

AN ANALYSIS OF WASTE COST ALLOCATION IN A SUGAR MANUFACTURE

**(A Case Study of Environmental Accounting Implementation in Pabrik Gula
Djombang Baru)**

**Undergraduate Thesis
Presented to Brawijaya University
As Form Prerequisite The Bachelor Degree of Business Administration
Faculty of Administrative Science**

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FACULTY OF ADMINISTRATIVE SCIENCE
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2014**

***“Science is the most useful legacy in a life.
Science is more useful than treasure.
No one got lost because science, while many people lost because of
treasure.”***

***“You will never find a change in the future if you do not change
your habits.
The future is the result that you get from a habit in your daily life.”***

***“Life is like a camera
Focus on what’s important,
Capture the good times, Develop from the negatives,
And if things don’t work out,
Take another shot”***

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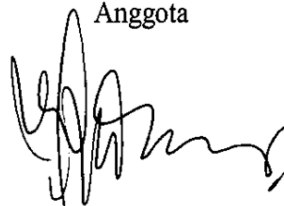
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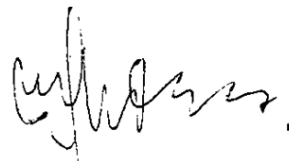
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MINOR THESIS ORIGINALITY STATEMENT

I truthfully declare that to my knowledge, in the text of this thesis there is no scientific papers that have been asked by the other party to obtain work or opinion ever written or published by another person, except that in writing this manuscript and cited the referred the source quotations and bibliography.

If it turns out in the text of this thesis can be proven there are elements of plagiarism, I prepared this thesis disqualified and academic degree I have gained (S-1) was canceled, and processed in accordance with the legislation that apply (UU No. 20 Tahun 2003, Pasal 25 ayat 2 dan pasal 70).

Malang, 2 Juni 2014

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***Big thanks to my family
My mother, my father, my sister, my brother
Thanks a lot for the support and always pray for my future. I am
very proud to be one of them. And promise will give the best that i
can do for them especially mom and dad.***

***Big thanks for all my classmate.
Beb Firly, Beb Oky, Beb Adel, Beb Dhea, Mami Intan, Nanik,
Shinta, Kelly, Karin, Jeje, Cece, Niken, Tika, Choey, Ajeng, Alin,
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Siska, Lala, Jubir. Thanks for the togetherness***

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Always Keep FELLOWSHIP AND FUN.***

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Love you all guys mak nok, mak put, mak pik, si baby yemima, si
kucing, bella, ami, ayu. Never forget our memories Langgengers.***

SUMMARY

Lina Andriyanti, 2014, An Analysis of Waste Cost Allocation in A Sugar Manufacture (A Case Study of Environmental Accounting Implementation in Pabrik Gula Djombang Baru). Dr. Siti Ragil Handayani, M.S.i. Nila Firdausi Nuzula, M.S.i, Ph.D.

PG Djombang Baru is one of the agricultural company where its produce sugar. The production process produces some waste which require further treatment in order not to pollute the environment around the company. There are some negative impacts in the operational activities of the sugar industry. The negative impact of the sugar industry in the form of air pollution, wastewater and noise. This negative impact can reduce the level of public health if not managed properly so that it is necessary to control to overcome it.

The research was conducted in PG Djombang Baru. This research aims to analyze how is the corporate responsibility from the company. How is the waste management at PG Djombang Baru. How is the implementation of environmental accounting at PG Djombang Baru.

This study used qualitative methods. The data was collected using observations, interviews and documentation. This data was obtained by involving relevant parties such as the responsibility control of processing department, financial department, human resource department. Data analysis used Miles and Hubberman models.

This study shows that PG Djombang Baru produce three types of waste, namely liquid, solid and air waste. Liquid waste is managed by using IPAL system, solid waste is managed by compost department to be used as biocompost fertilizer, and air waste is managed by using Dust Collector system. PG Djombang Baru was conduct the social activities as a form of the responsibility from the company to the society. These activities such as cheap market, house renovation for poor society, greening program and free medical treatment. In accounting, PG Djombang Baru also allocate environmental costs but still be associated with a company's financial statements.

The results of this study indicate that PG Djombang Baru already run social programs as corporate social responsibility and allocate the environmental cost in account reconditioning and environmental management. But PG Djombang Baru should make separate reports on environmental accounting and social activities because it can provide information about the quality of environmental management in optimizing social responsibility.

Key Word: Corporate Social Responsibility, Environmental Accounting.

RINGKASAN

Lina Andriyanti, 2014, An Analysis of Waste Cost Allocation in A Sugar Manufacture (A Case Study of Environmental Accounting Implementation in Pabrik Gula Djombang Baru). Dr. Siti Ragil Handayani, M.S.i. Nila Firdausi Nuzula, M.S.i, Ph.D.

PG Jombang Baru adalah salah satu perusahaan pertanian yang menghasilkan produk gula. Proses produksi menghasilkan beberapa limbah yang memerlukan perawatan lebih lanjut agar tidak mencemari lingkungan sekitar perusahaan. Terdapat beberapa dampak negatif dalam kegiatan operasional industri gula. Dampak negatif dari industri gula dalam bentuk polusi udara, limbah cair dan kebisingan. Dampak negatif ini dapat mengurangi tingkat kesehatan masyarakat jika tidak dikelola dengan baik sehingga perlu penanganan lebih lanjut untuk mengatasi hal tersebut.

Penelitian ini dilakukan di PG Jombang Baru. Penelitian ini bertujuan untuk menganalisis bagaimana tanggung jawab perusahaan dari perusahaan. Bagaimana pengelolaan limbah di PG Jombang Baru. Bagaimana penerapan akuntansi lingkungan di PG Jombang Baru.

Penelitian ini menggunakan metode kualitatif. Pengumpulan data dilakukan dengan menggunakan observasi, wawancara dan dokumentasi. Data ini diperoleh dengan melibatkan pihak terkait seperti responsibility control departemen pengolahan, departemen keuangan, departemen sumber daya manusia. Analisis data yang digunakan adalah model Miles and Hubberman.

Penelitian ini menunjukkan bahwa PG Djombang Baru menghasilkan tiga jenis limbah yaitu limbah cair, padat dan udara. Limbah cair dikelola dengan menggunakan sistem IPAL, limbah dikelola oleh pihak kompos untuk dijadikan pupuk bikompos dan limbah udara dikelola dengan menggunakan sistem *Dust Collector*. PG Djombang Baru mengadakan beberapa aktifitas sosial sebagai bentuk tanggung jawab perusahaan kepada masyarakat seperti kegiatan pasar murah, renovasi rumah untuk masyarakat miskin, penghijauan dan pengobatan gratis. Secara akuntansi PG Djombang Baru juga mengalokasikan biaya terkait lingkungan tetapi masih menjadi satu dengan laporan keuangan perusahaan.

Hasil dari penelitian ini menunjukkan bahwa PG Djombang sudah menjalankan program social sebagai tanggung jawab sosial perusahaan dan mengalokasikan biaya terkait lingkungan dalam akun rekondisi dan pengelolaan lingkungan hidup. Tetapi PG sebaiknya membuat laporan tersendiri mengenai akuntansi lingkungan dan kegiatan sosialnya karena dapat memberikan informasi mengenai kualitas dari pengelolaan lingkungan dan usaha untuk mengoptimalkan tanggung jawab sosial perusahaan.

Kata Kunci: Tanggung Jawab Sosial Perusahaan, Akuntansi Lingkungan.

FOREWORD

Upon the completion of my minor thesis, I would like to present my deepest gratitude to the Almighty Allah SWT for the blessing and strength that have been given to me in finishing my thesis entitled **“An Analysis of Waste Cost Allocation in A Sugar Manufacture (A Case Study of Environmental Accounting Implementation in Pabrik Gula Djombang Baru)”**. This undergraduate thesis is the final assignment submitted to the University of Brawijaya in partial fulfillments for the Bachelor Degree of Business Administration in the Faculty of Administrative Science.

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Malang, June 2014

Researcher

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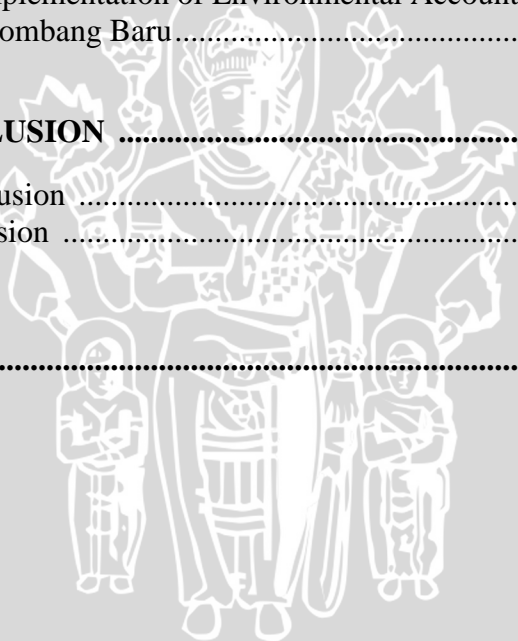
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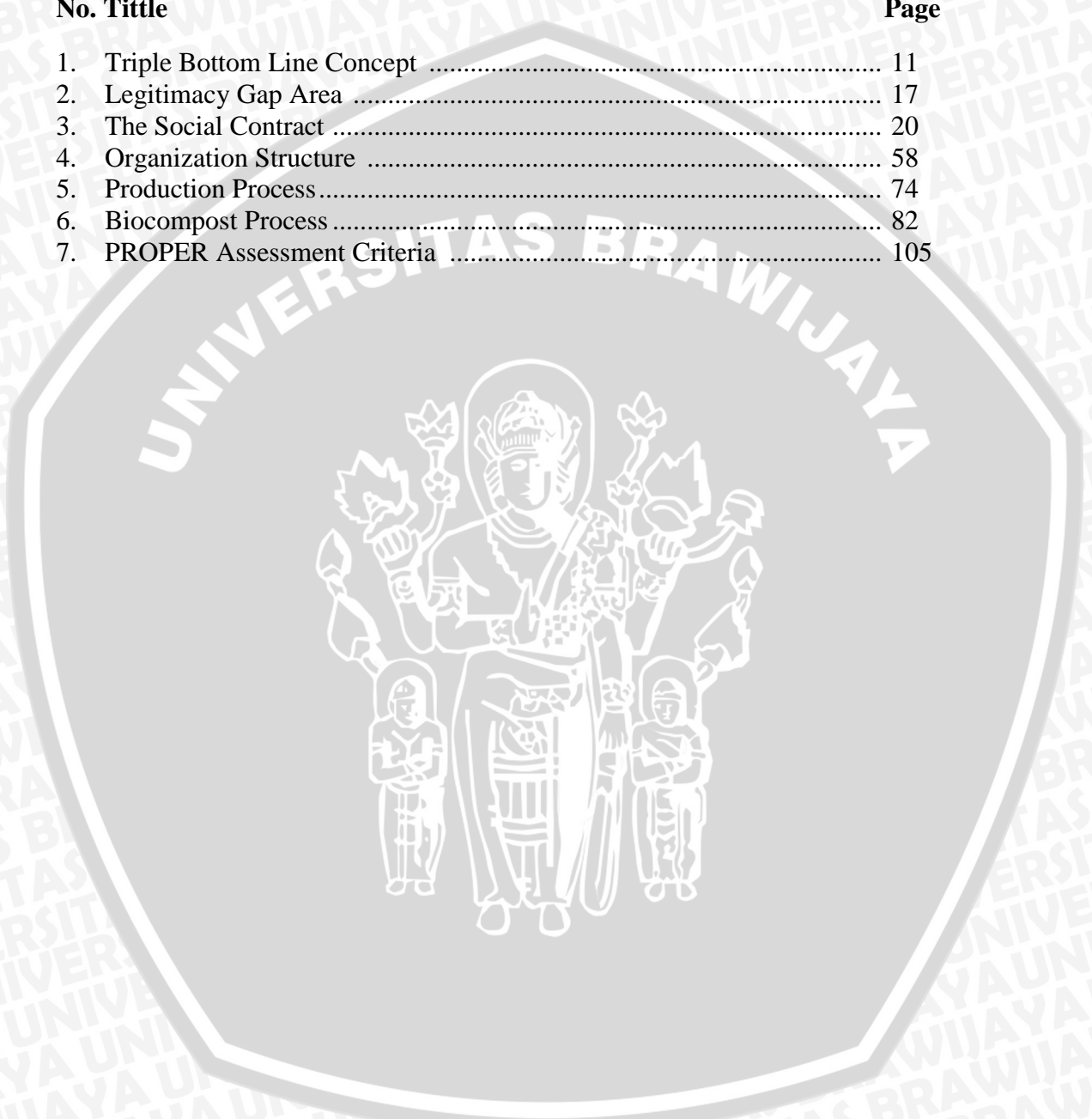


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CHAPTER I

INTRODUCTION

A. Background

Business is not only economic institution, but also social institution. As social institution, business has to responsible to help society in solving social problems. This responsibility called Corporate Social Responsibility (CSR). The movement of industrialization had a negative impact on the environment and other social institutions (negative externalities). Mobilization of resources for industrialization sooner or later can disrupt the balance of the resource. Thus, it is the importance of CSR for the environment and society (Hadi, 2011:45).

CSR pays attention about social problem and environment, so CSR support continuous development to help government role. This should be done considering the establishment of a company definitely has an impact on society and the environment, either directly or indirectly. In fact, given the impact of the establishment and production activities in a company often damage the environment and harm the public, such as the impact of waste production. It is inevitable that waste production is a matter that can damage the environment and ultimately cause harm to the community, particularly for the communities surrounding the company (Wibisono, 2007: 4-5).

CSR has become an obligation for a company, even the government has issued written rules regarding corporate social responsibility concepts

contained article 74 of Law about Limited Company, which states that any company that runs its business activities in the field and/or related to the natural resources required to carry out social and environmental responsibility. If not done, then the company will be sanctioned in accordance with the the regulation.

The demands of a large company, it is expected not only concerned with the interests of management, investors and creditors but also employees, customers, and communities. The company has a social responsibility to parties outside of the management and owners of capital. The demands on companies to provide information transparently, accountable organization and good corporate governance (GCG) is increasingly forcing companies to provide information about their social activities. The society needs information about the what extent the company has been carrying out social activities so that the right of people to live in security, peace, and welfare of employees can be met. In addition to implementing corporate social responsibility programs are also required to lead the movement towards green company, accountant become one of important factor. Because the accountant who have duty in presenting any information to the company's operations in the form of financial statements. If companies enter into the operational environment, the financial reporting must include elements of the environment. Therefore, the reporting should be based on environmental accounting.

According to Environmental Accounting Guidelines (2002) said that an increasing number of companies and other organizations are engaging in environmental management as part of their management strategies to specify measures for dealing with environmental issues and to internally carry out environmental conservation activities. Environmental accounting is a tool to supplement environmental management. Environmental accounting data is not only used by companies or other organizations internally, but is also made public through disclosure in environmental reports. The disclosure of environmental accounting data as one of the key elements in an environmental report enables those parties utilizing this information to get an understanding of the company's stance on environmental conservation and how it specifically deals with environmental issues. At the same time, a more comprehensive grasp of the companies and other organization's environmental information can be obtained.

The quantitative management of environmental conservation activities is an effective way of achieving and maintaining sound business management. In other words, in carrying out environmental conservation activities, a company or other organizations can accurately identify and measure investments and costs related to environmental conservation activities. By having better insight into the potential benefit of these investments and costs, the company can not only improve the efficiency of its activities, but environmental accounting also have the important role in supporting rational decision-making (Rikhardsson, 2005: 243).

The importance of environmental accounting basically encourage the awareness of the company or other organization that have been taken benefit from the environment. Those benefits are actually bring impacts in the development and improvement of the business activities. Thus, it is importance for the corporations or other organizations to take a part of concerning environmental conservations continuously in order to support the improvement of their business. One of those activities can be done by involving the environmental information to the company accounting practice. The information will not only used by the internal parties of the corporations but also for external parties such as investor, government, and stakeholders (Ikhsan, 2009:13-14)

One of the industries that generate waste and have a reciprocal relationship with the community is the sugar industry. The interrelationship of sugar industry in the form of cooperation between the public, especially sugarcane farmers to provide raw materials in the operations of the sugar industry. There are some impacts both positive and negative impacts in the operational activities of the sugar industry. The positive impact which given by the sugar industry are the availability of jobs and the needs of the community while the negative impact of the sugar industry in the form of air pollution, wastewater and noise. This negative impact can reduce the level of public health if not managed properly so that it is necessary to control to overcome it.

The object of this study is PT. Perkebunan Nusantara X unit PG Djombang Baru. The environmental issues that occur in PG Djombang Baru is that the sugarcane milling service produces a lot of waste and its located in the densely populated area. This makes the sugar mill gets more demands to maximize waste management and implement corporate social responsibility programs to the society affected by the waste in order to minimize the impact toward society and the environment around PG Djombang Baru. The waste that generated by PG Djombang Baru such as *blotong*, *abu ketel*, and waterwaste. These waste can disturb the society convenience, for instance, it will affected by water waste and dust smoke issued from smokestacks.

Therefore, environmental management should be supported with environmental cost. Management and allocation of environmental cost in practical manner would carry no problematic effect in overcoming negative impact, but in accounting, cost allocation which is not conducted systematically using cost allocation explanation method would reduce accountability of PG Jombang Baru.

Based on this explanation, author was interested in taking the title concerning “An Analysis of Waste Cost Allocation in a Sugar Manufacture (A Case Study of Environmental Accounting Implementation in PG Djombang Baru)”.

B. Problems of study

1. How is the implementation of corporate social responsibility in PG Djombang Baru?
2. How is the implementation of waste management at PG Djombang Baru?
3. How is the implementation of environmental accounting at PG Djombang Baru?

