

**FARAKKA SUPER THERMAL POWER PROJECT:
A SOCIOLOGICAL STUDY**

**THESIS SUBMITTED FOR Ph. D. (ARTS) DEGREE OF THE
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By

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TO MY ARITRA

P R E F A C E

The present work is a sociological study in aspects of production system, relations of production and social implication of a power plant. The study was conducted Farakka Super Thermal Power Project located at Murshidabad District of West Bengal. The data presented in this thesis were collected between March, 1988 to July, 1991.

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(ANUP KUMAR DAS)

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INTRODUCTION

Works on sociology and anthropology of industrialisation are largely based upon unique experiences of the Western societies. Recently, some works have been done in the Indian situation but the sociological and anthropological study of power plants or other industries in India has not yet attracted any major attention of the scholars.

Baviskar (1969) demonstrated that caste and other social configurations of people in a factory had practically no significant effect on work efficiency. His observation was based on a co-operative sugar factory in Maharashtra.

Bhowmik (1981) investigated the aspects of class formation among tribal workers engaged in the tea plantations of North Bengal. Employment in the plantations has changed their cycle of economic activities from that of self-supporting cultivators to wage labourers. The specific focus of his study has been on change in social relations, which resulted from a change in the organisation of production.

Dasgupta (1980) has shown the impact of industrialisation on a tribe of Bihar who were economically backward. He demonstrated how they utilised the agricultural land in industry, how their

social structure was affected by the factory life, and how their traditional rituals and beliefs were affected by the industry. He also studied the impact of industrial complex on the emerging tribal solidarity movement and how the tribal workers responded to the Trade Union movements.

Holmstrom (1978) examined workers' attitude to work and their concept of career in industry as well as life in an urban community in relation to the force of traditional institutions. He argued that a tradition of choice (among different sets of norms and values) and equality (among social segments) which was marginal in traditional India was becoming central in the behaviour of the urban industrial population.

Lambert (1964) examined the problem of commitment to work in depth and concluded that the degree of maladjustment of the Indian workers with their jobs is relatively smaller. He pointed out that some industrial organizations make their work force overcommitted by providing them with very attractive social and economic benefits. In his view employees may be overcommitted to an organisation if it enables them to fulfil all their social obligations well enough alongside their obligations to the employer.

Morris (1960) stressed that the major proportion of labourers required for modern industry in India is of unskilled sort and their nature of work in the factory is indistinguishable

from that done in rural areas.

Niehoff (1959) commented upon the social and economic life of a group of workers in a factory of Kanpur. He attempted to substantiate the view that industrialisation in India leads to social change in the direction of the social institutions obtaining in the Western society.

Orans (1965) studied the impact of industrialisation on a tribe (Santal) in Jamshedpur - an industrial belt of eastern India. He observed that the Santal had to readjust the culture of 'pleasure' orientation in the industrial areas and the amount of social change among them varied partly in terms of distance between residence and the industrial centre.

Rice (1958) observed the causes the caste-sub-caste conflict and their relations with the production system in industry. In addition, he also compared the conflict of different ethnic groups among the workers of the European industry with the caste-sub-caste conflict of the Indian industry. He observed that the effects on productivity due to rivalries or jealousies were not there in the Indian industries but were present in the European industries.

Ramaswamy (1977) studied the employees' involvement in the trade union activities in the context of their economic and

political affiliations, work situation, the net work of social relationships woven into trade union organization. The behaviour of the employees and their attitudes to work are also examined by him.

Sheth (1982) examined the widespread notion about the traditional institutions of India are an obstacle to its industrialization. He built a comprehensive picture of the life and structure of an Indian factory and observed the various forms of relationships among the personnel and the values and norms governing them. He began with an account of the emergence and growth of the factory ('oriental' in Gujrat), a normal day's routine in it, and the formal organization of the employees into group and categories. Their social background and their obligations to local communities, castes and kin groups were then examined to explore how far these influenced their work. The employees' involvement in trade unionism was discussed in the context of their relations within and outside the factory. He also discussed the interaction pattern between modern industry and the traditional institutions of developing societies in the Third World.

The given review of relevant literatures reveals that most of the Indian scholars have studied the employer-employee relationship, economic inequalities among the workers, caste-class relations, trade union movements, bureaucratic organizations, status hierarchy, etc. These studies were mostly conducted either

in jute, textile, or engineering industries. Naturally very little work has been done in the context of electricity and various aspects of the State Electricity Boards of different states of India. The following references have merely touched upon the issues.

Bhanage (1976) studied the aspects of regulation and economics of the electricity supply industry in Maharashtra, with particular emphasis on public utility.

Rao (1984) emphasized to find out the causes for the low production of the State Electricity Boards. He specifically examined the situation as found in the Electricity Boards of Andhra Pradesh, Madhya Pradesh, Tamil Nadu, Uttar Pradesh and West Bengal.

Kashkari (1975) discussed the resources, demand and nature of conservation of energy. He observed that intreation and continuous expansion of electric utility industry resulted in an enormous increase in the unit costs in recent times in India'.

Kothari and Dadi (1977) specifically examined the economic benefits by the rural electrification in Gujrat.

Naidu (1980) observed that the electric utility industry is a 'decreasing cost industry' i.e. the greater the use of the equipment the lower the unit cost. He critically examined the

finances of Andhra Pradesh State Electricity Board.

Salahuddin (1987) suggested the following points to improve the quality of output of power:

- (i) Objective of the (working team should be well defined,
- (ii) The Commissioning personnel should be different from the construction personnel,
- (iii) Operation crew should be fully involved in commissioning activities,
- (iv) Priority should be given to train the operating staff.

From the given reference it becomes conspicuous that sociological researches in the field of power plants (which is somewhat different from the other industries) are significantly lacking. Such studies are urgently needed for understanding the organizational pattern and the system of norms within it. The present account will not be in a position to fill up the gaps but will endeavour, through close examination of the situation, to provide insight into the nature of the problem and possible remedial measures.

Electricity being the most convenient and versatile form of all energies, the demand for the same has been growing at a much faster rate than other forms of energy. Since electricity plays a crucial role both in industrial and agricultural sectors, the quantum of consumption of electricity in a country represents

an indicator of productivity and growth. In realisation of this fact, power generation has been given high priority in the plan programmes of contemporary India.

Power from electricity holds the key for contemporary technological and economic development. Our daily life, science and technology, etc. are depend upon the same as a large measure of electricity is required to meet such demands.

"Power generation programmes, made phenomenal progress with the advent of Five Year Plans. The power sector is highly capital intensive and investment in this sector constitutes a substantial share of the total plan outlay in the country" (India, 1988-89 : 431).

"Throughout the sixties, India had a shortage of electric power. This shortage turned into a power famine during 1972-73 and affected all areas of activity in India" (Naidu, 1980 : 39).

The power engineers' conference held early in 1978 in New Delhi estimated that "shortfall in power generation has lost the country of Rs. 300 crores in terms of industrial production and three million jobs" (Economic Times, Feb. 7, 1978:5). This brings

out clearly the fact that the country's economy has been suffering considerably because of power shortages (Naidu, 1980 : 39).

At the end of the First Five Year Plan, the generation capacity of electricity stood at 34.2 lakh KW. At the end of Second Plan it reached to 57 lakh KW. At the end of Fifth Plan, the installed capacity rose to 313.07 lakh KW comprising 113.86 lakh KW from hydroelectric projects, 192.81 lakh KW from thermal projects and 6.4 lakh KW from nuclear projects. The achievement during Sixth Plan has been 142.26 lakh KW (28.73 lakh KW hydroelectric, 108.98 lakh KW thermal and 4.55 lakh kw nuclear) i.e. 72.3 per cent of the target. The total generating capacity during the Seventh Plan is 22,245 million kw (MW) in utilities. This comprises 15,999 mw thermal, 5,541 mw hydro-electric and 705 mw nuclear power.

Despite seven shortfall, the installed capacity of electricity in India is steadily increasing. Nevertheless, the demand of power has grown faster than its rate of generation resulting in the shortage. In view of this nagging problem, the National Thermal Power Corporation (NTPC) has taken up the responsibility of removing this shortage from its very beginning. Its declared objective has been to irradiate power shortages within the shortest possible time (NTPC News : 1985).

The National Thermal Power Corporation as a Public Sector undertaking was incorporated in November, 1975 with the main

objective of planning, promoting, and organising the integrated development of thermal power in the country. The Corporation has been entrusted with the task of execution and operation of large pit-head thermal power stations and associated transmission networks. The authorised share capital of the Corporation is Rs. 6,000 crores. (India 1988-89 : 435).

The NTPC has commissioned 12 units of 200 MW and during the sixth plan period, it accounted for 20.2 per cent of the total thermal capacity in the country. During the Seventh Plan, its contribution rose to about 50 per cent of the total thermal capacity. Further, NTPC has constructed of 10,000 kms of 400 KV transmission lines and HVDC transmission lines for the bulk transfer of power (NTPC News : 1987).

The objectives of NTPC, as envisaged, are to construct and operate coal-based Super Thermal Power Stations near coal pit-heads, along with associated Extra High Voltage transmission systems for bulk transfer of power to State Electricity Boards. It is presently betting up nine super thermal power stations. Among them the following seven have the total installed capacity of 16,360 MW at Singrauli, UP (2000 MW); Korba, M.P. (2100 MW); Ramagundam, A.P. (2100 MW); Farakka, W.B. (2100 MW); Vindhyachal, MP (2260 MW); Rihand, U.P. (3000 MW), Kahalgaon, Bihar (2800 MW). Installed capacity of the remaining two viz. Talcher (Orissa) (-) and National Capital Thermal Power Project, U.P. (-) is not instantly known. It is also betting up three combined cycle gas-

based power stations at Anta (Rajasthan), Auraiya (UP) and Kawas (Gujrat). The Corporation is also extending transmission lines with a total length of about 17,600 circuit km. The total estimated cost of the projects is Rs. 13,157.5 crore.

Five units of 200 MW each and two units of 500 MW each at Korba, three units of 200 MW each and one unit of 500 MW at Ramagundam, three units of 200 MW each at Farakka, two units of 210 MW each, at Vindhyachal and one unit of 500 MW at Rihand have already been commissioned. NTPC has also been managing Badarpur Thermal power station at Delhi on an agency basis (India 1988-89; 435-37; NTPC News, 1987).

NTPC has been earning profits right from the beginning of its operation. While in 1984-85 it earned a net profit of Rs. 87.54 crores; in 1985-86, the profit rose to Rs. 183 crores. The cumulative capital investment in projects has risen from Rs. 1.1 crore to Rs. 5,249 crore by October 31, 1986 (NTPC News, 1987).

NTPC has the distinction of being the single largest recipient of credit/loan from the World Bank, the total assistance from which source alone amounts to \$ 3,062.1 million (approximately Rs. 3,700 crore). Recently, NTPC has also earned the distinction of receiving the largest loan for the single project from the World Bank (combined Cycle Gas Turbine Project) of \$ 485 million (NTPC News, 1987).

Power sector accounted for an investment of Rs. 10,431 crore which was 14.63 per cent of the total investment in public enterprises under the Central Government at the end of March, 1988.

The top nine public enterprises in the public sector according to the amount of investment therein are : National Thermal Power Corporation Ltd. (Rs. 7,713.30 crore); Steel Authority of India Ltd. (Rs. 6,545.20 crores); Rashtriya Ispact Nigam Ltd. (Rs. 4,022.28 crores); Oil and Natural Gas Commission (Rs. 3,546.55 crores); Rural Electrification Corporation Ltd. (Rs. 2,562.10 crores); National Aluminium Company Ltd. (Rs. 2,516.44 crores); Food Corporation of India Ltd. (Rs. 2,033.67 crores); Mahanagar Telephone Nigam Ltd. (Rs. 1,613.85 crores) and National Textile Corporation Ltd. (Rs. 1,435.44 crores) [Year Book, 1990 : 791].

Among the profit making enterprises of the Government of India, Oil and Natural Gas Commission tops the list accounting for over 39 percent of the total profits. Indian Oil Corporation, National Thermal Power Corporation, Bharat Heavy Electricals, Mahanagar Telephone Nigam, Oil India and Bharat Petroleum are the others in the list of profit making enterprises (Year Book, 1990 : 792).

Along with the generation of power and accruing profit, the NTPC has been contributing to a major extent toward solving the problem of unemployment. There is a large number of people

engaged by the NTPC and its associated power stations as regular employees. The Seventh Five Year Plan made provisions for providing employment to about 46,000 persons at various levels during the five years period (NTPC News, 1985).

Farakka Super Thermal Power Project:

The National Thermal Power Corporation (NTPC) initiated the task of setting up its fourth Super Thermal Power Plant at Farakka, situated in Murshidabad district of West Bengal in 1981. On completion, the power station would be the largest Super Thermal Power Station of the NTPC. In fact, the initial work of the project has begun as early as in February, 1979 and the Letter of Intent of the main plant equipment for three 200 MW units was placed with Bharat Heavy Electricals Limited (BHEL) on May 15, 1981.

The Farakka Super Thermal Power Project (FSTPP) is located at about 300 kms. North of Calcutta. It is situated on the West Bank of feeder canal of the Farakka Barrage. This project has an ultimate capacity of 2,100 MW.

The total land requirement for this power station was 4,500 acres which included land for Merry-Go-Round (MGR) ash pond, main plant, and township. Out of this, 2,500 acres are in West Bengal. The entire land of which was acquired by February 1986. The remaining land is to be acquired from Bihar. The total land required for the MGR is 1,367 acres (78 acres in West Bengal and 1,289 acres in Bihar). Till March, 1986, compensation had been paid for 1,078.09 acres in Bihar.

For establishing this power station, 8000 persons had to lose their shelter and turn destitute. The land owners of this area, of course, received compensation. But that could not save them from turning to destitution. It was promised that the persons who had suffered for establishing this power station would get priority in employment. Out of such 8000 persons, only 294 so far got jobs (Anandabazar Patrika, 27th April, 1988).

There is 1630 (upto May, 1989) employees in the Farakka Super Thermal Power Project including executives, supervisors, trainee and clerks/workers. The General Manager is the top in the hierarchy. There are a number of divisional/departmental managers below him. Next are the supervisors, the clerks and the workers in order (skilled, semi-skilled and unskilled).

Generation of Power:

In Farakka Super Thermal Power Project, there were three stages of commissioning. The commissioning of Stage I is completed. There are three units of this stage. The capacity of this stage is 3 x 200 MW. The commissioning of Unit I stage II having 500 MW capacity is also completed. The second unit of Stage II is also likely to be completed by December, 1992.

As already mentioned, there are 1600 employees in the FSTPP. After completion the total work of the project, more men should be absorbed as regular employees. Out of these employees,

the bulk is from outside Farakka and for accommodating these non local employees, a township has grown resulting in the emergence of a heterogeneous cultural atmosphere. This has a tremendous impact on the life and culture of the local people.

Organization of a power plant is an important area for sociological investigation. Through the present study it is proposed to analyse various forms of relationships as found among the workers of the power plant and to examine to what extent those motive to its production potential.

Aims and Objectives of Present Study:

Specific aims and objectives of the present study are to know the following issues:

- (1) what is the nature of structure and organization of Farakka Super Thermal Power Project?
- (2) what is the pattern of status hierarchy in the bureaucratic structure of this power station?
- (3) what type of relationship exists among the management and employees of this power station?
- (4) what is the interactional pattern among the white collar employees with those of the skilled and unskilled labourers of the poer station both in place of work and elsewhere?
- (5) what are the characteristics of working relations (industrial relations) among the employees of FSTPP?

- (6) what are the differential rates of remuneration/salary among the employees of FSTPP?
- (7) what is the background of the employees of FSTPP and how they have adjusted themselves to the formal industrial norms?
- (8) what is the nature of commitment of the employees of FSTPP and what are the problems they face for successful commitments in their respective duties?
- (9) what are the rates of absenteeism labour turn over and indiscipline in work activities among the workers of FSTPP?
- (10) what are the characters of Trade Unions of FSTPP? What roles do they play for the development of the power station as well as for the betterment of the workers?
- (11) what is the level of class consciousness among the workers?
- (12) what are the roles of informal organizations in the life and activities of the employees of FSTPP?
- (13) what are the roles played by ethnicity, caste and religion of the workers in work activities of FSTPP and also in interpersonal relations among the workers in their day to day life?
- (14) what are the patterns of socio-economic life of the different categories of employees of this power station?

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- (15) what is the state of education among the employees of this power station, with a special reference of their technical education?
- (16) what impact the FSTPP has on the life and activities of the workers and also on the people in general of this locality?
- (17) what happens to the environment of the locality due to the existence of FSTPP, with particular reference to environmental pollution?
- (18) is there any existence of other small industries which have grown out to meet the necessity of FSTPP?

In order to fulfil the said aims and objectives, we propose to concentrate our enquiries into the following areas:

To examine the structure and organization of NTPC as well as FSTPP, including the system of their production and distribution of power. The relation of NTPC and FSTPP have also been reviewed.

To highlight the interpersonal relations among the management and employees of FSTPP. In this context we have shown the relationship between the management and the employees and relations among the employees of different categories. The class consciousness among the workers and their formal and informal organizations will also be examined in details.

The nature of commitment of employees of FSTPP, their educational and social backgrounds, roles of ethnicity, caste and religion of the workers in their work efficiency, rate of absenteeism and labour turnover, satisfaction and dissatisfaction of workers, etc.

Lastly, we have shown the impact of power plant on the local society, relations between the employees and local people, ecological and economic imbalance and scope for new industries and employment opportunities.

Hypotheses:

In view of the given research strategy, the following hypotheses have been considered important for the present study.

- (1) Being exposed to the process of industrialisation, a pre-industrial community tries to adjust itself with the form of industrialisation without concomitant breakdown of their traditional norms.
- (2) The development of production system of the industry is entirely dependent on commitment of its employees which in turn entirely rests upon the opportunity in the organizational set up and behaviour pattern of the labour force.
- (3) There lies a gap between ideology and practice in the trade union movements in industrial system.

- (4) It would be possible to integrate agricultural and industrial development by proper planning.
- (5) Industries can be established in the rural sector without drastic change of social, cultural and psychological set up of the region.

Methodology:

Since electricity is the most convenient and versatile form of all energies and since the demand for the same has been continuously growing at a faster rate than other forms of energy, the present author wanted to go through the root of its production and to highlight the social relations involved with this system. In India NTPC is being the most important agency to produce electricity. Thus a concern of it viz. FSTPP was selected by him for his study. West Bengal is facing various problems in industrial sectors since last few years. The deficiency of electricity is one of the important factor for this problem. FSTPP is the only power project of NTPC in West Bengal. Naturally the author was interested to choose FSTPP for his study. Another important factor knocked him that a Super Thermal Power Project must have sophisticated modern technology and there would be a tremendous impact of such type of industry in the socio-cultural life of the people living in and around of this.

The present study has been carried out primarily on the basis of structural-functional approach. Data for this study

have been collected both from primary as well as from secondary sources. Information on organizational pattern of FSTPP has been gathered from published accounts as well as from empirical study. The empirical facts for this study, in particular, have been collected through intensive field investigation in FSTPP. Empirical investigation have been conducted on the basis of conventional anthropological tools and techniques like : interviews, case studies, group discussions, genealogy and observations, etc.

At the initial stage, a pilot survey and a preliminary census were conducted on the employees of various departments of FSTPP.

To collect detail information on economic, social and cultural life of the employees and the local people, the author asked the aged and experienced persons. He also gone through the census report and other published materials and had taken the help of local government officials.

At the stage of study proper, data have been collected through intensive study of 25 percent of the employees of each department. The sample was drawn on the basis of stratified random sampling technique to represent every section of the workers belonging to different ethnic and social backgrounds. Intensive study on the sample households have been conducted through a schedule developed on the basis of pilot survey. For

collecting other information, techniques like interview, case study, group discussion and participant observation have been adopted.

In the context of social change among the employees of FSTPP, the base line for comparison is obviously the pre-industrial phase.

As one of the main thrust of this study is to describe the various forms of relationships found among the employees of FSTPP and the norms and values governing those relationships, it examines the set of relationships within the organization which functioned both as an unit of production and also as an association of people operating within the formal framework of the system. This set of relationships has been analysed by the concept of bureaucratic organization as proposed by Weber (1964).

The present author visited Farakka Super Thermal Power Plant for the first time in the month of March, 1988. He stayed there for 20 days to get an idea about the entire set up of this power plant viz. situation, employment, trade unions, local people, etc. He met with a number of officers, clerks, workers and others, and collected some data for pursuing the next course of study.

He visited the place for the second time in the month of October, 1988 and stayed there for 40 days. During this visit, he collected a number of other information relevant for his research viz. recruitment matter, labour turnover, economic situation, generation of power, workers' entitlement to facilities, land oustees and compensation, remedy of air pollution, etc. Preliminary census of a section of workers were also conducted at this stage.

The author started his intensive research work in the month of March, 1989 and stayed there for 45 days. During this visit he collected necessary information from 35 percent of employees of each Department. He also visited the different departments at this stage and talked to a number of employees and also visited several local areas.

He visited Farakka for the fourth time in the month of May, 1989 and stayed there for 40 days. During this visit, he collected various secondary data and further discussed with a number of employees. At that time he talked to a number of labourers under the contractors of NTPC and FSTPP, different trade union leaders and few officers and clerks. He talked to some local people and Government officials too at that time.

In the month of December, 1989 the present author visited Farakka for the fifth time and stayed there for 20 days. During that visit, he collected detailed information about the contractors

of NTPC and their nature of works and including information regarding the scope of setting up of new industries there. He also observed the family-life of the employees of FSTPP and the informal relations as found among the family members of the workers.

In the month of December, 1990 he visited the field for the sixth time, stayed there only for ten days and collected some secondary data from the FSTPP library.

The author visited Farakka in the month of July, 1991 for the last time and stayed there for other ten days for verification of field data which were collected earlier. Thus the total field work consists of a total of 185 days.

The present author was also visited several libraries of New Delhi, Calcutta and Shillong for obtaining relevant secondary data. Besides these the libraries of FSTPP and the University of North Bengal were time to time consulted by him for the sake of this research.

The data collected through primary and secondary sources were processed after necessary checking and editing. In course of data processing the completeness and accuracy of data were looked upon. Data were analysed both quantitatively and qualitatively. The quantitative data were analysed through preparing the tables and statistical calculations. Simple statistical

methods consisting mostly of percentages were calculated. The analysis of qualitative data were made through systematic and analytical descriptions of the facts. The methods of comparison have also been used. The data were finally organised and presented into nine chapters.

Limitations

Despite repeated visits and serious endeavours, the study could not be totally free from limitations.

It was in fact not possible for the author to take interview of all the employees. Due to certain limitations of the authority of the power plant and also of the author he could not go for a total enumeration of the employees. Besides, there were other limitations too, the most important among them are as follows:

1. Some employees thought that this research work was being carried out on behalf of the management that brought in a undesirable bias.
2. Some others had the notion that the researcher had political linkages too which affected free and frank exchanges of views.
3. Another set of employees had the notion that their views would be relayed to the management to their disadvantage.

Hence they were rather apprehensive. Another section of workers took the present researcher as a member of the press whose column might not be the safe medium to ventilate their grievances.

4. Some others felt that they had no reason to be generous for the personal benefits of an individual. One of the employees told the present author, "You will be educationally benefited by this work. You may get better service, better benefits but what is our profit out of this?"

For various reasons, the management of FSTPP was also rather non-cooperative at the initial stage but gradually over the period, a good rapport could be established.

In order to observe the informal life in the residential colony, the author visited several times the temporary township, permanent township and the field hostel. But mostly due to disinterest of the people, the present author was compelled to restrict his entrance only to the employees' quarter and could not reach the depth of information as he desired.

FARAKKA SUPER THERMAL POWER PROJECT : HISTORICAL
BACKGROUND AND DEVELOPMENT OF INFRA-STRUCTURE

The power development was initiated in India as early as in 1900 with the commissioning of the hydroelectric power station at Shivasamundram in Karnataka, the progress was not very impressive till 1947. The installed capacity was as low as 1363 MW and activity was mainly concentrated around urban areas (India, 1988-89 : 431). The installed capacity of electricity in India has since been continuously increasing. In the year 1900, the total installed capacity was only 1.13 MW which rose to 1363 MW in the year 1947 and 18,322 MW during the year 1974-75. The following table gives a clear picture of the development of installed capacity of electricity in India.

Table 2:1
Installed capacity of electricity in India

Year	Hydro	Thermal	Total
1900	0.13	1.0	1.13 MW
1915	71.13	36.0	107.00 "
1930	287.00	311.0	598.00 "
1939	442.00	629.0	1,071.00 "
1947	508.00	855.0	1,363.00 "
1960-61	-	-	4,653.00 "
1965-66	-	-	9,027.00 "
1970-71	-	-	14,709.00 "
1974-75	-	-	18,322.00 "
1983-84	-	-	24,210.00 "
1985-86	-	-	46,603.00 "
1986-87	-	-	50,059.00 "

Source : (i) Rao, K.L. (1970)
(ii) Statistical Pocket Book (1975)

Nevertheless there is still a shortage of power in this country. This shortage was rather too high in the year 1970 affecting industrial and agricultural products. Again, in the year 1980-81, the gap between the demand for power and its supply was 12.6 percent. It came down to 6.1 percent in 1984-85 but again rose to over 8 percent in 1986-87.

Emergence of NTPC

National Thermal Power Corporation Ltd. was constituted as a generating Company in November 1975 for the purpose of construction, operation and maintenance of the Super Thermal Power stations and associated Extra High Voltage transmission lines [Competition Success Review Year Book 1989 : 835]. In the year 1976, the amended Electricity Supply Act (1948) provided for the establishment of a corporation (National Thermal Power Corporation, NTPC) under the authority of the Government of India. This body was authorised to set up regional thermal power stations and to take charge of bulk transmissions from these units to the state power system.

There is Board of Directors to this Corporation with a full time Chairman-cum-Managing Director. This Board included a Director-in-charge of Finance and five part-time Directors. They represent the Department of Power, the Central Electricity Authority, Planning Commission and the Department of Heavy Industries. The Corporation is divided into different divisions responsible for corporate planning, data processing, contract services, finance, personnel, project management and technical services.

With this vast administrative structure, the NTPC is supposed to plan, promote and organize efficiently the thermal power sector which includes planning, investigation of new sites, preparation of feasibility and project reports, construction, operation, generation, maintenance, transmission and distribution of power generated from all thermal units. Besides this, it also undertakes research and development in the area (Sah, 1983).

