

Safeguarding local communities against Industrial Development:

A case study of Orissa

I Bhamini Rathor



SPRF.IN

08
22



Discussion Paper

TABLE OF CONTENTS

1. Abstract	03
2. Introduction and Legal Provision	04
3. A Case Study of Orissa: Distress in Hemgir, Sundargarh	05
4. Causes of Developmental Repercussions	07
5. Conclusion	08
6. REFERENCES	09

Cover Image credits: pixabay.com | Ankit Bhattacharyya

If you have any suggestions, or would like to contribute,
please write to us at contact@sprf.in

© Social and Political Research Foundation™

AUGUST 2022

Discussion Paper

Safeguarding local communities against Industrial Development:

A case study of Orissa

I Bhamini Rathor

ABSTRACT

Rural development projects have largely centred around the establishment of industries, such as steel plants and oil refineries, or industrial activities like mining. In the past, the coverage and scope of such projects have seen consistent growth. Development projects are also seen to provide job opportunities for the local people, thereby promising financial growth. Though financial security is crucial in creating livelihoods, locally available resources are also critical for fulfilling rural communities' basic food and water needs. However, the negative ecological impact of development displaces local communities in the region and deprives them of their natural habitat and livelihood. This paper looks at the case of the Hemgir block of Sundargarh, Orissa, to study the post-development impact of projects on the local livelihoods. The paper highlights how industrial development is not an adequately inclusive approach to the local communities.

Keywords: Industrial Development, Sundargarh, Mining, Local Livelihoods, Rehabilitation, District Mineral Foundation

INTRODUCTION AND LEGAL PROVISION

Development refers to a multidimensional undertaking to achieve a higher quality of life for all people. However, the term 'development' has different connotations that vary with context (Kent, 1982). In the 1950s, the meaning was limited to 'economic and social progress.' Today, it encompasses sustainable development that recognises poverty and inequality to create economic growth that promotes social inclusion (United Nations, 2015). Development remains a critical factor in modernisation and economic growth in developing countries as it inevitably leads to the creation of infrastructure services and employment opportunities that improve people's lives. However, providing financial opportunities does not always guarantee a holistic impact as, in some cases, it also leads to the displacement of livelihoods of many people (Kaushal, 2009). In India, Five-Year Plans were followed as a model for development post-independence. These plans focused on economic growth by establishing heavy infrastructure and building dams, factories, mining operations, etc. (Mohanty, 2005). Industrial development brought a prosperous perception of poverty reduction and higher living standards. In contrast, it negatively affected the local population (Chutia & Bhuyan, 2017).

Large-scale developmental projects usually require the availability of abundant natural resources. These resources are often found in the country's most backwards regions, inhabited by tribal or rural populations (Negi & Ganguly, 2010). More than 50 million people in India have been displaced due to developmental projects, of which over 40% are tribal populations (ibid.). For instance, the Sardar Sarovar Dam project has submerged 255 villages across Madhya Pradesh, Maharashtra, and Gujarat. The project has displaced over 2.5 lakh people, of which 50% are tribals, who still suffer from a lack of amenities and economic opportunities in rehabilitation and resettlement sites (Parsai, 2017). These projects force locals to deal with disproportionate development costs (Negi & Ganguly, 2010).

