



**MINING COMMUNITIES AND SOCIAL DEVELOPMENT**  
Assessing the Philippine Social Development  
and Management Program

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## ABOUT THE AUTHOR

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# **MINING COMMUNITIES AND SOCIAL DEVELOPMENT: ASSESSING THE PHILIPPINE SOCIAL DEVELOPMENT AND MANAGEMENT PROGRAM**

## **Introduction**

The Philippines has a vast potential of mineral reserves, and hosts one of the largest mineral deposits across the globe. Government estimates show that the country hosts a total metallic mineral reserves of 14.5 billion metric tons, and non-metallic reserves of 67.66 billion metric tons. Worldwide, the Philippines ranks fifth in terms of total mineral reserves: third in gold, fourth in copper, fifth in nickel, and sixth in chromite.<sup>1</sup> Large part of such potential, however, remains untapped. In 2013, there were 38 operating mines located in various provinces across the country. From 2010 to 2013, the gross value-added of the mining industry contributed an average of 0.58% to the country's gross domestic product. The average value of metallic production of the Philippines reached PhP512.23 billion from 2009 to 2013. In terms of employment, the industry provided a relatively small contribution to job creation over the recent years—from 0.5% of total employment in 2009 to 0.7% in 2012. In terms of government revenue, taxes and levies collected from the mining industry comprise an average of 1.18% of the total government collections.<sup>2</sup>

The mining sector remains one of the politically sensitive industries, and has been subject to numerous issues and challenges over the decades. Different sectors have expressed concerns and contentions against the pernicious environmental and social impact of mining operations. In recent years, revisions in the policies regulating mining operations in the country have been adopted to address the issues raised against the industry. One of the mechanisms introduced is the direct involvement of companies to minimize the unwanted environmental and social consequences of the operation.

Currently, the state mandates mining operators to actively take part in the development of their respective host communities. Mining operators in the country are required to directly spend for and implement programs

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1 Philippine Extractive Industry Transparency Initiative Report 2014

2 Based on the Mining and Geosciences Bureau (MGB) data as cited by the Philippine Extractive Industry Transparency Initiative (PH-EITI) Report 2014.

that will benefit mining communities through the Social Development and Management Program (SDMP).SDMP is a five-year comprehensive plan geared towards “sustained improvement in the living standards of host and neighboring communities by creating responsible, self-reliant and resource-based communities capable of developing, implementing and managing community development programs, projects, and activities in a manner consistent with the principles of sustainable development.<sup>34</sup>”SDMP shares the similar objective of corporate social responsibility (CSR). CSR of the mining industry intends to “contribute to the sustainable economic development, working with employees, their families, local community and society at large to improve the quality of life, in ways that are good for business and good for development.”<sup>5</sup> Companies may also engage in CSR activities to generate goodwill or increase the social acceptability of their operations.

However, resources allotted for SDMPs are required expenditures of mining operators. SDMP is therefore distinct from CSR as is not required under the under the Mining Law.Mining companies seeking to implement CSR activities—to either contribute to social developmentcommunities or increase social acceptability of their operations, or both—can do so by spending on top of the required spending for SDMP.

This paper analyzes the process through which mining companies have adopted their mandated SDMPs and assess the projects or activities identified therein with regard to the core objectives of the policy. The paper looks into the regulatory framework concerning the program by summarizing the laws and regulations relevant to the SDMP. It also identifies opportunities for improvementwithin a structure that is more conducive for the attainment of social development.

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3 DAO No. 2000-99, Section 2(o)

4 The 1987 World Commission on Environment and Development defines sustainable development as one that “meets the needs of the present without compromising the ability of future generations to meet their own needs”.

5 Based on the CSR Guidebook of the Chamber of Mines

## Regulatory Framework

Sustainable development is one of the governing principles which the State adheres to in regulating the mining operations in the industry.<sup>6</sup> To ensure mining companies contribute to the development of their respective host communities, the state requires operators to finance programs, projects, and activities geared towards social development of community hosting their respective operations.

To this end, the Republic Act (RA) No. 7942 or the Philippine Mining Act of 1992 was legislated to set out the general terms for governing the mining operations in the country. Among its salient features, the law ensures adherence of the industry to the principle of sustainable development throughout the mining operations. Specifically, it requires companies to assist in the development of host communities, promote the welfare of the locals, and advancement of science and mining technology.<sup>7</sup> Consistent with these objectives, the law mandates mining operators to directly finance and implement programs, projects, and activities relevant and consistent to the attainment of the said goals.

**Table 1: List of regulatory policies concerning the Social Development and Management Program**

Policy	Title	Remark
RA 7942	Philippine Mining Act of 1995	Provides for the primary legal basis in requiring operators to assist in the development of mining community, promotion of general welfare of inhabitants, and development of science and mining technology (Chapter X, Sections 57-58)
DAO 1995-23	Implementing Rules and Regulation of RA 7942	

<sup>6</sup> As stated in Sec.3 of DENR Administrative Order 1996-40, also known as the Revised Implementing Rules and Regulation of RA 7934

