

Annexures

Assessing Worker and Community Dependence on Thermal Power Plants A Case Study

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Annexure 1: Survey Questionnaires

A.1.1 Permanent workers

1. Interview information (to be written by note taker)

- A. Interviewer name:
- B. Interview date:
- C. Interview start time:
- D. Interview end time:

2. Respondent information

- A. Name:
- B. Telephone no (Instruction – If not available, mention NA):
- C. Age:
- D. Sex (Instruction – Do not ask. Fill based on observation):
- E. Education:
- F. Caste (Instruction – Do not push if the respondent is hesitant in answering this):

3. Employment details - responsibilities and benefits

- A. What are your responsibilities in the power plant?
- B. How long have you been working at this plant? Can you also describe your past job experience? (Probe: List and location of power plants and promotions)
- C. What facilities are provided to you by the power plant? (Probe: Residential unit, school for children, medical benefits, drivers, and government vehicles).
- D. How are technical staff selected and hired? What are the qualifications? Are there any exceptions to this? (Probe: Compensatory hires at clerical staff level)
- E. Did the power plant conduct any training programmes for the staff? (Probe: Different training programmes for various workers and frequency of such programmes)
- F. How are these trainings provided? By whom?

4. Details about contractual workers

- A. How many formal staff does the power plant currently employ? Of these, how many are women?
- B. How many labourers does the plant employ? How many of them are women?

- C. How are labourers hired? (Probe: Contractors, labour adda, experience/ qualifications)
- D. What are the benefits of hiring through contractors? (Probe: Any disadvantages)
- E. For which operations of power plants are labourers mostly hired? What work do women labourers do?
- F. Which of these are high health and safety risks?
- G. Are any training programmes undertaken for labourers?
- H. Are labourers provided with any benefits by the power plant? (Probe: Medical insurance, treatment for family members, education, ration, provisions of water, and electricity)
- I. How do labourers manage their housing? (Probe: Support offered by the power plant)

5. Impact of unit closure¹

Unit X closed down in 20xx, and Unit Y only operates sometimes. However, unit Z has come up since January 20yy:

- A. How did it affect your job assignment? (probe: Job assignments of other managerial staff, relocation to other thermal power plants, or reassignment to some other role within the power plant)
- B. What happened to the labourers employed in these units? (Probe: other jobs, migration, resistance to plant closure)
- C. Was any support provided to the labourers? (Probe: Reskilling and helping them avail alternative job opportunities or letters of recommendation)
- D. What other support did the labourers need that the power plant could not provide?
- E. How will repurposing affect the current staff's jobs? (Probe: Reskill, early retirement benefit and relocation)

6. Closing questions

- A. Would you be able to connect us with any of these people (Instruction – Insist on meeting new people personally through this person; if not feasible, take their numbers):
 - a. Colleagues in the coal handling division
 - b. Colleagues in the Human Resources
 - c. Contractors

¹ The sampled plant had seen a Unit closure approximately five years ago. Questions on the impact of unit closure were expected to help draw parallels between this and plant repurposing or decommissioning. However, during debriefs, we did not significantly explore these questions because (i) the closure of a unit is vastly different in terms of its impact as compared to a plant, especially when thinking of worker reabsorption, (ii) the significant time difference between the closure and the survey impacted both availability of relevant respondents and the risk of a recollection bias.

A.1.2. Contractual workers (formal and informal)

1. Interview information (to be written by note taker)

- A. Interviewer name:
- B. Interview date:
- C. Interview start time:
- D. Interview end time:

2. Respondent information

- A. Name:
- B. Telephone no (Instruction – If not available, mention NA):
- C. Age:
- D. Sex (Instruction – Do not ask. Fill based on observation):
- E. Education:
- F. Caste (Instruction – Do not push if the respondent is hesitant in answering this):

3. Employment details - responsibilities and benefits

- A. What are your responsibilities in the power plant?
- B. How long have you been working at the plant? Can you also describe your past job experience? (Probe: List and location of power plants and promotions)
- C. What facilities are provided to you by the power plant? (Probe: Residential unit, school for children, medical benefits, drivers, government vehicles).
- D. How are technical staff selected and hired? What are the qualifications? Are there any exceptions to this? (Probe: Compensatory hires at clerical staff level)
- E. Does the power plant conduct any training programmes for its staff? (Probe: Different training programmes for various workers and frequency of such programmes)
- F. How are these trainings provided? By whom?