Production and Distribution of Power

In the year 1982 there were six super thermal power projects of NTPC. These were at Singrauli (Uttar Pradesh), Korba (Madhya Pradesh), Ramagundam (Andhra Pradesh), Farakka (West Bengal), Badarpur (Delhi) and Neyveli (Tamil Nadu). The total installed capacity of the said six power projects is 10,910 MW. There were also five proposed projects. The proposed stations were at Kahalgaon (Bihar), Talcher (Orissa), Pench (Madhya Pradesh), Bhadrachalam (Andhra Pradesh) and Waichan (Uttar Pradesh).

To distribute the produced power, the NTPC has also arranged to transmit power through the upgraded 400 Killo Volt (KV) lines. These are extra high voltage lines, at the load centre in the regional grid and are supposed to help establishing a national grid. The NTPC is now constructing 1700 Ckt. kms. of these transmission lines and the total transmission lines to be constructed for the Singrauli, Korba, Ramagundam and Farakka

Projects is 7380 kms.

We may get a clear picture about production distribution, as well as the total investment from the Table 2:2. It is to be mentioned here that the said projects are mostly Super Thermal Power Stations.

Feasibility of FSTPP

Farakka Super Thermal Power project is utilising coal from the Rajmahal Coal Fields which are about 80 kms away and the source of water is Farakka Feeder Canal. FSTPP is the only project of NTPC where the distance between project and the source of coal is so far. According to information of the officers of ESTPP, there is no technical justification for inception of this project at Farakka. According to them, the project is bound to spend a large amount of money by coal transportation and toward vehicle cost. According to a high official source, it was set up here due to the influence of a powerful political leader of the locality. The source also added that due to shortage of accommodation, FSTPP is also paying the vehicle cost and the employees suffer due to the long distance. They are required to cover between the plant and quarters. FSTPP also had to spend a large amount of money for levelling the ground and such other jobs which would be avoided with some adjustment to the selection procedures of the site.

Table 2:2
 Installed Capacity, Transmission of Power and Investment to the
 Different Power Projects of NTPC

Project	Installed Capacity	Transmission System	Transmission Lines	Total Investment
Singrauli	2,000 MW	2350 kms of 400 KV lines	Singraulili-Obra Singrauli-Kanpur Singrauli-Kanpur Jaipur Singrauli-Lucknow- Moradabad-Muradnagar- Panipat	1001.96 Cr.
Korba	2,100 MW	1960 kms of 400 KV lines	Korba-Korba (west) Korba-Bhilai Bhilai-Koradi Koradi-Satpur Satpur-Indore Indore-Asoj	1142.95 Cr.
Ramagundam	2,100 MW	2430 kms of 400 KV lines	Ramagundam-Hyderabad- Nagarjunasagar-Cuddapah- Bangalore-Salem, Ramagundam-Nagarjunasagar- Cuddapah-Redhills, Ramagundam-Nagarjunasagar- Munirabad.	1429.34 Cr.

Contd..

Table 2:2 (Contd..)

Project	Installed Capacity	Transmission System	Transmission Lines	Total Investment
Farakka	2,100 MW	640 kms of 400 KV lines	Farakka-Durgapur Farakka-Jeerhat	974.00 Cr.
Baqaarpur	1,140 MW	-	-	189.35 Cr.
Neyveli	1,470 MW	-	Neyveli-Kalapakkam	-

Source : NTPC Today and Tomorrow, May, 1981.

Historical Background and Development of Infrastructure

The National Thermal Power Corporation (NTPC) established its fourth Super Thermal Power Plant in 1981 at Farakka, a place bordering Bihar (3 kms) and Bangladesh (about 10-15 kms). The Project, as already stated, is located in Murshidabad district of West Bengal which is about 300 kms North of Calcutta and has an ultimate capacity of 2100 MW. This power plant has already got an installed capacity of 600 MW (2 x 300) in the first stage. The second stage comprising of two units of 500 MW each are under construction. The original schedule of commissioning the first 500 MW unit is 1990-91.

Initial work of the project began in February, 1979 and the Letter of Intent of the main plant equipment for three 200 MW units were placed with Bharat Heavy Electricals Limited (BHEL) on May 15, 1981.

There are three stages of this power project by which its installed capacity is expected to be met. Stage I envisaged construction of three 200 MW units, which has already been completed. Two 500 MW units are due to be constructed in Stage II and in the 3rd stage construction of another 500 MW unit will follow.

Out of the three units constructed during Stage I, one unit is presently out of order. Due to bad quality of the generator,

the unit got locked. The generators of all the three units were supplied by BHEL (A Govt. of India enterprise). Strangely, although the said generator was of substandard quality and was disqualified by the Korba Power Project of NTPC, the same was supplied by the manufacturer to the Farakka project. The result was obvious, the unit could not perform.

Investment and Assistance:

The total cost of construction for the Stage I of the project was Rs. 603.33 crore. For Stage II, the estimated cost is Rs. 955 crore. International financial assistance of \$ 250 million was received for the purpose from the World Bank under a loan agreement signed in July, 1980. [International Development Association (\$ 225 million), International Bank for Reconstruction and Development (\$ 25 million)]_7.

The first 200 MW unit was commissioned on January 1, 1986. The second unit was commissioned on December 24, 1986 and the third was commissioned on August 6, 1987.

The two 500 MW units of the Stage II received the CEA clearance on 5th October, 1983 and the PIB clearance on 19th October, 1984.

Manpower :

Estimated man-power for the project would be around 3000 at the ultimate stage. The strength of employees of this project, as in May, 1989, was 1630 heads.

Resources:

Coal and water are the two natural resources for this power station. For establishing the project, the plan was that the coal required for this power station would be taken from the Hurra block of coal mines in Eastern Coalfields Limited's Rajmahal Coal fields. It should be noted here that the calorific value of this coal is very low. The water required for running the plant is obtained from the feeder canal of Farakka. This power project requires 10.5 million tonnes of coal per annum as its ultimate capacity. The transportation system of this coal is Merry-Go-Round (MGR) system, 88 kms long, totally owned and operated by NTPC. It links the project with the coalmine. The water required for the steam generation in the boiler is supplied by two streams in the water treatment plant. The civil work of the water treatment plant began in November, 1982 and the first stream was commissioned in April, 1985. The second stream has also been put into operation in January, 1986. The water required for cooling the steam in the condenser is around 300 cusecs. It is pumped into the system from the pump house connected to the feeder canal by the intake channel. The water used in the boiler is purified and made usable by chemicals.

Transmission Lines and Distribution of Powers:

Power generated from this power station is being transmitted over the NTPC 400 KV Farakka-Jeerhat Sub-station of West Bengal State Electricity Board and over the NTPC 400 KV Farakka-Durgapur line. These transmission lines have already been commissioned. Construction work for the Farakka-Bihar Sharif Transmission Line has also started. Malda-Farakka 400 KV (presently changed to 220 KV) transmission line, which has been constructed by National Hydroelectric Power Corporation, has connected the Chukha Hydel Power Project to the Regional Transmission system at Farakka through the National Hydroelectric Power Corporation's distribution system.

Work for Farakka-Kahalgaon-Bihar Sharif power transmission system, Farakka-Lalmatia and Durgapur-Jamshedpur Transmission Lines have already been taken up. New sub-stations in Bihar Sharif and Jamshedpur are being established and those at Durgapur and Jeerhat are to be extended. The total length of the transmission line system for FSTPP is 408 circuit Kms for Stage I (600 MW) and 1289 circuit Kms for Stage II (1000 MW).

Table 2:3
Allocation of Power to Beneficiary States
(for Stage I - 600 MW)

States	1st unit	2nd unit	3rd unit	Total	% ratio
Bihar	45	45	45	135	22.5
West Bengal	68	68	69	205	34.0
Orissa	25	25	25	75	12.4
Sikkim	02	02	01	05	0.1
D.V.C.	30	30	30	90	15.0
Unallocated	30	30	30	90	15.0

Source : Pamphlet of NTPC :1988

Air Pollution and Remedy :

Air pollution is one of the most important problems for the surrounding people of the industry. To prevent the environmental pollution, Farakka Super Thermal Power Project has initiated certain necessary steps. Due to burning of coal, carbon monoxide would be produced as by product. This carbon monoxide is very harmful for human and other animals. To avoid any hazard, a mechanism has been evolved initially to convert the released carbon monoxide to carbon dioxide. Since carbon dioxide is also harmful in order to avoid the damaging effect, very high chimney has been put up which mixes the discharged carbondioxide with the upper layer of the air.

On the other hand, the ash-handling plant and disposal system incorporating the highly efficient electrostatic precipitator has also been installed. There are the ash slurry pumps and piping for handling rapid disposal of the ash produced by burning coal inside the boiler. Due to this, the surrounding people are under protection regarding this aspect of the environmental pollution.

A technical expert told the present author that the ash-water (which are coming out of boiler) falling in the feeder canal contains many minerals, alkaline and acidic substances. This pollutes the water and threatens aquatic life. He apprehends that there may be some radio-active elements in the ashes - which are also harmful for human and other animals.

The authorities are trying to prevent air pollution by growing vegetation around the plant. The author has so far not come across any serious disease caused by air pollution in this area.

Township and Facilities :

Development of the township is one of the most important feature of modern industrialisation. At present, there is a temporary township within the project campus named 'Nabarun'. This temporary township has every modern civic amenity. There are Schools, post office, Bank, medical centre, shopping centre, residential quarters of the employees and an well-furnished

guest-house in this temporary township. Residential quarter of the General Manager of the project is also located within this campus. Besides there is also a children's park.

A permanent township complex is under construction with all the facilities like shopping centres, schools, hospital, recreation centres, playgrounds, stadium, swimming pool, cinema hall, etc. The name of the permanent township is 'Pubarun' which is located approximately eight kms away from the plant. The location of the permanent township is within Malda District of West Bengal. There is a transport service between the township and plant. The employees enjoy free bus trips between the township and the plant. The buses operate on contract with the FSTPP. There is also a boat ferrying between the temporary township and the plant. It is also under similar contract. Only the employees of FSTPP and the contractors of the FSTPP may avail of these facilities. The power plant is now spending more than Rs. 8.39 lakh for providing the transport facilities per year. In 1987-88, the expense was Rs. 8.39 lakh for this purpose (Finance & Account Section, FSTPP, May, 1989). Besides, the cost of fuel is by the FSTPP. Employees who are not availing of these facilities, use their personal vehicles but nevertheless get an extra allowance from the plant for this purpose which is in commensurate with the rank they occupy.

Besides the temporary and the permanent townships, there is an another campus - known as field hostel. Both bachelors and

familymen are accommodated there. The construction of the hostel is yet to be completed. A small shopping centre is also growing up there.

The author observed that prices of different commodities are a little bit high in shopping centres of the campus. Nevertheless, this campus is fully protected by the Jawans of Central Industrial Security Force (CISF).

Residential Areas:

According to service rules of NTPC, an employee is entitled to get residential facilities. If the corporation fails to extend this facility to the employees, they are entitled to get rent in lieu of the same. The authorities, however, are trying hard to provide accommodation (Corporations' quarter) to the employees.

There are four categories of quarters in the townships and field hostels : A-type, B-type, C-type and D-type. Facilities and comfort in the B type quarters are more than in A-type accommodation. C-type accommodation are rated better than B-type accommodation and so on. In better accommodations, rooms are larger and more. Entitlement to houses depends on pay scales and not on rank of the employees. Thus it is possible for a supervisor to get C-type quarters when an executive has been allotted with a B-type accommodation. It may be noted here that the executives are superior in rank to the supervisors.

Distribution of quarters in the townships by categories is given in Table 2:4.

Table 2:4

Categorywise Quarters in Townships and Field Hostel

Place	Types				Total
	A	B	C	D	
Permanent Township	512	336	102	25	975
Temporary townships	120	125	24	05	274

Total married quarter					- 975 (Permanent Township)
					- 274 (Temporary Township)
Bachelor's Accommodation:					
236 rooms in Field Hostel					
192 rooms in Permanent Township					

Source : P & A Dept., FSTPP, May, 1989.

It has been reported that some quarters have been allotted on share basis. There are instances where a quarter either A-type or B-type has been shared by two unmarried employees.

Altogether 90 B-type quarters are occupied by those employees who are entitled for C-type accommodation and 115 A-type quarters are being enjoyed by those who are entitled to B-type quarters. This has happened due to shortage of quarters.

There is already a demand for additional A, B and C-type quarters and the construction is in progress. There is nevertheless some delay in the schedule and some employees alleged indecisiveness of the authorities as the reason for the delay.

Though it was decided by the corporation (NTPC) that the local people living within a radius of eight kms would not get the accommodation facilities, but 30 percent of even the local employees are enjoying the same. According to information the authorities Personal & Administration (P & A Department) considered them as special cases. There appears perhaps extra-official considerations behind such allotment. An union leader, whose own house is just about two kms. away from the site of the plant, was enjoying a family accommodation. On the other hand, an employee hailing from 500 kms. away failed to get a family accommodation. As it appears, political considerations as well as personal contact are important in this respect.

Though the author was informed that the field hostel was only for the bachelors' accommodation (which is also shown in table 2:4) but in reality they were also used as family accommodations. A number of employees with their respective families were staying there.

Several contractors were also enjoying the quarters or rooms of the field hostel. According to Personal & Administration

Department, this allotment was done purely on temporary basis since there was no guest house/hostel/hotel around where they could accommodate themselves. The employees of schools, banks, post offices etc. were also enjoying such residential facilities.

It is to be mentioned here that there were separate BHEL's quarters in an adjoining campus constructed and maintained by Bharat Heavy Electricals Limited. A separate colony (Mustafa Complex) which does not belong to the establishment of the FSTPP is also coming upto accommodate the contractors.

Water, electricity, and such other facilities are available in the quarters of the permanent township, temporary township and field hostel and the employees are not required to pay anything for these facilities.

Education and Welfare Centres:

Education is an important feature of an industrial complex and the corporation as well as FSTPP is also looking into this aspect. The authorities are interested in spreading education among the children of employees of the FSTPP as well as among the local people. There are some primary and secondary (Higher Secondary too) educational institutions for the children and training centre for the employees. The place and categories of the educational institutes are as follows:

- (1) NTPC Nabarun Point English Medium School - it is situated at Nabarun, the temporary township of the plant. There are primary, secondary and higher secondary sections of the school. It is recognised by the Government of West Bengal and affiliated to the Indian Council of Secondary Education (I.C.S.E) Council, Delhi. There is a separate Managing Committee of this school - almost all the members of which were employees of the FSTPP (specially high grade officers). The Principal of this school is the ex-officio Secretary of the Managing Committee. The Principal as well as the other staff of the school were getting salaries according to pay scales of the Government of West Bengal. Further, they were enjoying other facilities - like free quarters, medical benefits, etc.
- (2) Kendriya Vidyalaya at Pubarun, the permanent township area. Though there is a separate Managing Committee for this school, it is totally guided and administered by the Kendriya Vidyalaya Sangathan, Calcutta. Recruitment policies, pay-scales, etc. are like the other Kendriya Vidyalayas (Central Schools). They follow the Central Board of Secondary Education (CBSE) syllabus.
- (3) A Bengali medium school is located at the permanent township area. There is a separate Managing Committee for this school. Pay Scales of the staff here is at par with the West Bengal Government pay scales. Here also the staff get extra facilities like free quarters, medical benefits, etc. There are secondary

and higher secondary sections that follow the West Bengal Board of Secondary Education and West Bengal Council of Higher Secondary Education syllabus respectively.

- (4) There is a Primary School at the permanent township. It is guided and managed by the 'Ladies Club' of the FSTPP.

Besides there is a separate training centre for the employees.

It was reported that the said schools were open to all (i.e. for employees' children and for outsiders). Most of the students, however, were the children of employees of FSTPP. The local people were not too much interested in education. They consider these schools as exclusively for the children of employees of the FSTPP only. Thus by and large they avoid these institutions.

Though it was told by the higher officers of FSTPP as well as by others that those institutions were very good for education and discipline, it has also been reported that the children of some high officers were getting themselves admitted to purely private educational institutions like The Atrayee at Balurghat - approximately 150 Kms. away from the Campus. This institution follows the CBSE syllabus. The boarding fees and tuition fees are very high in The Atrayee. Still the employees of FSTPP were sending their children to this school. If these

children get themselves admitted to the schools operated by FSTPP, they could have obtain education staying in their respective houses. They could also stay with their parents.

It should be mentioned here that the higher educational institutions (college) of West Bengal are considering the CBSE syllabus as somewhat lower than the ICSE and West Bengal Board (as well as Council's) syllabi.

From this fact, a question may arise whether the standard of education of the schools run by FSTPP is altogether satisfactory. If not, are the management of these schools incapable of maintaining the standard? If satisfying, why they are not able to attract children of high officers to that school. This issue deserve close consideration.

It is important to note down here that nearly 2000 people are working in the FSTPP and approximately 1000 employees are there at the Farakka Barrage. The total population of the Farakka Block is 1,34,445 (1981 census), but there is no College there. Mr. Sekhar Datta, the then B.D.O. of Farakka Block, told the present author that due to non-availability of space, they could not yet set up a College. The employees of FSTPP are not found that concerned in this respect.

Employees : Their Culture and Welfare :

According to the policy of the Central Government, in such public sector industries 70 percent of the staff have to be the local recruits and 30 percent could be non local i.e. of other States. The province-wise strength of employees of FSTPP is as follows:

Table 2: 5
Province-wise Strength of Employees of FSTPP (1989)

Province	No. of employees
Assam	8
Andhra Pradesh	22
Bihar	147
Gujrat	4
Haryana	2
Jammu & Kashmir	2
Kerala	22
Karnataka	4
Maharashtra	7
Madhya Pradesh	12
Meghalaya	3
Orissa	23
Punjab	7
Rajasthan	1
Tripura	5
Tamil Nadu	11
Uttar Pradesh	60
West Bengal	1289
	<hr/>
Nepal	1
	<hr/>
Total	1630

Source: Incumbent Register,
Sl. No. 1 to 1722, FSTPP, May, 1989.

From the given data it becomes clear that the Bengalees constitute the dominant group among the employees in FSTPP.

FSTPP is publishing a house journal named Anirvan from its Public Relations Department. There is a separate 'Hindi Section' in this journal. Nevertheless the authorities besides promoting programs for the dominant group also arrange Hindi poetry recitation competition, Hindi course and celebrating Hindi week.

The employees celebrate Independence Day, Republic Day, Rabindra Jayanti, Durgapuja, Diwali etc. The present author had the privilege of attending the Rabindra Jayanti function there in the year 1989. That function was organized by the Welfare Association of FSTPP. We observed that very few employees were really interested or participated in the programme.

Though it was reported that the cultural and religious festivals were informal in nature, yet we observed that they were to some extent formal in nature. The high officers and their family members were monopolizing the facilities. As a result most of the lower ranked employees were rather detached and casually attended the programme. It could be more appropriate to say that the ordinary workers took the programme as if the officers not of them.

Although it was reported that there was a clear and distinct informal relations among the employees in the township areas, in reality it did not really appear to be so. We observed an overtone of a formal relations among the employees living in the township area. Moreover, we observed that friendship/relationship among the employees as well as among their family members were mostly residential among the employees of the same category. It is appropriate to say that they demonstrated a sort of class-centred social behaviour. For the Bengalee employees in particular we may say that a modern cultural trend is growing up.

Among the 1289 Bengalee employees, there were 559 employees from Malda and Murshidabad districts. The rest are from other fifteen districts of West Bengal.

Distribution by religions of the employees is as follows:

Table 2:6
Religious Distribution of the Employees

Religion	No. of employees	Percentage
Hinduism	1431	87.79
Islam	148	9.08
Christianity	16	0.98
Others	35	2.15
Total	1630	100.00

Source: Incumbent Register, Sl. No. 1 to 1722, FSTPP, May, 1989.

N.B. : The Incumbent Register is not properly arranged. The Religion column is not there. Author concluded the religion by the name only.

From the distribution it becomes conspicuous that the Hindus (employees of FSTPP) constitute dominant religious group. Still, as reported, the employees of FSTPP get special holiday for Muslim festival. This holiday specially allotted for this power plant only. Even the State Government employees do not enjoy that holiday. It is said that they get this facility since in Malda and Murshidabad Districts, the proportion of Muslim population is high. It may, however, be noted that we observed no ethnic disturbances or ill-feelings among the employees of this power station. The educational qualifications of the employees of FSTPP are as follows:

Table 2:7

Educational Qualifications of the Employees of FSTPP

Qualification	No. of employees	Percentage
M.A./M.Sc./M.Com.	110	6.75
M. Tech.	6	0.37
B.A./B.Sc./B.Com	426	26.14
B.Tech/B.E.	183	11.23
M.B.B.S./Diplomas ITI and L.C.E. etc.	210	12.88
Matric/S.F./H.S.	366	22.45
Under Matric	329	20.18
Total	1630	100.00

Source : Incumbent Register, Sl. No. 1 to 1722,
FSTPP, May, 1989.

It may be added here that there are a very few foreign degree/diploma holders among the employees of FSTPP.

Welfare for the workers as well as for the local people is considered as one of the important objectives of a modern industry. Farakka Super Thermal Power Project is fulfilling this objective fairly well. There are Welfare Associations, Ladies Clubs, etc have various welfare activities are undertaken by these associations/organizations. They do the works for betterment of the workers as well as of the local people. They worked (by distributing food, cloth etc.) for the flood affected people in the year 1987-88. There is a primary school in the permanent township area which has been set up and is being governed by the members of the Ladies' Club. Besides this, several cultural programmes have been arranged by this club. Though it was told that the Ladies' Club is working for the local people also, but it is observed that they mainly work for the people of FSTPP. The authorities pay fair attention for this purpose. They also spend sufficient money for this. The year wise expenses of welfare in the FSTPP are as follows:

Table 2:8
Yearwise Welfare Expenses of FSTPP for the Employees

Year	Expenses (Rs. in lakh)	Year	Expenses (Rs. in lakh)
1981-82	1.64	1985-86	42.15
1982-83	6.07	1986-87	61.66
1983-84	17.31	1987-88	53.32
1984-85	25.32		

Source : Finance & Account Section, FSTPP, May, 1989.

Safety and its Precaution:

The 1630 employees in the FSTPP are engaged in official works, field works, managerial works, etc. Besides, there are approximately 2000 workers (labourers) engaged by different contractors. The works of the field workers are too tough and dangerous, though too much safety precautions have been taken by the authority of FSTPP and by contractors — accident may happen at any time. There is a Safety Department in this power plant having two executives, one supervisor, one typist, one attendant, and one sweeper. The Safety Department generally highlights the problems but the remedial steps are required to be taken up by the concerned department/departments. As per Government rules, the Safety Department should also take care of safety of the workers under contractors. According to regulations, the contractors are bound to pay compensation in case of accidents. If the

contractors violate the rules of the Safety Department of FSTPP, they could be penalised by imposing fine ranging from Rs. 5000/- to Rs. 1,00,000/-.

The following safety committees are functioning in this power plant :

1. Central Safety Committee - Head of the Department of 'Operation and Maintenance' is the Chairman of this Committee. Union/ Association representatives and Safety Executives are the members of this Committee.
2. Task Force Safety Committee - General Manager of FSTPP is the Chairman of this Committee. General Secretary/President of the Unions/Associations are the members of this committee.
3. Safety Stewards Committee - Head of the Department of 'Operation & Maintenance' is the Chairman and Supervisor of the Safety Department is the member of this Committee.
4. Contractors' Safety Committee - Represented by the Contractors' safety representatives.

In the year 1988, Shaik Irsad Ali died in an accident. He was a helper of Metaloid Corporation. His family received Rs. 40,000 from this Company as compensation. Isak Shaik, a labourer of Ellora Enterprise, died on 7th April, 1989 being involved in accident. It was reported that he could get compensation. The formalities are still going on.

Table 2:9
Accidents Directly Connected with the Operation
and Maintenance Department

Particulars	Year				
	1984	1985	1986	1987	1988
1. <u>Average Daily Employment</u>					
i) Executives	85	127	169	187	204
ii) Supervisors	8	70	75	100	100
iii) Workmen	10	150	239	378	466
iv) Contract labourer	-	-	-	-	427
Total	103	347	483	665	1197
2. <u>No. of accident</u>					
A. <u>Reportable</u>					
i) Fatal	Nil	Nil	Nil	Nil	Nil
ii) Non-fatal	1	4	22	33	37
B. Non-Reportable					
	Nil	Nil	1	Nil	2
C. Non-lost time					
	Nil	1	5	7	12
Total	1	5	28	40	51

Source : Safety Deptt., FSTPP, May, 1989.

There is a separate safety budget for this department. The safety budget in different years of this power plant are as follows:

Table 2:10
Safety Budget in FSTPP from 1985-1990

Year	Expenditure(s) in lakh
1985-86	N. A.
1986-87	13.90
1987-88	9.24
1988-89	9.25
1989-90	16.71

Source : Safety Deptt., FSTPP, May, 1989.

This department is arranging different seminars, workshps, etc. regarding safety. This Department has put up a number of hords throughout the plant indicating the different precautinal measures regarding safety in power plant.

This power plant received the international safety award at several times. This award is given to those industrial organizations only where there are sufficient safety precautions and rate of accidents is very low.

From the given table it is clear to us that fatal accidental case is practically nil in this power plant. There was no reportable fatal case in this power station during the years from 1984 to 1988 and only 3 non-reportable fatal cases (1 in 1986 and 2 in 1988) were there.

FSTPP and its surroundings:

It is said that the area where the plant is now located was very low. Due to this the rain water used to get accumulated in the area. To establish this power plant this area had to be filled up and due to this there has been a loss of land where the rain water could get accumulated. As a result, this area has become flood prone. It is to be mentioned here that the flood of 1986 was very serious in this area.

It is also reported that the area acquired for constructing field hostel, permanent township etc. were had good quality land for agriculture purpose. Due to loss of valuable agricultural lands many families have been landless.

Farakka industrially is the most important Block of Murshidabad District. Besides the big barrage and the power plant, there are several small scale industries of weaving, bidi-making, etc. Further, sericulture and production of good quality of mangos are grown here. All these helps to grow some other small scale industries in this area.

According to 1981 census, the total population of Farakka was 1,34,445 of which 68,371 were males and 66,074 were females. The total Scheduled Caste population was 15,522 which constituted 11.55 percent of the total population (Males - 7,925 and Females - 7,597). The total Scheduled Tribe population was 2,275 which constituted 1.70 percent of the total population (Males - 1,165 and Females - 1,110) of this place. The approximate ratio of

Hindu and Muslim population in this block was 30:70. Altogether there were 19,352 literate men and 8,300 literate women in this block.

