Beyond the Mines

The Tiered Economy of Coal and Its Local Dependence: A Report

Union Aid Abroad APHEDA
The global justice organisation of the Australian union movement

Dina Septi Utami

February 2026

Just Energy Transition in Coal Regions

The Innovations Regions for a Just Energy Transition project is jointly funded by the German Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMUKN) under the International Climate Initiative (IKI) and by the European Commission's Directorate-General for International Partnerships (DG INTPA) for the Just Energy Transition in Coal Regions Interregional Platform (JET-CR). The project is implemented by a consortium of organisations led by GIZ as Joint Project Coordinator and with the Climate Action Network (CAN), International Institute for Sustainable Development (IISD), International Labour Organisation (ILO), Wuppertal Institute für Klima, Umwelt, Energie GmbH, Solidarity Center, and Union Aid Abroad-APHEDA as implementing partners.

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On behalf of:

Federal Ministry
for the Environment, Climate Action,
Nature Conservation and Nuclear Safety

INTERNATIONAL CLIMATE INITIATIVE

of the Federal Republic of Germany

This publication was produced with the financial support of the International Climate Initiative of the German Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMUKN) under a Grant Agreement with GIZ. Its contents are the sole responsibility of their authors and do not necessarily reflect the views of BMUKN or GIZ.

Published by the Just Energy Transition for Coal Regions Knowledge Hub

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Union Aid Abroad-APHEDA is the global justice organisation of the Australian trade union movement. We work globally in partnership for the achievement of dignity at work, social justice, economic equality and the realisation of human rights. We work to achieve this through strong unions and social movements, sustainable development programs, global solidarity, and support at times of crisis.

Union Aid Abroad-APHEDA

Level 1, 365-375 Sussex St
Sydney NSW 2000
Australia

Tel: +61 (0) 2 264 9343
Website: apheda.org.au

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Written by Dina Septi Utami

Acknowledgements

The author and Union Aid Abroad-APHEDA gratefully acknowledge the support of KSPI (Konfederasi Serikat Pekerja Indonesia), KSBSI (Konfederasi Serikat Buruh Seluruh Indonesia), and KSPSI (Konfederasi Serikat Pekerja Seluruh Indonesia) for their assistance in facilitating data gathering for this research. Their support enabled access to workers, union representatives, and coal-dependent communities across the study locations. We also thank all research participants for their time and openness.

Executive Summary

Coal mining remains the economic backbone of many regions in Indonesia, shaping not only formal employment but a vast web of informal and semi-formal livelihoods that sustain entire towns. This report, **Beyond the Mines: The Tiered Economy of Coal and Its Local Dependence**, examines how coal-driven economies function beyond the mine gate, focusing on three locations: Sangatta (East Kutai), Tanjung Redeb (Berau), and Rawas Ilir (Musi Rawas Utara). Through qualitative research with 41 respondents and analysis of secondary data, the study maps how labour, income, and vulnerability are distributed across coal-dependent local economies.

The research introduces a **four-tier analytical framework** to capture the full structure of coal town economies. Tier 1 comprises core mining companies with formal employment, relatively high wages, and comprehensive social protections. Tier 2 includes contractors and direct suppliers, where employment is increasingly based on short-term contracts and dependent on mine operations. Tier 3 consists of supporting businesses and service providers—often formally registered but operating with informal labour practices and limited protections. Tier 4 encompasses the peripheral and informal economy: small traders, service providers, transport workers, and producers whose livelihoods depend indirectly on coal workers' consumption and who operate largely outside regulatory and social protection systems.

Across the three sites, the study finds deep economic dependence on coal, particularly in Sangatta and Tanjung Redeb, where mining contributes the majority of regional GDP and sustains a dense ecosystem of supporting businesses. The report also highlights stark inequalities in wages, working hours, and access to social protection across tiers. While Tier 1 workers benefit from relative security, the majority of workers in Tiers 2, 3, and especially Tier 4 face precarious conditions, informal employment relationships, unstable incomes, and limited access to occupational safety, health coverage, and social security. Informality is not confined to small businesses alone; it is embedded across the labour spectrum, including within formally registered companies.

Importantly, the findings reveal that most coal-dependent workers and small business owners are largely unaware of, or unprepared for, potential mine closures. Current just energy transition discussions and policies risk overlooking the majority of coal-dependent workers who operate outside formal mine employment. For labour unions, this presents both a challenge and an opportunity. The report calls for unions to expand their focus beyond Tier 1 workers, engage with informal and subcontracted labour, strengthen advocacy for universal social protection, and participate early in local just transition planning.

Table of Contents

Executive Summary iv
Table of Contents v
Abbreviations and Acronyms vii
1.0 Introduction 1
1.1 Background 1
2.0 Overview of Local Economies Around the Mines 5
2.1 Sangatta: Life Along the Main Artery of a Coal Town 5
2.2 Tanjung Redeb: The Heart of Berau's Coal Economy and Its Social Landscape 8
2.3 Rawas Ilir: Life, Work, and Transition in a River District of South Sumatra 11
3.0 Economic Dependence on Coal Mining 14
3.1 Formal and Informal Labour Relations Across the Mining Economy 14
3.2 Organization and Collective Bargaining 18
3.3 Working Hours and Wages Across Tiers 18
3.4 Occupational Health and Social Protection 21
3.5 Household Income and Expenditure Patterns 24
5. Conclusion and Strategic Directions for Labour Unions 29
5.1 Key Findings for Union Reflection 29
5.2 Pathways for Iterative Action and Learning 30
5.4 Final Reflection 31
References 32

List of Figures

Figure 1. Tiered framework serves to concretely map the structure of coal town economies....................................4

List of Tables

Table 1: Key Distinction of Wage (PU) vs. Non-Wage Recipients (BPU) 24

List of Boxes

Box 1. Tiered framework to map the structure of coal town economies..3
Box 2. Strategic Directions for Union Engagement 29

Abbreviations and Acronyms

AKAD	Inter-Regional Workers
AKL	Local Inter-Regional Workers
BPS	Statistics Indonesia
BPJS	Indonesia’s Social Security Scheme
CBA	Collective Bargaining Agreement
CPO	Crude Palm Oil
CV	Commanditaire Vennootschap
GRDP	Gross Regional Domestic Product
KPC	Kaltim Prima Coal
OSH	Occupational Safety and Health
PLN	Indonesia's state-owned electric utility company
PDAM	Perusahaan Daerah Air Minum (Local Government Owned Water Utilities)
PPE	Personal protective equipment
PT	Limited liability company
UMK	District minimum wage
UMSK	Palm Oil Minimum Wage

1.0 Introduction

1.1 Background

This research was conducted in three coal mining locations: Sangatta in East Kutai Regency and Berau in Berau Regency—both in East Kalimantan—and Bingin Teluk in Musi Rawas Utara Regency, South Sumatra. These regions are home to some of Indonesia's largest coal operations, where mining concessions span vast areas and employ thousands of workers. In Sangatta, the coal mining concession is operated by PT Kaltim Prima Coal (KPC), which directly employs 3,909 workers and contracts 129 companies, bringing the total workforce to 26,606 people.

Including the Bengalon coal mining area, KPC controls a concession of 93,000 hectares. Similarly, in Berau, a 100,000-hectare concession is managed by Berau Coal, with operations spread across Lati, Binungan, and Sambarata since 1983. Meanwhile, in Bingin Teluk, PT Gorby Putra Utama, a subsidiary of Atlas Resources, operates a 10,980-hectare concession, reinforcing the company's position as a key player in Indonesia's coal sector.

In coal-producing regions, mining is more than just an industry—it is the backbone of local economies, shaping employment structures and daily life.

The livelihoods of thousands of workers, both formal and informal, are directly tied to the operation of coal mines. Large mining companies employ skilled workers for extraction, processing, and logistics, but beyond these core employees, an entire network of subcontracted and informal labourers depends on the industry.

Truck drivers transport coal across regions, small workshop owners repair mining equipment, food vendors stalls to serve workers, and local mechanics keep the transportation system running. The presence of coal mining dictates employment patterns, income flows, and the overall economic rhythm of surrounding communities.

This economic dependence extends beyond individual jobs, creating a ripple effect throughout the local and national economy. Coal mining stimulates numerous supporting industries, generating backward linkages—such as demand for equipment suppliers, fuel distributors, and construction companies that provide essential services to mining firms. At the same time, the coal extracted from these mines feeds into power plants, steel production, and export markets, establishing forward linkages that extend the industry's impact far beyond the mining sites themselves. Meanwhile, the wages earned by miners and subcontracted workers are spent in local businesses—markets, restaurants, schools, and housing developments—sustaining consumption linkages that keep money circulating within the community. In this way, coal mining is not just a source of employment but a dominant force shaping the region's economic survival.

1.2 Research Question & Objectives

This research aims to identify and categorize the informal economy surrounding coal mines in these three locations, assess the working conditions of informal workers—including safety, wages, and employment status—and analyze the key challenges they face. To achieve this, the study will examine the types and patterns of informal economic activities around the mines, the relationship between informal workers and the formal coal mining sector, as well as their recruitment mechanisms and work networks. Additionally, it will investigate wage systems, payment mechanisms, workplace safety conditions, and the employment status of informal workers.

The central question of this research is: "How does the informal economy surrounding coal mines in East Kalimantan and South Sumatra operate, and what role does it play in the broader coal production chain?" To explore this, the research breaks down the main question into more specific, operational inquiries focusing on key issues such as employment relationships, working conditions, and patterns of production and consumption.