C. Study objectives

1. Knowing and describing the corporate responsibility from the company.
2. Knowing and describing the waste management at Pabrik Gula Djombang Baru.
3. Knowing, describing and analyzing the implementation of environmental accounting at PG Djombang Baru.

D. Contributions

1. For academic purposes

This study is conducted to give contribution for future researcher in order to derived general understanding, particularly, concerning environmental accounting and its implementation.

2. For practical purposes

The aims of this study is give contribution toward PG Djombang Baru in implemnting environmental accounting in order to support industrial development with environmental insight.

E. Parts of discussion

Chapter I : Introduction

This chapter explains about problems which became this study's background, problematic formulation, study objectives and author contribution.

Chapter II : Theoretical Framework

This chapter comprise of relevant literature review toward problems of background under examination.

Chapter III : Research Method

This chapter would explain how study would be conducted, concerning with type of study, focus of this study, location and site of study, source of data, and data collection technique also data analysis.

Chapter IV : Result and Analysis

This chapter contains research data and analysis result of the research method. In addition, it describes about the interpretation of the research result.

Chapter V : Conclusion and Suggestion

This chapter is concludes the research result and provides some suggestions.

CHAPTER II

LITERATURE STUDY

A. Prior Research

The prior researches presented in this section are meant to establish the current knowledge pertinent to the research questions.

1. Putri Indah (2010)

This minor thesis explain about the activities regarding environment management and the implementation of environmental accounting concept in a hospital. Researchers chose the topic because of the impact of externality company inflicted due to operational activities of the company. In practice the hospital showed the form of social responsibility on the environment. It is indicated by the formation of a special installation to run a healthy environmental development program.

2. Vivianti Vida (2010)

This research was analyze the implementation of environmental accounting as a form of responsibility of the company on the environment. As a form of corporate social responsibility toward the environment, PDAM Malang region was done the environmental management through the restoration. Environmental accounting concept was been implemented by PDAM Malang region by entering the restoration cost as the expenses and entered in maintanance account.

All the prior researches presents above in some ways strengthening this research by providing a combination of the implementation of Triple Bottom Line concept through the Corporate Social Responsibility and the environmental accounting report.

B. Triple Bottom Line

1. Definition of Triple Bottom Line (TBL)

A triple bottom line business is a business that incorporates into its business model social, environmental, and financial sustainability, in other words, people, planet, and profit. The triple bottom line, also called “TBL” or “3BL”, is a philosophy of business management and accounting suggests that the traditional accounting and performance reporting framework of a company should be expanded to include its ecological and social impact in addition to its financial performance. The concept of triple bottom line reporting implies that companies are answerable not only to shareholders but to stakeholders, with a stakeholder being defined as anyone or anything affected by the operations of a company (Timothy:2011). The principle of TBL has long embraced the Government of Indonesia. According to act 33 Undang-Undang Dasar 1945 “ Earth and water and natural resources contained therein are cotrolled by the country and reserved for the people walfare”.

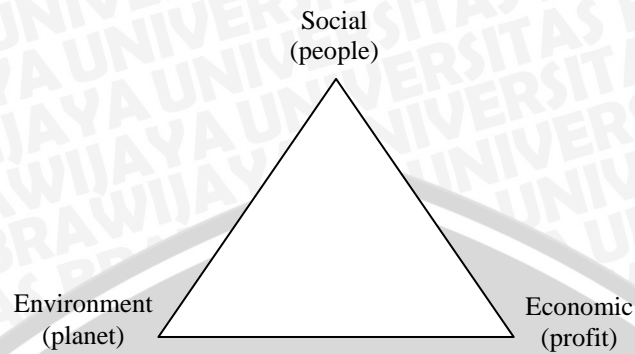
2. The Concept of Triple Bottom Line

The financial condition is not only sufficient to guarantee that company value will grow in sustainable way. The sustainability only will

be guaranteed if the company considering the social dimension and the living environment. It has become fact how the around society resistance that emerge to the company that is considered do not concern to the living environment. According to Cooney (2009) stated that green business is efforts done by company to minimize the negative impact of economic activities of company to the community, society, economy and local or global environment by fulfilling the triple bottom line of business principles.

The term of triple bottom line is popularized by John Elkington in 1997 through book of “Cannibal with Forks, the triple bottom line in the term of economic property, environment quality and social justice. Elkington is known as the triggering father of triple bottom line of business in several writings stated that the basic pillars of the business sustainability is the universe or environment (planet), people, and profit. Because of that, if company want its business grows and develops in sustainable way then the three basic pillars should be managed well and in sustainable way (Wibisono, 2007:32-33)

According to Wahyudi (2008:135-140) Elkington extend view point that the company that want sustainability should consider “3P”. Beside profit, the company should consider and involved in fulfilling the people welfare and give active contribution in conserving the environment (planet).



Source : Wahyudi (2008)

Figure 1
Triple Bottom Line Concept

Based on illustration above shows that the relationship between People, Planet and Profit (3P) can not be separated each other, because it has the related matters. When the company just implementing one aspect then the company will face any resistance form internally and externally. This is make the company get difficulties to run their business. The aspect in the triple bottom line such as:

- a. Profit. Profit is important element and become the main goals of each business activities. Profit is income addition that can be used to guarantee the company survival. While activities that able to increase profit such as improving the productivity and cost efficiency, so the company has competitive advantage that able to give maximum value added. Profit means creating fair trade and ethical trade.
- b. People. Realizing that around community of the company is one of stakeholder for the company, because the around community support is needed for the presence, survival and development of company, then as

inseparable part with the community, the company should commit to give benefit for the community. Beside that, it should be realized that company operation has potentials to bring impact to around community. People give emphasis to the importance of business practice to support the employee interest by resist to the exploitation of underage children, fair pay, safe work place and tolerable work hours. The concept also ask the company to consider the health and education of the employee.

c. Planet. If company want to be exist then it should consider the responsibility to the environment. Environment is something relate with all living field. But, some company still less care to the around community. It is caused by there are no direct benefit to the company, but the company will always need natural resources. Planet means managing well the energy usage especially the natural resources that is not renewable. Decrease the production waste results and manage again become safe waste to the environment. The embodiment of the program can be in the form of living environment, clean water provision, tourism development.

The three pillars that measure the success value of company with three criteria: economic, environment, and social. The triple bottom line concept implicate that the company should give emphasis to the stakeholder interest than the shareholder.

C. Corporate Social Responsibility (CSR)

1. The Definition of Corporate Social Responsibility (CSR)

The use of the term Corporate Social Responsibility or CSR lately has become increasingly popular with the ever increasing practice of corporate social responsibility. CSR has been known in 1970, and nowadays become the one of innovation for the company relationship between society and customers. There are some definition regarding the term of CSR.

According to The World Business Council for Sustainable Development (WBCSD) in Wibisono (2007:7) define as continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.

And The World Bank in Wahyudi (2008:29) explain that CSR is the commitment of business to contribute to sustainable economic development working with employees and their representatives the local community and society at large to improve quality of life, in ways that are both good for business and good for development. And also from the other expert explain that CSR mean open and transparent business practices that are based on ethical values and respect for employees, communities and environment.

Based on the government regulation the definition of CSR are follows:

The Government Regulation number 25 year 2007 article 15 about capital investment (*Undang-Undang Penanaman Modal* or UUPM) explain that the company responsibility to creates the harmonious relationship and appropriate with the environment, value, norms and the society around the company. And the Government Regulation number 40 year 2007 article 1 about limited company (*Undang-Undang Perseroan Terbatas* or UUPT) explain that the corporate social responsibility and environment are the commitment of company to contribute in the economic sustainable development in order to improve the social welfare.

Base on the opinion above the researchers provide the conclusion as CSR is a concept whereby companies integrate social and environmental concern in business operations and interaction with the stakeholders on a voluntary basic.

2. The Implementation of Corporate Social Responsibility

The scope of CSR practices are mostly refers to the concept of the Triple Bottom Line. This is supported by the implementation of CSR that is showed by the Prince of Wales International Business Forum that provide five pillars. First, the company's efforts to gain the support of human resources, both internal (employees) and external (public), by developing and providing welfare to them. Second, strengthening economies means the company required to not become rich own while the society surround them

is poor therefore they have to empowering the economic around. Third, maintaining harmonization with surrounding society to avoid conflicts (assessing social cohesion). Forth, implementing the good governance (encouraging good corporate governance). Fifth, protecting environment. (Wibisono 2007:125)

The other opinion is still in line with the reasoning above is Gurvy Kavei in Wibisono (2007:126) stated that CSR can be practiced in three areas. First, workplace. Its implementation includes safety and healthy work, elaboration of knowledge and skill employees, increasing the prosperity. Second, community. Its implementation through the contirbutions such as charity, philanthropy or community development. Third, environment. Its implementation such as production process and environmentally friendly products, and also participate in environmental preservation efforts. CSR include responsibility as the impact on their activities on the environment, customers, employees, communities, stakeholders, and other users.

3. The Principle of Corporate Social Responsibility

Social responsibility consist of wide dimension. In addition, social responsibility is also very different interpretations, especially if associated with the stakeholders. According to David Crowther (2008) in Nor Hadi (2011) describes the principles of corporate social responsibility into three, namely: (a) sustainability, (b) accountability, (c) transparency. Here are the explanation from each principles:

a. Sustainability

Sustainability is concerned with how companies in performing activities while taking into account the sustainability of the resource in the future. Sustainability means how to use current resources while considering and taking into account the ability of future generations.

Thus, sustainability related to the effort on how to utilize the resources in order to society still consider future generations.

b. Accountability

Accountability is responsible for the company's efforts and activities that have been carried out. Accountability is needed when activity affect the company and the external environment is affected.

Accountability can be used as a media company to build the image and the network to the stakeholders. The level of accountability and responsibility for determining the legitimacy of the company's external stakeholders, as well as increase the company's stock transactions.

c. Transparency

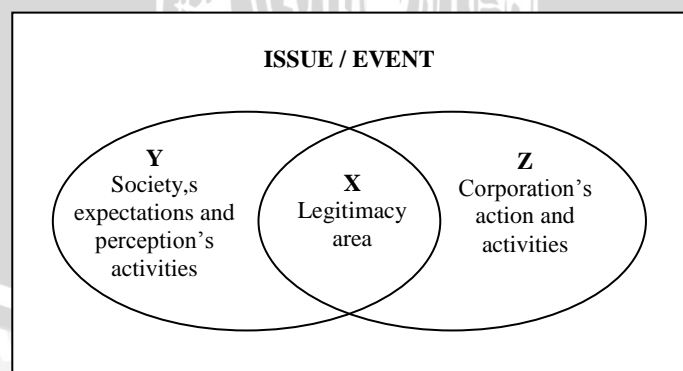
Transparency is an important principle for external parties.

Transparency related to the reporting of the company's activities and its impact on the external side. Transparency serves to reduce the asymmetry of information and accountability for environmental impacts.

4. Corporate Social Responsibility Theory

a. Legitimacy Theory

The legitimacy of the public is a strategic factor for the company in order to develop the company in the future. It can be used as an opportunity for companies to arrange corporate strategy, particularly to positioned the company in the community. Legitimacy is the psychological situation a person or group alignments that very sensitive to the surrounding environment symptoms. According to Deegan, Robin and Tobin (2002) in Nor Hadi (2011) stated that legitimacy can be obtained when there is a match between the company's presence does not disturb or match (congruent) with the existence of the value system in the society and the environment. Here is an illustration of the position of legitimacy and the legitimacy gap between companies and stakeholders.



Source: Gary O'Donovan in Nor Hadi (2011)

Figure 2
Legitimacy gap area



From the illustration above shows that the region X is suitability (congruence) between the social expectations whereas the regions Y and Z is a mismatch (incongruent) between the public perception and corporate activities (legitimacy gap). Corporate activities, including appropriateness of social values and norms. The reduction of Legitimacy gap can be done by expanding the X area through legitimacy strategies, such as by increasing the social responsibility and social disclosure (social disclosure) as a form of accountability and transparency the company's operations.

b. Stakeholder Theory

The company is not only responsible for the shareholders, but it is becoming more widespread is up to the stakeholders. This happens because of the demands of society due to negative externalities (Harahap, 2002). Therefore, the responsibility of the company which initially only measured the extent of the economic focused in the financial statements, now also have to consider the social dimensions of the stakeholders, both internal and external. Stakeholders is a group or an individual who can Affect, or be affected by, the success or failure of an organization, such as government, corporate competitors, local communities, international environment, agencies outside the company.

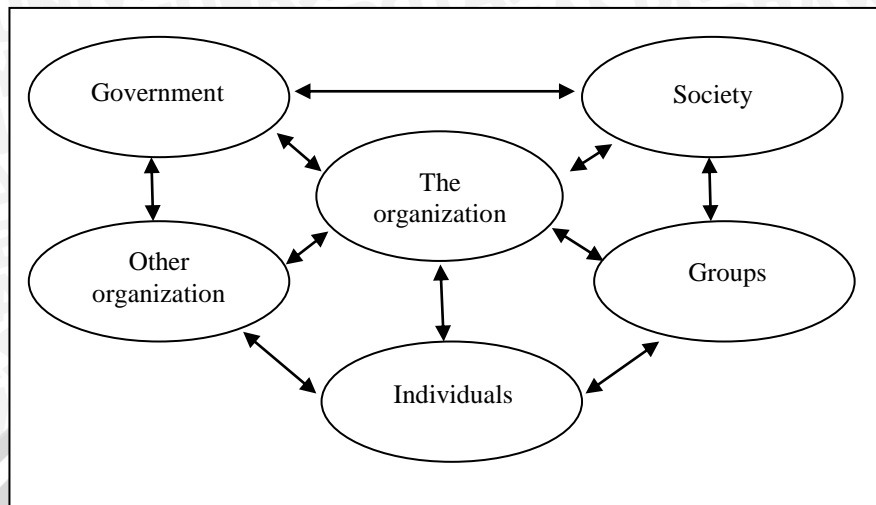
There are interconnections between stakeholder theory and legitimacy theory. Companies should reduce the expectation gap with

the public in order to increase legitimacy (recognition) community. Therefore, the company must maintain its reputation by way of changing the orientation of the original measured not only economic measurement (shareholder orientation), but also considering social factors as a form of concern for social issues (stakeholder orientation).

c. **Contract Social Theory**

Social contract arises because of the interrelation of the social life of the community, in order to the harmonization and balance, including the environment. The company, which is a group of people that have a common goal and to achieve goals together, is a part of the community in the larger environment. Its existence, is largely determined by the community, where they have mutual influence. Therefore, for a balance, it is necessary social contract either explicitly or implicitly that an agreement that is mutually protect the interests of the company.

Social contracts are built and developed, one of them to explain the relationship between the companies to the community. The Company has an obligation to the community to give benefit local communities. Interaction with companies toward the society are always trying to meet and comply with the rules and norms of society, so that the activities of the company can be recognized (Deegan, 2000). Meanwhile, David Crowther gave the ilustration social contract between the company and stakeholders.



Source : Crowther David in Nor Hadi (2011)

Figure 3
The Social Contract

The illustration above gives the interrelation and interdependence between the company and stakeholders, and between stakeholders with stakeholders. Correspondingly with the opinion from Roisseau stated that nature has given the regularity and have the competence to move in it. Therefore, to maintain the regularity of natural law, the parties in it needs to perform a contract, either directly or indirectly.

5. Classification of Social Responsibility Direct and Indirect Effects

Within Hadi (2011:160-166) stated that corporate social responsibility activities are divided into two that are indirect and direct activities. Generally, direct activities include: disaster aid, medical aid, basic food aid, and another similar activities.

While the real activity of social responsibility, as indirect effects found in the annual report, such as: efforts to maintain the environment by investing institutions and procedures that are oriented to reduce dust

emissions, air and water pollution, waste recycling, environmental management and other. The following is an overview the classification of social responsibility activities direct and indirect effects are described in the table:

Table 1: Classification of Social Responsibility Direct and Indirect Effects

No	Classification	CSR activity	Description
1	Environment	Waste management	Largely indirect, due to the small involvement and indirect benefits have on society (stakeholder)
		Waste treatment	
		Environmental survei	
		Environment Rehabilitation and reclamation	
		Environmental management systems and procedures	
		Prevention of pollution	
		security environment	
		environmental protection	
2	Community	Compliance with regulations	helping to communities around the company is largely direct, but most are oriented in relation to the interests of the company.
		Help repair	
		Alleviation of unemployment communities around companies	
		Increased economic prosperity and community around the company	
		Help cooperatives and SMEs	
		Healthy help	
		Education and training assistance	
		help clean water	
		disaster help	
		support facilities and public	
religious support and a great day			

3	Employee	Incentives and pension allowance	This aid is dominated by direct to internal stakeholders. However, it remains oriented towards the interests of the company, given the quality of the employees is one of the management interest
		Healthy assurance	
		Improvement of skills, education and training	
		House renovation and educational programs for employee	
		Environment, health and safety workplace	
		Employees refreshing program	
4	Product	Research and development	Social responsibility in this area is 60% indirect and 40% direct effect for external stakeholders
		has a production procedure and refer to product quality standards	
		Facilities and laboratory quality control	
		Product quality award	
		Quality assurance & healthcare products	
5	Energy	The use of energy efficient equipment	almost 90% of this activity is internal, so it is indirect stakeholder
		Using non-fossil fuels	
		Energy conservation	
		Replacement of obsolete equipment	
6	Other	Awards	
		Annual report	

Source : Nor Hadi (2009)

6. The stages of CSR Implementation

Within Wibisono (2007:127-131) describes the stages of implementation of CSR. Generally, companies that have succeeded in implementing CSR using the following steps:

a. Planning Stage

The planning stage consists of three main steps, namely Awareness Building, Assessment CSR, and CSR Building Manual. Awareness building is the first step to build awareness of the importance of CSR and management commitment. This effort can be done through seminars, workshops, discussion groups and so on. CSR assessment is an attempt to map the condition of the company and identify aspects that need to be given priority. The next step is to build CSR manual. Assessment results are the basis for the preparation of the CSR manually. Efforts are conducted through benchmarking or by asking independent experts from outside the company.

b. Implementation Stage

The implementation stage consists of three main steps namely, socialization, implementation, and internalization. Socialization is necessary to introduce the components of the company on various aspects related to the implementation of CSR. Efforts are needed to be effectively and which formed a special team under the supervision of the director of a company appointed as CSR champions in the company. then the implementation of an activity that is carried out in line with the existing CSR guidelines. While internalization is the long-term stages. Internalization include attempts to introduce CSR in the company's entire business process.

c. Evaluation Stage

After the CSR program is implemented, the next step is the evaluation of the program. Evaluation stage is the stage that needs to be done consistently over time to measure how far the effectiveness of the implementation of CSR. The evaluation also can be done by asking an independent party to audit the implementation of CSR has been done.

d. Reporting

Reporting is required with the aim of building a better information system for decision-making purposes and the purposes of the disclosure of information about the company.