<sup>7</sup> RA 7942, Chapter X, Section 57

DAO 1996-40	Revised Implementing Rules and Regulation of RA 7942	Provides further details for Chapter X, Section 57-58 of RA 9742 (Ch. XIV, Sections 134-136)
DAO 2000-99	Rules and Regulations on the Implementation of Social Development and Management Program (SDMP)	Revised Sections 134-136 of DAO 96-40, added Sections 136-A to 136-E which specifically provides for the regulation and guideline for the implementation, approval, and monitoring of Social Development and Management Program
DAO 2010-13		Revised Sections 134 to 136-D of DAO 96-40. Salient revisions include increase in allotment from 1% to 1.5%; provision of specific guidelines on the list of accredited programs/projects/activities; requiring of review and evaluation of the SDMP (Sec.3, providing for amendment of Section 136-E); amendment of Section 137 to set out guidelines for contribution to advancement of mining technology and geosciences
DAO 2010-21	Revised Implementing Rules and Regulation of RA 7942	Consolidated the revisions on DAO 1996-40

Pursuant to this, several regulatory policies were issued (see Table 1) to spell out the rules and guidelines on the implementation of the Sustainable Development and Management Program (SDMP). The SDMP is a five-year plan that maps the list of projects and activities to be financed and implemented by the companies, thus serving to concretize the role of the industry in contributing for the development of host communities.

Specifically, SDMP covers the following programs:

- a. Promotion of general welfare of those living in host and neighboring barangay communities
- b. Advancement of mining technology and geosciences
- c. Institutionalize Information, Education and Communication (IEC) program for greater public awareness and understanding of responsible mining and geosciences



### *Allocation and Credited Program*

To finance the abovementioned programs, companies are required to allocate a yearly budget for their respective SDMPs equivalent to at least one and half percent (1.5%) of their annual operating costs.<sup>8</sup>

Of the said amount, 75% (1.125% of operating expense) is allocated for community development programs; 15% (0.225% of operating expense) for mining technology and geosciences advancement programs; and 10% (0.15% of operating expense) for information, education, and communication programs.

The law also specifies which activities or expenditures can be credited for the SDMP allocation. For community development, credited activities/ expenditures are those under the following programs: human resource development, livelihood programs, infrastructure, education, health, and socio-cultural protection.<sup>9</sup> Computation of SDMP for the said programs excludes similar expenditures for the benefit of the companies' employees and their respective families.<sup>10</sup>

For the development of mining technology and geosciences, credited programs include the following: related basic and advanced research programs; trainings, scholarships and research grants for related subjects; and expenditures on equipment or capital outlay granted to educational institutions. Beneficiaries of these programs, as well as subjects of research and trainings, should be determined by the companies in coordination with concerned provincial and municipal governments.<sup>11</sup>

Lastly, promotion and awareness programs include expenditures for information and publicity centers; publication of IEC materials; and other public awareness efforts and educational campaigns for the dissemination of mining and mining-related information, issues, and concerns.<sup>12</sup> (See Table 2)

8 The implementing rules and regulation initially required an allotment of 1% pursuant to DAO 2000-99. This was later amended by DAO 2010-13 which increased the allocation to 1.5% of the company's operating expense.

9 DAO 2010-21, Chapter XIV, Section 135

10 Ibid.

11 Ibid.

12 Ibid.

**Table 2: SDMP Program allocation and accredited projects and activities**

<b>Program</b>	<b>% of Operating Expense</b>	<b>Credited Projects and Activities</b>
a. Community Development	1.125	Human resource development; livelihood; infrastructure; health; and socio-cultural programs
b. Mining Technology and Geosciences Advancement	0.225	Basic and advanced related research; trainings, scholarships and research grants; and outlays to educational institutions
c. Information, Education, and Communication	0.150	Information and publicity centers; IEC publication materials; public-awareness efforts and educational campaigns

*Preparation*

To make the programs responsive to the communities' needs, demands, and concerns, the law requires companies to prepare their SDMPs in consultation and in partnership with the host and neighboring communities.<sup>13</sup> Companies are required to prepare and submit their SDMP plans every five years to allow for the program to accommodate the changing needs and demands of recipient communities.<sup>14</sup>

*Processing and Approval*

The government, through the concerned regional office of the Mines and Geoscience Bureau (MGB) of the Department of Environment and Natural Resources (DENR), evaluates submitted SDMPs based on their respective "form, substance, and completeness". As part of the evaluation process, highlights of submitted SDMPs are presented in a technical conference with representatives from the MGB regional office, mining companies, and appropriate experts. If and once approved by the regional MGB office, mining companies enter into a Memorandum of Agreement with the recipient communities to ensure the implementation of agreed programs, projects, and activities. The company then submits Annual Programs

13 DAO 2010-21, Chapter XIV, Section 136-A

14 Ibid. Companies shall submit their SDMPs to the Regional Office of the Mining and Geosciences Bureau

based on the approved five-year SDMP plan prior to the beginning of every year for approval of the regional office.<sup>15</sup>

*Monitoring, Auditing, Review, and Evaluation*

Mining companies are required by law to designate a Community Relations Office (CRO) headed by the Community Relations Officer that will serve to facilitate the implementation of the SDMP programs.<sup>16</sup> The CRO and representatives from beneficiary communities jointly monitors the implementation of programs, projects, and activities specified in the Annual SDMP (ADSMP). The CRO also submits quarterly reports on the accomplishments of the ASDMP. The Regional MGB office, on the other hand, conducts semi-annual monitoring of the implementation of approved programs.<sup>17</sup>

