Strategic Ecological Issues: Environmental Problems in a Perspective of Regional Development in Bangka Belitung

Dwi Haryadi1*, Ibrahim Ibrahim2, and Darwance Darwance3

1Law Department, Bangka Belitung University, Balunijuk, 33134, Bangka, Indonesia
2Political Science Department, Bangka Belitung University, Balunijuk, 33134, Indonesia
3Law Department, Bangka Belitung University, Balunijuk, 33134, Bangka, Indonesia

Abstract. A region’s development planning should be carried out by referring to the strategic issues faced by the region. Thus, strategic issues become the basis upon which regional governments formulate their policies and work programs. This study examined how each region in Bangka Belitung Islands Province positioned strategic issues of ecology in its regional development planning. The current writers examined eight regional governments’ Regional Medium-Term Development Plan (RMTDP) documents; one of which belongs to the provincial government, while the rest belong to the regency/city governments. This study found that ecological issues comprised an average 17.6% of the strategic issues in all of the planning documents, the highest of which was found in Belitung Regency’s planning document. In addition, the analysis revealed that the general focus of the strategic ecological issues was environmental damage, which was reported by three of the regions as a result of mining activities. This study provides an illustration of how each regional government is committed to take ecological issues seriously and include them in the strategic issues at the regional level.

1 Background

Bangka Belitung is an Indonesian province with complicated ecological issues. Environmental damage is widespread both on its earth and in its ocean [1]. The contorted topography has become a sensitive issue amidst the regional government’s efforts to keep its stability as a young province. Although the province is an archipelago, tin lies underneath its entire lands, making it one of the most contested regions since Dutch colonization [2].

Despite having been subjected to tin mining for hundreds of years, mining activities have never ceased to persist in Bangka Belitung. The emergence of people’s mining has led to even more extensive environmental damage [3, 4]. Tin mining was no longer carried out only by legal companies, but also illegally by the people of the region [5].

It is no surprise that ecological degradation is ubiquitous, making Bangka Belitung easily identified as a region with damaged environment [6]. The increasing number of kolong (large pools of water formed from tin mining activities in the past) and the decrease in productive lands have made ecological issues fit to be categorized as strategic issues.

In every regional development planning document, every province, regency, and city are required to establish strategic issues as the basis on which regional leaders make development plans. In turn, these strategic issues become the consideration in formulating the steps to be done by the regional government. The planning document is prepared every five years along the commencing leadership of a new regional head. An elected regional head should prepare a five-year plan as a foundation of his/her leadership [7]. With environmental decline happening almost everywhere, it is important to see how strategic issues of ecology are viewed and positioned in a development planning document, which is an important document for a region. Equally important is observing how regional governments make environmental issues a strategic issue.

2 Method

This paper reports the result of a qualitative study whose data was collected by analyzing regional development planning documents. The planning documents comprised the latest Regional Medium-Term Development Plan (RMTDP) of eight regions, i.e. the governments of Bangka Belitung Islands, Bangka Regency, Belitung Regency, Pangkalpinang City, Central Bangka Regency, South Bangka Regency, West Bangka Regency, and East Belitung Regency [8, 9, 10, 11, 12, 13, 14, 15]. Following the provisions of regional development planning document preparation, this study focused on the part regarding strategic issues of regional development.
3 Discussion

Strategic issues are an inseparable component of every regional development planning document, since they help the government narrow down the focus of work. To address these issues, a regional government then outlines its vision, missions, goals, and work programs [16].

In Indonesia’s regional development system, planning is carried out every five years to adjust to a regional head’s period of tenure. That being said, the length of planning document preparation varies from one region to another, since it is usually in keeping with the varying lengths of regional leaderships in different regions. As a consequence, it is difficult to achieve integration of programs between different regions and different levels of government. Regardless, the central government has provided national development guidelines, most of which must be observed by the regional governments. In the regional government system, the government is divided into at least two governments, namely the provincial government and the regency/city government. Each level of governments must prepare its own regional development plan every five years, which is contained in the Regional Medium-Term Development Plan (RMTDP).

The government of Bangka Belitung Islands Province, which is the locust of this study, is a regional government that has been running since the year of 2000. Today, there are seven regional governments under the province: Pangkal Pinang, Bangka Regency, Belitung Regency, Central Bangka Regency, South Bangka Regency, West Bangka Regency, and East Belitung Regency.

With similar contours and patterns across the islands, areas in Bangka Belitung are bound to have similar problems, such as environmental damage, mining issues, low carrying capacity, and underlying problems in the sectors of marine and plantation. Therefore, this study tracked the availability of strategic ecological issues in each regional government’s planning document.

