

The Dark Side of NTPC

A Critical Look at the Social and Environmental Footprints of NTPC



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Cover Image: An evening view of NTPC Power Plant (*Source: NTPC Website*)

Visual after the boiler blast at Unchahar Power Plant, Uttar Pradesh (*Source: Bloomberg Quint*)

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Environmental Footprints of NTPC**



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Foreword



One of the four Navaratnas of India, a Fortune 500 company, National Thermal Power Corporation (NTPC) has played, for over four decades, a pivotal role in India's quest for development – a development model whose parameters are set in the West, which is energy intensive and caused a plethora of negative impacts to people, environment and sustainability over the years.

Starting with thermal power, over the years it expanded its foray into gas, hydro, nuclear and even renewable energy sources, apart from coal mining, making it the largest company in the field, one among the top five power utilities in the world, and one meeting near to a quarter of India's current power needs.

However, all these came at a heavy cost to people and environment. Be it forced evictions without rehabilitation, destruction of forests and other natural resources, pollution, health hazards to people living in the vicinity, ground water contamination, dumping of toxic wastes, issues related to disposal of ash and many such.

While there has been some documentation of individual projects and its impacts, or instances of police atrocities on people who are struggling against NTPC projects as in the case of Hazaribagh, or lapses in safety norms as in the case of Unchahar project which led to the killing of many labourers, a compilation of instances of gross violation of human rights and law of the land pertaining to land acquisition, forests, water contamination and many such is missing.

This booklet is an attempt to gather such information together to get to see the other – the darker – side of NTPC.

This is done based on a principle that no entity, whether a government, financial institution or corporation can be above law, should be responsible in their operations and should be held accountable in case of violation of laws, or when causing serious damages to people or environment.

We hope that this will help people to have a better understanding about NTPC as a corporation and help in their efforts to hold NTPC accountable.

Joe Athialy

Centre for Financial Accountability

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1. Introduction

The National Thermal Power Corporation (NTPC) was established in 1975 as a Government-owned company to accelerate power generation in India. Currently, NTPC is a listed company where the Government of India owns roughly 70% of its shares and the rest of the shares are held by financial institutions, mutual funds, retail investors, etc. NTPC is India's largest power company and one of the largest power companies globally. NTPC's contribution to India's power production has been significant and it can be judged from the fact that NTPC contributes 24% of India's total power generation. With more than 50 power projects and a combined capacity of more than 53,000 MW, NTPC has a huge footprint spread across India.

In this context, it is important to understand NTPC as a company, based on its operational track record. NTPC, as a company, has spent a substantial amount of money on its Corporate Social Responsibility (CSR) activities over the years, which has often received wide publicity. Between 2011-12 and 2016-17, according to NTPC's website, it had spent over Rs 1,200 crore on its CSR activities. However, its track record on multiple fronts, whether on land acquisition, rehabilitation, environmental degradation, pollution, labour safety, etc. rarely comes into limelight. As NTPC's majority of the projects

have been coal-fired thermal power plants, hence, the problems commonly associated with power projects have also been endemic to NTPC's projects, such as issues related to flyash disposal, environmental pollution, loss of livelihoods of the population being displaced, etc. Most of the NTPC's projects are above 1,500 MW (with installed capacity as high as 4,760 MW). Therefore, they have left a huge impact on the communities and the environment where they operate. The massive consumption of coal and water to run these thermal power plants have only worsened the situation and NTPC has not done enough to mitigate the problem.

In this study, violations of NTPC on various grounds have been documented based on news reports over the past decade. Many of these incidents have usually been looked at as isolated incidents specific to a particular power plant. Piecing these various incidents together provides a different framework to understand NTPC as a company, and how much it really cares about the people and the environment. Additionally, some of the incidents have been covered in the form of case studies such as the Unchahar tragedy and Barkagaon police firing, and NTPC's involvement in two power plants, that is, Pudimadaka and Kudgi, which have faced huge protests on account of forceful land acquisition and threat to environment and livelihoods.

There is also a detailed case study on NTPC's failed attempt in setting up a coal-fired power plant in Sri Lanka. This booklet also provides information about the various NTPC projects across India and its attempts to venture abroad in other countries.

Methodology

For compiling data, the study has relied on secondary research, which has included referring to various news sources, primarily leading English dailies, magazines and news websites. The data about NTPC's operations have been taken from the NTPC website and its Annual Reports. Though the data provided here is not exhaustive in nature, best efforts and meticulous care have been taken to include as much data as possible. In terms of timeline, the news articles

referred here date as back as 2004 and the latest articles referred are up to March 2018.

Acknowledgements

This booklet would not have been possible without the support of colleagues at the Centre for Financial Accountability (CFA). Additionally, the guidance and inputs of activists associated with struggles against the NTPC projects has helped in shaping up this booklet. We would like to thank our friends associated with the National Committee to Protect Oil, Gas, Mineral Resources, Power and Ports in Bangladesh who have inspired us to come up with such a publication. We would also like to extend our thanks to the team of Citizen Consumer and Civic Action Group (CAG), Chennai, for providing their valuable feedback on this booklet.



View of NTPC Barh Thermal Power Plant in Bihar (Source: Wikimedia Commons)



An evening view of NTPC Power Plant in Korba, Chhattisgarh (Source: NTPC Website)



An evening view of NTPC Power Plant (Source: NTPC Website)

2. Quick Facts About NTPC

The National Thermal Power Corporation (NTPC) is India's largest power utility company with an installed capacity of 53,651 MW. The NTPC was established in 1975 as a Government-owned company to accelerate power generation in India. Though NTPC has been primarily involved in fossil fuel based power generation, it has been diversifying its portfolio in generating electricity via hydro, nuclear and renewable energy sources. Apart from power generation, the company has diversified into the fields of consultancy, power trading, training of power professionals, rural electrification, ash utilisation and coal mining. In 2010, NTPC was awarded the status of 'Maharatna Company' by the Government of India; only three other companies have been given the same status.

NTPC's Operations

NTPC has a total installed capacity of 53,651 MW (including joint ventures) with 21 coal-based stations, 7 gas-based stations, 1 hydro-based station and 1 wind-based station. Nine joint venture stations are coal-based and 12 are solar PV projects. The NTPC claims that by the year 2032, its non-fossil fuel-based generation capacity shall make up nearly 30% of NTPC's portfolio. Additionally, NTPC has been involved in coal mining for procuring fuel directly for some of its power plants.

The NTPC has 17.73% of the total national capacity, though it contributes 24% of total power generation through extracting high efficiency from its plants.

The list of NTPC's Power Projects with respective installed capacities has been provided in Annexure - 1 for reference.

Growth in NTPC's Operations

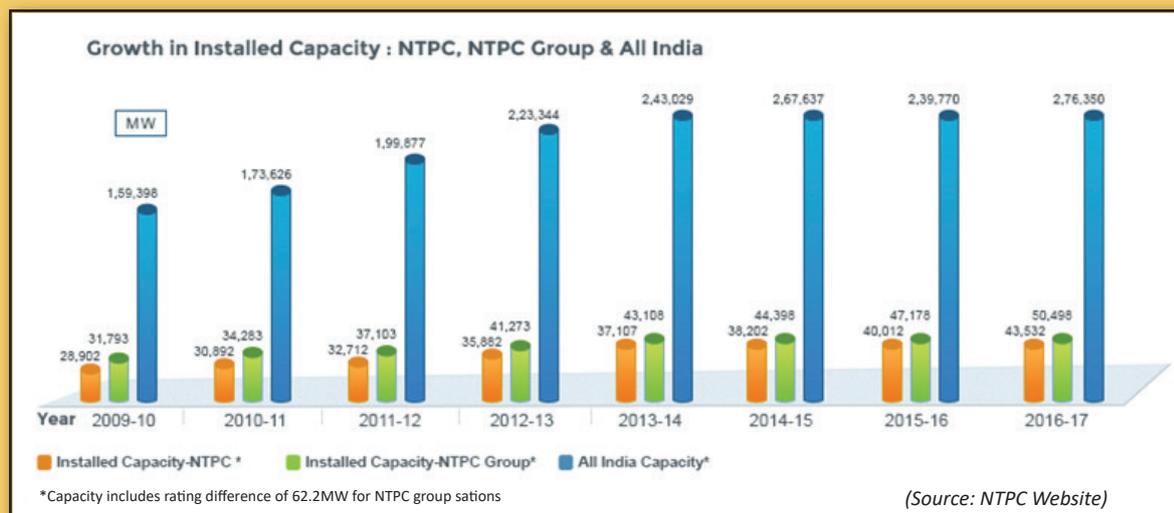
The NTPC has seen a steady growth both in its installed capacity and power generation in the last few years. Between 2009-10 and 2016-17, NTPC Group's installed capacity expanded from 31,793 MW to 50,498 MW. In the same time period, NTPC Group's generation increased from 230.01 Billion Units to 276.77 Billion Units.

The below graphs present the growth in NTPC's operations:

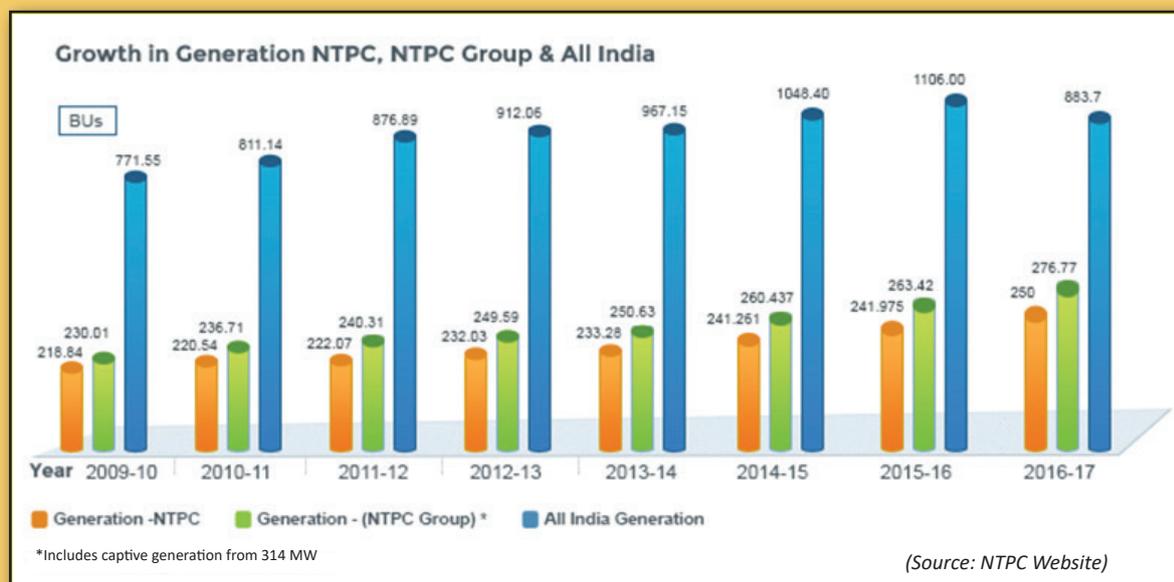
Shareholding Pattern of NTPC

Even though NTPC is a Government-owned company, over the past few years the Government of India has reduced its ownership in NTPC, thus pushing it to behave more like any other private company, focusing primarily on profits. The NTPC became a listed company in October 2004, when it launched its Initial Public Offering (IPO) consisting of 5.25% as fresh issue

Power Generation



Installed Capacity



and 5.25% as offer for sale by the Government of India. This brought down the holding of equity share capital of Government of India in the company to 89.5%. This was the first phase of disinvestment of NTPC by the Government of India. The shareholding of the Government of India was reduced from 89.5% to 84.5% in February 2010 through a further public offer. The shares of NTPC were further divested by the Government of India in February 2013 through the Offer for Sale route by 9.5%, bringing down

the Government's ownership to 75%. By March 2015, the Government's ownership stood at 74.96%. In February 2016, the Government of India sold off further 5% stake in NTPC, bringing down its ownership to 69.96%. Presently, the Government of India's ownership in NTPC stands at 69.74%, which it might reduce further in coming days¹.

1. Source: NTPC Overview - <http://www.ntpc.co.in/en/about-us/ntpc-overview>

Given below is the shareholding pattern of NTPC as per company's latest Annual Report of 2016-17.

Shareholding Pattern of NTPC

| | No. of Shareholders | Percentage |
|---------------------------------|---------------------|------------|
| Government Of India | 1 | 69.74 |
| Indian Financial Institutions | 63 | 12.73 |
| Foreign Institutional Investors | 59 | 1.1 |
| Mutual Funds | 203 | 3.09 |
| Foreign Portfolio Investors | 517 | 9.33 |
| Resident Individuals | 601705 | 1.61 |
| Bodies Corporates | 2567 | 0.78 |
| Insurance Companies | 66 | 0.77 |
| Banks | 33 | 0.43 |
| Trusts | 89 | 0.14 |
| Hindu Undivided Families (HUF) | 11118 | 0.05 |
| Others | 14891 | 0.23 |
| Total | 631312 | 100 |

(Source: NTPC Annual Reports)

NTPC's Annual Report mentions the names of the major shareholders in the company, i.e. shareholders with more than 1% of paid-up capital. Given below is the list of major shareholders in NTPC:

Major Shareholders in NTPC (with more than 1% of paid-up capital)

| | No. of Shareholders | Percentage |
|------------------------------------------------------------------------------------|---------------------|-------------------------------|
| Government Of India | 69.74 | Government of India |
| Life Insurance Corporation of India(including shares held in various funds/scheme) | 12.11 | Indian Financial Institutions |
| ICICI Prudential Mutual Fund (including shares held in various funds/ scheme) | 1.21 | Indian Financial Institutions |

(Source: NTPC Annual Reports)

Given below in the table are the figures of Revenue, Net Profit and Fuel Expense of NTPC in past five years.

Revenue, Net Profit and Fuel Expense of NTPC in Past Five Years

(Figures in Crores)

| | 2012-2013 | 2013-14 | 2014-15 | 2015-16 | 2016-17 ² |
|--------------|-----------|---------|---------|---------|----------------------|
| Revenue | 68,856 | 74,665 | 75,337 | 72,009 | 79,342 |
| Net Profit | 12,619 | 10,975 | 10,291 | 10,770 | 9,385 ³ |
| Fuel Expense | 41,018 | 45,830 | 48,834 | 43,799 | 47,572 |

(Source: NTPC Annual Reports)

2. The figures for Revenue and Net Profit for the year 2016-17 and 2015-16 is taken from NTPC 2016-17 Annual Report. The figures for 2014-15 is taken from NTPC 2015-16 Annual Report. The figures for 2013-14 is taken from NTPC 2014-15 Annual Report. The figures for 2012-13 is taken from NTPC 2013-14 Annual Report.

3. According to NTPC's Annual Report, "Profit after Tax looks subdued, primarily due to substantial offset of income tax by way of refunds received in previous fiscal and impairment loss on investment in RGPL." (Page 9/444)



A Billboard of NTPC saying "Always Dedicated for Nation's Service", Rihand Super Thermal Power Project (Source:Wikimedia Commons)

3. NTPC's Track Record Over the Years: Violating Rights of Communities, Year After Year

Between 2011-12 and 2016-17, according to NTPC's website, it had spent over Rs 1,200 crore on its Corporate Social Responsibility (CSR) activities. The NTPC wants to send out a message that it is a good 'corporate citizen' and it cares about the communities and the environment where it operates. However, there are several documented instances where NTPC has gone against the welfare of people and despite being a Government-owned company, has shown actions similar to profit-hungry private corporations. Moreover, NTPC has heavy backing of the state machinery, which has given it the leeway to violate the rights of communities where it has been operating, along with causing damaging effects on the health of people and the environment. Moreover, NTPC has shown poor concern for labour safety, as it has been quite evident in the case of the Unchahar tragedy, along with overlooking the demands of its contract workers for better wages. Given below is a compilation of various news reports spanning over more than a decade which throws light on the track record of NTPC on various fronts:

a. Land Acquisition/Rehabilitation

As a power producer, NTPC has always been dependent on acquiring huge tracts of land for its projects. The land which NTPC has acquired for its projects is mostly based in rural areas with the area spread over several villages. The NTPC pays compensation to the villagers for the land it acquires and local governments

play a key role in facilitating this acquisition. However, the required land for NTPC's projects has not been given up by villagers easily in lieu of compensation. The loss to existing livelihoods, inadequate compensation, lack of employment opportunities in the upcoming plants, pollution, environmental hazards, etc. have been some of the key factors in opposing the displacement. While the government says that the acquisition of land is important for development of the nation as meeting the growing power demand is one of the key prerequisites for the growth of Indian economy, but, many times, the communities whose land is being acquired do not necessarily agree with the government. For them it is more important to ensure that their livelihoods and environment is not sacrificed on the altar of nation's development.

Given below are some of the documented instances where communities have opposed the acquisition of land for NTPC's projects or have demanded better compensations for parting with the land. There have also been protests demanding jobs for local people in these power plants. Many of such struggles fail to get due media coverage. Hence, the instances mentioned below may only give a partial picture to the reader:

- In January 2018, there were news reports that farmers in Gadarwara area of Narsinghpur district of Madhya Pradesh have been protesting for

more than 15 days against acquisition of land by NTPC. According to a separate news article in 'Down to Earth' magazine, about 1,800 acres of land was taken for 3200 MW power plant from 500 small and marginal farmers for the construction of the power plant on rich fertile land. The news in 'Indian Express' mentioned that Madhya Pradesh Congress leader Ajay Singh had said that the farmers were promised Rs 18 lakh per acre, along with an annual bonus of Rs 30,000 per acre for the next 30 years and that NTPC had agreed to provide employment to at least one family member of the affected farmers; but, none of the promises had been fulfilled.