D. The Relationship Between TBL And CSR

A triple bottom line approach to doing business implies that decision-makers will evaluate their decisions in light of social, environmental, and financial responsibilities. One of the implementation of triple bottom line concept is corporate social responsibility. CSR is a form of caring companies against economic, social, and environmental issues based on the three basic principles that include profit, people and planet (3p).

Profit, as an corporation with a profit oriented enterprises, companies should be oriented to seek economic advantage to ensure the survival of the company in order to the operational and develop continuance of the company.

People, in order to ensure the survival and increase the competitiveness of the

company, the company must have concern for the welfare of employees and the man who was a valuable asset in the organization or country.

A form of CSR that socially-oriented such as giving scholarships for students, establishment a means of education and health. Planet, concern for the environment and sustainability biodiversity can be done through the program green environment, supply means of water repair settlement, development of tourism.

E. Industry And Environmental Issue

Living environment consist of biotic and abiotic factors and the existing condition in the occupied space. The change of biotic factors either naturally or because of man action has exceeded biotic ecosystem tolerance that called by pollution. The pollution is occurred because of poisonous and danger materials in the waste that enter into environment. Principally, the function of industry is to process input become output. For the input: raw materials, supporting materials, machine, equipments, employee, and etc. While the output is classified as the main product, side product, and waste that can be divided into waste with economic value and without economic value. The investigation to the waste sources can be done at the input, process, or output by looking at the type and specification of the produced waste, and to identify the industry as the polluter, then it should be known the industrial type, materials, process system and the final processing of the polluter sources (Nurika and Hidayat 2006:3-4).

To create sustainable development, it needs the basic change at the quality of the development. In general, industry in its activity needs more attention to make it efficient in using resources, producing less waste, and minimize the negative impact to the human health and environment.

1. Definition of industry

According to Government Regulation number 5 year 1984 about industry, industry is economic activities that process raw materials, half finished goods, and/or finished goods become the goods with higher value, including engineering and industrial engineering. While, According to Winarmo and Ismaya (2007:252) Explained that industry is economy activities by process or cultivate materials using the equipment as machines to produce goods or services. And *Badan Pusat Statistik* (2012) mentions the industry is a business unit that perform economic activities, aims to produce goods or services that have the layout of the building as well as legalization and has own administrative regarding the production and cost structure.

Based on the definition above can be concluded that industry is economic activities which is cultivate, processing and produce the goods and services by using current equipment to increase the utility of goods.

2. Classification of industry

According to Kristanto (2002:156-158) industry can be classified as follow:

a. Basic industry or upstream industry

Upstream industry has characteristic as follow: capital intensive, great scale, use high technology and tested. The location is selected near the raw materials and has its own energy. The industrial development able to cause environmental change, either economic, social and cultural aspects or pollution.

b. Downstream industry

The industry is the continuity of the upstream industrial process. In general the industry processes half finished goods become finished goods, the location usually near to the market, and use middle and tested technology and man power intensive.

c. Small industry

Small industry mostly develops in the rural and urban area, has simple tools. Although the production similar with the downstream industry, but the processing is simpler. The factory layout and the waste management is not considered. The industry is man power intensive.

Beside the classification above, industry also be classified conventionally.

- a. Primary industry, that changes raw material become semi finished goods, for example agriculture and mining.
- b. Secondary industry, that changes semi finished goods become finished goods.
- c. Tertiary industry, that mostly including services and merchandising industry that manage secondary industrial materials.
- d. Industry with environmental insight**

The environmental friendly sustainable development is conscious and planned efforts that combine the living environment including the resources, into development process to guarantee the ability, prosperity, and life quality of today and future generation. To support the human activities, it is often be done the change to the nature, the change is the development. One of development forms is industrial development. Industry is the human effort to produce something that is considered as important for the economic improvement. For big factory establishment, it needs wide area and near with the raw material to press the production cost. After the establishment is finished, and the activities begun, the important thing that should be considered is the waste of the production. The waste has potentials to pollute the around environment if it is not handled well. Because of that, analysis about the living environmental impact (AMDAL) is needed to conserve the living environment because of the human being activities that is called as development. In the 1991, International Standardization Organization (ISO) compile international

standardization for the environment in the ISO 14000, then it is determined also the commission for the environmental management.

- (a) SC1 is sub commission that responsible for standardization of environmental management system.
- (b) SC2 is responsible to compile the standard that relates with the environmental audit and environmental investigation. Environmental audit can be recommended in things that can be done such as raw materials saving, energy efficiency, and waste reduction.
- (c) SC3 determines the eco label. Eco label is the sign that placed at industrial product that shows the product fulfill various criteria that considered environmentally friendly. The valuation criteria including the raw material provision up to the banishment of the used product.
- (d) SC4 is responsible to develop the standard that can be done by an organization to measure the environmental performance.

e. **Definition of Waste**

In Ikhsan (2009: 222-224) waste is the produced waste from the production process either industrial or domestic where its presence in a certain time or place is not wanted by the environment because does not have economic value. The environmental control because of industrial waste is one of problems that should be handled for each developing country that enter into industrialization era. In Kristanto (2004: 02) explained the waste definition as

“Waste is logical consequences for each industrial establishment although not every industry produce waste. If waste contains certain chemical compound as dangerous and poisonous materials with certain concentration is discharged to the environment then it will produce pollution, either at the river, land, or air”.

Waste that contains poisonous and danger pollutant materials or known as B-3 waste. Its presence is dangerous especially that come from factory/industry, where the B-3 waste mostly used as the raw material or supporting material. The dangerous and poisonous of the waste is shown by the physical and chemical nature of the materials either from the quantity or the quality. Some dangerous and poisonous criteria have been determined, such as flammable, explosive, corrosive, strong oxidizing and reducing, easy to decay and etc. the danger level of waste depend on the type and the characteristic, either short or long term. Maybe in the short term will not bring significant influence, but in the long term will be fatal for the environment. Because of that, the prevention and overcome of the waste should consider the emerging impact for the long term (Kristanto 2004: 167-170).

While the Government Regulation No 18/1999 defined the B-3 waste as dangerous and poisonous waste (B3) is the residue of business and/or activities that contain dangerous and/or poisonous materials because of the property and /or its concentration and/or the amount, either directly or indirectly able to pollute and /or damage the environment, and/or able to

danger the living environment, health, human being and other being survival.

Thus, it can be concluded that waste is thrown materials from the human activities, or natural process that does not have economic value, even negative economic value.

f. **Classification of Waste**

In Kristanto, 2002: 169-173 stated that the kinds of based on its economic value, the waste is divided into waste that has economic value and that has not economic value. The waste that has economic value is the waste if pass through further process will bring value added. While waste that has not economic value is waste if pass through further process will not bring value added except only facilitate the discharge system. The waste of this type that often bring problems of pollution and damage of environment.

According to the characteristic, industrial waste can be grouped into three section:

- (a) Liquid waste come from the company that use much water in the production process for example in the cooling of factory machine. Beside that the raw material that contains waters so in the process the water should be discharged.
- (b) Solid waste is industrial waste in the form of solid, mud, or porridge that come from processing. The waste can be categorized into two

section, that is solid waste that can be recycled (Plastic, textile, metal scrap) and solid waste that has not economic value

(c) Gas and particle waste is waste that mostly discharged in the air.

g. **Waste Handling**

Industry which in its activities produce waste then there is several ways that can be used Sunu (2001:26) divided into 3 types such as:

(a) Industry send its waste to the waste processing center.

The waste is sent to the waste processing center that has recognition from the authority

(b) Waste is used by company or other industry.

Waste of a company can be used by other industry even able to have value added as main materials or as the supporting raw materials.

(c) Industry process its own waste.

Industry able to process its own waste such as liquid waste that is processed in the waste processing installation.

h. **Waste management**

The waste management goal is to control the pollution caused by the waste disposal from the human activities, such as industrial activities.

Waste management is one of efforts in reach clean production, that is part of ISO 14000 certification. Waste management can be done in various ways, that is prevention in nature, avoid or decrease the waste output from the production, from the production process, and overcoming in nature

such as overcoming the waste that too late has out from production process (Nurika and Hidayat 2006: 20-22).

i. **Waste utilization**

The waste usage can be grouped into three activities, that is reuse: the waste usage by reusing for similar need or function, without experience processing or form change, recycle: usage effort through chemical processing to produce similar product or other product, recovery: waste usage by processing to obtain one or more materials/component in it. The waste usage is helpful in decrease the waste in the environment. The waste usage means give value added that previously without economic value, become materials that have economic value. (Nurika and Hidayat, 2006: 26-28).

j. **Relation between Industry, Environment and Society**

In Ikhsan (2009:100-103), there is important factor in developing life cycle in the company environment. The factor about the relation between environment, industry and the community around the industry.

- (a) Manufacturing industry is one of factors that contributes in considering the damaged environment.
- (b) However, factor that give real contribution is the population growth and the human being desire for more and better quality of goods.
- (c) The societal needs to have goods excessively is directed for design and better development and complex materials and manufacturing process.

- (d) Manufacturing process requires industrial activities, done without analysis of implication that impact to the environment.
- (e) Customers use damaged manufacturing goods that impact the environment.
- (f) The relation between the needs and desires of human being, industrial activities, and environment should be understood well to value and regulate the risk.

k. **Environmental Management Program**

Implementation of environmental management must be supported by government programs according to the paradigm of environmental management programs include:

- a. Environmental Impact Assessment (EIA/AMDAL). AMDAL document includes studies on the environmental impacts that may arise from an activity that is planned, both at the stage of pre-construction, construction and post construction. This document must be approved by government authorities as one of the requirements of a permit for a company to run the new activity. Requirements as outlined in the document is a legally binding for companies related to the AMDAL should be part of a company's environmental management system.
- b. Environmental Performance Assessment Program (PROPER) is an assessment of the environmental performance of the company into 5 ranked from top to bottom is golden (nil emissions), green (better than

government standards), blue (according to government standards), red (not yet meet quality standards), and black (well below the requirements and there are environmental issues). Ratings are given based on the requirements contained in Environmental Regulations. (<http://www.menlh.go.id>. Access 05 Desember 2013)

F. Environmental Accounting .

1. The Definiton of Environmental Accounting

According to Sunu (2001:1) environment is a space unit with all thing, capacity, situation and being including in it human beings and their behavior that influence the viability and the human welfare. While according to Harahap (2003: 347-348) environmental accounting is accounting science that record, measure, and report the environmental impact that is produced from the production process of company such as pollution, poisoning, noise, discrimination. Environmental accounting of accounting science that serve to identify the socio benefit and socio cost that emerge from the production activities of company.

Whereas according to Ikhsan (2008: 6-7) environmental accounting is a tool of environmental management that is used to value the effectiveness of conservation activities based on summary and classification of environmental conservation cost. The environmental accounting data also be used to determine the cost of environmental management. The importance of environmental accounting disclosure that relate with the environmental conservation activities by company or other

organization and improving the environmental management efficiency by conducting valuation of the environmental activities from the view point of environmental cost and economic benefit.

Furthermore according to Djogo (2006:5), environmental accounting is a term that relates with the entry of environmental accounting into practice company accounting. The environmental cost is the impact either monetary or non monetary that should be accounted for by company as the consequences of activities that influence the environmental quality. The accounting results also be used by the company leader to make decision that relates with the environmental improvement. So, environmental accounting is the cost report that is needed for environmental conservation that is written in the form of financial report then the report be used for decision making of the company in managing environment.

Environmental issues become important to consider environmental accounting in order to disclose environmental accounting data created and published in accordance with the high level of comparison. In order to achieve success in the implementation of environmental accounting for the company will require company's management to manage the suitability between evaluations made by the company to the environmental impact.

According to Harahap (2003:356-358) state that there are three models about the company involvement in each social activity. The model explain about the company involvement in social activities.

(a) Classical model

The model departs from the perfect competition concept. The company goal only to get profit. The success criteria of company is measured by the efficiency and growth. Milton Friedman stated “there is only one company’s responsibility, that is to use its own wealth to improve the profit along with the prevailing regulations in a free competition system without deception and fraudulence”

(b) Management model

According to the model, company is considered as permanent institution that is live and has its own goals. Manager as the person that is trusted by the capital owner for the interest of not only the capital owner, but also to those that is involved directly with the company such as employee, consumer, supplier. So the manager as the party that responsible for the company survival to choose policy that should consider the social responsibility of the company.

(c) Social environment model

The model explains that company convinces that economic and political power that is owned has relation with the interest of social environment and not only from market suitable with the classical model. The consequences of the company that should participate actively in

solving the social problems in its environment such as education system that is not quality, unemployment, slum and etc. in the model the company should widen the goals that want to be achieved that relate with the social welfare in general.

2. The Purposes of Environmental Accountig

Ikhsan (2008:6) said that Basically the aim of environmental accounting is to increase the amount of relevant information that is made for those who need it or use it. The goals of environmental accounting consist of two such as:

- a) Environmental accounting is the information means in an environmental management tools. As the environmental management tool, environmental accounting is used to value the effectiveness of environmental conservation activities. The environmental accounting data also be used to determine the cost of environmental management facilities, the all cost of environmental conservation and also investment that is needed for environmental management activities. Beside that, environmental accounting also used to value the output level and achievement each year to guarantee the environmental performance improvement that should take place continuously.
- b) Environmental accounting as communication tool to the communities. As the communication tool with public, environmental accounting is used to deliver the negative impact of activities

environment for environmental conservation and the results to public.

Some opinions from Ikhsan can be concluded that environmental accounting aims to assess the performance of industry in the field of environmental management with conducting an assessment of environmental activities and benefit from the viewpoint of the cost.

3. The Function of Environmental Accounting

Environmental accounting is served to fulfill the information either internal or external so the environmental accounting information should be relevant. According to Ikhsan (2008:32) stated the function and roles of environmental accounting is divided into two:

- a) Internal function is function that relates with the internal party of the company. The internal party is the party that run the business. While the actor and the dominant factor at internal function is a leader of the company because a leader of the company is the person who responsible for each decision making. The internal function is enable to regulate the environmental conservation cost and to analyze the cost of environmental conservation activities effectively and efficiently suitable with the decision making.
- b) External function is function that relates with the financial reporting aspect. The financial report is aimed at giving information to investor and creditor in decision making of investment or credit. In this function, the company reveal the outcome of environmental

conservation activities in the form of accounting data. The external function give authorities for company to influence the decision making of stakeholders, such as customer, business partner, investor, local inhabitant or administrative section. Because of that, company should give information about how the company management responsible the management to the owner for the economic resources usage that is entrusted to them. It is expected with the publication of environmental accounting results will be functioned and useful for the companies in fulfilling their responsibility.

4. The Benefit of Environmental Accounting

According to Ikhsan (2008: 66) the benefit of accounting environment consist of five, as follows :

- a) Environmental accounting could reduce spending on business environmental accounting where it can help to identify and analyze the hidden costs
- b) Environmental accounting may help decision making from important information additional costs caused by environmental issues.
- c) Environmental accounting enhances the economic and environmental performance of enterprises such as the use of new technology in managing waste, conducting environmental conservation as a form of prevention and management of waste.
- d) Environmental accounting would be able to satisfy all parties concerned the application of environmental accounting in enterprises or activities

simultaneously can improve economic performance and environmental performance. So the impact on customer satisfaction and good relationships between investors, local governments, local communities, and reduce the risk of violations of the law and improve the good relationship with other stakeholders.

- e) Environmental accounting providing excellence efforts or activities. This enhances the overall environmental accounting methods or devices which help businesses or activities in increasing business profits and decision making.

The benefit of environmental accounting from Ikhsan can be concluded that environmental accounting provide the information to the stakeholder regarding the environment preservation as the form of environmental protection to assessing the performance of industry.

5. The Environmental Cost

The environmental cost is cost that arise from the company activities which influence toward environment quality. According to Hansen and Mowen (2005:72) environmental cost arise cause of bad environment condition. Source of environmental cost include the maintenance costs, prevention and management cost. The United States Environmental Protection Agency (US EPA) said that environmental accounting is a function that describes the environmental costs that must be considered by the company's stakeholders in identifying the ways that can reduce or avoid costs at the same time and effort improving environmental quality.

According to Ikhsan (2009:117-119) the environmental cost comes from external and internal. The cost of the internal environment of the company composed of direct costs, indirect costs, and the cost is uncertain. This includes medical expenses or the cost of the restoration, the cost of waste management, and environmental management costs. External environmental cost comes from the external company environmental damage costs.