1.3 Methodology

This research employs a qualitative approach while integrating quantitative analysis where necessary. The primary data is drawn from interviews and focus group discussions (FGDs) with 41 respondents across three mining sites: Berau, Sangatta, and Rawas Ilir. Secondary data is sourced from government documents—both local and central—as well as reports from the national statistics agency and mining companies.

The data is processed and analyzed through a tiered structural framework, which categorizes the coal mining supply chain into four distinct levels. These tiers are not merely abstract economic classifications; they reflect the lived experiences of workers and businesses operating at different scales within the industry. Methodologically, this approach draws loosely on Bertell Ollman's (2003) theory of levels of abstraction, which views abstraction as a necessary tool for isolating particular relations within complex systems. In this study, the four tiers are constructed as interconnected levels of economic and labour organization, enabling the analysis to move between the concrete experiences of workers—such as wage instability, informal contracts, or social protection gaps—and the more abstract mechanisms that structure those experiences, such as subcontracting regimes, institutional exclusions, and broader patterns of dependency. Crucially, this is not a linear analysis, but a dialectical movement: from the isolated abstractions of experience to the concrete whole of the system in which those experiences are embedded.

Complementing this, the framework is informed by Gary Gereffi's (2010) global value chain approach, which highlights how economic activities and labor relations are organized and governed hierarchically across networks of lead firms, intermediaries, and peripheral actors. Together, these conceptual tools allow the tiered framework to map how power, value, and vulnerability are distributed across the coal economy, and to reveal how different segments of the labour force are positioned within the unfolding dynamics of transition and precarity.

Building on this conceptual foundation, the following tiered framework serves to concretely map the structure of coal town economies—highlighting how different types of labor and enterprise are positioned, protected, or excluded within the broader supply chain.

Box 1. Tiered framework to map the structure of coal town economies

Tier 1: Core Mining Companies

At the top of the hierarchy are large-scale mining corporations, both state-owned and private, that oversee coal extraction and make significant investments in production. These companies hold direct contracts with major buyers, including power plants, steel manufacturers, and global markets.

Tier 2: Direct Suppliers and Contractors

This tier consists of mid-sized firms that provide essential services such as machinery, transportation, and logistics to core mining companies. While they maintain strong economic ties with Tier 1 entities, their operations are often shaped by fluctuating contractual conditions influenced by broader coal market dynamics.

Tier 3: Indirect Suppliers and Informal Workers

At this level, precariousness increases. This tier includes small subcontractors, temporary labourers, and informal service providers working under unstable arrangements. Workers here face limited regulatory protections, lower wages, and heightened exposure to market volatility. Many operate in shadow economies, where their earnings and working conditions are dictated by informal arrangements with larger firms.

Tier 4: Peripheral and Informal Economy

At the industry's margins, artisanal miners, small retail businesses, and informal service providers sustain their livelihoods through secondary or tertiary connections to coal mining. Some scavenge coal from abandoned sites, others provide food and shelter to miners, and many run small-scale hauling services. Their economic activities remain largely outside formal regulatory oversight and are highly dependent on shifting industry demands.

Within this framework, the study examines key aspects such as working conditions, occupational safety and health (OSH), wages, and employment terms within the informal economy. By mapping informal labour across these tiers, this research seeks to offer a deeper understanding of the challenges faced by informal workers—particularly in light of potential coal mine closures in the future.

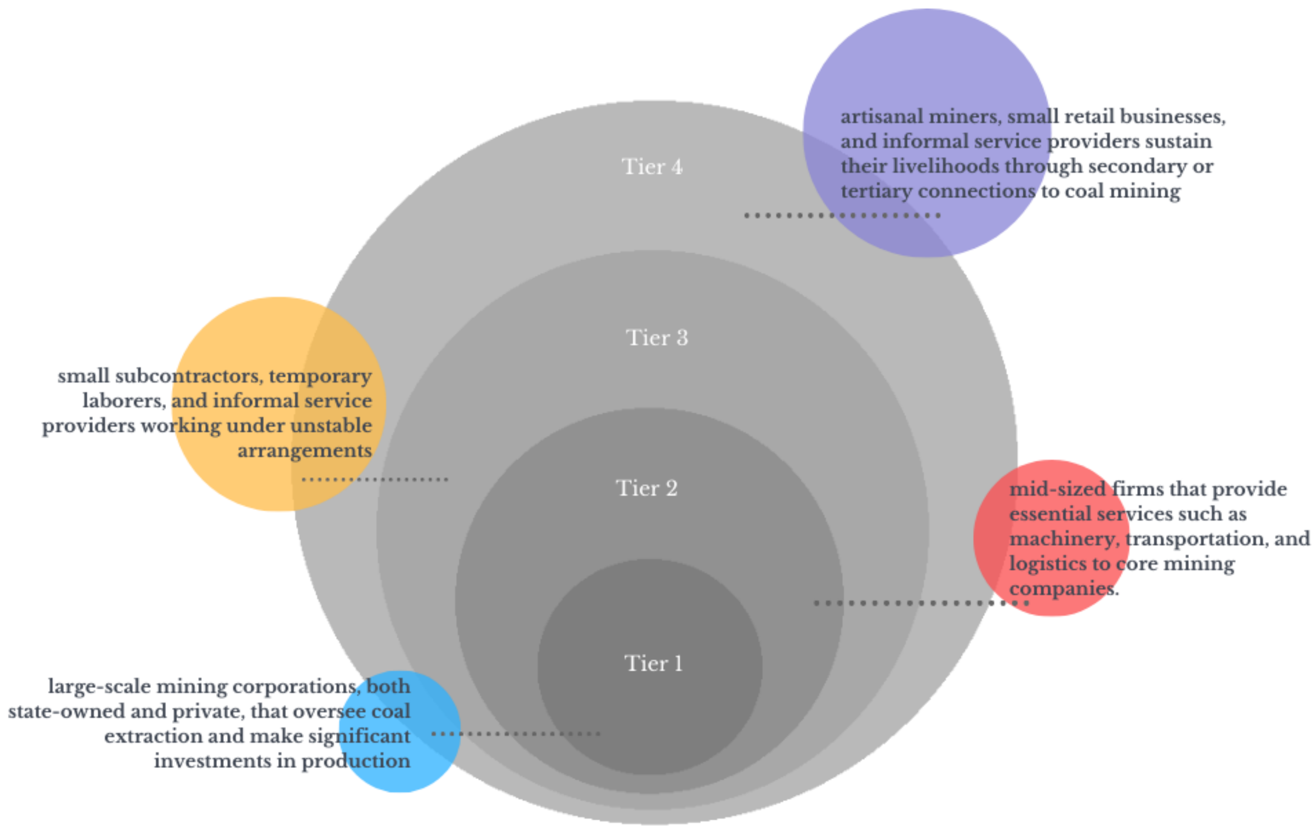

Figure 1. Tiered framework serves to concretely map the structure of coal town economies

Source: Author's diagram.

2.0 Overview of Local Economies Around the Mines

2.1 Sangatta: Life Along the Main Artery of a Coal Town

Jalan[1] Yos Sudarso is more than a road—it is the economic backbone of Sangatta. Stretching from its southern junction with Jalan Poros Bontang to its northern end at Jalan Poros Wahau,[2] this major thoroughfare captures the pulse of the town. Along this route, small restaurants serve Padang, Lamongan, Javanese, and Bugis cuisine. Hotels, markets, banks, schools, and hospitals line the road, offering essential services for a population shaped by decades of coal development.

Residential neighborhoods sprawl on both sides of this corridor. As of 2023, Sangatta is home to approximately 125,410 people, making up nearly 30% of Kutai Timur Regency's total population. A majority—about 65%—are directly tied to the coal sector, either as mine workers or as members of mining households.[3] The rest are engaged in a mix of occupations in retail, public service, food and beverage, and other supporting sectors.

To support this population, Sangatta has developed significant service infrastructure, including over 1,200 retail shops, nearly 600 restaurants and eateries, 26 hotels and accommodations, 2 traditional markets, 18 bank branches, and 6 healthcare centers.[4] Electricity is primarily provided by PLN, with clean water sourced from PDAM. In addition, the town benefits from a 3 × 18 MW coal-fired power plant operated by PT Kaltim Prima Coal (KPC), which supplies power to over 25,000 households. The plant, originally built to support mining operations, shares surplus electricity with the public through an agreement with PLN.[5]

Since the 1990s, Sangatta has drawn in migrants from across Indonesia, particularly from Sulawesi and Java. Attracted by employment opportunities in the mining sector or by the chance to build small businesses serving the growing town, these newcomers have shaped the demographic and cultural fabric of Sangatta. Sangatta is located face to face with Sulawesi strait

1 Jalan is street or road, Yos Sudarso is a name of a road in Sangatta.

2 Jalan Poros literally is main road, but in this case, Jalan Poros is also a name.

3 https://www.kpc.co.id/id/insan-kpc/#:~:text=Wilayah%20Sangatta%20berkembang%20dari%20sebuah,para%20kontraktor%20kami%20dan%20keluarganya

4 https://web-api.bps.go.id/download.php?f=92NY62wybKeStDv1tvNLQUlVMnVaMWZrVVhtS01tbnVLUFFGVnBZbThTQ1lLc0xSbnowdU9LWjZmSi80d2s2Z1Qzb2NLNjZTT2VNcENjdkhObmR2YVJsRW80NHVBbmZ4akRENk9sTHBEaWtIclNnL2lmZ3o4YVY5OHdseHpid3ViVWZqQ1g0TWJpODdHb0diUGNuZGl6bVlSZjJ3YnFZSG5sTG5Nc1RmcGhKSjNNNnY1TzREWklqZVBtaEhKb2hqQjdsL0dRL1NXcm10WHNWUzV1MFNDbk1WWFM1NURDUmhXYVNRcktPYkgyTEhwNVJtQUV1U1YyR0xHRUt5bFB5OG5abkRjY0N5S3liNDNzamk=

5 https://www.esdm.go.id/id/media-center/news-archives/fact-sheet-menteri-esdm-meresmikan-excess-power-pltu-tanjung-bara-dan-pabrik-pakan-ternak-pt-kaltim-prima-coal-kpc

that it became the main destination for migrants from there. Today, many residents are second-generation migrants who have made their lives in this coal town.