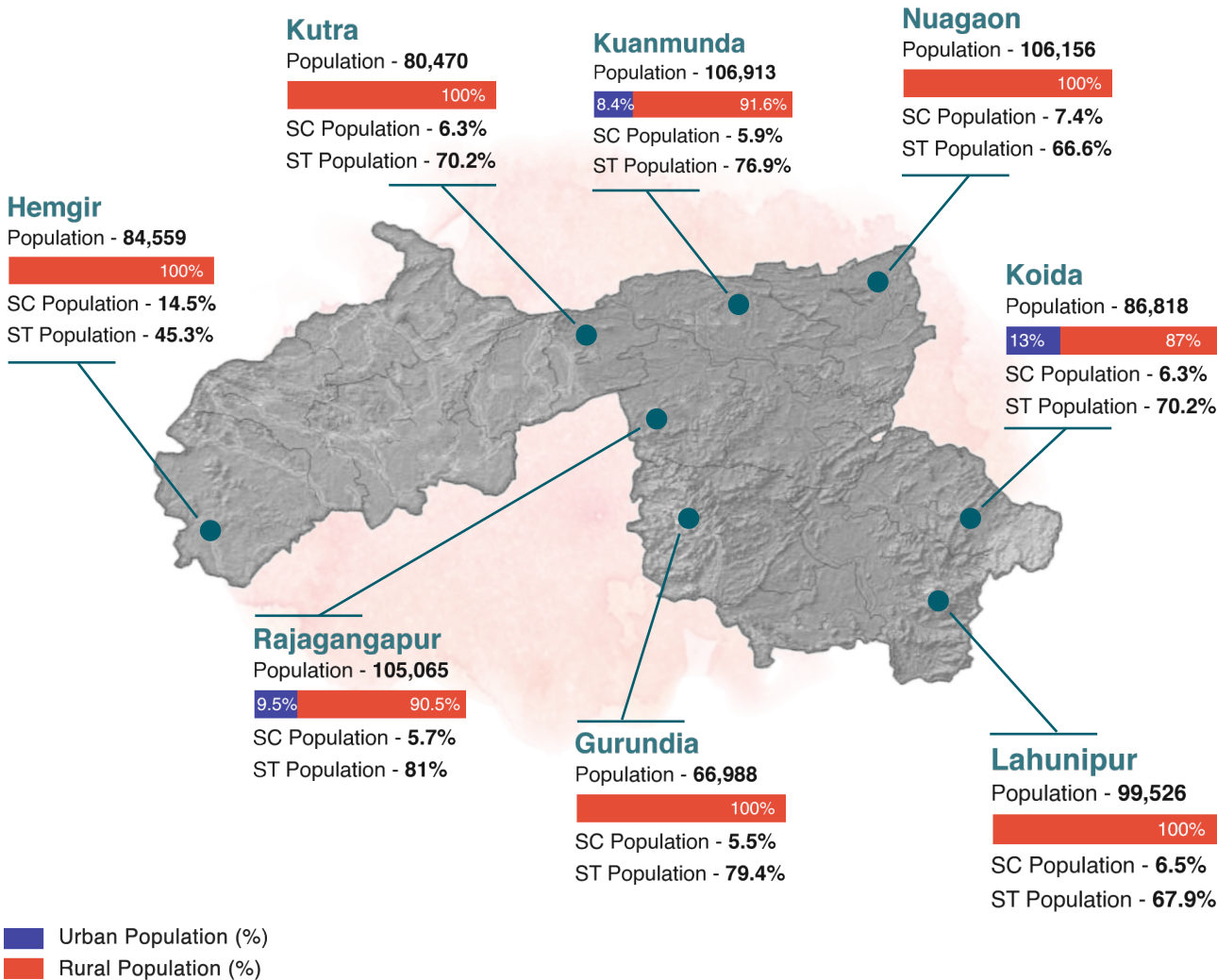
A crucial aspect of developmental goals is land acquisition for projects. In India, the Land Acquisition Act [LAA] of 1894 empowers the government to acquire land with or without the owner's consent (Balaji, 2016). The National Policy for Resettlement and Rehabilitation of project-affected families was introduced in 2003 to protect owners' rights against displacement by development activities. It addressed the displacement of indigenous people by large-scale development projects implemented throughout the country after independence (Challa, 2013). The policy was revised in 2007 and again in 2011, resulting in the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Policy, 2013 (ibid.). Under this policy, the project owner must obtain the consent of at least 80% of the affected families before acquisition. This creates a negotiating space between the land and project owners, ensures adequate compensation for the loss of land, and requires the project owners to resettle and rehabilitate the affected families (ibid.).

As a result of reforms, private sector industrialisation has increased, and the state's role as industrial owner and location regulator has substantially diminished (Kniivilä, 2007). Despite legal provisions, growing regional inequality has produced unfavourable outputs for local growth prospects. Extensive mining has been taking place for decades in the Hemgir block of Sundargarh, Orissa. It has resulted in a loss of agricultural lands, a decline in forest cover, and the locals' dependence on the unsustainable mining economy for livelihood (Oraon, 2012). This paper assesses the approach to industrial development and highlights its impact on Hemgir while examining the causes of disproportionate growth dynamics.

