



## ENVIRONMENTAL AND SOCIAL INJUSTICE: IMPACT AND SUSTAINABILITY OF SMALL SCALE TIN MINING UNDER INDONESIA'S NEW MINERAL AND COAL REGULATION

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### Abstract

The transformation of mining law policy in Law No. 3 of 2020 concerning Minerals and Coal has broad implications for mining law, including illegal tin mining. The high dependence of the tin extractive economy in Bangka Belitung has changed the landscape of this archipelago province as an area with a high level of natural damage and social disasters. The ability of governments through regulatory instruments to tackle illegal mining is an important ideal goal. This research was conducted using socio-legal methods, to produce a comprehensive analysis related to the environmental and social impacts of illegal tin mining after the renewal of the mineral and coal law. This study found that the transition of mining authority from the central government to the regional government directly has an impact on the proliferation of illegal mining activities. Substantive changes in the mineral and coal law have not provided a strategic solution because the tug-of-war over authority ends with the continued delegation of authority to grant community mining permits to local governments. Meanwhile, the unpreparedness of local governments has resulted in the continued marginalization of mining communities and has an impact on widespread environmental damage. The lack of fair decision-making processes for people mining licences is indicative of an immature tin mining management in Bangka Belitung. The purpose of this study is to provide a comprehensive overview of the implications of the latest mineral and coal policies on illegal tin mining activities, as a reference and consideration in strategic policy making to create an ideal and sustainable tin mining ecosystem.

**Keywords:** injustice, small scale tin mining, mineral and coal regulation

### A. Introduction

Indonesia is one of the most highly mineralized country in the world, and relies heavily on its mining extractive industry, such as nickel, copper, natural gas, gold, and tin.<sup>1</sup> Indonesia's geographical location, which is in the path of The Southeast Asia Tin Belt along with Myanmar, Thailand, and Malaysia, makes it the second largest tin producing country in the world after China by contributing as much as 26% of the total global tin production. Tin sediments are

<sup>1</sup> Ahmad Redi, "DINAMIKA KONSEPSI PENGUASAAN NEGARA ATAS SUMBER DAYA ALAM", *Jurnal Konstitusi* 12, no. 2, (2016): 401, DOI: <https://doi.org/10.31078/jk12210>.

widespread throughout Indonesia's western islands—including Bangka, Belitung, Singkep, and Karimun Kundur—which are regarded as 'The Indonesian Tin Islands'. Mining policy regulation and management is a crucial aspect to ensure optimal tin utilization in Indonesia.<sup>2</sup> Moreover, the mining sector produces various types of risks that are often associated with the 'resource curse', the phenomenon of degradation and systemic losses due to improper resource management. Basically, the resource curse that always ends in environmental and social injustice is related to several main factors, such as mismanagement, weak institutions, rent-seeking, neglect of local communities, and corruption.<sup>3</sup> For Indonesia, the issue of resource curse in the tin mining sector is a real challenge.

Indonesia is currently the second largest tin exporter in the world, with 98% of its total production exported to other countries and only 2% used for domestic industrial needs. With total production reaching 76,400 tons in 2017 and an average of 60,000 tons in the last ten years, 99% of Indonesia's total tin is produced in Bangka Belitung. Indonesia's tin mining sector has undergone a different approach to governance over the years since colonialism ended.<sup>4</sup> Three tin mining companies operating under Dutch ownership were nationalized and united in 1958 and became Perusahaan Timah Negara in 1968. For the next 31 years, the Indonesian government fully controlled and controlled tin mining as a strategic excavation. Government policy to maintain the centralization of tin mining encountered difficulties along with market price fluctuations that declined into the early 1980s.<sup>5</sup> Although tin production figures continued to remain at an average pace, state revenues continued to decline sharply in the following 10 years. This directly contributed to declining state revenues, quality of life, scarcity of necessities and food, inflation, and widespread political turmoil until 1998.<sup>6</sup>

Table 1. Indonesia's tin and foreign exchange production in 1980-1991

| <i>Year</i> | <i>Production (ton)</i> | <i>Price (USD/metric ton)</i> | <i>Exchange (Milion USD)</i> |
|-------------|-------------------------|-------------------------------|------------------------------|
| <b>1980</b> | 32.500                  | 17.090                        | 555,43                       |
| <b>1984</b> | 23.200                  | 12.442                        | 288,65                       |
| <b>1986</b> | 24.000                  | 5.386                         | 129,26                       |
| <b>1989</b> | 32.000                  | 9.605                         | 237,09                       |
| <b>1991</b> | 29.400                  | 5.703                         | 167,67                       |

The government's initiation to reorganize tin mining management was carried out in 1999 which established tin as an export item that was no longer regulated and supervised by the central government. Law Number 22 of 1999 concerning Local Government shifted the responsibility to local governments to regulate and manage mining in their respective regions. This provision is part of the regional autonomy project. The decentralization politics launched by the government in the early days of the Reformation Era aimed to reduce the centralization

<sup>2</sup> Erwiza Erman, "AKTOR, AKSES DAN POLITIK LINGKUNGAN DI PERTAMBANGAN TIMAH BANGKA", *Sosioglobal: Jurnal Pemikiran dan Penelitian Sosiologi* 6, no. 2, (2022): 114–130, DOI: <https://doi.org/10.14203/jmi.v36i2.640>.