The MGB and its regional offices, the mining company, or the members of the community may call for a review or revision of approved SDMP programs within the period covered to account for changes in nature and cost of activities. Furthermore, prior to the end of the 5-year period, the law mandates for a performance review, requiring MGB to determine and measure the impact of implemented programs. Results of the said review will serve as a guide in the preparation for the next set of the company's five-year plan.<sup>18</sup>

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15 DAO 2010-21, Chapter XIV, Section 136-B

16 DAO 2010-21, Chapter XIV, Section 136-C

17 DAO 2010-21, Chapter XIV, Section 136-D

18 DAO 2010-21, Chapter XIV, Section 136-E

## Summary of Projects and Activities

This paper looks at the set of projects and activities identified by companies using the information from their submitted SDMP plans.<sup>19</sup>In general, mining companies appear to provide highest allocation for infrastructure and/or education programs, while socio-cultural and human development programs were given less priority.<sup>20</sup> The identified projects and activities under the community development programs financed through the SDMPs are summarized in Table 3 below (see Annex for the detailed list of SDMP projects and activities).

Generally, projects and activities financed through SDMP do not appear to fall cohesively upon an integral framework of sustainable development. For example, health projects such as medical outreach activities and provision of medicines and medical supplies are unlikely to create a long-term impact in improved health outcomes of the community. Plans for the livelihood projects on commodity production do not include a mechanism that links the products to an existing market to ensure sustainability of the program.

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19 The surveyed SDMPs were based on plans submitted in the year 2011 at the latest. The earliest implementation period covers 2006-2010 while the latest period covers 2012-2016.

20 Antonio, Corridor, and Cruz (2015). *From Mineral Extraction to Community Progression: An Analysis of the Philippine Extractive Industries' Social Development and Management Program (SDMP)*.

**Table 3: Summary of SDMP Projects and Activities**

Program	Projects and Activities
Infrastructure	School and health facilities; construction or repair of waters systems, road, seawall, multi-purpose halls, barangay office, chapels, other buildings for various purposes, street lights
Education	School supplies and equipment; construction of educational facilities; college and technical/vocational education scholarships; financial assistance to schools (e.g. support for teachers' salary, school grant, etc.); other capacity building and human development seminars, trainings and conferences
Health	Medical outreach and feeding programs; construction of health facilities; provision of medicines and medical supplies
Livelihood	Agricultural livelihood programs (e.g. crop production, fishery, livestock, poultry, etc.); support for cottage industries; livelihood skills trainings and seminars; various financial support (e.g. support to local businesses and local cooperatives, microfinancing, etc.)
Socio-Cultural	Support for religious institutions or cultural and religious activities (e.g. fiestas, celebrations, sports tournaments, values formation seminars, etc.)
Others	Environmental protection seminars and other environment-related projects and activities; emergency relief assistance; financial assistance to local government; support for youth activities; information, education, and communication programs

*Source: Submitted SDMP Plans of mining companies covering various periods*

## Issues and Concerns

As previously stated, the primary objective of SDMP is to help create responsible and self-reliant communities capable of developing, implementing, and managing community development programs, projects, and activities in a manner consistent with principles of sustainable development. Mining companies, through their SDMP projects, can provide a considerable amount of resources for a recipient community's social development program. Table 4 below compares the estimated value of planned SDMP projects vis-à-vis the recipient communities' operating expenditure in 2011. As shown, for several of the selected municipalities, the value of planned SDMP projects in a given year can amount to as much as one-tenth of the resources that local governments have to work with in one fiscal year. Considering the amount of resources allocated to this program, necessity for responsiveness, effectiveness, and sustainability of identified and implemented projects cannot be overemphasized.

### *Community Participation: Responsiveness and Accountability*

Understanding the regulatory framework relevant to SDMP is useful in identifying spaces for community participation. As seen in the above discussion, the laws governing the implementation and design of SDMPs provide for a number of mechanisms at various stages of the process. In summary, the following have been the identified spaces for community participation in the SDMP process:

- a. In the preparation stage, companies are required to consult with the communities in formulating the five-year plan.
- b. Community representatives and the CRO jointly monitors the implementation of the programs, projects, and activities based on the submitted Annual SDMP of the companies.
- c. Community members, as well as representatives from the company or the MGB regional office, can call for a review or revision of the SDMP plan to accommodate the changes in nature and costs of activities initially identified.

Despite these, several issues have been raised regarding the compliance of companies with these mechanisms. Consequently, questions have been raised as to whether or not the project identified and later implemented by

**Table 4: Planned SDMP spending as percentage of municipal operating expense**

Local Government Unit	SDMP Expense (in '000 PhP)	Operating Expenditure (in '000 PhP)	Percentage of SDMP to Operating Income (in %)
Basilisa, Dinagat Islands	750	44,542	1.68
Cagdianao and Libjo, Dinagat Islands	12,500	91,762	13.62
Cantilan, Surigao del Sur	1,800	56,762	3.17
Carrascal, Surigao del Sur	6,383	63,045	10.13
Claver, Surigao del Norte	6,720	72,487	9.27
Guiuan, Eastern Samar	320	66,202	0.48
Loreto, Dinagat Islands	1,180	40,465	2.92
Maco, Compostela Valley	2,771	117,914	2.35
Quezon, Palawan	3,650	128,427	2.84
Siocon, Zamboanga del Norte	6,172	86,344	7.15
Sta. Cruz, Zambales	6,049	97,538	6.20
Surigao City, Surigao del Norte	2,620	437,237	0.60
Toledo City, Cebu	20,397	339,624	6.01
Tubay, Agusan del Norte	3,872	41,159	9.41

*Source: Calculated using data on SDMP expenses based on the submitted SDMP plans and data on operating expense based on the 2011 Statement on Income and Expenditure by the Bureau of Local Government Finance. Note that the figures on operating expenses are municipal-level data. The calculated ratio is therefore an overestimation given the data on operating expense include those of non-recipients barangays located in the municipalities indicated above.*

the companies respond to the actual needs or demands of the communities. Related to this is the issue on whether consultations in formulating SDMPs with their host communities were properly conducted, hence, whether companies were able to adequately identify concerns and programs needed to address the communities' expressed concerns.