A CASE STUDY OF ORISSA: DISTRESS IN HEMGIR, SUNDARGARH

Orissa is one of the key states in India where development projects have been taking place for decades. Sundargarh is the mining district in Orissa with vast reserves of coal and manganese, resulting in coal, limestone, and manganese mining in 17 blocks. Nearly 3-5 million people have been uprooted since 1950 in Orissa, more than 50% of which are tribals (de Haan & Dubey, A., 2005). For example, in Sundargarh, 100% of the population in mining-affected areas of Kutra, Lahunipada, Nuangaon, Hemgir, and Gurundia is tribal.

Population in mining-affected areas, Sundargarh



Source: Centre for Science and Environment [CSE] (2018)

Hemgir is one of the coal mining blocks in Ib valley, Sundargarh. Mahanadi Coalfields Limited [MCL] is the leading coal mining company in the region, with the third largest reserves in India, accounting for 22.3 billion tonnes (Biswal, 2021). MCL operates the Kulda

Open Cast Project [OCP], initiated in 2002 in Hemgir. The block lacks infrastructure and is inadequate for the growth of local communities (See Table). Due to dust particles from mining activities and lack of public health-care infrastructure, the region has prevalent pulmonary illnesses like tuberculosis, diarrhoea, and malaria. Of the 19 panchayats, 4 have been severely affected by mining activities. Out of a working population of 51%, 67% are primarily engaged in cultivation and agriculture practices (CSE, 2018).

Table: Infrastructure in Hemgir

Literacy (%)	Total	74.59
Diarrhoea and Dehydration (%)	Children 0-5 years	69.6
Malaria (%)	Children 0-5 years	30.4
Primary Healthcare Centers	Total	5
Anganwadi Centers	Total	214
Anganwadi Centers	With toilet facilities	87
Anganwadi Centers	With drinking water	90
School infrastructure (%)	Without tap water	96.24
School infrastructure (%)	Without electricity	75.27
Household piped water supply (%)	Total Coverage	39.6
Household with electricity supply (%)	Total Coverage	33.44

Source: CSE (2018)

Mining severely impacts the health of miners and people living in the vicinity of an open mine. Exposure to dust and toxins gives rise to various diseases affecting genetic makeup and life expectancy (Stewart, 2019). Years of mining in Hemgir have deteriorated the human capital¹. Sundargarh also has a TB prevalence of 280 per one lakh people in rural areas, much higher than the national average of 195 per one lakh people (CSE, 2018). The village is also covered in black coal dust due to chemicals like crystalline silica (Panigrahi, 2022).

Traditionally, indigenous peoples follow sustainable living based on indigenous knowledge and locally available resources (Oraon, 2012). In Hemgir, indigenous people rely mainly on natural² resources for shelter, food, and income. But mining contributes to erosion, sinkholes, deforestation, overuse of water resources, dammed rivers and ponded waters, wastewater disposal issues, acid mine drainage, and contamination of soil and ground and surface water. Such ecological damage affects communities that rely on land-related practices for sustenance (Stewart, 2019). The black, tar-coated paddy grown in Hemgir has ended the locals' dependence on agriculture (Panigrahi, 2022). Every day, more than 2,000 trucks pass through the Hemgir block carrying coal from the Kulga open pit mine, kicking up coal dust particles that have altered the morphology of the region, thereby affecting natural capital (Biswal, 2021). This has strained farmer incomes. Due to the discolouration, the paddy crop now sells for INR 5-7 per kg instead of INR 11-13 (ibid.). This has exposed tribal communities like Oraons and Gonds to further impoverishment, forcing them to seek alternative sources of income (Challa, 2013).

¹ Human capital includes the skills, knowledge, labor ability, and good health that collectively allow people to pursue livelihood.