Table 2
The environmental cost

External environment costs	
Example : Depletion of natural resources Noise and aesthetic impacts Residual air and water emissions Long-term waste disposal Uncompensated health effects Change in local quality of life	
Internal environment costs	
Direct or Indirect Environmental Costs	Contingent or Intangible Environmental Costs
Examples: 1. Waste management. 2. Remediation costs or obligations. 3. Compliance costs. 4. Permit fees. 5. Environmental training. 6. Environmentally driven R&D. 7. Environmentally related maintenance. 8. Legal costs and fines. 9. Environmental assurance bonds 10. Environmental certification/labeling 11. Natural resource inputs 12. Record keeping and reporting	Examples: 1. Uncertain future remediation or compensation costs. 2. Risk posed by future regulatory changes. 3. Product quality 4. Employee health and satisfaction. 5. Environmental knowledge assets. 6. Sustainability of raw material inputs. 7. Risk of impaired assets. 8. Public/customer perception.

Source: Adapted from: Whistler Center for Business and the Arts. Environmental Accounting. Prepared by T. Berry and L. Failing. 1996 in Ikhsan 2009.

6. The category of environmental conservation costs

Business activities can be categorized in any business activity itself, administrative activities, research and development activities, and social activities depend on the relationship between business and environmental impacts. According to Ikhsan (2008:79-90) describes the costs related environmental conservation as follows:

a. Business Activities

Business is a cost to reduce the environmental impact of activities going on in the business area. The business area is an area where the company directly regulate environmental impact. These costs include:

1) The cost of pollution prevention.

The cost is cost pollution prevention efforts are made to reduce the environmental impact, such as the installation of facilities to end emissions that has the aim to prevent pollution. Pollution refers to public health or the environment.

2) The cost of global environmental conservation.

Global environmental conservation costs are costs related with negative environmental impacts. Costs are allocated to the prevention of global warming, to prevent the depletion of the ozone layer.

b. Cost of Upstream and Downstream

Upstream costs is a cost that seeks to reduce the environmental impact created before to the inputs of goods and services in the business area.

Downstream costs are costs for efforts to reduce the environmental impact of goods and services created after issued from the business area.

c. Administrative Activities

Administrative costs are costs for management activities generated by the company in environmental conservation activities.

Costs involved in administrative activities are:

- 1) The cost for implementation and improvement of the environmental management system
- 2) The cost of the disclosure of environmental information relationship with the environment and activities
- 3) Costs of monitoring environmental impact.
- 4) Costs for environmental improvement activities.

d. Social and Development Activities

Costs for research and development activities are allocated to the conservation of the environment, these costs include:

- 1) Research and development costs for the development of products that help conserve the environment.
- 2) The cost of research and development to limit the environmental impact on the processing of products.
- 3) The cost of research and other developments related to the environmental impact of restrictions on the distribution or marketing of products.

e. Social Activities

The cost of social activities related to environmental conservation are generated for social welfare. The cost considerations for environmental conservation efforts of social activities indirectly related to the business activities of the company. The cost of social activities, among others:

- 1) The cost of greening
- 2) The cost related with donation
- 3) The cost related with other social activities

7. Reporting and disclosing the environmental accounting

Environmental concern in the industry can be realized with the financial statement in helping create a positive impression in the eyes of investors, Governments and communities. Financial report this environment should be manifested in the form of the statement report. Environmental costs need to be reported separately according to the classification of costs. The process of classification using the cost classification model based on quality cost category among other environmental costs: the cost of prevention, appraisal costs, internal error costs, the external error cost, and added value. This classification aims to present the information as a means to evaluate the performance of the company's operations that have an impact on the environment, as well as control over the environmental cost.

CHAPTER III

RESEARCH METHOD

A. Research Type

The research method according to Sugiyono (2010:2) is scientific way to get data with certain goals. The type of this reserach is qualitative using descriptive method with the case study approachment. It is because the researcher only explains, describing, and portraying a certain condition or phenomenon of certain symptoms or group in detail. Beside that in the descriptive method, the researcher want to describe the environmental accounting implementation in the waste management that produced by PG Djombang Baru and the responsibility of the company to the environment and around the society. It is suitable with the opinion of Sarwono (2008: 58) stated that “descriptive research is the research to describe characteristic, symptoms or function of population”. The study usually involves data collection that creates many time distribution of the researcher to observe the event characteristic. The descriptive method is usually used in the business research.

Based on the explanation above, the research using case study approach, which is conducting research by focus to certain problems and try to get the solution. The case study is research about certain social unit, which the result is the full describe and organized well about the unit. The research

goals of case and field study are study intensively about the background of existing condition and environmental interaction of certain social unit: individual, group, institution, or society (Murti, 2006:49). The basic reason the researcher using case study approach is give detail explanation about the background, special characters of existing case so able to produce research that can be understood and learnt.

B. Research focus

In the qualitative viewpoint, the emerging problems is holistic in nature, so the qualitative research doe not determine the research based on research variables but all social situation that including the place, actor, and activities that interact synergistically. Because the wide problems then the researcher limit the research at the problem limitation or called as research focus. In the research, the researcher takes several focuses as follow:

- a. The corporate responsibility from the company. The researcher will analyze the form of corporate responsibility as a result of waste generated. What the program have been conducted by the company for the welfare of the society around the company.
- b. The waste management of PG Djombang Baru. In this case the researcher will analyze how the waste management in the company whether the treatment has been accordance with the applicable standard and how efforts to reprocess the waste that can still be used.
- c. The implementation of environmental accounting at PG Djombang Baru. In this case, the researcher conduct research in PG Djombang Baru where

the company produces some of the waste from the production process. Therefore, disclosure of environmental accounting is very important as a form of responsibility to the public in a transparent manner. In this case the researchers will analyze whether the company has been implementing environmental accounting or not.

C. Research Location

Location that is used by the researcher is PG Djombang Baru at the Jombang City. While the background of the selection because this company is sugarcane milling service that produces several waste and the location in the middle of city make this company required managing well the waste so does not disturb the comfort of the community and environment around it. Because of that, the researcher wants to know how far the waste processing that has been implemented by PG Djombang Baru to keep the environmental balance around the company.

D. Source of data

The data existence can be used as the information source for investigation materials about what things that is researched. The obtained data able to give support and analysis that is done to the research object. The research used primary and secondary data. The primary data which is the researcher directly take the data from PG Djombang Baru such as:

1. Interview

The researcher take the data from interview with some parties who have responsible in PG Djombang such as interview with responsibility control of finance to get the data related with cost environmental management, responsibility control of production process to get the data related with the waste management and responsibility control of CSR to get data related with responsibility from PG Djombang Baru toward the society.

2. Documentation

The researcher take the documentation directly in PG Djombang Baru using the camera.

Beside that the researched used secondary data in the form of documentation to get information about the implementation of environmental accounting and observation to know the process of waste management in PG Djombang Baru. While the secondary data included:

1. The income statement report 2012 - 2013
2. The organization profile and structure of the company
3. The production process of the company
4. The guidance of waste management of the company
5. The cost of environmental accounting management report 2012-2013
6. Certificate about quality standard that is obtained from the PROPER institution

E. Data Collection Method

Data collection is supporting tool that used by the researcher in the research activities, to make it systematic in the data collection by using research method. The data collection method that are used in the research as follow:

1. Interview

Interview is meeting of two or more person aimed at obtaining information either facts or someone opinion for certain goals. The question sentence should be adapted by the interview goals, concrete, clear, containing something and not violate the interviewer.

2. Observation

Direct observation is technique that is done by come to the location directly where the research object present. The researcher observe directly in order to know the production process, the waste management and also how the responsibility from the company to the society.

3. Documentation

The documentation technique is done by using data collection technique by duplicating the relevant records with the research. The document that is made in the research is in the form of notes and photograph especially about the environmental management. The benefit that can be got from the documentation is to know the waste disposal chart and the cost allocation of PG Djombang Baru.

F. Instrument of Research

There are two things that influence the quality of research results, which are the research instrument quality and data collection quality. In the qualitative research, the research instrument is the researcher itself. The qualitative research as human instrument has function to determine the research focus, select informant as the data source, the data collection, valuate the data quality, data analysis, interpret the data, and conclusion the findings. The reseracher as the instrument of research doing several activities as follow:

- a. Interview guidance. As a research instrument, researchers conducted interviews to obtain information about the data that is needed. Researchers conducted interviews by question and answer with the parties concerned and then record the information obtained.
- b. Observation tools. As a research instrument, the researcher doing observation directly by attending PG Djombang Baru. Researchers also look at the production process and see where waste management directly.
- c. Documentation tools. As a research instrument, the researcher doing documentation to strengthen the data that has been obtained. Researchers used a camera to take picturess and ask the company about the documentation of activities that have been performed outside the company.

G. Data analysis method

According to Sugiyono (2007:246), data analysis in field of Miles and Hubberman model consist of three types:

1. Data reduction is a analysis form that sharpen, group, direct, and discard that is not needed and organize the data up to the final conclusion. The research focus in the data reduction is by focusing at the relevant cost with the environmental aspect from PG Djombang Baru. The researcher interviews the key informant to obtain the information. The interview results from the key informant produce random data that will be arranged to be data reduction that is grouped suitable with each section.
2. Data presentation is displaying data in the narrative form by displaying it is easy to understand what has occurred and then planning based on the understanding. Based on the data reduction, the researcher present data in the form of narration suitable with the obtained data in field then the data is being analyzed suitable with the investigated theory.
3. Conclusion and verification by inference and verification in the form of concluding the obtained data and then the data is analyzed suitable with the theory. The data analysis method as follows:
 - a. Understanding and describing the corporate responsibility from the company which is the researcher use point of Triple Bottom Line to analyze the social responsibility
 - b. Understanding and describing the waste management that is done by PG Djombang Baru
 - c. Understanding and describing the implementation of environmental accounting at PG Djombang Baru

CHAPTER IV

RESULT AND ANALYSIS

A. Overview of PT. Perkebunan Nusantara X (Persero) PG Djombang Baru

1. The History of PT. Perkebunan Nusantara X (Persero) PG Djombang Baru

PG Djombang Baru was established by the Dutch in 1895 directed by AMEMAET & Co. In 1957, AMEMAET & Co. leadership by the Indonesian government and maintained by PPN (*Perusahaan Perkebunan Negara*), focused in East Java and has a sugar factory in three *Karisidenan*. Based on the Government Regulation number 1 and 11 year 1963 the first reorganization occurred :

- a. The central formed BPU-PPN sugar
- b. In East Java was changed to BPU-PPN adviser East Java
- c. The sugar unit in *Karasidenan* was converted into office of inspection directors, which is PG Djombang Baru includes Inspection X Surabaya

Based on the Government Regulation Number 14 Year 1968 the second reorganization was occurred which consist of the dissolve of BPU-PPN. Then each region established of Directors plantation that has its own legal entity, like PNP XXI for sugar factories in Kediri and PNP XXII for sugar factory in Surabaya. PNP XXII supervise seven sugar factory, as follows:

- a. Pabrik Gula Krian
- b. Pabrik Gula Tjoekir
- c. Pabrik Gula Djombang Baru
- d. Pabrik Gula Krembong
- e. Pabrik Gula Toelangan
- f. Pabrik Gula Gempol Kerep
- g. Pabrik Gula Watoetoelis

Bsased on Government Regulation Number 29 Year 1973 the third reorganization was occured with the result of a merging PNP XXI and PNP XXII become PT.Perkebunan XXI-XXII. The new institution cover twelve sugar factories. On March, 11 1996 the restrukturization of BUMN officially become PT. Perkebunan Nusantara X (Persero) and have thirteen sugar factory, as follows:

- a. Pabrik Gula Pesantren Baru
- b. Pabrik Gula Ngadirejo
- c. Pabrik Gula Modjopangoeng
- d. Pabrik Gula Tjoekir
- e. Pabrik Gula Djombang Baru
- f. Pabrik Gula Krembong
- g. Pabrik Gula Toelangan
- h. Pabrik Gula Lestari
- i. Pabrik Gula Meritjan
- j. Pabrik Gula Gempol Kerep

- k. Pabrik Gula Watoetoelis
- l. Pabrik Gula Bone
- m. Pabrik Gula Canning

PT. Perkebunan XXI-XXII was established on 30 January 1974.

Based on notarial deed of Lumban Tobing. This company has the aim to conduct and support the policy in agriculture sector. The company runs their business in agriculture sector, especially in sugar industry. In order to simplify the management of the company, then year 1990 PTP.XXI-XXII turn into PT.Perkebunan Nusantara X (Persero) which is currently located in Jalan Jembatan Merah kav.3-5 Surabaya.

2. Vision and Mission

PT. Perkebunan Nusantara X (Persero) PG Djombang Baru has the vision and mission as follows :

Vision :

To be a base of agribusiness company which leads plantation in Indonesia by growing and developing with partners

Mission :

- a. Committed to produce sugar cane-based raw materials for the highly competitive domestic market and upholds self-sufficiency.
- b. Dedicate themselves to constantly improve the company's values for stakeholder satisfaction through leadership, innovation, and teamwork.

3. Location of the company

PG Djombang Baru is located in Jalan Panglima Sudirman No.1 Desa Pulo Lor Kecamatan Jombang Kabupaten Jombang. With geographical boundaries as follows:

- a. North : Jalan Panglima Sudirman
- b. West : Jalan Kapten Tendean
- c. East : Desa Jagalan
- d. South : Desa Pulo Lor

4. Integration Policy

PT. Perkenunan Nusantara X (Persero) PG Djombang Baru committes to become the white crystal sugar producer in Indonesia with superior quality meets national standards, appropriate expectations of customers, stakeholders, environmental, and workforce based on the predetermined standards and procedures, and always make continuous improvements by:

- a. Implementing Integration Management System ISO 9001; 2008, ISO 14001; 2004, and ISO 3140.08.2010 across the company's business activities.
- b. Obeying the requirements of laws and regulations and other requirements related with the quality and the environment.
- c. Establishing authority and responsibility clearly at all levels of the company to ensure the maintenance of Management Systems Integration.

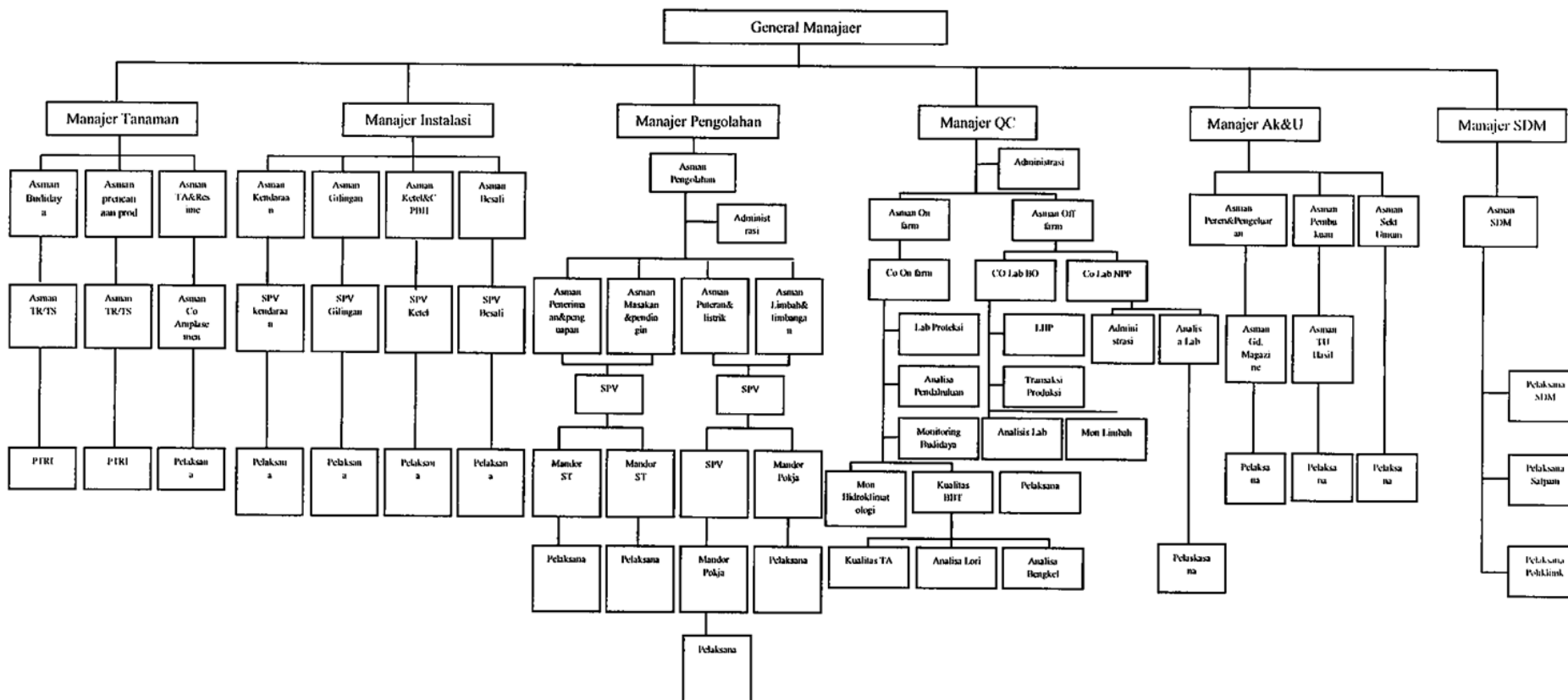
- d. Maintaining and communicating Policy Integration Management System to all employees and relevant external parties.
- e. Preventing of environmental pollution and conservation continuously.
- f. Establishing a harmonious relationship with stakeholders, directors, contractors, farmers, the public and interested parties

5. Organization structure

The organizational structure is an arrangement of the components within the organization that shows the division of labor, work functions, the command channel and submission of reports to be integrated in accordance with a command from a higher position. PT. Perkebunan Nusantara X (persero) PG Djombang Baru was an organization structure that illustrate the employment relationship and the division of authority. The authority which occupies the highest position is General Manager. It is in charge of six managers namely human resource managers, manager of quality control (QC), plant manager, instalation manager, processing manager, and general manager of finance and administration. Each of manager supervises certain parts until the lowest authority which is part of executor. The organizational structure of PT. Perkebunan Nusantara X PG Djombang Baru is shown in the following figure:

Struktur Organisasi PT. Perkebunan Nusantara X (Persero)

Pabrik Gula Djombang Baru



Source : PG Djombang Baru (2014)

General manager is the highest position of PT. PTPN X PG Djombang Baru. The tasks of the general manager is supervising and supporting six managers namely plant managers, installation managers, human resources manager, general manager of finance and administration, processing manager, and manager of quality control. The duties and responsibilities of the general manager are as follows:

- a. Implementing an overall program of activities that have been set by the directors in the management of sugar factories.
- b. Leading and coordinating the task at each supervisor of department so that there is unity of action in implementing integrated operations in order to achieve effective and efficient production.
- c. Managing and being accountable for human resources, sourcing and manufacturing equipment appropriate norms.
- d. Responsible for all duties of each parts in the company.
- e. Maintaining harmonization within the employment relationship and implementation of the company's daily activities, and the welfare of employees.
- f. Representing the relationship between the company and another installation.