(Source: 1. Congress seeks PM's intervention to resolve farmers' stir against NTPC - The Indian Express - January 15, 2018 - <http://indianexpress.com/article/india/congress-seeks-pms-intervention-to-resolve-farmers-stir-against-ntpc-5025668/>)

2. 'Pro-farmer' Madhya Pradesh government in a fix as land acquisition protest gains steam - Down to Earth magazine - February 05, 2018 - <http://www.downtoearth.org.in/news/-pro-farmer-madhya-pradesh-government-in-a-fix-as-land-acquisition-protest-gains-steam-59629>)

- According to a news report in 'The New Indian Express', since December 2017, hundreds of villagers had been protesting against NTPC's upcoming Gajmara plant in Dhenkenal district of Odisha demanding compensation from the Government. The protesters were claiming that they have not received the compensation amount, even though NTPC said that it had released compensation for those who lost their land before starting the project. This NTPC project is an upcoming 2400 MW coal-fired power plant which would be a joint venture between NTPC and aluminium major NALCO, which would be used for supplying low cost electricity for aluminium production.

(Source: Affected villagers stage protest, seek compensation - The New Indian Express - December 20, 2017 - <http://www.newindianexpress.com/states/odisha/2017/dec/20/affected-villagers-stage-protest-seek-compensation-1732015.html>)

- Bharatiya Rail Bijlee Company Limited (BRBCL), a 74:26 joint venture of NTPC and Indian Railways at Nabinagar in Aurangabad district, faced protests from the local villagers, who were demanding employment. The villagers had cut off the water supply of the power plant which had brought it to the verge of a shutdown. There were around 100 people from a displaced village, Kajrain, involved in the protest, which also included 40 women. The demand of the protesters included compensation for several plots, measurement of residential land, and irrigation facilities.

(Source: Protest stalls power plant - The Telegraph - December 06, 2017 - <https://www.telegraphindia.com/states/bihar/protest-stalls-power-plant-191414>)

- In July 2017, NTPC's 460 MW Talcher Thermal Power Station (TTPS) faced agitation from hundreds of local villagers, including women, who demanded employment for the locals. The protesters had also submitted a memorandum to the Talcher Sub-Collector, seeking employment and a few other demands. However, NTPC's General Manager gave a rejoinder, stating, "NTPC never committed jobs to locals in the plant. Besides, there are no vacancies in the plant." This agitation happened just two days before a public hearing for the expansion of Talcher Thermal Power Station.

(Source: Job protest clouds Talcher power plant expansion - The New Indian Express - July 11, 2017 - <http://www.newindianexpress.com/states/odisha/2017/jul/11/job-protest-clouds-talcher-power-plant-expansion-1627065.html>)

- In October 2016, four villagers were killed when police opened fire on the protesters whose land was being acquired by NTPC in Chirudih area in Hazaribagh district of Jharkhand. More than 500 villagers from different villages of the Barkagaon block had been staging 'Kafan (shroud) satyagrah' for last 10 days in Chirudih area of the NTPC site. However, they became aggressive when the police and officials arrived and asked them to end their agitation. The NTPC had acquired 8,056 acres of land for one of its biggest projects – the Pankri-Barwadih coal mining project in 2010. But, work could not start due to the villagers demanding higher compensation, employment and rehabilitation. The agitation of the villagers intensified after NTPC reportedly initiated the mining work.

(Source: Jharkhand: 4 villagers killed in police firing over land row; 2 officers injured - October 01, 2016 - <https://www.hindustantimes.com/india-news/jharkhand-two-killed-dozens-injured-in-police-firing-over-land-acquisition/story-6boabOFQ6KagMvcQA1FtnO.html>)

- NTPC's coal mining project in Hazaribagh district of Jharkhand faced strong opposition in June 2016, which could have led to 30,000 villagers losing their land with NTPC's plan to acquire 17,000 acres of land. The project would have affected 32 villages in the Keredari and Barkagaon block where the villagers alleged that NTPC had not discussed the issue with them. It was alleged by local rights activists that the compensation paid by NTPC to the villagers was grossly inadequate. According to a local lawyer, though the villagers were not opposed to land acquisition, they wanted better compensation.

According to the villagers, the land in this area is highly fertile and cultivation is done three times in a year.

(Source: NTPC's compensation is inadequate, say villagers - The Hindu - June 20, 2016 - <http://www.thehindu.com/todays-paper/tp-national/ntpcs-compensation-is-inadequate-say-villagers/article14433640.ece>)

- It was reported in May 2016 that villagers who had lost land in Barkagaon block of Hazaribagh district of Jharkhand had called for a block-level shutdown to protest against NTPC and police atrocities, where NTPC had been carrying a captive coal mining project. The villagers were demanding higher compensation, employment and rehabilitation. The displaced villagers had formed a platform by the name of Barkagaon Buddhijivi Manch and they sat on a hunger strike demanding that the company should fulfill their demands.

(Source: NTPC protest leads to bandh in Barkagaon in Jharkhand - The Economic Times - May 30, 2016 - <https://energy.economictimes.indiatimes.com/news/power/ntpc-protest-leads-to-bandh-in-barkagaon-in-jharkhand/52497143>)

- An article was published on Sierra Club's website, an environmental organization, which narrated the displacement faced by the people of Singrauli in Uttar Pradesh due to several power projects, which started with NTPC's Singrauli Power Project in 1977. According to an estimate, more than 300,000 people have been displaced because of the power projects which have been established in the region. The article also highlighted the plight of one of the displaced persons, Ram Shubhang Shukla, who sat for 63 days on protest in 2016, demanding rehabilitation and land for the land lost due to the NTPC project. Ram Shubhang Shukla is physically challenged, but no one from the various government departments paid heed to his plight. He has received only Rs 1,200 as compensation so far.

(Source: Displaced 35 Years Ago, One Man Fights For A Piece Of His Land - Sierra Club - May 23, 2016 - <https://www.sierraclub.org/compass/2016/05/displaced-35-years-ago-one-man-fights-for-piece-his-land>)

- In September 2015, construction work was stalled at NTPC's North Karanpura Super Thermal Power Plant in Tandwa town in Chatra district of Jharkhand due to a protest by a group of around 50 villagers demanding permanent job in the project. It was alleged that the company was not giving jobs to those who were losing their land. It was also claimed by sources that even though the matter was later on settled after the intervention of the local administration, regular protests by

the villagers and local leaders could turn into a massive crisis.

(Source: Job protest at power plant - The Telegraph - September 14, 2015 - https://www.telegraphindia.com/1150914/jsp/jharkhand/story_42470.jsp)

- In September 2015, a farmer had allegedly set his house on fire and others had raised slogans and tried to resist the authorities' move to vacate them from their land for the Meja Urja Nigam Private Limited (MUPNL)'s project of setting up ash dyke in Salaiya Kalan village of Meja block in Allahabad district of Uttar Pradesh. MUNPL is a joint venture of NTPC and Uttar Pradesh Rajkiya Vidhut Nigam Limited (UPRVNL) which has been tasked with construction of a 1320 MW power plant at Meja block. According to reports, Salaiya Kalan village was to be vacated by the villagers as the land was already acquired by MUNPL for the construction of an ash dyke. Although no untoward incident was reported from the village, one of the farmers allegedly set his house on fire before vacating it. Some of the village youths tried to resist and raised slogans against the authorities after which Rapid Action Force (RAF) was asked to move inside the village. Heavy police force was deployed in and around the village thereafter.

(Source: Farmers stage protest against vacating land for power plant - The Times of India - September 10, 2015 - <https://timesofindia.indiatimes.com/city/allahabad/Farmers-stage-protest-against-vacating-land-for-power-plant/articleshow/48897185.cms>)

- Farmers and land-owners have been protesting against NTPC demanding higher compensation from NTPC for their land in Solapur district of southern Maharashtra as per a news report of April 2015. Since early that month, the plant site at Fatatewadi village near Solapur has been under siege with hundreds of protesters demanding additional compensation. To control the agitation, the district administration had invoked Section 144 in the area and 150 police personnel were deployed. It was estimated that NTPC would have to give out Rs 300 to Rs 500 crore extra if it agreed to meet the demand of the agitators.

(Source: Solapur farmers stage protests at NTPC plant site, demand higher compensation - The Hindu Businessline - April 23, 2015 - <https://www.thehindubusinessline.com/news/national/solapur-farmers-stage-protests-at-ntpc-plant-site-demand-higher-compensation/article7134868.ece>)

- A massive protest was registered in September 2014 in Meja block in Allahabad district of Uttar Pradesh against the upcoming Meja Thermal Power Plant of Meja Urja Nigam Pvt. Ltd. The plant is a joint venture of National Thermal Power

Corporation Limited (NTPCL) and UP Rajya Vidyut Nigam Limited (UPRVNL). The villagers had been demanding higher compensation. The villagers had been paid Rs 90,000 per bigha (one third of an acre), while they were demanding Rs 25 to Rs 30 lakh per bigha. Villagers who had been displaced by the plant have been protesting for many days. They alleged that the plant was being constructed forcibly by deploying hundreds of police personnel.

(Source: Now villagers protest against Meja thermal plant - The Times of India - September 13, 2014 - <https://timesofindia.indiatimes.com/city/allahabad/Now-villagers-protest-against-Meja-thermal-plant/articleshow/42374660.cms>)

- A protest against Kudgi Power Plant in Bijapur district of Karnataka in July 2014 had turned violent when police was forced to open fire and burst tear gas shells. According to police, five people were injured in the incident, while two of them suffered bullet wounds. The incident also led to the imposition of Section 144 in Kudgi town. The Kudgi Power Plant was facing protests by hundreds of people for few months prior to this incident, even though 50 per cent of the project had already been commissioned. It was alleged by the protesters that the local residents were not provided jobs, even though NTPC officials had promised the same while acquiring fertile pieces of land from them a few years ago. The escalation of violence led to the exodus of hundreds of NTPC workers out of the town. The protesters had threatened to continue their protest till the government agreed to shift the plant out of Kudgi.

(Source: Kudgi: Police fire in air to stop hundreds of protesters - Deccan Chronicle - July 06, 2014 - <https://www.deccanchronicle.com/140706/nation-current-affairs/article/kudgi-police-fire-air-stop-hundreds-protesters>)

- It was reported from Meja block in Allahabad district of Uttar Pradesh that villagers of Salaiya Kalan village had a confrontation with the district administration when they opposed the construction of an ash dyke by Meja Urja Nigam Private Limited (MUNPL). It was informed by the leaders associated with the agitation that the villagers were protesting against the power plant under the banner of 'Visthapit Virodhi Sangharsh Samiti' as many villagers had been displaced because of the power plant and many farmers had been directly affected. According to the villagers, police had used force against the legitimate demands of villagers, which included compensation enhancement, construction of houses for the displaced farmers, jobs, etc.

(Source: Farmers, police clash at Meja thermal power plant - The Times of India - March 07, 2014 - <https://timesofindia.indiatimes.com/city/allahabad/Farmers-police-clash-at-Meja-thermal-power-plant/articleshow/31579062.cms>)

- The NTPC had been allocated the Pakri Barwadih coal block in Hazaribagh district of Jharkhand in 2004 and it was expected that mining would begin by February 2013. However, the work at the site was stalled due to agitation against land acquisition. NTPC officials had claimed that the compensation for the land acquisition had been paid by the company as stipulated by the state government, but, still, the farmers were agitating against the company. The NTPC came out with a statement: "Land owners are agitating for a higher land compensation and the law and order situation in that area is not conducive."

(Source: Law and order not 'conducive' for mining at Jharkhand's PakriBarwadih: NTPC - The Hindu Businessline - December 02, 2013 - <https://www.thehindubusinessline.com/economy/law-and-order-not-conducive-for-mining-at-jharkhands-pakri-barwadih-ntp/article23115105.ece>)

- In July 2013, it was reported that NTPC's 1320 MW Solapur Thermal Power project at Fatatewadi village in Solapur district of Maharashtra was facing agitation from villagers who were demanding higher compensation from NTPC for the land they had parted with earlier. The villagers had asked NTPC to stop the construction work till their demands were met and they also wanted a higher number of locals to be given jobs. The construction work of the power plant had begun in 2009. The locals wanted the compensation for their land in line with the prevailing market rates.

(Source: Land buy: NTPC Solapur project runs into trouble - The Hindu Businessline - July 05, 2013 - <https://www.thehindubusinessline.com/companies/land-buy-ntp-solapur-project-runs-into-trouble/article20634304.ece1>)

- The NTPC was allocated the Pakri Barwadih coal block in Hazaribagh district of Jharkhand in 2004. It was reported in June 2013 that villagers in Barkagaon and Keredari blocks had firmly refused to part with their cultivable land. This mining project, which was intended to feed its ultra mega power project, met with opposition protesting villagers stopped Thiess India from starting its work. Thiess India is part of an Australian Company which had been given the task by NTPC for coal exploration. The villagers were demanding Rs 40 lakh per acre as compensation, but NTPC refused to raise the compensation amount beyond Rs 15 lakh per acre. The NTPC had alleged that villagers had assaulted some

of the contractors engaged by the company for levelling the ground before mining.

(Source: Protesters halt NTPC mining in Hazaribag - The Times of India - June 07, 2013 - <https://timesofindia.indiatimes.com/city/ranchi/Protesters-halt-NTPC-mining-in-Hazaribag/articleshow/20470002.cms>)

- According to a news report, from February 2013, construction work at NTPC's first hydroelectric power project at Koldam Dam in Bilaspur district of Himachal Pradesh was stalled by the people displaced due to this 800 MW hydroelectric project. They were demanding permanent jobs for a member of each family or Rs 25 lakhs as compensation, along with other demands, such as free electricity and medical treatment at the NTPC dispensary. The protest led to imposition of Section 144 by the administration, while NTPC workers deserted the site.

(Source: Stir at Kol Dam site enters 8th day - The Tribune - February 20, 2013 - <http://www.tribuneindia.com/2013/20130221/himachal.htm#2>)

- A violent clash between villagers and police was reported in June 2012 at the project site of NTPC's Simhadri Super Thermal Power Plant at Parawada in Vishakhapatnam district of Andhra Pradesh. The violence broke out when a pipeline for the seawater pump house for the second phase of the power plant was stalled by hundreds of angry fishermen from Tikkavanipalem who were demanding jobs for the people affected by the project. The agitated fishermen pelted stones and personnel of the Central Industrial Security Force (CISF) opened fire in the air to quell the violent mob. Though no one was injured in the firing, eight people got injured in stone pelting, which included four policemen and four civilians. State secretary of CPI (M) B.V. Raghavulu said that NTPC completely failed in keeping a check on pollution, which, adversely, affected the livelihood of the fishermen, and that NTPC should not have gone ahead with the second pipeline without rehabilitating those affected due to the first pipeline.

(Source: Eight persons injured in stone-pelting at Parawada - The Hindu - June 29, 2012 - <http://www.thehindu.com/todays-paper/cisf-opens-fire-as-fishermen-demand-ntpc-jobs/article3582997.ece>)

- In December 2011, fishermen living near the NTPC Simhadri Power Plant of Vishakhapatnam district came up with a unique way of protest against the NTPC power plant and Pharma City, when they came with fishing boats and nets in front of the NTPC gate. The fishermen belonged

to four villages, viz. Dibbapalem, Jaalaripeta, Mutyalammappalem and Tikkavanipalem, and demanded that the NTPC and Pharma City managements should provide jobs to their children and resettlement of their villages. The fishermen complained that they were not getting the catch due to the dumping of hazardous waste of the companies into sea waters. The agitators conducted a funeral procession of NTPC and Pharma City managements at the power plant site.

(Source: Fishermen stage novel protest against NTPC, Pharma City - The Times of India - December 27, 2011 - <https://timesofindia.indiatimes.com/city/hyderabad/Fishermen-stage-novel-protest-against-NTPC-Pharma-City/articleshow/11260920.cms>)

- In 2009, NTPC had signed a MoU to develop its first power project in Karnataka, that is, a 4,000 MW Power Project at Kudgi village in the Basavan Bagewadi block in Bijapur district of Karnataka. Even before the grant of Environmental Clearance in January 2012, there had been opposition to the power plant from various groups and environmental activists. In February 2011, members of a people's forum 'Kallidalu Ushna Viduyt Stavara Vidoshigala Okkuta' had submitted a memorandum to the Deputy Commissioner of Bijapur stating that the site selected for the power plant is not suitable as it would cause enormous environmental and health hazards in the nearby regions. It was also alleged in the memorandum that the authorities were misguiding the people saying that the site selected for the power plant was barren and uncultivable.

(Source: 1. NTPC's Kudgi project gets MoEF nod - The HinduBusinessline - January 26, 2012 - <https://www.thehindubusinessline.com/companies/ntpcs-kudgi-project-gets-moef-nod/article20389166.ece>)

2. Thermal power plant at Kudgi opposed - The Hindu - February 11, 2011 - <http://www.thehindu.com/todays-paper/tp-national/tp-karnataka/Thermal-power-plant-at-Kudgi-opposed/article15294113.ece>)

- An incidence of violent clash was reported in January 2011, when hundreds of farmers clashed with the police demanding higher compensation in Aurangabad district of Bihar in lieu of the land acquired by NTPC in Nabinagar. The incident left a dozen farmers injured and it was reported that one farmer had died in the incident, which the district authorities had denied. The Nabinagar power plant was being set up as a 50:50 joint venture between NTPC and Bihar State Electricity Board (BSEB) for a 1,980 MW power plant for which 2,800 acres of land were required. The farmers alleged that the state government had promised that no industry would be set up on

fertile land. The farmers had earlier written a letter to Chief Minister Nitish Kumar with a demand to assess their quality of land.