² Natural capital consists of the natural resource stocks from which resource flows and sources are derived. These natural resource stocks include such elements as nutrient cycling and erosion protection, both of which are useful for maintaining livelihood.

The environmental conditions in the village have also worsened, with coal pollution from Kulda open-cast mine being the main contributor. The effect has trickled down to infrastructure affecting the physical capital³ of the village. Groundwater is drying up, and noise and air pollution levels are distressing. Schools also struggle to function as students complain that coal dust pollution has become unbearable (Biswal, 2021). The villagers have filed court complaints and protested against the pollution, but no strict action has been taken (ibid.). In January 2021, over 5,000 locals, including students, protested against coal transportation to protect their right to clean air and water (Mohanty, 2021). Orissa Human Rights Commission banned the movement of trucks providing relief to the villagers, but it was short-lived before Orissa High Court petitioned through MCL (ibid.). The villagers continue to protest with no resolve as MCL expands its project in the region.

Mining in Hemgir has affected the soil composition and severely damaged the groundwater table. As a result, tribal communities like Oraons and Gonds have had to shift away from traditional lands and agricultural practices with a slim hope of revival (Challa, 2013). This leads to marginalisation as many individuals cannot use their skills or knowledge upon relocation (ibid.). Rehabilitation dismantles

CAUSES OF DEVELOPMENTAL REPERCUSSIONS

Land acquisition began in the Sundargarh district in 1987. Despite the prevalence of a comprehensive Rehabilitation and Resettlement [R&R] Policy, the conditions of the displaced communities have not improved. Inadequate, inappropriate, or nonexistent compensation remains the main challenge for displaced families (Bhattacharya et al., 2013). In Hemgir, land acquisition took place in 1987 by MCL, and proper compensation has still not been provided to most villagers (Biswal, 2021). According to the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Policy, 2013, it is the project owners' sole responsibility to fulfil basic compensation requirements and facilitate rehabilitation and resettlement of the affected families. In Hemgir, MCL has been approached to meet the demands of the locals regarding compensation, employment, and rehabilitation and resettlement. Even though MCL started its initial coal mining operations in 2012, the demands in the Siarmal district in Hemgir are still unmet today (Government of Orissa, 2019). While the government cannot facilitate R&R, it can be gathered that even project owners cannot rehabilitate displaced persons (Garada, 2015).

Industrial development is significant to a country's economic growth and status. In the interest of economic development, governments often expose local communities to the challenge of displacement (Bhattacharya et al., 2013). The condition of Hemgir is not sudden. The villagers sought legal intervention in 2016 when the High Court of Orissa ordered the building of a separate corridor for the coal trucks. However, no special corridor has been built (Biswal, 2021). Over the years, people close to the mine have repeatedly requested corrective action from MCL and district administration officials, but to no avail (Centre for Integrated, Rural and Tribal Development [CIRTD] & Centre for Policy Research [CPR]-Namati Environmental Justice Program, 2020).

Additionally, a complaint was made to the SPCB Regional Office regarding the dust pollution caused by the road transportation of coal. The issue was acknowledged and recommendations were made

3 Physical capital is the resources available to support viable livelihood. This may include clean water, adequate sanitation, and effective shelter. These items are often encompassed by basic infrastructure.

4 Social capital consists of the specific social resources that are necessary to pursue one's own unique livelihood. These can be fostered via establishment of networks, trusting relationships, and membership of formalized groups.

during a site inspection (CIRTD & CPR, 2020). Even after complaints from the locals, degradation of human and natural capital, and unresolved negligence and non-compliance reports, MCL received clearance from Environmental Impact Assessment [EIA] in the name of national interest but sanctioned funds in District Mineral Foundation [DMF] (Biswal, 2021).