The people of this block were mostly engaged in agriculture and household industry. Some others were agricultural labourers and servicemen. But due to setting up of the power plant, many of the people have changed their occupation. A new group of contractor, sub-contractor, middlemen and some anti social have also emerged. Many of the agricultural labourers have turned into industrial and construction labourers. A group of small businessmen have also emerged. Many of the people are working as taxi drivers, rickshaw pullers, coachman etc. as means of their livelihood. All these have come up to setting up of the power plant.

The occupational break-up of the people in Farakka Block is given in Table 2:11.

Table 2:11

Occupational Distribution of the people
of Farakka Block (1981 Census)

Category	Population	Male	Female
i. Agriculture	6,659 (15.78)	6,574 (21.08)	85 (0.80)
ii. Service	12,089 (28.65)	10,961 (35.13)	1,128 (10.69)
iii. Household industry (including manufacturing, processing, servicing, etc.)	12,631 (29.98)	3,276 (10.50)	8,925 (84.59)

Contd..

Table 2:11 (Contd..)

Category	Population	Male	Female
iv. Day Labour (Agriculture & non-agriculture)	10,799 (25.59)	10,386 (33.29)	413 (3.92)
Total	42,198	31,197	10,551

Source : A. Datta, B.D.O., Farakka Block, Murshidabad District, West Bengal, May, 1989.

Most of the people of this Block are now economically depend (directly or indirectly) upon this barrage and power station. Since the work of this barrage has already been completed, the people are mostly depend upon FSTPP.

Most of the people in this area were economically backward. Due to poor economic condition, many of them were involved in various anti-social activities as their sources of livelihood. Beniagram village was known for the existence of a good number of anti-social elements. But due to establishment of barrage and power station, many of them have taken up new occupations for their earning. It is however true that only a few could abruptly change their economic condition. But they have failed to develop themselves in the culture/educational side. Due to this gap, they don't have hesitation to continue with anti-social works despite position of enormous wealth. It was reported that

such people, who suddenly became rich, and involved in anti-social works are getting shelter of different political parties.

On the other hand some people got chance to meet their minimum needs because of the establishment of this power plant. They are mainly serving as contract labourers. Since their earning is very low they cannot effort to take much interest in education of their children. As a result they are still educationally and culturally backward as they were before setting the FSTPP. Further details of which will be given elsewhere.

Emergence of FSTPP, Immigration and Rise of Colony:

There were 1630 employees of FSTPP (as on May, 1989) and there were more than other 8000 people who were directly or indirectly engaged with the works of FSTPP. Most of these people came to Farakka from outside of West Bengal. Some of these outsiders are trying to adopt themselves to the culture of Bengal, while the remaining are not interested to do so. Thus they are practicing their own culture and rituals even living within the cultural milieu of Bengal. But they are attending the socio-religious functions (say Durgapuja) of Bengal as festivity. The Bengalee people are also attending the functions of the non-Bengalees. In this way an acculturation is taking place.

We observed that the outsiders who stay in the residential quarters of the power plant have a tendency not to mix with the local people freely. Similarly, the local people have also a tendency to avoid them. Due to this the employees of FSTPP appear to live in an isolation.

To this 'isolated residential places', the employees of FSTPP are also celebrating social-cultural and religious functions. The national festivals are also being celebrated. To these festivals and functions, the employees and family members of FSTPP interchange their cultural norms to each other. It has been observed that many Bengalee employees were participating in many non-Bengalee programmes (say Hindi poetry recitation, essay writing etc.) and they have been able to earn excellence. On the other hand, many non-Bengalee employees tried to learn the Bengali language. At present there exists a mixed culture in this colony and the children of the employees of FSTPP will be adopted to this culture. In this way a new cultural trend is likely to emerge.

STRUCTURE AND ORGANIZATION OF THE POWER PLANT

Electricity being the most versatile form of energy which provides the infrastructure for economic development, the successive Five Year Plans of India have laid special emphasis on the development of power industry in the country. But, until 1975, this remained a rather neglected area of development. The financial outlays on power were of the order of Rs. 5000 crores during the entire plan era from 1951 to 1974. In contrast, the Fifth Plan alone provided for an outlay of Rs. 19,265 crores. This outlay far exceeds the total of outlays made during the earlier plan period. Despite vast resources, financial and other material inputs mobilised for power development, this sector has apparently failed to produce the desired results (Sankar, 1982 : 1).

The developed countries are characterised by the use of energy on a large scale, both for domestic consumption and industrial and agricultural production. The people there are energy conscious. They realised that satisfactory economic growth could not be achieved without adequate supply of energy in suitable forms of acceptable quality and at reasonable cost. Unless this condition is fulfilled, it will not be possible to achieve optimum development of production and productivity in industry, agriculture, transport, services and economic growth may fall short of the set target (Bhanage, 1976).

Till the era of planning was ushered in, the overhead capital in the public sector was meagre and power development there received scant consideration. Public investment was three percent of the national income in 1931-32 and was 1.7 percent on an average during 1932-37. It rose merely to 2.3 percent during 1948-49. During 1927-37, public investment on electricity development accounted for only 1.8 percent of total public investment (Healey 1965).

The Government, in fact, had no plan to develop this industry. About this Visvesvaraya (1934 :4) stated "In India the use of electricity has made a headway in a few industrial centres like Bombay and in lighting industrial towns, but its use for industries and manufactures is not being fostered according to a predetermined potential. While other countries are actively prosecuting well thought-out schemes, this country seems to be merely looking on".

Despite such in action , the demand for power had all along an increasing trend. We get a clear picture of this increasing demand from Table 3:1.

Table 3:1

Demand and Supply of Electricity in First and Sixth Five Year Plans

Installed capacity at the beginning of First Plan (1951)	2,270 MW
Installed capacity at the end of 1980-81	32,961 MW
Installed capacity at the end of Sixth Plan (1985)	51,192 MW
Planned installed capacity at the end of this century	1,30,000 MW
Investment to the Power Sector in the 1st Plan	Rs. 320 crores (16.3% of total)
Investment to the Power Sector in the 6th Plan	N.A.
Per capita consumption of electricity in 1951	18
Per capita consumption of electricity at the end of 1980	131
Per capita consumption of electricity in the Sixth plan	N.A.
No. of villages electrified so far	N.A.
No. of pumpsets energised so far	N.A.

[Source - NTPC : Today & Tomorrow, 1981]

Since the records of Seventh and Eighth Plan are not available, the records of Sixth Plan have been considered for our discussion.

It may be pointed out that along with the increasing demand, there has been an increase in the installed capacity.

The following table will provide the picture of the increasing installed capacity.

Table 3:2
Development of Installed capacity

Year	Hydro	Thermal	Total
1900	0.13	1.00	1.13 MW
1915	70.87	35.00	105.87 "
1930	216.00	275.00	491.00 "
1939	155.00	318.00	473.00 "
1947	66.00	226.00	292.00 "
1960-61	N.A.	N.A.	3290.00 "
1965-66	N.A.	N.A.	4374.00 "
1970-71	N.A.	N.A.	5682.00 "
1973.74	N.A.	N.A.	1955.00 "
1974.75	N.A.	N.A.	1658.00 "
1983-84	N.A.	N.A.	5888.00 "
1985-86	N.A.	N.A.	2392.00 "
1986-87	N.A.	N.A.	3456.00 "

Source : i) Rao, 1970 : 153

ii) Statistical Pocket Book : 1975

iii) India : Different years.

Table 3:3

Percentage Share of Different Categories
of Consumers in Total Electricity Sold

Sl. No.	Category of Consumers	1950-51	1960-61	1970-71
1.	Domestic Light and small power	12.62	10.70	8.96
2.	Commercial light and small power	7.43	6.08	6.01
3.	Public lighting	1.45	1.38	1.17
4.	Industrial power (Light and medium voltage)	62.64*	11.76	9.14
5.	Industrial power (High voltage)		57.73	59.95
6.	Traction	7.42	3.25	3.19
7.	Public water works and sewage pumping	4.55	3.13	0.24
8.	Agriculture	3.89	5.97	10.44

* Industrial Power-Light, medium and High voltage for all the three.

Source: Shah, 1977 : 21.

The rising power consumption pattern and the compulsion to increase the economy of generation and transmission calls for improvements and new developments in the power sector. The power system is required not only to meet the additional requirements of electricity in the future but also to make up for the past lapses and deficiencies.

For achieving a six percent growth rate during the 8th plan, the electricity generation requirements in 1994-95 will be 480 billion units (Kwh). After taking into account 25 billion units from the captive power units, the generation requirements from utilities would be of the order of 455 billion units. The gross generation after the addition of about 38,000 MW capacity during the 8th plan period is estimated about 410 billion units. However, this can be stepped upto 450 to 452 billion units provided a time bound action programme is taken for improving the performance and productivity of the existing units and operation of the power system as a whole (editorial, Southern Economist; 1990:1).

A detailed figure of target and actual power generation of different years is shown in table 3:4.

Emergence of NTPC

Until the year 1975, the development of power resources in the country had taken place with power stations being planned, constructed and operated almost exclusively by the State Electricity Boards. The Central Electricity Authority acted merely as the co-ordinating agency. Challenging needs of the fast growing power sector made it necessary for the government to review the organisational arrangements and saw the formation of a new Ministry of Energy in late 1974. To facilitate construction, operation, and overall management of the Super Thermal Power Stations, the

Table 3:4
Target and Actual Power Generation of Different Years in India

Year	TARGET (Billion Units)				ACTUAL GENERATION (Billion Units)			
	Hydro	Thermal	Nuclear	Total	Hydro	Thermal	Nuclear	Total
1984-85	52	98.5	3.5	154	53.75	98.77	4.05	156.63
1985-86	56	110.0	4.0	170	50.933	114.119	4.985	170.037
1986-87	Not Available				53.8	128.8	5.0	187.6
1987-88	56.4	143.0	5.6	205	Not Available			

Source : India 1985, 1986, 1987, 1988.

Electricity (Supply) Act was amended in 1976 to enable generating companies to be set up in the Central and State sectors. This is a major milestone in the power sector development as this amendment paved the way for the Central Government to be directly involved in power generation and transmission on a countrywide basis.

For the challenging needs of power, NTPC was emerged in the national power scene in November, 1975 under the Ministry of Energy as the sole Central Agency for promoting and organising an integrated development of thermal power in the country. The company started functioning in March, 1976 with the appointment of a Chairman and Managing Director.

The first stage of development of NTPC envisaged installation of more than 9,000 MW of generating capacity in the running decade. Initially there were four pit-head super thermal power projects, being simultaneously constructed at Singrauli, Korba, Ramagundam and Farakka. At present, there are super thermal power projects, thermal power projects, and gas stations under this agency.

While accepting the gigantic power development programme, the company has placed special emphasis on manpower planning and career development in order to provide quicker progression and

job enrichment to employees at all levels. The scope of NTPC's operations are as follows:

- (i) Planning, investigation of new sites, preparation of feasibility and project reports and design, and engineering of power stations;
- (ii) construction and commissioning of large pit-head thermal power stations and associated transmission networks within tight time schedules;
- (iii) operation and maintenance of power stations;
- (iv) research and development in power generation.

Organisational Structure of NTPC :

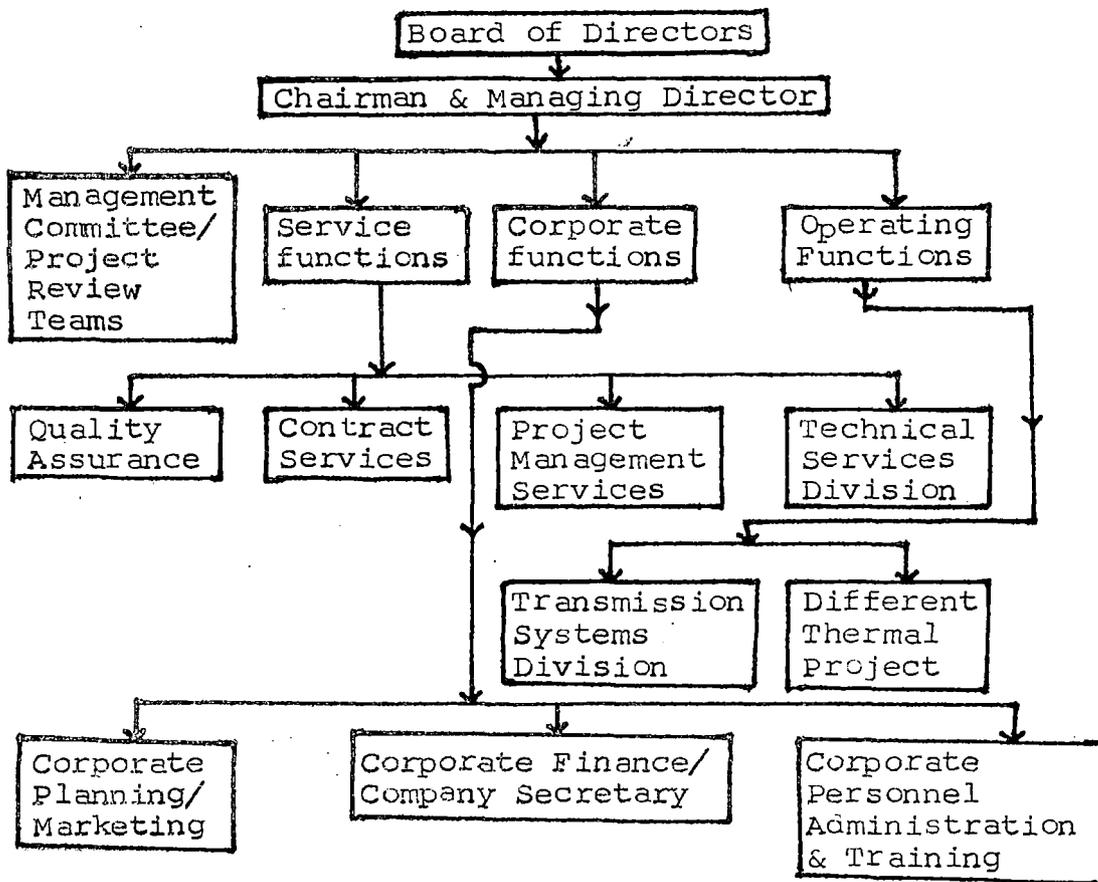
The organisational structure, management systems, and human resources are the important ingredients in the success of an organisation. NTPC has adopted a three tier organisation structure consisting of (i) Corporate Functions, (ii) Centralised Service Functions and (iii) Operating Division (Projects).

The Corporate Functions provide the policy making nuclei and ensure uniform implementation effort of all the projects. The Centralised Service Functions permit a high level of specialisation and building up of a valuable data base with progressive implementation of the projects.

The Operating Divisions (Project) have the total responsibility for implementation of the project within the predetermined targets. The relationship between the Operating Division and the Service Functions has been developed on a client-consultant basis.

Chart 3:1

Organisation Structure of NTPC

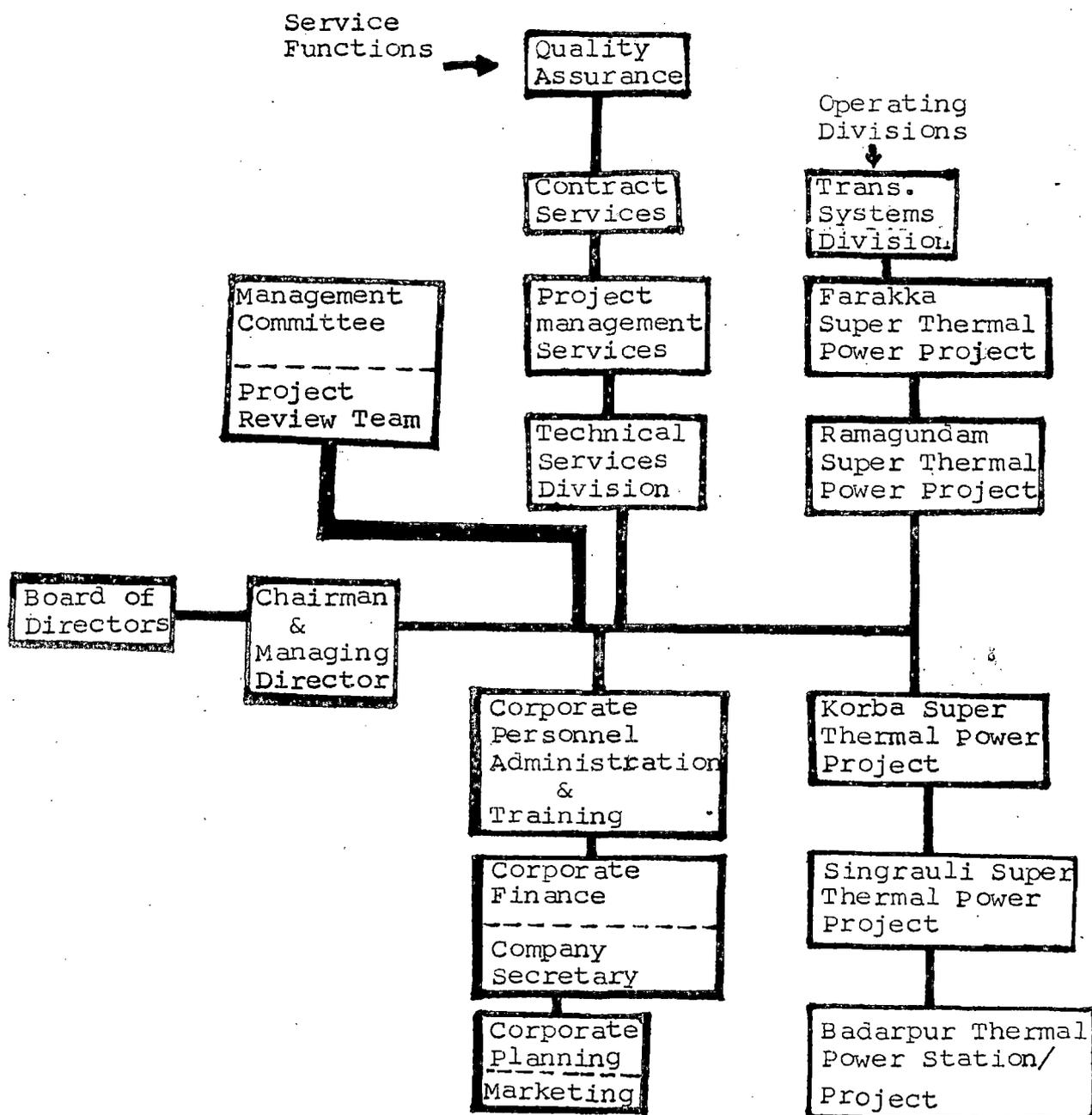


Source : NTPC : Today & Tomorrow, 1981

Service Functions, Operating Functions and Corporate Functions are correlated. The works of Corporate Functions are related and depend upon the works of Service Functions and Operating Divisions. The following Chart gives the interrelation among these three mentioned above.

Chart 3:2

Functional Relations of Corporate Profile



The Technical Services Division of the Company has been constituted for in-house engineering development. This division has the following main functions:

- i) preparation of Feasibility Reports,
- ii) preparation of Design Memorandum,
- iii) preparation of detailed Project Reports,
- iv) preparation of technical specialisation for plant equipment/works and technical evaluation of tenders;
- v) detailed engineering,
- vi) construction services,
- vii) Design development for plant and process improvement.

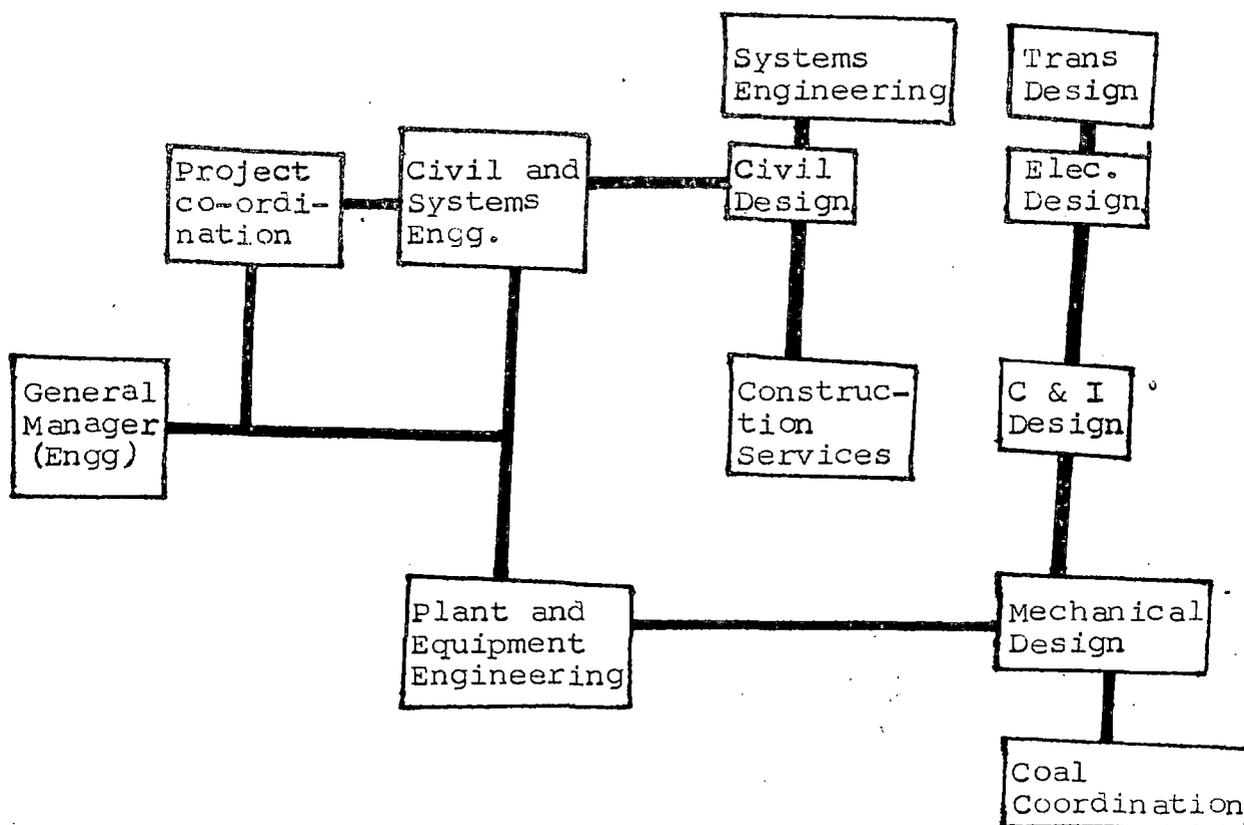
The Technical Services Division has introduced a number of new technological concepts:

- i) Merry-go-round coal transportation system
- ii) High voltage D.C. transmission
- iii) Data acquisition system
- iv) Tall multi-flue chimnies
- v) Power Plant Training Simulator.

The works of Technical Services Division may be shown in a diagram as follows:

Chart 3:3

Structural Pattern of Technical Service Division



Source: NTPC : Today & Tomorrow : 1981

The Operation Services Function was constituted soon after the inception of the Company to take care of the operational requirements right from the planning and design stages and in order to build a core of specialists to plan and prepare for the operation of the Company's power stations. This group has been actively associated with identifying problem areas and drawing up time-bound programmes for improving the performance of its projects.

The applied Research and Development function, now being developed as a part of this group, will go a long way in solving many day to day specific operation and maintenance problems, which are being faced by the thermal power plants in India.

The project management services is involved in drawing up the pre-order activities and master network for each project, identification, co-ordination, and integration of detailed networks, activity status monitoring and reporting for collation and dissemination of control information as well as exception reports.

Electronic Data Processing and management systems group is responsible for identifying and co-ordinating the development, implementation and documentation of management systems in all areas identifying areas for Electronic Data Processing applications, coordinating the computerisation of management systems and procurement of computer services and hardware.

The Contract Services Division has the total responsibility for contract packaging, preparation of commercial documentation and integration of all bid documents for tendering and performing co-ordination of all pre-tendering activities, bid evaluation, award finalisation and contract negotiation. The post-award responsibilities include expediting and co-ordination of inspect work through constant follow up with the contractors in order to ensure timely deliveries of equipment of right quality to the

project sites. In addition, the contract services also undertake centralised procurement co-ordination for steel, cement and diesel for all the projects.

NTPC has set up a separate Quality Assurance Group to ensure the quality requirements of goods and services produced by the Company. All the quality management functions in NTPC involve the following:

- i) Contract Quality Assurance
- ii) Engineering Quality Assurance
- iii) Inspection of Manufacturer's Works
- iv) Field Quality Assurance at each of the project sites.

The Finance Function in NTPC has an important role to play in view of the capital intensive nature of its projects. Headed by a whole time Director, the Finance Function has the following main areas of responsibility:

- i) Accounts and Budget
- ii) Loans and Finance
- iii) Financial Information systems
- iv) Internal Audit

In addition to normal work, finance function has been able to develop systems in critical management areas such as budgeting, costing, financial and contract accounting, inventory control and

internal audit with appropriate management reporting systems at corporate as well as at project levels.

The Corporate Planning and Marketing Department is responsible for the following functions:

- i) Project approvals and progress review
- ii) Project appraisals and co-ordination with financing agencies
- iii) Long range planning
- iv) Organisational planning
- v) Marketing.

Corporate Planning Department also functions as the Secretariat for the Chairman and Managing Director. The marketing function involves the formulation of tariff policy, contracts for supply of energy, billing and collection.

The Management Committee chaired by the Chief Executive comprises of all General Managers and whole-time Directors of NTPC. The Committee meets at regular intervals to discuss policy issues for implementation. The Committee reviews and approves all policies and provides a forum for resolution of issues affecting the entire company or a number of projects.

The Project Review Teams consisting of representatives from various functions, both from the corporate office and the

site organisation, meet every month to review the project in its entirety embracing all functions, namely, engineering, contracts, construction, finance and accounts, personnel and administration, and corporate planning. The meeting is chaired by the General Manager of the project.