4. Details about informal workers

- A. How many formal staff does the power plant currently employ? Of these, how many are women?
- B. How many labourers does the plant employ? How many are women?
- C. How are labourers hired? (Probe: Contractors, labour adda, experience/ qualifications)
- D. What are the benefits of hiring through contractors? (Probe: Any disadvantages)
- E. For which operations of power plants are labourers mostly hired? What work do women labourers do?
- F. Which of these are high health and safety risks?
- G. Are any training programmes undertaken for labourers?
- H. Are labourers provided with any benefits by the power plant? (Probe: Medical insurance, treatment for family members, education, ration, provisions of water and Electricity)

- I. How do labourers manage their housing? (Probe: Support offered by the power plant)

5. Impact of unit closure²

Unit X closed down in 20xx, and Unit Y only operates sometimes. However, Unit Z has come up since January 20yy:

- A. How did it affect your job assignment? (probe: Job assignments of other managerial staff, relocation to other thermal power plants and reassignment to some other role within the power plant)
- B. What happened to the labourers employed in these units? (Probe: Other jobs, migration and resistance to plant closure)
- C. Was any support provided to the labourers? (Probe: Reskilling and helping them avail alternative job opportunities or letters of recommendation)
- D. What other support could the labourers need that the power plant cannot provide?
- E. How will repurposing affect the current staff's jobs? (Probe: Reskilling, early retirement benefit and relocation)
- F. How will repurposing affect the jobs of the labourers? (Probe: Reskilling)

6. Closing questions

- A. Would you be able to connect us with any of these people (Instruction – Insist on meeting new people personally through this person; if not feasible, take their numbers. Do you suggest any other person):
 - a. Colleagues in the coal handling division
 - b. Colleagues in the Human Resources
 - c. Contractors

A.1.3. Induced workers

(Questions 1 and 2 remain the same as above)

3. Income and occupation details

- A. Why and when did you relocate to this plant?
- B. When did you start this business/employment? Do you have any other job or business in addition to this?
- C. What support did you receive to start the business? (Probe: SHG, other loans, and government schemes)
- D. What is your average monthly income? Are there seasons when the income is significantly higher or lower?
- E. How do you meet your household expenditures in periods of low income? (Probe: Alternative employment, loans and borrowings, and relocation to native town opportunities taken up during this period)

² ibid

4. Power plant-related questions

- A. How dependent is your job/ business on the power plant? (Probe: Customers: local community/labourers demand from the power plant, and provision of road and electricity)
- B. Did you notice any change in your income with the unit closure? How did you manage?
- C. What support would you have ideally needed? From whom? (Probe: Government schemes, MLA/ gram panchayat, SHGs)

5. Alternate opportunities

- A. Did you or your family ever work at the power plant? If yes, when and what work? If no, why not?
- B. Would you recommend working at the power plant to anyone you know? Why or why not?
- C. What other work opportunities exist for you? (Probe: In this area, in the nearest town, or elsewhere: agriculture, urban centre, native town)
- D. What support would you need to access these work opportunities? From whom? (Probe: Access to loans and borrowing, government schemes, thermal power plant)
- E. Would you need any training to work at these jobs? Where can you access these?
- F. Are you aware of any centres that offer these training sessions? Government or private? (Probe: Type of training: digital skills, language skills, financial literacy)
- G. Do you know anyone here with a job or business who has moved? If so, why did they move?

6. Socio-economic dependence

- A. What are some of the most significant issues in the area?
- B. What support does the power plant provide in addition to regular business and income? (Probe: Schools, healthcare, donations, ration, electricity, water supply, roads)
- C. Does your family use the school and hospital facilities in the vicinity? (probe: Quality of service)
- D. Whom do you approach for your issues related to these services? (Probe: Workers' union, local Zilla Parishad head, others)
- E. Are there any other issues you face in your daily work? What are they? Who do you approach (Probe: Union, local government, or thermal power plant authorities)
- F. Do you claim/receive any social welfare schemes from the government? Which ones?
- G. Are there any schemes you would like to access but have been unable to? Why not?