The following is job description for the six managers who have their respective roles:

1. Plant Manager

The duties and authority from plant management as follows :

- a. Responsible for the provision of raw materials on the milling season.
- b. Finding land for planting sugarcane, maintaining until the harvest and preparing on the milling.
- c. Looking or researching varieties of sugarcane that most superior.

In performing their duties, the plant manager is assisted by some elements of the Assistant Regional Manager and Assistant Manager Cutting and Transport. Each of these elements has the task as follows:

1. Assistant Regional Manager has the tasks, as follows:
 - a. Implementing the administration policy represented by the head of the plant and cinder garden area for both the plant and to harvest the cane transportation.
 - b. Conducting education to sugarcane farmers in the region to seek employment in order to find the sugarcane area income.
 - c. Providing guidance to farmers planting sugarcane on how good that sugarcane production can be maximum.
 - d. Developing an intensification of sugarcane plants include Sugarcane Intensification of Non-Credit and Sugarcane

Intensification of Non-Credit in accordance with the Presidential Instruction No.9/1975.

e. Managing transportation of sugarcane harvest in the the region. Starting from the determination of the harvest schedule until the implementation of cutting section in accordance with the size of the specified area.

2. Cutting and Transport Assistant Manager has the tasks, as follows:

- a. Implementing and planing for the company budget requirements in the field of transportation, saving for one's own cane.
- b. Ensuring smooth providers in the sugarcane milling season to run smoothly in accordance with the milling capacity.
- c. Conducting repairs and improvements in preparation for the emplacement area milled next time.
- d. Managing implementation of the harvest or cutting schedule in accordance with the maturity period of the planting of sugar cane.

2. Instalation Manager

The duties and authority from instalation manager are as follows :

- a. Implementing the administration policy concerning the production process.

- b. Making work plan in order to plan the budget that needed by the company especially for installation purposes, such as the maintenance costs of machinery and equipment in one year.
- c. Ensuring all of the company instalation can be running well to ensure the production process including water supply, the use of steam and others.
- d. Fostering good cooperation between divisions, considering production process is done continuously in the milling season. In the event of damage to one of the machines will stop one of the production process as a whole.

3. Processing Manager

The duties and responsibilities of processing manager are as follows:

- a. The implementation of administrative operations at the processing department.
- b. Making work plan in order to plan the budget that needed by the company especially for processing department in one year.
- c. Fostering good cooperation in the processing of raw materials into sugar cane so that appropriate standards have been determined.
- d. Ensuring cooperation with installation department such as machinist sugar processing activities can run smoothly, Efficient and effective.

- e. Collecting data and information to improve the control and conduct the evaluation of the magnitude of the cost of processing so as to reduce the production cost.

Processing managers in carrying out their daily duties are assisted by chemika or sugar physician. Chemika or sugar physician has duties and responsibilities include:

- a. Preparing production equipment on the evaporating juice according to each parts.
 - b. Controlling the sugar production process till the end.
 - c. Responsible for the smooth running of production equipment and securing environmental management.
4. Quality control manager

Responsible for monitoring the production quality produced by the farmers and ensure that it is a product with good quality. Quality Control (QC) is divided into 2 part which have different role that are quality control on farm and quality control off farm. QC On Farm tasked to determine the quality of sugarcane start from preparing the land, preparing the seeds, planting, maintenance of sugarcane, sugar yield determination, harvesting, transporting to conduct surveillance in the emplacement. In executing its tasks QC On Farm is helped by pests and diseases laboratory for the production of Pias was useful as a natural pesticide for sugarcane. Furthermore, QC Off Farm tasked to control the quality of cane from the first entrance to the factory,

processing, handling sugar products to the distribution of finished products.

5. General manager of finance and administration

General Manager of Finance and Administration has some parts that support the performance, as follows:

a. Planning and Supervision Assistant Manager

The responsibilities of assistant manager of planning and supervision are:

1. Making work plan in order to plan the budget that needed by the company
2. Planning for the needs of fund resource used of budgets
3. Monitoring and controlling over the use of financial resources.
4. Making a report on the use of sources of funding or working capital realization.

b. Bookkeeping Assistant Manager

The responsibilities of assistant manager of bookkeeping are as follows :

1. Recording all transactions that occur on a daily basis in the the company both cash and non-cash which is on the use of goods and products.
2. Making a financial statement period (monthly) in the form of balance sheet and management reports.

c. Secretary assistant manager

The responsibility of Secretary assistant manager are:

1. Completing the correspondence activity both outgoing and incoming mail in the form of expedition.
2. Archiving all of papers or documents.
3. Processing the administration of procurement of materials or goods to appropriate the needs of factory production.

d. Warehouse assistant manager

The responsibilities of warehouse assistant manager are:

1. Receiving the goods on the basis of the required procurement of each part.
2. Storing the goods in the warehouse according to the type of goods and the card is recorded in the warehouse.
3. Making available over the receipts and expenditures used in a book warehouse.
4. Making position reports inventory in the warehouse every period.
5. Using the stock opname inventory at the end of the year.

e. Human resource manager

The responsibilities of human resource manager are:

1. Planning for labor requirements appropriate with the standards of existing information.

2. Conducting development workforce through education, courses, training.
3. Making payments into the employees' rights, the payment of salaries, wages and benefits.
4. Generating reports on the position of the labor period and fees paid to the employee.

6. Human Resource

- a. The employee of PG Djombang Baru

The employees in PG Djombang Baru are divided into two types of employees which are permanent employees and temporary employees. Permanent employees are employees whose employment regulated in the *Perjanjian Kerja Bersama (PKB)* or Collective Labour Agreement (CLA) while the non permanent employees works temporarily, the agreement was only done when the milling season arrives.

1. Permanent employee

Permanent employee divided into two types, thats are:

- a. Leader employee (*Pimpinan*)

The leadership Employee is an employee tasked to implement the entire program has been established by the Board of Directors in the management of company. Assessments from PT. Perkebunan Nusantara X Djombang Baru to the position of General Manager should be taken from Group IIIA until with the

IVD. The employees who act as The leadership employee in PT. Perkebunan Nusantara X Djombang Baru is the General Manager named Mr. Ir. Alan H. Purwandiarso, M.Sc. He is not only the General Manager who acts as The leadership employee, but also for managers who lead parts of processing, installation, human, plants, quality control, and finance and general administration also include employee management.

b. Supervisor Employees (*Pelaksana*)

Supervisor employee are employees who have the role to implement any task that has been designed and specified by each manager so that every part of the program of work can be accomplished.

b. Temporary Employees

Temporary employees divided into two types, that are:

a. The employee of certain time work agreement

The employees who are hired only during the milling in PG Djombang Baru. These employee are contracted between May to November.

b. Outsourcing Employee

Outsourcing employee are employees who obtained Pabrik Gula Djombang Baru from third party. There are three employees who come from outsourcing employee, they are security, cleaning service, and driver.

c. The Number of Employee

PT Perkebunan Nusantara X (Persero) PG Djombang Baru has 580 employees. They are divided in the several department in the company. There are 235 permanent employee. While there are 345 temporary employee. See for the details in the table bellow:

Table 3 The Employee type

No	Employee Type	Number of Employee
1	Permanent employee	
	a. Leadership employee	35
	b. Executor employee	200
2	Temporary employee	
	a. The employee of certain time work agreement	241
	b. Outsourcing employee	104
Total		580

Source : PG Djombang Baru 2014

d. Work Hours

The work hours in PG Djombang Baru as follows:

Table 4 Work Hours

Day	Work hours	Break time
Monday - Thursday	06.30-11.30	11.30-12.30
	12.30-15.00	
Friday - Saturday	06.30-11.30	

Source: PG Djombang Baru 2014

And the work hours for temporary employee as follows :

Shift I : 06.00 – 14.00

Shift II : 14.00 – 22.00

Shift III : 22.00 – 06.00

e. The wage and salary for employees in PG Djombang Baru

Salaries and wages of employees, the company always pay attention to the principle of fairness and feasibility. Justice in question is based on the sacrifices that have been given the employees themselves, of course, balanced with the provision of wage adjusted by the company. system of payment of wages and salaries applicable to the company are in accordance with the salary system applied to the employee that is based on class. In addition to wages and salaries, the company also provide social security for employees, including:

1. The religion-related allowance (*Tunjangan Hari Raya* or THR), this allowance is given once every year on Eid and Christmas.
2. For those who want to give birth to female employees get the opportunity to stay home from work or work permit.
3. Annual leave for all employees and is given at the time of Eid and Christmas.
4. For those employees who exhausted his tenure (pension), they were given severance pay.
5. When employees are injured at work then all the care and treatment costs borne by the company.

7. Resource are used

a. Raw Material

PG Djombang Baru is using raw materials primarily sugarcane.

The raw materials are obtained from sugar farmers who have such agreements with the company and from plants harvested by the company itself. The company only accepts raw materials that suit with the specific requirement, such as sweet, clean and fresh.

b. The Auxiliary Material

The auxiliary materials used to support the sugar production process, are follows:

Table 5 The Auxiliary Material

No.	Name	Type	Usage
1	Kapur (Ca(OH)_2)	Solid	make milk of lime
2	Belerang (SO_2)	Solid	the making of gas used in the sulfitation process
3	Asam fosfat (H_3PO_4)	Liquid	the auxiliary material in the purification station
4	Kalsium fosfat (CaPO_4)	Powder	help in the purification process of colloidal deposition
5	Flokulan	Powder	coagulant used in the purification station
6	Air (H_2O)	Liquid	imbibition, water injection, water washing, water sanitation and water used for laboratory purposes
7	Caustic soda	Solid	Materials for cleaning descaling evaporation

Source : PG Djombang Baru 2014

c. Production Process

The production process in PG Djombang Baru is a continuous production process where the machine does not stop working until the finish milling season (6 months) unless there is a breakdown happens. There are several steps of the production process is distinguished by its stations. There are seven work stations such as emplacement, milling station, purification station, evaporation station, concoction station, *stasiun puteran*, and completion. Here is an explanation of each station.

1. Emplacement

Emplacement is a land area which serves to accommodate the raw material (sugarcane) from the truck farmer before entering the mill station. At this step there is a process of calculating the brix and pH levels in sugarcane varieties and classification (types) of sugarcane were taken by truck. The tools used are refractometer and PH meters.

2. Milling Station (*Gilingan*)

Milling station is used to get nira as much as possible until get the maximum *sakarosa*. milling station helped by rolling machine that is used to pressing the cane followed by *plat ampas* and nira pipes.

3. Purification Station (*Pemurnian*)

Purification station aims to produce the crude nira that is separate from the dirt. In the purification station will get a pure nira that will affect the amount of crystal sugar produced. This purification stations also produce the waste like *blotong* and *tetes*. *Blotong* comes

from the nira droppings and *tetes* comes from nira that has low viscosity.

4. Evaporation Station (*Penguapan*)

Evaporation station uses high-temperature steam heating medium is contacted indirectly with nira in a body evaporation to produce a very viscous of nira. As for achieving the desired viscosity nira until 30-32 Be.

5. Concoction Station (*Masakan*)

Cuisine station or crystallization steps has the aim to change the sucrose into a crystalline form with the provision 78-80 brix. The crystal that has been formed have to have same size according to standardization. Crystal process is done using a vacuum pan (empty space) to avoid damage of sucrose due to high temperatures.

6. Rotary Station (*Puteran*)

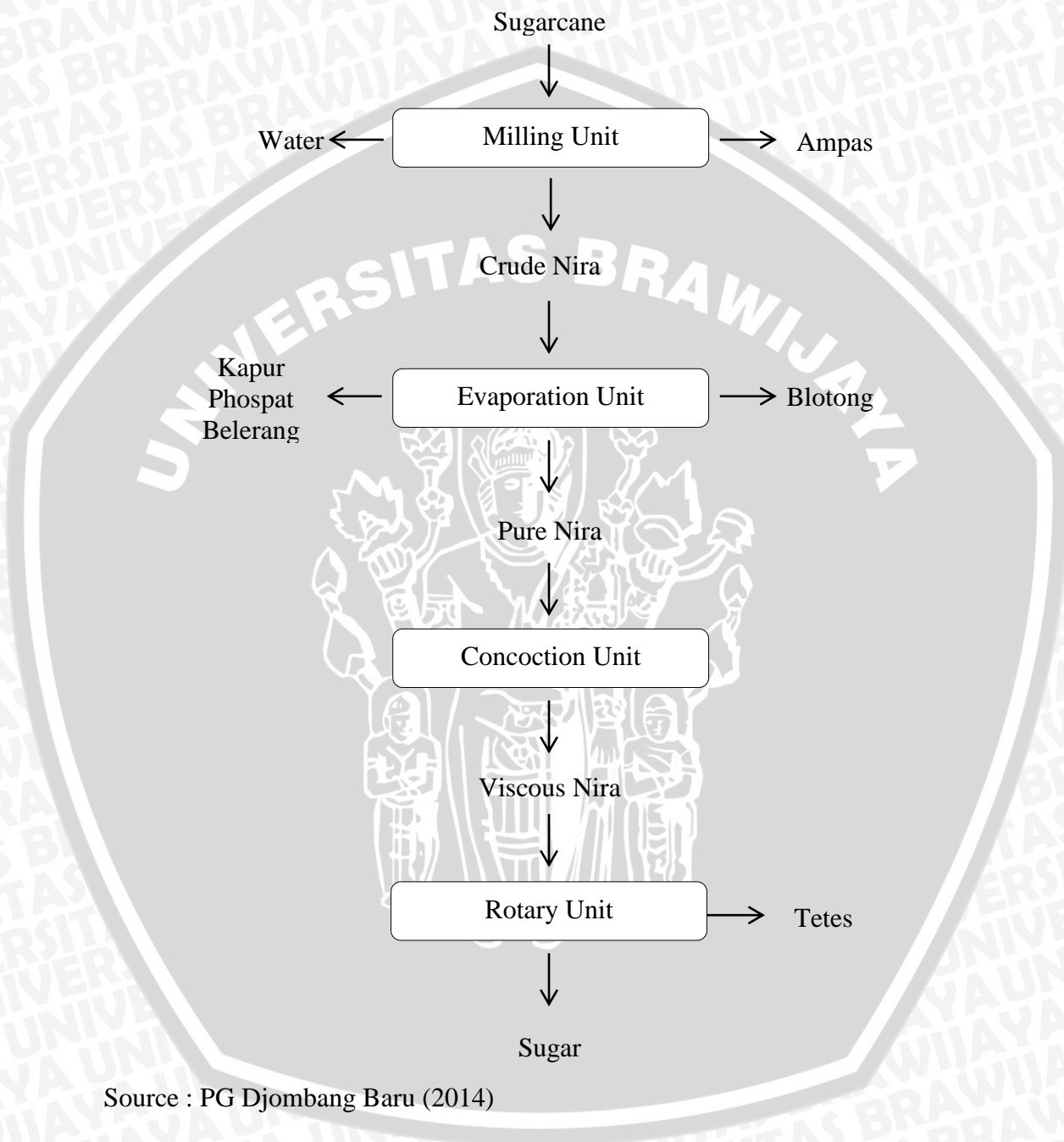
Puteran station serves to separate the crystals from the vacuum chamber by means of continuous and discontinuous played. The continuous rotation is used to rotate the crystal with low quality while the discontinuous function to generate super high sugar to the next round of results under the final stage.

7. Completion Station

The final stage is the stage of packaging. The final stage as follows :

- a. At the time the sugar is still wet. Sugar is dried in the dryer and cooler. Sugar drier air exhaled by the dry heat and cold air.
- b. Sugar dried filter was taken to vibrate so that the sugar will be obtained with a standard size of coarse sugar (*Krikilan*) and refined sugar. Sugar to the standard size 0.9 to 1.0 mm in size.
- c. Sugar that has been produced than carried to the sugar bin and the next will be packed in plastic sacks and weighed automatically weighing 50 kg/sack. The results of the sugar weighing scales are checked again with automatic Berkel scales to fit the actual weight of sugar that has been packaged and then stored in a warehouse.

The following is a chart of the production process of sugarcane :



Source : PG Djombang Baru (2014)

Figure 5 The Production Process

d. The rest of the production process

The rest of the production of sugar are ampas and the dirt resulting from the production process, as follows:

1. *Blotong*

Blotong waste is the waste comes from the raw materials of sugarcane that is carried with nira and separate in the filtration process. In this Purification station there are still a lot of waste because there is nira in the *blotong*, *ampas halus*, and other substances that are still fused with the *blotong*. The content of the element in *blotong* comes from crude nira that contains non-sugar substances such as monosacharides, dyestuffs, organic acids and nitrogen compounds.