The personnel Department looks after the development of the management system of NTPC. The main role performed by this department are as follows:

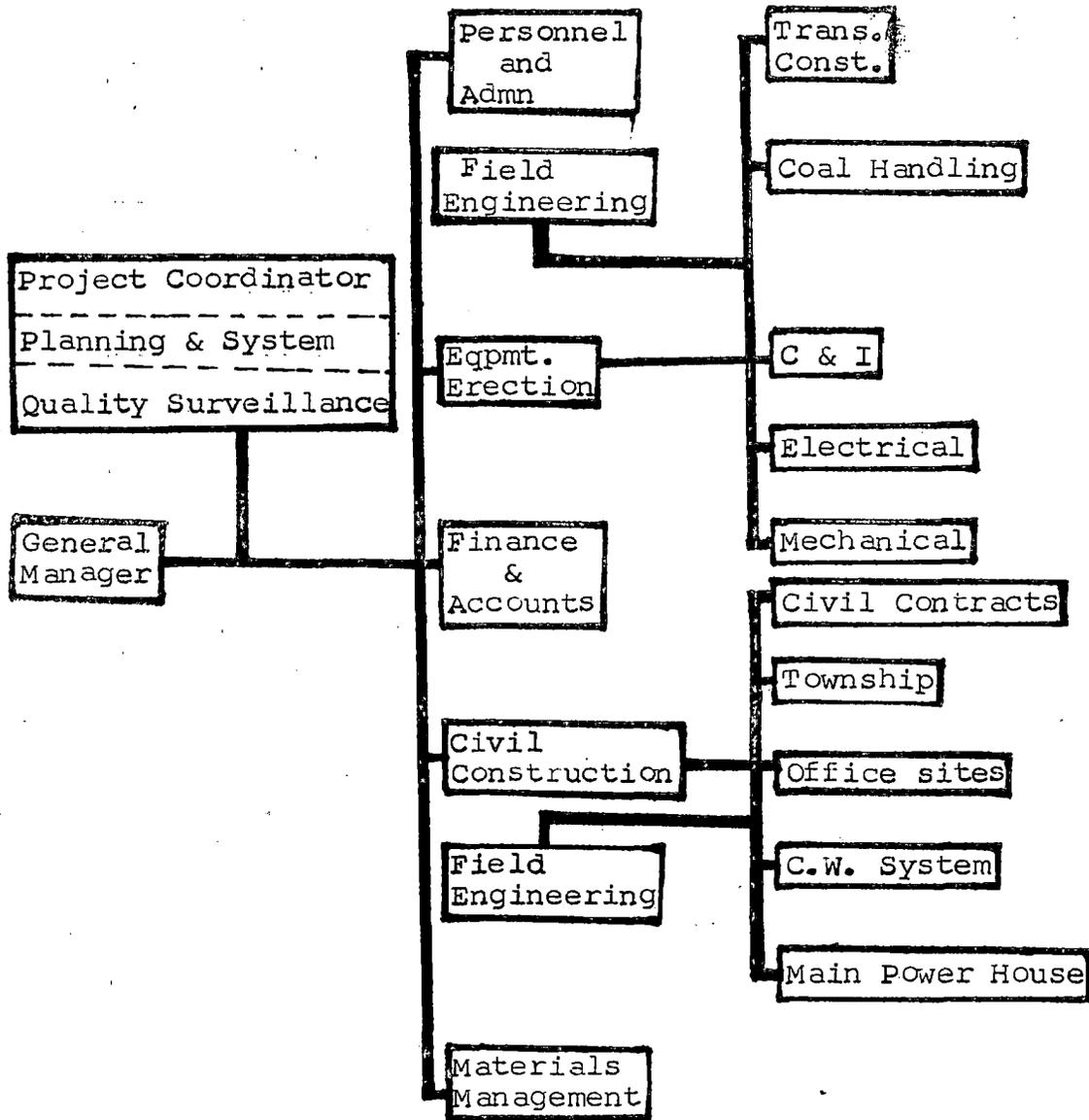
- i) Manpower planning
- ii) Recruitment & selection
- iii) Wage and salary administration
- iv) Personnel policies, motivational and welfare schemes
- v) Career planning
- vi) Organisational development, personnel research & personnel audit
- vii) Industrial relations
- viii) Training and Management Development

The project organisation (the operating division) headed by a General Manager is entrusted with the total responsibility for implementation of aspects of the project in accordance with the master network schedule. The project organisation is self-sufficient in most respects with delegation of adequate administrative and financial authority to the General Manager to redefine priorities within the framework of time, quality and costs. The

following gives the interrelation among the different Department/
Section of a Power Plant.

Chart 3:4

Functional Arrangement of a Power Plant



Source: NTPC : Today & Tomorrow : 1981

Table 3:5
Some Important Features of a Super Thermal
Power Project (Power Station) are as follow:

Generating Capacity	2100 MW
Capital Outlay	Rs. 1,000 crores
400 KV Transmission	2,000 Kms
Annual Revenue	Rs. 200 crores
Coal Consumption	10 million tonnes
Operation Manpower	5,000
Structural Steel	50,000 tonnes
Reinforcement Steel	100,000 "
Cement	200,000 "
Equipment	160,000 "
Cabling	3,000 "
Construction Manpower	20,000 "

Source : NTPC : Today & Tomorrow, 1981.

It may be noted in this connection that despite the transmission system of FSTP being 640 Kms instead of 2000 Kms, still it is said as Super Thermal by NTPC.

Projects of NTPC :

Different Super Thermal Power Projects, Thermal Power Projects, and the Gas Turbine Projects are the operating units or producing units of NTPC. These units are producing power for the country. Production capacity (installed capacity) of some power stations of NTPC are as follows:

(i) Singrauli Super Thermal Power Project - It is one of the biggest power stations in India located at Mirzapur District of Uttar Pradesh with an installed capacity of 2000 MW.

(ii) The Korba Super Thermal Power Project has already achieved a generating capacity of 1600 MW and with the proposed commissioning of the third and final 500 MW unit, the total capacity of Korba located at Bilaspur district of Madhyapradesh will raise to 2100 MW.

(iii) At Ramagundam of Karim Nagar District in Andhra Pradesh three 210 MW units and one 500 MW unit have already been installed. Two more 500 MW units are under construction which will raise the ultimate capacity to 2100 MW.

(iv) Farakka in Murshidabad District of West Bengal has already got an installed capacity of 600 MW (3 x 200 MW) in the first stage. The second stage comprising of two units of 500 MW each are under construction.

(v) The Indo-Soviet Venture Vindhyachal in Sidhi District of Madhya Pradesh has a generating capacity of 420 (2 x 210) MW. The approved capacity is, however, 1260 MW, comprising 6 units of 210 MW each.

(vi) Rihand in Mirzapur District of Uttar Pradesh has one unit of 500 MW already in operation and the second unit is under construction.

(vii) Badrapur Thermal Power Station/Project - This power project is located in Delhi and it was not initially a project of the NTPC. The main plant and equipment are among the first few units fabricated indigenously. After setting up, the management of this power station was handed over to NTPC in April, 1978. The first stage of this unit, designed to generate 300 (3 x 100) MW was commissioned in 1973. The second stage of 310 MW unit started on commercial operation in 1980 and the third stage of 210 MW unit was commissioned in 1981-82. The installed generating capacity of this power station is 720 MW.

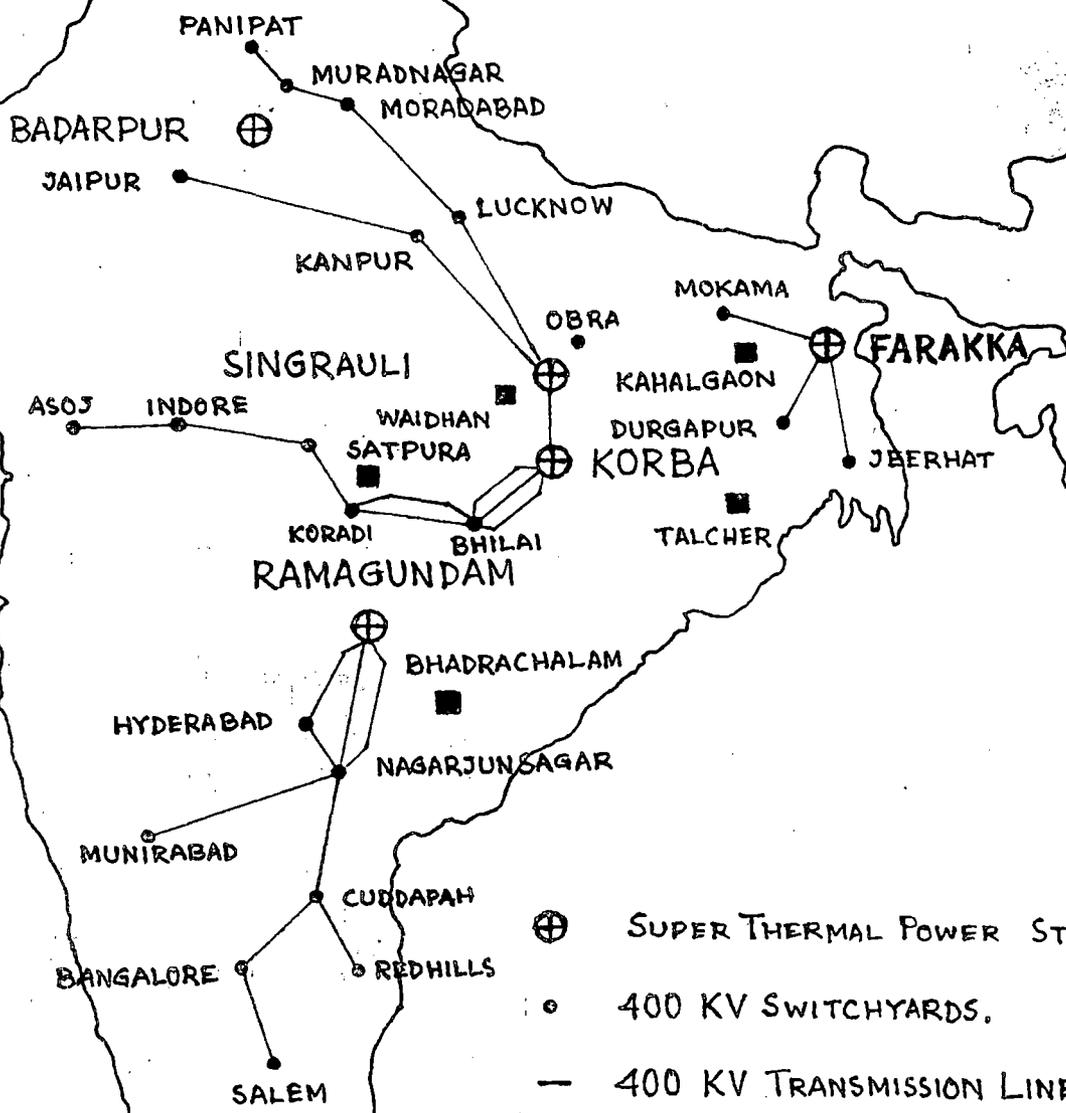
NTPC is also constructing projects at Dadri near Delhi, Kahalgaon in Bihar and three gas stations at Anta, Auraiya and Kawas. Government approval for Talcher Project in Orissa has now been received for the first stage of two units of 500 MW each.

In future, projects at Mangura (Andhra Pradesh), Chandrapur (Maharashtra), Pench (Madhya Pradesh) and Birbhum (West Bengal) will be taken up by NTPC.

Approved capacity and investment of NTPC :

As on 31st March, 1988, the approved capacity of the company was 13,370 MW with an approved investment, including the cost of the associated transmission system, of Rs. 12,227 cores. Including the Talcher Project, the approved capacity of

PROJECTS OF NTPC AND ITS POWER DISTRIBUTION
IN INDIA



- ⊕ SUPER THERMAL POWER STATIONS.
- ⊙ 400 KV SWITCHYARDS.
- 400 KV TRANSMISSION LINES.
- SITES FOR PROPOSED STATIONS.

the company is being raised to 14,370 MW with an approved investment of Rs. 13,758 crore.

Generation and Seventh Plan Profile of NTPC :

The corporation earned a net profit of Rs. 302.40 crore during 1987-88, registering a significant 42.77 per cent increase over the previous year's Rs. 211.80 crore. This included a prior income of Rs. 36.17 crores, mainly arising out of conversion of loan into equity for Singrauli and Farakka Projects. Thus the normal profit for the year amounted to Rs. 266.63 crores, which is itself far ahead of the previous year's profit. The return on capital was an impressive 12.1 percent.

NTPC added 2410 MW to its generating capacity during 1987-88 against a target of 1910 MW, raising its total installed capacity to 5510 MW. The corporation achieved an average plant load factor of 75.6 percent against the national average of 56.4 percent from thermal stations during 1987-88. 19,378 million units of power were generated during the year against the previous year's generation of 15,921 million units. This represents almost 10 percent of the total power generation in the country.

Seventh Plan Profile :

An outlay of Rs. 5560 crore initially approved for NTPC was recommended for enhancement after a mid-term review to

Rs. 9,460 crore by the Planning Commission. The increase is primarily on account of the new starts during the Seventh Plan. This stands for an increase of Rs. 3900 crore, over the initial outlay.

The Corporation has been relying more and more on internal and extra-budgetary resources for meeting the plan fund requirements. In the case of new starts, the requirements of funds to a large extent is envisaged to be either through NTPC's internal resources or by the way of international assistance and market borrowings.

The net budgetary support from the Government would reduce to a mere 9.6 percent in the recommended outlay of Rs. 9460 crore as against 41.6 percent in the initially approved outlay.

Plan Outlay of NTPC :

<u>Year</u>	<u>Amount</u>
1988-89	Rs. 2185 crore
1989-90	Rs. 2565 crore

It is to be mentioned here that modes of production of power industries is quite different from the other manufacturing industries. There is indirect production in this organisation but a number of industries are basically dependent upon its

production. Like the other industries, it is not a factory-based organisation but the correlation among the different departments (like the factory-based organisation) are important. Its productions are totally dependent upon those employees who are highly technical experts. It is a fact that most of the technical experts of the power plants of NTPC have been drawn from five Indian Institute of Technologies. Despite this, the production of this power plants is not entirely satisfactory. As information reveals, Farakka remains the only power plant of NTPC which is running at loss.

II

Emergence of Farakka Super Thermal Power Project

As stated, Farakka Super Thermal Power Projects (FSTPP) is the fourth Super Thermal power project, being constructed by NTPC. The villages surrounding the power plant and townships are generally thickly populated. Percentage of literacy is low (20.57% according to 1981 census) and the area was industrially very backward.

Table 3:6

Population and Literacy of Farakka Block (1981 Census)

	Male	Female	Total
Population	68,371	66,074	1,34,445
Scheduled Caste Population	7,925	7,597	15,522
Scheduled Tribe Population	1,165	1,110	2,275
<u>Literacy</u>	<u>Literate Total Population</u>	<u>Percentage of literacy</u>	
Total	27,652	20.57	
Male	19,352	28.30	
Female	8,300	15.56	

Source : Census Report, 1981.

The Farakka Super Thermal Power Project, when completed, will have an ultimate capacity of 2100 MW. The first 200 MW unit of Stage I was commissioned on January 1, 1986. The generation of Stage I (i.e. total generation) of FSTPP are as follow:

Table 3:7
Generation of Power of FSTPP in different years

Year	Installed capacity	Actual Generation (Million Unit)
1985-86 (From Jan. '86 to April, '86)	200 MW	0.276
1986-87	400 "	552.92
1987-88	600 "	1221.517

Source : Operation & Maintenance Deptt., FSTPP, May'89.

The power from FSTPP is being carried through 400 KV transmission system linking Farakka to Jeerhat and Farakka to Durgapur.

Structure and Organization of FSTPP :

We may divide the works of FSTPP in two categories viz:

- (a) Corporate works
- (b) Contract Labourers

It is to be mentioned here that it is a strategy of NTPC to complete their construction works in all power stations mainly by the contractors. There is a centralised contract services function of NTPC which has been established to organise and perform all procurement activities pertaining to high-value engineering

based equipments, materials and services for NTPC power stations. Procurement of services/materials/works requiring adherence to procedures of international financing institutions. This involving long delivery periods and intense engineering knowledge have been classified as Category-A contracts which are handled by the Centralised Division of NTPC. All other contracts pertaining to the project are classified as Category-B contracts and are handled directly by the project.

The Corporate's work is to find out the contractor's work and to produce power.

The administrative chief of this power plant is the General Manager. There are nine different departments headed by Deputy General Manager/Managers under the General Manager. These departments are as follows:

- (i) Operation & Maintenance
- (ii) Project
- (iii) Finance
- (iv) Materials
- (v) Personnel & Administration
- (vi) P & S
- (vii) EDP (Electronic Data Processing)
- (viii) Field Quality Assurance
- (ix) Field Engineering Services

Besides these, there are other two Sections which are directly under the General Manager -

- (i) Vigilance Department - headed by a Vigilance Officer
- (ii) Safety Department - headed by a Safety Officer.

The Managers/Sr. Managers or Deputy General Managers are responsible to report about their Departments/Sections to the General Manager of the plant. The only exception are the cases of Vigilance and Safety Departments. In these two cases, the officers are liable to report to the General Manager directly. The following Chart shows a clear picture about the Bureaucratic structure of FSTPP.

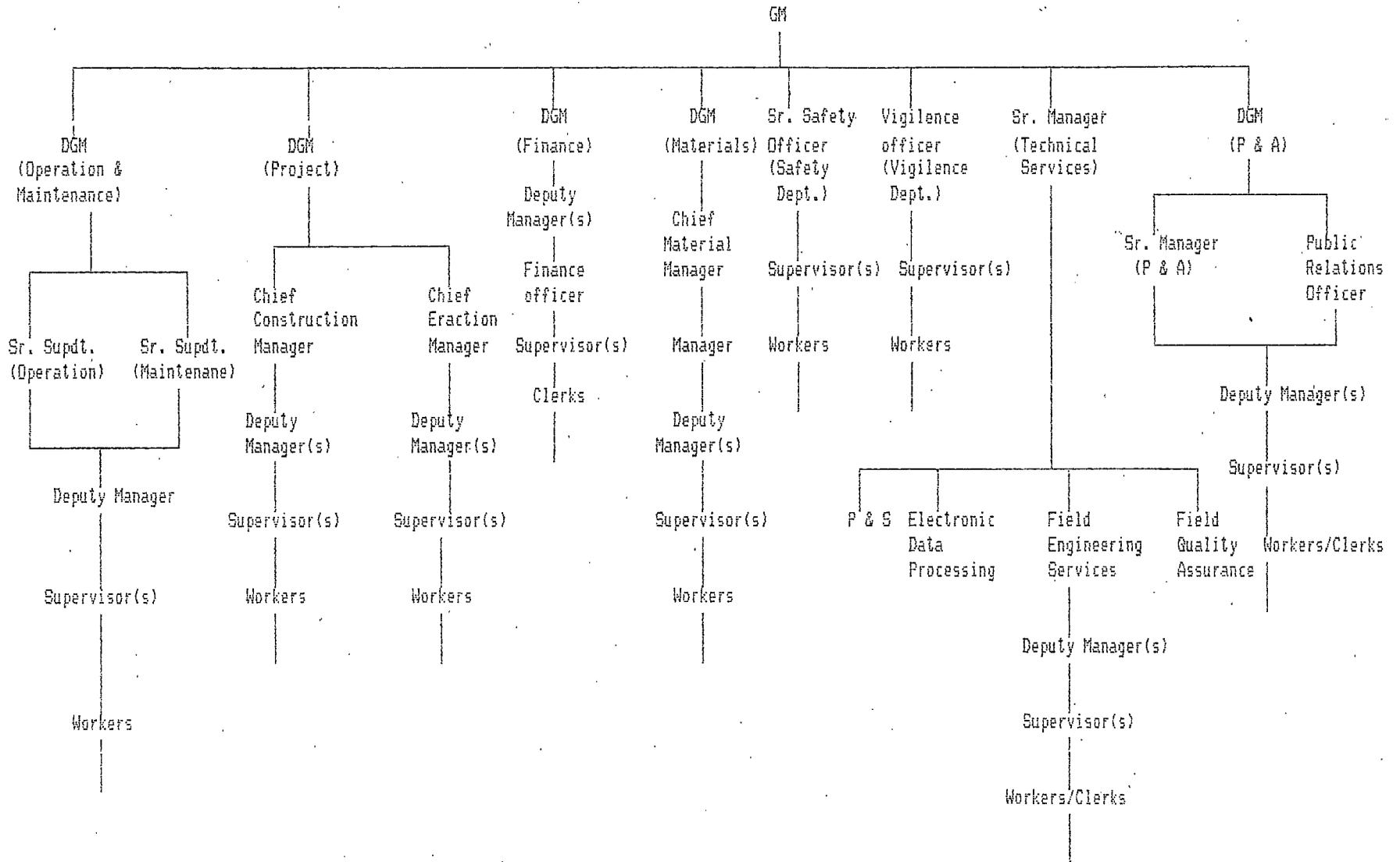
It is important to note down here that the deviations of the said Departments/Sections are not rigid. This system may vary from plant to plant, depending upon the situation of the plants.

The importance of different departments vary from time to time. For example, the importance of the Project Department is too high in comparison with other Departments at the initial state in every plant. After completion of the project, the importance of the 'Operation and Maintenance' becomes very high.

Despite such arrangement for its maintenance generation of power and distribution, only FSTPP is experiencing loss among all project of NTPC, the reasons of which will be discussed in due course.

Chart 3:5

Organisational Structure of Farakka Super Thermal Power Project



MANAGEMENT, WORKERS AND THEIR
INTERPERSONAL RELATIONS

It is the general requirement for every organization that it observes some necessary procedures by adoption of which it is in a position to run smoothly. Categorization of workers, division of labour, participation of various sections of employees in the management, etc. are some of the requirements considered important for smooth functioning of an industry. Since a power plant is associated with the indirect modes of production, its workers' categorization should be different from the other industries but the basic requirements have to be similar. Here we propose to examine this position at FSTPP.

Recruitment Procedure of the Employees:

It has been pointed out in the Chapter 3 that there are two agencies of the management of FSTPP, viz. (i) Central body and (ii) Local Project body

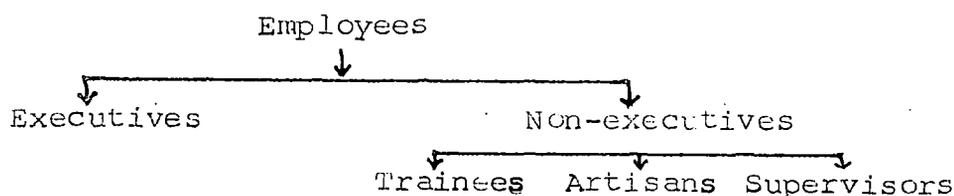
Chairman is the chief of the central body and Managing Director is the chief of the local project body. Accordingly recruitments in this organization are made by (i) the NTPC's central body as well as (ii) the local project.

The executives and trainees (of executive cadre) are deployed by the central body of NTPC through open examinations and interviews on all India basis. Such recruitments are done through open advertisements of these posts by the NTPC. The local projects, on the other hand, recruit the non-executives (Supervisors, workers and others). Generally the Projects ask for recommendations from the local employment exchange(s). Posts are also announced through news papers and selection is made after the necessary interview. However, approval of the central body is necessary before the actual recruitment. In certain cases, the central body also recruits the technical hands belonging to non-executive cadre.

The non-executives belong to three categories:

- (1) Trainees
- (2) Artisan-Workmen, attendants, etc.
- (3) Diploma holder Supervisors.

The workers' categorization in FSTPP can be represented by the following diagram:



The categorization of employees in this power plant as well as in other power plants of NTPC is based on pay-scales as well as on the nature of job. The pay scale of the employees of FSTPP are given below:

Exectuvives

1. Assistant Officer (Assistant Engineer) : E₁

Scale:Rs 1000-50-1300-60-1900

2. Officer (Engineer) : E₂

Scale : Rs. 1100-60-2000

3. Senior Officer (Senior Engineer) : E₃

Scale : Rs. 1600-60-2200-75-2500

4. Deputy Manager : E₄

Scale : Rs. 2000-75-2300-100-2800

5. Manager : E₅

Scale : Rs. 2300-100-3100

6. Senior Manager : E₆

Scale : Rs. 2600-100-3400

7. Deputy General Manager : E₇

Scale : Rs. 3000-100-3700

8. General Manager : E₈

Scale : Rs. 3500-100-4000

9. Executive Director : E₉

Scale : Rs. 4000-125-4500

Supervisor

1. Junior Supervisor : Rs. 750-30-900-35-1250

- | | |
|----------------------|---------------------------|
| 2. Supervisor II | : Rs. 800-35-975-40-1335 |
| 3. Supervisor I | : Rs. 880-45-1465 |
| 4. Senior Supervisor | : Rs. 950-45-1040-50-1540 |

Workmen

- | | |
|---|---------------------------|
| 1. W ₁ : Attendant, Mazdoor | : Rs. 550-11-715 |
| 2. W ₂ : Senior Attendant | : Rs. 580-12-640-15-790 |
| 3. W ₃ : Junior Assistant | : Rs. 600-16-840 |
| 4. W ₄ : Assistant, Grade IV | : Rs. 620-20-920 |
| 5. W ₅ : " " III | : Rs. 650-22-980 |
| 6. W ₆ : Assistant, Grade II | : Rs. 710-23-825-25-1000 |
| 7. W ₇ : Assistant, Grade I | : Rs. 750-25-875-30-1205 |
| 8. W ₈ : Assistant | : Rs. 800-30-950-35-1300 |
| 9. W ₉ : | : Rs. 880-40-1440 |
| 10. W ₁₀ : | : Rs. 950-40-1030-50-1530 |

Source: Finance & Accounts Branch, FSTPP, March, 1989.

Besides the basic pay there are D.A. (based on All India Consumers' Price Index, Labour Bureau, Simla), Project allowance, Tea subsidy, Transport Subsidy, House Rent Allowance, etc.

Recruitments during different years in this power plant have been as follows:

Table 4:1
Recruitment in FSTPP in Different Years

Year	No. of Employees
1978	01
1979	10
1980	16
1981	170
1982	165
1983	138
1984	252
1985	309
1986	207
1987	161
1988	112
Total	1253

Source: Personnel & Administration Section, FSTPP,
October, 1988

The groupwise employees upto 1988 were as follow

Group B	-	66
Group C	-	854
Group D	-	326
(Supervisors & Executives)		
Group D	-	07
(Sweepers & etc.)		
Total		1253

Source: Personnel and Administration Section, FSTPP,
October, 1988.

According to Personnel & Administration Section, in May, 1989 there were 1630 employees in this power station. Altogether 377 employees have been appointed between 1988 and 1989. The employees can be categorised into 14 different types. The distribution of whom is shown in Table 4:2.