(Source: Farmers in Bihar demand higher compensation for land - IANS - January 15, 2011 - <https://in.news.yahoo.com/farmers-bihar-demand-higher-compensation-land-20110115-051719-990.html>)

- It was reported in a news report that the plans for NTPC's 2300 MW Mauda Power Plant in Nagpur district of Maharashtra had ran into trouble because of land acquisition issues for the second phase of the power plant. The acquisition for the first phase had happened smoothly. However, the farmers were demanding a high price for their land because of which the District Collector had to intervene. The District Collector had arranged a meeting with around 150 farmers who had pressed for several demands, including Rs 25 lakh per acre, job for one member of the family, scholarship for students, setting up of a hospital in the village and Rs 5 crore for the repair of roads damaged due to heavy vehicles plying through their villages, among other demands.

(Source: NTPC land acquisition in trouble - The Times of India - November 26, 2010 - <https://timesofindia.indiatimes.com/city/nagpur/NTPC-land-acquisition-in-trouble/articleshow/6984126.cms>)

- NTPC had faced opposition from farmers when the Karnataka Government had shortlisted two locations for setting up power plants of 1,000 MW each at Bijapur and Tadadi in Uttara Kannada district. An eight-member central team had made a visit to inspect the project site in Bijapur where the villagers had shouted slogans against the government for its 'anti farmer' attitude. A meeting was organized between officials and farmers, who numbered nearly 2,000. The farmers were protesting the decision regarding the power plant and they handed over a memorandum opposing the setting up of power plant.

(Source: Farmers protest setting up of thermal plant in Karnataka - OneIndia - August 27, 2008 - <https://www.oneindia.com/amphml/2008/08/27/farmers-protest-setting-up-of-thermal-plant-in-ktaka-1219851286.html>)

- In 2001, 'The Hindu' carried a story about the villagers displaced due to the NTPC's Ramagundam 2100 MW Power Plant, who had lost their agricultural land and houses. Most of the displaced people had to migrate and NTPC failed to provide employment to the oustees. Earlier, NTPC had acquired 5,300 acres of agricultural land from 17 villages to set up the power plant. Many of the villagers

had complained that though the project was completed over 20 years ago, they had failed to get proper relief and rehabilitation.

(Source: Rehabilitation, a distant dream for NTPC land oustees - The Hindu - May 24, 2001 - <http://www.thehindu.com/2001/05/24/stories/0424201g.htm>)

- Villagers of Sipat area in Bilaspur district of Chhattisgarh had complained about loss of livelihood due to construction of a 3,000 MW NTPC power plant. It was alleged by the villagers that the environmental clearance for the project was pushed by the MoEF despite the fact that the EIA done by external consultants had violated several environmental guidelines. The project had been given clearance despite a large area of the project land being prime agricultural land and also covered forest area. The villagers complained that the project would affect their livelihood and that they were not satisfied with the R&R policy. They had also taken help of some local NGOs to challenge the clearances given to the project.

(Source: NTPC project threatens villagers' livelihood - The Hindu - May 24, 2000 - <http://www.thehindu.com/2000/05/24/stories/0224000c.htm>)

b. Environment/Pollution

NTPC power plants have caused severe pollution and environmental damage around the locations they have been operating, especially the coal-fired power plants. Whether it is the problem related to burning of excessive coal, flyash, deforestation or loss of biodiversity, communities near the plants have been raising concerns about the pollution caused by these power plants, over which they have no say. The NTPC claims that it uses state-of-the-art technology to ensure minimum environmental degradation, but stories from the ground tell a different picture since people are directly affected due to these power plants. Given below are some of the documented instances where communities have borne the brunt of pollution and environmental damage due to NTPC's projects, along with highlighting cases where environmental clearance was denied to NTPC due to environmental concerns.

- In January 2018 news came that NTPC's Talcher Super Thermal Power Station, also known as NTPC Talcher Kaniha, located in Angul district of Odisha, was on the verge of closure due to frequent strikes and protests by residents of Derang village at the ash dyke sites of the plant as around 3,000 villagers were facing pollution due to the ash dykes and were demanding shifting



▲ NTPC's Vallur Thermal Power Station, Tamil Nadu (Source: Wikimedia Commons)

of the ash pond from their village. The villagers had also been opposing maintenance work of the plant.

(Source: *Protest heat on plant - The Telegraph - January 16, 2018* - <https://www.telegraphindia.com/states/odisha/protestheat-on-plant-201296>)

- In December 2017, NTPC was warned by the Odisha State Pollution Control Board (OSPCB) to immediately stop water pollution in its project area. It was found that a contractual agency of NTPC was channeling the polluted water to a nearby canal causing pollution. This was with reference to NTPC's power plant being constructed in Darlipali village in Sundargarh district of Odisha, though its ash pond was being constructed at the border of Jharsuguda in Tileimal village. Apart from the problem of polluted water flowing into the nearby canal, the villagers have been complaining about various skin and allergy ailments.

(Source: *Stop pollution in project area: PCB to NTPC - The Pioneer - December 25, 2017* - <http://www.dailypioneer.com/state-editions/bhubaneswar/stop-pollution-in-project-area-pcb-to-ntpc.html>)

- In January 2017, NTPC got a warning from the Chhattisgarh Environment Department with regards to its 2980 MW power plant located in Sipat town of Bilaspur district in Chhattisgarh.

NTPC was given a warning that the operations of the power plant would be stopped if NTPC does not use the generated fly ash as per the existing rules. It was mentioned that the power plant was generating 14,000 metric tonnes of fly ash out of which only 22 per cent is being used, mainly in cement factories and brick-making.

(Source: *NTPC's Sipat plant gets warning over use of fly ash - PTI - January 14, 2017* - http://www.business-standard.com/article/pti-stories/ntpc-s-sipat-plant-gets-warning-over-use-of-fly-ash-117011400675_1.html)

- In September 2016, an expert panel of the union environment ministry had flagged concerns about the impact of NTPC Barethi power plant project on forests around Panna tiger reserve and the Khajuraho UNESCO heritage site, Madhya Pradesh. The Rs 18,000 crore Barethi super thermal power project's Stage-I was up for appraisal before the ministry's expert panel on thermal projects for environmental clearance. The project proposes to set up 4x660MW of thermal power plants in Chattarpur district, Madhya Pradesh. The ministry's expert panel had deferred recommending the project for clearance as it was not satisfied with pending issues related to environmental protection, emissions from the power plant and the impact of the project on Ken River. While deferring the project, the panel stated clearly that the project's stage-II is not feasible.

(Source: After Ken-Betwa river project, concerns raised over upcoming power plant near Panna tiger reserve - DNA India - September 24, 2016 - <http://www.dnaindia.com/india/report-after-ken-betwa-river-project-concerns-raised-over-upcoming-power-plant-near-panna-tiger-reserve-2258233>)

- In August 2016, news came that NTPC's Pudimadaka project in Vishakhapatnam was delayed as the proposal submitted to Ministry of Environment and Forests (MoEF) was returned and NTPC was asked to do a fresh feasibility study as the Union Power Ministry had asked NTPC to use domestic coal instead of imported coal, which was planned earlier. Because of this suggested change, NTPC would also require another 1,000 acres of land to build the ash dyke. This also reflected on the poor planning on part of the NTPC and the government. Use of domestic coal would also impact the local environment more due to its higher fly ash content.

(Source: NTPC's Pudimadaka project set for delay - Deccan Chronicle - August 06, 2016 - <https://www.deccanchronicle.com/nation/current-affairs/060816/ntpcs-pudimadaka-project-set-for-delay.html>)

- In January 2016, NTPC received a major jolt when it got to know that its upcoming Kajra Power Plant in Lakhisarai district of Bihar would not be able to start because of its proximity to Bhimbandh Wildlife Sanctuary. The MoU for the power plant was signed between NTPC and state government in February 2014. In another development, the state environment and forest department had sent a proposal to the central ministry to declare the project site as an eco-sensitive zone (ESZ) just before the MoU was signed. Later, NTPC got to know that its hired project consultant had not mentioned in its report that the Kajra power plant is located next to a wildlife sanctuary. This shows how NTPC failed to fulfill its responsibility with due diligence in conceptualizing the power plant location.

(Source: Green hurdles to power plant - The Telegraph - January 15, 2016 - https://www.telegraphindia.com/1160115/jsp/bihar/story_63904.jsp)

- In September 2015, the National Green Tribunal (NGT) issued an interim order explicitly asking NTPC to not violate environmental conditions and explosive rules related to open blasting while setting up its thermal power project in Sundargarh district of Odisha. The tribunal acted on a petition filed by Subhash Mohapatra, executive director of Global Human Rights Commission. Subhash Mohapatra alleged that the NTPC had indulged in rampant blasting activities against the explosives rules for removal of hard rock on the land proposed for construction of

a power plant, posing a risk to human life and property in the area.

(Source: NGT directs NTPC not to violate explosives rules - Business Standard - September 24, 2015 - http://www.business-standard.com/article/news-ians/ngt-directs-ntpc-not-to-violate-explosives-rules-115092401151_1.html)

- Farmers opposing the NTPC's 2,400 MW Kudgi Power Plant in Bijapur district of Karnataka had demanded from NTPC that it should execute a surety bond before the Supreme Court with the undertaking that the power plant would not cause any environmental and health hazards. The farmers were led by Karnataka Rajya Raitha Sangha and Hasiru Sene, when they took out a protest rally to the Deputy Commissioner's office where a memorandum was submitted with the demand that the power plant should not cause any health hazards and damage to the flora and fauna in villages within 25 km from the project area. It was alleged that earlier NTPC had submitted inaccurate information to the government to obtain clearance for the power plant, saying that the proposed area was barren and hence there would not be any damaging impact on flora and fauna. Local leaders raised concerns that the power plant would affect the yield of crops and the fly ash from the power plant would also create health hazards both for human beings and livestock. Local leaders challenged NTPC that if its claims on environmental concerns are disproved then it should shut down or shift the power plant.

(Source: Farmers opposed to Kudgi plant want NTPC surety bond - Deccan Herald - August 26, 2014 - <http://www.deccanherald.com/content/427769/farmers-opposed-kudgi-plant-want.html>)

- According to a news report, from May 2014, NTPC had been facing stiff opposition from farmers and environmentalists for its 2,400 MW Kudgi Power Plant in Bijapur district of Karnataka. A retired nuclear scientist M.P. Patil had taken the matter to the Supreme Court. The National Green Tribunal (NGT) had suspended the environmental clearance of Kudgi Power Plant on the pretext of giving false information for getting the clearance. Earlier the project had got a clearance from Environment Ministry in January 2012, when NTPC had claimed that the land for the project was a barren land, though the selected area was a prime agricultural land. NGT had called this "a wilful suppression of facts" from NTPC, asking the Ministry to reevaluate the case. When NTPC had approached the Supreme Court immediately after NGT's decision, then Supreme Court on appeal of NTPC had stayed NGT's order.

(Source: Greens oppose Kudgi thermal power plant - Business Standard - May 05, 2014 - http://www.business-standard.com/article/current-affairs/greens-oppose-kudgi-thermal-power-plant-114050400589_1.html)

- There was a news report in September 2013 about a protest by people from 13 gram panchayats of the Lakhanpur block under Jharsuguda district of Odisha against the proposed NTPC's 2,400 MW Lara Thermal Power Plant in state of Chhattisgarh. The villagers were concerned that no consideration was given to the environmental impact of the project on the bordering areas of Odisha. One of the panchayat heads complained that the power plant would damage their agricultural land, water bodies, environment which in turn would affect their livelihood. Another panchayat head pointed out that because of the decision of the Chhattisgarh government, people of Odisha would have to suffer and hence the project should be cancelled. The local people had also blamed the elected representatives as they have not raised their voice on this matter.

(Source: Jharsuguda villagers protest Chhattisgarh power plant - The Pioneer - September 18, 2013 - <http://www.dailypioneer.com/STATE-EDITIONS/bhubaneswar/jsuguda-villagers-protest-cgarh-power-plant.html>)

- It was reported in May 2012 that environmentalists had protested against the NTPC's 4,000 MW Kudgi Power Plant in Bijapur district of Karnataka, when the foundation stone for the project was about to be laid in the next few days. The environmentalists had alleged that the power plant would adversely affect health of the people in the region, besides causing harm to the ecology. A retired scientist of Dept. of Atomic Energy M.P. Patil had filed a petition in the National Green Tribunal (NGT) that the environmental clearance granted by MoEF should be withdrawn. He had also accused NTPC of providing false information that 3,000 acres of land for the project is barren. Mr. Patil had accused the NTPC of misleading the MoEF when it sought approval for the power plant.

(Source: Kudgi kicks up green storm - Deccan Herald - May 30, 2012 - <https://www.deccanherald.com/content/253345/kudgi-kicks-up-green-storm.html>)

- In July 2011, the Odisha government had asked NTPC to completely shut down the Stage-II of 2,000 MW Talcher Super Thermal Power Station over concerns on fly ash disposal. The Odisha State Pollution Control Board (OSPCB) had issued a notice to NTPC to close down two units of 500 MW each of Stage-II due to severe pollution caused by the power plant. In response,

the NTPC had submitted an action plan for better management of fly ash coming out from the power plant, but OSPCB was not satisfied with NTPC's action plan. Pollution Control Board officials also informed that NTPC had been cautioned about fly ash management for the past two to three years, but NTPC had not paid enough attention to the matter.

(Source: Orissa asks NTPC to close 2,000 MW Talcher power plant - Livemint - July 04, 2011 - <http://www.livemint.com/Politics/dtASUxUDRFnwVwk0UbVrUN/Orissa-asks-NTPC-to-close-2-000-MW-Talcher-power-plant.html>)

- According to a news report of June 2011, the State Pollution Control Board (SPCB) was planning to take stringent action against NTPC due to the breach of its fly ash pond near Kaniha in Angul district of Odisha, which was built for the 3,000 MW NTPC Kaniha power plant. According to a SPCB official, traces of fly ash were found in water of Tikiria river. It was informed that there was a possibility of issuing a closure notice as the power plant was causing serious environmental pollution due to fly ash mismanagement. Moreover, NTPC was issued a warning over a year ago regarding dangers from its fly ash pond, but it had been very slow in taking action in rectifying the situation.

(Source: NTPC caught in row over fly ash - The Telegraph - June 11, 2011 - https://www.telegraphindia.com/1110611/jsp/orissa/story_14097256.jsp)

- Villagers near the NTPC Ramagundam Power Plant had protested against the power plant alleging that the NTPC ash pond located in Kundanapalli village had been causing environmental pollution and health hazards to the villagers. The villagers had staged dharnas, 'rasta roko' and had also obstructed work at the ash pond site. The ash from the ash pond had been accumulating all over the villages including on vegetation. Earlier, the ash was being controlled through use of several water sprinklers, but in order to increase the height of the pond, the authorities had removed all the water sprinklers and were using ash from the pond instead of using mud, which was causing pollution. Ramagundam police had made some arrests of NTPC officials and contractors based on the complaints filed by the villagers.

(Source: Pollution: villagers launch protest against NTPC - The Hindu - May 21, 2004 - <http://www.thehindu.com/2004/05/21/stories/2004052106520500.htm>)

c. Health Impacts

Apart from the damage caused to the environment by power plants, a major concern

has been of the debilitating effects on the health of the people living near the power plants. The fly ash emission from the thermal power plants has been one of the main culprits in exacerbating this problem. Moreover, the emissions of other toxic gases and chemicals due to the burning of coal impacts the health of the people and even leads to congenital deformities in some cases. Many times, while considering the impact of a power plant, the cumulative impact of other power plants in nearby areas and presence of other industries in the vicinity is ignored, which the people have to face in totality. Further, in most of the cases, the construction of power plants leads to further industrialization in nearby areas, which makes things worse for people. Given below are some instances where communities near NTPC's power plants have faced adverse health impacts:

- A news report came out in April 2017 about a village Kuruvimedu in Minjur block in Thiruvallur district of Tamil Nadu, which was located in very close proximity to the Vallur Thermal Power Station and had been severely affected by fly ash pollution. The thermal power plant is operated by NTPC Tamil Nadu Energy Company Limited, a joint venture between the NTPC Limited and Tamil Nadu Generation and Distribution Corporation Limited (Tangedco). The plant has an installed capacity of 1,500 MW. About a decade ago, Kuruvimedu village had about 100 households, but the number had reduced to 40 households with many of the villagers having migrated to other locations due to the deteriorating conditions. The residents had been facing severe health issues due to the pollution caused by the drying of the ash pond of the power plant and have been demanding

relocation from the NTPC. The pollution from the power plant and other nearby industries has severely affected the groundwater and agriculture in the village.

(Source: With rights over land near north Chennai plant gone, residents' lives now reduced to ash - The New Indian Express - April 02, 2017 - <http://www.newindianexpress.com/cities/chennai/2017/apr/02/with-rights-over-land-near-north-chennai-plant-gone-residents-lives-now-reduced-to-ash-1588881--1.html>)

- In April 2013 it was reported that residents of Kahalgaon town in Bhagalpur district of Bihar had been facing issues due to fly ash emission from NTPC's power plant. The power plant has an installed capacity of 2,340 MW. The plant has been affecting 45,000-odd residents of the town and those living on the outskirts. The residents have been inhaling the toxic air since 1985 when the plant was inaugurated. An NTPC official had admitted that the plant has so far achieved only 25 per cent target of reusing fly ash of the 6.5 million tonnes of the fly ash they have to handle annually.