2. Kettle Ashes (*Abu ketel*)

Kettle ash waste is the rest of materials that comes from combustion. Than the ash will be carried in the spryer air to reduce the volume of ash that will be issued. This waste contain metallic elements but its not dangerous because below the permitted threshold.

3. Liquid Waste

The liquid waste in PG Djombang Baru based on the amount of liquid waste and its contamination can be classified into two. First, liquid waste comes from the condenser cooling water used but its contamination relative small. Second, the waste water from washing equipment, spilled of nira, leaks from faulty equipment and waste water from the boiler.

B. Data Presentation

1. Identification of Corporate Social Responsibility at PG Djombang

Baru

Identification of Corporate Social Responsibility (CSR) aims to find out the programs that is conducted in PG Djombang Baru as a responsibility to the society and environment around the company. Identification of these activities was obtained through interviews with Mrs. Herlina as the responsibility control of CSR activities. This information was obtained not only through interviews but also look into the location and interviews directly to the person in charge of each program. Here is the social program that conduct in PG Djombang Baru.

a. Free Medical Treatment

This program is one of the corporate social responsibility (CSR) program in PG Djombang Baru to the society. This was accomplished because the company be aware of the environmental impact of air pollution that can damage the health of people living near the area of the company. This program will conduct every 3 to 6 months. There are several village that receive free medical treatment routinely such as Desa Jagalan, Desa Gentengan, Desa Sumbernongko and Desa Jombang. Every village had 60-80 ticket for free medical treatment. The activity received a positive response from the society because they could have a free health consultation and get medicines for free of charge. Free treatment which is given

by PG Djombang Baru can help the society near the company and indirectly the company already proved their responsibility as a responsible of the effect from industrial development.

The statement above supported with Dr. Yesi as a doctor in Poliklinik PG Djombang Baru.

“Kegiatan bakti sosial PG Djombang Baru meliputi pengobatan gratis, khitan massal dan donor darah. Tetapi kegiatan yang rutin dilakukan ya pengobatan gratis setiap mendekati musim giling. Untuk sunat massal dan donor darah kita melihat respon masyarakat terlebih dahulu, maksudnya peserta yang akan mengikuti program ini sudah memenuhi target apa belum. Untuk kegiatan pengobatan gratis yang mendapatkan respon yang baik. Biasanya tiap desa diberi jatah 60-100 tiket untuk bisa melakukan pengobatan gratis dan selalu habis. Layanan yang diberikan ya seperti cek tekanan darah, cek gula darah, pemberian obat gratis”.

This interview conduct on Thursday 27 March 2014 at 09.00 pm in Poliklinik PG Djombang Baru. She said that free medical treatment is condcted in the area near PG Djombang Baru such as Desa Jombang, Desa Gentengan, and Desa Sumbernongko. Every village had 60-80 ticket for free medical treatment. The activity received a positive response from the society because they could free health consultation and get medicines for free of charge. Free treatment carried out routinely every time approached milling cane.

b. The Greening Program

The greening program is one proof from PG Djombang Baru responsibility to the environment. This greening has the function to add oxygen levels in the Desa Sumbernongko. Afforestation on land

owned by company with an area of 1.5 ha. The company choose to plant Trembesi and Yellow bamboo. Because the shady of Trembesi has a high level and bamboo able to survive in the tropics area. The statement above supported with Mr. Sariman as a coordinator of Biocompost process in PG Djombang Baru.

“Desa Sumbernongko adalah daerah yang masih memiliki lahan kosong yang sangat luas. Sehingga pabrik memilih desa ini sebagai tempat pengolahan limbah abu dan blotong. Daerah ini merupakan daerah tandus sehingga pabrik melakukan program penghijauan di area sekitar tempat pengolahan limbah. Program penghijuan ini sudah dilakukan 2 tahun yang lalu dan di tahun-tahun berikut tinggal merawatnya saja”.

This interview conduct on Monday 31 March 2014 at 10.00 pm in Biocompost area in PG Djombang Baru. He said that the greening program conduct in Desa Sumbernongko where that is Biocompost area. It is dry area and PG Djombang Baru use this area as a place for Biocompost process, thus PG Djombang Baru choose Desa Sumbernongko as a greening area. Greening program execution is not continue activity that should be done routinely. But it is just need maintenance.

c. Cheap Market

Cheap market is one of the Corporate Social Responsibility activities held during the month of Ramadan and Idul Fitri. In this event the company sells groceries at below market prices. Cheap market is more intended for people around the company. They are

very receptive to this activity because of the selection of the right time to approach the feast of Eid so very profitable.

These program supported by the statement from mrs. Herlina as a responsibility the control of CSR programs.

“Pasar murah adalah salah satu bentuk CSR PG Djombang Baru. Kami mengadakannya setiap mendekati hari raya Idul Fitri. Barang yang diperjualbelikan yaitu bahan pokok seperti beras, gula, minyak goreng. Harga barang tersebut telah disubsidi oleh pihak pabrik antara 10-20% dari harga pasar”.

This interview is conducted on 2 April 2014 at 08.00 pm in PG Djombang Baru. Cheap market program conducted in areas near PG Djombang Baru, such as Desa Jagalan, Desa Jombang Desa Gentengan, and Desa Sumbernongko. Cheap market is a market that sells foodstuffs such as sugar, rice, cooking oil etc. The prices of goods are bought and sold in the market has also received subsidies from the company approximately 10-20 percent of the market price. The program is held once a year that is approaching the feast of Eid. So, this program can ease the burden of society to meet the basic needs approach the feast of Eid.

d. House Renovation Program

The location of PG Djombang Baru had been in a densely populated residential area. This residential area inhabited by the middle class. Therefore, the company hold the house renovation program for families who can not afford economically. In this activity the company do a total renovation to the house which is

considered inhabitable. This activity is the latest program in the company. In the execution of the company only choose one house to be renovated really considered not habitable.

These program supported by the statement from mrs. Herlina as a responsibility the control of CSR programs.

“Program bedah rumah atau renovasi rumah ini merupakan program baru. Kriteria dari rumah yang dipilih yakni berasal dari keluarga tidak mampu dan sudah tidak layak huni. Kami merenovasi total terhadap rumah tersebut”.

This interview conduct on 2 April 2014 08.00 pm in PG Djombang Baru. The last program is house renovation. It is a new program from PG Djombang Baru. The criteria for the determination of which will be in the house renovation is really not livable and come from poor families. The new program was held in 2013 and the renovation of the house is done 100 percent.

2. Identification of Waste Management at PG Djombang Baru

The processing of sugar cane to be inseparable from the emerge of waste. This waste can not be disposed into the environment, because it can arise environmental pollution. Before being discharged into the environment, the waste must meet the quality standards in accordance with the provisions of the environmental agency. There are three types of waste that is generated solid waste, liquid and air.

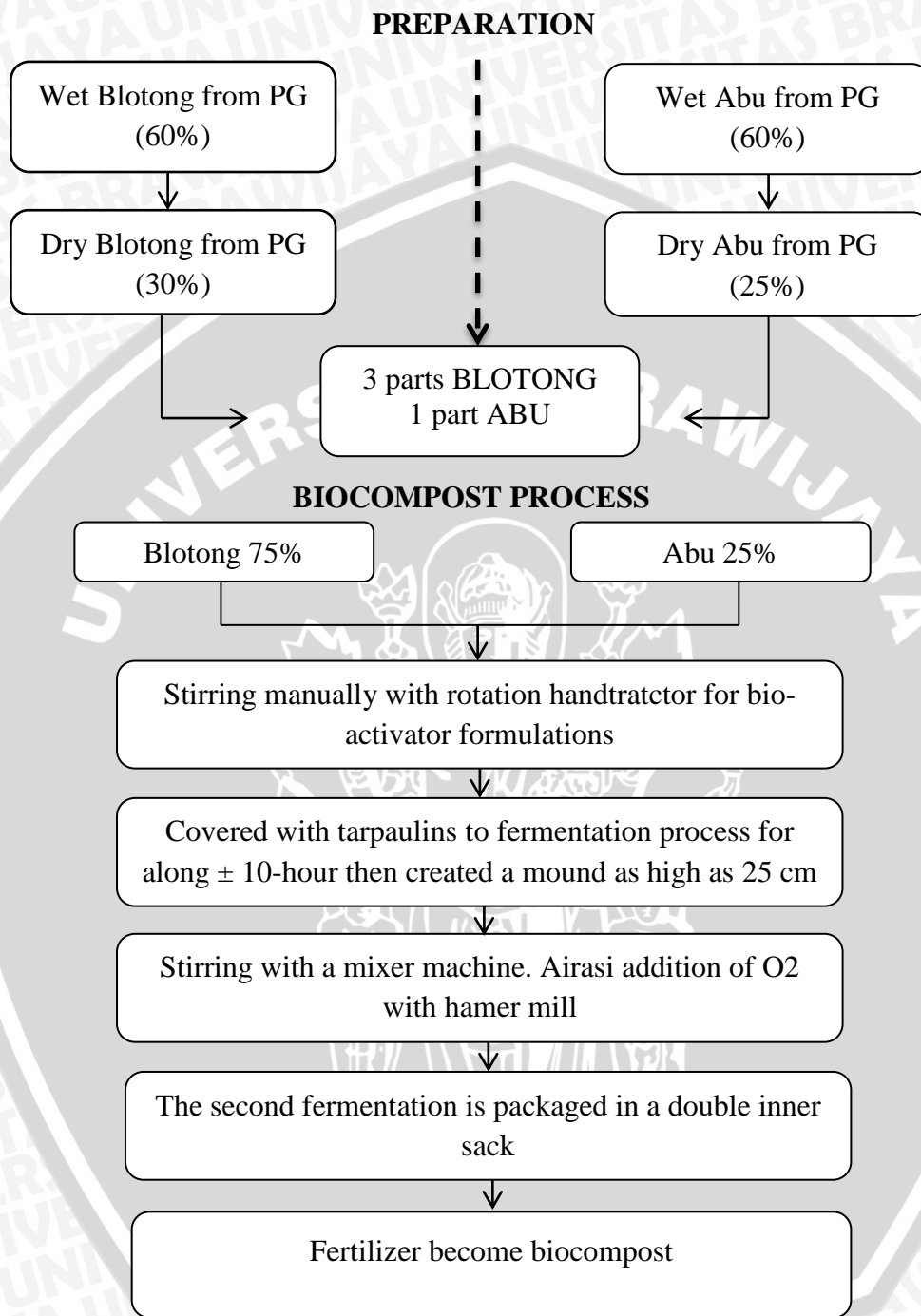
a. Solid Waste

There are two types of solid waste that generated by PG Djombang Baru, i.e categorized as B3 waste and non B3 waste. The

solid waste that include in B3 types are battery fuel, oil, contaminated rags, tubular lamp, and printer katrid. PG Djombang Baru directly submitted to the third parties for its management in the end of the year for the management of B3 waste. Furthermore, the waste that include non B3 are kettle ashes (*abu*), *blotong* and *ampas*. PG Djombang Baru will recycle them for the management of non B3 waste.

Abu waste comes from residual combustion of *ketel*, *blotong* comes from *nira* precipitation and *ampas* comes from sugar cane. *Ampas* waste is not disposed but its submitted to the warehouse and used as fuel. While the management of *blotong* and *abu* in PG Djombang Baru, it proceed to be the compost, then to be managed biocompost. Biocompost fertilizer can be used by the local society for free and also used by farmers as fertilizer with buy it to the PG Djombang Baru.

The Biocompost fertilizer management is done in a separate place from PG Djombang Baru in Desa Sumbernongko where the area is located near the PG Djombang Baru. Biocompost management process is carried out by the villagers of Sumbernongko thus, it can reduce unemployment in Desa Sumbernongko. Here is *Standard Operasional Proses* (SOP) of making biocompost using *bioactivator bio N10* PG Djombang Baru in figure 6.



Source : PG Djombang Baru (2014)

Figure 6
Biocompost Process

b. Liquid Waste

Liquid waste generated by PG Djombang Baru comes from the wash water skrup, or wash water of crust and cooling water from milling machine. Liquid water management in PG Djombang Baru is done by using *Instalasi Pengelolaan Air Limbah (IPAL)* with Aerob system. Aerob system will produce clean water, thus it does not pollute the environment. First in the water will be put into some pool then the pool given the flow of oxygen, nutrients, and bacteria such as activated sludge. This is done to speed up the eradication of bad bacteria. Liquid waste management process is monitored by *Badan Lingkungan Hidup (BLH)* every month. And next is the process of testing the quality standard by means of liquid waste put into a pool containing water *hyacinth plants (enceng gondok)* and fish. Then the water will be monitored in several times. If the plants and fishes in the pool are still alive then this water has been declared safe for the environment and can be poured into the river.

c. Air Waste

PG Djombang Baru also produces air waste which comes from the chimney. The air waste is formed as densed smoke that potentially pollutes the environment and harm the health of the society around PG Djombang Baru such as cough, shortness of breath and also contaminate people's homes. Therefore, PG Djombang Baru has been strive for the management maximally. The air waste management is using two methods, namely the Dust Collector system by spraying water into the smoke to reduce the harmful particles in the smoke and cyclone system. Deposition cyclone, is a tool used to precipitate dust or ash that participate in the exhaust gas or air. The working principle is the use of precipitating cyclone centrifugal force of air or exhaust gases are accidentally blown through the tube wall edge of the cyclone, so the relatively heavy particles will fall down. Dust, ash or particles that can be deposited by the cyclone are sized between 5-40 micro. The larger the size of the dust, the faster the particles precipitated.

This information is obtained through the interviews with Mr. Samsul as the executor of the processing department and also from the survey directly in the company.

Nama : Samsul

Jabatan : pelaksana bagian pengolahan

Waktu : Jumat, 4 April 2014 (jam 9.00)

“Limbah PG Djombang Baru memiliki dua jenis limbah. Ada limbah B3 dan non B3. Limbah B3 termasuk oli bekas, kain pel yang terkontaminasi, tubular lamp, dan katrid printer. Limbah B3 langsung

di serahkan ke pihak ke 3 mbak. Kalau limbah non B3 itu ada blotong, abu ketel, ampas, air. Ampas ditimbun dan digunakan untuk bahan bakar ketika produksi. Air diolah dengan IPAL, dimasukkan kolam-kolam kemudian melalui beberapa tahapan dan di uji oleh BLH apakah layak atau tidak untuk dialirkan ke sungai. Kalau untuk limbah abu ketel dan blotong dinagkut ke kompos (gudang pembuatan pupuk biokompos) dan selanjutnya diproses menjadi pupuk biokompos”.

This interview conduct on Friday 4 April 2014 at 09.00 pm in PG Djombang Baru. Mr. Samsul said that PG Djombang Baru produce some waste, that are liquid waste, solid and air. We have been doing the management toward each kinds of waste because the company aware about the waste that can be appeared of waste. Liquid waste is managed by IPAL system. And Solid waste is managed by a third party into Biocompost fertilizer. While the air waste is managed with dust collector system in a way that is exploited to reduce the harmful particles in the air.

There are some waste that can be used as Biocompost, such as *abu* and *blotong*. This is supported by the statement of the Mr. Sariman as Biocompost management coordinator.

Nama : Sariman

Jabatan : Kordinator pengolahan pupuk biokompos

Waktu : 5 April 2014 (jam 10.00)

“Desa Sumbernongko ini memang letaknya paling jauh dari PG Djombang Baru. Desa ini dijadikan penampungan limbah blotong dan abu untuk diolah menjadi pupuk biokompos. Untuk operasinya sendiri sudah berjalan 2 tahun setelah sebelumnya dilakukan masa uji coba dan menunjukkan dampak positif. Desa ini dipilih sebagai tempat penampungan limbah karena area nya masih luas. Pabrik memperkerjakan masyarakat sekitar sini untuk mengelolah limbah abu dan blotong menjadi pupuk biokompos sehingga bisa menyerap pengangguran disini. Masyarakat juga boleh menggunakan pupuk biokompos ini secara gratis”.

This interview conduct on 5 April 2014 in Biocompost area at 10.00 pm. He stated that the PG Djombang Baru has formed a partnership with a third party to manage the type of waste ash and blotong to be Biocompost. This Biocompost useful as a fertilizer to enrich the soil or as a crop fertilizer. During this 2 year the existence of Biocompost fertilizer is very useful for the society because they can use it for free. Mr. Sariman also explains the stages of making this Biocompost. Here is the Standard Operating Process (SOP) development using *bio-activator Bio N10* in PG Djombang Baru. In the following table 6 also shows the waste generated at each milling station in PG Djombang Baru.