Sangatta serves as the administrative center of Kutai Timur Regency. In addition to being the capital of the Regency, it also functions as the region's main center of economic activity. Kutai Timur officially separated from Kutai Regency in 1999, and now spans an area of 31,293.29 square kilometers, comprising 18 sub-districts and home to 429,640 residents (2024). Kutai Timur In 2024, East Kutai recorded a Gross Regional Domestic Product (GRDP) of 159.49 trillion rupiah, making it the second richest regency in East Kalimantan and one of the wealthiest in Indonesia. The mining and quarrying sector dominates the local economy, contributing 127.1 trillion rupiah, or 79.67%[6] of the total GRDP. This overwhelming share underscores the sector's central role as the primary economic driver in the region.

The substantial contribution of the mining sector to the GRDP clearly indicates that it is the primary driver of Kutai Timur's economy. This reliance is further reflected in the high local revenue generated from coal mining. In 2024, Kaltim Prima Coal alone contributed 547 billion rupiah to the regency's income.[7] A significant portion of the coal produced in Kutai Timur is exported to international markets, making the region's economy highly vulnerable to fluctuations in global coal prices and exchange rate volatility.

In addition to its coal industry, Kutai Timur is also a major producer of palm oil. In 2024, the total area of oil palm plantations reached 582,917 hectares, making it one of the largest plantation areas in East Kalimantan. That same year, crude palm oil (CPO) production stood at 48.2 million tons. Despite these impressive figures, the economic contribution of palm oil remains relatively low. In 2024, the sector accounted for only 8% of the regency's GRDP, significantly below the contribution from coal. Similarly, its impact on local revenue was limited, generating just 36 billion rupiah, far less than the mining and quarrying sector.

Sangatta falls under the administrative jurisdiction of Kutai Timur Regency, where the minimum wage for 2024 is set at Rp 3,536,506. However, entry-level wages for coal mine workers range between Rp 6 to 7 million—well above the regional minimum. This wage gap contributes to the town's ongoing attraction as a labour migration hub.

The centerpiece of Sangatta's economy is PT Kaltim Prima Coal's vast open-pit mine—one of the largest of its kind in the world—covering more than 90,000 hectares across Sangatta, Bengalon, and Rantau Pulung. The mine is reachable within an hour from town, and dedicated company

6 https://web-api.bps.go.id/download.php?f=wCgpCrfmqZbK8e1coomZfkNjeU9NZDJQblZLRkhUdXJLMVh1bWFUbS9sWUd0MnRIYU5heHUrc2gwbUpsQXBOZXNTUzFSQmo0VU8vblhVRFd1cWd5K3Vya2dxcjQ0ek56UmNLcW0rdVVhdEp5MU5WdGx2YmVCdHNodjdPV1MyWTh1dWdzekNsVTJ2b21UQnJSUmZmamhPekFZZWU5T1JibGV1Nlh1MVBrQXYvZGs5OEloTGpmMVN3TWtIdFg2YnpHajBSZVJDTUpDRmdJdmRHWmJzbmNjU3RGY0FwWStsZVIzdjRPelZrYXQ5aHpCejRmciswQlliQ04zMkYrQ29xRm00Yk93VUZqUzJOaE1FZEJOWWQ2MjJQMGlOendwVnhPSEI5bDd0Uzg2c2VnajNpRGtsTG15MUpndDd1Z2ZyMDBuWVdkOTNCRWp0S0h5RmdL

7 https://insightkaltim.com/2024/07/23/potensi-pendapatan-kutim-dibahas-fokus-pada-tambang-dan-sawit/

buses ferry workers to and from the site each day. There is currently no public transport system serving the mining workforce; workers largely depend employer-provided transport.

Historically, KPC provided housing for its employees in a designated area known as Swarga Bara,[8] which later became an administrative village. As workers retired and some returning to their hometowns, many of these homes were rented out to new employees. Over the years, demand for rental housing has expanded well beyond Swarga Bara, stimulating growth in local housing markets. Many miners now live in rented homes scattered throughout the town's expanding neighborhoods.

Kaltim Prima Coal (KPC) makes a significant contribution to both local and national governments through taxes and royalties.[9] Beyond that, the company also plays an important role in developing local infrastructure in Sangatta. Between 2018 and 2022, for example, KPC supported the construction of approximately 40.2 kilometers of roads in the region. KPC operates its mining activities through partnerships with its contractor companies. These contractors are responsible for various aspects of mining operations, including land surveys, land clearing, and coal extraction. In addition, they provide related services such as coal transportation, heavy equipment rentals, and other operational needs. These contractors often rely on a wide range of service providers—including those in communication, transportation, electricity, chemical supply, blasting services, construction, equipment, catering, security, and water management. Many also hire workers through third-party labour supply companies, some of which are outside the mining sector.

This report classifies contractor companies like PT Pamapersada Nusantara and PT Mandiri Herindo Adiperkasa as tier-two businesses. These companies have direct contracts with tier-one entities like KPC. Meanwhile, companies offering supporting services—such as those in transport, electricity, catering, and security—are classified as tier-three. These tier-three businesses provide goods, services, and labour to the tier-two contractors.

Both tier-two and tier-three companies employ their own staff. According to KPC's internal data, more than 21,000 workers employed by contractors fall under KPC's extended workforce. These workers and their families reside in Sangatta, creating demand for a variety of goods and services. Businesses that meet these daily needs are grouped under tier four.

Tier-four businesses do not maintain direct economic relationships with KPC or its contractors.

Instead, they serve the mining workforce and their families. This group includes a wide range of informal and small-scale enterprises, such as boarding house owners, landlords, street food

8 Informal conversation with Toni, a former KPC workers. He retired a few years ago.

9 From 2017 to 2022, KPC paid a royalty and tax to the Government of Indonesia as much as Rp 112,35 trillion (https://radarkutim.com/kinerja-kpc-diapresiasi-isran-dukung-royalti-dan-pajak-tembus-rp-112-t/)

vendors along Yos Sudarso Street, iced tea sellers in residential areas, delivery motorcycle drivers, vegetable vendors, grocery shop owners, and water refill depot operators.

It’s important to note that this fourth tier sustains its own local economic network. Many of its actors—such as fishermen and vegetable farmers—may not engage directly with the mining sector, but their goods reach miners and their families through intermediaries like vendors, stalls, or restaurants. As such, they remain part of the mining-related economic chain, albeit indirectly.

2.2 Tanjung Redeb: The Heart of Berau’s Coal Economy and Its Social Landscape

Tanjung Redeb is the administrative and economic center of Berau Regency in East Kalimantan, Indonesia. Though modest in size—covering just under 25 square kilometers—it plays an outsized role in the region. It hosts key government offices, commercial banks, company headquarters, and the region’s main trade and service hubs. Infrastructure such as the airport and port are also located here, and in recent years, national app-based transportation services have become available—an indicator of the town’s growing connectivity.

This small town is also home to a significant portion of the region’s coal mining workforce. Many workers live in rented rooms or housing complexes scattered throughout the area. While some mining sites are located within the district, most are situated in surrounding sub-districts like Sambaliung, Sungai Lati, Sambarata, and Gurimang—reached by road, with travel times ranging from 40 minutes to over an hour. Daily life in Tanjung Redeb reflects this dynamic: mornings and evenings are marked by fleets of shuttle buses and SUVs carrying workers to and from these sites. Additionally, other mining-related vehicles—such as SUVs equipped with antennas and various safety apparatus—are commonly seen ferrying workers to and from mining sites located outside of Tanjung Redeb.

For the general public, transportation options primarily include minibuses and larger buses. However, since the introduction of app-based transportation services in Berau Regency in 2019, these traditional forms of land transport have experienced increasing pressure. As is the case in many regions, the unreliability of public transportation has led many residents to prefer private vehicles—typically motorcycles or cars—for their daily commutes.

Tanjung Redeb is surrounded by the Segah and Kelai rivers, which merge at Sambaliung and eventually flow into the Lati River. These waterways are crucial logistics routes for coal shipments and also serve as channels for goods entering from other parts of Indonesia, particularly Java. The town’s port is a vital node in the region’s trade infrastructure.

Despite its small land area, Tanjung Redeb is densely populated. As of 2023, it had nearly 75,000 residents[10]—more than a quarter of Berau Regency's total population. The majority are migrants, especially from Java and Sulawesi, many of whom came in response to the coal boom that began in the 1980s. This trend continues today, with migration contributing significantly to population growth. In 2023 alone, Berau's population grew by 4,000 people.