DMF funds are legally sanctioned funds in mineral-rich states for the welfare of mining-affected families. In recent times, DMF has received criticism over misplacement and misuse of funds in various states (Hindustan Times, 2022). In Orissa, these funds are diverted to urban areas and priority projects. For instance, the DMF funds are being used to construct an International Stadium in Rourkela. In 2020, these funds were used to purchase 25 cars for patrolling in non-mining affected areas (Kumar, 2021). In Hemgir, good road networks remain absent despite years of demand, pollution control measures are not adhered to, and school infrastructure remains an issue (ibid.). Rather than mitigating the issues faced by tribal communities in mining-affected areas, the state government has sanctioned funds under DMF for sound-proofing and air-conditioning schools located on the Raigarh-Sundargarh road (Biswal, 2021). This points to the conflict of priorities and interests between the locals and state authorities. Additionally, this indicates the challenge faced by collectors in distributing DMF funds in essential areas and, more crucially, the influence of politicians in fund

CONCLUSION

From the above discussion, it can be gathered that development projects are not focused on bringing about community development in the backwards or resource-rich regions of the country. Secondly, project owners, the central government, and the state government are insufficient stakeholders in balancing such development. Thirdly, development projects are focused on economic growth and are inadequate in achieving equitable development outcomes for all.

A revised developmental approach in these areas must cater to the needs of the locals and ensure sustainable livelihood. The government must play an active role in rehabilitating displaced persons (Challa, 2013). At the minimum, a monitoring body should be formed to guarantee basic necessities, including food, shelter, sanitation, water, and healthcare, upon resettlement. DMF funds should be monitored quarterly to ensure that they are spent for assisting and rehabilitating mining-affected families. Moreover, there is a need for a complete environmental and social assessment of a region before the approval of projects to safeguard indigenous livelihood practices and limit the effects of resettlement shock on a community. The establishment of developmental projects should align with regional developmental plans. Lastly, the state governments, along with DMF, should consider the long-term effects of projects to assess them vis-a-vis futuristic sustainable outcomes.

REFERENCES

- Balaji, N. (2016). Land Acquisition and Development Induced Displacement: India and International Legal Framework. *Indian Law Institute Law Review*. https://ili.ac.in/pdf/p6_balaji.pdf.
- Bhattacharya, P., Mal, S., Tripathy, S., Mandal, S., & Ghosh, B. (2013). Development Induced Displacement and Human Development through Industrialisation in India. *African Journal Of Geo-Sciences Research*, 1(3), 1-5. https://www.researchgate.net/publication/273385511_DEVELOPMENT-INDUCED_DISPLACEMENT_AND_HUMAN_DEVELOPMENT_THROUGH_INDUSTRIALISATION_IN_INDIA.
- Biswal, B. (2021, August 10). Mine games in Sundargarh, Odisha where coal mines are on an expansion mode despite flouting several rules. *Gaon Connection*. <https://en.gaonconnection.com/coal-mining-mines-chattisgarh-local-villagers-scheduled-tribes-crop-damage-health-exploitation-disparity-economy-energy/>.
- Challa, K. (2013). Development-Induced Displacement: Legal and Human Rights Perspectives. *Bharati Law Review*. <http://docs.manupatra.in/newsline/articles/Upload/93FB0A13-1002-4BBB-B48B-D4B308F0E438.pdf>.
- Chutia, N., & Bhuyan, A. (2017). Impact of Industry on Livelihood of Surrounding Rural Areas-A Review of Some Evidences. *Indian Journal Of Economics And Development*, 13(2), 219-228. <https://doi.org/10.5958/2322-0430.2017.00173.1>.
- Centre for Integrated, Rural and Tribal Development & Centre for Policy Research-Namati Environmental Justice Program. (2020). Closing the enforcement gap: Groundtruthing of environmental violations in Sundargarh, Odisha. <https://cprindia.org/wp-content/uploads/2021/12/Sundargarh-Report-for-Web-Version-Final-Revised.pdf>.
- Centre for Science and Environment. (2018). Indicative Plan District Mineral Foundation, Sundargarh, Orissa. <https://cdn.cseindia.org/userfiles/Sundargarh-Odisha.pdf>.
- de Haan, A., & Dubey, A. (2005). Poverty, Disparities, or the Development of Underdevelopment in Orissa. *Economic and Political Weekly*, 40(22/23), 2321–2329. <http://www.jstor.org/stable/4416712>.
- Garada, R. (2015). Development Project Caused Resettlement and Rehabilitation Policy: Overviews on Dam Projects in Orissa (India). *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, 20(3), 89-97. <https://www.iosrjournals.org/iosr-jhss/papers/Vol20-issue3/Version-7/L020378997.pdf>.
- Government of Orissa. (2019). Proceedings of Public hearing of M/s Mahanadi Coalfields Limited for Siarmal Open Cast Coal mining Project for production of 40 MTPA (Normative)/50 MTPA (Peak) in total project area of 2580.45 Ha. (ML area 2290.45 Ha.) in Basundhara Area of Sundargarh district. <http://environmentclearance.nic.in/writereaddata/Public%20Hearing/150220199LT740QSAx-VII.pdf>.
- Hindustan Times. (2022, May 1). Don't divert funds meant for mines-affected community: Odisha govt to collectors. *Hindustan Times*. <https://www.hindustantimes.com/cities/others/odisha-asks-collectors-not-to-divert-funds-meant-for-mining-affected-community-101651377860335.html>.
- Kaushal, N. (2009). Displacement: An Undesirable and unwanted Consequence on Development. *The Indian Journal Of Political Science*, 70(1), 77-89. <http://www.jstor.org/stable/41856497>.
- Kniivilä, M. (2007). Industrial development and economic growth: Implications for poverty reduction and income inequality. In United Nations Department of Social and Economic Affairs, *Indus-*