<sup>3</sup> Yuanyi Ding, "DOES NATURAL RESOURCES CAUSE SUSTAINABLE FINANCIAL DEVELOPMENT OR RESOURCES CURSE? EVIDENCE FROM GROUP OF SEVEN ECONOMIES", *Resources Policy* 81, (2023), DOI: <https://doi.org/10.1016/j.resourpol.2023.103313>.

<sup>4</sup> Andri Yanto et al., "IMPLIKASI RESENTRALISASI KEWENANGAN PERTAMBANGAN TIMAH TERHADAP POTENSI PENDAPATAN DAERAH DI BANGKA BELITUNG", *Jurnal Interpretasi Hukum* 4, no. 2, (2023): 344–357, DOI: <https://doi.org/10.55637/juinhum.4.2.7756>.

<sup>5</sup> Ronaldo Irzon, "PENAMBANGAN TIMAH DI INDONESIA: SEJARAH, MASA KINI, DAN PROSPEKSI", *Jurnal Teknologi Mineral dan Batubara* 17, no. 3, (2021): 179–189, DOI: <https://doi.org/10.30556/jtmb.Vol17.No3.2021.1183>.

<sup>6</sup> Edward Aspinall and Greg Fealy, eds., *Soeharto's New Order and Its Legacy: Essays in Honour of Harold Crouch*, 1st ed. (Canberra: ANU Press, 2010), 13.

of authority that curbed during the New Order era, while providing space for regions to develop their economic potential independently.<sup>7</sup>

The delegation of tin mining authority to local governments has opened a new phase which in the author's previous research was referred as the 'illegal mining boom'. The local government of Bangka Belitung in 2001 provided access to local communities to be directly involved in mining activities. During the first five years of implementing the decentralisation policy of 2001, there were 75 mining concessions, 37 tin smelters, and 6507 artisanal tin mining units that together drove a significant increase in tin production.<sup>8</sup> This led to a significant contribution to local revenues as well as increasing income for the people of artisanal mining communities. However, this condition also directly has implications for the widespread destruction of nature which immediately makes Bangka Belitung a 'Dead Islands'. Tin mining activities, especially small-scale unregulated mining, directly associated with environmental damage, landform deforestation, soil degradations, and inconsistency of spatial planning. Uncontrolled mining activities are caused by poor management of mining business.<sup>9</sup> The socio-economic impact of tin mining after 20 years since the 'illegal mining boom' began to enter the resource curse phase, which is indicative of slower economic growth, reduced social welfare, landform and environmental degradation, and the very high economic dependence on the tin exploitation sector.

The problems arising during the 20 years of decentralization of mining authority ended in 2020, with the enactment of Law Number 3 of 2020 concerning Minerals and Coals which is new.<sup>10</sup> Consequently, this new regulation revokes the authority of local governments to regulate mining in their territories, as well as return them to the central government. During the first 3 years since its inception, concrete solutions to the problem of tin mining have not yet seen their significance. The revocation of local government authority has the potential to cause illegal mining to mushrooming and more difficult to control. People of Bangka Belitung are still and continue to face the reality of resource curse due to mining activities which boils down to two fundamental consequences, environmental and social injustice.

Previous research conducted by Jailani Syamsudin (2023) comprehensively explained the transfer of mining business licensing authority using a decentralized perspective. The results show that the transfer of authority for mining business licenses is not in line with the principle of decentralization which requires a greater role for regions to optimize resource utilization for the regional economy.<sup>11</sup> Furthermore, research by Muhammad Salman Al Farisi (2021) analyzes the forms of authority possessed by regions in mineral and coal mining affairs after Law No. 3 of 2020. The results showed that currently the region only has authority in the

<sup>7</sup> Muhammad Salman Al Farisi, "DESENTRALISASI KEWENANGAN PADA URUSAN PERTAMBANGAN MINERAL DAN BATUBARA DALAM UNDANG-UNDANG NOMOR 3 TAHUN 2020", *Jurnal Ilmiah Ecosystem* 21, no. 1, (2021): 20–31, DOI: <https://doi.org/10.35965/eco.v21i1.699>.

<sup>8</sup> Risdawati Ahmad, "DERITA DI BALIK TAMBANG: KONTESTASI KEPENTINGAN EKONOMI POLITIK DALAM PERTAMBANGAN TIMAH, DI BANGKA BELITUNG", *Sosioglobal: Jurnal Pemikiran dan Penelitian Sosiologi* 6, no. 2, (2022): 114, DOI: <https://doi.org/10.24198/jsg.v6i2.36803>.