In 2023, a total of 10,144 people migrated to Berau,[11] comprising both inter-provincial and inter-district migrants. While it is unclear whether all of these individuals have permanently settled in the area, the Berau Population and Civil Registration Office reported that 90% of migration applications were motivated by the search for employment.[12]

The high rate of in-migration—driven primarily by job-seeking—has intensified competition in the local labour market. As of 2024, Berau Regency had 46,009 workers, with more than half employed in both large-scale and small-scale coal mining operations. This workforce is categorized into three groups: (i) local workers (27,265 people): Individuals with Berau ID cards; (ii) Inter-Regional Workers (AKAD) (12,609 people): Migrant workers recruited from other provinces who do not hold Berau ID cards; and Local Inter-Regional Workers (AKL) (6,075 people): Workers originating from other districts within the same province.[13]

The significant presence of AKAD and AKL workers has sparked concern and resentment among the local population. Many mining companies—particularly larger ones—prefer to recruit non-local workers through the AKAD and AKL mechanisms. As a result, local residents, including indigenous people and those holding Berau ID cards, face increasing challenges in accessing employment, particularly in the high-paying mining sector. This growing sense of social jealousy and economic disparity between non-local (AKAD/AKL) and local workers prompted the

10 Kabupaten Berau dalam Angka 2024 tersedia di https://web-api.bps.go.id/download.php?f=3ewRXsHGceCwsJKH7qz9WVFBMXBPNDJra3dVSG9jVFpZWU1JTTQ5bHZKM01Db0VLdE04ME1CZFBzM2JkbkVPN0trMmZIOGhYQW9vRnRMZWFwbGdvYTBoTnpiQ3JqTW4rVW52by94QXNiYUIwcTlvcnVxOGd3SnhrUUl2K0xlS1JaRzhqN2lCSzhyR3M5bXhJUTljZVZrdjFlTG5rcC9HdUwzZys1VVRFU0M4MmxEUGJObnkySGl2RUNBbWhoMEIrVC96ZkJYTURJWlA2dnp6Wi9SOUVwUHRwSjhjUFlDZmlPZGVuRzVmdmJwcW1CNWZFb0hjckNsY3puTmtYS014UkxDTHZDcUNNQWp1bG1HRks=

11 Profil Perkembangan Kependudukan 2023 Kabupaten Berau, available at: https://disdukcapil.beraukab.go.id/files/DATA%20PROFIL-143-file.pdf

12 https://beraupost.jawapos.com/utama/2445477280/penduduk-berau-melonjak-kelahiran-dan-perpindahan-penyebab-utama#:~:text=TANJUNG%20REDEB%20%2D%20Jumlah%20penduduk%20di%20Berau,mencapai%207.945%20jiwa%20dibandingkan%20akhir%20tahun%20lalu.

13 Interregional Labor Placement, or AKAD (Antar Kerja Antar Daerah), refers to the formal process of deploying workers across provincial boundaries. Mining companies often use this mechanism to recruit labor from outside the province. Similarly, intraregional labor placement—within a single province—refers to the deployment of workers across districts or municipalities. Workers recruited through either process may reside in a district, such as Berau, without necessarily changing their official domicile or updating their identity card (KTP) to reflect their current location. This administrative nuance contributes to the high number of workers in Berau recorded under these two categories.

issuance of Regional Regulation No. 8 of 2018 on the Protection of Local Workers, aimed at safeguarding local access to employment opportunities.

Berau's relatively high minimum wage reflects its resource-based economy. In 2024, the district's minimum wage (UMK) was set at Rp 3,832,297—the highest in East Kalimantan. Sectoral minimum wages for palm oil and coal mining are slightly higher, and in practice, coal miners often earn significantly more due to extended shifts and overtime work.

The mining sector plays a key role in contributing to the regional revenue of Berau Regency. In 2023, the mineral and coal (minerba) sector contributed 2 trillion rupiah, accounting for 52% of the regency's total revenue.[14] Meanwhile, in 2024, Berau's Gross Regional Domestic Product (GRDP) reached 50.8 trillion rupiah, with mining and excavation emerging as the largest contributor—26.96 trillion rupiah, or 53.08% of the total.[15] The remaining 46.92% was derived from a combination of 16 other sectors, including agriculture, forestry and fisheries; wholesale and retail trade; vehicle repair; construction; transportation; manufacturing; and services.

For over a decade, the mining and excavation sector has consistently been the main economic driver in Berau Regency, according to BPS (Statistics Indonesia).[16] However, its contribution began to decline in 2020, as coal production fell due to policies implemented during the Covid-19 pandemic. This was followed by a brief rebound in 2022, before declining again in 2023. These fluctuations have had a direct impact on Berau's economic performance, with the regency's overall GRDP rising and falling in line with the mining sector's output.

This pattern highlights Berau's heavy economic dependence on the coal sector. Any decline in the sector's contribution—whether due to reduced coal production, price volatility in the international market, or weakened demand in export destination countries—has significant repercussions for the regency's overall economy.

The largest actor in this sector is PT Berau Coal, which has been operational since 1983. Headquartered in Tanjung Redeb, the company's concessions span over 100,000 hectares across multiple sub-districts. It directly and indirectly employs around 23,000 people, including workers at its subcontractors such as PT BUMA and PT Pamapersada Nusantara.

If 80% of these 23,000 workers reside in Tanjung Redeb, approximately 18,400 people commute to and from work each day. If we include spouses and children, it is estimated that

14 https://benuanta.co.id/index.php/2024/08/06/bupati-sebut-sektor-tambang-batu-bara-sumbang-52-persen-pendapatan-daerah/150206/15/53/34/, https://rri.co.id/daerah/887401/berau-masih-melihat-pad-dari-sektor-pertambangan#:~:text=Sri%20menyebut%20sektor%20pertambangan%20dan%20perkebunan%20merupakan,berkontribusi%2052%20persen%20dari%20pendapatan%20daerah%2C%E2%80%9D20ucapnya.

15 BPS, Produk Domestik Regional Bruto Kabupaten Berau Menurut Lapangan Usaha 2020 – 2024, available at https://beraukab.bps.go.id/id/publication/2021/04/05/4e776fe0878e530e12dc2e1a/produk-domestik-regional-bruto-kabupaten-berau-menurut-lapangan-usaha-2016-2020.html

16 BPS, Produk Domestik Regional Bruto Kabupaten Berau Menurut Lapangan Usaha 2020 – 2024, available at https://beraukab.bps.go.id/id/publication/2021/04/05/4e776fe0878e530e12dc2e1a/produk-domestik-regional-bruto-kabupaten-berau-menurut-lapangan-usaha-2016-2020.html

around 70% of the town's population depends directly on the coal industry for their livelihoods. This level of economic dependency underscores the town's vulnerability to shifts in the coal sector—whether due to market fluctuations, regulatory changes, or environmental considerations.

The mining economy is supported by a multi-tiered network of companies:

- **Tier 1** includes PT Berau Coal itself.
- **Tier 2** consists of mining contractors like PT BUMA, which operates in Lati and Binungan and employs about 3,000 workers. PT BUMA's contract is set to expire in April 2025, with layoffs expected to begin as early as December 2024.
- **Tier 3** comprises subcontractors and suppliers that support Tier 2 operations. These range from legally registered companies to community cooperatives and small informal businesses. They offer services including transportation, equipment rentals, catering, and security. No comprehensive data exists on the number of workers or enterprises in this tier.
- **Tier 4** includes small and micro-enterprises that informally support the coal economy:food vendors, coffee shops, grocery stores, clothing retailers, bakeries, delivery services, and more. These businesses are crucial for everyday life in Tanjung Redeb, even though they often operate without legal protections or formal labour arrangements.

2.3 Rawas Ilir: Life, Work, and Transition in a River District of South Sumatra

Rawas Ilir is a sub-district nestled in the downstream stretch of the Rawas River, part of the recently formed Musi Rawas Utara Regency in South Sumatra. Created through an administrative split from the larger Musi Rawas Regency, this regency spans about 6,000 square kilometers and is made up of seven sub-districts. Rawas Ilir itself covers over 1,000 square kilometers and is home to just over 30,000 people, living across 12 villages and one central administrative unit.

The main village is Bingin Teluk, which serves as the district capital, though day-to-day activity is shared between Bingin Teluk and Beringin Makmur II. These two villages are the beating heart of the sub-district, hosting the local government offices, schools, health services, markets, and other key community facilities. The only high school in the entire sub-district, SMA Negeri Bingin Teluk, is located in Beringin Makmur II. From banking to healthcare to groceries, these villages provide essential access for people across Rawas Ilir.

The formation of Musi Rawas Utara as its own regency brought an unexpected benefit: proximity. What used to be a long 130 km trip to the old regency capital, Muara Beliti, is now a shorter 50 km journey to the new capital, Muara Rupit. This seemingly simple change has had a meaningful impact—making administrative services, healthcare, and economic centers more accessible to people who once had to travel far just to renew documents or seek medical care.

Like many riverine communities, the villages in Rawas Ilir have grown along the banks of the river. For generations, the river has been central to life here—providing water for daily chores, a place to bathe and wash, and a vital means of transport. But times are changing. With the gradual expansion of land-based roads and infrastructure, the river is losing its role as the community's main thoroughfare.

In some villages, the river still acts as a divider. Tanjung Raja, for example, is split into two—one part on either side of the river. The same goes for Beringin Makmur. While a few bridges now connect certain villages, ferry boats remain a trusted mode of crossing, especially for those living in more remote parts.

For decades, Rawas Ilir's economy was rooted in rubber and palm oil. Families relied on small-scale plantations to earn a living, harvesting rubber and tending to oil palm. In 2023, the sub-district produced 27,000 tons of rubber and 14,000 tons of palm oil. Within the wider Musi Rawas Utara regency, these numbers are even more impressive—it ranks among the top rubber producers in South Sumatra and sits fourth in palm oil output.

But a transition is underway. As rubber prices fall and palm oil becomes more profitable, more and more villagers are abandoning rubber cultivation. The area under rubber has been shrinking, while oil palm plantations—both large and small—are expanding. Many households now depend on a mix of wage labour on corporate plantations and income from smallholder palm plots near their homes.