trial Development for the 21st Century: Sustainable Development Perspectives (295-332).

Kent, G. (1982). Meanings of Development. *Human Systems Management* 3(3). 188-194. <http://www2.hawaii.edu/~kent/MeaningsofDevelopment.pdf>.

Kumar, M. (2021, May 5). Odisha diverts DMF funds to urban areas as mining-affected communities suffer. *Mongabay*. <https://india.mongabay.com/2021/05/odisha-diverts-dmf-funds-to-urban-areas-as-mining-affected-communities-suffer/>.

Mohanty, B. (2005). Displacement and Rehabilitation of Tribal's. *Economic And Political Weekly*, 40(13), 1318-1320. <https://www.jstor.org/stable/4416394>.

Mohanty, D. (2021, March 23). School children in Orissa's Sundargarh district protest pollution by coal trucks. *Hindustan Times*. <https://www.hindustantimes.com/india-news/school-children-in-odisha-s-sundargarh-district-protest-pollution-by-coal-trucks-101616476974013.html>.

Negi, N., & Ganguly, S. (2010, December 5-9). Development projects vs. internally displaced population in India: a literature based appraisal [Conference Presentation]. ESF-UniBi-ZiF research conference, Germany. https://www.ssoar.info/ssoar/bitstream/handle/document/42201/ssoar-2011-singh_negi_et_al-Development_projects_vs_internally_displaced.pdf.

Oraon, V. (2012). Changing Patterns of Tribal Livelihoods: A case study in Sundargarh district, Odisha [Unpublished Master's Thesis]. National Institute of Technology Rourkela. http://ethesis.nitrkl.ac.in/3379/1/VIJAY_FINAL_REPORT_MAY_12TH.pdf.

Orissa Rehabilitation and Resettlement Policy, (2006). <http://govtpress.odisha.gov.in/pdf/2006/651.pdf>.