Based on the evaluation of submitted SDMP plans, some companies have been found to formulate SDMPs based mainly on secondary information obtained from the local government units (LGUs).<sup>21</sup> Based on its own SDMP report, one company did not present a narrative on the community consultation process it conducted (if any) for the preparation of its SDMP plan.<sup>22</sup>

For many of the operators, sources of secondary data include Barangay Profiles, Community-Based Monitoring Survey results, and Comprehensive Land Use Plan of the LGUs. Use of secondary data, per se, is not a problem except when some companies rely on dated sources on the socio-economic conditions of the communities where they operate. Some of the companies rely on data from the year 2000 to contextualize and identify social and economic projects to be implemented from 2008 to 2012. In general, while, mining companies claim to have conducted various forms of consultations in designing their SDMPs (e.g. community technical working groups, key information interviews, focused-group discussions, household and demographic surveys, etc.),<sup>23</sup> the current structure of the regulatory policies are silent in providing specific guidelines to ensure that the consultations conducted by the companies will capture the concerns of the community. Thus, while formal compliance is observable with regard to community consultations, adequacy, effectiveness and responsiveness of the undertaken processes are difficult to verify.

For example, the regulatory policies do not set out guidelines for systematic identification of stakeholders to be consulted in crafting the SDMPs. Currently, the composition of community representatives for the consultations is set solely by the mining operators.<sup>24</sup> Consequently, the current system lacks legal safeguards against the possibility of deliberate exclusion of perceived critical stakeholders—particularly IPs, groups or individuals

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21 Antonio, Corridor, and Cruz (2015)

22 Ibid.

23 Based on a survey of SDMPs submitted by the companies conducted by Antonio, Corridor, and Cruz (2015).

24 Based on the PH-EITI assessment of the SDMP.



who expressed opposition to mining operation, other displaced sectors— from the consultations in view of SDMP formulation.

Moreover, the current regulatory framework lacks specific guidelines for the selection of barangays to be targeted as recipient communities. Currently, the law provides that recipient barangays shall include the host community (i.e. barangays where the mining operations are located<sup>25</sup>) and neighboring communities (i.e. those adjacent to the host barangay;<sup>26</sup> areas covered by the mining tenement of the project; areas where mining facilities are located; and immediate areas which will be affected by the mining operations<sup>27</sup>). Apart from the abovementioned definition of host and neighboring communities, the laws do not provide guidelines from systematic and categorical selection for determining the roster of recipient barangays. In practice, choice of neighboring community recipients lies largely on the discretion of mining companies.

This raises concern whether the SDMPs crafted through such consultation processes, while compliant with the formal requirements due to the broad guidelines set out by law are responsive to the needs and concerns of the community. It similarly raises the question of whether the demands of the communities or sectors negatively affected by the mining operations are taken into account in the formulation of the SDMP—a program viewed to contribute to development and potentially counterbalance the unwanted social impacts of mining operation.

In addition, while community members are consulted in crafting the SDMP— notwithstanding the issue on the adequacy of such mechanisms— communities are given lesser opportunities for direct involvement at the implementation stage of the SDMP. The law enables community representatives to join the government in monitoring the program implementation, and provides beneficiaries the opportunity to call for review or revision. To some extent, these mechanisms give communities the avenue to exercise some level of control in SDMP implementation after its approval. Yet, even in paper, a larger part of the said process remains at the discretion of the companies. On one hand, company discretion in the implementation may be a natural consequence of the primary objective of the program— to ensure direct contribution of operators to the development of the communities. On the other hand, this paradigm may defeat the law's intention of

25 DAO 2010-21, Chapter XIV, Section 134(a)

26 Ibid.

27 DAO 2010-21, Chapter I, Section 5(at)

“creating self-reliant communities capable of developing, implementing, and managing community development programs, projects and activities in a manner consistent with the principles of sustainable development.”

In playing a less active role on the implementation of these social development programs, communities may end up highly dependent to the mining operators. This is most likely to occur particularly for recipient communities with limited fiscal capacity, in which SDMP projects could constitute a significant part of its overall resources to finance development programs (e.g. beneficiary communities of Dinagat Islands or Surigao del Norte). Dependence of beneficiaries on programs for social development can adversely limit the capacity of communities to protect themselves against possible abuses and other unwanted consequences of mining operations. As such, while mining regulation requires social acceptance of host community for the commencement and continuation of the said activities, the dependence of communities to the mining operators may undermine the arms-length determination of social acceptability of the said operation.

