The effects of social development and management programs (SMDP) of Philippine mining companies to the host communities: A qualitative method

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\textbf{ABSTRACT}

The study used a qualitative approach to gather data from the participants through the interview and focused group discussions (FGD). The participants consisting of 30 for the interview and 11 for the FGD were asked to answer the questions using a semi-structured, open ended interview guide. The results of the interview and FGD were carefully examined using thematic analysis. The results show that as to the level of awareness of the host communities regarding the different SMDP of the mining companies, there is strong evidence on the high level of awareness of the respondents as to human resource development, enterprise development, assistance to infrastructure development, access to education, access to health services; and protections to respect of socio-cultural values. As to the level of agreement of the impact of the different SMDP implement by the mining companies, the respondents confirmed the positive effects of these programs in relation to education, health, social and cultural, and economic indicators. As to the perception of the respondents on the sustainability of the SMDP, except for the completeness of documents available in the designated SMDP offices in the communities, the respondents confirmed and agreed on the sustainability of the SMDP in terms of stakeholder groups relationship; company financial and management capacity; and compliance with the legal requirements.

\textbf{Introduction}

The mandated community development program of mining companies has been in place for many countries and continues to be implemented to others in order to ensure that they are doing their social responsibility to the affected communities (Dupuy, 2014). These norms actually became a trend through the number of international initiatives, such as the environmental excellence exploration (E3), extractives industries initiative (EITI), global reporting initiative (GRI), ISO26000 and ISO 140000 (Dupuy et al, 2014).

Community development approaches are recognized globally and are widely used in any discipline. Its interpretation has shown to be very complex, that policy makers, legislators and development experts have come up with its definition with prudence (Nwapi, 2017). Within the mining industry, community development is used to fulfil social obligations in communities located within the areas of the mining operations (Kemp, 2010; Nwapi, 2017). Development of the programs/projects/activities includes human development, networking, infrastructure development, health services, education support and protection and respect to cultural values of the affected communities (Kemp, 2010; Nwapi, 2017).

Community Development Agreements (CDA) between companies and affected communities have an imperative part role in meeting the current needs of the stakeholders, nonetheless different approaches to community development agreement comes with varying results (Mining Community Development Agreement Source Book, 2012).
Many countries incorporate community development in their policies and laws, in order to ensure the reversal of the negative impact of mining activities (Dupuy, et al; 2014). The mining industry in some countries is the major source of their revenue through foreign exchange (Dupuy, 2014). Previous studies mentioned that global norms, especially in the mining industry, obviously consider the higher regulatory standards especially if it’s coming from big countries. Investors are most likely to invest if they see that there are certain qualities and good behaviors to prove that their investments are secured (Greenhill, et al., 2009). The only challenge to the countries that adopted community development into their mining laws is the impact of the implementation (Dupuy, 2014).

Community development refers to the plan of activities of the mining companies in partnership with the local communities to create positive social benefits, such as improvement of the quality of life that is also sustainable (Wilson, 2015). Community development is a people-centered practice in specific kinds of affinities between people (Westoby, 2014). These benefits are outlined below (Source: The Worldbank, 2012):

- **Clarity and Transparency.** Enabling an outline for the engagement between a corporation and local stakeholders. Clarifying specific beneficiaries and the budget that will be allocated all the way to the responsibility, roles, monitoring, transparency and accountability.
- **Engagement.** Expanded participation of local members and related stakeholders. Enhancing communication and dialogue regarding local development goals and helping communities to voice out their goals.
- **Capacity Development.** Establishing human resource building through training needs assessment.
- **Business Best Practices.** Assisting mining corporations to realize their corporate social responsibility standards. Maximize positive community impacts.
- **Sustainability.** Facilitating all information gathering and reporting to change over time.

The positive outcome from community development agreement is the most important benefit to deliver its objective (World Bank, Mining Community Development Agreement Source Book, 2012).