<sup>9</sup> Ibrahim, et al., "FROM CHARM TO SORROW: THE DARK PORTRAIT OF TIN MINING IN BANGKA BELITUNG, INDONESIA", *PEOPLE: International Journal of Social Sciences* 4, no. 1, (2018): 360–382, DOI: <https://doi.org/10.20319/pijss.2018.41.360382>.

<sup>10</sup> Alfredo Risano, "DISHARMONI ANTARA UU NO. 3 TAHUN 2020 TENTANG PERUBAHAN ATAS UNDANG-UNDANG NOMOR 4 TAHUN 2009 TENTANG PERTAMBANGAN MINERAL DAN BATUBARA DENGAN UU TAHUN 23 TAHUN 2014 TERKAIT KEWENANGAN DI BIDANG PERTAMBANGAN MINERAL DAN BATU BARA OLEH PEMERINTAH PUSAT", *Jurnal Independent* 8, no. 2, (2020): 320, DOI: <https://doi.org/10.30736/ji.v8i2.120>.

<sup>11</sup> Jalilani Syamsudin, "PENGALIHAN KEWENANGAN PERIZINAN USAHA PERTAMBANGAN DALAM UNDANG-UNDANG MINERAL DAN BATUBARA PERSPEKTIF DESENTRALISASI", *Jurnal Tana Mana* 4, no. 1, (2023): 46-50, DOI: <https://doi.org/10.33648/jtm.v4i1.273>.

People's Mining Permit (IPR).<sup>12</sup> In general, the two studies above have provided a brief overview related to the transition of government policy towards mining after Law No. 3 of 2020, but there has been no comprehensive explanation related to the implications of these policies on environmental and social conditions specifically in Bangka Belitung as a province with a dominance of the tin economic sector.

The novelty of this study is an analysis of the impact of the policy transition in Law No. 3 of 2020 on illegal tin mining in Bangka Belitung, seen from an environmental and social perspective. The problems to be studied in this study are divided into two, namely the legal politics of community mining and the inefficiencies of regulations in Law No. 3 of 2020, as well as the environmental and social impacts of the inefficiencies of these regulations in Bangka Belitung.

This research employs a qualitative socio-legal approach tailored to investigate the environmental and social injustices stemming from small-scale tin mining activities within the framework of Indonesia's new Mineral and Coal Regulation. The choice of this approach is deliberate, allowing the researcher the freedom to explore data without the constraint of predefined questions. However, it is essential to acknowledge certain limitations.

The central focus of this research revolves around assessing the tangible environmental and social impacts of small-scale tin mining. Furthermore, it scrutinizes how these impacts are influenced by recent modifications in the government's mineral and coal legislation. Data collection methods:

1. In-depth interviews, to capture firsthand perspectives, in-depth interviews are conducted with key stakeholders, including miners, affected communities, and social and environmental activists. The purposive sampling technique is employed to ensure representation and diversity among interviewees.
2. Direct observation, visits to mining sites provide a ground-level understanding of mining operations and their immediate effects on the environment and surrounding communities.
3. Documentation, comprehensive data is collected from various sources, including government reports, institutional data, previous research findings, and verified news coverage. This secondary data supplements the primary sources and helps establish a holistic view of the issue.

To bolster the credibility of findings, this study adopts a triangulation approach. Triangulation allows for cross-validation of data from multiple sources and methods, reducing potential biases and enhancing the robustness of the research. By combining primary and secondary data sources and comparing them through triangulation, this study seeks to obtain comprehensive, methodologically sound inferences that directly address the environmental and social injustices associated with small-scale tin mining in the context of Indonesia's evolving mineral and coal legislation.

## B. Discussion

### 1. Political Design of The People's Mining Law in Mineral dan Coal Regulation

The utilization of mineral and coal resources in Indonesia through policy transitions carried out by the government from time to time is basically built in the welfare state thought supersystem codified in Article 33 Paragraph (3) of the 1945 Constitution, that "Earth and water and the natural resources contained therein are controlled by the state and used for the greatest prosperity of the people".<sup>13</sup> The substance of this article confirms the conceptual existence of the Right to Control the State (HMN). Historically, HMN was not a new concept introduced

<sup>12</sup> Muhammad Salman Al Farisi, *Op.Cit.*, 24.

<sup>13</sup> Ahmad Redi and Luthfi Marfungah, "PERKEMBANGAN KEBIJAKAN HUKUM PERTAMBANGAN MINERAL DAN BATUBARA DI INDONESIA", *Undang: Jurnal Hukum* 4, no. 2, (2021): 473–506, <https://doi.org/10.22437/ujh.4.2.473-506>.