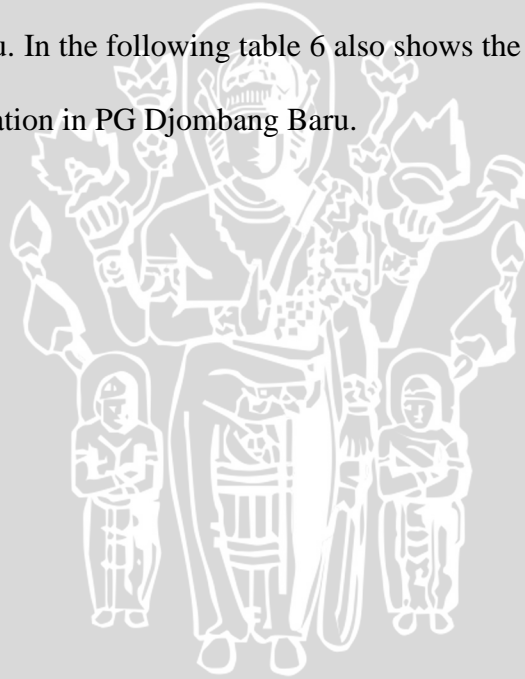


Table 6
Waste Management in PG Djombang Baru

No	Station	Kinds of waste	Waste source	Management	Result
1.	<i>Gilingan</i> (Milling)	Solid waste (<i>ampas</i>)	Unigator	Recycle	Ketel fuel/paper materials, compost fertilizaer, mushroom growing media
2.	<i>Pemurnian</i> (Purification)	Solid waste (<i>blotong</i>)	Deposition of materials and components of sugar	Recycle	Compost fertilizer, fuel
		Liquid waste	ex wet scrubber/dust collector, washing water juice heater dan evaporator	Reuse	Cooling water
		Air waste	The smoke from the burning dust kettle	Reduce	-
3.	<i>Penguapan</i> (Evaporation)	Liquid waste (<i>Lar soda</i>)	Evaporation process	Reuse	As a neutralizer IPAL
4.	<i>Masakan</i> (Concoction)	Liquid waste	oil machine	Reduce	-
5.	<i>Pemutaran</i> (Rotary)	Liquid waste	Tetes	Recycle	Fertilizaer, animal feed, alcoholic fermentation

Source : PG Djmbang Baru (2014)

3. The identification of Environmental Accounting at PG Djombang

Baru

PG Djombang Baru is a unit of service that serve the sugar mill where the management reporting has not much pay attention to the issue of environmental costs. Social costs relating to the environment has been implemented by the company but the cost is classified in other accounts such as donation cost and other. This is due the company still use conventional accounting thus causing information to be conveyed is unclear. PG Djombang Baru is a unit of PT. PTPN X Surabaya which is a government-owned industry. The company should not only present a conventional report but need added with complementary reports such as environmental accounting. The environmental accounting is expected to provide information to the government and stakeholders.

The environmental accounting in PG Djombang Baru has been implemented yet. Therefore, Environmental costs in PG Djombang Baru can be known through the income statement report. environmental cost include in the production cost especially in management account with code 515. So, in the management account there are several accounts such as wage and salary, the recondition of equipment and sugar processing, laboratory activities, environmental management, etc. Here the income statement in PG Djombang Baru that showed the environmental cost.

Tabel 7 Income Statement 2012-2013

Here is the income statement 2012-2013 in PG Djombang Baru :

(in thousand rupiah)

Description	Year	
	2012	2013
A. INCOME		
1. SUGAR		
Sales of Sugar exs present year	Price/Ton 9.314.739	8.430.091
	Total 93.655.155	58.336.392
Sales of Sugar exs last year	Price/Ton 7.728.686	9.091.165
	Total 407.209	17.630.323
Total A1	94.062.364	75.966.715
2. TETES		
Sales of Tetes exs present year	Price/Ton 1.274.820	1.121.405
	Total 16.050.551	13.891.876
Sales of Tetes exs last year	price/Ton 926.240	1.087.924
	Total 130.674	1.859.080
Total A2	16.181.225	15.750.956
Grand total A	110.243.589	91.717.671
B. COST OF GOOD SOLD		
1. SUGAR		
Begining inventory of economist sugar (+)	324.940	11.572.041
Begining inventory of sisan sugar (+)	735.136	1.201.193
Production costs :		
510 Wage and salary	8.678.293	9.254.999
510.81 Depreciation of fixed asset	6.944.322	7.977.638
511 Seeding	944.870	108.480
512 Milling cane	13.464.074	8.809.780

Continued

Description	Year	
	2012	2013
513 Cutting and transport of cane	5.844.542	6.019.038
514 Factory	26.212.973	28.464.119
515 Processing	7.447.587	8.116.492
Packaging	1.763.952	953.916
599 Quality Control (QC)	2.032.478	2.278.838
	73.333.091	71.983.300
Ending inventory of sisan sugar (-)	-1.201.194	-1.886.455
Ending inventory economist sugar (-)	-11.572.040	-245.908
Total B1	61.619.932	82.624.171
2. TETES		
Begining inventory tetes (+)	53.831	1.284.504
Production cost :		
510 Wage and salary	1.408.054	2.131.565
510.81 Depreciation fixed assets	-1.126.717	1.837.369
511 Seeding	153.305	24.984
512 Milling cane	2.184.548	2.029.024
513 Cutting and transport of cane	948.278	1.386.275
514 Factory	4.253.058	6.555.713
515 Processing	1.208.372	1.869.349
518.60 Purchasing tetes	0	0
599 Quality Control (QC)	329.769	524.850
	11.612.101	16.359.129
Ending inventory of tetes (-)	-1.284.504	-2.284.589
Total B2	10.381.428	15.359.044
Grand total B	72.001.360	97.983.215

Continued

Description	Year	
	2012	2013
C. GROSS OPERATING INCOME (A-B)	38.242.229	-6.265.544
D. GENERAL AND ADMINISTRATIVE COST	44.880	225.588
E. NET INCOME (C-D)	38.197.349	-6.491.132
F. OTHER INCOME		
Compost income	500.265	196.568
Coal income	0	0
Deposits interest / giro services	99.700	116.666
Ampas	359.976	0
Other income	908.806	528.848
Total F	1.868.747	842.082
G. Other costs		
Compost cost	608.619	205.958
Coal cost	0	0
Other operational cost	572.030	815.393
Total G	1.180.649	1.021.351
H. Income before PPh (E+F-G)	38.885.447	-6.670.401

Source : PG Gula Djombang Baru (2014)

Following the topic of this study, the author examines in which account the company records environmental costs. The data obtained from the company shows that environmental related-activity costs will be recorded in sub account no 505.314 Reconditioning and environmental management. The account is classified in account number 515 management costs. Here all sub accounts grouped into account number 515.

Tabel 8 Management Cost

Account no.	Description	2012	2013
515	Processing		
515.0	Salary of permanent employee	2.105.319.000	2.759.076.000
515.1	Salary of campaign employee	1.217.439.000	1.535.635.000
515.20	Salary of seasonal employee	722.152.000	1.582.809.000
515.22	Salary of temporary employee	0	0
515.30	Reconditioning equipment and processing sugar	0	0
515.300	Cleaning the pipe	392.661.000	335.122.000
515.301	Laboratory activities	0	9.139.000
515.302	Maintenance weigh	153.085.000	185.091.000
515.303	Sugar processing	2.580.029	2.148.294.000
515.304	Reconditioning and environmental management	979.991.000	1.002.524.000
515.400	packaging	2.608.500.000	1.773.444.000
515.401	Transports and store up	591.294.000	446.659.000

Source : PG Djombang Baru (2014)

Detailed records for enviromental costs are presented in Table 9 for 2012 and Table 10 for 2013 below.

Table 9 and Table 10 shows the details from the reconditioning and environmental management costs. The reconditioning and environmental management account includes costs such as environmental costs associated with BLH meeting, repair costs, waste disposal costs, and so forth.

Tabel 9 Environmental Management Cost 2012

Code	Description	Total
515.304.01	Cost of spray pond cleanup	6.471.696
515.304.01	Cost of IPAL cleanup	8.667.450
515.304.01	Cost of processing meeting	1.823.000
515.304.02	The cost of making the bridge floor B3 waste	3.500.000
515.304.02	The cost of making the environment organizational structure	935.000
515.304.02	Cost of chemiker and processing supervisor cordination	2.500.000
515.304.02	Cost of reconditioning IPAL pipe	1.500.000
515.304.02	Cost of cordination with BLH Jatim	2.500.000
515.304.02	Cost of pump service	250.000
515.304.04	Cost of IPAL operation	1.147.500
515.304.04	The cost of waste management consultancy	35.000.000
515.304.05	Cost of cleanup rabat floor	52.300.000
515.304.07	Cost of cleanup cooling trog	4.181.818
515.304.07	The cost of cleaning drains	13.900.000
515.304.08	Cost of juice heater floor reparation	26.300.000
515.304.08	Cost of inhouse keeping reparation	50.896.800
515.304.09	Cost of upgrade software puteran HGF	1.500.000
515.304.09	Cost of Hyperkes (Higiene Perusahaan Ergonomi dan Keselamatan) Jatim cordination	3.500.000
515.304.09	The cost of air quality measurement results	9.630.000
515.304.09	Cost of waste sampling cordination	5.000.000
515.304.09	The cost of certification quality emission measurement results	30.630.000
515.304.09	Cost of emission certification	27.430.000
515.304.09	Cost of taking POPER report cards	5.000.000
515.304.10	Cost of PPLHD (Pejabat Pengawas Lingkungan Hidup Daerah) BLH prov. Jatim cordination	3.000.000
515.304.10	Cost of liquid waste analyze	33.000.000
515.304.10	Cost of PROPER team cordination	25.000.000
515.304.10	Cost evaluation of milling in processing department	7.500.000
515.304.11	Cost of ashes waste transportation	91.858.224
515.304.11	Cost of ashes pool cleanup	70.000.000
515.304.12	Cost of IPAL cleanup	29.930.000
515.304.13	Cost of coordination with environmental about PG	9.000.000
515.304.13	Cost of making waste monthly reports 3 (month)	511.850
515.304.13	Cost of waste meeting coordination	1.943.950
515.304.14	Cost of ashes cleanup	2.750.000
515.304.	Another costs	410.933.712
Total		979.991.000

Source : PG Djombang Baru (2014)

Tabel 10 Environmental Management Cost 2013

Account No	Discription	Total
515.304.01	Cost of IPAL disposal	13.762.860
515.304.01	Cost of preparation miling season 2013	2.511.150
515.304.01	Cost of mentoring ISO 9001	2.238.375
515.304.01	Cost of cordination milling season 2013	10.000.000
515.304.01	The cost of sugar building cleaning	5.100.000
515.304.02	The cost of cooling tower IPAL service	18.270.000
515.304.02	The cost of making a spray pond outlet channel	39.090.909
515.304.03	Road map and mentoring ISO (International Stadardization of Organization)	2.766.288
515.304.04	IPAL premium cost	6.794.500
515.304.04	Cost of environment seminar	500.000
515.304.04	Cost of IPAL operation	463.000
515.304.04	Cost of procesing department meeting	770.700
515.304.04	Cost of BLH Jatim mentoring	15.020.500
515.304.04	Cost of ISO meeting	422.800
515.304.04	Cost of mentoring ISO ministry	1.175.000
515.304.04	Cost of guidance of ISO 9001	555.250
515.304.04	Cost of guidance of ISO 9001	1.796.750
515.304.04	Cost of mentoring ISO dan IT	2.442.664
515.304.07	The cost of cleaning drains	12.465.691
515.304.09	The cost of coordinating air quality measurements	38.050.000
515.304.09	Cost of BLH team acomodation	5.250.000
515.304.09	The cost of coordinating air quality measurements	38.050.000
515.304.10	Cost of solid waste analyze	1.510.000
515.304.10	B3 waste permit coordination costs	5.000.000
515.304.11	Reconditioning aerator cost	24.480.000
515.304.11	Ashes waste transportaion costs	265.246.251
515.304.12	Blotong waste transportation costs	197.459.631
515.304.13	The cost of laboratory tests of water bodies	1.000.000
515.304.13	Environmental seminar cost	1.200.000
515.304.13	Cost of waste cordinantion with PROPER team	9.815.000
515.304.13	RK PSB form self PROPER BLH Jatim	11.404.500
515.304.13	Waste cordination cost	750.000
515.304.13	Cleaning drilling cost	4.500.000
515.304.13	Processing meeting and calibration cost	18.868.000
515.304.13	Environment cordination cost	1.000.000
515.304.13	BLH (Badan Lingkungan Hidup Jatim cordination cost	5.000.000
515.304.13	Culverts/Gorong-gorong cleaning cost	750.000
515.304.13	Evaluation processing cost	20.000.000
515.304.13	Cost of training	36.628.704
515.304.	Another costs	180.413.477
	Total	1.002.524.000

Source : PG Djombang Baru (2014)

In order to provide detailed records about its environment accounting, the company uses smaller sub accounts. This allows the company determines all information of cost environment spendings. It also explain and summarize enables the company to control and monitor the accounts of the spendings on environmental activities. For example, account no 515.304 reconditioning and environmental management is used for recording costs such as maintaining and recoditioning equipments and conduct the meeting with third parties to discuss about environmental conservation.

The table 9 and Table 10, shows that the cost of reconditioning and environmental management indicates that the highest cost expenditures in 2012 and 2013 are the transport costs of *abu* and *blotong* waste. This is because PG New Djombang conduct the management of *abu* and *blotong* waste in separate place of the company. Therefore, during the milling season for 6 months PG Djombang Baru will continue to produce *abu* and *blotong* waste so that the waste transport will continue until the milling season finish.

C. Analysis and Interpretation of Data

1. Implementation of Corporate Social Responsibility at PG Djombang Baru

Social responsibility according to Ernie (2007:110) is a company shows concern for the interests of other parties more widely than just the interests of the company only. The company's existence can not be separated from society as its external environment. This relationship creates mutual benefit. This is because the interest of the company for the long term depends on the social responsibility to the society that are part of the company's activities. Instead the public welfare will increase depending on how much the corporate social responsibility. In addition to improving relations with the society's social responsibility can improve relationships with stakeholders including the government, competitors, suppliers, employees, communities, investors and customers.

PG Djombang Baru realize that the production process of the company produce several waste and it is can disturb the society pleasure. Thus, PG Djombang Baru was carry out the social activities as the form of company's responsibility toward society such as free medical treatment, cheap market, greening program, and house renovation for poor people. This responsibility creates a harmonious relationship between the company and the society and stakeholders to encourage the creation of a positive image. Basically the company has two basic principles that should be run is the principle of social justice and the principle of a responsibility for

what the company has done. It is appropriate that have been raised by Evan and Freeman (1993) quoted in the Indonesia Contact Centre Association (ICCA) Handbook on CSR (2006:16) states that:

“We can apply two simple principles. The first is the principle of corporate right which demands that the corporations has the obligations not to violate the right of others. The second the principle of corporate effect, says that companies are responsible for the effects is of corporate effect says that companies are responsible for the effects of their actions on others. In the light of these two basic principles a stakeholder can be defined in the following slightly more precise way : a stakeholder of a corporation is an individual or a group which either is harmed aby or benefits from the corporations or whose right can be violated or must be respected by the corporations”.

Based on the CSR theory, PG Djombang Baru can be classified into the contract social theory. Contract social arises because of the interrelation of the social life of the society, in order to the harmonization and balance, including the environment. The company, which is a group of people that have a common goal and to achieve goals together, is a part of the society in the larger environment. Its existence, is largely determined by the society, where they have mutual influence. Therefore, it is necessary social contract either explicitly or implicitly that an agreement that is mutually protect the interests of the company.

Social contracts are built and developed, one of them to explain the relationship between the companies to the society. The Company has an obligation to the society to give benefit local society. Interaction with companies toward the society are always trying to meet and comply with the rules and norms of society, in order to the activities of the company

can be recognized (Deegan, 2000). Meanwhile, David Crowther gave the illustration social contract between the company and stakeholders which has been written in the theoretical framework in figure 7. The illustration in that figure gives the interrelation and interdependence between the company and stakeholders, and between stakeholders with stakeholders. Correspondingly with the opinion from Rousseau stated that nature has given the regularity and have the competence to move in it. Therefore, to maintain the regularity of natural law, the parties in it needs to perform a contract, either directly or indirectly.

PG Djombang Baru is a BUMN (owned by government). The company produces sugar by using cane as the raw material. The company is under PTPN X Surabaya directors and any decision in the main office thus the company can not be separated from government control. Therefore the company should be disciplined in carrying out any activities in order to obtain the company's own cane cooperation with sugarcane farmers in the region around Jombang. In this case the company should be able to establish a good cooperation relationship with sugarcane farmers because the company is very dependent on the cane. And the company's production process can not be separated from the rest of the production waste. There are three types of waste that are *abu ketel*, *blotong* and water which each waste requires special treatment before finally will be reused or removed from the company. The treatment of each waste can not be done by the company itself that requires the company to cooperate with a

third party such as *Badan Lingkungan Hidup* (BLH). The company's location is in a densely populated area requires the company to perform optimally responsibility therefore public and corporate events can run smoothly.

According to the explanation above in accordance with the social contract theory which explains that the company basically can not walk alone and to be able to establish good cooperation with the government, the people, the other organizations, individuals or groups. It is intended to build harmony and balance between each other so that all of the objectives can be achieved.

Social responsibility activities in PG Djombang Baru are a form of responsibility to the society in the form of social and environmental concerns. Nevertheless, the existence of operational in PG Djombang Baru provides some impact to the surrounding society such as environmental pollution, health, and noise. PG Djombang Baru has implemented CSR programs to the environment and surrounding societies. The existence of these activities are expected PG Djombang Baru to optimize the level of public health and optimize the management of the dust and pollution. This is because in these activities disturb the society in the form of health such as shortness of breath and the environment dirty. Here are some responses from the society around PG Djombang Baru:

Nama : Mamik

Jabatan : Ketua RT.001 RW.002 Desa Jagalan

Waktu : Kamis, 03 April 2014 (jam 9.00)

“Untuk limbah pabrik sudah tidak mengganggu, kalau dulu memang limbah cairnya itu dialirkan ke sungai desa kami kemudian warga sini protes karena baunya tidak enak sangat mengganggu masyarakat. Memang sekarang masih menimbulkan bau tapi sudah tidak separah yang dulu. Untuk limbah asap dari cerobong itu tergantung arah angin dan desa ini tidak begitu merasakan limbah asapnya. Kalau kegiatan sosial itu ada seperti sembako, pengobatan gratis, gula icip-icip tapi ya jarang sekali mbak, 1 tahun bahkan pernah 2 tahun hanya dikasih sekali saja. Saran untuk pabrik ya ditingkatkan lagi kepedulian kepada warga sekitarnya”.