Moreover, company discretion in the implementation process has other repercussions. Since funds are directly spent by the companies (except in the cases of donations and other financial assistance), the public cannot monitor the financial soundness or efficiency of how such funds are used. In the public sector, LGU transactions are audited by the Commission on Audit (COA) based not only on their efficiency but also on compliance with the concerned laws and policies. Since SDMP spending is directly made by companies and is not covered by COA jurisdiction, and since any auditing counterpart is currently lacking, efficient use of spending for SDMP is difficult to verify.

In addition, while the framework requires companies to consult local authorities (primarily barangay officials), the laws do not provide mechanism to ensure that the programs to be implemented will not overlap with existing or future projects of the municipal, provincial, and national governments.<sup>28</sup>

Furthermore, the existing monitoring of MGB is weak. While the companies submit their accomplishments to the MGB, the agency, nevertheless, lacks mechanism to validate or verify the submitted projects.

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28 Based on discussion with multi-stakeholders group

Lastly, no mechanism is in place to safeguard local spending for social development from being dislodged by SDMP expenditure. Currently, municipalities where identified beneficiaries are located have higher average allocation for general public services and health programs, but have a lower average allocation for education (see Table 5 below). Such safeguard is necessary to prevent dependence of communities to SDMP (and hence, mining companies) in financing local development initiatives. As earlier described, one safeguard is the alignment of the SDMP spending with the development plan of concerned LGUs.

**Table 5: 2012 municipal average allocation, as % of operating expense, national vs. SDMP beneficiaries.**

	National ave. allocation (in % of 2012 operating expense)	SDMP beneficiaries ave. allocation (in % 2012 of operating expense)
General Public Services	63.04	66.17
Education, Culture, and Sports	2.83	1.79
Health, Nutrition, and Population Control	8.72	9.08
Labor and Employment	0.05	0.03
Housing and Community Development	1.36	0.58
Social Services and Social Welfare	5.87	5.60
Economic Services	17.11	15.60
Debt Service	1.02	1.16
TOTAL	100.00	100.00

*Source: Calculated using municipality-level operating expenses from the 2012 Statement of Income and Expenditures of the Bureau of Local Government Finance*

## *Sustainability*

As presented in the above summary, many of identified SDMPs rely largely on the continuous support of the operators to keep the projects or activities in place. Mining companies can extend support either directly (e.g. salary support for teachers, financial assistance to cooperatives) or indirectly (e.g. livelihood projects where companies serve as the principal end-users).

In the absence of an alternative support mechanism, such projects or activities tend to fail once the mining projects are terminated and companies move out of the community.

Lack of sustainability in many of selected projects and activities stem from the absence cohesive long-term development framework in which SDMPs should fall upon. The sustainability of SDMPs could be better attained if linked, for example, to the development plan of the LGU. The local development plans of LGUs are crafted by their respective Local Development Councils (LDC). The LDCs at the municipal, provincial, and regional level are interconnected,<sup>29</sup> thus enabling each councils to craft their respective development plans cohesively with those of other local governments. Moreover, LDCs provide for greater public involvement by allowing civil society representatives to take part in the formulation of the local development plan. Thus, linking the SDMP to existing mechanisms of the local development planning not only helps address the program's lack of sustainability (consistent with a larger development structure), but also strengthens its responsiveness in addressing local needs and concerns. Moreover, SDMPs should be designed in anticipation of a scenario where mining companies have ceased the operations nor have involvement in the communities. Projects and activities financed through the SDMPs should enable LGUs to establish alternative sources of revenues for their respective development programs, and allow communities to have an alternative livelihood opportunities independent of mining activities. Are mining companies in the position to design their SDMPs towards the abovementioned objectives? Some companies may not be concerned with the welfare of community members, but will provide projects that benefit host communities to temper possible opposition against their operations. Thus, SDMP may be considered as a tool towards the social

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29 A representative from the League of Barangays is part of the Municipal Development Council; a representative from League of Municipalities is part of the Provincial Development Council; and a representative from League of Provinces is part of the Regional Development Council.

acceptability of mining projects—an objective which companies are willing to spend for anyway whether or not mandated by law.

Moreover, self-interested companies would find it worthwhile to implement projects/activities with immediately observable impact—notwithstanding their lack of sustainability. In addition, they might find creation of self-sustaining communities as a risky undertaking if possible opposition against mining projects may arise prior to the designated termination of their operations. In an extreme scenario, companies may prefer to deliberately foster community dependence as a safeguard against possible opposition. Under such considerations—and given the lack of mechanism to safeguard communities against such abuse—SDMPs may be self-defeating if design and implementation is left largely at the discretion of the operators.

## The Case of Carrascal

To assess the impact of SDMP to its recipient community, this paper looks into the case of Carrascal municipality located in the province of Surigao del Sur. The municipality currently hosts mining operations of Carrascal Nickel Corporation and CTP Construction and Mining Corporation. The mining project of Carrascal Nickel Corp. (CNC) is situated in seven of the fourteen<sup>30</sup> barangays of the municipality, and covers a total land area of 4,547.76 hectares, equivalent to 19.75% of the total land area of the seven host barangays.<sup>31</sup>

Carrascal was selected among other recipient municipalities primarily due to the availability of data necessary for the analysis. In addition, the composition of the municipality makes it a possible subject for the case study given that half of its barangays benefit directly from SDMP while the other half do not. This provides a sample with presumably homogenous characteristics, but differ in terms of the concerned policy to be analyzed. Specifically, it allows us to control for differences in geographic, political, and cultural factors which may affect the levels of the socio-economic outcome that needs to be examined. It therefore enables us to account policy difference among the barangays (i.e. whether SDMP recipient or not) for the variations in their respective performances in chosen economic, education, and health indicators.

