Local Stakeholders’ Perception toward Tin Mining Issues in Bangka Belitung

Abstract—Since tin mining that has been long and massively lasted in Bangka Belitung Island province has created lots of positive impacts for economical growth; however, its negative impact has been also not least. In the middle of status quo, stakeholders as the part of decision makers didn’t firmly take the stance. Nevertheless, this study proved that the related stakeholders were aware of the negative context occurred and had positive perception on more firmly tin mining regulation policy. There was the awareness that tin mining had destroyed environment. The awareness of stakeholders’ didn’t eventually get along with the current policy. There is occurred status quo, though stakeholders’ perception itself has wished a firm policy, an interesting condition to describe the tin mining policy complexity in this region.

Keywords—Local Stakeholders, Tin, Mining, Issue

I. INTRODUCTION

Tin mining in Indonesia has lasted since Dutch colony era in the beginning of 1700s [1, 2, 3]. Nevertheless, tin mining in this area has been a controversy as in the long mining period, it has also occurred conflicts between local people and the tin connoisseur [4]. The authority drag in tin management had warmed up since the local autonomy issuance in 1998 signed by the changing of tin into nonstrategic commodity [5, 6, 7]. The implication was that tin mining could be managed by local government. This condition opened a large opportunity for more complex relation development because in turn, tin resource management transformed to be a problem involving various actors: local, national, and global.

Interestingly, the actors’ involvement were also very complex as subsequently involved some interests that were not only economical, but also juridical, political, and social [8, 9, 10, 11]. In the economical aspects, there was resources seizure on tin management. It occurred resource scramble between illegal and legal miners. While in juridical aspect, there were interests in terms of law enforcement, individual law officer involvement, and then which regulation was actually the most suitable one for tin mining condition in this area [12, 13]. As for political side, the occurred condition was even more complicated, since they threw each other’s responsibilities, blame each other, and they mobilized political support based on miners that became the common thing in this area. More serious environmental damage could come about [14, 15, 16, 17, 18, 19, 20]. Meanwhile, in the social aspect, there was local value degradation as a result of social migration among inter-area people, social conflict, to rapid economy turnaround resulting in economical gap among society [21, 22, 23, 24, 25, 26].

Then, where is actually the stakeholders’ position here and who are they? Stakeholders are actors having elite relevance with policy-making regarding tin mining. This study apprehended that stakeholders had key roles in encouraging the issuance of a policy. Hence, the researchers were interested in finding out the real position of stakeholders in the middle of chronic mining taking place. This study is important to be the basic assumption that the policy can actually be telescoped in the stakeholders’ perception hoping that by finding out their perception position, the more moderate policy regarding tin mining can be taken.

This study would uncover the dark veil on the policy ideas that should be taken by the parties in encouraging the more eco-friendly tin mining and give benefit to all parties involved.

II. RESEARCH METHOD

This study applied quantitative design by proposing some questions in the form of Likert scale to the related stakeholders with tin mining in Bangka Belitung Island Province. The data was descriptively analyzed by using SPSS 20. The stakeholders identified in this case were legislative, local government associated with tin mining management, and civil society organization elements. Respondents were chosen by employing purposive sampling method in considering that respondents had sufficient capacity and authority to give the view in their capacity as stakeholders. Respondents were chosen from every element with area distribution in all regencies and municipalities in Bangka Belitung Island Province.

As for the study respondents were described as follows:
Based on the position in organization, data was obtained as described in the diagram above. The stakeholders surveyed were 54% as chairman/leader/director in government office, as local representative board or CSO, and 46% as a member in their own sector.

III. RESULT AND DISCUSSION

The stakeholders’ perceptions were illustrated in the following table:

Based on Table 3 above, data showed that respondents knowing the legal and illegal tin mining in Bangka Belitung Island Province, stated agree and strongly by 81% and only 13.5% stated disagree. It means most of them knew that in Bangka Belitung Island Province, there were illegal and legal miners.

Based on Table 4 above, respondents confidently replied as agree that environmental damage is very serious as a result of tin mining by 94.6%, while those stated disagree were only 2.7%. It means most stakeholders in Bangka Belitung Island Province stated that environmental damage was because of tin mining.