One of the many benefits that could be derived from community development is the chance to assist societies to enable their capacities for skillful negotiation and engagement building, and to increase their understanding about how a mining project operates. Moreover, it gainfully generates harmonious relationships between varying stakeholders that cultivate trust and respect (The Centre for Social Responsibility in Mining, University of Queensland, 2011). One of the many outcomes of this research works was the concluding statement that the ‘processes that went through is just as valuable as the final outcome that happened, as it provided a very clear outline for continuous consultation and partnerships’ (The Centre for Social Responsibility in Mining, University of Queensland, 2011). One of the many outcomes of this research works was the concluding statement that the ‘processes that went through is just as valuable as the final outcome that happened, as it provided a very clear outline for continuous consultation and partnerships. In South Sudan, Africa, the legal regimes of their community development agreement are comprehensive, as it is mandated and penalized if non-compliance was identified, but this practice only applies to large-scale mining operations (Nwapi, 2016).

In the Philippines, there is the adoption of the EITI or the Philippine-Extractive Industries Transparency Initiative (PH-EITI) as mandated to all mining companies, to promote transparency in their financial undertakings. The Extractive Industries Transparency Initiative (EITI) is a global standard of transparency that requires oil, gas, and mining companies to publish all financial transactions with the government (taxes, royalty, etc.), and the government will announce what they collect from these mining companies in the report (PH-EITI, 2014). The mandated reporting in the Philippines will benefit the government, companies and citizens.

There are continuous improvements for this and it was suggested to also include social and economic contributions to ensure that such contributions have sustainable impact (PH-EITI, 2014). The Philippines was entered as a candidate country by the EITI board on May 22, 2013. As an overview, the third PH-EITI report contains the following chapters:

**Chapter 1 covers the contextual information about the Philippine extractive industry:**

- Legal frameworks and Government mechanisms for the sector
- The contracts and licensing processes, including payments and revenue-sharing schemes at the national and sub-national (local) levels.
- Discussion on state-owned extractive enterprises and the process for securing the free and prior inform consent of Indigenous peoples.
- Mining encompassing large and small-scale metallic and non-metallic; and oil and gas and coal reporting on entities both under exploration and commercial operations.

**Chapter 2 presents the results of the reconciliation procedures and constrains information on the material revenue streams from the extractive industry as reported by the participating companies and national government agencies:**

- Fiscal payments (taxes, fee, charges) and non-fiscal payments (SDMP) funds environmental protection and rehabilitation funds, and royalty payment
- Discrepancies reporting, offering recommendations
- Evaluation of the small and large scale mining
This research aims to determine the awareness of the communities about the Social Development and Management Programs of mining companies in terms of the following accredited programs/projects/activities under the CDAO-2010-21, measure the impact of Social Development and Management Programs to education, health, social and cultural and economic aspects of the host communities. Lastly, this research seeks to ascertain the sustainability of the Social Development and Management Programs of the mining companies in terms of stakeholders’ group relationship, company financial and management capacity and compliance with the legal requirements.

As we move towards more responsible mining, it is important that identified sectors of the society benefit from the results of the study. The mining companies will be able to develop a more effective and efficient SDMP and be more responsive to the needs of the affected communities leading to the improved sustainability of their operations. On the part of the mining communities, so as to escalate their engagement with the program as they move to become self-reliant, empowered and resource-based communities. On the other hand, the researchers and the academe can use this study as a reference for future planned research projects on the mining industry specifically in the realm of social development and the local mining communities.

The reminder of this study is organized as follows. The next section provides a review of extant literature. The third section introduces methodology and data. Finally, conclusions and implications of the study are presented in the final section.

Literature review

Theoretical background

Sustainable development

Mining companies have the most problems with human and the environment that the UN social development goal 2030 tries to address (Frazer, 2018). The goal of sustainable partnership should be stated clearly in a manner that people in the community can easily understand the joint programs, projects, and activities to be done. It should be fair and provide equal benefits on their level of acceptance.

More sustainable outcome will be achieved if mining companies integrate their skills and knowledge in addressing those issues, these joint partnership can improve stakeholders’ relationship, it may reduce misunderstanding that affect the community and the mining companies (George et al., 2016 & Fraser, 2018; Kemp & Owen, 2013). A sound partnership between mining companies and the communities is the way in achieving mutual benefits. It is important to conclude that fruitful partnership with the communities should be based on the clear and honest communication, which builds trust (Zvarivadza, 2017).

Zvarivadza (2017) the necessary elements for a sustainable agreement between mining companies and the communities.