during the independence era. The idea of the urgency of controlling resources by the state has become a cultural part of pre-colonialism society in Indonesia. In the era of colonialism, HMN was formulated through a number of laws and regulations, including *Agrarische Wet* 1870, *Domeinverklaring* 1870, *Algemene Domeinverklaring* 1875, *Koninklijk Besluit* 1872, and *Indische Mijn Wet* (IMW) 1899. After Indonesia's independence, a number of regulations were formed to accommodate the interests of mining exploitation, including Law No. 1 of 1967 concerning Foreign Investment and Law No. 11 of 1967 concerning Basic Provisions of Mining. After the reform, Law No. 4 of 2009 was formed and updated with Law No. 3 of 2020 which consequently redrew the design of mining governance in Indonesia. Linearly with a number of these changes, HMN experienced ups and downs in its implementation.<sup>14</sup>

The 'Big Bang' decentralisation policy in Indonesia's mineral and coal mining sector was associated with significant economic contributions to the Gross Domestic Regional Product (GDRP) structure of the mineral-producing regions and further correlated positively with per capita income, especially in Bangka Belitung.<sup>15</sup> Before decentralization, the government imposed a ban on the general public from engaging in mining activities directly. Instead, communities receive indirect benefits through the construction of public facilities, educational facilities, and development funds distributed to local governments. However, difficult economic conditions during the 1997-1999 monetary crisis prompted the government to change the politics of mining law and allow people to participate in mining through the People's Mining Permits (IPR) scheme.<sup>16</sup>

In its implementation, the transition of authority to grant mining permits to local governments is not followed by mature policy infrastructure development. This condition can be seen from the imminent proliferation of small-scale mining run by the people illegally.<sup>17</sup> The IPR mechanism, which is narrated as key to community mine management, was never effective until changes in mineral and coal new laws in 2020. The latest data released by the regional government in 2017 only recorded a total of 30 active IPRs, inversely proportional to the number of illegal mining pontoons which in 2018 amounted to 18,000 units spread throughout Bangka Belitung.<sup>18</sup>

Regarding IPR, the latent problem faced by the Bangka Belitung Islands Province, as the second largest tin producing region in the world, is illegal mining run by the community.<sup>19</sup> High economic dependence on tin became a social phenomenon after the opening of tin mining as a non-strategic mineral in 1998, thus encouraging the large number of illegal miners.<sup>20</sup> The IPR mechanism, which is narrated as the key to community mine management, was never

<sup>14</sup> Ayuk Suryaningsih, et al., "HAK PENGUASAAN NEGARA DALAM BIDANG PERTAMBANGAN MINERAL DAN BATUBARA SESUAI DENGAN UU MINERBA", *SUPREMASI: Jurnal Hukum* 5, no. 2, (2023): 144–158, DOI: <https://doi.org/10.36441/supremasi.v5i2.1262>.

<sup>15</sup> Eko Prianto and Husnah Husnah, "PENAMBANGAN TIMAH INKONVENSIONAL: DAMPAKNYA TERHADAP KERUSAKAN BIODIVERSITAS PERAIRAN UMUM DI PULAU BANGKA", *BAWAL Widya Riset Perikanan Tangkap* 2, no. 5, (2017): 193, DOI: <https://doi.org/10.15578/bawal.2.5.2009>.

<sup>16</sup> Faisal Faisal, et al., "CRIMINAL SANCTIONS' REFORMULATION IN THE RECLAMATION OF THE MINING COMMUNITY", *Fiat Justisia: Jurnal Ilmu Hukum* 16, no. 1, (2022): 11–30, DOI: <https://doi.org/10.25041/fiatjustisia.v16no1.2222>.

<sup>17</sup> Derita Prapti Rahayu, "KEARIFAN LOKAL TAMBANG RAKYAT SEBAGAI WUJUD ECOLITERACY DI KABUPATEN BANGKA", *Jurnal Hukum IUS QUIA IUSTUM* 23, no. 2, (2016): 320–342, DOI: <https://doi.org/10.20885/iustum.vol23.iss2.art8>.

<sup>18</sup> Yolanda Oktavia, et al., "REVITALISASI KEWENANGAN PENGELOLAAN PERTAMBANGAN OLEH PEMERINTAH DAERAH DALAM MENGOPTIMALISASI PELAKSANAAN OTONOMI DAERAH DI BANGKA BELITUNG", *Jurnal Penelitian Serambi Hukum* 16, no. 2, (2023): 119, <https://doi.org/10.59582/sh.v16i02.789>.

<sup>19</sup> Muhammad Agus Fajar Syaefudin and Fajar Ari Sudewo, "PENEGAKAN HUKUM TERHADAP TINDAK PIDANA PERTAMBANGAN MINERAL DAN BATUBARA ILEGAL DI KOTA CIREBON", *Diktum: Jurnal Ilmu Hukum* 8, no. 1, (2020): 108–124, DOI: <https://doi.org/10.24905/diktum.v8i1.81>.

<sup>20</sup> Ibrahim, et al., *Op.Cit.*, 365.

effective until changes in the mineral and coal law in 2020. The latest data released by the local government in 2017 only recorded a total of 30 active IPRs, in contrast to the number of illegal mining pontoons which in 2018 amounted to 18,000 units. The Forum for the Environment (Walhi) noted that during 2004-2013, there were 81,000 illegal mining units spread across Bangka Belitung.<sup>21</sup> Although there is no data update until 2023, it is certain that the number of illegal miners has not decreased from the period before 2013 judging from the increase in the average annual amount of environmental damage due to illegal mining.

