

Sustainable Economic Potential Mapping Based on Plantation and Tourism Sectors Post Mining Resources Scarcity

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Abstract

This research was conducted with a purpose of mapping the economy potential based on plantation and tourism sectors, which have been the leading alternative sectors in Belitung Timur Regency post mining resources scarcity. The type of research method chosen for this theme is a descriptive survey that requires primary and secondary data. The complete data collection was analyzed using a descriptive statistic method. The research shows that; (1) mining resources scarcity shown by the rate of economic growth for mining sector tends to decrease in the last couple of years. Apart from that, the scarcity of the resources is identified by the difficulty of founding a profitable mining field either socially or economically. It shows that, in the future, mining field can no longer be a leading sector that supports Belitung Timur Regency's economy development; (2) plantation and tourism are two potential sectors that could help building a sustainable economy development post mining resources scarcity.

Keywords: Sustainable economy development, plantation, Tourism.

1. Introduction

Belitung Timur Regency is one of Indonesia's top tin mining extractor. The mining activity has been on going for more than one century (Buku Saku, 2011:2). Because of the continuous mining activity, the minerals, especially tin, has become a highly rare mineral in the area. Given that one of the government main goals is to "Running a local natural resources based economy" (Belitung Timur in Figures, 2012:v), it should refer to renewable natural resources.

Tin mining sector can be categorized as a non-renewable natural resource, which along this time has been one of the leading sectors of Belitung Timur's economy development. Therefore, with the scarcity of the mineral, real actions need to be done in order to realize sustainable economy development that based on natural resources excellence such as development through plantation and tourism sector as leading sectors for the future of Belitung Timur Regency's economy development. Therefore, this research was conducted to create a sustainable economy potential based on plantation and tourism that becomes a part of post mining resources scarcities leading sector programs.

Based on the above description, this research is specifically aimed to acknowledge: (1) mining sector contribution for Belitung Timur's economy development, (2) the scarcity of mining resources in contribution of Belitung Timur's economy development continuity (3) plantation and tourism sectors mapping to realize a sustainable economy development due to post mining resources scarcities, and (4) to acknowledge tourism and plantation based sustainable economy development's main and supporting aspects in Belitung Timur post mining resources scarcity.

2. Literature Study

The Brutland Report emphasized the importance of sustainable development (Tjuk Kuswartoro, 2010:54-55). Then what is the meaning of sustainable development? By using Our Common Future's definition, it is stated that, "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Wilderer, Schroeder, and Kopp (eds.), 2005:8). Therefore, sustainable development is to meet present generations' needs without paralyzing the future generations' ability to sustain their needs.

The concept of sustainable developments motivated by the scarcity of natural resources which then worried because of its huge social and economical impacts. To face and overcome the future global problem, WCED (World Commission on Environment and Development) who have been reviewing many countries and the condition of their environment, offers a concept called as Sustainable Development. The concept's idea is to align the environment with the development and seek to meet present needs without inhibiting future needs (Tjuk Kuswartojo, 2010:17-18).

Not less than 30 percent of Indonesian land has been allocated for mining sector, which covers mineral, coal, or excavation C mining. It is not rare that these mining areas overlap forestry areas that contains a vast

natural diversities and indigenous territories (Ali Yafie, 2006:141-142). Furthermore, the connection between mining activities and sustainable development has been many times, revealed by experts (Rajaram, Dutta, and Parameswaran (eds.), 2005).

Development in Indonesia has often sacrifices nature, illegal logging, land damaging, invading rivers and waterways, also increasing pollutant numbers on the atmosphere (M. Abdurrahman, 2012:5). Chemical companies are not only the ones that dispose illegal wastes. There are also other companies that has been doing the same practice such as coal companies, food companies, and other companies producing textile or other companies producing ready-to-use goods (Ibrahim Abdul-Matin, 2012:191), including tin mines. In practice, mining resources will eventually experience scarcities if they continuously exploited and in turn, a strategic solution is needed to develop other sectors as long-term economy development continuity in the future.

Development is an effort to increase the benefit that we receive from used natural resources. The effort to increase efficiency in local natural resources usage is not only important for non-renewable resources, but also for the renewable resources. This effort is important based on two main causes (Otto Soemarwoto, 2008:172-173): (a) for renewable resources, increased exploitation intensity heightens natural resources damages risks. The damages can cause the renewable resources become non-renewable, except with a high maintenance cost. For the non-renewable resources, increased exploitation intensity will accelerate natural resources depreciations. It means, the natural resources will deplete faster, and (b) high amount of natural resources usage commonly leads to a great problem of pollution. The pollution, usually, will lower environments' ability to support sustainable development. Lawn (2001:120) describes the importance of non-renewable and renewable natural resources understanding in relation with sustainable development.