![Wheel of sustainable development partnership agreement](Source: Zvarivadza, 2017)

Successful partnership between mining companies and the local communities can be a good return on investment. Despite all of the negative views about the mine, the local communities are willing to embrace them if the planning and benefits are clarified and well-explained (Zvarivadza, 2017). This is because communities have limited capacity and resources so any decisions should be sensitive enough to people (stakeholders involved) (Erdiao- Kwasie & Alam, 2017).
Many previous researches have come up that community is considering the economic, social, and environmental benefits. However, when it comes to perspectives about the local economy, social and environmental issues against mining, levels of impact that a mining project as viewed from sustainability view.

A study entitled “A new hybrid decision support tool for evaluating the sustainability of mining projects” by Kamenopoulos S, Agioutantis Z, and Komnitsas K. (2018) assessed the impact of a mining project from the sustainability point of view. Number decision support system has been applied in several sustainable development concepts. By utilizing different methods and techniques and the result of the study was a proposed state of art decision support system which can assist the implementer and stakeholders to evaluate the program and make a go no decisions from the sustainable point of view. The proposed DSS is based on the multi-criteria analysis and combined with multi-attribute utility theory. Citizen approach and greater transparency in a holistic approach are described and aligned with the United Nations point of view of sustainable development.

![Fig. 2: “Go-No-Go” decision making process for project assessment from the sustainable development point of view; Source: Adopted from Kamenopoulos, S. et al., 2018.](image)

The proposed decision system support still in its prototype form, but it gives clear steps to be considered when projects of mining companies need to stop or continue because of several conflicts. Further development of this proposed DSS toward the goal of uniformity for the design and implementation of the project aligned to sustainable development is currently in place (Kamenopoulos, et al., 2018).

The study entitled “Social Impact Assessment in the Mining Sector: Review and comparison of indicators frameworks” by Mancini and Sala, (2018) comparing the different indicators from different frameworks to assess the social impacts and sustainability of mining. The list of impacts resulted from this study was compared with the indicators proposed in different context and applied at different scales: from the Sustainable Development Goals for global level with 232 indicators, in the sector level the Global Reporting Initiative, EU level for macro and sector scale and Social Life Cycle Assessment for country sector. The UN Sustainable Development Goals include most of the social impacts identified in the mining industry. The conclusion in this study showed that indicators used for different contexts for sustainability assessment have different perspectives and coverage to capture different aspects.

Social impact assessment and sustainable development

It is important to create indicators or adopt them from different frameworks to monitor the mining industry’s adherence to the sustainable development guidelines. With regards to indicators, it should be the agreement between the stakeholders and the mining companies in assessing sustainable compliance (Zvarivadza, 2018). Some other indicators suggested by the Global Development Research Center (GDRC, 2017) such as the Equator Principles (EP), Human development index (HDI), Environmental Sustainability Index (ESI), Pilot Environment Performance Index (EPI), and Ecological footprint (Zvarivadza, 2018).
The Social Impact Assessment is a process of analyzing the impact of intervention on the social aspects of the human environment. Today there is a common understanding of “social impact”—what it is or how to measure it. Currently, measures of impact depend from funder to funder, and organization to organization. The more appropriate measurement tools integrate organizational and process metrics with quantifiable outcome data, but in the absence of a common measure (like shareholder value) investors and Grantmakers are making it up as they go along, the impact value chain and role of SIA is illustrated below adopted from the Goldman Sachs Foundation, 2003.

![Diagram](image.png)

**Figure 3:** Impact value chain illustration; Source: Adopted from the Goldman Sachs Foundation, 2003.

Based on the flowchart, if applied on the SDMP implementation, the input shall be the Program itself, whether it is the approved five (5)-year SDMP or the Annual SDMP. The activities are the identified Programs/Project/Activities based on the needs, interest and capacity of the community during the planning workshop, since this shall be jointly implemented with the mining company. The output could be the measurable results using indicators that should be ranged from each P/P/A. The outcomes would be the specific changes in the lives of the community. And the goal is achieved to create responsible, self-reliant and resourced-based communities capable of developing their own development programs.