Surrounding the villages are thick forests and oil palm plantations, some of them owned by residents, others by large companies. The biggest of these is PT London Sumatra (Lonsum), which first entered the area in the 1980s with rubber and switched to palm oil in the 1990s. Lonsum now operates a large oil palm plantation and a processing mill between Bingin Teluk and Tanjung Raja. The company's presence has brought some infrastructure, but it has also added pressure on communal forest lands that once served as a fallback for farming, fishing, and gathering.

In the 2010s, another economic force arrived: coal. The first permits for coal mining were issued in 2009, and by 2012, mining operations began in earnest. The coal sites lie in the outer areas of three villages—Beringin Makmur II, Tanjung Raja, and Belani—about 9 to 14 kilometers from Bingin Teluk.

Mining is now a growing, though still secondary, source of employment. For many residents, especially young people, working at the coal mine offers a faster way to earn cash compared to the slower income cycles of rubber or palm oil. As a result, some have left behind family farms and fishing nets in favor of working with coal contractors.

At least four coal companies currently operate in Rawas Ilir:

- PT Gorby Putra Utama (GPU)
- PT Banyan Koalindo Lestari (BKL)
- PT Bara Sentosa Lestari (BSL)
- PT Triaryani

These companies are linked to major national conglomerates, such as Atlas Resources, Golden Energy and Resources (part of the Sinar Mas Group), and Geo Energy. None of the four mining companies match the size of major players like Berau Coal in Berau or KPC in Sangatta. However, for the sake of analysis—and based on the available data—this report places one of them, PT Gorby Putra Utama (GPU), in the top tier. GPU works with several subcontractors across different areas. One of these is PT Ulimanitra, a company that provides dump trucks and drivers as part of its services.

Still, Rawas Ilir hasn't become a mining town in the way that places like Berau or Sangatta have. The coal economy is visible, but it hasn't yet taken over. Rubber and palm oil still dominate the local livelihoods, and agriculture remains a key part of daily life.

There are no precise figures on how many people work in the coal sector here, but it's generally fewer than in bigger mining regions. Workers typically use motorcycles to get to job sites, and the short distances and light traffic mean there's little demand for bigger transport services. One economic ripple has come from outside the mines: rental housing. With companies hiring from outside the region, demand for places to stay has surged. Company dormitories are limited, and this gap has sparked a small boom in local home rentals and dorm businesses—one of the few indirect benefits of mining that's currently visible.

3.0 Economic Dependence on Coal Mining

This section explores labour relations, working conditions, and the economic dynamics of production and consumption within the mining industry. Rather than focusing on tier one—the large-scale mining companies operating at our three research sites—this report centers on the layers beneath them. Still, we will briefly touch on tier one labour conditions to provide context and comparison.

Throughout this report, we distinguish between formal and informal businesses or economies, as well as the workers within them. A business may be considered formal because it holds proper licenses, is well-organized, uses advanced technologies, or recruits workers through professional channels. However, the work relationships within that same business may still be informal, or partially so.

In this way, we approach the idea of formality and informality as a spectrum rather than a strict division. Workers at one end of the spectrum are engaged in entirely informal employment, lacking all the key characteristics of a formal work relationship. On the other end are workers in formal businesses with formal employment contracts and protections.

Therefore, when we refer to informal workers in this report, we mean not only those working in informal businesses or sectors but also those in formal settings who experience informal employment conditions. This broader definition reflects the complex and varied nature of informality in the mining industry.

3.1 Formal and Informal Labour Relations Across the Mining Economy

A formal employment relationship is typically marked by a contract signed by both the employer and the worker, with each party keeping a copy. These contracts usually include details such as how work will be performed, the terms of termination, wage levels, and benefits—essentially outlining the rights and responsibilities of both parties.

As mentioned earlier, this report doesn't focus on employment relationships in tier one companies, but we'll touch on them briefly for comparison. Tier one companies are typically large businesses that hire workers through formal employment arrangements. These employees are usually permanent staff who receive a range of benefits, including retirement plans.

However, things have been changing. According to Toni, a retired employee from PT KPC, over the past fifteen years there's been a noticeable shift. The company he worked for has increasingly relied on subcontracted labour, not just for operational roles on-site, but even for some lower management positions.[17] As a result, the number of permanent employees has dropped significantly. These days, only a select group of employees in specific roles remain directly employed by the company.

In addition to holding permanent employment status, tier one mine workers also benefit from relatively high wages. Entry-level operators, for instance, earn between Rp 7,000,000 and Rp 10,000,000 per month—amounts that are approximately two to three times higher than the prevailing minimum wage. Workers employed by tier one companies also receive a range of additional benefits, such as paid leave, rest entitlements, transportation allowances, private health insurance, and opportunities for professional development through training and education programs.

During the 2010s, the benefits provided were even more comprehensive. Employees commonly received housing facilities, transportation services, work rotation premiums, healthcare access, and, in some cases, paid rest entitlements that extended to their families.[18] However, these facilities and benefits are no longer as widely available. At present, only a limited number of workers continue to receive the full range of advantages once commonly afforded to tier one mine employees.

Tier Two: Contractors Tied to Main Mining Companies

Tier-two businesses are directly linked to tier-one mining companies, typically as contractors that supply goods, services, or labour. For example, in Berau and Sangatta, companies like PT Pamapersada Nusantara and PT BUMA operate in this tier.

Workers in tier two are usually under fixed-term contracts. One respondent, employed by an electrical contractor at PT KPC in Sangatta, signed a three-year contract. Although he was also offerred a one year contract by the company, he chose to have a longer certainty and job security.[19] He received a copy of his contract, which clearly lays out the terms of employment, wages, and benefits.

In Rawas Ilir, dump truck drivers employed by PT Ulima Nitra—a company that provides heavy equipment and mining vehicle rental services to PT GP—are engaged under short-term contracts. These contracts are renewed monthly, with each new agreement containing nearly identical terms, differing only in the dates. One respondent from Rawas Ilir reported having

17 Informal conversation with Toni, January 21, 2025.

18 For example, look at PT Kaltim Prima Coal CBA 2013, can be accessed here: https://gajimu.com/pekerjaan-yanglayak/perjanjian-kerja-bersama-basis-data/perjanjian-kerja-bersama-antara-pt-kaltim-prima-coal-dengan-korppra-sp-kep-dan-spk#Pasal_37_:_PROGRAM_PERUMAHAN_KARYAWAN

19 Having the option to choose the duration of a work contract is uncommon. The reason this company allows prospective employees to select their contract length remains unclear.

worked as a dump truck driver for six years under this arrangement, yet his employment status remains contractual, with no transition to permanent employment.[20]

Tier Three: Supporting Businesses and Service Providers

Tier-three businesses provide services and labour to tier-two companies. In Berau, these businesses include not only limited liability companies (PT) but also CVs (Commanditaire Vennootschap), community-based enterprises (LPM), and cooperatives. One of the tier-three companies, operating as a limited liability company (PT), is PT GA—a company that provides security personnel, often referred to as Satpam. PT GA assigns these security officers to guard a mining site owned by PT BUMA. The guards work under one-year contracts, which they renew annually without having to reapply. Despite having worked continuously for seven to nine years, many of them are still considered contract workers and have not been offered permanent employee status.

Several limited partnerships (Commanditaire Vennootschap or CVs) actively engage in contractual arrangements to provide goods and services that support mining operations. One notable example involves a CV that supplies logistical goods and office consumables such as paper, printers, and furniture. In addition to these supplies, the CV is also involved in the rental of vehicles— specifically Mitsubishi Triton and Pajero units—to mining contractor companies for use in field operations.

This CV operates under a business model that involves partnering with individual vehicle owners through specific contractual agreements. Under these agreements, the CV pays a fixed monthly rental fee to each owner while maintaining a separate contract with the mining company, thereby earning a margin as the intermediary. The CV also employs several personnel, including administrative staff and drivers or vehicle operators.

Given that the contract between the CV and the mining contractor is typically renewed on an annual basis, corresponding contracts with vehicle owners and employees are also renewed yearly to align with the primary agreement.

In the transportation segment of the mining support sector, cooperatives play an essential role in facilitating the mobility of mine workers. These cooperatives often have contracts with second-tier mining contractors and are responsible for providing transportation services to and from mining sites. Notably, these cooperatives do not own vehicle assets; instead, they subcontract individual vehicle owners who provide both the vehicle and a driver. These service agreements are also subject to annual renewal.

20 According to Law No. 13 of 2003, an individual who has been employed under a fixed-term contract three times must be granted permanent employment status. In practice, however, in Rawas Ilir, dump truck drivers have gone through dozens of contract renewals and still remain classified as contract workers.

Separately, a cooperative holds a contract with a mining contractor company to handle coal loading and unloading activities at barges. This cooperative supplies a labour force known as TKBM (Tenaga Kerja Bongkar Muat or stevedoring labour). The cooperative does not enter into direct employment agreements with individual labourers. Instead, it coordinates with team leaders who are responsible for assembling labour crews. Each team typically consists of 20 to 25 workers and is deployed based on workload requirements, with assignments ranging from 3 to 10 days depending on the volume of coal to be loaded or unloaded.

Tier Four: The Broader Coal Economy Support System

Tier four encompasses businesses and workers that support the coal economy more indirectly—primarily through the consumption of coal workers and their families. These businesses have no contractual ties to higher-tier companies. Instead, they are part of a broader, more informal local economy.

Some of these businesses are directly linked to coal workers' consumption needs—such as restaurants, food stalls, grocery stores, rental housing, and motorcycle taxis. Others, like fishermen or farmers, are further removed, with their products reaching coal workers through intermediaries such as markets or restaurants. These economic relationships are often informal, with no stable or written contracts between producers and suppliers.