7. Closing questions

- A. Would you be able to connect us with any of these people (Instruction – Insist on meeting new people personally through this person; if not feasible, take their numbers):
 - a. Contractors
 - b. Labourers working in the power plant

A.1.4. Local community

(Questions 1 and 2 remain the same as above)

3. General questions

- A. How long have you been living in this area? What do you do for a living?
- B. What are some of the most significant issues faced by this locality? What is the source of this issue?
- C. Who can you approach regarding any of these issues?
- D. Is the neighbourhood benefiting in any way due to TPP? (Probe: Increased economic activity, rents, markets, roads, electricity, or hospitals).
- E. Does the neighbourhood face any issues due to the presence of TPP? (Probe: Pollution of air, water, or rampant unplanned industrialisation)

4. About informal workers and the presence of TPP

- A. Do you know anyone who works at the power plant? Can you describe their role?
- B. Is there a labour adda? What labour do they supply?
- C. Are the worker's unions or women's groups active in the town? Do you hear about any of their activities?
- D. Is there a training or skill development institute nearby? What do they train people on? Who goes there?

5. Impact of closure of TPP units³

- A. Why are so many houses abandoned in the area? (Probe: who lived there, why did they leave, and where did you go)
- B. How has this abandonment of those houses affected your town? (Probe: population, impact on local business in terms of revenue generation/sales, job market)
- C. Has the availability of utilities (water, electricity, and sanitation) changed in your area since then?

6. Socio-economic dependencies

- A. Where do you access healthcare? (Probe: private or government and why)
- B. Do you know of a government healthcare facility close by? Who accesses those facilities?
- C. If you have children, where do they go to school? (Probe: public or private and why)
- D. Do you have any questions for us?

³ ibid

A.1.5. Contractors

(Questions 1 and 2 remain the same as above)

3. Engagement with the power plant

- A. What are your roles and responsibilities at the power plant?
- B. Who do you interact with at the power plant for these responsibilities? (Probe: Managerial staff, technical staff, human resource department)
- C. Since how long have you been contracting workers at the power plant?
- D. What do your workers do at the power plant?
- E. How did you identify this power plant?
- F. Are you also a contractor for anyone else? (Probe: Other factories in the area, any other jobs)

4. Relationship with the workers

- A. Currently, how many workers have you contracted? How do you contract them? (Probe: Written or verbal communication)
- B. What is the contract duration? Is it possible to extend the contract?
- C. How many of these are women? For what kind of work do you contract women?
- D. How do you locate the workers? (Probe: Connections with their hometown, labour adda, reference from existing workers, advertisements)
- E. Can you provide details about the adda's operation and how it relates to your work? (Probe: Number of labourers, type of work, in which industries, and average daily wage)
- F. How are wages for workers decided? (Probe: Nature of work, minimum wage of the state, wage rate at the labour adda)
- G. Is there a difference between wages for men and women workers? If yes, why?
- H. Do workers negotiate their wages? How? (Probe: Role of the contractors, discussions with the power plant managers/ human resource manager)

5. Support offered by the power plant

- A. What support does the power plant offer to workers in addition to the wages? (Probe: Healthcare for self, family members, education for children, ration or training for other jobs)?
- B. Are there any government schemes in the area that workers benefit from?
- C. Are any of these benefits extended to you? (Probe: Healthcare, education, housing)
- D. Are the workers trained before working at the power plant? Are these skills also helpful for working in other industries? (Probe: For which roles, duration, and who bears its costs)
- E. If workers were to find work elsewhere, how do they go about it? (Probe: Contractor, labour adda, reskilling platform)

6. Impact of Unit closure⁴

Unit X closed down in 20xx, and Unit Y only operates sometimes. However, Unit Z has come up since January 20yy:

- A. Why are there empty houses in the area? (Probe: Who lived there, why did they leave, and where did they go?)
- B. How did the unit closure affect you or other contractors?
- C. How did you cope? Did you receive any support? (Probe: Support from the power plant, local administration, money lenders, and family members)
- D. How is it communicated to the worker that they need to leave? (Probe: Notice period, severance pay)
- E. Did they receive any support in finding other jobs? From whom?
- F. What support do you think they could have received? From whom? (Probe: Power plant: recommendation letter, contractor: reskilling, finding them other jobs in the power plant, finding them other jobs elsewhere, government, worker union)

7. Role in grievance redressal

- A. What are some of the main issues you face? (Probe: Worker non-payment, no-show of workers, emergency healthcare for workers, a threat to your own safety)
- B. What support would you need to deal with these issues? From whom?
- C. Is there a worker union? Do you interact with them? Please elaborate with examples.
- D. What sort of issues do workers come to you with?
- E. What support do you need to address any of these issues?

8. Closing questions

- A. Would you be able to connect us with any of these people (Instruction – Insist on meeting new people personally through this person; if not feasible, take their numbers):
 - a. Co-contractors
 - b. Workers who lost their jobs after the closure of Unit X

A.1.6. Schools and Hospitals

(Questions 1 and 2 remain the same as above)

3. Employee information

- A. How long have you been working here?
- B. Does anyone in your family work in the TPP? (Probe: Managerial, technical, contractual capacity) (Relevant for employees in private schools and clinics)

4. Operation of the institution - Schools

- A. When was the institution established?

⁴ ibid

- B. Until which class (*kaksha*) does the school operate? What is the medium of instruction? (Probe: Medium of instruction in other schools in the vicinity)
- C. What kind of jobs are the parents of the students engaged in? Are there other schools in the town catering to students from different economic backgrounds?
- D. What are the significant streams of funding for the school? How are the decisions regarding the dispersal of funds taken? (Mainly applicable to private schools).

5. Ascertaining their centrality to the community - Schools

- A. What are some of the issues that the school faces and how are they addressed? (Probe: does TPP help in any way)
- B. Does the TPP undertake any social activities to facilitate the school's functioning? (Probe: Funding repair works, gardening, and books)
- C. Does the school have any sort of affiliation with the TPP? (Probe: Direct admissions to children of the staff, formal or informal workers)
- D. In what ways does the school help the community develop?
- E. Are there any unions or associations here? If yes, what do these associations do?

6. Impact of closure on schools⁵

- A. Has there been any changes in the rate of enrolment and dropout rate since the closure of units at the TPP?
- B. Has there been a change in the level of local government support since the closure of the plant unit?

7. Operation of the institution - Hospital

- A. When was the institution established?
- B. Do you have adjoining testing/ scanning centres at the hospital? If not, how far are the nearest testing/scanning centres?
- C. What is the economic background of patients that come here?
- D. What is the nature of cases that the hospitals receive? (probe: Accident cases from the TPP)
- E. What are the significant streams of funding for the hospitals? How are the decisions regarding the dispersal of funds taken? (Mainly applicable to private dispensaries/clinics)

8. Ascertaining their centrality to the community - Hospital

- A. Does the hospital face any issues with its day-to-day functioning? If yes, then how is it resolved by the authorities (Probe: Does TPP play any role)
- B. Does the TPP undertake any social activities to facilitate the functioning of the hospital in any way? (Probe: donations of funds or equipment)

⁵ *ibid*

9. Impact of closure on hospitals⁶

- A. Has there been a change in the patient load and the nature of cases (Probe: fall in general check-up)?
- B. Has there been a change in the level of local government support since the closure of plant units?
- C. Are there any unions or associations here? If yes, what do these associations do?

⁶ ibid

Annexure 2: Sample Anonymised Framework for Analysis

Table A2: Detailed components of the framework used for analysis

Particulars		Permanent workers	Formal contractual workers	Informal contractual workers	Contractors	Induced workers (male)	Induced workers (female)	Local community (male)	Local community (female)
Dependence	Nature of employment								
	Income								
	Access to education								
	Access to healthcare								
	Access to other public utilities: accommodation, water, electricity and roads)								
Vulnerability	Supplemental income								
	Employment location								
	Access to formal skilling								
	Termination clause for employment at TPP								
	TPP/company support for upskilling								
	Continued access to healthcare and education in the absence of TPP								

Source: Authors' compilation

