# IMPACT OF CORPORATE SOCIAL RESPONSIBILITY (CSR) IN INDONESIA: A CASE STUDY OF GENERAL MINING INDUSTRIES

## DAMPAK TANGGUNG JAWAB SOSIAL PERUSAHAAN (CSR) DI INDONESIA: STUDI KASUS INDUSTRI PERTAMBANGAN UMUM

#### **UKAR W. SOELISTIJO**

Department of Mining, Faculty of Engineering Bandung Islamic University JI. Taman Sari No. 1 Bandung Faculty of Mining and Oil Engineering Institute of Technology Bandung JI. Ganesha No. 10 Bandung e-mail: ukarws@yahoo.com

#### ABSTRACT

Mining companies as the stakeholder of the community should implement community development (CD) as a translation of corporate social responsibility (CSR). In other words, they should involve business activities for developing humankind. The application of CSR in the general mining in Indonesia is expected to encourage mining company to allocate its profit for developing the local people who live around mining area. The quantitative models for evaluating the CD impact include net social gains (NSG) and net gain coefficient (NGC). The NGC shows that the value between 1 to 23% of the companies' revenue has satisfied the local people. The values could be increased in the future to make beneficial for the regional sustainable development.

Keywords: CSR, general mining industries, local people

#### SARI

Perusahaan pertambangan sebagai pemangku kepentingan dari masyarakat perlu melaksanakan pengembangan masyarakat (CD) sebagai terjemahan tanggung jawab sosial perusahaan (CSR). Dengan kata lain, mereka perlu ikut serta dalam upaya kegiatan untuk pengembangan kemanusiaan. Penerapan CSR di dalam pertambangan umum di Indonesia diharapkan dapat mendorong perusahaan pertambangan untuk mengalokasikan keuntungannya bagi pengembangan masyarakat setempat yang tinggal di sekitar daerah pertambangan. Model-model kuantifikasi yang digunakan untuk mengevaluasi dampak CD meliputi manfaat sosisal neto (NSG) dan koefisien perolehan neto (NGC). NGC menunjukkan bahwa pada kisaran nilai antara 1 dan 23% perolehan perusahaan telah bermanfaat bagi masyarakat setempat. Nilai-nilai tersebut, sudah tentu, dapat ditingkatkan di masa datang untuk menciptakan manfaat bagi pengembangan wilayah berkelanjutan.

Kata kunci: CSR, industri petambangan umum, masyarakat setempat

#### INTRODUCTION

Indonesia has abundant mineral resources such as oil and gas, coal, metallic- and non-metallicminerals, radioactive- as well as rock materials. Since 1970s, the country has produced several varieties of metallic minerals and coal, for instance iron sand, bauxite, tin, copper, gold, silver and nickel and step by step, it developed the added value processing technology, e.g., gold/silver, tin, aluminum, copper and nickel. Moreover, in the broader sense, the simple meaning of added value is the result of techno-economic transformation from the initial condition of mineral resources and commodity toward the condition with the greater value of economic, utilization and usefulness than before, then this new condition would contribute positive impact upon the economic, social and culture at the level of global, regional, national and local (Soelistijo, 2013).

The accredited mining enterprise includes the successfulness indicator both in the fields of financial management and mining enterprise. Moreover, a more specific indicators of financial management include several matters such as, (1) an enterprise characterized by good governance and clean management, that is supported by systematic/professional, accountable and transparent/auditable financial management system; (2) the system of fund raising (debt equity, loan rescheduling, diversification of enterprising, and services development; (3) the system of book-keeping; and (4) the system of audit. The indicators of mining enterprise management may include the activities from upstream (resource/reserve management), management of production activities, up to downstream activities (marketing management) and problems relating to regional development (Herfindahls, 1974; Isard, 1975; Richardson, 1979) and including CSR (corporate social responsibility) (Anonymous (h), 2004).