The analysis uses select Core Local Poverty Indicators based on the results of the Community-Based Monitoring System (CBMS) survey conducted in the province of Surigao del Sur in the period of 2008 to 2011.<sup>32</sup> For the municipality of Carrascal, the CBMS survey covered 3,230 households or 14,996 individuals of the said community.

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- 30 The seven host barangays include, Adlay, Babuyan, Bacolod, Bon-ot, Gamuton, Panikian, and Pantukan. The remaining seven barangays are Baybay, Caglayag, Dahican, Doyos, Embarcadero, Saca, and Tag-anito.
- 31 Calculated using the information on land area of the mining project and the sum of land area of the seven barangay, as provided by the Carrascal Nickel Corporation SDMP report for 2008-2012.
- 32 No narrative was provided for the details of the survey methodology. This creates vagueness on time period in which the survey for Carrascal was conducted. One possibility is that the survey was implemented throughout the extent of the 2008 to 2010 period for all municipalities of the province. Another is that the 2008-2011 period refers to the duration it took to cover all municipalities of the province, accomplishing the survey for a fraction of the municipalities in one year. Nevertheless, the fact that the SDMP coverage matches the survey period tempers the gravity of this concern.

In roughly the same period that the said survey was conducted, CNC had an SDMP plan which covered 7 of 14 barangays, as abovementioned, implemented from 2008 to 2012. Approved in 2007, the plan is the second phase of the company's SDMP, intended to finance projects and activities with total budget of PhP6.7 million for the duration of the program, or an average of PhP1.34 million in one year.

In formulating its SDMP plan, CNC obtained secondary data on community profiles from the Municipal Planning and Development Office, Department of Agriculture, Department of Agrarian Reform, and Department of Environment and Natural Resources. The company's SDMP report also indicates that consultations were conducted with community residents, local authorities, community development workers, and other development authorities in the government and private sector.

Community problems identified are as follows: insufficiency of medicine and lack of waste disposal; lack of teachers and educational facilities; lack of networks to assist in marketing of local products (e.g. fish and agricultural produce); lack of capital to establish livelihood activities; lack of technological know-how for various enterprises; poor quality of infrastructure; and lack of knowledge and skills for management of organizations and livelihood programs.

In response to the identified problems, CNC formulated a five-year plan to implement livelihood, infrastructure, and social services programs. Of the PhP6.7 million planned spending for the five-year program, PhP3.14 million was allotted to social services, covering projects such as medical consultations, provision of multivitamins to malnourished children, establishment of reading centers, provision of school bus and school supplies, administration of coastal resource management, and establishment of potable water system. Livelihood and infrastructure programs were allotted a planned spending of PhP1.54 and PhP2.05 million, respectively.

### *Social Development Performance*

By comparison, SDMP barangays in Carrascal municipality appear to perform better than their non-SDMP counterparts on selected poverty indicators, with the latter displaying higher rates of household poverty and subsistence at 56.7% and 42.2%, respectively, compared to the former at 47.0% and 35.1%, respectively. Nevertheless, the SDMP barangays show higher unemployment rate at 2.4% compared to non-SDMP barangays at 1.3%.

In addition, barangays receiving SDMP show poorer performance in terms of school attendance among children in both primary and secondary level. In SDMP barangays, 40.6% of elementary school children (6-12 years old) and 22.3% of high school children (13-16 years old) are not attending school. Non-SDMP barangays registered a lower rate of children not attending school at 21.0% and 33.4% for elementary and high school children, respectively.

SDMP barangays also show higher rate of malnutrition among children below 5 years old at 2.5%, compared to 1.8% child malnutrition rate among non-SDMP barangays. Non-SDMP barangays, however, registered a higher death rate among children 0-5 years old at 1.5%; SDMP barangays indicate a lower child mortality rate at around 1.0%. (See Table 6 for summary of Core Local Poverty Indicators)

Note that the above indicators may not necessary capture what may be deemed as the direct outcomes of the implemented projects. However, social development programs (especially those on health, education, and livelihood), if effective, do not necessary have to correspond linearly and narrowly to social outcomes. For example, educational activities have an impact on household health and nutrition decisions; health projects affect economic and livelihood performance of the community workforce; and livelihood programs can help improve household access to other health and educational services. Thus, looking at the “direct” impact of the implemented SDMP projects can be given less importance, and the selected indicators should capture the social development impact (if any) of the implemented SDMP projects and activities.

To determine whether the averages of selected indicators are statistically different,<sup>33</sup> this paper used a paired t-test to compare the means of the indicators for the SDMP and non-SDMP areas within the municipality.<sup>34</sup> Results of the t-test show that, for all the various indicators, the averages for SDMP recipients are not statistically different from the averages of non-SDMP barangays. In other words, the result suggest that the

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33 The sample mean estimates the ‘true’ value of the population mean, and takes a range of values depending on the set of sample observations obtained from the population. The paired t-test shows whether or not the two sample mean are statistically different from each other given the range of possible values they may take respectively.