(Source: Ash peril for plant neighbours - The Telegraph - April 06, 2013 - https://www.telegraphindia.com/1130406/jsp/bihar/story_16691256.jsp)

d. Labour Struggles/Accidents

Even though NTPC has been accorded 'Maharatna' status by the Government of India, NTPC has shown a poor track record when it comes to safety of its workers, whether permanent workers or those working on a contractual basis. The Unchahar accident in November 2017 exposed a major negligence on the part of NTPC, but it was not an isolated case. There have been multiple instances of accidents inside NTPC power plants which have led to severe injuries to workers and even

▼ Dried up fly ash pond of Vallur Thermal Power Station, Tamil Nadu (Source: New Indian Express)





▲ Panoramic View of NTPC Kaniha Power Plant, Odisha (Source: Wikimedia Commons)

death in some cases. Even, NTPC has not paid compensation properly in case of death of workers inside its plants. Given below are several instances of accidents at NTPC's plants and raises questions on how seriously the workers' safety is valued by NTPC:

- NTPC owned Feroze Gandhi Unchahar Thermal Power Plant located in Unchahar town in Raebareli district of Uttar Pradesh witnessed one of the worst industrial disasters in India in November 2017, when a boiler exploded in the latest Unit 6 of the 1550 MW power plant. The power plant had started generating power in 1988 with five units of 210 MW each. The Unit 6 had a capacity of 500 MW and had started operating in March 2017. Due to the explosion, a massive fire had broken out and a huge ball of dust rose after the explosion, making rescue operations difficult. When the initial numbers came, 22 people were killed and dozens had suffered injuries in the boiler blast. An eyewitness account by an officer mentioned that at least 70 people were killed in the tragedy. By November 10, news agency IANS mentioned that the death toll in the accident had reached 43. While the NTPC officials denied that there was any rush in commissioning the plant, NTPC insiders and power sector experts with knowledge of Unchahar plant have raised serious questions about the process of commissioning the plant.

(Source: 1. 22 Dead, Dozens Injured In Boiler Blast At NTPC Power

[Plant In UP - NDTV - November 02, 2017 - https://www.ndtv.com/india-news/casualties-feared-many-injured-as-boiler-pipe-bursts-at-ntpc-plant-in-up-1769883](https://www.ndtv.com/india-news/casualties-feared-many-injured-as-boiler-pipe-bursts-at-ntpc-plant-in-up-1769883)

2. [NTPC boiler blast: Workers' families say some of their loved ones are missing, NTPC insists they're not - Firstpost - November 04, 2017 - https://www.firstpost.com/india/ntpc-boiler-blast-workers-families-say-some-of-their-loved-ones-are-missing-ntpc-insists-theyre-not-4192463.html](https://www.firstpost.com/india/ntpc-boiler-blast-workers-families-say-some-of-their-loved-ones-are-missing-ntpc-insists-theyre-not-4192463.html)

3. [NTPC blast: Death toll reaches 43 - IANS - November 10, 2017 - http://www.business-standard.com/article/news-ians/ntpc-blast-death-toll-reaches-43-117111001242_1.html](http://www.business-standard.com/article/news-ians/ntpc-blast-death-toll-reaches-43-117111001242_1.html)

4. [Rush to commission project likely culprit in NTPC Unchahar tragedy - ThePrint - November 10, 2017 - https://theprint.in/report/rush-commission-project-likely-culprit-ntpc-unchahar-tragedy/15559/](https://theprint.in/report/rush-commission-project-likely-culprit-ntpc-unchahar-tragedy/15559/)

- A major fire erupted at Vallur Thermal Power Plant in June 2017, located in Thiruvallur district of Tamil Nadu. The thermal power plant is operated by NTPC Tamil Nadu Energy Company Limited, a joint venture between the NTPC Limited and Tamil Nadu Generation and Distribution Corporation Limited (Tangedco). The plant has an installed capacity of 1,500 MW. The fire broke out after the turbine from where the power is generated was burst in the third unit. According to the NTPC officials it took six fire tenders to douse the fire in two hours. NTPC officials said that there was no casualty in the accident. However, such accidents raise concerns about the safety of the workers working inside the power plant.

(Source: [Fire at TN's Vallur Thermal Power plant - Deccan Chronicle - June 04, 2017 - https://www.deccanchronicle.com/nation/current-affairs/040617/fire-at-tns-vallur-thermal-power-plant.html](https://www.deccanchronicle.com/nation/current-affairs/040617/fire-at-tns-vallur-thermal-power-plant.html))

- According to a news report in 'DNA', from February 2017, NTPC workers clashed with Central Industrial Security Force (CISF) personnel at the site of an under-construction plant of NTPC in Lara village in Chhattisgarh's Raigarh district. This clash led to firing in the air and stone-pelting from the workers' side. Members of NTPC Theka Mazdoor Sangh (contractual workers' union) staged the protest outside the plant site and prevented other workers from going in. The reason for this protest was the death of a labourer called Hemram Yadav who was killed in an accident at the site. The contractual workers union complained that it was not involved in the talks with NTPC when the compensation for Hemram was decided and it demanded a higher compensation for his family.

(Source: - 2 CISF men injured in stone-pelting at NTPC site in C'garh - DNA India - February 13, 2017 - <http://www.dnaindia.com/india/report-2-cisf-men-injured-in-stone-pelting-at-ntpc-site-in-c-garh-2321756>)

- In October 2016, three contract labourers were crushed to death when a 100 tonne girder fell on them in the upcoming NTPC Solapur Power Plant in Maharashtra. NTPC had mentioned that these labourers belonged to another company, Power Mech Projects Ltd, which had been entrusted with the task of constructing the power plant along with two other companies.

(Source: Three killed in accident in NTPC's upcoming Solapur plant - IANS - http://www.business-standard.com/article/news-ians/three-killed-in-accident-in-ntpc-s-upcoming-solapur-plant-116100701220_1.html)

- In an unfortunate incident, two workers were killed inside the Coal Handling Plant (CHP) of NTPC's Kahalgaon Super Thermal Power Project in August 2016. The Kahalgaon Power Plant has a capacity of 2,340 MW. The accident happened when the conveyor belt of CHP developed a snag and started moving in reverse direction due to which huge piles of coal on the workers. Both these workers were contract workers on the payroll of Chanda Construction Company. NTPC had alleged negligence on the part of the outsourced Chanda Construction Company and had said that an FIR would be lodged against the company if the probe established that.

(Source: Two workers killed at NTPC's Kahalgaon plant - The Times of India - August 23, 2016 - <https://timesofindia.indiatimes.com/city/patna/Two-workers-killed-at-NTPCs-Kahalgaon-plant/articleshow/53832706.cms>)

- In October 2015, two labourers were seriously injured in an explosion at the coal-holding section of the NTPC Korba Power Plant. The two labourers

injured were working as contractual labourers for Priya Tech Company. A suspected detonator was found in the consignment of coal supplied by South Eastern Coalfields Limited (SECL) Gevra Mines. A police investigation was going on as how a detonator from coal mines landed in the consignment. Such an incident highlights that labour safety is not given paramount importance in NTPC's premises.

(Source: Two labourers injured in explosion at NTPC Korba Plant - October 11, 2015 - Business Standard - http://www.business-standard.com/article/pti-stories/two-labourers-injured-in-explosion-at-ntpc-korba-plant-115101100604_1.html)

- NTPC's Farakka Unit in West Bengal faced a major labour unrest in June 2015, where the state administration's intervention was required to restore normalcy. There was a major concern regarding power outage when NTPC shot letters to the states of West Bengal, Bihar and Jharkhand governments, saying that power generation may get affected as few units would have to be shut down due to labour unrest. The unrest had started a month before following the death of a worker, where NTPC agreed to pay a sum of Rs 4 lakh after a group of workers protested with the management. This led to a group of around 3,000 contractual workers to demand incremental salary and other benefits. However, NTPC claimed it to be a non-recognized group. After West Bengal power department took note of the matter, it instructed the local administration to smoothen out things, which led to the arrest of several leaders of the group, who were later released on bail.

(Source: Normalcy restored in NTPC Farakka unit as Bengal govt intervenes - Business Standard - June 09, 2015 - http://www.business-standard.com/article/companies/normalcy-restored-in-ntpc-farakka-unit-as-bengal-govt-intervenues-115060900688_1.html)

- Eight people including two engineers and six contract workers got injured at NTPC Korba plant in Chhattisgarh in August 2014, when there was a sudden release of ash during the cleaning of ash from a boiler. All the victims reportedly suffered burns with one of the workers sustaining 60-65% burns.

(Source: Eight suffer burns in accident at NTPC Korba plant - The Times of India - August 08, 2014 - <https://timesofindia.indiatimes.com/city/raipur/Eight-suffer-burns-in-accident-at-NTPC-Korba-plant/articleshow/39847363.cms>)

e. Miscellaneous

There are some other instances which do not fit in the above mentioned categories, but they need to be highlighted to show how NTPC has

been ignoring the plight of the communities where it establishes its power plants and the impact on the health, livelihood and local ecology is blatantly ignored. If NTPC takes into account the devastating impact its power plants have on the communities, then it would not remain as profitable as it claims to be. Given below are some instances which highlights NTPC's actions and which needs to be questioned:

- In August 2016, Chief Minister of Odisha Naveen Patnaik urged Prime Minister Narendra Modi to instruct NTPC to address concerns of 27 villages in Jharsuguda district who were going to be heavily affected by a 1,600 MW thermal power project being set up in Lara village of Raigarh district of Chhattisgarh. Naveen Patnaik had said that 27 villages of Kandeikela, Remata, Kanaktora, Charpali, Pithinda and Badimal gram panchayats of Laxhanpur block in Jharsuguda district would be adversely affected by the project due to their close proximity. While the Environmental Impact Assessment (EIA) was done for the affected villages in Chhattisgarh, there was no such public hearing for project-affected villages in Odisha. The Odisha Chief Minister had also taken up the issue with the Union Minister for Power and Renewable Energy.

(Source: Odisha CM Naveen Patnaik seeks PM Narendra Modi's intervention for people affected by power project - August 23, 2016 - <http://indianexpress.com/article/india/india-news-india/odisha-cm-naveen-patnaik-seeks-pm-narendra-modi-intervention-for-people-affected-by-power-project-2991190/>)

- Environmental public hearing of NTPC Pudimadaka 4000 MW power plant in Vishakhapatnam was conducted in August 2015 by Andhra Pradesh Pollution Control Board (APPCB) amid protests by project-affected people. The public hearing was held at project site and the proceedings were recorded amid heavy rain and unprecedented security. The Left parties opposed the project saying it would affect livelihoods of fishermen and farm workers in the area due to discharge of ash contaminating groundwater and causing ocean pollution. Despite the rains, around 1,000 people from the neighbourhood turned up at the public hearing. It was also alleged that the EIA report had failed to specify the rehabilitation plan and environmental risks involved in the project.

(Source: Public hearing for NTPC 4,000 MW project held amid protests - The Hindu - August 12, 2015) - <http://www.thehindu.com/news/national/andhra-pradesh/public-hearing-for-ntpc-4000-mw-project-held-amid-protests/article7529572.ece>)

▼ NTPC Ramagundam Power Plant, Telangana (Source: Wikimedia Commons)



- An alternative Public Hearing was conducted in Jharsuguda district of Odisha in September, 2014 for the NTPC Lara Super Thermal Power Plant on the Chhattisgarh-Odisha border, as it was alleged that the mandated Public Hearing was not conducted in violation of EIA Notification 2006 and, in response, Water Initiatives Odisha (WIO) took the lead in organizing this alternative Public Hearing. A fact-finding visit was conducted by WIO and it was found that NTPC's plant would have a "devastating impact" on the Mahanadi, local ecology and people's livelihoods in at least six gram panchayats in Jharsuguda district of Odisha. In the public hearing people shared their grievances as to how the plant would affect their livelihoods, pollute their water bodies and affect their livestock. Apart from the pollution from the plant, concerns were raised about the 400 acre fly ash pond coming up in proximity of these villages.

(Source: NTPC Lara plant to prove devastating for 6 Odisha GPs' - Daily Pioneer - September 30, 2014 - <http://www.dailypioneer.com/state-editions/bhubaneswar/ntpc-lara-plant-to-prove-devastating-for-6-odisha-gps.html>)

- NTPC 1320 MW Mouda power plant's public hearing on environmental clearance for phase-II was disrupted by angry villagers, due to allegations of providing misleading information. The NTPC officials made an attempt to present their side but angry villagers asked them to leave saying that they would not allow the second phase of the project to come up at any cost. The villagers even ransacked the dias forcing the officials to leave the hearing. Many of the political leaders, environmentalists and activists present during the meeting also opposed the expansion of the power plant. It was alleged that NTPC had not been providing correct information about the pollution level, as it was not clubbing the emissions from phase-I and phase-II to calculate the emission levels. The local MLA also alleged that the draft environmental impact report was prepared by NTPC without talking to any local residents and hence should be considered illegal.

(Source: Public hearing disrupted (NTPC Mouda Power Plant) - The Times of India - August 28, 2010 - <https://timesofindia.indiatimes.com/city/nagpur/Public-hearingdisrupted/articleshow/6449643.cms>)

4. Case Studies on NTPC - Peoples' Interests vs NTPC's Interests

In this section, five case studies have been selected to highlight how NTPC has gone against the interests of people to pursue its own relentless expansion in the name of growth and profits. These case studies illustrate how NTPC has been casual when it comes to workers' safety, especially the contract workers as mentioned in the case study on the Unchahar tragedy, where hundreds of workers lost their lives in a boiler blast accident inside the plant in November 2017, due to rushed commissioning of sixth unit of Unchahar Power Plant. The accident exposed the poor worker safety norms followed by the NTPC management and raises questions on the safety standards in other NTPC power plants too. The backing up of the State, which NTPC projects have got, have put democratic rights of people at stake, as it has been mentioned in the case study on Barkagaon firing in Hazaribagh, Jharkhand where four villagers were killed and several others got injured in October 2016 when police opened fire on a group of protesters protesting against the captive coal mining project of NTPC. Similarly, in another case study on Kudgi power plant in Karnataka, it is mentioned how a clash between the police and hundreds of protesters in July 2014 had turned violent when police had fired bullets and tear gas on the protesters, which led to people sustaining bullet wounds, along with vehicles being set on fire and damage of property.

The push from NTPC to take forward a project

against the interests of local people has been underscored in the case study on Pudimadaka power plant, where a public hearing for the project was opposed by more than a thousand people, but this was not at all reflected in the EIA report of NTPC and it still got clearance. It's another story that the project had to be eventually shelved due to lack of coal linkages, which made the project unviable. While the Rampal power project has got media coverage from world over, due to the imminent threat to Sunderbans, NTPC had already tried venturing in setting up a 500 MW power plant in Trincomalee, Sri Lanka, for which it had signed an MoU with the Sri Lankan government in December 2006, but the project could not take off and the Sri Lankan government dropped the plan eventually in September 2016, ruining NTPC's plans to have its first power plant operating abroad. The power plant in Trincomalee had been shelved due to multiple reasons including the political turmoil inside the country, but this was also due to the concerns raised by the environmental groups about the impact of the coal project on environment, along with the threat of displacement being faced by the people. It is an irony that the Sri Lankan government relented against the demands of its people to shelve the NTPC project, but the Indian government has constantly backed up NTPC despite the several projects relying on forcible land acquisition and causing huge environmental impact in the project areas.



▲ Visual after the boiler blast at Unchahar Power Plant, Uttar Pradesh (Source: Bloomberg Quint)

While the case studies mentioned here are different from each other in terms of the nature of violations caused by the specific projects, the binding thread among all these case studies has been that despite NTPC being a government-owned company, the interests of the company has been put in forefront and the well-being of the communities and the environment has been made secondary. Moreover, NTPC would not have been able to move ahead with its ventures had it not been getting the backing up of state machinery, which is rather supposed to act as a regulator on the actions of such companies. The case studies also show the lacuna in our system, where people are not able to hold a government-owned company accountable for its actions and one can imagine how much more difficult it is to make the private companies answerable to the people. NTPC's logo on its website is displayed prominently which says, "Beyond Power and Profit", but in reality, as reflected on the ground, indicates that NTPC basically cares about is its profits and growth, not the well-being of communities it displaces, nor the safety of its workers. Going through the following case studies will let the readers take a deeper look into the incidents which led to loss of lives in Unchahar and Barkagaon and the nature of protests faced by NTPC in Pudimadaka and Kudgi, along with a detailed look into the failed venture of NTPC in Sri Lanka.

4.1. Unchahar Tragedy - A Case of Treating Human Lives Cheaply

Unchahar is a small town and Nagar Panchayat located in Unchahar town in Raebareli district of Uttar Pradesh. Unchahar came in news in November 2017 when a major blast happened inside NTPC owned Feroze Gandhi Unchahar Thermal Power Plant power plant located here. The power plant has an installed capacity of 1,550 MW. The power plant was commissioned in 1988, which was earlier owned by Uttar Pradesh State Electricity Board (UPSEB). In 1992, UPSEB transferred Unchahar Thermal Power Station to NTPC against payment overdue and was renamed to Feroze Gandhi Unchahar Thermal Power Plant by NTPC.

The blast of a boiler inside the power plant on November 01, 2017 led to the death of several workers and injured hundreds of them. The accident was one of the worst industrial disasters in eight years in India (after 2009 fire in Indian Oil's Jaipur depot).⁴

NTPC issued an official statement on November 01, 2017, which stated: "In NTPC Unchahar, Unit No. 6 at around 1530 hrs on 01.11.2017 there was sudden abnormal sound at 20 mt. elevation and there was opening in corner no.2 from which hot

4. Major Industrial Accident kills 25 in Uttar Pradesh -The Independent - November 02, 2017 - <http://theindependent.in/major-industrial-accident-kills-25-in-uttar-pradesh/>

flue gases and steam escaped affecting the people working around the area.

Around 80 people were rushed to NTPC hospital, most of them were discharged after giving first-aid. In the mishap 8 people succumbed to the injuries. About 10 persons with serious injuries have been referred to nearby hospitals and to Lucknow to provide immediate treatment.