Table III. Knowing the legal and illegal mining existence

| Alternative      | Frequency | Percent |
|------------------|-----------|---------|
| Valid            | 37        | 100.0   |
| Disagree         | 1         | 2.7     |
| Doubtful         | 9         | 24.3    |
| Agree            | 17        | 45.9    |
| Strongly Agree   | 7         | 18.9    |
| Total            | 37        | 100.0   |

Based on Table 5 above, it could be concluded that 83.8% respondents were agree and strongly agree. It means that they knew if there have been many illegal tin mining operating in Bangka Belitung Island Province and only 2.7% disagree of this.

Based on Table 6 above, 45.9% were agree and 18.9% were strongly agree that most respondents knew if there were many permission violations in tin mining operations. The answers were interesting since the stakeholders themselves believed if they did commit many violations on their operational permission.

Based on Table 7 above, 43.2% respondents were agree and 40.5% were strongly agree, meaning that respondents knew and agreed in which arranging the tin management in Bangka Belitung Island Province was difficult or uneasy to implement. Only 13.5% was disagree that it was not difficult in arranging tin management in Bangka Belitung Island Province.

Table IV. Knowing that there were many tin mining operation permission violations

| Alternative      | Frequency | Percent |
|------------------|-----------|---------|
| Valid            | 4         | 10.8    |
| Doubtful         | 9         | 24.3    |
| Agree            | 17        | 45.9    |
| Strongly Agree   | 7         | 18.9    |
| Total            | 37        | 100.0   |

Table V. Knowing that illegal mining still operated

| Alternative      | Frequency | Percent |
|------------------|-----------|---------|
| Valid            | 1         | 2.7     |
| Doubtful         | 5         | 13.5    |
| Agree            | 19        | 51.4    |
| Strongly Agree   | 12        | 32.4    |
| Total            | 37        | 100.0   |

Table VI. Believing the difficulties in arranging the tin management

| Alternative      | Frequency | Percent |
|------------------|-----------|---------|
| Valid            | 5         | 13.5    |
| Doubtful         | 1         | 2.7     |
| Agree            | 16        | 43.2    |
| Strongly Agree   | 15        | 40.5    |
| Total            | 37        | 100.0   |
TABLE VIII. TIN ARRANGEMENT WAS LESS SYNNCRONOUSLY RUNNING

| Alternative     | Frequency | Percent |
|-----------------|-----------|---------|
| Valid Disagree  | 1         | 2.7     |
| Agree           | 22        | 59.5    |
| Strongly Agree  | 14        | 37.8    |
| Total           | 37        | 100.0   |

Based on the Table 8 above, respondents stated as agree was 59.5% and 37.8% was strongly agree that the current tin arrangement was less synchronously running or in other word, it didn’t run well.

Based on Table 9 above, 43.2% respondents were agree and 40.5% were strongly agree, and thus it could be stated that 83.7% concluding if local government was less successful in overcoming in-conventional mining, and only 8.1% said it worked well.

In case of environmental damage, based on Table 10 above, 43.2% was agree and 40.5% was strongly agree, and thus it could be said 94.6% having opinion that the recent environmental damages haven’t been well overcome.

Based on Table 11 above, generally there was no high disparity answers, 40.5% was disagree meaning that respondents said in tin arrangement, all parties should not blame each other; however, 24.3% was agree and 24.3% was strongly agree, meaning that 44.6% stated if in tin arrangement, all parties blamed each other.

TABLE IX. LESS SUCCESSFUL OF LOCAL GOVERNMENT IN OVERCOMING THE INCONVENTIONAL MINING

| Alternative     | Frequency | Percent |
|-----------------|-----------|---------|
| Valid Disagree  | 3         | 8.1     |
| Doubtful        | 3         | 8.1     |
| Agree           | 16        | 43.2    |
| Strongly Agree  | 15        | 40.5    |
| Total           | 37        | 100.0   |

Based on Table 12 above, respondents were almost evenly answered in every part or there were no high disparity answers. The most answers (32.4%) were doubtful. It means that respondents didn’t question if tin issues were used as a political tool or not, and 29.7% respondents answered agree, meaning that they admitted if tin issues were often used as a political tool in obtaining support.

Based on Table 13 above, 54% answered agree and strongly agree showing that the people of Bangka Belitung Island Province was ready to to adapt if tin business was disciplined or stopped. While 27% was not ready and 27% other was doubtful whether they were ready or not to adapt.