This research identifies several categories within tier four:

- **Food and Beverage:** Includes food stalls, beverage stands, home-based caterers, and app-based food sellers.
- **Transportation & Delivery:** Encompasses app-based drivers, local couriers, and small-scale ride services.
- **Consumer Goods:** Grocery stores and vendors selling daily necessities or skincare products.
- **Clothing:** Mostly small-scale apparel sellers.
- **Housing:** Homeowners renting out rooms or houses to mine workers.
- **Services:** Laundry services, car rentals, and small hotels or lodges.
- **Food Production:** Fishermen, vegetable farmers, and small agricultural producers.

In many of these businesses, the owners are also the workers. If others are employed, there are usually no written contracts—just verbal agreements about pay, hours, and responsibilities. Recruitment is typically informal, often relying on personal connections, and rarely includes interviews or job tests.

In some cases, especially family-run businesses, workers (often family members) are not paid at all and work without any formal agreements. In such scenarios, there is no real employment relationship.

App-based motorcycle taxi and delivery drivers represent a unique case. Those working for multinational platforms are labeled as "partners," even though the relationship closely resembles that of employer and worker. In contrast, drivers working through local informal systems coordinate through an admin on WhatsApp, who connects them to customers. There's no contract between the admin and the drivers.

3.2 Organization and Collective Bargaining

Tier one is the most organized, with active labour unions in place. Tier two is also fairly organized —except in Rawas Ilir, where dump truck drivers have not unionized. This lack of organization, coupled with short-term contracts and low familiarity with unionization, leaves workers with little bargaining power. Some have recently lost jobs without explanation when contracts weren't renewed. Issues like double income tax deductions (PPh 21) also remain unaddressed due to the absence of collective negotiation.[21]

Tier three is largely unorganized. Security guards and workers employed by CVs, including drivers and admin staff, are not unionized, and their labour issues were not fully captured by this study. Tier four is the least organized. Workers and owners alike are unfamiliar with labour unions or collective organization. Still, in some cases, due to the close relationships between owners and employees in small businesses, informal negotiations—like requesting holidays—can happen directly and amicably.

The informality in tier four sometimes creates room for more humane and flexible relationships. But it also means a lack of protection, recognition, and bargaining power for workers who contribute to the coal economy every day.

3.3 Working Hours and Wages Across Tiers

In tier two, work schedules follow the coal mine's operations in tier one — 12 hours a day. There are two shifts: a day shift from 6 AM to 6 PM, and a night shift from 6 PM to 6 AM. Each shift includes a one-hour break for meals and prayer. Days off and holidays are scheduled based on a rotating roster. For example, dump truck drivers in Rawas Ilir work six consecutive day shifts, followed by six night shifts, and then receive a single day off.

21 Each month, the company deducts PPh 21 (income tax) from the wages of dump truck drivers. However, in December, their wages are deducted again for PPh 21, with the amount equivalent to the total income tax for the entire year. This raises questions about the accuracy and transparency of the tax process. It also remains unclear whether the company actually remits these deductions to the tax office, and if so, how much is being paid.

Workers in tier two are generally paid according to the regional minimum wage (UMK). However, since they work more than 8 hours a day, they receive daily overtime pay as regulated by Indonesian labour law — 1.5 times the hourly rate for the first hour of overtime and double for every hour after. This overtime pay significantly boosts their take-home income, often doubling the local minimum wage.

In Rawas Ilir, dump truck drivers typically earn between Rp 6,000,000 and Rp 7,000,000 per month. By comparison, the 2024 minimum wage in Musi Rawas Utara is Rp 3,564,933. Their earnings include overtime and bonuses, though bonuses are conditional on meeting transport targets. Salaries are transferred via bank, which the company uses as an excuse not to issue pay slips. As a result, wage deductions are often made without the workers' knowledge. When they do receive a pay slip, it sometimes lists mysterious items like "unpaid" or "absent," even if they worked every scheduled day.[22]

In tier three, work arrangements vary. For example, security officers in Berau typically work 4 days on, followed by 4 days off. However, this schedule can change at any time depending on company decisions. Previously, they had a 5-on, 5-off pattern. This change came after PT BUMA began winding down operations as their contract with Berau Coal neared its end. Like others, these workers also do 12-hour shifts with a one-hour break — meaning they work 3 hours of overtime daily. Thanks to overtime pay, their monthly income can nearly double the local minimum wage, reaching around Rp 6,000,000 to Rp 7,000,000. The minimum wage in Berau in 2024 is Rp 3,832,297.

Work conditions differ in the transport sector. Drivers shuttle mine employees between their accommodations and the mining blocks. Each round trip takes about 2 hours (1 hour each way), and they typically do this twice a day, making their total workday around 4 hours. For this service — including both the car and the driver — the cooperative pays Rp 8,000,000 per month. It's unclear whether the drivers are formally employed or engaged under a partnership agreement, and who their legal employer really is — the cooperative, the vehicle owner, or someone else.

In tier four, small business owners often can't accurately calculate their income. They rely on rough estimates, with gross daily earnings ranging between Rp 300,000 and Rp 2,000,000, and monthly totals anywhere from Rp 4,000,000 to Rp 7,000,000. These figures fluctuate heavily, with some days bringing in no income at all. Sales depend on many factors — demand, weather, the owner's health, and even motivation. For instance, one sleepwear shop owner in Berau

22 According to the dumptruck drivers, the company often cut their wages without any reasons nor notifications. Those cuts appear on their payslip as "unpaid." They said that if it is unpaid, it should be paid at some points, but it never was paid to them. Some other times, those cuts appear as "absent" in their payslip althouth they never were absent from work.

closes up early when she's not in the mood, sacrificing the day's potential income. During economic downturns, sales of non-essential goods like sleepwear can decline sharply.

Unlike small business owners, wage workers in tier four have more consistent, though much lower, incomes — typically between Rp 1,000,000 and Rp 2,500,000 per month. This is well below the 2024 minimum wage in Kutai Timur, which is Rp 3,515,324. They also receive no additional benefits: no health insurance, no overtime pay, no meal or transport allowances.

Another group in this tier are platform-based drivers (like motorcycle taxis). Their monthly income ranges from Rp 500,000 to Rp 4,000,000. To reach Rp 4,000,000, a driver must work at least 8 hours a day, complete 15 to 20 trips, and work about 20 days a month. Still, income is unpredictable — some days, they only get 2 or 3 trips, earning as little as Rp 50,000.

Working hours across this tier vary widely depending on the job. People often juggle multiple jobs. For instance, Yuli — a mother of one — works as a platform-based motorcycle taxi driver, drives children from her neighborhood to school, and also does laundry for her husband's coworkers. She doesn't track how many hours she works each day, nor how much she earns from each job.

Food and beverage stalls in mining towns typically operate 5 to 12.5 hours per day. Breakfast stalls close by noon, while dinner spots can stay open from 7 AM to midnight. These hours don't even include prep work. Grocery stores are open longer — between 13 to 16 hours a day. Transport workers in this tier typically work 3 to 7 hours daily, often balancing other responsibilities like school, farming, or small businesses.

These small enterprises rarely take formal holidays. Stalls may close if the owner is sick, it rains heavily, or on religious holidays. Grocery and clothing stores follow a similar pattern. Some transport workers choose to rest on Sundays to align with family routines, but others work more on weekends to earn extra.

The same pattern applies to workers in food production and services — there are no scheduled rest days. They only pause when necessary. They can not draw a clear line between working and not working. A female farmer in Sangatta, for example, not only farms but also runs composting workshops, is active in village environmental projects, and sells local produce through WhatsApp. Many of her customers are her relatives. So while delivering produces to her costumers, she also visited relatives. Her activities are so varied, she can't estimate her total income.

Fishermen in Sangatta live similarly unstructured work lives. They head out to sea for 5 to 10 days at a time. One said he sleeps only 3 hours per night while at sea. After returning, he sells his catch to middlemen, then rests for 3 to 5 days before his next trip. A single fishing trip can generate Rp 27,000,000 in income — but costs are high: fuel, food for three people, refrigeration, and safety gear.

Although the work hours can be long and holidays are unpredictable, some respondents say it's the flexibility that keeps them going. The freedom to decide when to take a break, when to work, and how long to work is what motivates them to keep pushing forward and choose running their own business over working in a traditional job. Workers and small business owners in tier four earn nothing if they don’t work. There's no income guarantee, job security, or social protection. They bear all the risks — economic loss, disasters, lost income, and health — while also covering the full cost of sustaining themselves and their families.

3.4 Occupational Health and Social Protection

Social security benefits — like health and employment insurance — are usually provided to workers in tiers one and two. In tier three, it’s more hit-or-miss. Companies with formal legal status (PT or CV) typically offer these protections, but cooperatives often do not. The same inconsistency applies to occupational health and safety provisions, such as personal protective equipment (PPE).

As stated earlier, Tier One is not the primary focus of this research. However, to provide a comparative perspective on social security across tiers, this report uses the 2023–2025 Collective Bargaining Agreement (CBA) between PT Kaltim Prima Coal (KPC) and three trade unions— PPMI (Indonesian Muslim Workers Union), SP KEP, and FPE KSBSI[23]—as the main reference. The analysis is based on the normative provisions outlined in the CBA, not on their actual implementation. Therefore, additional research is necessary to obtain accurate data on the implementation and coverage of social security programs in Tier One.

The Indonesian government mandates that all companies register their employees in the BPJS Health and BPJS Employment programs.[24] Accordingly, companies in Tier 1 comply by enrolling their workers in both schemes. In addition to BPJS Kesehatan, Tier 1 employees receive supplementary benefits, including private health insurance and company-sponsored medical coverage. These benefits typically include hospitalization, outpatient care, and regular health check-ups that also extend to their family members.