The main factors that led to the failure of the IPR scheme to control community mining are divided into three aspects. First, the substance of complicated laws and regulations, complex requirements in licensing, and convoluted and inefficient registration procedures. Second, the low capacity of mining communities, which are generally run by educated and low-income communities, makes it difficult to manage permits. Moreover, illegal mining provides instant profits without having to fulfill environmental responsibilities and pay taxes. Third, the low quality of law enforcement by the government. The crackdown by law enforcement officials did not produce a significant effect on tin miners. The number of illegal tin miners continues to increase following the increase in market prices.<sup>22</sup>

Recent changes to the mineral and coal law still substantively use the same research design in controlling artisanal mining. The IPR remains in place, but with some changes to the requirements that are even more selective. This provision although ideal on paper, but its implementation is far from roasted from the fire. The transfer of authority from the regions back to the center is expected to be able to provide answers, although empirical potentiality in the field still shows the opposite trends.<sup>23</sup> The unpreparedness of local governments in exercising people's mining authority has a broad impact on the mushrooming of illegal mining and massive environmental damage.

## **2. People's Mining Regulation Before and After Law No. 3 of 2020 concerning Minerals and Coal**

The existence of illegal tin mining that mushroomed in Bangka Belitung is inseparable from the government's inability to carry out function of control as regulated in Law Number 4 of 2009 concerning Minerals and Coal.<sup>24</sup> During the 11 years since its establishment, local governments have been widely given the authority to make local regulations, grant and coordinate business licenses and community mining permits, guidance, supervision, and resolution of conflicts. This authority is stipulated in Article 7 and Article 8 of Law Number 4 of 2009. However, the realization of local government authority is deadlocked in the face of the large number of illegal mining. Significantly, the incompetence of these local governments has a direct impact on the losses of the state. Indonesian Corruption Watch (ICW) recorded accumulative state losses due to illegal mining during 2004-2013 reaching IDR 50 Trillion.

<sup>21</sup> D Haryadi, et al., "ENVIRONMENTAL IMPROVEMENT POLICY THROUGH THE OBLIGATION OF POST-TIN MINING RECLAMATION IN THE ISLANDS OF BANGKA BELITUNG", *IOP Conference Series: Earth and Environmental Science* 1175, no. 1, (2023): 3, DOI: <https://doi.org/10.1088/1755-1315/1175/1/012021>.

<sup>22</sup> Derita Prapti Rahayu and Faisal Faisal, "EKSISTENSI PERTAMBANGAN RAKYAT PASCA PEMBERLAKUAN PERUBAHAN UNDANG-UNDANG TENTANG PERTAMBANGAN MINERAL DAN BATUBARA", *Jurnal Pembangunan Hukum Indonesia* 3, no. 3, (2021): 337–353, DOI: <https://doi.org/10.14710/jphi.v3i3.337-353>.

<sup>23</sup> Yolanda Oktavia, et. al, *Loc.Cit.*

<sup>24</sup> Derita Prapti Rahayu and Faisal, "POLITIK HUKUM KEWENANGAN PERIZINAN PERTAMBANGAN PASCA PERUBAHAN UNDANG-UNDANG MINERBA", *Pandecta* 16, no. 1, (2021): 168-170, DOI: <https://doi.org/10.15294/pandecta.v16i1.28013>.

Meanwhile, the Financial and Development Supervisory Agency (BPKP) reported that the country's average loss due to illegal tin mining was IDR 2.5 Trillion per year.<sup>25</sup>

The political transition of mining in 2020 led to the centralization of mining authority. Article 35 Paragraph (4) of Law Number 3 of 2020 concerning Minerals and Coal which updates Law Number 4 of 2009 systematically revokes the authority of local governments and returns them to the central government. Article 4 and Article 3 of this law affirm that the authority of mining management is entirely the authority of the central government.<sup>26</sup>

However, the polemic of revoking the authority of local governments in mining matters was not immediately completed by the enactment of a new mineral and coal law. Since its enactment on July 10, 2020, the implementation of this law has caused the onset symptoms of 'bureaucratic confusion'. The reason is, the Minister of Energy and Mineral Resources has stipulated Circular which prohibits the issuance of new permits of tin mining in 2020. This step is carried out to wait for legal certainty about the mechanism of the mining licensing process following new mineral and coal regulation.

For the next two years, 2020-2022, illegal mining activities continued to boom in Bangka Belitung. This condition is closely related to the rate of inflation, sluggish economic growth, and restrictions on activities due to the COVID-19 pandemic, which has encouraged people to start switching to illegal small-scale mining. At the same time, local governments do not have certainty of the authority to exercise control over mining, because the authority has been withdrawn to the centre but implementing rules have not been established. During this period, illegal mining became uncontrollable and there were no new government-issued IPRs.