The implementation of the company SDMP is mandated under the DENR Administrative Order No. 2010-21, otherwise known as the Consolidated Implementing Rules and Regulations of the Philippine Mining Act of 1995. The Philippine Mining Act of 1995 is the foremost national law that the national government, the regulating agencies, such as the DENR and its implementing bureau, the Mines and Geosciences Bureau, and the mining companies themselves adhere to in the general safety and health, environmental management, and rehabilitation and social development, and management performance that each must comply with.

The specific provisions of the CDAO calls for contractors and permit holders to create a five-year SDMP to be implemented annually in consultation and in partnership with the host and neighboring communities, to make such communities self-reliant and resource based local mining communities. The specific objective can be attributed to the three relative principles, the community development, United Nations Sustainable Development Goals, and the corporate social responsibility principles that visualize enabling communities and make them self-empowered and determined in the face of the ever changing social landscape around them.

Community development in the mining industry refers to plans for the creation of development programs that are people-centred and tapping to the innate and enormous capacity of community members and assist them in a way that they fully develop their communities. By achieving fully developed communities, they become empowered, for it shows the ability to manage their own resources and become the primary decision makers of critical matters to be decided upon such as how to sustain their competitiveness and to fully utilize the resources endemic to their locality. The next principle is somewhat similar as to its ideology and outlook when it comes to managing business objectives and sustainable community development.

The United Nations Sustainable Development Goals are a set of specific goals for the year 2030. It has identified a broad range of social issues such as hunger, poverty, health, education, etc. and these at hand, it may as well recommend to mining companies their sound investments to consider preparing programs (it is carefully thought of the SDMP) that shall help contribute to the achievement of the goals set forth. The said companies are in a better position to address the said social issues and offset whatever bad or misconstrued information that the general society has against mining operations, which brings us to the next principle to be discussed, the corporate social responsibility principles being espoused in the western countries.

**Research questions**

*What is the level of awareness of the communities about the Social Development and Management Programs of the mining companies in terms of the following accredited programs/projects/activities under the CDAO-2010-21?*

*What is the perception of the respondents on the sustainability of the Social Development and Management Programs of the mining companies in terms of:*
What is the level of agreement of the respondents of the Barangay on the impact of SDMP on the following aspect in terms of:

**Methodology**

The study used qualitative approach to gather data from the participants though interview and focused group discussion (FGD). The participants consisting of 30 for the interview and 11 for the FGD were asked to answer the questions using a semi-structured, open ended interview guide. The participants are residents of the host communities where the subject mining companies operate and are recipients of the social development and management programs implemented by the mining companies. The interview guide was validated by experts from the industry and the academe to determine its content validity. The results of the interview and FGD were carefully examined using thematic analysis.

**Results and discussion**

The following tables (table numbers 1, 2, ad 3) present the summarized results of the interview and FGD.

**Table 1**: Level of awareness of the communities about the Social Development and Management Programs of the mining companies

| Level of awareness in:                             | Results                                                                                                                                                                                                 |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Human resources development                       | All answered yes on the conduct of capacity building trainings such as on livelihood programs such as sewing and cosmetology and most were given TESDA Certification; Some said that this is for the women, youth and senior citizens; |
| Enterprise development and networking             | There are implemented projects such as poultry and provision of farm inputs There are cooperatives established and well-maintained.                                                                            |
| Assistance to infrastructure development and support services | There are established infrastructure projects such as roads and bridges; There is electricity and water supply for the host barangay; |
| Access to education and educational support programs | There is scholarships from the SDMP until College; There are some OJT Programs in place; There is no subsidy for teachers.                                                                                          |
| Access to health services, facilities and professionals | There is free medicine provided; There is no health insurance provided; There is water and waste disposal system for the community.                                                                                             |
| Protection and respect of socio-cultural values    | The Company sponsors community and church events.                                                                                                                                                        |

Table 1 presents the level of awareness of the communities about the Social Development and Management Programs of the mining companies. It reveals that the respondents of both the interview and FGD are aware of the different programs implemented by the mining companies in their respective communities. In the case of SDMP programs related to human resources development, the participants all agreed that the mining companies conduct livelihood programs leading to a TESDA certification.