The indicators of successfulness in the mining enterprise either in the financial management or in the business management is indicated by internal capability in relation to the least cost and the optimal profit obtained as well as by external capability in relation to optimal benefit for the nation where the enterprise operate. For instance, in the case of accountable tax paying and optimal benefit for the regional development including local community development as a corporate social responsibility. Related to the title of this study, it was the successful indicator of mining management from the upstream activities to downstream activities and the problems relating to the environment which include corporate social responsibility (CSR) as part mission of regional development. Thus, CSR is one of the present important parameters as indicated that "the company is the stakeholder of the community".

The core content and understanding of CSR as the meaning of community development (CD) is a form of stimulant for the industry to make effectual CD so that it can be more beneficial for the society and the local government. Moreover, the CSR will implement and utilize the concept of sustainable development in the country as well. However, it can be simplified that CD is an instrument to implement CSR in term of foundation for sustainable development in term of the transformation from the mining economy era into the non-mining economy era in the forms of the ever increasing and continuation of the primary, secondary as well as tertiary economic sectors beyond the post mining era. Indonesia has tried to implement the CSR in relation to CD in the field of energy and mineral resources, oil and natural gas industries as well as the general mining such as coal industry.

#### THEORY AND METHODOLOGY

#### Theory

The fields of added value in the mineral resource development is that may include sector or economic as well as regional added value.

Sector or economic added value means the value gained by the process of vertical enrichment and it can contribute to the national income or gross domestic product (GDP) or upstreamdownstream added value. This macroeconomic added value could create multiplying effects that could be measured by using economic multiplier and linkages.

The another added value is regional one meant as the beneficial for the local people coming from such as corporate social responsibility (CSR). The mining company as the servant of the community should implement community development as translation of their CSR for the development of humankind as well (Figure 1) toward regional resilience due to firm and positive interaction between the mining companies and the local community. Those two types of added value could measure the beneficial of the mining activity in the economic field at the level of national as well as regional. NSG = (uj - mj - rj) vj - f sj vj + EjDRC = f sj vj + Ej / (uj - mj - rj) vjssNGC = NSG / Total Output



Figure 1. Basic concept of CSR in the context of regional development

#### Methodology

In principle, NSG is the difference between the company revenue and the cost of production. While, the profit or loss is called net external effects (NEE). The positive NEE means that the impact of the existence of mining companies is beneficial to the lives of the local people. The negative NEE means that the mining companies create social unrest. NEE consists of backward and forward linkages, technological, final demand and fiscal linkages of the company as well.

The formula for calculating NSG is as followed (Pearson and Cownie, 1974):

#### where:

DRC = Domestic Resource Cost NGC = Net Gain Coefficient

uj is export revenue of sector j;

- mj is intermediate goods imported;
- rj is repatriation;
- v is shadow price;
- f is commodity price;
- is commonly price,
- E is external effects.

#### **RESULTS AND DISCUSSION**

Quantitatively the social-economic benefits of CSR for the local development could be identified among others by using the net social gains (NSG)

model, in this case, the net gain coefficient (NGC) has been practiced in general and manufacturing industries (see Tables 1 and 2).

Based on the above-mentioned data, it was observed that the NGC ranges from 1 % to 61.62 %. It therefore means that the contribution of the mining companies in Indonesia related to CD as the core of CSR could be encouraged to be instrumental in sustainable regional or local development as well. It depends on the government approaches or policies and the spirit of the companies.

In relation to COW the financial benefit at the national was estimated at 55% of the companies' revenue and around 60% of the Coal COW revenue was gained by Indonesia. Net social gain from the COW companies and the State-owned companies were between 1% - 23% of their revenues gained by the local community in the form of their participation in the regional development which include the environment protection and CSR. Nevertheless it is advised that those amounts should be increased and enforced in the future.