An enquiry has been set up by NTPC Management to investigate the reasons for the accident. All possible measures are being taken to provide immediate relief to the families of affected people in close coordination with the district administration.”⁵

However, only after a couple of days, NTPC Chairman and Managing Director Gurdeep Singh told the media that 32 people had succumbed to injuries and 48 were undergoing treatment. It was also informed that NTPC had formed an enquiry panel headed by NTPC Executive Director S.K. Roy, along with two general managers, which would submit its report in a month.⁶ An eyewitness account by an officer mentioned that at least 70 people had been killed in the tragedy.⁷ By

5. NTPC Accident at NTPC Unchahar - NTPC - November 01, 2017 - <https://www.ntpc.co.in/en/media/press-releases/details/ntpc-accident-ntpc-unchahar>

6. 32 dead in Unchahar blast, enquiry report in a month: NTPC - PTI - November 03, 2017 - <https://www.indiatoday.in/pti-feed/story/32-dead-in-unchahar-blast-enquiry-report-in-a-month-ntpc-1076094-2017-11-03>

7. NTPC boiler blast: Workers' families say some of their loved ones are missing, NTPC insists they're not - Firstpost - November

November 10, news agency IANS mentioned that the death toll in the accident had reached 43,⁸ while another news article in the investigative magazine 'Tehelka' published on November 16 mentioned that the death toll had reached 46, along with leaving more than 100 people injured.⁹ A fact-finding team from Delhi Solidarity Group (DSG) had visited Unchahar after the accident and in its report one of the victim's sisters had given a testimony that there were more than three hundred workers working in the plant at the time of the accident and at least 150 people must have died inside.¹⁰

In August 2013, the UPA government had announced that a sixth unit of 500 MW capacity would be added to the Unchahar power plant and the construction of the power plant started in December 2014. Earlier, the deadline to commission the unit was December 2016 with a time period of 40 months. However, NTPC tried to make up for the delay in construction by targeting to complete the work by March 2017 in a span

04, 2017 - <https://www.firstpost.com/india/ntpc-boiler-blast-workers-families-say-some-of-their-loved-ones-are-missing-ntpc-insists-theyre-not-4192463.html>

8. NTPC blast: Death toll reaches 43 - IANS - November 10, 2017 - http://www.business-standard.com/article/news-ians/ntpc-blast-death-toll-reaches-43-117111001242_1.html

9. 46 dead,100 injured. Who is responsible? - Tehelka - November 16, 2017 - <http://www.tehelka.com/46-dead100-injured-who-is-responsible/>

10. How Many Deaths Will It Take...A Preliminary Report on Unchahar Tragedy - NAPM - December 2017 - <http://napm-india.org/wp-content/uploads/2017/12/Unchahar-Prelim-report-Final.pdf>

▼ Workers being taken to hospital after Unchahar tragedy (Source: Bloomberg Quint)



of 26 months. For construction of this unit, NTPC had collaborated with Bharat Heavy Electricals Limited (BHEL). The sixth unit of the plant was announced by the UPA government in August 2013, and construction started 16 months later in December 2014. NTPC was constructing this unit in collaboration with Bharat Heavy Electricals Limited (BHEL). On March 31, 2017 the unit was synchronised, that is, the power it generated was connected to supply grid for transmission and on September 30, 2017 the unit began commercial generation of power.¹¹

While NTPC officials denied that there was any rush in commissioning the plant, NTPC insiders and power sector experts with knowledge of Unchahar plant have raised serious questions about the process of commissioning the plant. It was pointed out by Shailendra Dubey, Lucknow-based chairman of All India Power Engineers Federation that the plant was incomplete when it was synchronised on March 31, 2017 as a new unit of power plant starts commercial production after a gap of two months, but in the case of the Unchahar power plant there was a gap of six months. Moreover, 'The Print' reported that only half a dozen workers were needed to operate a boiler in a new unit, but there were 311 workers in the sixth unit at the time of the explosion. The labour contractors had informed 'The Print' that most of the workers had been deployed for civil work such as painting, isolation of boilers and other construction work.¹²

A four-member inquiry committee was instituted by the Uttar Pradesh labour department to identify the cause of the blast, which submitted its final report to the Uttar Pradesh labour commissioner in January 2018. The panel was headed by director (boiler section, labour department) R.K. Purvey, and comprised Anil Kumar Gupta, additional vice-president (technical), Reliance Rosa Power Supply Company Ltd, Manu Arora, general manager (boiler and auxiliary), Hindalco Industries Ltd (power division), Renu Sagar, Sonebhadra, and Jagmohan, deputy director, boiler section. The committee had found the operating staff guilty of gross negligence leading to the accident. One of the committee members while disclosing to 'Hindustan Times' said, "The formation and accumulation of clinker in the boiler duct due to non-cleaning had increased the pressure to a

11. Rush to commission project likely culprit in NTPC Unchahar tragedy - ThePrint - November 10, 2017 - <https://theprint.in/report/rush-commission-project-likely-culprit-ntpc-unchahar-tragedy/15559/>

12. Refer Footnote 11

level where the duct got choked and burst due to high pressure. It resulted in fly ash – heated up to 400-500 degrees Celsius – coming out with enormous force and engulfing whoever was at close range." Additionally, he said, "Shutting down the unit could have prevented the accident, but the operating staff ignored even the most basic principles of mechanical science". However, the operating staff rebutted the accusation saying that the senior management had ordered against the shutdown, which was also validated from the report where it was mentioned that the management had asked the operating staff to run the 500 MW unit at a lower load of 200 MW instead of shutting it down. At the time, when this finding had come out, findings of at least three more parallel inquiries, including one ordered by the Central Government, were awaited.¹³ However, it should also be noted as pointed out in 'The Times of India' that NTPC engineers had detected a fault in the ash evacuation system an hour before the blast and were working to fix it while the unit was kept working, which shows a serious lapse on the part of NTPC management.¹⁴

The accident at the Unchahar power plant raises serious questions about the safety standards followed by NTPC and how the lives of the labourers/contract workers are valued by the management. It was shocking to know that NTPC had removed the names of many workers from the company records to lower the company's liability as many of the families of the workers claimed that they were missing after the accident as it was pointed out in the DSG's fact finding report.¹⁵ Similarly, it was pointed out in another news report that factory workers went missing after the accident, but NTPC denied that they had been missing.¹⁶ The accident has also pointed out lack of regular inspection of the boilers, which could have prevented the accident, as the boilers are designed to give warning if pressure builds up inside them. In fact, the boilers in India are regulated by the Indian Boilers Act, 1923 which mandates uniform standards in the quality and upkeep of these units. Under the provisions of the Indian Boilers Act, 1923, it is

13. Unchahar NTPC boiler blast: Probe panel blames operating staff for negligence - Hindustan Times - January 13, 2018 - <https://www.hindustantimes.com/lucknow/probe-panel-blames-ntpc-blast-on-operating-staff-s-negligence/story-hrVWM1lRdujBKT-SIAx44cL.html>

14. NTPC plant kept snag-hit unit running under anniversary pressure? - The Times of India - November 05, 2017 - <https://timesofindia.indiatimes.com/india/ntpc-plant-kept-snap-hit-unit-running-under-anniversary-pressure/articleshow/61513740.cms>

15. Refer Footnote 10

16. Refer Footnote 7



▲ The family of a 16-year-old student killed in Barkagaon firing mourns his death (Credit: Manob Chowdhury)

a statutory requirement for the owner of every boiler to obtain a certificate authorising the use of boiler and every boiler needs to be inspected at least once a year by the boiler directorate for the purpose of annual renewal of the certificate. Unfortunately, the renewal of certificate for unit six was due in December 2017.¹⁷ There was also a lapse in providing protective gear to the workers while working in a hazardous environment. The loss of lives and the grave injuries to the workers would remain a dark blot in the track record of NTPC in the years to come; it also raises several concerns on the safety of workers located in other plants of NTPC across the country and what steps NTPC would take to ensure that another such accident does not happen in the future.

4.2. Barkagaon Firing - Use of Bullets in NTPC Project to Silence the Dissent of People

In a clash between police and villagers in Barkagaon block in Jharkhand, four villagers died in a police firing on October 1, 2016 and several others got injured. The incident happened in a coal block area which was allocated to NTPC for the purpose of captive mining. Instead of looking at this incident in isolation, it would be useful to

17. Just five directorate officials to inspect 3270 boilers in Uttar Pradesh - Hindustan Times - November 08, 2017 - <https://www.hindustantimes.com/india-news/just-five-directorate-officials-to-inspect-3270-boilers-in-uttar-pradesh/story-CqmgwbaVbEqC-7nOOjqlmbK.html>

go through the background as to what led to the culmination of this unfortunate incident.

The Pakri Barwadih coal block located in Barkagaon block of Hazaribagh district in Jharkhand was allocated to the NTPC in 2004 for doing captive mining. A news report from December 2013 pointed out that NTPC had mentioned that law and order situation was not 'conducive' in Pakri Barwadih coal block area. Earlier, it was expected that mining would start by February 2013, but the work at the site was stalled due to agitation against land acquisition.¹⁸ Back in November 2010, NTPC had given the mining contract worth Rs 23,000 crore to Indian subsidiary of Australian coal mining company Thiess Minecs. There was news about protesters halting the work of Thiess India in June 2013, as they demanded higher compensation for the cultivable land, which NTPC was unwilling to pay to the villagers.¹⁹ The mining contract of Thiess India was cancelled in May 2014 due to excessive delays in starting the operations.²⁰

18. Law and order not 'conducive' for mining at Jharkhand's PakriBarwadih: NTPC - The Hindu Businessline - December 02, 2013 - <https://www.thehindubusinessline.com/economy/law-and-order-not-conducive-for-mining-at-jharkhands-pakri-barwadih-ntpc/article23115105.ece>

19. Protesters halt NTPC mining in Hazaribag - The Times of India - June 07, 2013 - <https://timesofindia.indiatimes.com/city/ranchi/Protesters-halt-NTPC-mining-in-Hazaribag/article-show/20470002.cms>

20. NTPC scraps Thiess Minecs' Rs 23,000-crore mine development deal - The Economic Times - May 12, 2014 - <https://>

The protests against the acquisition of land in Barkagaon block had been going on for years, but things got heated up with the involvement of leaders from political parties in the region. In August 2015, there was a violent clash between police and protesters which resulted in bullet injuries to six people and leaving more than two dozen people injured. The clash happened near Dhenga village of Barkagaon block where construction work of R&R Colony for displaced people by NTPC coal mining project was going on. The group of villagers was led by Congress local MLA Nirmala Devi and her husband ex-minister Yogendra Sao, who had led the group of villagers to the construction site after they were denied permission to hold a meeting in a school in Barkagaon. There the group was confronted by the police, where it broke out into a heated argument and then into a violent clash.²¹ It should be noted that the struggles against NTPC in Barkagaon had primarily been led by Yogendra Sao and Nirmala Devi.

In September 2015, the mining contract

economictimes.indiatimes.com/industry/energy/power/ntpc-scrap-thiess-minecs-rs-23000-crore-mine-development-deal/articleshow/35026605.cms

21. Police open fire on violent mob at Barkagaon - The Pioneer - August 15, 2015 - <http://www.dailypioneer.com/state-editions/ranchi/police-open-fire-on-violent-mob-at-barkagaon.html>

was awarded to a joint venture of Thriveni Earthmovers and Sainik Mining to extract 15 million tonnes coal per annum.²² In May 2016, there was a huge protest against land acquisition and police atrocities resulting in the shutdown (bandh) of the entire Barkagaon block, preventing NTPC to carry out its mining operations which it started few days before the protest.²³ There was also an instance of *lathi charge* by the police on the villagers in Barkagaon area around July 2016. The villagers had been displaced due to NTPC's project and the incidence was termed as a case of violation of human rights by several eminent personalities.²⁴ Following this, leaders from the opposition parties, including ex-Chief Minister of Jharkhand Babulal Marandi had met the affected villagers on July 24, 2016 and had extended their support for the agitation. To negate this move, NTPC had lodged an FIR against the opposition

22. NTPC gives Pakri-Barwadih coal block contract to Thriveni-Sainik - The Economic Times - September 29, 2015 - <https://economictimes.indiatimes.com/industry/energy/power/ntpc-gives-pakri-barwadih-coal-block-contract-to-thriveni-sainik/articleshow/49158025.cms>

23. NTPC protest leads to bandh in Barkagaon in Jharkhand - The Economic Times - May 30, 2016 - <https://energy.economictimes.indiatimes.com/news/power/ntpc-protest-leads-to-bandh-in-barkagaon-in-jharkhand/52497143>

24. Barkagaon incident was violation of human rights - The Pioneer - July 09, 2016 - <http://www.dailypioneer.com/state-editions/ranchi/barkagaon-incident-was-violation-of-human-rights.html>

▼ Rapid Action Force (RAF) was deployed in the villages near the coal mine site after the Barkagaon firing (Credit: Manob Chowdhury)



leaders and the opposition leaders had decided to court arrest on August 4, 2016, but they were turned away by the Hazaribagh police. A week later, the opposition leaders were detained when they were heading for a dharna in Hazaribagh to oppose the forcible land acquisition.²⁵ On August 16, 2016 Chief Minister of Jharkhand Raghubar Das met 300 protesters from Barkagaon who were protesting against acquisition of land by NTPC. The Chief Minister was also accompanied by the current Member of Parliament from that constituency. It was assured by the Chief Minister that no injustice would be done to villagers.²⁶

Nirmala Devi and her husband Yogendra Sao and their supporters had started a 'Kafan Satyagraha' dharna outside Pakri-Barkagaon mining area from September 15 demanding the stoppage of mining in the area on the land acquired by NTPC. The police had gone to meet the protesters, but they refused to withdraw their protest. On September 28, NTPC had tried inducting machines in the area which was stopped by the protesters. To circumvent the situation, the administration tried an alternate route on September 29 through which it inducted four machines into the area. But the protesters stopped NTPC when it was trying to induct the fifth machine into the area. By September 30, the work had come to a complete halt following which NTPC registered two FIRs with Barkagaon Police Station. On October 1, police went to the protest site with adequate force to diffuse the situation. The police said that their team had arrested Nirmala Devi and was returning when they were stopped by the villagers near Dandikala village. The police alleged that angry villagers had attacked the police and had tried to abduct senior police officials and had torched police vehicles. The police said that they tried to give warning to the villagers but they did retreat despite firing of tear gas shells and rubber bullets. The police then opened fire which resulted in the death of four protesters, leaving over half-a-dozen people injured. Amidst this chaos, Nirmala Devi had went missing after the incident and her husband alleged that she had been taken by the police to an unidentified place.²⁷ In an another news report it was cited

25. Jharkhand ex-CM BabulalMarandi, political leaders detained - IANS - August 11, 2016 - http://www.business-standard.com/article/news-ians/jharkhand-ex-cm-babulal-marandi-political-leaders-detained-116081101218_1.html

26. Jharkhand CM meets villagers protesting land acquisition by NTPC - IANS - August 26, 2016 - http://www.business-standard.com/article/news-ians/jharkhand-cm-meets-villagers-protesting-land-acquisition-by-ntpc-116081601081_1.html

27. 4 killed in police firing over land acquisition - The Pioneer - October 02, 2016 - <http://www.dailypioneer.com/state-editions/ranchi/4-killed-in-police-firing-over-land-acquisition.html>

that the locals were mainly questioning the manner of arrest of Nirmala Devi and there were no water cannons or rubber bullets used to diffuse the crowd, according to a local supporter. It was said that police straightaway started firing bullets and that too above the waist, as if shooting to kill. After this incident all routes to Dandikala village remained barricaded and prohibitory orders were imposed.²⁸ The Left political parties strongly condemned this incident and demanded a high-level judicial probe into it.²⁹ The demonstrators later claimed that they were shocked at what they felt was excessive use of force by the administration. The residents of Barkagaon said that five persons had died in the police firing, including three students in their late teens, and that more than 40 people have been injured, though news sources said that 4 persons had died in firing incident. One of the residents of Barkagaon said that the farmers felt that they were living in suffocation and that the government should shoot them all, instead of doing it one by one.³⁰ On October 4, Yogendra Sao was arrested by the police and on October 19 Nirmala Devi was also arrested.³¹

The Barkagaon incident clearly showed the collusion of the State and NTPC in taking an anti-people stand and only caring about profit at the cost of suppressing any democratic dissent of the people. To meet its expansion needs, NTPC had gone ahead with its plans for captive mining in Pakri Barwadih coal block totally overlooking the conditions of the native people residing in that area. The way the state government has used force from time to time to suppress any kind of protests is a matter of deep concern. The Barkagaon firing incident of October 2016 and the struggle of people in this area over the past decade clearly shows that NTPC acts like just any other private company when it comes to respecting the democratic rights of the villagers in the mineral rich regions.

