

# BENEFITS OF COAL STOCKPILE AT PALIMANAN TO ITS SURROUNDING COMMUNITY

ENDANG SURYATI

R & D Centre for Mineral and Coal Technology

Jalan Jenderal Sudirman 623 Bandung 40211, Ph. (022) 6030483-5, Fax. (022) 6003373

## ABSTRACT

*One of the positive impacts of coal stockpiles in Palimanan is the benefits for surrounding communities. Poling of stockpile developments to people in West Palimanan shows that 81.20 % people agree to have stock pile, 8.57 % disagree and the rest is abstain. Disagreement occurs as the people are afraid with dust pollution from coal stockpiles and transportation.*

*Keywords : stockpile, job opportunity, dust pollution, Palimanan.*

## 1. INTRODUCTION

Before 2005, locations of coal stock at Cirebon were dispersed sporadically and it aroused protests from the local community due to the worry of environment at pollution. Referring to such a fact, Cirebon government took a policy to centralize coal stock pile activities at Palimanan. Currently, there are 11 sites of coal stock pile activities; however, only 6 of them are active. Coal stock pile activities may provide positive and negative impacts to surrounding environment. The positive one is providing opportunity to the local community for employment and running business. The chance to have job opportunities is big as the coal stock pile activities do not require any specialized skill. They just need unskilled persons such as loading-unloading workers, security guard, driver, and assistant to driver, which can all be done by the surrounding people.

The objective of this social study is to analyze the impact that might be occurred when the stockpile established. In terms of predicting the impact of stock pile activities to the communities, such an evaluation was based primary and secondary data.

## 2. METHOD OF STUDY

- a. data collection
  - a. primary data (source: interviewing local residents );

- b. secondary data (several reports from related institutions such as Central Bureau of Statistics, Agency for Regional Development);

- data analyses

$$K = \frac{I}{\Delta S / \Delta Y}$$

K is a multiply effect of worker expense who is involved in stock pile activity

S is worker savings

Y is the increase worker income

## 3. RESULTS AND DISCUSSION

Total population at West Palimanan is 11.226 people, consisting of 5,687 males and 5,539 female, the population density is 116 persons/km<sup>2</sup>, such a figure less, than that of Gempol, (152 persons/km<sup>2</sup>) as seen in Table 1.

Based on their educational level, total population of that area can be seen in Table 2. The table shows that educational level at Cirebon is relatively low. The majority of the population is elementary school (57.62%), followed by junior and senior and vocations, schools namely 31.03% and 11.35%, respectively.

Palimanan people earn their money mostly from

**Table 1. Total population at Gempol District in 2005**

No	Villages	Males	Females	Total	Population Density/km <sup>2</sup>
1	Cupang	1,555	1,591	3,146	105
2	Gempol	1,446	1,271	2,717	234
3	Walaha	1,675	1,674	3,349	100
4	Kempek	2,285	2,175	4,460	166
5	Winong	3,578	3,517	7,095	222
6	Cikeusal	1,668	1,647	3,315	119
7	West Palimanan	5,687	5,539	11,226	116
8	Kedungbunder	3,648	3,312	6,960	214
	Total	21,542	20,726	42,268	152

Source : Village potency April 2005

**Table 2. Number of alumni from various public, islamic and vocational schools at Cirebon, during 2004-2005**

No	School	Number			
		School	Students	Graduate	Teachers
1	Elementry Public School	931	255,857	39,746	6,925
2	Ibtidaiyah Islamic School	114	19,880	2,317	1,065
3	Junior High School	113	65,416	19,092	2,318
4	Tsanawiah Islamic School	83	25,264	6,620	1,856
5	Senior High School	42	17,465	5,600	1,251
6	Aliyah Islamic School	29	8,799	2,001	685
7	Vocational School	42	19,367	42,161	1,201

Source : Cirebon in number at 2005

industrial sector such as cement factory as seen in Table 3. Around 2,279 persons work in that sector followed by agricultural and service sectors (1,800 and 1,700 respectively). Income level of the citizen is between Rp 150,000,- to Rp 900,000,-/ month, as shown in Table 4. The majority of Gempol population is moslem (99.68%). The amount of worship house in Gempol can be seen in Table 5.

In general, the health level of Palimanan resident is good enough. Diseases frequently suffered by the people are:

- ARI (Acute respiratory infection)
- influenza
- diarrhea

Health facilities at this village include:

- polyclinic 1
- auxiliary health centers 12
- health posts 1

Medics and paramedics available at such an area consist of :

- midwife 1
- medical aide 2
- nurse 1
- traditional midwife 3

Based on interviewing 70 residents from West Palimanan, 57 (81.20%) agreed to have coal stock pile, 6 of them (8.57%) disagreed, and the risk (10%) did not respond (Table 6).