Plantation is one of sectors that can be made as leading sector by using sustainable development paradigm. But hard work, local government's smart decisions and the companies concerned, including local people's needs to be sought. The government, in this case local government, has an important role in controlling strategic sectors that can highly benefit for their areas development and contributes peoples' economy through regulation, incentive, funding, facilitating and networks.

Tourism sector development, similar with mining sector development, factories, farms or other kind of economy development, will produce many influences that can effect an area or more where the development is implemented. Of course, the effect or the influence of many developments are varies but there is one influence is often seen during the process. All development will highly impact the people's economy, government and its environment (Wahab, Crampon, and Rothfield, 1997:10-11). For sustainable Tourism based economy development, a lot of main and supporting factors need to be expertly integrated. Tourism attractiveness requires the availability combination of interesting tourism sites, supporting infrastructures, community preparedness to success tourism sector as their area's advantage, and also the overall area's ability to provide the best services for tourists as tourism services consumers.

3. Research Method

Research method used in this occasion is a descriptive survey. Descriptive research is a research that is a method that describes a phenomenon and is able to utilize survey technique. Through descriptive research, it is expected that the potential of sustainable economy development mapping can be produced. Meanwhile, the utilized survey technique is a way to collect information in hoping to acknowledge and to be able explains the presented phenomenon through a research against the presented problem. Therefore, this research requires primary and secondary data availability. Primary data is utilized to obtain direct input. Primary data is collected through in-field survey in form of depth interview through focus group discussion (FGD) on seven different districts in Belitung Timur Regency. Meanwhile, secondary data is obtained from many connected local institutions.

4. Discussion

4.1 Mining Sector Contribution Against Economy Development

The intended mining sector in this case is tin mining that has become one of the leading sectors that affects the people of Belitung Timur's economy. In this area oil and natural gas mining is not presented. For a couple of years, percentage of mining sector contribution against Belitung Timur's economy development experienced an increase during 2004 to 2007; however during 2007 to 2012 the percentage tends to periodically decreased years by years. Mining sector contribution in Belitung Timur excluding oil and natural gas for the last ten years is averagely 8,41 percent (Belitung Timur Regency Basic Data, 2013:II-13), which is quite large in terms of local economy. However, with the decreasing contribution percentage from the sector since 2007 to 2012 and the contribution percentage that reach below average percentage, it would be difficult in the future to maintain and plays role as leading sector in Belitung Timur's economy development, given that the availability of the mining resource is non-renewable. Because of that an alternative substituting sector needs to be found as replacement for mining sector to support local economy development. Therefore, local leading sector transformation from mining to another sustainable sector is vital, in hoping that the replacing sector can be a leading sector for

sustainable economy development in Belitung Timur.

4.2 The Scarcity of Mining Resource in Economy Development

Although the present mining sector in Belitung Timur still provides significant contribution against local economy, the growth rate of the mining sector experiences significant decrease. “Even from 2008 until 2012 the growth rate of the mining sector is low, which is between 1,45 percent (highest) to -1,57 percent (lowest) that occurs each happened in 2010 and previously 2009, on 2012 the growth rate of this sector experience decrease by -0,20 percent” (Belitung Timur Regency Basic Data, 2013:II-19). Therefore, for a long-term local sustainable economy development, with the increasingly scarce mining resource, the sector has become unreliable and cannot play role as leading sector for sustainable economy development.

Scientifically, the scarcity of mining resource that occurred can be identified by the difficulty of finding a social or economically profitable tin mining land in Belitung Timur. Socially means mining land activity needs to be able to bring benefits either economically or ecologically. Ecologically, it needs to positively impacting society’s environment and the natural preservation, and economically means it can bring benefit for mining activity including avoiding its negative impact on society’s mindset of short-term economic livelihood (mining minded). Therefore, there are private companies that stopped their mining activities because the lack of profit due to high production cost either on the fixed cost or the variable cost. Meanwhile the acquisition value received is unable to cover the expenses. Mining activity is considered inefficient, because of the mining resource scarcity that can’t be processed with certain technology owned by the companies.