Based on Table 14 above, 54.1% was agree and 27% was strongly agree. It showed that 81.1% respondents stated if local legislation policy in terms of tin was not optimum, and only 8.1% was disagree meaning that it had already been optimum.

Based on Table 15 above, the future hope from the option given to respondents with the very high disparity was
89.2% answering limitation. It means that stakeholders wanted to have limitation on tin, and only 10.8% answered status quo.

Leaving from the study result above, it could be exposed several interesting things to analyze.

**First**, the stakeholders included in these study respondents were basically fully aware that the ongoing tin mining was overlapped between legal and illegal with the large implication to other sectors. The available regulations were also continuously changing, included the latest, the permission centralization drawn to province through Local Government Rule that had large impact. This awareness is certainly having correlation with the hope to encourage the mutual consciousness among decision makers that tin mining was contextually aware as having problems. It means that this context awareness should be able to push the initiation birth to make improvements. Although recently illegal tin mining are still massively ongoing, the stakeholders are at least aware that there are issues on this mining management.

**Second**, there are almost majority comprehension showing that tin mining managements reviewed from their impact solving aspect and regulation are still overlapped. This confirmed the study by Ibrahim [27] and Haryadi [28; 29] showing the long seizure existence in chronics tin management that was actually awareness its destruction by actors in local level. It is interesting since basically the respondents were the decision maker components in their own unit, except for those who came from civil society organization element. The interesting question was why there was no tin mining policy reformulation standing on larger interests for local people and that area, while the respondents actually had capacity to take strategic decision. It means that the ongoing tin management is larger and macro in nature as the fact that although there is full awareness on the chronics occurring; however, the stakeholders in fact didn’t have power to take the opposite policy. If so, there was the bigger power becoming the determinants for key policy, in addition to local government and legislative institution. It would then arise an important question in terms of who is actually the most powerful in taking decision. In the condition of the currently occurring tin management, the chaotic regulation condition apparently explained that the decision taken by certain stakeholders as far as not comprehensive would not gain any result, even counterproductive, arising horizontal conflict, and not always becoming the solution. For example, the WPR and IPR policy were actually in their practices facing with some problems, such as miners’ pragmatism, minimum potency of WPR, the regulation friction between IPR and miners’ character, and others.

**Third**, there has been arising great hope in this study, perception that the limitation on tin mining activities will be greatly hoped by the stakeholders themselves. This finding is interesting because it illustrated the desire to make a change in tin mining management currently ongoing. Although the next question would certainly be who must take the policy and how to do it. The condition that tin mining is in the ‘red zone’ level actually has been aware by stakeholders, only in this ongoing condition showed that stakeholders themselves didn’t have enough capacity make a change. The condition has been getting worse when among stakeholders are also part of tin business itself, in fact, it has become the political commodity to earn votes in every democracy party. The related institutions, for example, remained shadowing by their local heads’ policies related to mining activities, either by corporation or people’s mining that was previously becoming a part of the local head winning.

**Fourth**, this study also showed that the support from the local stakeholders on the opportunity to make a policy change in tin mining was actually widely opened. The perception showing that tin mining must be overcome signing that stakeholders have opportunity to secure policy that will stand more in large people’s interests, particularly legally guaranteeing people’s tin mining and the philosophy that nation has power in natural resources included tin for people’s prosperity will be really achieved.

**IV. CONCLUSION**

In the middle of status quo and the prevailing debate regarding legal and illegal tin mining, this study found the stakeholders knew that they were aware on the existence of both legal and illegal mining terms. The stakeholders also knew that tin mining in this area seriously destructed environment, many illegal mining still operated, and a lot of violation on tin mining permission management. Stakeholders were also generally aware that it’s difficult to conduct arrangement on occurring tin mining.

At different issues, stakeholders viewed that this current arrangement was believed as less synchronous each other. Local government was perceived as less successful in overcoming illegal mining. Meanwhile, environmental damage issues experienced the same thing. Interestingly, the respondents were seen as doubtful as they were asked of their perception regarding tin mining politicization and the tendency of blaming each other among stakeholders on the condition currently occurred. The same thing could be seen in terms of whether the society was ready or not to adapt with the era without tin. Nevertheless, the stakeholders stated that local legislation policy in tin mining aspect hadn’t been optimum.

On expectation issue, the greatest expectation from stakeholders were reflected on the condition whether there must be or not strict limitation on tin management or kept allowing status quo, the majority wanted to have limitation option.

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