The following is the result of analysis of the regional development planning documents:

The Provincial Government of Bangka Belitung Islands

The Provincial Government of Bangka Belitung Islands determined 25 strategic issues to tackle for the period 2017 to 2022. Three of them are environmental issues, i.e. (a) widespread environmental damage; (b) disaster vulnerability; and (c) inconsistent spatial planning, utilization, and control.

Pangkal Pinang City Government

The Government of Pangkal Pinang City determined 14 regional strategic issues for the period 2018 to 2023. Three of them focus on ecological issues: (a) the nonoptimal environmental management, such as issues of waste-handling triggered by the high volume of waste, which is up to 110 ton per day, the limited landfill space, the lack of community awareness, the scant effort to empower the community members to manage their environment, and the high risk of flood and inundation; (b) the low quality and quantity of public infrastructure such as green open space and city street lighting, the poor slum management; and (c) the low optimization of integrated development and usage of Rangkui riverbank areas in Pangkal Pinang.

Bangka Regency Government

For the period 2019 to 2023, the Government of Bangka Regency determined nine strategic issues of regional development. Two of them focus on ecology: (a) controlling agricultural land conversion rate and (b) improving the quality of ecological function.

Belitung Regency Government

Belitung Regency Government determined six strategic issues, three of which focus on ecology: (a) Belitung as a strategic region, (b) sustainable environment, and (c) disaster management.

Central Bangka Regency Government

Central Bangka Regency Government determined 17 regional strategic issues of regional development for the period 2016 to 2021. Two of them focus on ecology: (a) developing renewable energy and (b) improving the quality of environment.

South Bangka Regency Government

South Bangka Regency Government determined 30 strategic issues of regional development to be resolved for the period 2016 to 2021. Out of the 30 strategic issues, two focus on ecology: (a) environmental issues, i.e. land degradation and weak law enforcement in the case of environmental damage instigation; and (b) energy and mineral issues, i.e. the need for regional authority to perform mining supervision on the existing mining business license areas.

West Bangka Regency Government

West Bangka Regency Government determined 5 strategic issues of regional development for the period 2016 to 2021. One of them focus on ecology, specifically the effort to improve the quality of the environment.

East Belitung Regency Government

East Belitung Regency Government determined 7 strategic issues for the period 2016 to 2021. One ecological issue included is the decreasing carrying capacity of the environment.

The number and percentage of ecological issues found in Bangka Belitung regional planning documents are seen in the table 1 below:

Table 1. Percentage of Strategic and Ecological Issues in Bangka Belitung

| Government       | Strategic Issue | Ecological Issue | Percentage of Ec. Issues |
|------------------|-----------------|------------------|--------------------------|
| Provinsi         | 25              | 3                | 12 %                     |
| Pangkal Pinang   | 14              | 3                | 21 %                     |
| Bangka           | 9               | 2                | 22 %                     |
| Belitung         | 6               | 2                | 33 %                     |
| Central Bangka   | 17              | 2                | 12 %                     |
| South Bangka     | 30              | 2                | 7 %                      |
The focuses of ecological issues in each region’s planning document are as seen below:

**Table 2. Focus of Ecological Issues in Bangka Belitung**

| Government       | Focus of Ecological Issues                                                                 |
|------------------|---------------------------------------------------------------------------------------------|
| Province         | Environmental damage, disaster vulnerability, and use of spatial planning                     |
| Pangkal Pinang   | Environmental management, green open space, and management of Rangkui River                 |
| Bangka           | Nonoptimal use of agricultural lands and decrease in ecological functions                   |
| Belitung         | Development of maritime areas; urgency of sustainable development                            |
| Central Bangka   | Development of alternative energy; greening, pollution anticipation, reducing environmental |
|                  | damage, conservation, and other activities that support the carrying capacity of the environment |
| South Bangka     | Land degradation and law enforcement; mining supervision                                     |
| West Bangka      | Environmental damage, particularly in ex-mining areas, forests, and watersheds; Global climate change |
| East Belitung    | The decreasing carrying capacity of the environment due to mining and oil palm plantations  |

As shown in the table above, the focus of strategic issues generally varies due to the condition of the associated region. Out of the eight regional planning documents analyzed in this paper, three regions specifically reported strategic issues associated with tin mining. It is interesting to note that although there was a transfer of authority for the mining license issuance from regency/city government to provincial government according to Law No. 23 of 2014 on Regional Government, the major impacts of tin mining are still mostly felt at the regency/city level. Not only does mining affect the environment, it will also eventually impact the economy of the people at the regency/city level. Meanwhile, some other areas reported environmental damage as a unique case, while Pangkal Pinang City did not associate environmental damage to tin mining.