34 Similar test was conducted to account for the possible impact of SDMP of CTP Construction and Mining Corp., (planned implementation of which covered 2010 to 2014 period). The test included barangay Dahican among the group of SDMP recipients. The test showed similar results that the average of all indicators for SDMP barangays are not different from those of their non-SDMP recipient.



socio-economic situation across the area (in the context of the selected indicators) are not significantly different, notwithstanding the fact that half of the barangays receive additional assistance in the form of the SDMP to address issues such as poverty, unemployment, schooling, and health.

**Table 6: Select Core Local Poverty Indicators of Barangays of Carrascal Municipality**

Barangay	Economic			Education		Health		
	Poverty Rate <sup>a</sup>	Sub-sistence Rate <sup>b</sup>	Unemployment Rate <sup>c</sup>	Out-of-School Youth (6-12) <sup>d</sup>	Out-of-School Youth (13-16) <sup>e</sup>	Child Mal-nutrition <sup>f</sup>	Child Mortality <sup>g</sup>	No Toilet Facility <sup>h</sup>
Adlay*	33.50	23.90	1.84	24.46	37.26	2.27	1.02	10.50
Babuyan*	75.00	62.50	1.80	26.25	64.91	0.00	2.17	17.00
Bacolod*	58.50	43.20	0.84	20.81	39.33	5.10	1.27	6.30
Baybay	48.60	34.40	0.00	20.90	31.68	0.69	0.00	7.70
Bon-ot*	47.50	34.30	4.17	20.29	37.40	2.04	2.38	27.10
Caglayag	66.70	46.20	5.32	25.00	44.12	2.00	0.00	2.60
Dahican	66.90	48.80	1.14	33.66	72.22	10.00	3.03	31.40
Doyos	70.50	58.10	0.25	19.47	29.58	0.00	1.53	6.40
Embarcadero	39.60	23.60	1.73	17.07	21.43	1.92	2.44	5.60
Gamuton*	50.60	37.20	2.44	15.07	34.11	0.00	0.00	11.10
Panikian*	49.00	37.30	3.57	15.79	32.12	2.46	0.00	8.40
Pantukan*	81.00	65.50	1.57	41.98	81.25	6.73	1.15	52.20
Saca	42.40	30.30	1.22	16.83	27.12	0.00	0.00	5.50
Tag-anito	65.20	51.10	4.48	16.48	17.78	0.00	6.67	5.40
<b>Carrascal</b>	<b>50.45</b>	<b>37.65</b>	<b>2.03</b>	<b>21.84</b>	<b>38.15</b>	<b>2.28</b>	<b>1.13</b>	<b>12.41</b>

Source: Community-Based Monitoring System, Surigao del Sur, 2008-2011

\* Covered by SDMP of Carrascal Nickel Corp. for 2008 to 2012, based on the approved SDMP plan

<sup>a</sup> Proportion of households with income below the poverty threshold

<sup>b</sup> Proportion of households with income below the food threshold

<sup>c</sup> Proportion of the labor force (15 yrs. old and above) who are unemployed

<sup>d</sup> Proportion of children (6-12 yrs. old) who are not attending elementary school

<sup>e</sup> Proportion of children (13-16 yrs. old) who are not attending high school

<sup>f</sup> Proportion of children under 5 years old who are malnourished

<sup>g</sup> Proportion of children (0-5 yrs. old) who died

<sup>h</sup> Proportion of households without access to sanitary toilet facility

**Table 7: Paired t-test results**

	Weighted Ave.			Std. Deviation		$t^{(y-x)}$	p-value [ $H_0$ : diff=0]		
	Municipal Average	SDMP area <sup>[x]</sup>	Non-SDMP area <sup>[y]</sup>	SDMP area	Non-SDMP area		$H_a$ : diff<0	$H_a$ : diff!=0	$H_a$ : diff>0
Poverty Rate	50.45	46.97	56.69	19.48	13.10	1.10	0.853	0.295	0.147
Subsistence Rate	37.65	35.10	42.20	17.68	12.52	0.87	0.799	0.403	0.201
Unemployment	2.03	2.44	1.26	1.18	2.22	-1.24	0.120	0.240	0.880
Out-of-School Youth (6-12)	21.84	22.31	20.98	9.21	6.22	-0.32	0.378	0.756	0.622
Out-of-School Youth (13-16)	38.15	40.56	33.40	19.93	18.56	-0.70	0.250	0.501	0.750
Child Malnutrition	2.28	2.51	1.82	2.50	3.61	-0.42	0.343	0.685	0.657
Child Mortality	1.13	0.98	1.45	0.95	2.48	0.46	0.674	0.652	0.326
No Toilet Facility	12.41	14.47	8.75	16.93	9.91	-0.77	0.228	0.456	0.772

### *Limitations*

Several caveats need to be raised with regard to the results of this analysis. First, the results apply to the municipality of Carrascal and, given the data limitations, no conclusions can be derived whether or not the results generally apply to other SDMP beneficiaries.

Second, while the result suggests that barangays receiving SDMP projects do not perform differently from their non-recipient counterparts in addressing various social issues, it cannot conclusively indicate that SDMP have no impact on the examined aspects of social development. The lack of significant difference may be an indication, for example, of factors that counterbalance the possible impact of SDMP. Insufficiency of available data prevent the analysis to isolate the effects of such factors and to rule out the possibility that other variables, and not ineffectiveness of SDMP, drove the level of the observed outcomes.

