CHAPTER 2

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 Waidhan (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 FSTPP, 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 Singrauili-Kanpur Singrauili-Kanpur Jaipur Singrauili-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 Inode-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.
Badarpur	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. [7] International Development Association ($ 225 million), International Bank for Reconstruction and Development ($ 25 million).

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 chimny 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 sturry 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 purse (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. Recruitmentn 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 per with the West Bengal Government pay scales. Here also the staff get extra facilities like free quarters, mecical 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 Employess 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
	1629
Nepal	1
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 monopoling 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. Average Daily Employment					
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. No. of accident					
A. Reportable					
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 precautional 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. Al 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 came 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.