As regard infrastructure development and support services, it can be noted that the respondents signified their awareness with respect to projects like roads and bridges construction and provision of electricity and water supply for the host communities. On the part of education and education support programs, the respondents’ awareness indicate that the mining companies implement programs related to scholarships that recipients enjoy up to college level including internship. It was also noted that access to health services, facilities, and professionals remains a priority for mining companies since respondents agreed that free medicines are provided and water and waste disposal systems in the community are as well made available. Lastly, the mining companies have likewise provided programs related to protection and respect to socio-cultural values which is validated by the respondents’ agreement that mining companies sponsor community and church related events.
Table 2: Perception of the respondents on the sustainability of the Social Development and Management Programs

| Sustainability of the social Development and management Programs | Results |
|---------------------------------------------------------------|---------|
| Stakeholder groups relationship                                | All strongly agreed that the Company identified groups in the community during planning; Almost all strongly agreed that there the social issues is mainly dust pollution from the quarry activity and delay in the release of SDMP budget; Almost all strongly agreed are satisfied to the quality of response of the Company; All agreed that there were informed of the SDMP and a few said that they were not informed that the planning is scheduled for the development of the SDMP; All strongly agreed that there are no major issues against the SDMP but a few said that the dust pollution is the main issue; All strongly agreed that they are satisfied with the responses of the Company regarding the issues raised. |
| Company financial and management capacity                      | All strongly agreed that the budget is within the mandate of the law; All strongly agreed that the Company have adequate staff for the SDMP; All strongly agreed that the Comrel Staff (personnel) possess adequate educational background some said that personnel is kind and courteous and a few said that there some personnel that is not people friendly; Almost all disagreed that there are complete set of documents of the SDMP at the office since they themselves have not seen any of them; All strongly agree that the Company have an established implementation guidelines; All strongly agreed that there is established monitoring system for the SDMP |
| Compliance with the legal requirements                         | All strongly agreed that the Company based its budgetary allocation on the requirements of the law as disclosed to them by the Comrel; All strongly agreed that they were consulted for their needs interests and capacities; Almost all disagreed that the Company submitted complete set of documents of the SDMP and on time and that it adhered to the requirements set forth by the Government since they are not in a position to monitor it (it is the duty of the government); All agreed that the P/P/As identified are based on community needs such as livelihood; All strongly agreed that it generated interests from the community; All strongly agreed that members of the community are encouraged to participate in the implementation of the SDMP so that they have something to do; All strongly agreed that there is MOA established and a few do not know this; Almost all strongly agreed that the Barangay was given a complete set of SDMP documents but some disagreed that there are submitted documents because they did not see them; All strongly agreed that there is an established Community Relations Office. |

Table 2 presents the perception of the respondents with regard to the sustainability of the Social Development and Management Programs of the mining companies in terms of stakeholders’ group relationship, company financial and management capacity and compliance with the legal requirements. The respondents perceived that the SMDP of mining companies are sustainable except for documentation.

It can be noted that the respondents disagreed that the respondents mentioned that the mining companies lack important documents and these do not comply with the requirement set by law. This finding is critical since it is important for mining companies to be compliant with what the law requires since this is one measure on whether mining companies are true to their commitment to help the host communities to become developed and sustainable.
Table 3 summarizes the respondents’ answers as to the impact of Social Development and Management Programs to education, health, social and cultural and economic aspects of the host communities. The responses show uniformity as to the level of agreement of the respondents with respect to the impact of different SDMP. The respondents strongly agreed that these Social Development and Management Programs being implemented to their respective communities have strongly contributed to the development of the host communities. These programs cover the areas of education, health, social and cultural and economic.

Conclusions

The results of the research led to the following conclusions:

As to the level of awareness of the host communities regarding the different SMDP of the mining companies, there is strong evidence on the high level of awareness of the respondents as to human resource development, enterprise development, assistance to infrastructure development, access to education, access to health services; and protections to respect of socio-cultural values.

As to the level of agreement of the impact of the different SDMP implement by the mining companies, the respondents confirmed the positive effects of these programs in relation to education, health, social and cultural, and economic indicators.

As to the perception of the respondents on the sustainability of the SMDP, except for the completeness of documents available in the designated SMDP offices in the communities, the respondents confirmed and agreed on the sustainability of the SMDP in terms of stakeholder groups relationship; company financial and management capacity; and compliance with the legal requirements.

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