For employment-related protections, Tier 1 workers are registered under BPJS Employment, which covers Old Age Security, Pension Security, Death Security, and Work Accident Security. Beyond these mandatory benefits, they also receive additional protection through a company-managed Pension Fund Program. Under this scheme, employees are entitled to receive a

23 CBA between PT KPC and PPMI (Persatuan Pekerja Muslim Indonesia), SP KEP dan FPE KSBSI 2023 – 2025, available at https://anyflip.com/vgwyq/yrwr/basic.

24 BPJS stands for Badan Pengelola Jaminan Sosial or Social Security Adminitrative Body. It is a government’s body established to administer social security programs, both health insurance and employment insurance. BPJS Kesehatan provides the National Health Insurance (JKN) for all Indonesian citizens, while BPJS Ketenagakerjaan offers protection to workers against social risks such as workplace accidents, death, old age, and retirement. Refer to Law No. 24 of 2011 on Social Security Administrative Body.

pension for up to 10 years after retirement, with the amount gradually decreasing over time.[25] Moreover, Tier 1 workers are enrolled in a Group Life and Accident Insurance plan, which provides financial protection and compensation in the event of work-related accidents or death.

Beyond basic health and employment protections, Tier 1 workers receive a range of additional benefits, including transportation allowances in the form of pick-up services and operational vehicles, meal allowances, and housing allowances—either in the form of direct cash or company-provided housing facilities. They are also entitled to annual bonuses, annual leave, long paid leave, and opportunities for education and training. Notably, both annual and long paid leave benefits extend to workers' dependents (spouse and children). Furthermore, the company provides educational assistance for employees' children who are not enrolled in schools managed by the company's affiliated Educational Foundation.

Tier 2 workers are generally registered in the BPJS Health and BPJS Employment programs. However, larger and more reputable Tier 2 companies, such as PT Pamapersada Nusantara, offer additional health benefits beyond BPJS Kesehatan.[26] These typically cover family members and include hospitalization, medical expenses, doctor's fees, and select surgeries. In contrast, many other Tier 2 companies—such as PT DAP in Sangatta—limit benefits to BPJS Kesehatan and BPJS Ketenagakerjaan only. Outside of these programs, Tier 2 workers commonly receive meal allowances, though transportation and housing allowances are not universally provided.

In **Tier 3**, employers generally enroll workers in BPJS Kesehatan, but not consistently in BPJS Ketenagakerjaan. In this research, none of the Tier 3 respondents were found to be registered under BPJS Employment. Some workers are enrolled in BPJS Kesehatan as independent (self-paying) members, rather than through employer contributions. Workers in this tier typically do not receive meal or transportation allowances, nor do they benefit from annual bonuses.

Workers and business owners in Tier 4 not only shoulder all business risks independently but also bear the full burden of their own social reproduction. They often lack access to health insurance and other social protections. In this study, none of the Tier 4 respondents were enrolled in BPJS Employment, and only a portion were enrolled in BPJS Health—many of whom were in arrears or dependent on their spouse's employer-sponsored coverage. Even when enrolled, participation is typically through voluntary (BPU) membership, which requires full self-payment.

25 Further examination is needed regarding the amount and duration of the pension benefits. This information was obtained through an informal conversation with a KPC retiree on January 22, 2025.

26 CBA between PT Pamapersada Nusantara and Serikat Pekerja PT Pamapersada Nusantara 2018 – 2020, available at https://www.scribd.com/document/443120126/PKB-PAMA-2018-2020.

Under the BPU scheme, the cost of social protection is significant relative to income. BPJS Kesehatan premiums for BPU members in 2024 are:

- Class 3: Rp 42,000 per person per month
- Class 2: Rp 100,000 per person per month
- Class 1: Rp 150,000 per person per month

For BPJS Ketenagakerjaan BPU, the monthly contributions are based on declared income and include:

- Old Age Security (JHT): Rp 20,000 – Rp 414,000
- Work Accident Security (JKK): Rp 10,000 – Rp 207,000
- Death Security (JKM): Rp 6,800
- Pension Security (JP): Not available for BPU members

These out-of-pocket costs reduce real income and present a significant financial barrier, particularly for low-income or irregular earners. Although the Indonesian government mandates universal participation in BPJS Health and Employment, as of mid-2024, about 16.6 million people—roughly 6% of the population—remained unenrolled in BPJS Kesehatan.[27] Moreover, many BPU members face lapses in coverage due to irregular income and payment arrears. These conditions underscore the precariousness of social protection among informal and low-tier workers in Indonesia's mining sector.

The key difference in BPJS participation between Tiers 1–2 and Tiers 3–4 lies in the type of membership. Workers in Tiers 1 and 2 are registered as wage recipients (Penerima Upah/PU), whereas those in Tiers 3 and 4 are enrolled as non-wage recipients (Bukan Penerima Upah/BPU). This distinction primarily affects contribution responsibilities. The table below sums up the BPJS scheme between tier and 2 and 3 and 4.

27 As of 2024, BPJS Kesehatan enrollment has reached 96.8% of Indonesia's population, although 58.3 million members are inactive (i.e., not paying contributions). In contrast, enrollment in BPJS Ketenagakerjaan remains relatively low, with 40.2 million participants as of early 2025, including 8.99 million inactive members—most of whom are non-wage workers (BPU).

Table 1: Key Distinction of Wage (PU) vs. Non-Wage Recipients (BPU)

Feature	Tier 1 & 2 (PU)	Tier 3 & 4 (BPU)
BPJS Health	Employer-support(PU)Self-funded (in most cases)	
BPJS Employment	Full coverage	Rare or absent
Contribution Structure	5% of wage: 4% employer, 1% worker	100% worker-paid
Old Age Security (JHT)	3.7% employer, 2% employee	Not available
Pension Security (JP)	2% employer, 1% employee	Not available
Work Accident Security (JKK)	0.24%–1.74%, employer-paid	Not available
Death Security (JKM)	0.3%, employer-paid	Not available

While Tier 1 and some Tier 2 workers receive comprehensive coverage and employer-supported benefits, workers in Tiers 3 and 4 face vulnerabilities due to limited or nonexistent employer contributions and benefits. These gaps highlight the need for targeted policy interventions to strengthen protections for informal and lower-tier workers in Indonesia's mining sector.

3.5 Household Income and Expenditure Patterns

This section presents an overview of household income and expenditure patterns, categorized into three main types of spending: food expenses, non-food expenses, and social expenses. Food expenses refer to all monthly costs related to meals and groceries for the family.

Non-food expenses include electricity, water, fuel, internet, children's education, housing, clothing, personal care items, credit or loan repayments, and cigarette consumption.

Social expenses encompass contributions for waste management, neighborhood association dues, religious donations, and social events such as weddings, funerals, and births. This category also includes remittances to extended family.

Additionally, this research notes whether households have any savings, and if so, what methods they use to save.

Income is analyzed based on its source and type—either from business activities or wages, and whether it functions as a primary or secondary income stream. The number of family members who earn income is also considered.

The findings indicate that male-run businesses are typically the primary and often sole source of household income. Meanwhile, businesses operated by women are generally secondary sources. All married female respondents in this study are partnered with men employed by coal mining companies tier two.

One significant challenge encountered in this research was the limited availability of detailed income and expenditure data. Respondents commonly reported that they do not maintain financial records. Their reported income figures were often gross amounts, without deductions for production costs or wages for workers, if any. Moreover, many respondents were unaware of their spouse's earnings. Those living with parents also lacked knowledge about the household's overall financial situation.

Despite these limitations, this study was able to draw basic comparisons between household income and expenditure.

For many respondents, income is insufficient to meet monthly expenses. In several cases, even when household income includes both spouses' earnings, expenses still outpace income. For instance, one respondent, Ani, runs a home-based food business, and her husband is employed by a coal company in Berau. Their combined income reaches approximately Rp 15 million per month, yet it still does not cover their total household spending.

The issue is not exclusive to lower-tier workers. Dump truck drivers in Rawas Ilir, who earn nearly twice the local minimum wage, also face financial shortfalls. A significant portion of their income goes to cigarettes and debt repayments, with monthly cigarette costs ranging from Rp 300,000 to Rp 1.5 million (roughly 4.3% to 23% of income). Debt payments—such as for motorbikes or cars—can range from Rp 1 million up to Rp 7.4 million, sometimes exceeding total monthly earnings.

This study was unable to capture detailed narratives about how households cope with financial shortfalls, including strategies used to endure or fill income gaps.

However, some respondents reported that their income exceeds their expenses. These included:

- Owners of CV companies with monthly turnovers up to Rp 2 billion,
- Independent consultants,
- Operators of mining vehicle rental businesses,
- Single individuals living with family who have no food or housing expenses.

In this group, there are also women with small businesses whose husbands are coal mine workers, whose combined income is sufficient to exceed their household needs. A few respondents reported no expenses for food or housing, and others did not spend money on cigarettes or loan repayments. Additionally, some respondents reported multiple income sources, such as running a side business (e.g., oil palm plantations) in addition to their primary employment.

Despite higher earnings, many households in this group still cannot save due to the small margin between income and expenses.

A key finding across all income groups is the high proportion of income spent on food, ranging from 14% to 98% of total earnings. A majority of respondents reported food expenses exceeding 50% of their household income. One major reason for this is that all food must now be purchased with cash—respondents no longer forage for vegetables or grow their own. In Rawas Ilir, for example, the shift began a decade ago with the arrival of mobile vegetable vendors in mining villages, leading to the near-total commodification of basic food access.