On April 11, 2022, the government established Presidential Regulation Number 55 of 2022 which regulates the delegation of mineral and coal mining authority. Article 2 Paragraph (3) of this regulation expressly states that the authority to grant IPR is delegated to local governments.<sup>27</sup> Thus, the IPR provisions have not changed from Law Number 4 of 2009 at all and local governments remain authorized to grant tin mining permits as before the new mineral and coal law. The bureaucratic confusion symptoms that lasted for two years ended in the absence of a change in the licensing authority of the IPR.

In addition to the polemics of laws and regulations that are mutually intertwined between the central and local governments, another problem that arises related to community mining is in regional zoning. In the provisions of the mineral and coal law, it is emphasized that community mining can be granted IPR permits only in areas categorized as People's Mining Areas (*Wilayah Pertambangan Rakyat/WPR*). However, until September 2022, Bangka Belitung still has not submitted a WPR proposal. This means that even if people register to obtain IPR, local governments still cannot grant permits because there is no WPR.

Table 1. Distribution of licenses in Law No. 3 of 2020

| Actors             | Mineral and Coal Mining Licensing Forms     |
|--------------------|---|
|                    | Nonmetallic Mineral Mining Business License |
| Central Government | Rock Mining Business License                |
|                    | Rock Mining License                         |
|                    | Transport and Sales License                 |
|                    | Mining Services Business License            |
|                    | Mining Business License for Sales           |

<sup>25</sup> Anonymous, 'Akibat Penambangan Timah Ilegal, Indonesia kehilangan Pendapatan Rp58,080 Triliun', *Kementerian Energi dan Sumber Daya Mineral*, 7 November 2015, <https://www.esdm.go.id/id/media-center/news-archives/akibat-penambangan-timah-ilegal-indonesia-kehilangan-pendapatan-rp58080-triliun>.

<sup>26</sup> Imas Novita Juaningsih, "POLEMIK REVISI UNDANG-UNDANG MINERBA DALAM DINAMIKA TATA NEGARA INDONESIA", *'ADALAH* 4, no. 3, (2020): 105, DOI: <https://doi.org/10.15408/adalah.v4i3.16502>.

<sup>27</sup> Yolanda Oktavia, et. al, *Loc.Cit.*

| Provincial Government | People's Mining License |
|-----------------------|-------------------------|
|-----------------------|-------------------------|

Source: Law No. 3 of 2020

The centralistic authority arrangement as in the table above, is affirmed in Article 4 Paragraph (2) of Law No. 3 of 2020 which confirms that: "*The control of minerals and coal by the state is held by the Central Government*". The existence of PP No. 96 of 2021 and Presidential Regulation No. 55 of 2022 as implementers of Law No. 3 of 2020 schemes the form of control by the Central Government by delegating a small amount of authority to the regions (Al Farisi, 2021). Thus, centralization does not completely eliminate, but still provides space for regions to be able to exercise a number of authorities related to mining, especially People's Mining Permits (IPR).<sup>28</sup>

### 3. Implications of Legal Uncertainty on Smallholder Mining Activities: An Issue for Social Justice

The People's Tin Mining Association (ASTIRA) dataset in 2006 recorded the number of small-scale (unconventional) mines reaching 13,345 units. This number increased to 18,000 units, according to provincial government data in 2018. Meanwhile, PT Timah Tbk in March 2012 released the findings of 6,230 units of illegal suction vessels spreading in the Bangka sea area. Wahana Lingkungan Hidup (Walhi) noted that during 2004-2013, there were 81,000 illegal mining units spread across Bangka Belitung. Although there is no data update until 2023, it is certain that the number of illegal miners has not decreased from the period before 2013 judging from the increase in the number of annual average environmental damage due to illegal mining.<sup>29</sup>

As a form of countermeasures for unlawful acts, law enforcement officials have carried out various disciplinary efforts. However, these efforts are also ineffective as countermeasures against illegal miners. First, there was resistance from miners who had a high economic dependence on tin. In 2019, there was a clash between the police and illegal tin miners in the Belitung protected forest area which caused the deputy governor, Abdul Fatah to be held hostage by miners and 20 policemen injured. Second, miners continue to return after being put in order, as has been the case at the Kelabat Bay mine since 2014 to the present. Third, the court's decision on illegal miners is relatively light. Fourth, a court ruling that does not confiscate heavy equipment and tin sand from illegal mining. In addition to these factors, the ineffectiveness of law enforcement is also influenced by the number of police officers who are also involved in mining activities. Small-scale mining activities carried out by the community only received legal guarantees until 2009, when the government requires people to manage IPR in order to mine.<sup>30</sup> However, because IPR was never effective (and not entirely due to miners), the mining community became marginalized and discredited as illegal miners. Ironically, small-scale miners still exist and have to catch up with security forces, as the process of obtaining permits to make their mining activities legal is also very difficult to access.