Table 4:2
Sectionwise Distribution of Employees
in FSTPP

Types	Headed by	No. of employees
1. G.M. Office	G.M.	08
2. Vigilence	Vigilence Office	04
3. Planning system	Manager	13
4. Field Engineering	"	23
5. Field Quality Assurance	"	19
6. EDP, SCM & Safety	"	19
7. Finance & Accounts	DGM	84
8. Trainee	Manager	22
9. Medical	Asst. Cheif Medical Officer	78
10. Personnel & Administration	Chief Personnel Manager	99
11. Materials	Chief Material Manager	112
12. Civil	DGM, Project	136
13. Erection	"	229
14. Operation & Maintenance	Sr. Supdt.	784
Total		1630

Source : Personnel & Administration Section, FSTPP, May, 1989.

The employees spend about eight hours of each working day in the plant. There are shifting duties in the Operation and Maintenance branches. In other sections, the duty is generally from 9 A.M. to 5 P.M. As it appeared, many of the employees regarded the plant not just as a place to earn their livelihood but as the manifestation of a community, characterized by a set of rules, beliefs, and sentiments, common to its members. This was particularly so, specially among those employees who were associated with fieldwork. The few, who regarded the plant as a place to earn their livelihood, are the employees of the Personnel & Administration Section. In comparison with the former, they appear to lack total involvement. This is also true for some trade union leaders and active union members.

Interpersonal Relations

Smooth interpersonal relation is an important factor for any industry. Industrial harmony, modes of production, in a way, the industrial atmosphere as such depends upon these factors. An industry suffers from sickness if the interpersonal relationships there are not steady or smooth. Besides interpersonal relation, if the workers of an industry maintain healthy relationship with the local people, that too speaks of strength of the industry. The interpersonal relationship is more important for this power plant, as this is the only power plant of NTPC where the employees do not get incentive for production yet. Workers of all other NTPC plants enjoy this benefit.

Interpersonal relations may be looked into in two ways:

- (1) Formal (i.e. inside the factory) and
- (2) Informal (i.e. outside the factory).

Formal Relations:

There are certain committees having representatives from the management as well as employees meant to look after industrial harmony.

Employees' Participation in Management:

"NTPC believes that active participation of all employees in every aspect of its operation in true participating spirit is essential for creation of a climate of involvement and commitment to the work which alone can motivate the employees to contribute the best for the sustained growth and prosperity of the organization" [Employees participation in Management (Pamphlet), FSTPP]. In pursuance of this belief, NTPC has set up a joint Bipartite Negotiating Committee at the apex national level in 1982 (Now it is called Negotiating Bipartite Committee). It is believed that this has resulted in 'industrial harmony accompanied with significant achievements in productivity and other construction activities' [Employees participation in Management (Pamphlet), FSTPP].

Though it is claimed that there is an industrial harmony over there, this was only for those Departments which were related to the field works (Operation & Maintenance, Field Engineering, Erection, Civil Departments). Some Departments like Personnel & Administration, Materials, Planning & System, appeared to lack of harmony among the workers. There are many workers in these Departments who spend time in gossiping, union works, etc., rather than attending to their concerned duty. Such work-culture has no apparent difference from those engaged as petty Clerks in many Government offices.

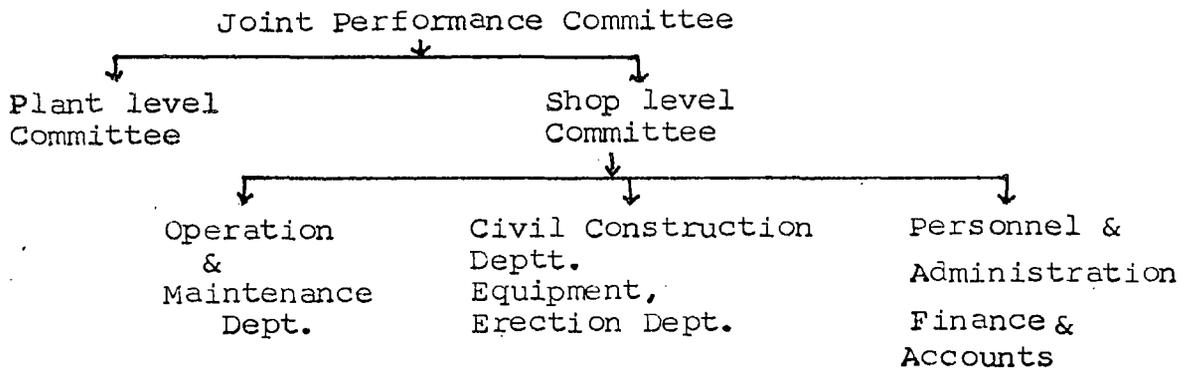
It is a fact that at the apex level NTPC Joint Performance Committee has been formed. NTPC has decided to extend the participative system to the plant and shop levels. The objective of the scheme of Employees' Participation in Management at FSTPP are as follows:

(i) To establish a system of participation ensuring involvement of employees and the management in decision making both at plant level and shop floors.

(ii) To ensure effective two-way communication and continuous exchange of information for an objective appreciation of problems relating to production activity and other activities with a view to resolving problems through the joint endeavour of both employees and the management.

(iii) To foster a spirit of joint responsibility and co-operation with a view to promoting increased production, productivity, and other activities by optimum utilization of the

resources for the general benefit of the organisation, the employees, and the country.



There is one Plant Level Committee and there are three shop level committees at FSTPP. Three shop level committees covering shops/sections are as follows:

- (i) Operation and Maintenance Department with all its sections and sub-sections
- (ii) Civil Construction Department and Equipment Erection Department
- (iii) P & A, F & A, Materials and other sections
i.e. Planning & System, Field Quality Assurance, Auto Base etc.

According to their constitution, 'the plant level committee shall consist of three representatives from the employees and equal number of representatives of the management, besides a Chairman'. There are eight members in the Plant Level Committee.

Besides, there is also a 'member-secretary'. The three representatives of the employees are nominated by the following unions/association (one each) :

- (i) NTPC Supervisors' Association, Farakka
- (ii) FSTPP Workers' Union, Farakka
- (iii) FSTPP Employees Union, Farakka.

The General Manager of the project is the Chairman of the Plant Level Committee. He nominates an executive from Personnel Department as the Secretary to the different committees.

According to their constitution, there shall be seven members (in total) in the Plant Level Committee

- 3 (representatives of management)
- +3 (representatives of employees)
- +1 (General Manager)

Total = 7

At the time of field investigation, on which the present account is based, Mr. K. Radhakrishnan, General Manager was the Chairman of the Plant Level Committee and Mr. A.K. Bala, Deputy Manager (Personnel) was the Secretary.

The Plant Level Committee meets once in three months. The Secretary prepares the agenda for the meeting with the approval

of the Chairman. He also prepares the schedule for discussion.

All decisions of the Committee are on the basis of consensus. This Committee is expected to deal with different types of matters which are given below:

- 1) Optimum general efficiency and fixation of productivity norms and generation/construction/performance targets.
- 2) Planning, implementation and review of monthly targets and schedules.
- 3) Matters relating to planning of materials, maintenance of inventory at optimum level and storage facilities.
- 4) House-keeping.
- 5) Encouragement to a consideration of suggestions.
- 6) Exchange of operational performance figures.
- 7) Matters not resolved at the shop level committee or concerning more than one Shop.
- 8) Review of working of the Shop Level Committee.
- 9) Matters relating to profit and loss statements, Balance Sheets.
- 10) Review of operating expenses and financial results.
- 11) Matters relating to plant performance in financial terms, labour and managerial costs etc.
- 12) Absenteeism in general and remedial measures for its reduction.
- 13) Initiation and supervision of workers' Training programme consistent with requirements of the Project.
- 14) General health, welfare, safety measures, medical benefits, sports & games, housing, township administration, canteen etc.

- 15) Matters relating to Control of gambling, drinking, indebtedness and other activities affecting the social and physical health of employees.
- 16) Matters concerning extension of services and community development activities.
- 17) Pollution control.
- 18) Any matter agreed upon by Management and Employees' representatives.

Each Shop Level Committee consists of three representatives of employees and an equal number of representatives from the management. The three representatives of employees are nominated by the three Unions/Associations. The seniormost management representative is the Chairman of the Shop Level Committee. This Committee meets once in two months. The works of the Secretary of these committees are the same as that of the Secretary of the Plant Level Committee. This Committee deals with seven different types of matters as indicated.

At the time of field investigation on which this dissertation is based, Mr. T.K. Sinha Roy, Assistant Personnel Officer was the Secretary of all the Shop Level Committees. Mr. B.M. Bhattacharyya, Senior Manager (Operation & Maintenance); Mr. P.C. Saha, Chief Erection Manager and Mr. A.K. Bhaduri, Chief Finance Manager were the Chairman of the three Shop Level Committees.

Though it is not specifically stated in the Constitution that one and the same person would be the Secretary of the different

Shop Level Committees, this is generally observed here. Further, despite the fact that Mr. A.K. Bhaduri is one of the members of the Plant Level Committee (representative of management), at the same time he is the Chairman of a Shop Level Committee (Personnel & Administration, Finance & Accounts, Materials & Management Services). It is to be mentioned here that the committees are formed for one year from the date of its first meeting.

Two interesting points are mentioned in their constitution which need a reference here. That

(i) the functions of the Committees shall not include any item which is traditionally accepted as a subject of collective bargaining between the unions and the management,

(ii) where joint consultative committees are in operation, the Plant Level Committee or Shop Level Committee cannot pursue that matter(s). In view of the facts it may be stated that the committees are working for production, productivity, and related phenomena. Instead, the trade unions are functioning more or less exclusively with respect of bargaining between the management and workers.

From the given description it becomes clear that the type of formal relation as exists here is generally observed in other public and private organizations, where the relation is basically job-oriented. In this regard certain important questions emerge. Are committees working for job-harmony or more production? Are these committees helping to develop smooth industrial atmosphere?

Are they able to make it? The phenomena as observed are yet to indicate any positive answers to these questions. Despite the presence of such committee, workers were found threatening the Deputy Manager in his chamber.

Though the caste/community feelings of the employees were not prominent within the factory but we observed lack of participation of the so-called backward classes to the formal organizations. In the said committees (Plant Level and Shop Level) there was practically none belonging to the backward classes except in the Personnel & Administration, Finance & Accounts, Materials and Management Services' Shop Level Committee, although there were 12.2 percent Scheduled Caste and 2.5 percent Scheduled Tribe employees in the FSTPP.

It was observed that there was a relative lack of participation of this groups in the union activity also. Neither the scheduled nor the non-scheduled communities were found very willing to discuss this subject.

In some cases it was observed that the employees were to some extent interested in the informal relations rather than in the formal ones inside the factory. Instances are many when the subordinates were addressing their superiors as 'brother' (Dada-elder brother) rather than 'Sir' in the office. The reverse is also true - the superiors were addressing their subordinates by name rather than as 'Mr. X'.

It reveals that it is a healthy atmosphere on one side for any institution - industry or other place whatever the case may be. By such relation any work can be completed smoothly. There are demerits of such relations too. This type of relations may be a barrier for a bold command of any superior to his subordinate and, of course, this may disturb the harmony of work of an industry which may ultimately reflect upon the production.

(B) Informal Relations

It has been indicated that there is informal relationship within the plant during office-hours. To find out the extent of informal relationship outside the factory, all the three residential places, viz. Permanent Township, Temporary Township and Field hostel were visited. In fact, the present investigator stayed for several days in the field hostel. He was invited to dinner by an executive and was able to make close observation about the nature of informal relationship.

In the field hostel, particularly in the bachelors' accommodation, very few employees were sharing their sorrow or joy with others. Rather they were extra-individualistic. They hardly pass any time in the common room for watching T.V., listening to radio/tape recorder or studying magazines. They assembled together only at the time of dinner or lunch. Even in the dining hall, there was hardly any conversation among the employees. People preferred to roam about here and there to pass their leisure time.

In the family quarters of Temporary and Permanent Townships people mostly exchanged greetings when they came across their neighbours. Thus, the informal relation too turned out to be a mere formality. Though there are a number of informal organizations (Ladies' Club, Welfare Club, etc.), informal relations were not that conspicuous.

There are, of course, a few people who came to socialize and are very popular. This popularity is certainly not due to any union leadership or so. They are popular because of their own behaviour, activity and control. They maintain informal relations inside the plant, with their subordinates, as well as with their neighbours outside the Plant.

Among the family members, relationships are restricted to members of the same category. It has already been mentioned that the quarters were allotted according to the pay-scale and not according to the service grade. But income could not be an equaliser in this respect.

Relations Among Employees

Worker vs. Worker — Relations among the workers of the same department and of the same section are fairly cordial, particularly within the Plant during working-hours. It was observed that the workers of the same age group of the same section and department were addressing one another by name. But on the other hand they

were addressing as pseudo brother to the elder and senior worker. They preferred companion of the same age group which going to the canteen at the tiffin hour and lunch time. This companionship was regular and stable. It was observed that they were giving preference the department/section to select this companionship in most of the cases. This friendship was not so rigid to their residential life. They had other company (in some cases, specially for the family men) to that place. To select this company they were giving preference as the following criteria :

- i) Neighbouring quarter,
- ii) People of same native place,
- iii) Old classmate or wife's old classmate,
- iv) Family friend,
- v) Member of same union,
- vi) Same caste/religious group.

It was also observed that some employees who have the nearby-quarters, they are continuing the friendship with each other. They were passing their leisure time with the said companies. Sometimes they invite each other (if possible with family) to their religious/family festivals. Their wives were also making friendship with the wives of their husband's friend. It was observed that the women were making relation (at least tried to make relation) to the women of the nearby quarter.

The children of the employees were selecting their own friend. To select their friend they were not giving emphasis to their father's friend or they were not thinking about the status of their father. This was true for their parents too.

Workers vs. Supervisors — The relation of the workers with their Supervisor was not so formal within Plant during their working hours. Because there were the lack of bossism feelings to the plant as a whole. The commands of the supervisors to the workers were seemed to be as instruction only. Though the relation of the workers with the Supervisors were cordial, no friendship were there among the workers and supervisors. Few cases were exception, specially this was observed to the cases of union leaders and members. This fact is true to the plant as well as to the residential places. For the bachelor worker and supervisors, friendship among them was observed in the plant and residential places.

Workers vs. Executives — The relation of worker and executive are almost the same which have been discussed under Worker vs. Supervisor. Let us describe here two cases which will give some idea about the relation of workers with workers, supervisors and executives. These two workers were not so popular union members or others.

Case No. 1 : Sarat Kundu was a worker of the Operation and Maintenance Department. His native place was at Jalpaiguri, a District of North Bengal. He joined there at the time of field work

of the author. He had dependent father, mother, one brother, wife and two children. Being the new employee he didn't get his family quarter and he stayed at field hostel in a single room. He was taking his lunch and dinner in the canteen of field hostel. An executive was his close friend who was totally unknown to him before joining this power station. They were going together to the canteen to take their meals and to find out if their duty hours were the same. They were going together to the plant. They were passing their extra time by roaming here and there together. Mr Kundu was sharing the newspaper and T.V. of that executive. Once we observed that Mr. Kundu was having his tiffin to the office canteen alone. He was not sharing his table with other workman. It is to be mentioned here that the said executive was of their department. That executive was trying to obtain a family quarter for Mr. Kundu.

Case No. 2 : Nitai Ghoshal was a typist (Workman Grade) of the Personnel & Administration Department. His native place was at Raiganj of West Dinajpur (Uttar Dinajpur at present) District of North Bengal. He was staying at permanent township to a family quarter with his wife, mother and two children. He had good relation with a number of workmen of his department and of other department also. He had good relation with a number of supervisors and few executives. We saw him with a supervisor, Mr. Nikhil Sarkar of Personnel & Administration Department, so many times. They were having their tiffin and lunch together in the canteen

of the plant. We observed that Nitai and Nikhil were gossiping so many times within the office. They were coming to the plant together and were also leaving the plant together. We saw them together to the permanent township on a number of occasions.

By analysing the above case studies, it is observed that the status of the employees is not so barrier to make the informal relations among the employees. There are some criteria, which have discussed earlier, which are the factor for informal relationships. Besides this, it has been observed that the bachelor employee were giving preference to another bachelor employee to select the company. To make friendship with an executive by an workman is possible to FSTPP.

The relation of supervisors with the workers have already been discussed. Now we will discuss the relation of supervisors with supervisors and supervisors with executives.

Supervisor vs. Supervisor — In most of the cases it was seemed that there was a good relation among the supervisors with one another. Though all of them were the members of the Supervisors' Association, there was a clash among them. This clash was not in publicly viewed. The supervisors of the other departments could not tolerate the supervisors of Personnel & Administration Department. According to their version, the supervisors of Personnel & Administration Department had a superiority complex. The supervisors of Personnel & Administration Department blamed the supervisors

of Personnel & Administration Department for various cases. They reported that the supervisors (as well as the workmen and executives) of Personnel & Administration Department were not sincere at all. Instead of work, they were more interested to union works and others. But the unity of supervisors is remarkable for their common interest. It has already told that the selection of company/friend depends on some criteria. This is true for the supervisors and their family also which have discussed earlier.

Supervisor vs. Executive —The relations between supervisors and the executives are not that good. Though this is not a public knowledge but the jealous is of supervisors against the executives on their activity and version. In most of the cases, the supervisors are tried to avoid developing personal relationship with the executives. This is true for their family members also.

The picture is somewhat different in the cases of workers who are field oriented e.g. of Operation & Maintenance Department. The employees of this section are relatively more dedicated and devoted to their jobs. By the way nature of their works, all the employees (workmen, supervisors, executives) come in close contact. This lead to cordial relationship among them. In matters of work they are more concerned about the assignment in hand than the rank of themselves.

It was observed that most of the executives wanted to show that they are different from the other employees. There is a basic

distinction of the executives because they have been recruited by the corporate centre directly. It was observed that the executives were more united than the supervisors. They are the members of the Executives' Association. There are, of course, a number of Executives who had good relations with their subordinates. But, for the collective interest, they didn't have any hesitation in acting against the supervisor/workmen. Most of the executives are coming to the Plant by their own vehicle. Except the bachelors, generally the executives do not go to the canteen to take their lunch or tiffin. A number of executives were found to bring lunch from their respective home in tiffin carrier.

To their residential places they tried to maintain distance from supervisors/workmen. Generally their wives restrict making relations with wives of other executives. The case studies will make argument explicit.

Case No. 1 : S.N. Dubey was a Senior Engineer of Operation & Maintenance Department. His native place was 24 Parganas, a District of West Bengal. Before joining this power plant, he was working in a company of the Tata Group. He stayed at the quarter of permanent township with his wife and children. He was coming to the plant by his own vehicle. He was not going to canteen to take his lunch because he was carrying his lunch from home. He observed, "There is no proper atmosphere of work here. So many technical difficulties are there. Due to the political motivation, there is a lack of rhythm of work". After returning home in the

evening he generally spends his time with his family members. He is, however, very popular in his place of work. Still he is almost isolated at his residence. His wife is a graduate. She maintains the family jobs herself.

Case No. 2: Dr. S. Purkayastha is a chemist. He did his Ph.D. from Indian Institute of Technology, Delhi. He is associated with the Chemistry Department. His native place is Shillong. He is a bachelor and stays in the bachelors' accommodation of the field hostel. He is coming to the plant on foot and by ferry service. His main work is to analyse the coal in order to test the calorific value and to analyse the water to testify the percentage of mineral. Since his work load is too small he passes his extra time by gossiping with his colleagues and reading newspapers and materials. He had good relation with supervisors and workmen. He has his lunch and tiffin in the canteen and at that time he shares his table with supervisors and workmen. After the working hour, he is roams here and there with any friend. NO friend is fixed to this time. After returning home he passes his time with T.V., newspapers, journals and literary papers. Sometimes he takes drinks with his friends.

It has been observed that in some cases, a Hindu employee had a close friendship with a Muslim employee and vice versa. It was also observed that in some cases, Bengali speaking employee had a close relation with one or more non Bengalees. Manithripathi

was a supervisor of the Operation & Maintenance Department. He was more interested to share his table with the Bengalee employees at the tiffin time rather than the non-Bengalee employees. It was observed that in most of the time he was entertaining his extra time with Bengali speaking people rather than non-Bengalees. It is an interesting phenomenon that he could not speak in Bengali. This fact was observed in few cases.

From the given discussion it is observed that in order to make the informal relations, religion or caste are not the important factors. Similar age group and friendship is one of the most important factors in this respect. Language, culture, place of origin, native place, rank and union affiliation are some other minor factors for developing such informal relations.

Workers' Attitude towards the Management

It is observed that there is the highly exploitative management which divides the workers and their unions systematically and take advantage of the weakness of them. This is the general criteria for every industry, private or public, whatever the case may be. In most cases, the managements are offering some special facilities to few influential workers or union leaders to keep them within their grips. In this way they try to achieve their goal. This is also true in the case of Farakka Super Thermal Power Project. By the divisionary taktics the trade unions are

operating in this power plant.

Though most of the informants indicated positive attitude towards management/authority, they demonstrated that they in reality had reservations with respect to their relationship with the management. Only a few were definitely positive. They have boldly expressed their opinions. There were different categories of employees (viz. executive, Deputy General Manager and the general workmen) who had shown the negative response towards the management. "They (management) are always trying to build their own service-career and not looking after the project generation or completion of the project in time". This is perhaps the most important issue in almost all of the managements (who are also employee) in the public sector company. There is a general feeling that the executives try to build their career (like award, promotion etc.) at the cost of the subordinates.

Class-Conflict

There are serious class-conflicts among the employees (say executives vs. supervisors, supervisors vs. workers, employees vs. Deputy Managers/Managers etc.) in this power plant. Due to such conflict, the power generation programme suffers. And as a result, the employees fail to qualify for any production incentive bonus.

Class conflicts often get reflect through the following:

- (i) Posters against the management.

- (ii) Threatening pasture of the workers against Deputy Managers during office-hours on some petty issue like non availability of socks.
- (iii) In the month of December, 1988, a procession of the workmen and supervisors as well as their family-members gathered in the permanent township to express their grievances against the executives and management. According to the rule of NTPC, the executives may get vehicle loan. By this rule, some of the executives have taken that loan and purchased vehicles. The supervisors demanded that such loans should be given to them also but the management could not oblige.
- (iv) There were several instances when some employees demonstrated a hostile attitude toward their respective superiors. Though the high officials reported that this was possible because there were friendly relations among the employees- but the manifestation of grievances appeared rather too serious.

The following comments of the workers will highlight the nature of conflict:

- (i) "They (management) are always trying to blame the workmen systematically",
- (ii) "Management try to put all the blame on the workers to cover up their own inefficiency".

(iii) "Management is only able to give facilities to the executives but not to workmen or supervisors".

(iv) "... "Management is extremely executive oriented".

As has already been mentioned, the executives are directly appointed by the corporate office (head office, New Delhi) through competitive examinations, whereas the workmen and supervisors are appointed by the local plant. A question may, therefore, arise whether the conflict has any relationship with this fact.

In order to make some idea about the matter, a senior engineer of this power plant was asked to comment. As he responded, "not only the management, the workers are also responsible for creating this type of atmosphere". According to him, the workers are by and large lethargic - they do not want to work and this is happening due to high politicization and lack of work culture among the people. As he told, "people know that they are highly protected by the political party. They know that they would not be jobless if they do not work. For this, they are indifferent about their duties and do not hesitate in creating chaos". He also added that he never before experienced such type of unhealthy atmosphere during his service-life. It is to be mentioned here that the senior engineer worked with the Tatas and some other private sector companies (power plants) before joining FSTPP.

Another respondent too blamed the workers for the unhealthy atmosphere in the power plant. He repeated that was happening due to high political motivation. The respondent was Ph.D. from I.I.T., Delhi. He commented "I like to work but I am sorry to say that there is no atmosphere in this power plant to work with satisfaction".

If there is no satisfaction of workers of an industry, production will not be satisfactory there. Dissatisfaction is one of the important factor to the commitment to work. Due to this it is necessary to highlight the workers' attitude and their commitment to work.

WORKERS' ATTITUDE AND COMMITMENT TO WORK

Most of the workers of FSTPP were found to have been suffering from the 'fever of dissatisfaction'. As it appears that they joined this organization just to earn their livelihood. Many of them were found ready to leave the organization if they got other jobs like school teacher, clerk, or equivalent in any other organization. According to them, the job over here is boring, laborious, monotonous and uncomfortable. Such attitude was conspicuous among both technical and non-technical workers. An executive, Ph.D. holder from Indian Institute of Technology, New Delhi, told the present investigator that there was no scope here to utilise the knowledge that he acquired through higher education. As he assessed, his works could be done even by a matriculate.

Another executive of managerial rank, expressed the view that there was no justification for setting up that power station at Farakka by destroying so much cultivable land. According to him, the nation could earn more through agricultural production of these land than by production of power. Incidentally, he was an active supporter of a leftist political party. The present investigator was, however, reported by different persons, including government officials (local B.D.O.) that was an agriculturally low productive area. It is to be mentioned here that the power station was set up in that area by the active patronization of the then central minister A.B.A. Gani Khan Chaudhury, a well respected man from Malda district.

Most of the employees of Farakka Super Thermal Power Project have migrated from villages to a highly sophisticated and modern technology-based power station. A number of workers/employees are there who are first generation service-holders. Their father/brothers are still engaged in agricultural farming. To out their livelihood they joined the power project. Since they have joined the project only to earn their livelihood, most of the employees perform their duty by passing their time within the compound of the power station. There appears a hardly any motivation among the workers of this power station to demonstrate efficiency of the project. It is to be mentioned here that the Public Relations Officer (an executive) of this power station left this organization to join another organization when the field-work of the present author was in progress. Few respondents told that since they got no other job, they are in this project. According to several of them, the jobs of the power station are not attractive, challenging or enjoyable.

One can reasonably presence that such mentality is not conducive to promote work-culture in the project. The negative impact of this mentality on the production seems rather too^o apparent.

The employees who came from rural areas, almost all of them belong to the non-executive category. They are not much educated and are generally from the agricultural background.

Being somewhat educated, they are rather hesitate to go to the field for farming. They are interested in the job that belong to the chite collar category. The moment they qualify for this kind of job, they try heart and soul to stay there and became eager to transform their life style from the rural to the urban pattern. There are instances where they were found hesitant to mix with the rural people of their own neighbourhood.