Most of the people interviewed in Berau and Sangatta aren't originally from those areas. They've mostly come from other parts of Indonesia—mainly Java and Sulawesi—or are second-generation migrants. Many of them regularly send money back home to support their families. Beyond that, they also contribute to local social events and responsibilities, like religious donations, village fees, and helping out with weddings, funerals, or births in their communities. These social expenses typically take up between 2% and 20% of their total income.

4. Projected Impact of Mine Closures

Sangatta and Tanjung Redeb are deeply dependent on coal mining for their economic survival. These cities have developed alongside the coal mining industry, with a wide range of small and large businesses supporting the livelihoods of workers and their families. These businesses, which include transportation, food and beverage services, housing, and other essentials, create an interconnected network that sustains the local economy.

This economic interdependence becomes apparent in situations like the expiration of contracts for tier-two coal mining companies in Sangatta, particularly at the Bengalon site. While the exact number of workers laid off is unclear, one local resident observed that the village became noticeably quieter when the contract ended. Workers who remained in the area reduced their spending, which affected the income of local vegetable vendors. Additionally, some workers who had come from outside Bengalon and Sangatta returned to their hometowns, while others chose to stay.

In the context of this research, all respondents are linked to coal mining, either directly or indirectly. Some former coal mine workers have started small businesses to make a living, while others have expanded their operations and now employ several people. Many respondents also have family members—such as spouses, siblings, or children—working in the coal mines, while others serve the mining community through their businesses.

The potential impact of a coal mine closure is further explored using the example of the expiration of PT BUMA's contract with Berau Coal. Set to end in early 2025, PT BUMA has already started reducing its workforce and adjusting its operations. By December 2024, over 300 workers had been laid off, but the ripple effects were felt by up to 1,200 people when their families were considered. While small businesses did not immediately feel the impact, one laid-off worker admitted to postponing non-essential purchases. Though severance pay was provided according to regulations, workers were left wondering how to stretch their severance and what businesses they might pursue in the future.

A key concern among former PT BUMA workers is the potential saturation of the local market with new small businesses. If many laid-off workers decide to start their own businesses, 23competition could become intense, making it harder for new ventures to grow or even survive. This is particularly concerning in Berau, where the market is already crowded with businesses. The main question is: who will buy these products if the coal miners and their families, who have been the primary consumers, are no longer there?

The government's proposed alternative of shifting to palm oil production is not appealing to former coal miners or small business owners in Berau and Sangatta. One significant obstacle is the remote location of the palm oil plantations, far from the bustling towns of Tanjung Redeb and Sangatta. This isolation makes the plantations unattractive for those used to the urban environment. Additionally, older workers feel that the physically demanding nature of palm oil labour, combined with their declining health, makes it unsuitable. Younger workers, on the other hand, prefer to migrate rather than take up jobs in the palm oil sector.

Moreover, the low wages offered in the palm oil industry have discouraged many respondents from considering it a viable alternative. Despite the Palm Oil Minimum Wage (UMSK) for 2025 being set higher than the East Kutai Minimum Wage (UMK), it has not sparked interest among the people of Sangatta. In addition to the lack of benefits such as overtime pay, social security, and freedom, palm oil workers are also burdened with difficult work conditions. Many small business owners in the region prioritize the freedom to set their own working hours, which is something they cannot get in the palm oil sector.

Another drawback is the limited number of workers needed for palm oil plantations. Unlike coal mining, which generates numerous support industries—such as transportation, food, electricity, and construction—palm oil plantations create fewer jobs, leading to less economic activity in surrounding areas. This is similar to the situation in Rawas Ilir, where the presence of London Sumatra since the 1980s has not led to significant economic growth, unlike in Tanjung Redeb and Sangatta.

The low wages and remote location of palm oil plantations have led respondents to believe that starting businesses near these plantations will not be profitable. They argue that selling goods such as clothing or cakes in rural areas near the plantations would not generate the same income as businesses in more urbanized areas like Tanjung Redeb or Sangatta.

Most respondents, however, do not perceive a link between the closure of coal mines and the sustainability of their livelihoods. Furthermore, they have never received any information regarding plans or the possibility of coal mine closures in their area, nor about the government's strategies for post-mining economic transformation. In both Sanggata and Berau, respondents expressed little concern about the potential closure of coal mines. Many have already tried running various small businesses, some of which have failed for various reasons. If the closure of coal mines causes their current businesses to collapse, they intend to start another business—possibly in a different location.

In Berau, several respondents said that if their business fails or they lose their job, whether due to coal mine closures or other factors, they would seek new business opportunities or employment. Others admitted they had never contemplated such scenarios or what actions they would take. Meanwhile, in Sangatta, respondents identified several business options they might pursue if their current ventures failed, whether due to mine closures or other reasons. These included seafood export, sewing shops, fishing tackle stores, livestock feed businesses, car rentals, and grocery stores. Many of these options relate to their current businesses or long-held aspirations contingent on having sufficient capital.

For small business owners and workers in these communities, transitioning between small-scale businesses is common. For example, Rais (male, 32) previously worked as a transport assistant and shallot peeler before becoming a gallon delivery person at a refill depot; he is now saving to open a grocery store. Similarly, Yuli (female, 28) plans to open a sewing business once she has enough capital. Before working as an app-based motorcycle taxi driver and laundry service provider, she sold clothes and served as a store administrator. When asked about coal mine closures, Yuli expressed more concern about her husband potentially losing his mining job than about her own employment. This sentiment was echoed by other respondents whose husbands work in mining companies.

Unlike Tanjung Redeb and Sangatta, Rawas Ilir's dependence on coal mining is much lower. While it does have smaller and more recent mining operations, other industries such as palm oil and rubber have long been established in the region. However, dump truck drivers in Rawas Ilir are not optimistic about these sectors serving as alternatives to coal mining. They are familiar with the low wages, lack of freedom, and difficult working conditions in palm oil plantations. Some of these drivers also have palm oil farm as a side income, but to match their earnings from coal mining, they would need significantly larger plantations.

5. Conclusion and Strategic Directions for Labour Unions

5.1 Key Findings for Union Reflection

This study provides an early-stage, exploratory mapping of coal-based economies in Sangatta, Berau, and Rawas Ilir. It reveals a deeply tiered structure of labour and livelihood, ranging from formal, unionized employment in Tier 1 to informal, precarious micro-enterprises in Tier 4. Although the full economic and institutional dynamics in each location are still being uncovered, certain cross-cutting patterns have emerged.

We found that while Tier 1 workers benefit from relative security and protections, the vast majority of workers in Tiers 2, 3, and 4 face informal arrangements, short-term contracts, exclusion from social protections, and minimal access to collective voice. Many operate outside the reach of current union frameworks, and their concerns are largely absent in policy or transition planning discussions.

As coal's role in the national energy mix begins to shift, the potential risks to these communities — particularly those whose work is already unstable—are significant. Although more granular, localized research is needed to fully grasp the complexities in each town, it is already clear that the labour movement has a vital role to play in organizing, protecting, and representing this broader base of coal-dependent workers.

Box 2. Strategic Directions for Union Engagement

Rather than fixed recommendations, we offer the following as priority directions for further union-led inquiry, organizing, and experimentation—responsive to evolving conditions in each locality.

1. Expand Organizing to Informal and Contracted Workers

Preliminary findings show that workers in Tiers 2–4, though integral to coal town economies, are often unrepresented. Unions should begin developing inclusive membership models, conducting outreach among informal and subcontracted workers, and identifying community organizers who can lead localized union presence. This work is foundational to any long-term effort to represent all labour in mining regions.

2. Promote Social Protection for All Tiers of Labour

Access to BPJS health and employment insurance remains uneven, especially among informal workers. While the institutional mechanisms for inclusion exist, they are underutilized or poorly adapted to local realities. Unions can begin by documenting protection gaps in each location, supporting group-based registration efforts, and advocating for simplified access pathways tailored to informal workers' needs.

3. Engage in Local Just Transition Dialogues

Each location faces a different timeline and trajectory for transition, but few include worker perspectives beyond formal mines. Unions can begin by establishing transition watch groups, mapping worker vulnerabilities, and advocating for a seat at the table in local planning forums. Early engagement allows for more meaningful participation once transition policies take shape.

4. Build Legal Support and Documentation Systems

Legal awareness and recourse among lower-tier workers is low. Unions could initiate pilot legal aid desks or mobile complaint channels to gather wage violation reports, contract disputes, and health claims. These efforts would also build an evidence base to inform future campaigns and negotiations.

5. Foster Solidarity and Shared Identity Across Worker Tiers

Finally, unions should begin cultivating solidarity between formal and informal workers, across different tiers and towns. Small actions—joint assemblies, peer interviews, shared campaigns—can lay the groundwork for a broader, more inclusive labour identity that reflects the real social and economic fabric of coal towns.

Source: Author

5.2 Pathways for Iterative Action and Learning

Recognizing this is a preliminary study, implementation should proceed as pilots, listening campaigns, and iterative organizing. Suggested first steps include:

- Community listening sessions in each site to test these directions against local needs.
- Worker mapping exercises to understand where and how informal labour concentrates.
- Documentation of promising practices from existing cooperatives or informal networks.
- Monitoring tools (surveys, WhatsApp channels) to build worker-generated data for advocacy.

As further research and organizing deepen, these strategies can be adapted and scaled in collaboration with workers and their communities.

5.4 Final Reflection

This study does not pretend to offer a definitive blueprint. Rather, it presents a call to action: that unions begin engaging with the full complexity of labour in coal regions—not just those inside the formal workplace gates. By extending solidarity, protection, and collective power across tiers, the labour movement can redefine its role in shaping a just future for all workers.

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Just Energy Transition in Coal Regions