People who disagreed said that coal stock pile would arouse environmental pollutions as well as

**Table 3. The major income source of the villages in Kecamatan Gempol**

No	Villages	The major income source	Comodity
1	Cupang	Agriculture	Rice
2	Gempol	Others	Vendor
3	Walahan	Agricultural	Rice
4	Kempek	Industrial Sector	Rattan
5	Winong	Agriculture	Rice
6	Cikeusal	Mining and Quarrying	Building material
7	Palimanan Barat	Industrial Sector	Cement
8	Kedungbunder	Restaurants and Hotels	

Source : Village potency October 2005

**Table 4. Income level of West Palimanan's citizen**

Income level (Rp)	Percentage
100,000 – 200,000	7,14
210,000 – 300,000	21,4
310,000 – 500,000	15,7
510,000 – 600,000	2,8
610,000 – 900,000	4,3
> 900,000	5,7

Source : Primary data 2005 based on interviewing local residents

traffic jam. However coal stock pile existence at West Palimanan provides a positive impact to the local residents that included:

- security guard recruitment
- job opportunity in loading - unloading sector
- driver recruitment.

Security workers needed at each coal stock pile location are 3 persons. Each worker, has salary of Rp.750,000 a month.

While the loading-unloading activity requires 4 persons per truck, They are paid as much as Rp.25,000/person. For each freight, the driver and his assistant receive Rp.200,000 and Rp.150,000, respectively.

Transporting the coal from the harbor to the stock pile or from stock pile to consumers, (mostly in Bandung) is conducted by a sub contractor(s). The existence of 6 stock plies can absorb 0.0716 % local residents to be employed.

**Table 5. The amount of worship house in villages of Sub-District of Gempol**

No	Villages	Mosque	Prayer House
1	Cupang	1	8
2	Gempol	1	13
3	Walahan	2	4
4	Kempek	4	16
5	Winong	2	11
6	Cikeusal	2	12
7	West Palimanan	4	36
8	Kedungbunder	4	20

Source : Cirebon in number at 2005

Coal stock pile activities may present business opportunities for local community, such as eatery. The workers who have no time to take rest at their own house would look for a nearby eatery. Income calculation of the employees who are involved in stock pile activities is as follow:

#### 1. Labour

- Loading and unloading section, if assumed that all of the work day is 1 month 20 days and its pay is Rp 25,000,- a day. In a month, one worker will have 20 x Rp 25,000,- = Rp 500,000,-. If each location have 4 persons, for 6 locations will get 24 people. Total earning is 24 x Rp 500,000,- = Rp 12,000,000,-

#### 2. Security guard

- The pay for security guard is Rp 750,000,-

**Table 6. Interview result of Palimanan resident regarding stockpile existence**

No.	Perception of community on coal stock pile activities	Total	%
1	Agree	57	81.42
2	Disagreed	6	8.57
3	Not responding	7	100
	<b>Total</b>	<b>70</b>	<b>100</b>
	<b>Reason of agreed people to coal stock pile existence</b>		
1	Job opportunities	26	35.71
2	Other benefits	31	44.28
	<b>Total</b>	<b>56</b>	<b>77.99</b>
	<b>Reason of disagreed people to coal stock pile existence</b>		
1	Dust pollution	5	7.14
2	Traffic jam	1	1.42
	<b>Total</b>	<b>6</b>	<b>8.56</b>

Source : Processed from primary data

per month. One location will employ 3 persons and total security guards for 6 locations are 18 people. They will have 18 x Rp. 750,000,- = Rp. 13,500,000,-

### 3. Truck driver and his assistants

- In one trip, a driver will have Rp 200,000,- and his assistant gets Rp 150,000,-; if there are 2 trips in a month, the driver and his assistant will have 2 x 6 x Rp 200,000 = Rp 2,400,000,- and 2 x 6 x Rp 150,000,- = Rp 1,800,000,-, respectively.

Table 7 describes all calculation for resident incomes who involve in stock pile activities.

### 3.1 Multiply Effect due to Stockpile Activities

To calculate the multiply effect, such a calculation can be figured out by taking example of labor

and security guard incomes (Djajadiningrat, 1997). Normally, the loading-unloading workers are temporary laborers. Their main job is actually farmers with their income of Rp 300,000,-. If they also work for stock pile activities, they will have Rp 300,000,- + Rp 500,000,- = Rp 800,000,-.

Supposed, they save their money for 1% of their whole income, their saving will be 5% x Rp 800,000,- = Rp 40,000,-. If the security guards also save their earning, their total savings are 5% x Rp 750,000,- = 37,500,-. Total savings of both are Rp 77,500,-.

$$K = \frac{I}{\Delta S / \Delta Y} = \frac{1}{77500 / 1250000}$$

It means that for the increase of Rp 1,-; the expense of the labour will affect the earning of another person. Table 8 shows the effect.

**Table 7. Income level of the community involved in coal stockpile activities**

No.	Job Types	# of workers	Total Income per month (Rp)
1	Loading-unloading workers	24	12,000,000
2	Security guards	18	13,300,000
3	Drivers for coal freight	6	4,800,000
4	Drivers assistant	6	3,600,000

Source : Processed data from primary data

**Table 8. Cumulative income arisen from the increase of labor income**

Period	Income increase (Rp)	Expense increase (Rp)	Cumulative income
1	100	100	-
2	100	1,612	1,712
3	1,712	27,597.44	29,309.44

## 5. CONCLUSION

Coal stockpile activities provide a good impact for Palimanan community. Those are :

- increase income for community between Rp 500,000,- to Rp 750,000,-
- multiplier effect of 16,12.

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