4.3 Plantation and Tourism Sector Potential Mapping in Realizing Sustainable Economic Development

By the continuous mining activity and the scarcity of the non-renewable resources, economic development in Belitung Timur’s area that depended on mining as economical leading sector, it is impossible to rely on the sector to become the leader of sustainable economic development in the long run. Therefore, another potential alternative sectors need to be developed. “Based on business field that can bring economical contribution above 6 percent per year for the last three years in Belitung Timur” (Belitung Timur Regency Basic Data, 2013:II-13), shows that plantation is a potential economy alternative to develop as one of the leading economic sector. Plantation resource is categorized as renewable resource, so it can become a sustainable economic sector for the people of Belitung Timur. Pepper is the plantation sector’s leading commodity in this area. Not only pepper has the vastest plantation area, it has also absorbs the highest number of labors in plantation sector. Rubber is second in line and the third commodity is palm oil. Therefore, apart from the contribution given by the three commodities for the people’s economy, the possibility of the sub sectors of these three commodities to be developed is very potential. The three main commodity sub sectors, which are pepper rubber and palm oil, need to be prioritized as the peoples’ main business field, and of course without setting aside many other commodities that have been already cultivated such as coconut, cashew nuts, palm sugar and coffee that has been cultivated since a long time ago by the people of Belitung Timur.

Also in line with one of Belitung Timur Regency goals; to increase local natural resource based economy through Tourism sector; therefore this sector needs to be developed. Because of that, Belitung Timur’s Regents is convinced that “Tourism sector will grow large and replace mining sector that has been dominating people’s lives” (Majalah Wisata, Edisi 4, 2013:7). Bringing Belitung Timur as one of the main tourism destinations is very realistic to be realized. From the data obtained in the last two years, the number of visitors in Belitung Timur is increasing. “Cumulatively, tourist achievement on year 2013 increased by 100 percent from year 2012” (Majalah Wisata, Edisi 5, 2014:8). Belitung Timur Regency is very rich in tourist attractions and is feasible for further development towards becoming one of Indonesia’s main tourism destinations. In accordance with 141 islands within Belitung Timur’s territory, it is understandable if this area is dominated with marine tourist attractions.

Tourism sector in this area needs to be developed into main area because of its vast potential with the beauty of the sea, white sand, hundreds of small islands and various natural and beautiful underwater charms. Mining sector that has been dominating the people’s economy along this time becomes unsuitable to expect due to its non-renewable natural resources. Therefore, besides the highly potential and promising plantation sector for the people, tourism sector is one of many sectors that is highly promising and can become one of the leading sectors in the area. Tourism sector possesses a strong multiplier effect for micro, small, and intermediate businesses. Tourism sector is not only generating huge contribution for local genuine revenue, but also generate multiplier effect against the growth of creative industry.

4.4 The Main and Supporting Sustainable Economy Aspect Based on Plantation and Tourism Sector

Various main and supporting aspects in sustainable plantation and tourism based economy development shows that, plantation sector, which is the main aspect in the optimized value chain is the plantation land utilization, limited farming capital, people’s creativity that still needs to be developed, the lack of dominance from people

that truly focused on plantation and marketing aspect that still depends on internal market. Besides the supporting aspect, especially infrastructure, agency joint venture that can become a huge power for farmers bargaining power is yet to be existed, the farmers' human resource who are still in need of further farming skill development, production technology and farmer orientation that needs to be guided for long term success, of course without setting aside the need of short-term economy fulfillment.

In tourism sector, various main aspects are decided by the size of tourism potential, the utilization of tourism potential and the signature value. Whereas, the supporting aspects are infrastructure, society readiness, support from the business world and also the promotion aspect and effectiveness. In relation with the people's support, the mindset of the people is still affected by mining minded. In the short-run, the economical effect from Tourism sector is not directly experienced by the society, but for mining sector that relatively instant the effect is experienced well for the people's economy. Because of that, altering mindset is not an easy thing, but it needs verification and an economy impacting result that can be perceived by the people against their economy.

5. Conclusions

The conclusions of the research are: (1) mining sector's contribution for Belitung Timur's economy shows a decreasing trend over the last five years; (2) mining resources scarcity is shown by the growth rate in this sector that tends to decrease periodically along these couple of years. Apart from that, the scarcity of the resources is identified by the difficulty of founding areas that contain favorable mining resources either socially or economically. It shows that, in the future, mining can no longer plays role as a leading sector for Belitung Timur economy development; (3) plantation and tourism are potential substitution sectors to help realizing sustainable economy development post mining resources scarcity. Mapping result shows that there are three superior commodities from plantation sector, which are pepper, rubber and palm oil. Besides plantation sector, mapping result shows that Belitung Timur is also tourism destination. Tourism areas in Belitung Timur are dominated by marine tourism, beaches and natures; also literature tourism, history; mangrove forests; culinary and many other tourism attractions; and (4) various main and supporting aspects of sustainable economy development that affect plantation and tourism sector are: (a) for plantation sector, the main aspects are land usage, capital, the creation of added value and market potential. Meanwhile the supporting aspects are infrastructures, farmer's abilities, technology and farmers mindsets about sustainable economy success; and (b) for tourism sector, the main determining aspects are potential utilization and its unique value. As for the supporting aspects are infrastructures, community preparedness, supports from business world and also tourism promotion and its effectiveness.

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