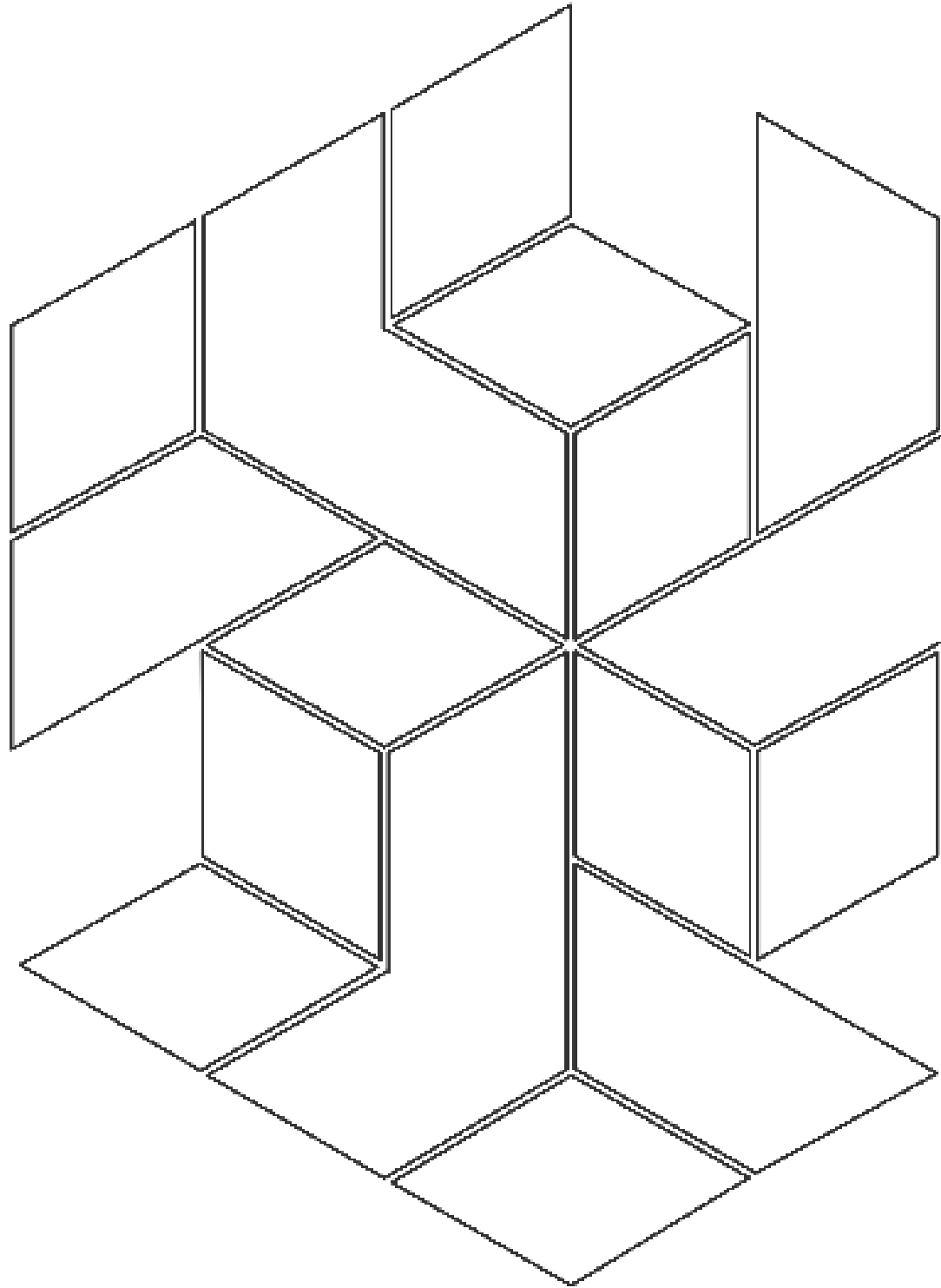
Parsai, G. (2017). Who Will Shatter the Conspiracy of Silence Around Those Displaced By the Sardar Sarovar Project? *The Wire*. <https://thewire.in/environment/sardar-sarovar-displacement-rehabilitation-narmada>.

Panigrahi, C. (2022, February 24). Black paddy, black lungs: How coal mining has wrought havoc in Odisha's Sundergarh. *Down To Earth*. <https://www.downtoearth.org.in/blog/mining/black-paddy-black-lungs-how-coal-mining-has-wrought-havoc-in-odisha-s-sundergarh-81685>.

Stewart, A. (2019). Mining is bad for health: a voyage of discovery. *Environmental Geochemistry and Health*, 42(4), 1153-1165. <https://doi.org/10.1007/s10653-019-00367-7>.

The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, (2013). <https://legislative.gov.in/sites/default/files/A2013-30.pdf>.

United Nations. (2015). Transforming our World: The 2030 Agenda for Sustainable Development. <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N15/291/89/PDF/N1529189.pdf?OpenElement>.



SPRF.IN