CSR is a measuring instrument of community development (CD) that could be utilized from the company. From the community point of view, the CD instrument could be measured by using Human Development Index (HDI) such as human basic needs (clothes, food, housing), education and health toward the measurement of their wealth. Economically, wealth of the community could be measured by their currency, assets and bound as well. Macro-economically, HDI of the Indonesia people could be seen on Table 3. Between 1975 and 2011 the HDI significantly increased. For example, in the case of Papua human resource development carried out by PT Freeport Indonesia (PT FI), it shows that the current operational and partnership program were running successfully. This program is aimed at lifting the Papua people in term of their professional and self-confidence in the era of globalization, so that they are able to secure job wherever they want. Since the Indonesia Human development Index (HDI) in the years of 2001-2006 was about 68.2 (UNDP; 2002), then HDI of South Jakarta Province is estimated at 75.7 (the highest one), Yogyakarta 7.3, Mimika Regency (where PT Freeport Indonesia copper mine is located) 64.8 and Jaya Wijaya Regency 47.0 (the lowest one). It is shown that Mimika Regency HDI exists at the middle score

(Anonymous (e), 2006). In 2011, Papua province still has the ranking of 64.9 as the lowest among the provincial ranking in Indonesia, where Nduga Regency in Papua also has the lowest ranking of 48.0 among other regencies in the country (Table 3). In 2012, Indonesia reached HDI of 72.9 and Jakarta of 78.2.

CSR of PT Freeport Indonesia with the net gain coefficient (NGC) is about 0.83 % in 1999, 2.01 in 2006 and it is indicated of about 1.08% (in 2010) (Anonymous (h), 2004). In comparison with that of NGC PT Aneka Tambang (Gebe nickel mine) is of 4.60% (1990) and iron sand mine at Kutoarjo is 22.46 % in 2002, PT Batubara Bukit Asam coal mine 4.31% in 1999 and 4.04% in 2008, PT INCO (Soroako nickel mine) was 1.28% in 1989 to 2.54% in 2005. The lowest NGC is PT Adaro (coal mine) which is 0.59% in 2001. {Achyar, 2007; Amrullah, 2007; Anonymous (a), (c), 2006; Anonymous (b), 2011; ; Anonymous (g), 2012; PT Aneka Tambang Tbk, 2002, 2004; PT Bukit Asam Tbk,, 2000; Soelistijo, 1984, 2004, 2010, 2011; Soelistijo, et al, 1995, 2002, 2003; Saleh, 1991, 1992; Mujib 1991, 1992, 2003; Saefudin, 1992, Sugandi, 1992; Toni, 2009}. CSR of any mining companies could be said to have been successfully carried out in the region where the companies operate. The local people obtain maximum benefit to provide for their professional, so that they could face their own future sustainability in terms of human, social, economy and environment harmoniously as a whole. In principle, however, the program of CSR should be compulsory to encourage and increase the mining companies' awareness in the form and part of regional development. In fact, that CSR is a compulsory assignment to the private companies as well as state-owned companies based on the existing laws and government regulations {Anonymous (d), (e), (f), 2007}.

### CONCLUSION

The role of the mining company is obviously important to carry out community development functions mainly for the local people as part of the regional development program. Many examples, for instances, PT Freeport Indonesia, PT Antam, PT BA, PT Adaro, PT INCO (PT Vale Indonesia) have allocated regional development especially CSR program activities in the forms of facilities and infrastructure at least 1-22% of their annual corporate budget. It is intended to support the development of the physical and non-physical