Nevertheless, if such case is true, what can be inferred for this case study is that SDMP has not been effective enough to more than offset the factors that drive and exacerbate these problems. If this is generally true, it can be particularly disconcerting in a situation where the mining operation itself produce the factors leading to such problems, and where SDMP intends, but fails, to counterbalance these negative effects and thus bring positive net impact to the community.

Third, given the limitation of the methodology and data availability, the analysis is unable to control for the possibility of spillover effects. Specifically, while projects are established and available in SDMP barangays, mobility within the municipality enables residents from non-SDMP barangays to enjoy the same benefits by travelling to areas where the projects or activities are available. One of the underlying assumption of the test is that the benefits are exclusive to their identified recipients, and this may not hold true for the municipality of Carrascal.<sup>35</sup> Thus, the results indicating alack of significant difference in the social development performances between SDMP and non-SDMP barangays may also suggest spillover effects of SDMP benefits to non-SDMP recipients.

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35 Barangays of Carrascal are adjacent to one another, thus mobility of residents from non-SDMP barangays to recipient counterpart is not impossible.

## Conclusion

SDMPs can serve as a significant source for the financing of local social development programs of beneficiary communities. Currently, the projects and activities financed through the SDMP do not appear to fall upon a cohesive framework of sustainable development. Many of the identified projects and activities depend largely on the support of companies and are unlikely to remain viable once the mining operations are terminated.

Moreover, questions have been raised if companies adequately consult communities in formulating their SDMPs. Currently, the existing mechanism for community participation are broadly provided. The laws regulating the program lack specific guidelines to systematically determine which neighboring barangays will benefit from the program, or to ensure that the consultations undertaken will effectively capture the needs and demands of the communities.

Currently, spending and implementation is largely at the discretion of the companies. Lack of direct community involvement in the implementation process may result in reliance to operators, and may defeat the purpose of creating self-reliant and sustainable communities. If mining companies are concerned only with the social acceptability of their operations, SDMPs may be used to serve only such purpose.

In addition, unlike local public spending, the system currently lacks a counterpart mechanism to assess the efficiency and compliance of spending made by the companies. Thus, financial soundness of spending for SDMP is difficult to verify.

To analyze the impact of SDMP on recipient communities, this paper looked at select social development indicators, and compared the performance of recipient versus their and non-recipient counterparts. The results indicate that there is no significant difference in the performance of recipient and non-recipient barangays in the said municipality with regard to the selected social development indicators. Notwithstanding these results, various data and methodological limitation hampers the research from making definite conclusion on the impact of SDMP to the host communities.

## Recommendations

Given the various considerations raised—from the limitations and weaknesses of the existing regulatory policies to conceptual issues regarding SDMP—this paper recommends to transfer the funds from companies to local communities as a form of levy. Instead of requiring companies to spend for the social development of local communities, local governments can instead directly obtain the funds and earmark the proceeds to social development programs. This alternative paradigm will not affect the tax liability of companies, since under the current system, the tax liability of companies have already been reduced because of SDMP. In effect, instead of paying taxes, companies undertake SDMP activities, and thus, funds for SDMP indirectly serve as public money. The advantages of this alternative paradigm are as follows:

- a. *Direct involvement will capacitate and empower local communities in handling their resources to finance social development.* Allowing communities to identify and implement development programs capacitate and empower them to participate and be involved in local governance. This will also enable local authorities to acquire the necessary skills for an effective, responsive, and participatory local governance. It would enable LGUs to become self-reliant in designing and administering programs and activities coherently with their respective development plans.
- b. *Earmarking for social development would provide a legal mandate to use the funds consistent to the abovementioned framework of sustainable development.* This would help ensure that funds are used in placing sustainable programs independent from the direct or indirect support of mining companies. This also helps establish livelihood opportunities available to community members even when the mining operations are terminated.
- c. *Transferring the fund to LGUs will subject fund to the processes of local public finance.* The public financial system currently has a broader opportunity for public participation not only in local public budgeting, but also in designing the local development plan. Local spending is also subject to the auditing system by the Commission on Audit which provides assessment on the effective utilization and compliance of authorities with policies regulating the fund utilization. It also provides legal safeguard and remedy to possible offenses, such as misuse of funds. Thus, the said current mechanisms in place should

help address the concerns on the responsiveness of SDMP, and issues on accountability in use of resources.

- d. *Transferring the funds to municipalities will enable a more strategic use of resources among the different barangays.* With the funds under municipal jurisdiction, more barangays could benefit from the resources other than the host communities and neighboring barangays selected by the companies. It could also help local authorities in designing a system of service provision that considers a wider jurisdiction, and thus in placing the projects and activities more strategically across the whole area.
- e. *Minimizing company discretion would safeguard communities from risks of dependence to operators.* This would prevent companies from using tokens to obtain community acceptance of their operations, and thus compel companies to operate at a socially acceptable level.

Transferring the funds to LGUs reverses the current structure where companies hold greater discretion in designing and implementing the SDMP. The strength of this alternative framework should address the identified weaknesses of the current system. Nonetheless, this alternative relies largely on the capacities of local institutions. This system is therefore likely to suffer in communities where local authorities currently lack the capacity to handle resources, or design and implement their own development plans. But as above mentioned, allowing direct involvement of communities will allow them to eventually acquire the necessary skills to participate in local governance. Thus, despite this weakness in the alternative framework, it is inherently more consistent with the program's core objective of capacitating communities towards self-reliance.





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