28. Protests In Jharkhand After 4 Die In Police Firing Over Land Acquisition - NDTV - October 05, 2016 - <https://www.ndtv.com/india-news/protests-in-jharkhand-after-4-die-in-police-firing-over-land-acquisition-1470305> -

29. CPI condemns police firing on farmers in Jharkhand - India Today - October 03, 2016 - <https://www.indiatoday.in/pti-feed/story/cpi-condemns-police-firing-on-farmers-in-jharkhand-710924-2016-10-03>

30. Shoot us all': Hazaribagh still in shock at police firing on protest against land acquisition - Scroll.in - October 05, 2016 - <https://scroll.in/article/818270/shoot-us-all-hazaribagh-still-in-shock-at-police-firing-on-protest-against-land-acquisition>

31. Hazaribagh firing incident: Police arrest Congress MLA Nirmala Devi - The Indian Express - October 19, 2016 - <http://indianexpress.com/article/india/india-news-india/hazaribagh-firing-incident-police-arrest-congress-mla-nirmala-devi-3090174/>

4.3. NTPC Pudimadaka Power Plant - Fishermen's Wish Prevailed in Not Having NTPC Power Plant in Their Village

Pudimadaka is one of the largest fishing villages in Anakapalli Mandal of Visakhapatnam district of Andhra Pradesh with a population of roughly 20,000 people. In January 2011, NTPC had announced that it would be setting up a 4,000 MW coal-fired power plant at Pudimadaka.³² In September 2014, NTPC signed a MoU with the Andhra Pradesh government to set up the power plant at Pudimadaka at an estimated investment of Rs 20,000 crore. The Pudimadaka plant was in addition to NTPC's existing 2,000 MW coal-based power plant in Simhadri in Visakhapatnam district. It was informed that the power plant would be based on imported coal and would require about 19.8 million tonnes of coal per year. The Andhra Pradesh Industrial Infrastructure Corporation (APIIC) had given 1,200 acres of land to NTPC for this project. At that point of time NTPC had expected to commission the power plant by 2019-20.³³

The environmental public hearing for the project was planned for August 2015. However, in July 2015 the CPI (M) had declared that it opposed the public hearing which was planned for next month. The party spokesperson alleged that NTPC should have approached a government institution for doing the Environment Impact Assessment rather than hiring services of the Hyderabad-based Vimta Labs.³⁴ On August 12, 2015, the environmental public hearing of the project was held by Andhra Pradesh Pollution Control Board (APPCB) amid strong protests by the project-affected people and Left political parties. Despite heavy rains, around 1,000 people from nearby areas had turned up at the public hearing. CPM and CITU leaders and local fishermen strongly opposed the public hearing claiming that the project would affect the livelihood of fishermen and farm workers in the area due to the discharge of contaminated water containing ash, while causing oceanic pollution. It was also alleged that the EIA study had failed

32. NTPC to set up 4,000 MW power project in Vizag - PTI - January 02, 2011 - <https://economictimes.indiatimes.com/industry/energy/power/ntpc-to-set-up-4000-mw-power-project-in-vizag/articleshow/7206374.cms>

33. NTPC to set up 4,000 MW coal-fired power plant in Andhra Pradesh - Livemint - September 16, 2014 - <https://www.livemint.com/Industry/d5aAml55NdMcumeNP8V4eO/NTPC-to-set-up-4000-MW-coalfired-power-plant-in-Andhra-Pra.html>

34. CPI(M) opposes public hearing on Pudimadaka plant - The Hindu - July 26, 2015 - <http://www.thehindu.com/news/cities/Visakhapatnam/cpi-m-opposes-public-hearing-on-pudimadaka-plant/article7466678.ece>

to mention the rehabilitation plan and had not explained the environmental risks associated with the project.³⁵ In another news report, it was stated that CPM leader Ch. Narasinga Rao pointed out that Pudimadaka was one of the biggest fishermen's village in the state with a population of 20,000 and that the plant would ruin the marine and fisheries resources. The CPM leader had pleaded to NTPC to relocate the Pudimadaka village before setting up the plant. The village leaders had also resonated with the concerns of the CPM leader and added that the local people should not be sacrificed for the sake of building the power plant.³⁶ However, in the EIA report in the section on Public Hearing, NTPC had given a response that, "No fishermen will be affected due to the proposed power project", when the issue was raised that the entire population of 20,000 of Pudimadaka dependent on fishing would be affected.³⁷ This was a blatant denial on part of NTPC as a 4,000 MW plant would have a huge impact on fishermen community because of heavy discharge of hot contaminated water in the sea. Meanwhile, a Andhra Pradesh-based civil society organization, Human Rights Forum, (HRF) issued a letter in August 2015 demanding that the Andhra Pradesh government should drop the proposal to set up the Pudimadaka power project. In its letter to the government, HRF also pointed out that residents of Pudimadaka were already facing the brunt of NTPC's existing 2,000 MW power plant in Simhadri area of Visakhapatnam district and another 1,000 MW power plant by Hinduja National Power Corporation Ltd. (HNPLC) was coming up in the area and both these power plants were only 20 kilometers away from Pudimadaka. The letter said that if the Pudimadaka project got commissioned then a small stretch of land would have to bear the burden of 7,000 MW of power generation, which would be a human and ecological disaster.³⁸

In August 2016, news came that the power plant would be delayed as the Union Power Ministry

35. Public hearing for NTPC 4,000 MW project held amid protests - The Hindu - August 12, 2015 - <http://www.thehindu.com/news/national/andhra-pradesh/public-hearing-for-ntpc-4000-mw-project-held-amid-protests/article7529572.ece>

36. Relocate main village near the thermal plant, NTPC urged - The Hindu Businessline - August 20, 2015 - <http://www.thehindubusinessline.com/news/national/relocate-main-village-near-the-thermalplant-ntpc-urged/article7530737.ece>

37. Environmental Impact Assessment for Pudimadaka Super Thermal Power Project (4 x 1000 MW) at Pudimadaka, Visakhapatnam District, Andhra Pradesh (Page 156/434) - Ministry of Environment and Forests (MoEF) - November, 2015 - <http://environmentclearance.nic.in/writereaddata/EIA/23112015P0QQ7TGAnnexure-EIAReport.pdf>

38. Drop NTPC's 4000 MW Pudimadaka proposal: HRF - Human Rights Forum - August 10, 2015 - <http://humanrightsforum.org/drop-ntpcs-4000-mw-pudimadaka-proposal-hrf/>



▲ Construction site chosen for NTPC Pudimadaka Power Project (Source: World TV News)

had decided to use domestic coal instead of importing coal, for which a fresh feasibility study would be done, which would take six to nine months. NTPC had submitted its proposal to Ministry of Environment and Forests (MoEF) on November 23, 2015, but the MoEF expert appraisal committee had returned the NTPC proposal after reviewing it. MoEF had sought more details about the public hearing held on August 12, 2015 and specifically asked for the MoU on the coal supply for imported coal. Later, an NTPC official informed that in a meeting with the Union Power Minister in presence of other state officials that it was eventually decided to use domestic coal to save foreign exchange. Because of the change in coal linkage, NTPC had also required another 1,000 acres of land for building an ash dyke and the capacity of proposed power plant was reduced from 4,000 MW to 3,200 MW (4x800 MW).³⁹ In October 2016, the central government had assured fuel linkage from Coal India Limited (CIL) for the project, which was considered as a major boost for the project to take off.⁴⁰

It was cited by a news source in July 2017 that two Members of Parliament from the Bharatiya Janata Party (BJP) and Telugu Desam Party (TDP)

39. NTPC's Pudimadaka project set for delay - Deccan Chronicle - August 06, 2016 - <https://www.deccanchronicle.com/nation/current-affairs/060816/ntps-pudimadaka-project-set-for-delay.html>

40. CIL coal linkage likely for NTPC Pudimadaka power project - The Hindu Businessline - October 19, 2016 - <https://www.thehindubusinessline.com/news/national/cil-coal-linkage-likely-for-ntpc-pudimadaka-power-project/article9240428.ece>

told 'The Hindu' newspaper that the Pudimadaka project had officially been shelved, even though NTPC officials declined to comment on this. The TDP MP mentioned that while both Central and state government wanted the project to go forward, but the glut situation in power sector has made the project unviable.⁴¹ In another news report in December 2017, it was revealed that due to the abnormal delay in the project, NTPC had withdrawn its staff and officers from the project site and had transferred them to other locations as NTPC officials said that the project has got stagnant. According to the government reports, the coal was supposed to be supplied from Raniganj Coalfield in West Bengal, but due to the lack of an exclusive railway track to the construction site, a separate railway track would have to be constructed from Yelamanchili railway station. For this, further land acquisition would have been needed and would have added to the fuel costs making the project unviable, according to NTPC officials. The NTPC had also requested the government that, as an alternative approach, it should have been allowed to construct a captive berth to import coal through shipment from Raniganj, but Indian Navy had opposed it due to its existing naval base in close proximity.⁴²

41. Pudimadaka power project hits a roadblock - The Hindu - July 25, 2017 - <http://www.thehindu.com/news/cities/Visakhapatnam/pudimadaka-power-project-hits-a-roadblock/article19356865.ece>

42. Proposed NTPC plant faces road blocks - The Hans India - December 21, 2017 - <http://www.thehansindia.com/posts/index/Andhra-Pradesh/2017-12-21/Proposed-NTPC-plant-faces-road-blocks-/346890>

In March 2018, Union Minister of State for Power R.K. Singh informed the Rajya Sabha (Upper House of Parliament) that because of impediments like coal linkage and clearances there has been an excessive amount of delay in the progress of the NTPC power plant at Pudimadaka.⁴³ In all probability, it seems that the Pudimadaka project would remain in limbo in the coming years, even though it was projected as a major investment opportunity by NTPC. In yet another instance, NTPC has ignored the interests of the local population in the name of producing 'electricity for the nation'. The concerns raised by the fishermen had been blatantly ignored by NTPC and it went ahead with its decision to construct a 4,000 MW power project in one of the largest fishermen village in Andhra Pradesh, though eventually its plans could not materialize. Moreover, NTPC had simply overlooked the cumulative impact of power generation in the area as it had already been running its Simhadri power plant and the presence of another power plant by HNPCL, which should have been given

43. Centre admits delay in Pudimadaka power project - The Hindu - March 14, 2018 - <http://www.thehindu.com/todays-paper/tp-national/tp-andhrapradesh/centre-admits-to-delay-in-pudimadaka-power-project/article23232640.ece>

a due consideration when selecting a suitable area for its project. Though the opposition by the fishermen community did not deter the plans of NTPC, the lack of availability of fuel has come as a welcome relief for the local people who would otherwise have faced displacement and loss of livelihood in the name of development.

4.4. Trincomalee Power Plant - NTPC's First Overseas Power Plant Failed to Take off in Ten Years

In order to expand its operations beyond India, NTPC had planned to set up a coal based thermal power plant in Sri Lanka and Indian government had seen this as an opportunity to improve the bilateral ties between the two countries. During the state visit of President of Sri Lanka to India back in December 2005, a bilateral understanding was reached to set up a 500 MW coal based power plant in Sri Lanka.⁴⁴ Later, in December 2006, NTPC signed an agreement with Ceylon

44. Joint Press Statement, State Visit of Mr. Mahinda Rajapaksa, President of Sri Lanka to India, December 27-30, 2005 - December 30, 2005 - <http://www.mea.gov.in/bilateral-documents.htm?dtl/7314/Joint+Press+Statement+State+Visit+of+Mr+Mahinda+Rajapaksa+President+of+Sri+Lanka+to+India+December+2730+2005>

▼ A protest against the NTPC power plant in Trincomalee, Sri Lanka (Source: Tamil Guardian)



Electricity Board (CEB) and Sri Lanka Government for setting up of the 500 MW coal-based thermal power plant in Trincomalee district in Eastern Province, Sri Lanka.⁴⁵ The project was supposed to be implemented by a joint venture company with 50 per cent ownership each by NTPC and CEB and funded by a debt equity ratio of 70:30. During signing of the agreement it was expected that the power plant would commence operations from 2011. However, when the agreement was signed there was no unanimity between the two countries on the plant location. Sri Lanka had identified Sampur as the preferred location while NTPC team had a preference for a site near the Indian Oil Corporation oil complex, close to the Trincomalee harbour. Sampur had been taken control by the military from the Liberation Tigers of Tamil Eelam (LTTE) in September 2006. The decision of Sri Lankan government to locate the plant in Sampur had triggered a controversy with the pro-LTTE Tamil National Alliance raising political and environmental objections. In April 2008, India had finally agreed to locate the power plant in Sampur.⁴⁶

The joint venture agreement between NTPC and Ceylon Electricity Board (CEB) was signed on 6th September, 2011 where the joint venture company was named as "Trincomalee Power Company Limited (TPCL)". The plant had an estimated cost of Rs 3,150 crores. Further, Government of India had offered a concessional line of credit of \$200 million to fulfil its commitments under the implementation agreement. It was also decided that the coal for the project would be imported and supplied by Lanka Coal Company (LCC) and the power generated would be supplied to CEB.⁴⁷ In a news report in August 2012, CEB Chairman Wimaladharm Abeywickrama mentioned that the feasibility project was ready and that the work for the project would start by December 2012.⁴⁸ An announcement was made by Sri Lanka's Minister for Power and

Energy Pavithra Wanniarachchi in April 2013 that the work on Trincomalee power plant would commence soon.⁴⁹ Meanwhile, in a news report, The Hindu in December 2013 mentioned about the plight of the 800 families who were facing displacement due to the acquisition of land for the NTPC project. This acquisition had also triggered protests in the area.⁵⁰

In a setback to Government of India, in October 2015 Sri Lanka asked India to change the location of the stalled power project. This was the second shift suggested by Sri Lankan government after the first shift requested back in 2007. The request was to move the project from Sampur to Foul Point area in the same district. With the change in the project location, NTPC was required to do fresh feasibility studies at the new site, with a foreseen delay of another two to three years. Some of the reasons cited for the shift from Sampur site included changes in local socioeconomic conditions due to settlements by the displaced Tamil population, reluctance of the government to give environmental clearance and expected litigations in future. The delay had also been attributed to protests by the earlier Dravida Munnetra Kazhagam-led Tamil Nadu government against the Sri Lankan government.⁵¹ While there were news reports mentioning about the shift in project location, some of the later news reports mentioned about protests in Sampur area itself against the power plant. In April 2016 there was news of a protest carried out by Green Trincomalee Organization, an Organization for Sri Lanka Tribe Rights, where the villagers opposed the power plant coming up in Sampur area.⁵² Meanwhile, by June 2016 there was news that Sri Lankan government was considering usage of liquefied natural gas (LNG) as fuel instead of coal, which created troubles for NTPC's plan for the project. The power plant had received its environmental clearance in February 2016 and TPCL had floated

45. NTPC power project in Trincomalee - The Hindu - December 30, 2006 - <http://www.thehindu.com/todays-paper/tp-business/NTPC-power-project-in-Trincomalee/article15729552.ece>

46. NTPC plant at Sampur as Colombo wants - The Hindu - April 20, 2008 - <http://www.thehindu.com/todays-paper/tp-international/NTPC-plant-at-Sampur-as-Colombo-wants/article15207174.ece>

47. NTPC to set up first overseas power plant in Sri Lanka - Business Standard - September 07, 2011 - http://www.business-standard.com/article/companies/ntpc-to-set-up-first-overseas-power-plant-in-sri-lanka-111090700081_1.html

48. NTPC's Sri Lanka project may start by December - Business Standard - August 31, 2012 - http://www.business-standard.com/article/companies/ntpc-s-sri-lanka-project-may-start-by-december-112083100018_1.html

49. NTPC's Sri Lanka project set to take off - The Hindu - April 23, 2013 - <http://www.thehindu.com/business/Industry/ntpcs-sri-lanka-project-set-to-take-off/article4644359.ece>

50. 800 Tamil families hit in the name of Sri Lanka-NTPC project - The Hindu - December 15, 2013 - <http://www.thehindu.com/news/international/south-asia/800-tamil-families-hit-in-the-name-of-sri-lankantpc-project/article5460494.ece>

51. Sri Lanka asks NTPC to shift planned plant again - Livemint - October 07, 2015 - <http://www.livemint.com/Industry/DOUd71oQISIXbeNI4RYquK/Sri-Lanka-asks-NTPC-to-shift-planned-plant-again.html>

52. We don't need Sampoor Thermal Power Plant: People protest carrying axes - Tamil CNN - April 07, 2016 - <http://www.tamilcnn.ca/we-dont-need-sampoor-thermal-power-plant-people-protest-carrying-axes.html> Sampur project uncertainty continues - The Hindu - June 16, 2016

bids for the project in May 2016.⁵³

In a major development in September 2016, the Sri Lankan government announced that it would not go ahead with NTPC's coal power plant in Trincomalee, after facing strong objections from environmentalists and the public. This came as a big blow to NTPC who was keen to showcase Trincomalee Power Plant as its first overseas power plant displaying its ability to build power plants abroad. The rights petition against the proposed power plant was filed by The Environmental Foundation Limited (EFL) in May 2016, where it objected to the coal power plant over its environmental impact. EFL had highlighted the long term environmental impact from the project and its resultant health effects. In the past there had been protests over the resettlement of people displaced by the war with the LTTE in Sampur. Since the war ended, Sampur had been declared a high security zone due to the proposal to build the coal power plant.⁵⁴ In another news report of September 2016 in Indian Express, it was clarified that Sri Lankan government had conveyed to Supreme Court that it would still go ahead with building the power plant in Trincomalee, but it would not be building a coal-fired power plant.⁵⁵ A month after this development, India offered Sri Lanka to develop a solar power plant in Trincomalee in place of the scrapped NTPC power plant.⁵⁶ A fresh Memorandum of An agreement was signed between Sri Lanka and India in April 2017 to set up a 50MW solar power plant in Sampur town of Trincomalee. Ministry of Power and Renewable Energy Sulakshana Jayawardena said in June 2017 that the solar units would be set up soon.⁵⁷ Despite the fact that the Trincomalee project by NTPC was proposed back in 2005, still, after more than 10 years, the coal-based power project couldn't take off due to the protests by the people and environmental groups, which came as a major victory to them. To some extent credit

53. Sampur project uncertainty continues - The Hindu - June 16, 2016 - <http://www.thehindu.com/business/Industry/Sampur-project-uncertainty-continues/article14427982.ece>

54. Lanka not to go ahead with coal power plant with NTPC - The Hindu Businessline - September 13, 2016 - <https://www.thehindubusinessline.com/companies/lanka-not-to-go-ahead-with-coal-power-plant-with-ntpc/article9104393.ece>

55. Sri Lanka to build power plant in Trincomalee - Indian Express - September 16, 2016 - <http://indianexpress.com/article/world/world-news/sri-lanka-to-build-power-plant-in-trincomalee-3034139/>

56. India offers solar plant in Trincomalee - The Hindu - October 20, 2016 - <http://www.thehindu.com/business/Industry/India-offers-solar-plant-in-Trincomalee/article16075763.ece>

57. Sri Lanka, India to set up solar unit soon - The Hindu - June 28, 2017 - <http://www.thehindu.com/business/Industry/sri-lanka-india-to-set-up-solar-unit-soon/article19165715.ece>

must be given to the Sri Lankan government which gave in to the demands of the people and decided to scrap the project, unlike Indian government, which has pushed the coal-based power projects despite heavy opposition from many communities in India.