	Variable	PT INCO Soroako nikckel mining 2005	PT Bukit Asam Coal Mine 2008	Ombilin Coal Mine (PT Bukit AsamA) #) 1990	Kutoarjo Iron sand mining (PT Aneka Tambang) +) 2002	Gebe Nickel Mine (PT Aneka Tambang) 1990	Kijang Bauxite Mining (PT Aneka Tambang) @)	Pomalaa Nickel Mine (PT Aneka Tambang) 1990	PT Adaro Coal Mine 2001	PT Freeport Indonesia 2006
avre siste siste siste siste siste all church all churc	tput	8677.8	5719.1	41.6	27.0	108.2	82.0	106.9	3919.1	n.a
Social Control	ut			40.1	n.a.	107.1	81.8	106.7	n.a	n.a
siste siste siste scal chua chua chua chua chua chua chua chua	Economic rent	1.6	40.9	0.6	0	0.1	0.2	0.8	0	n.a
siste scal al con scal al con chor chor (*	Net external effect (NEE)	219.0	188.0	2.8	6.6	4.8	2.2	4.1	23.1	n.a
scal scal scal scal chn a chn	Consisted of:									
scal a chundre	<ul> <li>Forward and backward linkages</li> </ul>		31.3	0.4	2.1	0.6	1.2	0.6		
Soci uno Soci al chunch and chunch Soci (*	<ul> <li>Fiscal linkages.</li> </ul>		146.2	0.7	0.9	2.9	0.2	0.8		
Soci	- Final demand linkages		7.1	1.4	1.4	1.1	0.9	2.4		
Soci 3air *)	- Technological linkages.		3.4	0.3	2.2	0.2	0.04	0.3		
3air	Net Social Gain (NSG)	220.6	231.0	3.4	8.0	4.9	2.2	4.4	23.1	729.1
mor 07/2	Net Gain Coefficient (NGC)	0.0254	0.0404	0.0812	0.2246	0.0460	0.1040	0.0421	0.0059	0.0201)
		(2.54%)	(4.04%	(8.12%)	(22.46%)	(%09.4)	(10.4%)	(4.21%)	(0.59%)	(2.01%, 2006)
3/To										(1.08%, 2010)
mor (*	Total Asset	n.a.	n.a	109.0	n.a.	n.a	n.a	69.8	n.a	n.a
(* *	Economic rent ratio (NSG/Total asset)	n.a	n.a	0.0024	n.a	n.a	n.a	0.0747	n.a	n.a
In fact, Directorate General of Mineral and Coal as the competent institution in this program, just initiating pilot CSR studies project in 2013 in cooperation with the universities	<b>*</b>	) PTBA Ombilin Anonymous (a), Aneka Tamban itiated by Miner- ing company in e to its importan lineral and Coal	coal mine wa 2006; Toni, 2 g 2002, 2000 al Technology cooperation v t evaluation fit as the compe	sterminated in sterminated in 4; PT Bukit Ass / Development with the related or the national stent institution	1997. +) Kijang I o, et al. 1995, 20 am., 2000, Triyon center (MTDC) I research instituti interest for frontie in this program, j	bauxite mine wi 03, 2010,2011; o, 2007. in the early 199 ions and univer i development ust initiating pild	as terminated in 1. Saleh, et al, 199 30s and resulted ( sities to carry out ot CSR studies pr	999 @) Kutoar 1,1992: Sugan CSR studies o CSR studies f CSR studies f	jo iron sand n di, et al, 1992 f the only sev rom now and	ine was terminated ; Mujib, et al, 1991, eral mining compa- on to anticipate the with the universities

Table 1. The linkage effects of the mining companies on the regional or local social economies using NSG model \*)

Impact of Corporate Social Responsibility (CSR) in Indonesia ... Ukar W. Soelistijo