In addition to IPR, another solution to do mining legally is to establish partnerships with mining companies, such as PT Timah Tbk which has a Mining Business Permit (*Izin Usaha Pertambangan/IUP*). In 2023, PT Timah has 127 IUPs with an area covering 473,388 hectares, while other private companies have 517 IUPs with an area of 572,631 hectares. However, partnerships with mining companies are also ineffective because companies have special

<sup>28</sup> Derita Prapti Rahayu, *Loc.Cit.*

<sup>29</sup> Yolanda Oktavia, et. al, *Loc.Cit.*

<sup>30</sup> Risdawati Ahmad, "DERITA DI BALIK TAMBANG: KONTESTASI KEPENTINGAN EKONOMI POLITIK DALAM PERTAMBANGAN TIMAH, DI BANGKA BELITUNG", *Sosioglobal: Jurnal Pemikiran dan Penelitian Sosiologi* 6, no. 2, (2022): 114, DOI: <https://doi.org/10.24198/jsg.v6i2.36803>.



restrictions and conditions for partnering, such as having to have a legal entity. This condition is difficult for the community, and is not proportional to the number of miners.<sup>31</sup>

The unavailability of a directly accessible licensing mechanism allows smallholder miners to continue mining illegally to meet the needs of life. However, the community does not fully reap prospective profits, but also bears the losses caused. Illegal mining is carried out without adequate safety procedures, resulting in a high number of work accidents. In the 2017-2020 period, there were 59 deaths due to illegal tin mining accidents recorded by local governments. The highest death toll occurred in 2019 with 25 deaths in a one-year period.

The low level of government oversight in carrying out the coaching function also has an impact on the high rate of school dropouts and child labour. In 2015, there were 3,337 child workers under the age of 17 who also worked in the mining sector.<sup>32</sup> Children's involvement in illegal mining activities is clearly a form of marginalization and contrary to the rules of labor law in Indonesia, basic principles in the International Labor Organization, and Human Rights.

#### **4. Implications of Legal Uncertainty on Illegal Mining and Environmental Impacts: An Issue of Environmental Injustice**

The exploitation of tin mines left a trace of extensive natural damage in Bangka Belitung. An inventory of environmental damage data released by the Regional Environment Agency of Bangka Belitung Province in 2014 reported that of the total land area of 1,675,240.51 hectares, there has been 15.15% critical land, 37.28% of potential critical land, 44.54% of somewhat critical land and only 10.79% of which includes non-critical land. Meanwhile, in a survey conducted by the Wahana Lingkungan Hidup (Walhi) of Bangka Belitung in 2020, the amount of critical land has penetrated into 1,053,253.19 hectares, or 64.12% of the total land area. In the last 10 years, Bangka Belitung has also lost 320,000 hectares of productive land due to mining activities.<sup>33</sup>

Environmental damage from tin mining is directly associated with the process of dredging and sorting tin ore from the ground and seabed. According to data released by PT Timah Tbk, the tin ore content in Bangka Belitung is on average 0.32-0.43 kilograms per cubic meter. With total production reaching 82,820 tons in 2018, it takes 18.6 million cubic meters of land transfer in just one year.<sup>34</sup> Within five years, 2017-2021 the total tin production of Bangka Belitung is 291,590 tons, and has dredged 65.8 million cubic meters of land. Data from the Environment Agency in 2021 shows that as many as 75% of the 67 rivers flowing in Bangka Belitung have been polluted due to illegal mining. Meanwhile, 7 rivers that store the largest freshwater reserves in Bangka, namely the Mabet, Kayubesi, Limbung, Baturusa, Selindung, Pangkalbalam, and Rangkui rivers are included in the category of heavily polluted with chemical compounds exceeding water quality standards.<sup>35</sup>

Environmental degradation that systematically transforms the landscape of Bangka Belitung into 'Dead Islands' is expected to continue in the next few decades. In 2020, the world's total known tin reserves were 4,741,000 tons, with as many as 800,000 tons (17%) in Indonesia. With an average mining rate of 70,000 tons / year, Bangka Belitung will remain mined at least

<sup>31</sup> Yolanda Oktavia, et. al., *Loc.Cit.*

<sup>32</sup> Putra Pratama Saputra. "EKSPLOITASI PEKERJA ANAK PENAMBANG TIMAH OLEH ORANG TUA DI DESA KACE, KECAMATAN MENDO BARAT, KABUPATEN BANGKA, PROVINSI KEPULAUAN BANGKA BELITUNG, INDONESIA" *Jurnal Masyarakat dan Budaya* 20, no 1, (2018): 2-4, DOI: 10.14203/JMB.V20I1.620.

<sup>33</sup> D. Haryadi, et al., *Loc.Cit.*

<sup>34</sup> Joko Susilo and Siti Maemunah. *Tiga Abad Melayani Dunia: Potret Tambang Timah di Bangka Belitung* (Jakarta Selatan: Jaringan Advokasi Tambang, 2009), 13.