Although the vast majority of Indian workers come from rural background and by and large prefer to return back to their traditional neighbourhood, they too show preference for industrial jobs along with resentment about city life. They look upon their industrial jobs in the city as a steady and permanent source of income and economic security, but find to maintain ties with respective villages for fulfilment of social and cultural requirements.

As already indicated, the workers of Farakka Super Thermal Power Project are rather apathetic toward direct participation in Union/Association activities. They stay away from direct conflict of the Union/Association vs. management. Few of them, of course, are very aggressive but they are rather exceptions. One respondent of the rural area, whose house is in a village of West Dinajpur District, told the present investigator, "we should be satisfied with our salary and other benefits as we get more than many in such organization". He was a commerce graduate

and a typist in a State Government office before joining this organization.

The mental make up of the technical employees are to some extent different from the non-technical employees. The non-technical employees viz. employees of Personnel & Administration Department, Finance & Accounts Department in general were passing their time primarily as 'clock watchers' who were ever eager to get back home. Of course, a small fraction of them was an exception. Otherwise it would have been impossible to run the plant at all. Even that small fraction do not find their job very attractive. It may be noted that most of the active Union/Association workers are from the Personnel & Administration Department.

The technical employees in comparison, appear somewhat dedicated to their jobs. Although in certain cases they too have shown their dissatisfaction since they were not getting their proper atmosphere of work still their commitment is beyond question. A Senior Engineer told the present author, "The work in this power station is highly politically motivated. Due to this, there prevails an unhealthy atmosphere leading to some troubles at work".

Since there is a close interconnection of the Departments regarding work, if one Department or few employees behave irresponsible, others can't do their work properly either.

The technical employees are closely associated with the production. They often demonstrate responsible behaviour. In certain cases, this dedication is duly appreciated by the management.

Job satisfaction is the most important criteria for the employees of an industry and even for any institution. The Hawthorne experiments were taken to provide evidence of the need to think in terms of 'social man'. Awareness of the nature of man's 'needs' has led to discussion of 'self-actualising man' or 'complex man' rather than 'social man' (Schein : 1965). It has been suggested that needs can be classified in a hierarchy ranging from simple needs for survival, safety, and security to self-actualisation which may involve both good 'hygiene' (removing factors like poor working conditions which lead to dissatisfaction) and providing motivating factors (e.g. recognition and achievement which fulfil the needs for esteem and self-actualisation) (Maslow, 1954; Herzberg et al, 1969; see also Wall and Stephenson, 1970).

Taking a lead from given situation, it is proposed to examine at least some of the issues raised by the authorities in the present dissertation. At the time of fieldwork the present author observed a number of workers in the Farakka Super Thermal Power Project who were dissatisfied in their works. They were dissatisfied due to 'unhealthy (political) atmosphere', 'dictatorship of the management' and nature of works, etc.

Even among the best qualified people employed by FSTPP some elements of dissatisfaction are conspicuous. A number of scholars (from the Indian Institute of Technology, Indian Institute of Management etc.) are engaged in this power station, NTPC is deploying highly qualified professionals and technical experts to their organisations/plants. But according to them (scholars), except in a few cases, most of the workers are inefficient and irresponsible. This becomes a constant source of frustration and irritation for them.

Another respondent told, "If I would get any scope of lecturership in any college, I shall leave this service". It is to be mentioned here that the salary and other benefits are more here than what could be in the Colleges.

Due to such dissatisfaction, a kind of lack of rhythm of works is conspicuous in this power station. But, from the managements' point of view, the works of the power station are highly technical and sophisticated. For this, they prefer highly qualified technical experts who should find their job challenging and interesting.

As mentioned earlier (Chapter 4), there is a Plant Level Committee and three Shop Level Committees in this power station. These Committees have been formed to ensure proper work arrangement. The members of these Committees were not so qualified as experts

in their respective field. They were picked up on political considerations. The highly qualified technical experts feel alienated because of this. When the workers face any problem, these members fail to resolve those primarily because of lack of appropriate knowledge in that subject. A number of employees of FSTPP were sufficiently uninhibited in exposing their dissatisfaction.

Sometimes, absenteeism and labour indiscipline are also considered as indicators of lack of commitment. Sharma (1970) used thirty independent variables and tried to see their relationship with absenteeism, the dependent variable. He stated

".... out of these thirty variables only the rural-urban background and union involvement were found to be significantly related with absenteeism. However, in both cases, the direction of relationship was contrary to popular beliefs. That is to say, the rural workers were found to be more regular than their urban counterparts and those who were interested in the union and who were active union participations were more regular than those who did not have any union involvement".

The present author observed that the employees who had rural background were interested in adjusting themselves to the system of the power plant. But due to their inadequate background they failed to do that in some cases. They are more interested in

doing their duties than in union work or other ticks which are going on around the industrial system. It was further observed that they were thinking more about production of their agricultural land which are there in their native places. Due to this some of them are taking leave during the harvesting time.

He also observed that most of the employees who had rural background have considered that service provides a chance to uplift themselves from the rural life-style to the urban life-style and better economic standard. Because of this, most of them had no inclination to leave the organization. Besides this, another important factor was there, that was, the better salary and better benefits than what they are in many other organisations. In the case of people with urban background, the fact was just opposite. Many of them were interested to leave this organisation even if they could get a little less benefit in other organizations. The reason behind needs to be carefully examined.

The employees who were involved in union activities had less interest to leave the organization than the others. Due to such involvement, they are more or less totally identified with this establishment and find it rewarding to be over here.

Discipline is the most important criteria for appreciating commitment to work. But due to unhealthy political atmosphere or due to the undue interference of muscle power, we observe that

there is a lack of discipline in the industrial sector, especially in West Bengal. It should be mentioned here that many of the private organizations had shifted their factories from West Bengal to other places due to such unhealthy political atmosphere (there are other causes also viz. shortage of power, etc.). The lack of discipline among the workers is another important reason. There are plenty of instances where the workers even disobeyed their superiors. There were also instances when the upper class employees (Supervisors, Executives) also violated the code of discipline. At FSTPP some Supervisors and Executives were found to come late to the plant and leave early. Instead of attending to their jobs, they were found roaming about here and there in the plant. They were also disinterested in attending the cultural programmes of the plant.

Reasons for the indiscipline can be enumerated as below:

- (1) The Supervisors who look into the discipline of the workers, were themselves not that disciplined.
- (2) Informal cliques based on pseudo-kinship relations were formed in the factory. The boss was considered as the pseudo-elder brother and therefore, were looked upon to protect the interests of the subordinates (the pseudo younger brothers).
- (3) The management was not found to be committed to the purpose of making the enterprise efficient and disciplined.

Despite these, there is a low rate of absenteeism. The main causes behind this can be understood as follows:

- (i) Salary is better than many other organizations,
- (ii) Quarter facilities are relatively better here,
- (iii) Free transport facilities are available here,
- (iv) Enough job securities are here.
- (v) House-building loan/vehicle loan facilities are available here.
- (vi) Good promotion facilities are expected here.
- (vii) Children's education facilities are adequate here.
- (viii) Good recreation and employee's welfare facilities are available here.

The influence of technology as a constraint, or even a determinant, of social relations and behaviour in industry has been explored by researchers who have been labelled as using a 'technological implications' approach. Concern for the social consequences of the material means of production has, of course, a long and important history in social science (Marx and Engels, 1958; Durkheim, 1933); the use of a 'technological implications' approach, however, involved making detailed distinctions between types of production system within modern industry' (Brown, 1981 : 92).

Considering the above statements, we may say that the Farakka Super Thermal Power Plant is a highly sophisticated technology-based industry. The production of this industry depends upon the condition of the machine, quality of the raw materials (coal), and sincerity of the employees. The present investigator was informed that the coal used here are of low quality (of less calorific value). Lack of sincerity of the employees (in some cases) was also a reality due to some unavoidable circumstances (which have been discussed earlier). As a result the production of this power plant is not that satisfactory. As a result, the employees are not getting production incentive bonus here.

Attitude to work must be looked into as a consequence of totality of the workers experience inside as well as outside the factory (Beynon and Blackburn : 1972). In FSTPP it has been observed that there are at least some experienced employees whose ranks are also fairly high but the technical works deployed under them are neither very qualified nor much experienced. Due to this though the later are under the supervision of a number of experienced employees, demonstration of commitment of technical workers is not that conspicuous.

It should be mentioned here that the social relations and behaviour (and of course production) cannot depend upon the nature of workers' orientations to work any more than it can on the type of technology.

It has been observed that a number of employees of this power station were indisciplined. This was due to highly political motivation of the employees. Most of the employees were the members of some union or association. It is a fact that most of the trade unions are enthusias of some political parties of West Bengal as well as of India. The activity of the unions of FSTPP could not be upto the expectation primarily due to this fact.

WORKERS AND TRADE UNIONS

The Trade Union has come to become an important element of modern industries. The paternalistic employer in general does not encourage workers to form union. This is true in case of private as well as public sector industries. The employers, left to themselves, by and large are not prepared to forego their dictatorial stance. This is particularly so when they are aware that they are required to enforce something which the workers do not like. But wherever the trade unions exist, the situation is different. The workers come unitedly to resist any illegal and sometimes even legal orders of the management. Bhowmick (1981) makes a similar observation in his study of the tea plantation industry of India. As it reveals, if it is not possible to exploit them by extending extra facilities, the employers try to destroy the trade union activities through adoption of illegal means.

The situation is quite different in the case of public enterprises. The management (it is to be remembered that they are also employees in general) tries to keep the union leaders within their own group by giving certain extra facilities. In most cases, the management takes initiative to divide the workers and their unions systematically in order to make them weak and take advantage of them. In some cases (specially in the public sector organizations)

the management encourages workers to start union activity. It tries to keep a group of organised workers within their fold by extending favourable terms. The trade union activity at the Farakka Super Thermal Power Project follows more or less a similar pattern. There are altogether three workers' unions, one Supervisors' Union and an Executives' Union in this power plant. The unions are named as below:

(i) FSTPP Employees' Union, Farakka : This union is affiliated to INTUC (Indian National Trade Union Congress). The number of members of this Union upto May, 1989 is 310. The General Secretary of this Union was Mr. Amlan Pandey at that time.

(ii) FSTPP Workers' Union, Farakka : This Union is affiliated to CITU (Centre of Indian Trade Union). The total number of members of this Union in May, 1989 was 610. The General Secretary of this Union was Mr. K.L. Mishra at that time.

(iii) FSTPP Sramik Union, Farakka : This Union is affiliated by UTUC (United Trade Union Congress). The total number of members of this Union is very low. The General Secretary of this Union was Mr. Narayan Sarkar at that time.

The FSTPP Employees' Union, Farakka, has at present two parts :

(i) FSTPP Employees' Union, Farakka, headed by Mr. Amlan Pandey and (ii) FSTPP Employees' Congress, Farakka, headed by

Mr. Laxmikanta Banerjee. The members of FSTPP Employees' Union are now divided into two groups. The differences are primarily due to differences in the political inclinations of the leaders. In Fact, there was no secrecy about the political patronization of FSTPP Workers' Union. The local M.L.A., Mr. Abul Hasnat Khan was the President of this union. Though he was not an employee of FSTPP, he was elected the President. Although an outsider, he often visits this plant for union activities. It is to be mentioned here that there are too many restrictions about entry into this power plant by an outsider. But for Mr. Khan, there was not much difficulty in continuing with his Union activities and repeated visits to the power plant.

The Supervisors' Association is exclusively for the Supervisors of this power plant. It was reported that there were Supervisors' Association in every plant of NTPC. There is a close connection among the Associations between plants. The Executives' Association, on the other hand, is exclusively for the executives of this power plant. There are, nevertheless, Executives' Association in every plant of NTPC.

The Supervisors' Association of this power plant was formed in the year 1983 and the Executives' Association was formed in the year 1984. All the Supervisors are the members of Supervisors' Association and all the Executives are the members of Executives' Association.

Supervisors' Association and Executives' Association are non-political bodies. But members have keen interest in politics and many of the members of these two associations indulge in political activities (which is not formally open but is only an open secret).

It is to be mentioned here that there are more than 8000 contract labours who are working under different contractors. Out of these, about 1000 labourers are permanent and the rest are temporary. The permanent are so in the sense that the works of their respective contractors are permanent.

Actually the contract works of NTPC as well as FSTPP may be divided into two parts : These are (i) Temporary Contract Works - construction is under this category. (ii) Running contract works — Repairing works, Canteen etc are under this category.

The workers works under the first category are known as temporary workers. Their works will continue till the completion of the construction works of the project. After completion the construction works, the contractors may give them opportunity of works to other new projects if available. Generally this scope is for the well mannered and skilled workers.

On the other hand, running works should continue upto the continuation of NTPC. Those who work into this category are known as permanent workers.

The contractors may change from year to year but the workers under these contractors continue. Due to this, there is a sense of permanency in their jobs. There is an agreement between the Union (of these Contractors' workers) leaders and FSTPP management that these workers should continue their works. Their salary and other benefits are also decided upon by the management. The contractors should obey this decision. The temporary workers are mainly engaged in construction sites.

The leftist union of these temporary workers is called Paschim Banga Nirman Karmi Union, Farakka Unit. Since the construction work varies from time to time, the number of workers also varies and due to this the number of members of the union also varies from time to time. Mr. Abul Hasnat Khan (local M.L.A.) was the Secretary of this Union for a long time. At the time of field investigation, as already stated, he was the President of this Union. Regarding remuneration and other benefits of the workers, the workers and the Union leaders generally negotiate with the contractors.

The leftist Union of the first category i.e. of permanent contract labourers is 'Farakka Tapbidyut Thikadar Mazdur Union',

Mr. Khan was the Secretary of this Union the number of members of which was about 700.

A Union leader (Mainul Haque) here also functioned as a contractor. As a result, people working under him enjoy no benefits of Union activities, despite the fact that the Union formally exists there.

Workers' Attitude Toward Unions and Associations:

At the time of filling out the questionnaire, most of the workers highlighted positive attributes to the Unions/Associations and the leaders. But the same workers demonstrated apathy or negative attitude toward Unions/Associations during latter discussions. In response to a question "What role the union leaders play for the development of the power project and of its employees?", one of the workers reacted, "Please find out".

As already mentioned, there was a clash between the Executives and Supervisors vs. workers. One of the Executives (member of Executives' Association) mentioned, "Workers' Union is not working for upliftment of the project and is only busy for satisfying every desire of its members (of the particular union) whether the same is legal or illegal. Supervisors' Association is also working in the same fashion. Executives' Association is working both for the upliftment of the project and for the employees.

Union leaders are anxious for the development of its members (members for the particular union) only and not for the project as a whole. They are mostly working for the fulfilment of unfair demands of its members.

It has been observed that practically no union/association were working for the overall benefit of the project. The Executives' Association was interested to get more facilities from the authorities. They were least bother whether their demands were legal. Examples may be produced regarding the allotment of quarters. The same type of observation was there for the supervisors association and workers union.

It was observed that the union leaders (whether it is executives association or supervisors' association or workers' Union) were more interested to pass their time by enjoyment but less interested to do their works. The author observed that a number of leaders were ~~indifferent~~ about duty hours and even to relaxing in their respective quarters during duty hours. That's why it may be concluded that the respondent appear to be highly committed to the executives' association and has a negative opinion about the Supervisors and workers.

A worker (member of FSTPP Workers' Union, CITU) reported that "Activity of CITU and of Supervisors' Association is for the benefit of common employees and the plant. The activity of

Executives' Association is exclusively for their members".

This suggests that the respondent was politically motivated. Instead of FSTPP Workers' Union and FSTPP Employees' Union, he wanted to say about CITU and INTUC respectively. According to him, his Union (CITU) was only doing works for the benefit of the employees but not the others. He did not hesitate to refer to the clash between the workers and executives.

In general, every Union leader was eager to say or demonstrate that his Union has been engaged for the benefit of the employees and the plant but alleged that the other unions were doing nothing. They were puppets of the management. Some of the observations the author made are noted herein this context.

Many members and leaders of FSTPP Workers' Union remarked the present investigator that the FSTPP Employees' Union was established by the then Cabinet Minister A.B.A. Gani Khan Chaudhury. Since he was the minister of power at that time, he wanted that the employees might be under the management by the help of the said Employees' Union. According to their version, since the time of establishment of FSTPP Employees' Union, they were working on behalf of the management but not for the workers. They also added that since Congress Government is in Delhi, the said union is still continuing such type of activities. The similar statement was made by the members and leaders of the FSTPP Sramik Union.

On the other hand, the members and leaders of FSTPP Employees' Union told that the works of FSTPP Workers' Union is harmful for the project and for the workers. According to them leaders of FSTPP Workers' Union are highly political motivated and they talk much but not work at all. They also added that these leaders always try to achieve something for their personal benefit. Many respondents told the present author that the leaders of FSTPP Workers' Union was trying to destroy the rythm of work among the employees.

This suggests that the interrelation of the members of different Unions and Associations was not smooth. Most of the members of all Unions/Associations wanted to say/show that the Executives' Association was a part of the management. They work as a part of the management's organization. Most of the workers had grievances against the executives. In order to demonstrate this grievance, the workers merged with the supervisors. During field investigation of the author there was a combined protest rally of the workers and supervisors in the month of December, 1989.

The relationship between the leaders of various Unions/Associations was apparently smooth though in public they alleged each other for their interest. Some of the facts regarding this are given below:

Members and leaders of FSTPP workers' Union remarked that the works of FSTPP Employees' Union was continuing on behalf of

the management. Similar statement was by the members and leaders of the FSTPP Sramik Union. On the other hand, members and leaders of the FSTPP employees' union blamed the FSTPP workers' union that they were trying to destroy the rythm of work among the employees. These remarks shows the political interest of the unions.

All the three unions with the Supervisors' Association remarked that the activities of Executives' Association was on behalf of the management's organization. This remarks reflects the grievance of non-executive staff against the executives.

Members of Executives' Association remarked that the activities of the workers' union and Supervisors' Association was not for the benefit of the plant but for the narrow interest of the members. This remarks reflects the grievance of Supervisors against the subordinates.

The following tables (Tables 6:1 and 6:2) show the workers' attituce towards own Union and Association and notion about the other Unions and Associations.

Table 6:1
 Workers' Attitude Toward Unions/Associations
 (among the respondents)

Name of the Union/ Association	No. of members whose attitude towards their own Union/Association is			
	Positive	Negative	Neutral	No comments
FSTPP Employees' Union	48	35	35	118
FSTPP Workers' Union	51	44	31	126
FSTPP Sramik Union	18	08	04	30
Supervisors Association	43	32	22	97
Executives' Association	22	10	07	39
Total	182	129	99	410

Table 6:2
 Attitude of the Union/Association Members
 Toward other Union/Association Members
 (among the respondents)

Name of the Union/ Association	No. of members whose attitude towards the other Union is			
	Positive	Negative	Neutral	No comments
FSTPP Employees' Union	30	37	09	76
FSTPP Workers' Union	29	108	14	151
FSTPP Sramik Union	06	26	02	34
Supervisors' Association	21	62	16	99
Executives' Association	11	30	09	50
Total	97	263	50	410

It may be mentioned here that the activities of the FSTPP employees' union were started under direct patronization of the management. It was reported that the then management wanted to keep the workers within their own fold and hence patronized the workers to form the first Workers' Union in this power plant. One important point is that Mr. A.B.A. Gani Khan Chaudhury was the Cabinet Minister of power and energy at that time. Mr. Chaudhury is from Malda District. The first union was affiliated by INTUC. Since INTUC is closely related with Indian National Congress and since Mr. Chaudhury was a popular Congress leader of the locality at that time, he might initiate to form the union.

It was observed that the FSTPP Employees' Union (INTUC) and FSTPP Workers' Union (CITU) were taking active part in different functions of the management. It was reported that the Unions were negotiating only in the case of demand-based activities. It is certainly true that most of the Union works in West Bengal as well as India are basically demand-based. Higher salary, higher bonus, higher D.A., more facilities are their main demands. The Union leaders are least interested in promoting creative role of the workers.

It was observed that the personal relations among the employees were rather very formal. The relations of workers were centering around the workers and relations of executives were mainly restricted to the executives. A few bachelors were

exceptions in this respect. The officers vis-a-vis the workers were maintaining a distance inside and outside the plant. In most cases, this is also true for the families of the employees.

Workers were taking the Unions/Associations as good protective platforms. They were enrolling themselves as members only for the protection. The Union leaders and a few employees had active participation in the Union/Association function. They are interested to cultivating relationship (formal as well as informal) among the departmental colleagues. Most of the Union/Association members expect something from the Union/Association. One of the high officials of the Personnel Department told the present investigator, "If I face any problem, this Association (executive association) would help me". According to him, the Association is nothing but a problem solving organization for him.

Another high official of the same Department reacted as follows:

"Since most of the Union as well as Association leaders are not exposed to industrial climate, they are unaware of how an Union/Association can be run without clash of rights with the management. As a result, to fulfil their demands they resort to use of muscle power".

This power station is not an exception in this respect. They are quite in tune with the trade union activity which is going on to the other private/public sector organizations in West Bengal.

At present in West Bengal (in other parts of India also), many of the trade union workers are getting more salary, more D.A. and other facilities compared to other sections of the working class.... Freedom of the working class is not the aim of the present trade union activities. It's aim is to acquire some special facilities and to manage the 'permanency of the service'..... Leadership is a profession or career to conduct this type of unionism. It is also a business like the pleading (Bhattacharya , 1986 : 51).

It should be noted here that most of the trade union activities in West Bengal are guided by the political leaders (not by trade union leaders) and due to this most of the union movements are going on for the political interest but not for the interest of the working class and industries. The trade union activity in the Farakka Super Thermal Power Project is not an exception in this respect. It should be mentioned here that though the FSTPP is at the top to produce electricity in West Bengal but it is not upto the level to the other power plants of NTPC. So many respondents mentioned that narrow trade union activities are liable for this.

Attitude of Workers Toward Union/Association Leaders :

Union/Association leaders are playing an important role in industries/organizations. They don't have the role in the Union works only but the administration, production etc. are also dependent upon them. A true leader will also make such informal and individual relations with the workers/employees by which not only the employees but their family members also would accept him as a friend of their family. A leader should project such a type of image by which the employees should take suggestions not only for service but also for personal problems.

Many of today's leaders do not conform to this image (personal relation), workers attach a great deal of importance to their leaders and leadership (Ramaswamy, 1983 : 96).

Workers always want such leader(s) who will participate to major social, cultural and even family activities. Ramaswamy further wrote,

The availability of abundant leadership skills had led to the organization of community affairs along lines which closely resemble union organization. Workers believe that a leader is indispensable to planning and organization of any major activity (p. 98).

.It was observed in this power plant that the Union/ Association leaders had accepted the Union/Association works as a part of their job. They took this as duty rather than as social work. They demonstrated that they were busy and almost all the time were surrounded by some followers. This was a general picture whether he was a leader of leftist Union or otherwise.

. A leader of an Association was doing his Association works with some co-members in his office table during office hours. The Deputy Manager's chair was just beside him. No one was bothering him about this work. The leader does not want to spend his personal time for such activities. He rather preferred to spend his office-time for Union activities. Due to this mentality many employees do not work properly to this power plant. Specially this type of employees were observed more in the Personnel & Administration and Finance & Accounts section. The informants also informed about this. A Deputy General Manager remarked, ".... Even there is a CITU leader in this plant who did not type a single page in four years".

An interesting fact was that most of the Union/Association leaders were from the 'Personnel & Administration' Department. The General Secretary of FSTPP Employees' Union, the General Secretary of FSTPP Workers' Union, are all from the Personnel Department. It is to be mentioned here that there were only 99 employees (six percent) in this Department out of total strength of 1630 as in May 1989.

In some cases, the wives and other relatives of the Union leaders are in service (although several among them are not efficient). Union leaders are getting extra leave, bonus and such other benefits.

It is also needed to discuss about the attitude of Union members towards the union leaders. It was observed that many members were not satisfied with the union leaders due to their works. Many respondent remarked that the union and association leaders were interested to get personal benefit rather than collective benefit. Few of them told, "Union leaders are busy to manage special vehicle, wives' service and etc." This type of remarks, obviously indicates that there is no proper union activities in this power plant. Table 6:3 shows the attitude of union members towards their leaders.

Table 6:3

Attitude of Union members Toward their Leaders
(among the respondents)

Name of Union/ Association	A T T I T U D E			
	(No. of members with percentages)			
	Positive	Negative	No comments	Total
(i) FSTPP Employees' Union	55 (13.41)	37 (9.02)	24 (5.85)	116 (28.28)
(ii) FSTPP Workers Union	64 (15.61)	39 (9.51)	41 (10)	144 (35.12)
(iii) FSTPP Sramik Union	11 (2.68)	05 (1.22)	04 (0.98)	20 (4.88)
(iv) Supervisors' Association	38 (9.27)	24 (5.85)	33 (8.05)	95 (23.17)
(v) Executives' Association	18 (4.34)	09 (2.20)	08 (1.95)	35 (8.45)
Total	186 (45.36)	114 (27.80)	110 (26.83)	410 (100.00)

From the given table we observe that 45 percent of the members have shown positive attitude towards their Union leaders and 27.5 percent (among the respondent) have shown negative attitude towards their leaders.

Although there is a general notion that Trade Union activities of the private sector undertakings and public sector undertakings are quite different, but the characteristics appear almost similar in both the cases.

Study of social, cultural and religious life of the employees of an industry reflects the unity among the employees and the unity obviously influence the production. Due to this it is necessary to particularly highlight about the social and cultural life of the employees of ESTPP which has been attempted in the chapter that follows.

SOCIAL AND CULTURAL LIFE OF THE WORKERS

A very less number of people of Farakka block have got chance to be employed to this power project. Their social life with the other employees to be discussed in this chapter. The impact of FSTPP to those local people who did not get chance to employ here will be discussed in the next chapter.

Before construction of the Farakka Barrage and Farakka Super Thermal Power Project, the people of Farakka Block were generally poor and mostly illiterate. At the time of construction of the barrage, a section of the people could earn cash through wage labour. After completion of construction of this barrage, that source of earning dried out.

Although at present a few earn something through deployment by this power station, they will be jobless no sooner the construction of this power station is completed. Therefore, what lasting socio-economic impact the barrage and power station will have on the life of the local people needs to be closely watched.