Referring to Table 1, we can see that an average 17.6 % of the strategic issues focuses on ecological problems. Based on the data, Belitung Regency and Bangka Regency are two regions that have the highest percentage of ecological issues, while South Bangka Regency, Central Bangka Regency, and the Provincial Government have the lowest percentage. Although the percentage information is not meant to gauge the regional government’s success in ecological planning, the data presented above illustrates how serious the regional governments view ecological issues by including them in the strategic issues.

**4 Conclusion**

The findings in this study support the conclusion that every regional government in Bangka Belitung Islands Province has positioned ecological issues as a part of regional strategic issues in its regional development planning documents. From the varying numbers, the current writers identified that an average 17.6 percent of the strategic issues contained in the regional five-year development planning documents were ecological issues. Additionally, the highest percentage of ecological issues were found in Belitung Regency Government’s planning document, while the lowest were found in South Bangka Regency Government’s document.

Meanwhile, the extensive document analysis has led to a conclusion that the ecological issues included in the Regional Development Planning are generally those associated with environmental damages, with three regencies, i.e. South Bangka Regency, West Bangka Regency, and East Belitung Regency firmly claiming that the damages are an impact of tin mining.

This study revealed that Bangka Belitung Islands Province’s regional governments have deemed ecological issues crucial, considering its inclusion into the development planning’s strategic issues, albeit varying in number and distribution. Incorporating ecological issues into strategic issues is essential, since these issues serve as the foundation on which policies and work programs are formulated.

We thank you to General Directorate of Higher Education of Ministry of Education and Culture, Republic of Indonesia, that funded this research under Basic Research Scheme 2020-2022 with contract number 141.A/UN50.11/PP/2020.

**References**

1. I. Ibrahim, D. Haryadi, N. Wahyudin, *Environmental Advocacy Dilemma on Tin Mining Communities in Bangka Belitung*, E3S Web of Conference, 118, pp. 1-5 (2019).
2. Ibrahim, *Bangka Tin and The Collapse of The State Power*, GSTF Journal of Law and Social Sciences (JLSS), 5(1), pp. 1-7 (2016).
3. I. Ibrahim, et.al., *From Charm to Sorrow (The Dark Portrait of Tin Mining in Bangka Belitung, Indonesia)*, PEOPLE : International Journal of Social Sciences, 4(1), pp. 360-382 (2017)
4. D. Haryadi, *Illegal Tin Mining (Life Time Problem?)*, In *After 14 years (The Journey Note of Bangka Belitung Islands Province)*, Yogyakarta, Imperium, (2014)
5. D. Haryadi, *Criminogenic Factors Related to Illegal Tin Mining in Bangka Belitung*, Journal of Legal Issues, 44 (1), pp. 52-58 (2015)
6. S. Sulista, I. Ibrahim, S. Pratama, *Accomodation, Resistance, and Divided Community : Study of The Dynamics of Offshore Tin Mining Conflict Between the Fisherman of The Coastal Area and Companies in Bangka Islands*, PEOPLE: International Journal of Social Sciences, 5(3), pp. 275-296 (2019).
7. I. Ibrahim, N. Zulkhri, R. Rendy, *Between Tourism and Ecology: Review of Political Policy Commitments on Ecotourism Development in Bangka Belitung*, E3S Web of Conference, **118**, pp. 1-4 (2019)

8. Provincial Regulation No. 14 of 2017 on Bangka Belitung Islands Provincial Medium-Term Development Plan for the period 2017-2022

9. District Regulation No. 12 of 2016 on South Bangka Regency Medium-Term Development Plan for the period 2016-2021

10. Final draft of Bangka Regency Medium-Term Development Plan for the period 2019-2023

11. District Regulation No. 11 of 2016 on East Belitung Regency Medium-Term Development Plan for the period 2016-2021

12. Final draft of Belitung Regency Medium-Term Development Plan for the period 2018-2023

13. First draft of Belitung Regency Medium-Term Development Plan for the period 2018-2023

14. District Regulation No. 7 of 2016 on West Bangka Medium-Term Development Plan for the period 2016-2021

15. Central Bangka Medium-Term Development Plan for the period 2016-2021

16. R. Rendy, I. Ibrahim, S. Pratama, *Ecological Political Commitments Measuring The Ecological Leadership Visions of District Head In Bangka Belitung Region*, Atlantis Press, **389**, pp. 208-212 (2020).