<sup>35</sup> Mentari, et al., "INFLUENCE OF TIN MINING ACTIVITY TO WATER QUALITY IN BATURUSA RIVER OF BANGKA REGENCY", *Akuatik: Jurnal Sumberdaya Perairan* 7, no. 2, (2017): 23-30, DOI: .

until 2035. However, continued exploration over time is likely to result in new reserve findings, which means extending the life of tin exploitation on the island.

According to data released by PT Timah, the average tin ore content in Bangka Belitung is 0.32-0.43 kilograms per cubic meter. With total production reaching 82,820 tons in 2018, it takes soil removal of 18.6 million cubic meters in just one year.<sup>36</sup> In a period of five years, 2017-2021 Bangka Belitung's total tin production is 291,590 tons, and has dredged 65.8 million cubic meters of land. Meanwhile, the remaining tin mining land cannot be used as production land, and is often used as a small-scale mining area by the community. Unlike the company's ex-mining land which must be reclaimed, illegal small-scale mining leaves under and pollution without any treatment. Environmental damage due to tin mining is directly associated with the process of dredging and sorting tin ore from the ground and seabed.

Data from the Environment Agency in 2021 shows that as many as 75% of the 67 rivers flowing in Bangka Belitung have been polluted due to illegal mining. Meanwhile, 7 rivers that store the largest freshwater reserves in Bangka, namely the Mabet, Kayubesi, Limbung, Baturusa, Selindung, Pangkalbalam, and Rangkui rivers are included in the category of heavily polluted with chemical compounds exceeding water quality standards based on Government Regulation Number 82 of 2011.<sup>37</sup> Massive damage that pollutes land and rivers results in conditions of decreased soil fertility and reduced productive land in Bangka Belitung. Consequently, agricultural potential is declining and difficult to develop.

Tin mining in Bangka Belitung has undergone a 'from charm to sorrow' phase as a direct result of changes in mining policy and management during the period of regional autonomy that marked the illegal tin mining boom. For three decades since 1999, the problem of illegal small-scale mining has not been resolved. The licensing mechanisms put in place through local governments are inefficient and instead encourage the continued proliferation of illegal miners. The change in mining policy through Law Number 3 of 2020 concerning Minerals and Coal has caused bureaucratic confusion for two years, because the licensing authority was withdrawn back to the central government. However, in 2022, Presidential Regulation Number 55 of 2022 was issued which returned the authority of community mining permits to local governments.

As a non-renewable natural resource that requires an extraction process that changes the landscape, tin exploitation without proper management and regulation will have a direct impact on the degradation of environmental quality and socio-cultural aspects. The difficulty of public access to obtain IPR due to the absence of WPR and bureaucratic hierarchy and the complexity of the conditions, makes the mining community marginalized and has no choice but to mine illegally.

The mining sorrow has been basically occurring. Uncontrolled illegal tin mining leads to many miner deaths due to inadequate safety procedures, child labour exploitation, river pollution, environmental damage, and widespread critical land throughout the island. As the second largest tin producing region in the world, with reserves known to still be mined for decades to come, Bangka Belitung needs immediate mining management improvement to alleviate social and environmental problems caused by illegal mining. Indonesia and international institutions must proactively advocate for the rights of people and the environment as a tangible manifestation of real sustainable development.

### C. Conclusion

Legal uncertainty in the process of transforming mining authority in Law No. 3 of 2020 increases the access of illegal tin miners to carry out mining activities in line with the withdrawal of regional authority in mining management. Legal certainty related to the new authority presented through Presidential Regulation No. 5 of 2022 makes the two-year period

<sup>36</sup> Joko Susilo and Siti Maemunah, *Op.Cit.*, hlm. 15.

<sup>37</sup> Mentari, et al., *Loc.Cit.*

of legal vacuum, and the contribution of the COVID-19 pandemic, further increasing the number of illegal tin miners in Bangka Belitung. Although this activity has occurred since the beginning of the reform, the inability of the region to manage community mining activities has made illegal mining increasingly impactful, both for the environment and socially. The three main causes that cause the government's failure to manage community mining are the disparity of legal norms with social reality, weak law enforcement, and low community legal culture.

Illegal tin mining activities that are difficult to control, even after going through regulatory shifts, contribute to environmental damage and social conflict in an extensive spectrum. The tug-of-war of authority in mining regulations, including in Law No. 3 of 2020, makes efforts to protect the environment and prevent social conflicts difficult to carry out ideally. Moreover, after the granting of the return of the authority of the People's Mining License to the regions, there is no adequate management and law enforcement infrastructure, while economic needs continue to encourage the increasing number of illegal miners. Thus, existing regulations need to be formulated and equipped to comprehensively integrate the government's role in tackling the problem of illegal tin mining.

The transfer of authority from the regions to the center has implications for the increasingly difficult efforts to combat illegal tin in Bangka Belitung. For this reason, local governments, which currently have the authority to grant IPR, must optimize its implementation by accelerating WPR proposals and ensuring good management so that IPR can be implemented in accordance with laws and regulations.

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