Social Life of the Local Employees

Since Farakka is located at the border of Malda and Murshidabad districts of West Bengal, for the purpose of this dissertation the people of these districts have been referred to

as the local people. The total number of employees of Malda and Murshidabad Districts is only 559 (Malda 289, Murshidabad-270). This is out of a total of 1630 employees. Among the local employees very few are from Farakka Block who are actually land oustees. It is difficult to find out any significant number of employees of FSTPP from Farakka Block except the land oustees. Since the local people do not have adequate technical qualification, they are not well prepared to earn a job in the power station. It is to be mentioned here that the literacy rate of the people of Farakka Block is only 20.75 percent (according to the 1981 Census).

To discuss the social life of the local employees we would like to divide them in two categories viz. Employees staying at the quarters of FSTPP and Employees staying at their own village. We will discuss these separately one after another.

(A) Local Employees Staying at the Quarters of FSTPP

It has been discussed earlier that we have considered those employees as local employees whose residence is in Malda or Murshidabad district. Therefore the employees of these two districts who are staying at the quarters either they have residence to unavoidable distance from the project or they were not interested to stay in their natal villages. Few exception were also there who managed quarters by their personal or

political influence. Most of these employees were staying at quarters with their own family.

It has been observed that some of these employees were interested to stay in isolation from their kith and kins. These employees were passing their non-duty hours with their family members or by doing domestic works. The employees who compelled to leave their native place due to their service are interested to visit their home when they get time. They maintain the relation with their colleague and the neighbours just as courtesy. Instead of this they are more interested to continue the relation with those people who are staying to their native place. Incidentally most of these employees are of workman category. These employees were observed as almost isolated in the plant also. They have less number of friends. It was also observed that they were less interested to the union activities. Generally their wives did not have higher education as they did not have also. They are more interested to pass their time with T.V., radio and chief literature. Generally they have found to maintain the relation with the same type of association.

On the other hand these are another type of employees who were interested to make relation with a number of employees. They have a number of friends, in the plant as well as in their residential areas where they passing their time with the colleague. They were more interested to the union activities. Most of them

have higher education (graduation and post graduation). Incidentally many of them have the cases of love marriages. They are also interested to visit their native place but they have less interested than the former one. Interestingly it was observed that many of them were first generation educated and service holders.

These category of employees were found to be more interested in organising and participating in different social and cultural activities within the plant and in the residential areas. It was observed that their family members are also participating in these activities.

(B) Local Employees staying at their own Villages

Employees of these category were found to come to the plant by bus or by cycle. Just after completing the duty hours they were found to busy to go to their home. In most cases they were interested to choose friends with those employees who were also of the same place. Most of these employees had separate association in their native place too. These employees were passing their leisure time and holidays by doing domestic works, by watching movie and Television and listening chief radio programme. Many of these employees were living to their home in joint family. Due to this, in most of the cases, they were in a position to follow their traditional cultural life. A very few of these employees were participating in the union activities

and other social and cultural functions of the plant. It is to be mentioned here that many of these employees had cultivable land at their native place (those who belong to rural area). They looked after the land and cultivation during their leisure time. They also utilised the holidays and leaves for their agricultural needs. It was noted that most of these employees were supporting cultivators.

Social Life of the Employees of other places

Most of the employees of this power plant were from outsidies of Farakka Block. Among them the majority, as already stated, were Bengali-speaking people. These employees stayed at the quarters of FSTPP. The informal relations of these employees have already been discussed earlier.

It was observed that though there was a lack of cordial relation among the employees, they at least maintained the formal relation with each other. Sometimes they were visiting the neighbour house but giving priority to visit the house of close friends.

There were some employees who were really interested to do some social and cultural activities within the plant and in the residential areas. It is to be mentioned here that most of these employees were of second and third generation service holders.

Family of the Employees

Employees staying at their own village, many of them were living to the joint family system. All of these were paternal joint family. This family was composed of a man, his wife, parents, children and their unmarried offspring living together in their own household. In some cases it was also observed that mother-in-law of the employee and/or his widow aunt were also living with him.

In very few cases, it was observed that the employees were living in the nuclear family which composed of a man, his wife and children.

On the other hand, in most of the cases, employees staying at the quarters were living in the nuclear family. In very few cases, parents were living with him.

In the family of these quarters, wives of the employees were generally addressing him by name in private. But this was not to be taken as an understanding of equality. Females are generally subordinate as it is in most cases in India.

Mother tongue of most of the non-Bengalee employees of this power station is Hindi. The ratio of Bengalee and non-Bengalee employees of this power station is 3:1 (approx.).

There are so many non-Bengalee employees who can speak Bengali. They talk in Bengali at the time of conversation with the Bengali employees/colleagues. By this way they are trying to adopt themselves to the local situation.

Scheduled Caste and Scheduled Tribe Employees

There were 199 Scheduled Caste employees, 41 Scheduled Tribe employees, 30 Ex-serviceman and 16 physically handicapped workers in the Farakka Super Thermal Power Plant. Table 7.1 shows the categorywise Scheduled Caste, Scheduled Tribe, Ex-Serviceman and physically handicapped employees.

Table 7:1

Categorywise Scheduled Caste, Scheduled Tribe, Ex-Serviceman and Physically handicapped employees of FSTPP

Service Category	Scheduled Caste employees	Scheduled Tribe employees	Ex-Serviceman	Physically handicapped	Total
Executive	23 (5.6%)	01	01	-	25
Supervisor	27 (10.4%)	01	08	-	36
Workman	149 (15.6%)	39	21	16	225
Total	199 (12.2%)	41 (2.5%)	30 (1.8%)	16 (1%)	286

Source : P & A Section, FSTPP, May, 1989.

From the given table it is clear that 12.2 percent of the total employees of the project were Scheduled Castes. Among the Scheduled Caste employees, 11.5 percent were executives who constituted 5.6 percent of the total executives of FSTPP. There were 27 Scheduled Caste supervisors which constitutes 13.5 percent of the total Scheduled Caste employees and 10.4 percent of the total supervisory staff. Nearly 75 percent of the total Scheduled Caste employees were workmen who constituted 15.6 percent of the total workmen.

There were 41 Scheduled Tribe employees which was 2.5 percent of the total employees; 30 ex-serviceman constituted 1.8 percent of the total employees; and 16 physically handicapped constituted one percent of the total employees of FSTPP.

Family Background and Industrial Culture

Most of the employees belonged to middle class families. The family-occupation of most of the employees was agriculture. Very few had business as the primary occupation. Those who came from the background of agriculture and business, most of them belong to the clerical cadre. Those who are in technical cadre or officers, the family-occupation of them was service (Government or private). They were service-holders for two or three generations.

Employees coming from agricultural background had nominal participation in Union/Association activities as they were not interested in that. They were maintaining a close relation with their family members (father, mother, brother, sister, etc.) and with the village-life. The local employees of this category were maintaining the industrial norms inside the plant and they were converting to 'non-industrial people' no sooner they are outside the plant. In some cases they could not fully adopt themselves to the industrial norms

Among 410 respondents, there were 149 local employees. Out of these 149 respondents, there were 82 of Malda District and the rest 67 employees were of Murshidabad District. Analysing the collected data it is observed that there were 52 and 44 employees of Malda and Murshidabad Districts respectively who could not adopt themselves to the industrial norms and this were 63.4 percent and 66 percent respectively among the respondents.

The employees who were service-holders for generations had a tendency to acquire more benefits/facilities. If they could get that in any other organization, they would not have any hesitation to leave the service of FSTPP. Many of them had active participation in the Union/Association activities. The majority of the Union/Association leaders belonged to this category.

Social life of the Employees to the Quarters

The employees who are industrial workers of the first generation, have a close relation with their natal home. Those who are from nearby places, they visit their family every weekend. Many employees of this group stay alone at Farakka to do their duty. Their wives and children stay at their native places with other family members. This group of people by great emphasis on their connection with their natal place.

The Bengali employees who are industrial (or non-industrial) workers for the second generation or so have relatively less connection with their natal homes. If they have old parents, back home, they communicate with them through letters once a month or so. Some of them send money to their parents every month. Occasionally they arrange to get together with their parents and other family members.

Very few of the first category live at Farakka with their respective wife and children. They, therefore, visit their natal home at every opportunity. Very few of the second category maintain a close relation with their parents and other family members. The non-Bengali employees mostly live at Farakka with their wives and children. The majority of them (specially the employees of U.P., Bihar and Orissa) send a reasonable amount of money to their home after obtaining salary any month. They

generally visit their natal homes once a year but maintain the relation by exchange of letters from time to time.

Entertainment

Competitiveness is a common criteria among the modern people. Some amount of competition is there even in the material possession of the people. We observe that colour T.V./V.C.R., freezers, scooter/maruti etc have become the status symbol of the modern people. One of the interesting phenomena of the contemporary society is that an uneducated rich man gets more respect than an educated poor man in the society. This is relatively more conspicuous in the industrial establishments. The industrial workers were interested in reading the film magazines/women's magazine, etc. rather than cultural or literary magazines. They spend their free time by watching the T.V./Movie or shopping or roaming about here and there.

It has been observed that the employees of FSTPP get much salary. But they are mentally materialistic rather than cultural. Due to lack of interest of the majority of the employees, proper cultural atmosphere is not there.

Life Among the Labourers Under the Contractors

There were a number of contractors in this power station who were doing the construction works of FSTPP. They have a number

of workers and labourers. Few contractors have their own quarters for their workers. Bharat Heavy Electricals Limited (BHEL) is one of the important contractors. The community life of such workers is to some extent of same like the employees of FSTPP. It is to be remembered here that only those people (workers of the contractors and not of BHEL) enjoy the quarters facilities who belong to the supervisory category. The construction workers (labourers) of these contractors are come from their houses to attend to their duties. Few labourers are there who are outsiders (mainly from Bihar). They are stay in huts or houses with fellow people.

To their house though the male member was appear as the head of the family, in some cases the females also had priority. It was generally observed to those family where husband and wife both were working as labourer. These families were generally controlled by females.

The practice of caste system is not very rigid among the employees of FSTPP. Perhaps this is the general pattern of the labour class in most of the factories or industries. The official records do not maintain caste identity of the employees except for those belonging to the Scheduled Castes and Scheduled Tribes. But caste identity seems important among the labourers of contractors who generally came from the so-called lower case background.

The poor local Muslims also work as labourers. Local contractors and manual labourers of this plant are mostly local Muslims.

The management of FSTPP as well as the contractors were trying to keep the local musclemen within their fold by variously satisfying them. The Muslims constitute the major group in the immediate neighbourhood and most of the musclemen belong to this faith. Perhaps due to this affinity, most of the local contractors, their supervisors, trade union leaders of their labourers are Muslims. Not only that, even the local political trends mostly depend upon the tendency of the Muslims. The majority of the local political leaders are also Muslims.

Way of Life

The local employees of FSTPP maintain the same type of way of life like the other service-holders. They work to the plant as per their duty. Some employees engaged themselves to agriculture in the leisure time and holidays which have discussed earlier. Some enjoy the free time/holidays watching movie and Television, roaming about here and there, gossiping or by doing household work like the other service-holders. A very few were observed as interested to local politics. It is better to say that there were no difference between the mode of life of the local employees of FSTPP and the other service holders, i.e., the mode of life of industrial workers was observed more or less the same as those of

the non-industrial workers.

The non local employees stayed at the residential quarters of FSTPP. Passing of leisure time of these employees have discussed earlier. Their enjoyment and time passing wre the limited residential complex oriented. Though it appeared that these employees were more industrial workers comparing to the local employees but it is not true. Since they had no other alternatives to pass their time, sometimes their matter of discussion was the power station, NTPC etc. A very few employees were observed who were fully adopted the industrial way of life.

For contract labourers, this was more disappearing because it was observed that there was no difference between the mode of life of the labourers of contractors and the rickshaw puller, coachman of horse drawn cart or even small shop-keeper. They enjoy their leisure time by domestic works or by playing cards and etc. Sometimes they take drinks and play small gambling also. Some labourers were observed to earn some extra money to their leisure time by cottage industry.

The habit of playing cards among the bachelor employees was conspicuous. In some cases they indulge in gambling. This practice is, however, not that popular. Bachelors generally play cards to pass their time. Few of the bachelor employees were used to taking drinks but this was not a regular habit. Most of them

preferred having beer. No drinking bout or abnormality among the employees inside or outside the industry was observed.

Perhaps drinking is a common habit or has become status symbol among the higher officers i.e. Executives. When the present investigator visited their residence several offered him drinks.

Before setting the FSTPP, Farakka was almost a non-industrial area. There were only a few cottage industries viz., bidi making, weaving, etc. After inception of the FSTPP some changes have observed in socio-cultural life of the local people.

Above discussion reveals the fact that some changes have taken place in the social and cultural life of the people in and around Farakka due to the inception of the power project in this locality.

IMPACT OF THE POWER PLANT ON THE
SURROUNDINGS OF FARAKKA

It is necessary to study the effects of an industry on the culture of the area and its community, where it has grown up. Here we will try to find out the effects of Farakka Super Thermal Power Project on the surroundings. At the same time impact of the power plant to the local people will also be discussed.

Farakka is the border of two distinct parts of the State of West Bengal - North Bengal and South Bengal. It is close to the ancient capital of Bengal known as Gaur. Farakka is also famous for producing good variety of mango, silk and availability of hilsa fish. It is more known for the barrage named after the place and there is a proposal to produce hydroelectricity with the help of this barrage.

Traditional Economic, Social, Cultural and Political life of the People of Farakka

Before inception of FSTPP and before construction of the barrage, the whole of North Bengal was rather isolated. Ferry service was the only way to connect these parts with the other. Due to this relative isolation, no large scale industry could

grow in North Bengal. Tea industry was the only exception. Naturally most of the people of North Bengal were dependent on agriculture or agricultural industries. But due to the same set of problems there was no proper market even for the agricultural products.

Most of the people of Farakka Block, as already stated, were economically backward. Very few well-to-do farmers belonged to the high caste Hindus. Generally, they were not cultivating their land themselves. A large number of people belonging to lower Hindu castes and economically backward Muslim groups were earning their livelihood as agricultural labourers under the farmers. They, nevertheless earned very little against their hard labour. Many of them were whole-timers under the farmers, who used to be referred to as 'Kamins'. In most of the cases, these Kamins were getting just their food and clothes and no money. The number of people producing raw silk and mango was also few.

According to 1981 census (in this year FSTPP was established), 17,458 people were engaged in agriculture-which constituted only 13 percent of the total population. Out of the said population, about 6,659 were cultivators (approximately 5 percent) and 10,799 people were agricultural labourers (8 percent of the total population).

Since there was no proper market facilities before construction of the barrage, the peasants were compelled to sale their products at low prices. They had to travel to Berhampore, the district town of Murshidabad for marketting their products by spending a good deal toward transportation. After construction of the railway lines, they are participating in an wide market networks along with their products.

Besides agriculture, there were some cottage industries also among which weaving, bidi binding etc. were the most important. A number of people, both Hindu and Muslim, were engaged in weaving. The Hindu weavers were known as Tanti and the Muslim weavers were known as Jolaha. They used to produce saree, mosquito nets and towels (locally called Gamcha). These weavers too got a market for their products after construction of the barrage.

Many of the house-wives as well as the male members of their family (both of Hindu and Muslim) were engaged bidi binding to manage their families. After construction of the barrage they are getting better support of the market. It is to be noted here that bidi-binding was one of the most important household industries in this area. According to 1981 census, there were 12,651 people engaged in household industry, which was about nine percent of the total population. Out of the said population, males constituted 3,276 and females constituted 8,925.

Small business, fishing, coachmanship, etc. were the other professions. A few people were earning their livelihood by indulging in anti social activities.

There were 12,089 persons (1981 census) whose occupation was service or others (worked as middlemen, agent, contractor, etc.). Out of these, there were 10,961 males and 1,128 females.

At the time of construction of the barrage, a number of people turned themselves from the position of agricultural labourers to construction workers. At that time they could earn something by which they could manage the requirement of food supply. But after completion of the barrage, they have become jobless again and are compelled to turn themselves to their original profession as agricultural labourers. This has put them into relative economic hardships.

At the time of construction work of the barrage, a few people also earned some unexpected sum as contractors or sub-contractors. Because of sudden extra income, these people changed their life-style altogether. But they failed to improve their educational background so quickly and due to this they still lag behind in other activities.

Though the income of the local people was less, there was a cordial relationship among them. The lower age-group people were addressing the male seniors as brother, uncle,

grandfather, etc. and the female seniors were addressed as sisters, sisters-in-law, aunt, grand-mother, etc. There were mutual co-operation and help among the people even for attending to any individual problem.

Most of the people of Farakka had no active participation in party politics. They used their voting power by the instruction of the locally influenced people (generally the well-to-do land owners). Most of the people at that time were pro-Congress.

There was cordial relationship between the Hindus and Muslims. Communal disturbances were almost unknown. Moreover, the Muslims were participating in the festivities of Durga puja and the Hindus were participating in the Id-ul-fitr. Both of the communities were paying regards to the elders of the locality irrespective of their religious affiliation. Religion was not the factor to put them apart.

Economic, Social and Cultural Life of the people of Farakka in Contemporary Times

Due to the wide scope of construction work of **ESTPP**, a number of people are working as construction labourers. According to the information, about 8000 people are engaged in the construction work. They are working as helpers, labourers, supervisors, contractors, etc. The rainy season is a lean period for construction work. At that time, they work as agricultural labourers

under the local well-to-do peasants. It is to be mentioned here that the economically as well as socially backward Hindus and Muslims are mostly working as labourers. The rich and influential Hindus and Muslims are working as supervisors, sub-contractors and contractors.

At present a new tendency is being observed at Farakka. The local people are setting up hotels, stationery shops, automobile shops, etc. to supplement their income. Besides this, the poor people are engaged in rickshaw-pulling for their livelihood. Weaving and other household industries (which has already been mentioned) are the other professions in which the people participate. The other occupations are service, working as middlemen, agent, etc.

Few local people are earning unexpected amount of money due to the setting up of the power station. Some of them are getting this by showing their sheer muscle power. Though agriculture was the main source of earning of the people of Farakka, at present they in general are interested in service rather than agriculture. The people who do not have proper education, are more interested in business than agriculture. With the changing mentality of profession, changing of family system was also observed here.

Though the joint family system is still prevalent, but an individualistic attitude has been growing among the family

members. Breaking of joint families to nuclear units is an emerging trend. The heads of nuclear families are mostly depend on service in the power plant. At the same time it was observed that they are paying relatively greater emphasis on individual interest than on collective interest.

Previously the elders were getting more respect from the youngsters. But it gradually changing at present. The younger people these days do not hesitate to smoke in front of their elders, but which was not a practice in early days.

Regarding education a change is observed among the people of Farakka. They are gradually getting interested in education. Dropout rates among the school going children are declining. Even the poor people try to send their children to schools for education. Still improvement in education is not that satisfactory.

At present the people are trying to adopt themselves to the modern culture. They are enjoying TV/Radio programme. They are going to Cinemas and V.D.O. shows. The young people are much interested in the modern Hindi films and film-songs. Even the poor people entertain their guests by offering a cup of tea. Most of the people wear trousers and shirts when they go out to any public place. The Hindu ladies and young girls wear sharees and the Muslim young girls wear salwar and kamij popularly called as Churidar. The Muslim ladies wear sharees.

At present there are many clubs at Farakka. Most of the active members of these clubs are young people but the aged persons also are patronising these clubs. These clubs are arranging religious, cultural, and social festivals like Durga puja, Rabindrajayanti, Independence day celebration, etc.

The above facts suggest that the people of Farakka are trying to adopt themselves with the new forces of change without drastic change in their traditional social and cultural life. Similar observation was made by Nash (1958).

He observed "Many areas of traditional life can flourish on a new level in the process of industrialization".

Many people are participating in active party politics at present. The young people are very much involved with them. Most of the clubs are also directly associated with the political parties. The political parties are trying to differentiate the Hindu and Muslim communities for their political interests. An important phenomenon is observed here that in most of the elections, C.P.I. (M) as well as Congress are putting Muslim candidates from this constituency. In fact, most of the political leaders of this locality are Muslims.

Most of the trade union leaders of FSTPP were the local people of Farakka. Mr. Amlan Pandey, General Secretary of FSTPP Employees' Union; Mr. K.L. Mishra, General Secretary of FSTPP Workers' Union and Mr. Abul Hasnat Khan, President of the said Union were the local people of Farakka. It was observed that the leaders of the contract labourers were the leaders of political parties at the same. Congress and C.P.I. (M) were the main political parties at that place. The strength of other political parties was rather poor. Sometimes political chaos were created as a direct result of clash between the supporters of two parties (specially between C.P.I. (M) and Congress). Though there was political disturbance, communal relation was good.

According to information, there was an overall cordial relation among the Hindus and Muslims. There were disagreements between the members of these communities on issues like Tam Temple and Babri Masjid but no real clash occurred due to this.

The changing scene - As already indicated, a number of people converted themselves from agricultural labourers to the construction labourers. As the construction work of FSTPP is going on since 1981, the income of these labourers is to some extent regular. Due to this, they are economically better off now. They have changed their life-style particularly in food habits, dress, entertainment, etc.

Some people have accepted a new profession (like middleman, agent etc.) and by this they are earning an unexpected amount of money. As a result, there is a tendency toward abrupt change in their life style through purchasing V.C.R., Scooters/motor cycles and other sophisticated material goods. These people now maintain a long distance with those people who were of same category few years ago.

There are some people who neither earn money showing their muscle power nor get a chance to do work in the plant. They do not have any permanent source of income either. They are really in a precarious position. Sometimes they work as agricultural labourer, sometimes as rickshaw puller and etc. Sometimes they fail to manage their minimum needs by hard work. Due to this the gap between the 'have' and 'have not' is continuously increasing in this locality.

It has earlier been mentioned that a few people were earning their livelihood by indulging in some anti social works but after completion of the first phase of the power plant, this tendency has come down.

A change is observed in the social and family life of the people of Farakka. The joint family system is breaking down and nuclear families are growing up. Out of 150 families studied,

there were 92 (61.3 percent) nuclear families. Instead of collective interest, individual interest is more important at present. There is a change in behaviour of the local people. There is a visible change in the system of paying respects to the elders.

There are three schools managed by FSTPP but they provide little change for admission of the local children. The local poor illiterate people came to know the necessity of education but the increasing rate of education is not upto the level due to lack of proper scope.

There are 81 primary schools and 12 secondary schools including 3 Junior High Schools and 1 Hindi Medium School to the Farakka Block. Besides these, there are the schools of FSTPP still the literacy rate is only 20.57 percent (1981 census). Though the poor people want to send their children to school, they are not doing this. Because their notion is that his son/girl may earn something at that time. Moreover, they are unable to bear the minimum expenses of education. Authorities are not taking proper step to overcome this problem.

We observe political clash among the people now, which was not there in the past. It is true that this is the general phenomenon at present throughout West Bengal. There are several professional politicians at Farakka which was not the case previously.

There is no change in religious activities among the people of Farakka. The people are more liberal in religious matters than before.

Attitude of FSTPP employees to the local people

The outside employees of FSTPP are concentrated in three residential places of FSTPP. They have hardly any relationship with the local people. They have their own shopping centre, schools, recreation centres, etc. If there is any relationship that is a sellers and buyers. The shopkeepers are local people and after obtaining prior permission from the authority they started their shops at the shopping centres of FSTPP and live there.

A few bachelor employees sometimes come to the tea stalls outside the Temporary Township campus. This visit has no other purpose but to pass time. There is a shopping centre at the Temporary Township campus too. Besides the shops of this shopping centre, very few are there outside the campus. The tea stalls of the outside shopping place are almost like the footpath tea stalls seen elsewhere. Very few employees come to these tea stalls.

The attitude of FSTPP employees toward local people is not favourable. One of the engineers of FSTPP reported, "I do not like to mix with them and I have doubts whether any employee would like to mix with them since they don't have education,

culture, and they are mostly interested in doing illegal works".

Nevertheless, as a departmental manager reported, "Basically they are not bad. Due to their poverty they are indulging in some illegal activities. I had arranged and organised some cultural activities with the local people form them".

Another respondent remarked, "They (local people) have not any motive to develop their socio-economic condition and this is due to lack of education".

This statements are mostly true. But there is a question; who is responsible for this lack of interest in education? The poor illiterate local people or authority or the political leaders?

Attitude of the local people toward the employees

Most of the local people consider the employees of ESTPP as people belonging to other spheres. According to them, they are very rich, have high education, and belong to high society. They became babu because they are working in such an organization where they get everything. These people observe that they are attending to their duty and returning home by nice comfortable buses. They get very good houses from the government, they wear very nice and sophisticated dresses. There are schools in the two

townships the doors of which are totally closed to the local people. There are hospitals exclusively for them. Due to this, a gap is steadily increasing between the local people and FSTPP employees.

As a coachman observed, "they are for themselves and we are for ourselves - there is no relation between us".

Local M.L.A. Mr. A.H. Khan told, "A conflict is continuously growing between the employees of NTPC and the local people".

According to him the conflict is as follows:

The employees of FSTPP are living within the same area as the local people but they do not want to make any sorts of relation with them. They take help of the local people, but their labour, but they do not want to help them by any means.

It is to be mentioned here that there is a strict security (named by Central Industrial Security Force) at the gate of FSTPP. It is very difficult for the local people even to enter into the power plant without having sufficient reasons. Mr. Khan reported, "Although there is a public Relation Officer of this plant but he does n't have any connection with the public". This indicates a clash of local people and employees of FSTPP.

Problems of local people and employees due to setting up of FSTPP

There are various types of problems of the employees as well as the local people. "It is difficult to improve the local people, there is no time to mix with them - that's why there is no improvement. In future, we would be a people in an island. It will take a long time to develop the local people culturally".

[Employee of FSTPP, Engineer].

"The behaviour of the employees of FSTPP is not so bad but not sincere. They are making relation with the local people for their own benefits, nothing more than that". [Local businessman and contractor of FSTPP].

"There is a gap between the expectation and reality of the local people" [Mr. A.H. Khan, M.L.A.].

"We are trying for their cultural and economic development but they are not showing the interest upto the expectation" [An Executive of FSTPP].

"A labourer's son cannot be an officer..." [A contract labourer of FSTPP].

It is true that the local people may get some education. At least they can manage to get a certificate. This will provide

them with a chance to get jobs in the power plant. But the proper steps have not been taken by which they might get appropriate education.

Three important problems need a reference here.

(i) As already stated, the campus of FSTPP was a very low lying area. This was the place for holding rain water. Since NTPC acquired this land, the local people are facing the problems of flood. It is said that the serious flood problem of 1986 was primarily due to this.