Variable	PT Inco Tbk (2005) **)	PTBA Tbk (1989)	Ombilin Coal (1990)	Nickel Gebe Island (1990)	Bauxite Ki- jang (1990)	Nickel Pomalaa (1990)	Iron Sand Cilacap (2003)	Coal PT Adaro (2000) ***)	Copper PT FI (1990)
I. Location	Soroako, Luwu, South Sulawesi	Tanjung Enim, Muara Enim, South Suamtera	Sawahlunto, West Sumatera	Gebe Island, Halmahera, North Maluku	Kijang, Riau Archpelago	Pomalaa, Kolaka, South-East Sulawesi	Cilacap, Central Java	South Kalimantan	Tembagapuer, Mimika, Papua
II. Net Sosial Gain/ NSG (IDR billion)	220574,7	3821,71	3369,21	4963,21	3349,31	4462,18	1633,21	23100	19860
III. Net Gain Coefficient	0,0254	0,0291	0,0812	0,0459	0,1046	0,0421	0,1742	0,008	0,0083
NGC= NSG / output	-2,54%	-2,91% (4,31%, 1999)	-8,12%	-4,59%	-10,46%	-4,21%	-17,42%	-0,80%	-0,83%
Sources: *) See comments on Table 1. Achyar, 2007; Amrullah, 200 Sugandi, et al, 1992; Mujit	r Table 1. rullah, 2007,Anonyi 992; Mujib, et al, 19	See comments on Table 1. Achyar, 2007; Amrullah, 2007, Anonymous (a), 2006; Anonymous (g), 2012;Freeport McMoran, 2010; Toni, 2009; Soelistijo, et al, 1995, 2003, 20 Sugandi, et al, 1992; Mujib, et al, 1991, 1992, 2003; Saefudin, 1992; PT Aneka Tambang 2002, 2004; PT Bukit Asam , 2000, Triyono, 2007	onymous (g), 2012 aefudin, 1992; PT	;;Freeport McMora `Aneka Tambang	in, 2010; Toni, 20 2002, 2004; PT	39; Soelistijo, ∈ Bukit Asam , 2	et al, 1995, 2003, 2 000, Triyono, 200	2010, 2011; Sale 37.	See comments on Table 1. Achyar, 2007; Amrullah, 2007, Anonymous (a), 2006; Anonymous (g), 2012;Freeport McMoran, 2010; Toni, 2009; Soelistijo, et al, 1995, 2003, 2010, 2011; Saleh, et al, 1991, 1992; Sugandi, et al, 1992; Mujib, et al, 1991, 1992, 2003; Saefudin, 1992; PT Aneka Tambang 2002, 2004; PT Bukit Asam, 2000, Triyono, 2007.

116

Table 2. Net Social Gain (NSG) and Net Gain Coefficient (NGC) of the several mining companies in Indonesia \*)

Year		Score (Ranki	ng)
		Indonesia	Other country (Norway)
	National	Region	
1975	46.4		
1980	52.6		
1985	57.8		
1990	61.9		
1995	65.9		
1998	67.0 (100)		
1999	67.7 (102)		
2000	68.4 (110)		
2001	68.2 (112)		
2005	68.3 (112.2)		
2006	68.4 (112.3)		
2007	68.9 (118.2)		
2008	69.6 (119.4)		
2009	70.8 (121.4)		
2010	71.8 (123.1)		
2011 a)	72 3 (124) b)	77.6 (Jakarta) c) 79.5 (South Jakarta) d) 48.0 (Nduga Regency) e)	96.5 (Number 1 of the world ranking)
2012	72.9 (125.0)	78.2 (Jakarta)	

Table 3. Historical trend of human development index (HDI) in Indonesia, 1975-2012

Sources: UNDP, 2013.; Wibawa, 2012; Badan Pusat Statistik, 2011; Sagir, 2009. Recalculated.

development for the resilience and welfare local people under the transformation concept of mining sustainability development, in particular toward their future in the post mining period. The CD fundings from the mining companies between 2005 and 2010 were allocated around IDR 0.8 trillion in 2005 up to IDR 1.16 trillion in 2010 or increased almost 50% within that period. This amount of funding could be able to increase the socio-economic, cultural and humankind of the local people through the mechanism of partnership between the mining company and the local people. This phenomena could translate the implementation of the meaning of corporate social responsibility (CSR) as the sustainability in terms of humankind, social, economic and environmental development in the country. Especially the mining company which operates in the remote areas, so as to function as a prime-mover of the development as well. It is necessary to encourage the mining companies, if it is necessary by regulation, to increase stage by stage their annual budget for CSR program in line with the spirit of the Indonesian Constitution.

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