It would be useful for the reader to check about the confidentiality clause which was cited in the Right to Information (RTI) application filed by an activist from Commonwealth Human Rights Initiative (CHRI). On the order of CIC, NTPC also revealed a Project Synopsis which had some useful details.

(Source: RTI intervention discloses confidentiality clause in the Sampur Thermal Power Project related agreement signed between NTPC India and Trincomalee Power Corpn. Ltd.- <http://www.humanrightsinitiative.org/blog/rti-intervention-discloses-confidentiality-clause-in-the-sampur-thermal-power-project-related-agreement-signed-between-ntpc-india-and-trincomalee-power-corn-ltd>)

4.5 NTPC Kudgi Super Thermal Power Plant - Violent Protests for Opposing the NTPC Power Plant in Bijapur

Back in January 2009, NTPC had signed a MoU with Power Company of Karnataka Ltd. (PCKL) for development of a 4,000 MW Power Project at Kudgi village in BasavanBagewadi block in Bijapur district of Karnataka.⁵⁸ This was supposed to be first NTPC project in the state of Karnataka. NTPC was given the Environmental Clearance from Ministry of Environment and Forests (MoEF) in January 2012 for setting up the Stage-I of Kudgi Super Thermal Power Project of 2,400 MW capacity. The Stage-I had an estimated investment requirement of Rs 15,000 crores and would have required 3,500 acres of land for the project. Karnataka government had sanctioned 5.2 TMC of water per annum from Alamatti Dam, which was 18 km away from the project site.⁵⁹

Even before the grant of environmental clearance, there had been opposition to the power plant from various groups and environmental activists. In February 2011, members of a people's forum 'Kallidalu Ushna Vidyut Stavara Vidoshigala Okkuta' had submitted a memorandum to the Deputy Commissioner of Bijapur stating that the

58. NTPC and Power Company of Karnataka Ltd sign MoU - The Economic Times - January 12, 2009 - <https://economictimes.indiatimes.com/industry/energy/power/ntpc-and-power-company-of-karnataka-ltd-sign-mou/articleshow/3969016.cms>

59. NTPC's Kudgi project gets MoEF nod - The HinduBusinessline - January 26, 2012 - <https://www.thehindubusinessline.com/companies/ntpc-kudgi-project-gets-moef-nod/article20389166.ece>

site selected for the power plant is not suitable as it would cause enormous environmental and health hazards in the nearby regions. It was also alleged in the memorandum that the authorities were misguiding the people saying that the site selected for the power plant was barren and uncultivable.⁶⁰ Similarly, retired scientist of Dept. of Atomic Energy M.P. Patil had also appealed to the Chief Minister of Karnataka around that time that the power plant would harm the people due to the health pollution and would also affect the agriculture. He had also said that the power plant would lead to more number of industries in the area that cause pollution, such as ash brick making and other ancillary small industries.⁶¹ By December 2011, Karnataka Industrial Areas Development Board (KIADB) had acquired 1,960 acres, i.e., more than 60 per cent of the land required for the project. KIADB had earlier great difficulty in acquiring the land as the offered compensation was quite less and the farmers feared that the power plant would have an

adverse impact in the region. Later, when KIADB announced higher prices for the agricultural land, the farmers agreed to sell their land saying that the elected representatives had not worked towards providing irrigation facilities to them.⁶²

It came in the news in May 2012 that M.P. Patil had filed a petition in the National Green Tribunal (NGT) that the environmental clearance granted by MoEF should be withdrawn. He had also accused NTPC of providing false information that 3,000 acres of land for the project is barren. However, as the Land Acquisition Officer (LAO) of KIADB had disbursed compensation for 1,600 acres of land as irrigated land debunking NTPC's claim. It was also informed by Patil that the Tribunal had issued notices to NTPC and Land Acquisition Officer of KIADB.⁶³ Following up on the case, NGT suspended the environmental clearance of NTPC in March 2014 on the grounds of falsifying information while seeking the environmental clearance and in response NTPC

60. Thermal power plant at Kudgi opposed - The Hindu - February 11, 2011 - <http://www.thehindu.com/todays-paper/tp-national/tp-karnataka/Thermal-power-plant-at-Kudgi-opposed/article15294113.ece>

61. Kudgi thermal power plant will be hazardous for people' - The Hindu - February 07, 2011 - <http://www.thehindu.com/todays-paper/tp-national/IsquoKudgi-thermal-power-plant-will-be-hazardous-for-people/article15131260.ece>

62. More than 60 per cent land acquired for Kudgi thermal power plant - The Hindu - December 13, 2011 - <http://www.thehindu.com/todays-paper/tp-national/tp-karnataka/more-than-60-per-cent-land-acquired-for-kudgi-thermal-power-plant/article2710512.ece>

63. Kudgi kicks up green storm - Deccan Herald - May 30, 2012 - <https://www.deccanherald.com/content/253345/kudgi-kicks-up-green-storm.html>

▲ Women protesting against the Kudgi Power Plant (Source: La ViaCampesina Blog)



had approached the Supreme Court immediately. The court suspended the clearance calling NTPC's actions as 'wilful suppression of facts' that most of the land was barren and rocky and not much agricultural activity was happening there.⁶⁴ Even the Supreme Court stayed the order of NGT in April 2014 and that time NTPC made an appeal to the court that the construction of power plant had reached an advanced stage with contracts worth Rs 9,500 crores under execution and expenditure worth Rs 2,600 crores had already been incurred by NTPC and that huge investment of public money was at stake.⁶⁵ The final hearing of the case in Supreme Court was supposed to happen in August 2014, but no further news related to it could be obtained.

Meanwhile, in July 2014 a violent clash was witnessed between police and hundreds of people who were protesting against Kudgi power plant. The protest had turned violent when the vehicles were set on fire and property was damaged because of which police opened fire in the air and burst tear gas shells. This incident left five people injured including two with bullet wounds, according to the police officials. It came to light that hundreds of people have been protesting against the power plant since past few months as they alleged that the project did not provide jobs to the local residents and that NTPC brought workers from other outside states, even though NTPC had promised to offer jobs while acquiring land a few years ago. Due to the violence, hundreds of workers and labourers of NTPC had fled out of town due to the unrest.⁶⁶ After this incident, Karnataka's Chief Minister ordered a magisterial probe to look into the incidents that led to the police firing. According to another news source, total twelve persons were injured in the incident, including two policemen. The Chief Minister even urged the farmers to not oppose the power project, as the state was facing acute power shortage.⁶⁷ After a few days of the violent clash, work at NTPC's power plant had come to a grinding halt as more than 5,000

64. NGT suspends clearance for Bijapur plant - The Hindu - March 15, 2014 - <http://www.thehindu.com/news/national/ngt-suspends-clearance-for-bijapur-plant/article5789383.ece>

65. Supreme Court stays NGT order on Bijapur NTPC project - The Hindu - April 02, 2014 - <http://www.thehindu.com/news/national/supreme-court-stays-ngt-order-on-bijapur-ntpc-project/article5863157.ece>

66. Kudgi: Police fire in air to stop hundreds of protesters - Deccan Chronicle - July 06, 2014 - <https://www.deccanchronicle.com/140706/nation-current-affairs/article/kudgi-police-fire-air-stop-hundreds-protesters>

67. Violence at Kudgi Thermal Plant: CM orders magisterial probe - Business Standard - July 06, 2014 - http://www.business-standard.com/article/current-affairs/violence-at-kudgi-thermal-plant-cm-orders-magisterial-probe-114070600509_1.html

workers had left the construction site of the power plant, including 20 technicians from Japan and Korea due to the atmosphere of fear. The workers had come from states like Uttar Pradesh, Bihar, Odisha, Rajasthan, Andhra Pradesh and Tamil Nadu. NTPC was even making efforts to get security from Central Industrial Security Force (CISF) to bring back the workers.⁶⁸

The protest against Kudgi power plant continued to the next month, when a protest rally of farmers in Bijapur district of Karnataka was led by Karnataka RajyaRaithaSangha and HasiruSene to deputy commissioner's office in August 2014, who demanded NTPC to execute a surety bond before the Supreme Court, undertaking that the NTPC Kudgi plant would not cause any environmental and health hazards. The protesters submitted the memorandum demanding that power plant should not cause any health hazards and damage to the flora and fauna in villages within 25 km from the project area. Concerns were raised that the plant would affect the yield of crops. The farmer leaders alleged that the fly ash from the plant would create health hazards and people exposed to such pollution will suffer from diseases like skin cancer, asthma and tuberculosis besides developing breathing problems.⁶⁹ Meanwhile, Karnataka's Chief Minister had emphasized that the state government was determined that the Kudgi Power Plant would not be shifted citing the scarcity of the power in the state and had urged the farmers not to oppose the project.⁷⁰

Despite the intense protests against the Kudgi power plant, NTPC went ahead with the construction of the power plant and the first unit of the Stage-I of the power plant of 800 MW capacity commenced commercial operations from July 2017. The second unit, also of 800 MW capacity, commenced its operations from January 2018.⁷¹ NTPC commenced the third and final unit of Stage-I unit in March 2018 taking up

68. 5,000 Kudgi power plant workers, technicians leave - July 18, 2014 - Business Standard - http://www.business-standard.com/article/companies/5-000-kudgi-power-plant-workers-technicians-leave-114071801003_1.html

69. Farmers opposed to Kudgi plant want NTPC surety bond - Deccan Herald - August 26, 2014 - <http://www.deccanherald.com/content/427769/farmers-opposed-kudgi-plant-want.html>

70. Government will not shift power plant from Kudgi, says Siddaramaiah - The Hindu - August 15, 2014 - <http://www.thehindu.com/news/national/karnataka/government-will-not-shift-power-plant-from-kudgi-says-siddaramaiah/article6319710.ece>

71. 2nd unit of NTPC project at Kudgi begins commercial operation - PTI - January 01, 2018 - <http://www.thehindu.com/todays-paper/first-unit-of-ntpc-begins-commercial-operations/article19412514.ece>



▼ Kudgi NTPC Power Plant on 21 July 2014 (Source: La ViaCampesina Blog)

the total capacity of Kudgi power plant to 2,400 MW capacity.⁷² However, there is still uncertainty over the Stage-II of the expansion of Kudgi power plant, which would have taken up the plant's capacity to 4,000 MW. A news article came in March 2017 that NTPC was planning to shelve the expansion plans of the Stage-II of the project and that it may use the left over space of the 3,500 acres for adding solar power capacity.⁷³

72. NTPC commissions third unit of Kudgi Super Thermal Power Station - The Hindu Businessline - March 13, 2018 - <https://www.thehindubusinessline.com/companies/nptc-commissions-third-unit-of-kudgi-super-thermal-power-station/article23214115.ece>

73. NTPC may drop further expansion plans of Kudgi thermal project in Karnataka - The Economic Times - March 28, 2017 - <https://economictimes.indiatimes.com/industry/energy/power/nptc-may-drop-further-expansion-plans-of-kudgi-thermal-project-in-karnataka/articleshow/57859308.cms>

Kudgi Thermal Power Plant is yet another example of NTPC's brazen efforts to ignore the plight of the local people where it builds its power plant, by justifying it in the name of nation development. It is the people who get displaced due to such mega power projects who have to bear the true cost of it. The claims by NTPC that the power plant would not cause any pollution and would not impact the agriculture in nearby regions because of using advanced technology is simply farcical as despite the best use of technology, thermal power plants of this capacity leave a huge footprint and cause an irreversible damage through pollution to both the people living in nearby areas and the flora and fauna, along with exacerbating the problem of global warming.

5. NTPC's Abroad Ventures of the Past and Plans for Future

Even though NTPC was incorporated as a public sector company back in 1975, since the past two decades it has been trying to expand its operations beyond India to project itself as a global player in power sector. While NTPC's track record in India has been questionable on several fronts, that is, environmental, human rights, labour, health, etc., it is a matter of deeper concern as how citizens of other countries would be able to hold NTPC accountable for its violations. Though NTPC's plans for venturing abroad have not materialized in the manner it had visualized earlier, but NTPC has not given up on this front. Given below is a brief synopsis of various projects (listed country wise) where NTPC had ventured abroad in the past and the projects which are in pipeline:

1. Australia

In June 2010, NTPC had planned to buy a 720 million tonne coal mine located near Perth in Western Australia in a deal valued at \$1-1.5 billion. This would have allowed NTPC to fire about 3,500 MW power capacity. Apparently, the deal did not eventually materialize as no further news was available related to this deal.

(Source: NTPC to buy Australian coal mine- The Economic Times - June 03, 2010 - <https://economictimes.indiatimes.com/industry/indl-goods/svs/metals-mining/ntpc-to-buy-australian-coal-mine/articleshow/6005504.cms>)

2. Bangladesh

A MoU was signed between India and Bangladesh

in January 2010 to build a power plant in Bangladesh by NTPC through a 50:50 joint venture with the Bangladesh Power Development Board (BPDB) under which a private company Bangladesh-India Friendship Power Company Limited (BIFPCL) was incorporated in Bangladesh in October 2012. The power plant named as Maitree Super Thermal Power Plant is of 1,320 MW capacity and is located at Rampal in Bagerhat district of Khulna division in Bangladesh. Indian Exim Bank is providing loans worth 1.6 billion USD to build this power plant. Currently, the construction for Rampal power project is going on despite major opposition to the power plant in Bangladesh.

(Source: NTPC arm ties up \$1.6 bn for Maitree plant in Bangladesh - Hindustan Times - April 11, 2017 - <https://www.hindustantimes.com/business-news/ntpc-arm-ties-up-1-6-bn-for-maitree-plant-in-bangladesh/story-8bh8BNOU4rQsIaLeR3VA2M.html>)

3. Bhutan

In December 2009, NTPC had entered into a preliminary agreement with Bhutan to set up Amochhu Reservoir hydel project. Though NTPC had traditionally been generating power through coal-based power plants, NTPC had hitherto not ventured into hydro projects on its own.

(Source: NTPC-Bhutan pact for Amochhuhydel plant - PTI - December 28, 2009 - http://www.business-standard.com/article/companies/ntpc-bhutan-pact-for-amochhu-hydel-plant-109122800139_1.html)

4. Britain

Back in 2003, NTPC had plans to enter the European market, when a foreign investor was willing to give an Operations and Maintenance (O&M) contract to NTPC, where the investor had plans to take over a 430 MW thermal power plant in England owned by Carron Energy. Apparently, the deal did not eventually materialize as no further news was available related to this deal.

(Source: NTPC eyes power project in England - The Times of India - December 19, 2003 - <https://timesofindia.indiatimes.com/business/india-business/ntpc-eyes-power-project-in-england/articleshow/369027.cms>)

5. Indonesia

In August 2007, according to a news report, NTPC was planning to invest in either Indonesian or Australian coal mines in order to ensure fuel security for its coal based stations as a long term measure. Three years later, in another news it was mentioned that NTPC was planning to buy stakes in two coal mines in Indonesia in East Kalimantan and Sumatra mines with a combined capacity of 1.8 billion tonnes of coal. However, later it could not be confirmed if the deal actually went through.

(Source: 1. NTPC eyes Indonesia, Australia coal mines - Livemint - August 14, 2007 - <https://www.livemint.com/Companies/sXOYiPX09bEbQr515s45cO/NTPC-eyes-Indonesia-Australia-coal-mines.html> ;

2. NTPC plans stake buy in Indonesia coal mines - Livemint - August 30, 2010)

6. Iran

In August 2009, according to a news report, India had plans to build a gas-based 6,000 MW power plant in Iran with a 1,500 km high voltage transmission link to carry power to India at a cost of \$10 billion and the government was planning to approach NTPC to execute this project. However, by February 2010 the news came that the project plan had been shelved due to feasibility issues, as the transmission link had to go through Pakistan, which would have been difficult to execute there.

(Source: 1. India plans 6,000 MW power project in Iran-report - Reuters - August 24, 2009 - <https://www.reuters.com/article/india-power-iran/india-plans-6000-mw-power-project-in-iran-report-idUSDEL48428220090824>

2. Future looks dark for NTPC-Iran 6,000MW project - Livemint - February 02, 2010 - <http://www.livemint.com/Companies/cLk65be6oCqS78uUqHD3Dl/Future-looks-dark-for-NTPC-Iran-6000MW-project.html>)

7. Mozambique

NTPC had plans to set up power projects in Mozambique as per a news report of March 2008,

whereby it sought to acquire rights to mine coal in return of setting up the power projects. However, NTPC did not go ahead with this plan later. Instead, NTPC entered into a joint venture with four other PSUs: Steel Authority of India Limited (SAIL), Coal India, Rashtriya Ispat Nigam Limited and National Mineral Development Corporation (NDMC) to form International Coal Ventures Limited (ICVL). In July 2014, ICVL had acquired a coal mine from Rio Tinto for \$50 million.