(ii) The second is that a mafia group has evolved due to the setting-up of this power plant. It is believed that this mafia group is leading the union movement. They are taking sub contract from the contractors of FSTPP. In their sub contract work, they do not allow any Union activity. They force the big contractors to pay commission. It is said that they are virtually ruling the area. The main complaint is that there is a close connection between the management and this mafia group. The management of FSTPP is utilising them for their own requirement and choice.

(iii) Another important point is that due to setting up of FSTPP, the labourers are getting a chance to earn something. The local businessmen are improving their lot. A new group of businessmen have emerged due to this. But the lower-middle class farmers are facing an acute problem due to the presence of the power plant as the barrage as well as the power plant have acquired their land.

Not only that, due to setting up of this power plant, the rate of agricultural labourers has gone up. They lost a lot of agricultural land over and above, they are spending more to produce crops in their land. Due to this, their economic condition is continuously deteriorating. The lands acquired by the barrage and power plant were of medium quality. The Railways also acquired some land for establishing railway tracks which belong to fertile category.

Scope of Economic and Industrial Development

It is reported that the economic condition of the ordinary local people has improved due to setting up of FSTPP. The number of rickshaws, buses, Tangas has increased. Four market places have grown and the local people get a chance to sale their products in these markets. A number of people get chances to earn something as day labourers/contract labourers. Still the economic development of this area is not that spectacular. The main cause behind this is that no industries has been set up in this area where the local people could secure permanent jobs. Though there is a wide scope to set up a number of industries in this area, these are not coming up due to various reasons.

According to the District Industries Centre, there is a scope to set up 63 different industries in this area but so much land have already been acquired by the barrage. If the barrage does not lease out land, it would be difficult to get land for

setting up such industries.

A number of people are engaged in bidi making industry. This is purely an unorganised sector. These people are working under the merchants of Aurangabad and Dhulian which are 15/20 kms away from Farakka. If proper steps are taken, this cottage industry could be set up at Farakka by the local people.

About 700/800 people are engaged in weaving. There are four weaving cooperatives - one at Mahadebnagar, one at Maheshpur, one at Arjunpur and one at Kuli. There is a problem of marketing their products. Due to this, proper development of this industry is not possible yet.

There is a food processing industry which is rather primitive. This could be modernised and developed. There is a proposal to start Sericulture Centre at Bahadurpur.

It is said that so much ash is coming out as waste-product, the ash pond made to store this waste-product is inadequate. It is said that ash brick, low quality cement, asbestos, etc. may be made out of the said waste-products. In foreign countries, ash bricks are made of this waste-products in every power plant. An Engineer of O & M section informed that the Hyderabad Asbestos Company is purchasing this ash from 1986 by contract. But this is only a little fraction of the total waste-product. If the industry (to make Brick, asbestos cement etc.) is set up at this

place as private sector or public sector enterprise, it could have opened enormous job opportunities.

There is a scope to set up ancilliary industries at Farakka. Repairing shop, gas factory, etc. might also be there. One senior engineer reported that oxygen is produced as biproduct in this power plant. He suggested that a large scale industry could be set up to fill oxygen cylinders by this oxygen gas. The local M.L.A. also repeated the same. He suggested that an I.T.I. may be started here. If it starts, there would be a wide scope for technical education as well as job opportunities for the local people. He remarked that if FSTPP extended some help to the State Government, the institute could be started.

Power Plant and Socio-Cultural Consequence

Before the establishment of the FSTPP, the people of Farakka were economically poor and based purely on agricultural income. Most of the people were earning their livelihood as agricultural labourers under the well-to-do peasants, as fisherman, as weaver, etc. This is the general picture of most of the villages of West Bengal. They lacked education, nutrition, health-care facilities, etc. Despite this, there were cordial relations among them. Sorrow and joy of one moved the other. There was an over-all fellow-feeling and solidarity, even across caste and religion.

At the time of construction of the Farakka barrage, the poor people got a chance to earn some extra money by which they could for the time being ease their precarious existence. It is primarily due to this fact, many agricultural labourers opted out for construction work. But unfortunately, this respite was very short-lived.

It is a fact that immediately after construction of the barrage was over, the construction work of FSTPP was started. The same people, who were engaged in the construction of barrage also rushed for this job. Since the volume of work of FSTPP is more than the construction work of barrage, in fact, more people have got the chance of working there. Naturally they were earning more than their earning as agricultural labourers. Such job opportunities also attracted people from elsewhere to Farakka.

The poor people of Farakka closely observe the modern civic amenities e.g. quarters with electricity and water, school, hospital, cinema hall, stadium, personal car, scooter, etc. Once upon a time the small children of this area used to rush to see an ambassador. Now they see the latest design Maruti van. Besides, previously they used to look at them with a sense of awe. Now the people got so much, used to their presence that they have become rather indifferent about this development..

To the bewilderment of the poor, the people of this locality, a few local people experienced abrupt change from day-

labourers to millioners. At the same time these people observed that when they went to hospital at the FSTPP Campus, they were denied any assistance or facilities available there. When these people went to the schools of FSTPP, there too, they met with frustration. Thus, when FSTPP was responsible for major transformation of the way of life of a few, for the bulk, the organisation provided no scope depending on which they could also change. Even when they turned to the FSTPP for employment as manual labourers, they met with little reward. Naturally the local people have started to feel that the employees of the FSTPP are somewhat different from them. They are considered as the privileged few who are born with certain special endowments unlike them. As a result, there is a clear demarcation between local impoverished or the 'we' and the privileged few, the FSTPP employees representing 'they'. The difference between the two is often not comprehended in these terms though, they are getting crystallised very fast making the distinction relatively sharper.

With further increase in this difference, the possibility of clash between the outsiders and the local poor people is creeping in which needs immediate attention. The instant reaction of the local people is to retaliate by charging exorbitant rates for the local non-agricultural products, and even for pulling rickshaw. The local people are charging high price in the market even for their agricultural products. They think, since they expect nothing from FSTPP or of the elite group, why should not

they try to get some extra money for their products? On the other hand, the said elite group feel that though they pay a little bit extra money, but since they are getting fresh vegetables, milk, egg, fish, etc. that get amply compensated. Thus, despite the existence of an apparent wall between them, this has not led to any serious disturbance.

As a matter of fact, the local young people cannot accept the employees of FSTPP or the employees of the other organizations/institutions. They do not like to accept the existence of these organizations/institutions at all. They observe that there are schools but they do not get entry into those schools; there are hospitals but they are not entitled to that facility; there are entertainment centres, but they cannot enjoy the benefits. The most important thing is that they lost their land due requisition while setting up the FSTPP but they are not getting much direct benefits out of that yet as they are suffering as a result of flood due to construction of the barrage and are still mostly unemployed. They with anger that despite setting up of the FSTPP and construction of the barrage, they are still continuing their old profession of bidi binding, weaving, fishing, etc. They are not getting the minimum chance of employment or minimum education by which they could uplift themselves.

Another important fact is that the local poor people cannot tolerate those few local people who suddenly changed

themselves from poor to a rich man. They observe that those neorich do not bother about upliftment of the rest of the community. They also observe that those people are making relations with the high officials of FSTPP, high officials of barrage and administration. Some of them became political leaders also but they are not taking any interest by which the poor fellow members of the community could overcome their poverty, the uneducated could get a chance for education. The bulk of the local people consider them too as if belonging to the 'they' group.

From the foregoing discussion it is noted that the authorities are not taking proper steps to set up industries related to FSTPP by which there could be an economic upliftment of the local poor people. Again, the local people do not have the knowledge or capacity to initiate any steps in this respect. As a result, more outsiders are coming to avail of the chances than that of the local people. Due to this, the wall between the 'haves' and 'have nots's is getting increasingly strengthened. This as such is a negative trend since this has the inherent tendency of dividing the people at the outset and then maintaining the line of divide. Most of the local people are so indifferent about the existence of FSTPP and its work, including the construction work, that they do not bother to know whether the rest of the construction work of FSTPP will continue or not. If the rest of the work is shifted from Farakka to anywhere, either they are indifferent about this or they feel that they do not have that capacity by

which they could stop the process. Because when there is a proposal to shift the rest of the work of FSTPP from Farakka to somewhere else in Bihar (Anandabazar Patrika 31.7.92 : There was a protest against the report), only the contractors and union leaders were anxious but the general labourers were totally unconcerned. Their version is that if this work stops they will go back to agricultural labourers or undertake any other hard works. This mentality clearly reflects that though they are getting their present employment through this project, they are not that involved in it or have little emotional attachment with it. Actually they had a lot of hope from this power plant but in return they get very little.

On the whole, the local people seem to have developed an attitude about the entire matter as if it does not really matter much whether the FSTPP continues or otherwise. The social and psychological factors responsible for this development need careful scrutiny. A fresh study with appropriate emphasis on those aspects would be in a position to throw further light in this respect.

GENERAL OBSERVATIONS
&
CONCLUSION

The intention of the present study as noted in introduction are :

1. To examine the structure and organization of the Farakka Super Thermal Power Project relating to its production system.
2. To highlight the interpersonal relations between the management and employees of this power plant.
3. To find out the formal and informal relation among the employees of FSTPP.
4. To analyse the role of trade union work and action of the power plant and their role in the life of the workers.
5. To highlight the social and cultural life of the people living in and around of this power plant.
6. Social implication of the power plant in the locality.

In the foregoing chapters it has already been presented an analytical discussion on various aspects of Farakka Super Thermal Power Project and its impact among the people living in and around of this power plant. In this section I shall furnish

the summary of findings on the entire study in the following lines. The validity of the hypothesis and their significance in the context of present study is also highlighted here. The conclusion has been drawn on the basis of empirical facts and their analysis as per objectives of this study.

I

Power generation has been given high priority in the Plan Programmes of contemporary India, but there is a shortage of power. To overcome this shortage, the National Thermal Power Corporation (NTPC) was incorporated in November, 1975. The NTPC installed its fourth Super Thermal Power Plant at Farakka, situated in Murshidabad District of West Bengal in 1981.

Ultimate capacity of Farakka Super Thermal Power Project (FSTPP) is 2100 MW and the estimated manpower for the project would be around 3000 at the ultimate stage. There were 1630 employees in this power project as on May, 1989. Employees of this power plant are enjoying free quarters with free education for their children, free medical facilities, free vehicle facilities, etc.

65 percent of the employees of FSTPP were from outside Farakka. 80 percent of the employees were Bengalees and the rest

20 percent were non-Bengalees. Since they stayed at the same residential areas, i.e. quarters of FSTPP, an interaction among the employees is taking place.

NTPC has adopted a structure of three tier system which consist of (a) Corporate Functions, (b) Centralised Service Functions and (c) Operating Divisions, i.e. Projects. The Operating Divisions have the total responsibility for implementation of the project within the predetermined targets. FSTPP is under this division.

The works of FSTPP may broadly be divided into two categories, viz. (i) Corporate works (ii) Contract Labourers. The Corporate's work is to find out the Contractors' work and to produce power.

The administrative chief of this power plant is the General Manager. There are nine different departments headed by Deputy General Managers or Managers under the General Manager.

Employees of FSTPP are of two categories, viz. Executives and Non-Executives. The non-executives are of three types. There are Trainees, Artisans and Supervisors.

Within the plant, employees are maintaining informal relations rather than formal one and the formal relation among them is basically job-oriented. It is important to note here that the status of the employees is not so rigid to make the informal relations among the employees.

To improve the production and to look after the industrial harmony, certain committees are there in FSTPP which consist of the members of Management and employees. In spite of that there are serious class-conflicts among the employees in this power plant. In consequence of which the power generation programme suffer .

Almost all the employees from rural areas belong to the non-executive category. They are not much educated and are generally from the agricultural background. They were eager to adjust themselves to the prevailing system of the power plant. But due to their inadequate capability they failed to do so in some cases. Most of these employees are of first generation service-holders. It is observed that they are more committed to their works. Similar observation was made by Dasgupta who comments, 'The workers who came from distant villages have no other alternative but to live in the town. So, it appears that partial dependence on agriculture affects to some extent to wholesome commitment of the workers to the industrial occupation and tones down the motivation for unidimensional economic goal' (Dasgupta 1978 : 113).

On the other hand, most of the employees with urban background are not so committed to their works. It is observed that the technical employees are more dedicated than the non-technical employees. A number of employees of FSTPP do not bother to expose their dissatisfaction. There are plenty of instances where the workers even disobeyed their higher authority. There are also instances when the executives even violated the code of discipline.

Although there are a general notion that Trade Union activities of the private sector undertakings and public sector undertakings are quite different but the characteristics appear almost similar in both the cases.

It is observed that there is no secrecy about the political patronization to the union activities of this power plant. Even an union leader also functioned there as a contractor.

The interrelation of the members of different Unions and Associations is not very smooth.

Data reveals that, among the respondent, the attitude of 44.4 percent employees is positive and the attitude of 31.5 percent employees is negative towards their Union/Association activities. On the other hand, attitude of 23.7 percent employees is

positive and attitude of 64.1 percent is negative towards other Union/Association. Again, attitude of 45 percent employees is positive and 27.5 percent is negative towards their leaders.

Most of the employees staying at quarters of FSTPP are isolated from the local people. Again the relation among the employees is not very cordial within the residential complexes of FSTPP.

The employees staying at their own villages are continuing their cultivation during their leisure time. Many of them avail their due leave during sowing and harvesting times. Dasgupta have made similar observation. He stated 'During peak agricultural seasons like sowing and harvesting. The industrial workers avail themselves of their due leave or engaged agricultural labourers on payment' (Dasgupta 1978 : 113).

Employees of agricultural background were maintaining a close relation with their family and even with the village-life.

There was no difference between the mode of life of the labourers under contractors of FSTPP and that of the rickshwa pullers, coachmen of horse-drawn cart or even small shop-keepers. They are passing their leisure time by domestic works or by engaging themselves card-playing. Some of them are also engaged in various craft works for extra earning

According to 1981 Census, the total population of Farakka Block are 1,34,445 with 68,371 males and 66,074 females. The Scheduled Caste population of this block is 15,522 which consists 11.55 percent of the total population. The total Scheduled Tribe population is 2,275 which constituted 1.70 percent of the total population of this locality. The approximate ratio of the Hindu and Muslim population in this block is 30:70 . The total literacy rate is 20.75 percent. 13 percent of the total population is engaged in agriculture. Out of this, 5 percent are cultivators and 8 percent are agricultural labourers. 9 percent are craftsmen and 11 percent are service-holders.

II

In Farakka local people were not migrated due to inception of FSTPP, moreover a number of people immigrated to Farakka for earning. The local people witnessed that an industry has been grown up in their locality. But most of them do not have any direct benefit from this industry. They also observe that a number of people of outside places get the opportunity of employment at FSTPP but they failed to get that due to their lack of education. To get this opportunity the local people want to provide proper education to their children but many of them failed to do this. As a result they want to accept the indirect benefits of this power plant.

The upper caste people of Farakka have started to earn money as contractors. Some of them have started industry oriented business, agency etc. While the lower caste people partially converted themselves from agricultural labourers to contract labourers i.e. industrial labourer to earn their livelihood. At the same time they are continuing their traditional profession i.e. agriculture, household industry etc. Srinivas (1967) recognized it as a paradox of change and Singer (1966) designated it as compartmentalization.

Due to setting up of this power plant a few local people earned an unexpected money but they failed to adopt the industrial norms.

From the foregoing discussion it is clear that only a section of the local community, particularly higher caste Hindus and influential and educated Muslims, tried to adjust themselves with the process of industrialization. Such adjustment is also partial in nature. The people adjust with the demand of the new situation. At the same time they have patronising their traditional norms too, for example, religious belief and practices, social relations, traditional way of earnings and such others. Dasgupta (1978) stated this process as compromise between traditional and industrial demands. This group of people is going to their working place with pant, shirt, shoes etc. But they do not give up visiting temples, mosques or other religious places with dhoti and Panjabi

or Lungi and Kurta or Pajama and Kurta.

Those who directly or indirectly associated with the power plant are found to maintain the relationship with their kith and kins who are staying away from their place of work. Some people are also send money to their home to meet the expenses of their natal family and to look after the cultivation. Similar observation was made by Eames (1954), Gadgil (1954) and Prabhu (1956). To his study in a village in North Central India, Eames observed that about 75 percent of the total migrants send money regularly to their home. Gadgil and Prabhu observed that even when a migrant managed to take his wife and children to town with him, he probably had a piece of land, or his old parents and other relatives in the village, needing his continual attention.

It is also observed that majority of the local people of Farakka have a desire to get opportunity of employment from FSTPP. Because one can improve his life-style by such type of employment. Because of this they also want to get a service in FSTPP or any other establishment.

Rao (1974) had the similar observation who observed that the villagers in general seek urban employment.

Only a few local people have neither adjusted themselves nor tried to adjust with the forces of industrialization. They

are continuing their traditional economy and social life too. Abegglen's (1959) study also shows that a pre-industrial social system may continue in the midst of a radically changed technological system. This group of people have a lot of grievances against the employees of FSTPP. These people even are less interested about education of their children. According to them education is not for their children and they will not be benefitted by such type of education.

The above discussion suggests that the first hypothesis i.e. 'By the process of industrialization, a pre-industrial community try to adjust itself with the industrialization without breakdown of their traditional norms' is only partially established.

The data reveals that the production of power in FSTPP is not very satisfactory. It is the only project of NTPC where employees have been denied of incentive bonus due to unsatisfactory performance. It is to be mentioned here that this incentive bonus is being paid by the Corporation to the number of its projects for their better production. Though the organizational set up of FSTPP is as per general standard, due to lack of rhythm of work, the generation of power is poor. This is because of the high politicization of the employees. Further, there is an information that a boiler which was rejected for sub-standard quality by the Korba Project, was accepted by the Farakka Project.

That boiler worked only for a few months . As a result, production of one unit totally hapered for several months. This is against promotion of commitment. A number of senior and experienced employees expose their dissatisfaction about their place of work. It is true that dissatisfaction reflects against the commitment of employees which obviously reflects the production too. This suggests that the second hypothesis 'the development of production system of the industry is entirely depended on commitment of its employees' is found valid.

The third hypothesis is — there lies a gap between ideology and practice in the trade union activities in industrial system.

It is observed that the leadership of trade unions are continued by the same persons for a long time. After becoming an union leader a person has interested for personal gains. But his appearance reveals that he works for the members of the union. Dayal and Sharma (1976) had the similar observations. They stated, "Those who showed higher interest in unions be lieved that the union is a source of economic benefit and job security".

Due to such various causes the gap between the ideology and practice of trade union activities is continuously increasing. This gap is also widespread - whether it is in public sector or in private organizations. This is true both for the industrial as well as non-industrial sectors.

In West Bengal as well as in India as a whole the trade union activities are guided by the political parties. Due to this, there is no ideal trade union movement at present. Instead of looking after the interest of the employees, the unions are looking into the interest of the respective political parties and managements. This seems to be more prominent particularly in West Bengal. Similar observation was made by Bhattacharya (1986) who observed "Freedom of the working class is not the aim of the present trade union activities. It's aim is to acquire some special facilities".

The trade union activities in FSTPP is not different from the above discussion. The union leaders of this power plant are availing extra privileges but they are showing that they are always working for the benefit of the general workers without any personal gain. It is important to note here that according to Tata (1977) the Management and the Government should pursue to develop healthy and responsible trade unionism in industry.

Another important factor which has been observed to be mentioned here that the employees of FSTPP generally maintaining their relation with the same class of people of outside the plant. To their social and cultural festivity, they are giving priority to interact with the people of same class. In some cases it has been observed that employees are giving preference to religion, caste and status to select their friends.

From the above discussion it can be said that the third hypothesis is valid.

The fourth hypothesis is about the possibility of industrial and agricultural development together. There is a wide scope for industrial development at Farakka. Every possibilities such as availability of raw materials, electricity, transport systems are there through which new industries may start at Farakka. But there is no proper planning for industrial growth. In the I.R.D.P. Scheme, Rs. 13,49,000 had spent in 1987-88 and Rs. 16,50,000 had spent in 1988-89 as subsidies. Certain schemes have taken by the authority to improve the local people, industrial development programme is not enlisted to the said schemes. On the other hand, there is a widespread scope for agricultural development in this place. But there is a lack of planning about this.

Due to lack of proper planning for agricultural and industrial development, it is not possible to testify this hypothesis.

The fifth hypothesis is — industries may be established in the rural sector without drastic change of social, cultural and psychological set up at the region.

It is observed that after inception of the power plant, there is no remarkable change of social and cultural life of the

people of Farakka. Moreover, it appears that there is a change of mentality of the local people. They cannot accept the fact that the outsider would earn at their place. Education, culture, social and economic condition are the factors for this mentality. Another factor is there that the outside people have notion to avoid the local people. Some local people have an aspiration to improve themselves in the aspects of their economic, social and cultural life but they have failed to do so for various reasons. It has already been discussed that the poor local people demand relating more price for their agricultural products or charge more remuneration for their labour. Economic gain is not the only tendency believed this. Their outlook reveals that since the outsider immigrated to their own place for earning they have to spend extra money.

It has been described earlier that some of the people of Farakka are economically benefitted by FSTPP. But their numbering are very less. A few local people also got the chance to work in FSTPP. But majority are continuing their traditional cultural life. Thus there is no abrupt change in the social and cultural life. In some cases it is observed that a few people have accepted the trends of change into industrialization of the area but at the same time they are also continuing their traditions under new environment. There are no significant impact to their religious belief, norms, festivals, etc.

In the context of social change in Farakka, it is found that some people of Farakka have adjusted themselves to new occupational roles in the new system of values, they have sought to order their roles in the family and household in terms of traditional system of values with some modifications. Similar observations was made by Rao. He stated, "While villagers validate their activities in one area of social life in terms of new rights and obligations, they seek to legitimize their activities in another area in terms of traditional norms. In doing so they perceive no contradiction but only advantages" (Rao 1974 : 517-518).

The above discussion reveals that a peasant society is not fully affected by the implication of a modern sophisticated technology based industry which is similar to the observation made by Nash (1958). According to him factories may be introduced into peasant societies without drastic chain of social and cultural consequences implied in the concept of industrial revolution.

The foregoing discussion reveals that the hypothesis is partially valid.

III

The study reveals that the performance of Farakka Super Thermal Power Project is comparatively better than that of other power stations of West Bengal. But on the whole the power production of FSTPP is the poorest among the projects of NTPC. Lack of rhythm of work is one of the factor and high politicization of workers is the other factor behind this.

It appears that this power project is not as beneficial to the local people as it was expected. This power project has been set up by acquisition of cultivable land of the local people. It is a fact that the landholding peasant enjoys an air of prestige in the rural area. Land thus not only provide security but also enhances status of its owner. The landholding peasants and the landless labourers belong to two distinct class of unequal social status. It is true that compensation has been paid by the project authority for acquiring land and the compensation has been calculated in the economic terms. In reality it is no match to social prestige since money can never restore the social prestige of the landless to that extent. Obviously the loss of prestige cannot be compensated by the monetary terms.

After inception the power plant, the social harmony among the people of Farakka has been threatened. It is difficult to compare the economic benefit with this loss of harmony among the people.

Though some employment opportunities were created with inception of this power plant, such opportunity was too restricted and would hardly meet the needs of the local people. As a result, a class-based society has been further segmented in terms of economic classes and a conflict between the classes became inevitable .

It is a fact that a peasant society has been affected due to the inception of this power plant and the effects are as follows:

- (i) A number of land owning peasant has become landless.
- (ii) Some of the local people converted themselves to industrial worker and on the other hand some of the people remain same as they were before setting up of this power plant.
- (iii) Few local people suddenly earned an unexpected amount of csh due to setting up of this power plant. As a result a neorich group has emerged.
- (iv) The very presence of this neo rich is humiliating the village aristocrat.

The above discussion may give an impression that the present author is against of modernization and industrialization of the area. This is certainly not a fact, rather the author is eager for a qualitative change in the rural scene. Considering

the overall situation he wants to sound a caution. Generally whenever a project of this dimension is planned, its feasibility is considered only by taking the financial aspects in view. As a result, the social consequences of such measures never become conspicuous. Financial and other benefits notwithstanding, as because social consequences due to setting up the power plant to this area. The caution therefore is to pay due attention so that there should not disintegration of the society by way of loss of social values and heritage of the people.

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Q U E S T I O N N A I R E

[To Collect Information from the Employees of FSTPP]

(A) PARTICULARS ABOUT INFORMANT:

1. Name -
2. Age and Sex
3. Marital Status
4. Religion
5. Caste/Ethnic Group -
6. Present Address-

7. Permanent Address-

8. Educational Level -
9. Total Monthly Salary -

(B) PARTICULARS ABOUT THE PROJECT (FARAKKA SUPER THERMAL POWER PROJECT) WORK :

1. Department-
2. Designation-
3. Nature of Job-
4. Types of Job-
5. Reasons for accepting this Job-
6. When did you come to join this Job?

7. Duration of service in this project-
8. Occupational background of the employee-

9. How did you get this Job?

10. Are you satisfied with your work at this place?

11. Why do you prefer this job?
12. Do you like this work better than others?
13. What is your attitude to this project work?
14. How did you adopt the ideology of the work?

(B1) PARTICULARS ABOUT EMPLOYER-EMPLOYEE RELATIONS:

15. What is your attitude to the management/authority?
 - i)
 - ii)
 - iii)
 - iv)
 - v)

(B2) SOME OPINIONS OF THE EMPLOYEES REGARDING PROJECT WORK AND OTHERS:

16. Are you enjoying any quarter facility?
17. What is your opinion regarding that facility?
18. What type of recreation-facilities are available in the project?
19. What is your opinion regarding the existing welfare organization of the project?
20. What is your opinion regarding your colleague?
21. Is there any further employment opportunities in this project?

22. What is your opinion regarding the life of the local people?
23. Do you think that the local people are/would be benefitted by this power station? If yes, how?
24. Have you any technical/other problems of your work? If yes, what are the problems?
25. Is there any disagreement amongst the employees in achieving a common goal?
26. What is your opinion regarding the social implication of this power station?

(B3) PARTICULARS ABOUT TRADE UNION ACTIVITIES:

27. How is the trade Union/Supervisors' Association of Executives' Association organized?
 - (i) What part do you play in the Union/Association activities?
 - (ii) Do you co-operate with other members of the union/association - Yes/No-
 - (iii) What is the name of the Trade Union/Association with which you are associated?
 - (iv) Do you have any association with a political party - If yes, specify-
28. Do you think that your activities of union/association confer some extra privileges, If yes, specify-
29. What is your opinion regarding the Union/Association activities of this power project? .
30. What role the union leaders are playing for the development of the power project and of its employees?

Signature:

Date :

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