(Source: 1. NTPC offers power for coal to Mozambique - Livemint - March 08, 2008 - <https://www.livemint.com/Companies/ZLuZmmdbHCB8J0szuPQ9gO/NTPC-offers-power-for-coal-to-Mozambique.html>

2. ICVL buys Mozambique coal mine from Rio Tinto for \$50 million - The Hindu Businessline - July 30, 2014- <https://www.thehindubusinessline.com/companies/ICVL-buys-Mozambique-coal-mine-from-Rio-Tinto-for-50-million/article20831827.ece>)

8. Nigeria

NTPC had signed an energy co-operation pact with the Nigerian Government in May 2007, where NTPC would have got access to three million tonnes per annum of LNG on a long term basis for its projects in India and in return NTPC would have set up two power plants in Nigeria on its own or through a joint venture. However, in October 2008, the news came that NTPC's plans had faltered because of delays in finalizing an alliance with a local partner. NTPC's Nigerian partner wanted an equity stake in the power plants to be set up by NTPC and moreover, there was a change of government which led to this situation. In 2011, NTPC was considering revisiting the proposal for the Nigerian venture, but it did not eventually materialize.

(Source: 1. NTPC inks energy pact with Nigeria - The Hindu Businessline - May 26, 2007 - <https://www.thehindubusinessline.com/todays-paper/tp-corporate/NTPC-inks-energy-pact-with-Nigeria/article20165419.ece>

2. Delay in finalizing local partner mars NTPC's Nigerian gas deal - Livemint - October 29, 2008 - <https://www.livemint.com/Companies/ro07WHnsQwqX9RdcGK85nO/Delay-in-finalizing-local-partner-mars-NTPC8217s-Nigerian.html>

3. NTPC looking to revisit proposal for Nigeria venture - The Economic Times - February 13, 2011 - <https://economictimes.indiatimes.com/industry/energy/power/ntpc-looking-to-revisit-proposal-for-nigeria-venture/articleshow/7487579.cms>)

9. Sri Lanka

NTPC had signed a MoU with Ceylon Electricity Board (CEB) and the Sri Lankan government in December 2006 to set up a 500 MW power plant in Trincomalee district of Sri Lanka. In 2011, Trincomalee Power Company Limited was incorporated with 50:50 joint venture between NTPC and CEB. However, in September 2016, the

Sri Lankan government scrapped the plans of going ahead with the Trincomalee power plant after environmentalists raised serious concerns about the coal power plant. Instead, the Sri Lanka government decided to look at other options such as Liquefied Natural Gas (LNG), Solar and Wind power. This move came as a major blow to NTPC as the Trincomalee power plant was supposed to be the first overseas power plant for NTPC.

(Source: Sri Lanka scraps NTPC's plan to build coal plant - The Hindu - September 13, 2016 - <http://www.thehindu.com/business/Sri-Lanka-scraps-NTPC%E2%80%99s-plan-to-build-coal-plant/article14637833.ece>)

10. Yemen

In 2007, NTPC had plans to set up power projects and a training facility in Yemen, in return of securing gas supplies for its power plants in India.

This move was basically suggested by the Ministry of External Affairs to secure gas resources, estimated at around 4,000 million barrels of oil and gas in order to pre-empt the Chinese companies gaining any upper hand in Yemen. However, in April 2009 it came to light that NTPC's Yemen plan was stalled due to dispute over price issues as Yemen government wanted to pay below the cost to NTPC for setting up power projects, which was not acceptable to NTPC.

(Source: 1. After Nigeria, NTPC is heading for Yemen - Livemint - November 02, 2007 - <http://www.livemint.com/Companies/qymvB6OvFNRIWLIBP9SS5I/After-Nigeria-NTPC-is-heading-for-Yemen.html>)

2. NTPC's Yemen plans stalled due to dispute over price issues - Livemint - April 12, 2009 - <https://www.livemint.com/Companies/FjN2rnh2HagHQrosZFCK0M/NTPC8217s-Yemen-plans-stalled-due-to-dispute-over-price-i.html>)

Annexure - I Coal Based Power Stations

Given Below is the List of NTPC's Coal Based Projects

| Sl. No. | COAL BASED (Owned by NTPC) | STATE | COMMISSIONED CAPACITY(MW) | Year of Commissioning (1st Unit) |
|-----------------------|----------------------------|----------------|---------------------------|----------------------------------|
| 1. | Singrauli | Uttar Pradesh | 2,000 | 1982 |
| 2. | Korba | Chhattisgarh | 2,600 | 1983 |
| 3. | Ramagundam | Telangana | 2,600 | 1983 |
| 4. | Farakka | West Bengal | 2,100 | 1986 |
| 5. | Vindhyachal | Madhya Pradesh | 4,760 | 1987 |
| 6. | Rihand | Uttar Pradesh | 3,000 | 1988 |
| 7. | Kahalgaon | Bihar | 2,340 | 1992 |
| 8. | Dadri | Uttar Pradesh | 1,820 | 1991 |
| 9. | TalcherKaniha | Orissa | 3,000 | 1995 |
| 10. | Feroze Gandhi, Unchahar | Uttar Pradesh | 1,550 | 1988 |
| 11. | Talcher Thermal | Orissa | 460 | 1995 ¹ |
| 12. | Simhadri | Andhra Pradesh | 2,000 | 2002 |
| 13. | Tanda | Uttar Pradesh | 440 | 2000 ² |
| 14. | Badarpur | Delhi | 705 | 2006 ³ |
| 15. | Sipat | Chhattisgarh | 2,980 | 2011 |
| 16. | Mauda | Maharashtra | 2,320 | 2013 |
| 17. | Barh | Bihar | 1,320 | 2013 |
| 18. | Bongaigaon | Assam | 500 | 2015 |
| 19. | Kudgi | Karnataka | 2,400 | 2016 |
| 20. | Solapur | Maharashtra | 660 | 2017 |
| 21. | Lara | Chhattisgarh | 800 | 2018 |
| Total Capacity | | | 40,355 | |

1 - Taken over from Orissa State Electricity Board in 1995

2 - Taken over from UP State Electricity Board in 2002

3 - Ownership to NTPC was transferred in 2006

Given Below is the List of NTPC's Coal Based Joint Ventures/Subsidiaries

| Sl. No. | COAL BASED (Owned by NTPC) | STATE | COMMISSIONED CAPACITY(MW) | Year of Commissioning (1st Unit) |
|-----------------------|----------------------------|--------------|---------------------------|----------------------------------|
| 1. | Durgapur | West Bengal | 120 | 2009 |
| 2. | Rourkela | Orissa | 120 | 2009 |
| 3. | Bhilai | Chhattisgarh | 574 | 2008 |
| 4. | Kanti | Bihar | 610 | 2013 |
| 5. | IGSTPP, Jhajjar | Haryana | 1,500 | 2010 |
| 6. | Vallur | Tamil Nadu | 1,500 | 2012 |
| 7. | Nabinagar-BRBCL | Bihar | 500 | 2016 |
| Total Capacity | | | 4,924 | |

Gas Based Power Stations

Given Below is the List of NTPC's Gas Based Projects

| Sl. No. | GAS BASED (Owned by JVs/Subsidiaries) | STATE | COMMISSIONED CAPACITY(MW) | Year of Commissioning (1st Unit) |
|-----------------------|------------------------------------------|---------------|------------------------------|----------------------------------------|
| 1. | Anta | Rajasthan | 419 | 1989 |
| 2. | Auraiya | Uttar Pradesh | 663 | 1989 |
| 3. | Kawas | Gujarat | 656 | 1992 |
| 4. | Dadri | Uttar Pradesh | 830 | 1992 |
| 5. | Jhanor-Gandhar | Gujarat | 657 | 1994 |
| 6. | Rajiv Gandhi CCPP Kayamkulam | Kerala | 360 | 1998 |
| 7. | Faridabad | Haryana | 432 | 1999 |
| Total Capacity | | | 4,017 | |

Given Below is the List of NTPC's Gas Based Joint Ventures/Subsidiaries

| Sl. No. | GAS BASED (Owned by JVs/Subsidiaries) | STATE | COMMISSIONED CAPACITY(MW) | Year of Commissioning (1st Unit) |
|-----------------------|------------------------------------------|-------------|------------------------------|----------------------------------------|
| 1. | Ratnagiri Gas and Power Pvt. Ltd. | Maharashtra | 1,967 | 2006 |
| Total Capacity | | | 1,967 | |

Hydro Based Power Projects

Given Below is the List of NTPC's Hydro Based Power Projects

| Sl. No. | HYDRO BASED | STATE | COMMISSIONED CAPACITY(MW) | Year of Commissioning (1st Unit) |
|-----------------------|-------------|------------------|------------------------------|----------------------------------------|
| 1. | Koldam | Himachal Pradesh | 800 | 2015 |
| Total Capacity | | | 800 | |

Wind Energy Based Power Projects

Given Below is the List of NTPC's Wind Energy Based Power Projects

| Sl. No. | WIND ENERGY BASED | STATE | COMMISSIONED CAPACITY(MW) | Year of Commissioning (1st Unit) |
|-----------------------|-------------------|---------|------------------------------|----------------------------------------|
| 1. | Rojmal | Gujarat | 50 | 2017 |
| Total Capacity | | | 50 | |

Solar Based Power Projects

Given Below is the List of NTPC's Solar Based Projects

| Sl. No. | SOLAR BASED | STATE | COMMISSIONED CAPACITY(MW) | Year of Commissioning (1st Unit) |
|---------|--------------------------------|--------------------------|---------------------------|----------------------------------|
| 1. | Dadri Solar PV | Uttar Pradesh | 5 | 2013 |
| 2. | Port Blair Solar PV | Andaman & Nicobar Island | 5 | 2013 |
| 3. | Ramagundam Solar PV (Phase -I) | Telangana | 10 | 2014 |
| 4. | TalcherKaniha Solar PV | Odisha | 10 | 2014 |
| 5. | Faridabad Solar PV | Haryana | 5 | NA |
| 6. | Unchahar Solar PV | Uttar Pradesh | 10 | NA |
| 7. | Rajgarh Solar PV | Madhya Pradesh | 50 | 2014 |
| 8. | Singrauli Solar PV | Uttar Pradesh | 15 | 2015 |
| 9. | Ananthapuram Solar PV | Andhra Pradesh | 250 | NA |
| 10. | Bhadla-Solar | Rajasthan | 260 | 2017 |
| 11. | Mandsaur-Solar PV | Madhya Pradesh | 250 | 2017 |
| | | Total Capacity | 870 | |

Given Below is the List of NTPC Projects Currently Under Implementation

| Sl. No. | PROJECT | STATE | ENERGY (COAL/ HYDRO) | APPROVED CAPACITY (MW) |
|---------|--------------------------------------|----------------|-----------------------|------------------------|
| 1. | Barh I | Bihar | Coal | 1,980 |
| 2. | Bongaigaon | Assam | Coal | 250 |
| 3. | Darlipali | Odisha | Coal | 1,600 |
| 4. | Gadarwara | Madhya Pradesh | Coal | 1,600 |
| 5. | Khargone | Madhya Pradesh | Coal | 1,320 |
| 6. | Kudgi | Karnataka | Coal | 800 |
| 7. | Lara | Chhattisgarh | Coal | 1,600 |
| 8. | North Karanpura | Jharkhand | Coal | 1,980 |
| 9. | Solapur | Maharashtra | Coal | 660 |
| 10. | Tanda-II | Uttar Pradesh | Coal | 1,320 |
| 11. | Telangana | Telangana | Coal | 1,600 |
| 12. | TapovanVishnugad | Uttarakhand | Hydro | 520 |
| 13. | Singrauli CW Discharge (Small Hydro) | Uttar Pradesh | Hydro | 8 |
| 14. | LataTapovan | Uttarakhand | Hydro | 171 |
| 15. | Rammam | West Bengal | Hydro | 120 |
| | | | Total Capacity | 15,529 |

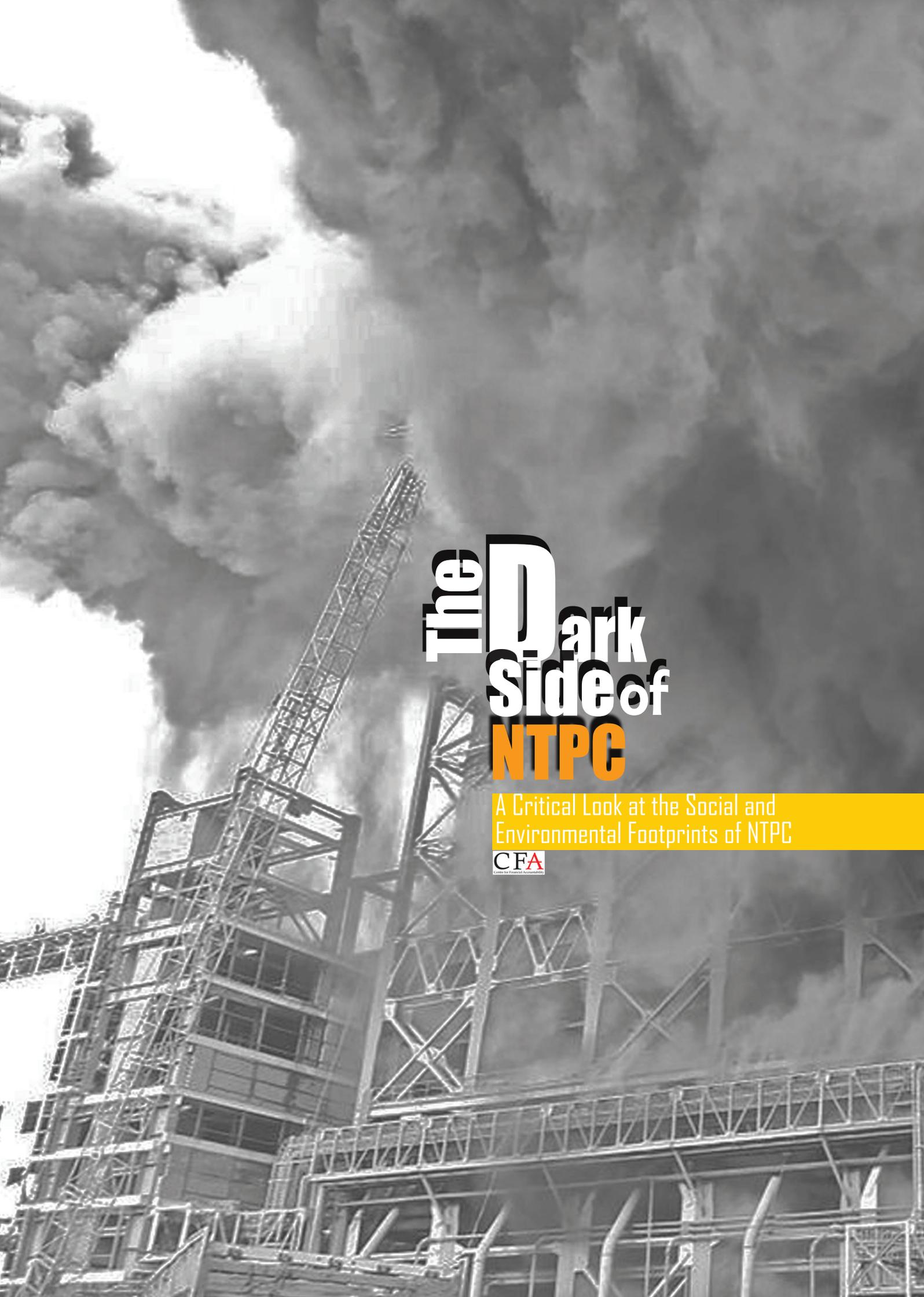
Given Below is the List of NTPC Joint Ventures and Subsidiaries Projects Currently Under Implementation

| Sl. No. | PROJECT | STATE | ENERGY (COAL/ HYDRO) | APPROVED CAPACITY (MW) |
|---------|-----------------|---------------|-------------------------|---------------------------|
| 1. | Meja | Uttar Pradesh | Coal | 1,320 |
| 2. | Nabinagar-BRBCL | Bihar | Coal | 500 |
| 3. | Nabinagar-BSEB | Bihar | Coal | 1,980 |
| 4. | Rourkela-NSPCL | Odisha | Coal | 250 |
| 5. | Durgapur-NSPCL | West Bengal | Coal | 40 |
| 6. | BIFPCL | Khulna | Coal | 1,320 |
| | | | Total Capacity | 15,529 |

Additionally, NTPC had signed a MoU with Govt. of Chhattisgarh to set up a Geothermal Power Plant in Tattapani area of Balrampur district in Chhattisgarh. Feasibility studies in association with the Geological Survey of India are in progress. NTPC had also formed a joint venture with Nuclear Power Corporation of India Ltd. (NPCIL) in 2011 by the name of AnushaktiVidhyut Nigam Limited (ASHVINI) to set up nuclear power projects in India, but so far any power plant has not yet materialized through this joint venture.

Coal Mining Sites of NTPC

| Sl. No. | Name of Project | Location | Type |
|---------|-------------------------------------|-----------------------|---------------|
| 1. | Pakri Barwadih Coal Mining Project | Hazaribagh, Jharkhand | NTPC Owned |
| 2. | Chatti-Bariatu Coal Mining Project | Hazaribagh, Jharkhand | NTPC Owned |
| 3. | Kerandari Coal Mining Project | Hazaribagh, Jharkhand | NTPC Owned |
| 4. | Talaipalli Coal Mining Project | Raigarh, Chhattisgarh | NTPC Owned |
| 5. | Dulanga Coal Mining Project | Sundargarh, Odisha | NTPC Owned |
| 6. | Banai Coal Mining Project | Raigarh, Chhattisgarh | NTPC Owned |
| 7. | Bhalumunda Coal Mining Project | Raigarh, Chhattisgarh | NTPC Owned |
| 8. | Mandakini-B Coal Mining Project | Angul, Odisha | NTPC Owned |
| 9. | Banhardih Coal Mining Project | Latehar, Jharkhand | Joint Venture |
| 10. | Kudanali-Laburi Coal Mining Project | Angul, Odisha | Joint Venture |



The Dark Side of NTPC

A Critical Look at the Social and
Environmental Footprints of NTPC

CFA
Center for Financial Accountability