According to Mr. Mamik as a leader of RT. 001 RW.002 Desa Jagalan on Thursday 3 April 2014 at 09.00 pm said that PG Djombang Baru shows the awareness toward the society. This social activities such as cheap market and free medical treatment. Actually PG Djombang has been implemented but in the fact shows that these activities just implement once in a year even once in two years. PG Djombang Baru doing these activities not routinely according to the period that has been arranged. for waste problem, the society not disturb anymore because there are complain from the society. The sugession from Mr. Mamik to PG Djombang Baru is expected to increase the awareness toward society especially in social program.

Nama : Khumarsani

Jabatan : Ketua RT. 09 RW. 04 Desa Gentengan

Waktu : Jumat, 04 April 2014 (jam 9.00)

“Limbah PG yang kami rasakan ya limbah air itu mbak. Dulu asapnya itu sempat sangat mengganggu karena arah angin condong ke desa Gentengan ini, jadi kotor semua rumah kami tapi sekarang sudah ditangani jadi tidak mengganggu lagi. Limbah air ini kalau waktu giling sampai merembes ke halaman rumah warga. Pengaruhnya itu sumur warga jadi bau terus tanaman sekitar

rumah pada mati. Saran dari saya ya supaya cepat diperbaiki saluran pembuangan limbah air agar tidak mengotori rumah warga lagi”.

According to Mr. Khumarsani as a leader of RT. 09 RW. 04 Desa Gentengan on Friday 4 April 2014 at 09.00 pm said that the society can feel the social activities held PG Djombang Baru like cheap market and free medical treatment. The society is very enthusiastic in participating in these activities. But there are several impacts that disturb the society. Water waste that issued by PG Djombang Baru still pollute the society environment because the pipe that used to issue the water near Desa Gentengan. Thus, the water waste arise the bad smell and wreck the plantation. Mr. Khumarsani give suggestions for PG New Djombang should fix the drainage of waste water disposal in order not to pollute the environment surrounding society.

Nama : Kholis

Jabatan : Ketua RT. 03 RW. 02 Desa Sumbernongko

Waktu : Senin, 07 April 2014 (jam 9.00)

“Desa Sumbernongko ini sebenarnya tidak kena limbah pabrik mbak, tapi dijadikan tempat pembuatan pupuk. Awalnya sih memang warga terganggu karena pada waktu limbah abu sama blotong diangkut k gudang itu baunya nggak enak, tapi lama kelamaan ya sudah biasa mbak. Warga sini juga diuntungkan kok, karena pabrik mempekerjakan masyarakat sini untuk proses pengolahan pupuknya jadi bisa menyerap pengangguran di desa kami mbak. Untuk sumbangan pihak pabrik memberikan sumbangan seperti pemberian gula gratis, pengobatan gratis. Penghijauan juga sudah dilaksanakan mbak dua tahun yang lalu di sekitar daerah penampungan limbah blotong dan abu”.

According to Mr. Kholis as a leader of RT. 03 Rw. 02 Desa Sumbernongko on Monday 7 April 2014 at 09.00 pm said that the Desa Sumbernongko is the most distant area of PG Djombang Baru. And thus

area become biocompost warehouse. This warehouse owned by PG Djombang Baru that used to accommodate *abu* and *blotong* waste and processing into biocompost fertilizer. The existence of this biocompost warehouse can absorb labor in the Desa Sumbernongko because in the process of making biocompost fertilizer PG Djombang Baru involve the society as wholesale labor. In addition, the society also feel the presence of cheap market activity held by PG Djombang Baru.

The existence of the public opinions above, it can be concluded that the society accept the existence of PG Djombang Baru. This is caused by the awareness of PG Djombang Baru on surrounding society, such as the free medical treatment, cheap market, social service and greening so that people feel reputed. PG Djombang Baru also absorb workforce, thereby reducing the level of unemployment in the area. The relationship is symbiotic mutualism will indirectly provide reciprocal relationship so as to create a very favorable harmonious relationship between PG Djombang Baru and society. This harmonious relationship should be enhanced, especially in the field of improvement of both the quality of waste management and the provision of free medical treatment at the time of the milling session and reduce dust impacts that can pollute the society.

2. Implementation of Waste Management in PG Djombang Baru

PG Djombang Baru is a company that produces sugar and produces some waste. There are three types of waste such as waste water, *abu* and *blotong*, which each waste has been described in the data presentation.

Waste management has been implemented by PG Djombang Baru. Water waste is managed using wastewater plant (WWTP) or *Instalasi Pengelolaan Air Limbah (IPAL)*. *Abu* and *blotong* waste are used as fertilizer biocompost. Fertilizer biocompost is a waste that has economic value because it can be sold to cane farmers and the sales are the additional income to PG Djombang Baru.

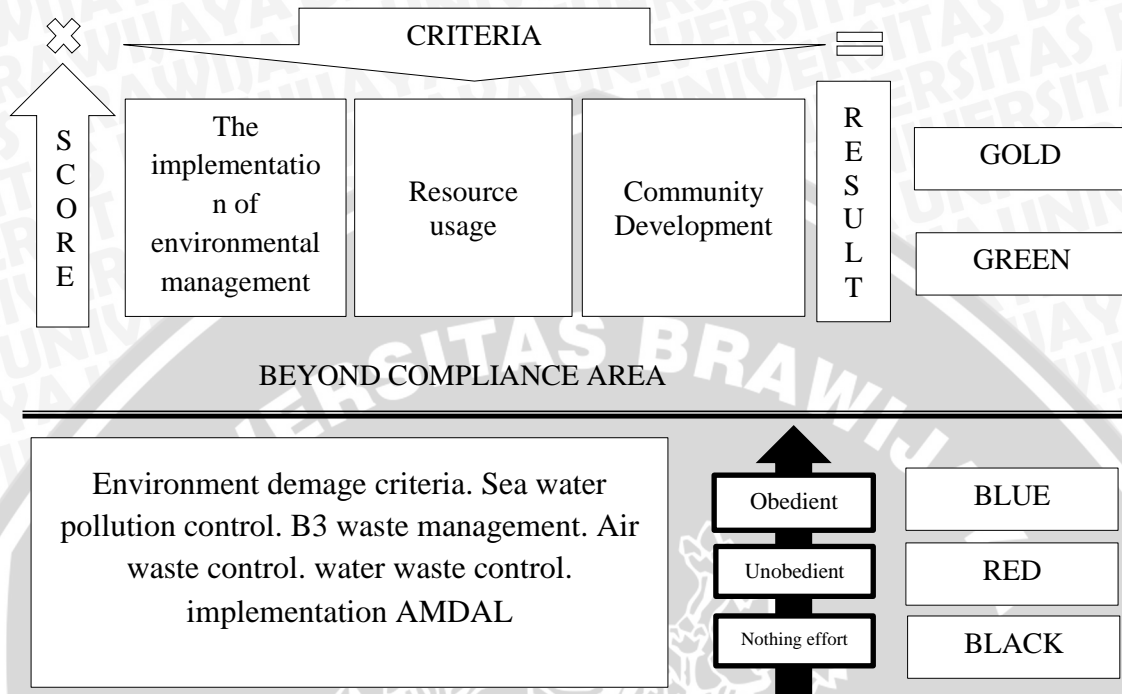
PG Djombang need assesment standard to measure the waste management untill its can meet the expected standardization which is arranged by company and the third party. Thus, PG Djombang Baru has been cooperate with third parties in waste management such as *Kementrian Lingkungan Hidup (KLH)* , *Badan Lingkungan Hidup (BLH)* and follow one program that is supervised by KLH namely Environmental Performance Assessment Program (PROPER). PG Djombang Baru has followed PROPER since 2009 until now and successively received ratings of blue color for two years. Blue colour shows that the PG Djombang Baru meet environmental quality standards set by KLH. The regulation of the Minister of Environment No. 5 year 2011 on Guidelines for PROPER implementation and the mechanisms regulation of PROPER Assessment Criteria can be differentiated into 2, as follows:

1. The obedience criteria that used for ranking blue, red, and black. The obedience criteria basically is a valuation companies compliance with environmental regulations. Rules are used as the basis of assessment is the rule:

- a. Implementation of Environmental Management Document
 - b. Water Pollution Control
 - c. Air Pollution Control
 - d. Waste Management
 - e. Sea Water Pollution Control
 - f. Criteria for Environmental Damage
2. Assesment criteria for more than the required result (beyond compliance) for ranking gold and green. Assessed aspect as follows :
- a. Environmental management system
 - b. Energy efficiency.
 - c. Emission reduction
 - d. Utilization and waste reduction B3.
 - e. 3R implementation of solid waste non B3.
 - f. Water conservation and reduction in pollution load of water
 - g. Biodiversity protection.
 - h. Implementation of community empowerment.

Here is the figure 7 illustrates about PROPER assesment criteria :

PROPER ASSESSEMENT CRITERIA



Source: PROPER Guidance 2011-2012

Figure 7 PROPER Assesment Criteria

3. Implementation of Environmental Accounting at PG Djombang Baru

According to Sunu (2001:1) environment is a space unit with all thing, capacity, situation and being including in it human beings and their behavior that influence the viability and the human welfare. While according to Harahap (2003: 347-348) environmental accounting is accounting science that record, measure, and report the environmental impact that is produced from the production process of company such as pollution, poisoning, noise, discrimination. Environmental accounting of



accounting science that serve to identify the socio benefit and socio cost that emerge from the production activities of company.

PG Djombang Baru is a unit of service that serve the sugar mill where the management reporting moderately paid attention to the issue of environmental costs. The company illustrate the costs related with environment in the smaller sub account no 515.304 reconditioning and environmental management costs. While, Social activities costs related to the environment has been implemented by the company but the cost is classified in other costs. This is due the company still use conventional accounting thus causing information to be conveyed is unclear. PG Djombang Baru is a unit of PT. PTPN X Surabaya which is a government-owned industry. The company need added complementary reports such as environmental accounting report. This environmental accounting is expected to provide information to the government and stakeholders.

The implementation of environmental accounting in PG Djombang Baru based on the cost of environmental conservations. Business activities can be categorized in any business activity itself, administrative activities, research and development activities, and social activities depend on the relationship between business and environmental impacts. According to Ikhsan (2008:79-90) describes the costs related environmental conservation as follows:

a. Business Activities

Business is a cost to reduce the environmental impact of activities going on in the business area. The business area is an area where the company directly regulate environmental impact. These costs include:

1) The cost of pollution prevention.

The cost is cost pollution prevention efforts are made to reduce the environmental impact, such as the installation of facilities to end emissions that has the aim to prevent pollution.

Pollution refers to public health or the environment. Here is the prevention cost from PG Djombang Baru.



Table 11 The Cost of Pollution Prevention in PG Djombang Baru 2012

Account no	Description	Total (Rp)
515.304.01	Cost of processing meeting	1.823.000
515.304.02	Cost of chemiker and processing supervisor cordination	2.500.000
515.304.02	Cost of cordination with BLH Jatim	2.500.000
515.304.04	The cost of waste management consultancy	35.000.000
515.304.09	Cost of Hyperkes (Higiene Perusahaan Ergonomi dan Keselamatan) Jatim cordination	3.500.000
515.304.09	Cost of waste sampling cordination	5.000.000
515.304.10	Cost of PPLHD (Pejabat Pengawas Lingkungan Hidup Daerah) BLH prov. Jatim cordination	3.000.000
515.304.10	Cost evaluation of milling in processing department	7.500.000
515.304.13	Cost of coordination with environmental about PG	9.000.000
515.304.13	Cost of waste meeting coordination	1.943.950
Total		71.766.950
Total Environment Management Cost 2012		979.991.000
Presentase of Pollution Prevention Cost 2012		7.32%

Source: PG Djombang Baru 2014

Table 11 for The Cost of Pollution Prevention in PG Djombang Baru 2012 shows that the cost of pollution prevention in PG Djombang Baru 2012 has the contribution as 7.32% from the total cost of environment management Rp. 979.991.000. The highest cost incurred for waste management consultancy was much Rp. 35,000,000. Waste management consultancy covering the preparation document of *Upaya Pengelolaan Lingkungan – Upaya Pemantauan Lingkungan* (UKL-UPL), Environmental baseline assesement, Environmental and feasibility Study and other activities related with environment. This indicates that PG has attempted to minimize the pollution.

Table 12 The Cost of Pollution Prevention in PG Djombang Baru 2013

Account no	Description	Total (Rp)
515.304.01	Cost of mentoring ISO 9001	2.238.375
515.304.04	Cost of environment seminar	500.000
515.304.04	Cost of procesing department meeting	770.700
515.304.04	Cost of BLH Jatim mentoring	15.020.500
515.304.04	Cost of ISO meeting	422.800
515.304.04	Cost of mentoring ISO ministry	1.175.000
515.304.04	Cost of guidance of ISO 9001	2.352.000
515.304.04	Cost of mentoring ISO dan IT	2.442.664
515.304.09	The cost of coordinating air quality measurements	38.050.000
515.304.09	Cost of BLH team acomodation	5.250.000
515.304.09	The cost of coordinating air quality measurements	38.050.000
515.304.10	B3 waste permit coordination costs	5.000.000
515.304.13	Environmental seminar cost	1.200.000
515.304.13	Cost of waste cordinantion with PROPER team	9.815.000
515.304.13	Waste cordination cost	750.000
Total		123.037.039
Total Environment Management Cost 2013		1.002.524.000
Presentase of pollution Prevention Cost 2013		12.27%

Source: PG Djombang Baru 2014

From the Table 12 for The Cost of Pollution Prevention in PG Djombang Baru 2013 shows that the cost of pollution prevention cost give contribution as much 12.27% from the total environment management cost Rp. 1.002.524.000. The highest cost that occur for the cost of cordinating air quality measurements. This is done to determine the air quality in areas where the company is located. This coordination is also important for environmental arrangement which at this point should have a minimum service standards (SPM).

2) The cost of global environmental conservation.

Global environmental conservation costs are costs related with negative environmental impacts. Costs are allocated to the prevention of global warming, to prevent the depletion of the ozone layer. And this is the cost allocation in PG Djombang Baru that has the aim to the prevention of global warming.

Table 13 Global warming prevention cost 2012

Account no	Description	Total (Rp)
515.304.09	The cost of air quality measurement results	9.630.000
515.304.09	Cost of waste sampling coordination	5.000.000
515.304.09	The cost of certification quality emission measurement results	30.630.000
515.304.09	Cost of emission certification	27.430.000
Total		72.690.000
Total Environment Management Cost 2012		979.991.000
Presentase Prevention Global Warming Cost 2012		7.41%

Source: PG Djombang Baru 2014

Table 14 Global warming prevention cost 2013

Account no	Description	Total (Rp)
515.304.09	The cost of coordinating air quality measurements	38.050.000
515.304.09	The cost of coordinating air quality measurements	38.050.000
515.304.11	Reconditioning aerator cost	24.480.000
Total		100.580.000
Total Environment Management Cost 2013		1.002.524.000
Presentase Prevention Global Warming Cost 2013		10.03%

Source: PG Djombang Baru 2014

The Table 13 for Global warming prevention cost 2012 provide the contribution as much 7.41% from the total environment management cost 979.991.000 and Table 14 for Global warming

prevention cost 2013 provide the contribution as much 10.03% from the total environment management cost 1.002.524.000. It is incurred to contribute preventing global warming. And the company has to consider it because PG Djombang Baru is one of company which issued smoke from the rest of production.

b. Cost of Upstream and Downstream

Upstream costs is a cost that seeks to reduce the environmental impact created before to the inputs of goods and services in the business area.

Downstream costs are costs for efforts to reduce the environmental impact of goods and services created after issued from the business area.

Table 15 Upstream Cost 2012

Account no	Description	Total (Rp)
515.304.01	Cost of processing meeting	1.823.000
515.304.02	Cost of chemiker and processing supervisor cordination	2.500.000
515.304.02	Cost of cordination with BLH Jatim	2.500.000
515.304.04	The cost of waste management consultancy	35.000.000
515.304.09	Cost of upgrade software puteran HGF	1.500.000
515.304.09	Cost of Hyperkes (Higiene Perusahaan Ergonomi dan Keselamatan) Jatim cordination	3.500.000
515.304.09	Cost of waste sampling cordination	5.000.000
515.304.10	Cost of PPLHD (Pejabat Pengawas Lingkungan Hidup Daerah) BLH prov. Jatim cordination	3.000.000
515.304.10	Cost of liquid waste analyze	33.000.000
515.304.10	Cost of PROPER team cordination	25.000.000
515.304.13	Cost of coordination with environmental about PG	9.000.000
515.304.13	Cost of waste meeting coordination	1.943.950
Total		123.766.950
Total Environment Management Cost 2012		979.991.000
Presentase Upstream Cost 2012		12.63%

Source: PG Djombang Baru 2014

Table 16 Upstream Cost 2013

Account no	Description	Total (Rp)
515.304.01	Cost of cordination milling season 2013	10.000.000
515.304.04	Cost of environment seminar	500.000
515.304.04	Cost of procesing department meeting	770.700
515.304.04	Cost of BLH Jatim mentoring	15.020.500
515.304.04	Cost of ISO meeting	422.800
515.304.04	Cost of mentoring ISO ministry	1.175.000
515.304.04	Cost of guidance of ISO 9001	555.250
515.304.04	Cost of guidance of ISO 9001	1.796.750
515.304.09	The cost of coordinating air quality measurements	38.050.000
515.304.09	The cost of coordinating air quality measurements	38.050.000
515.304.10	B3 waste permit coordination costs	5.000.000
515.304.13	The cost of laboratory tests of water bodies	1.000.000
515.304.13	Cost of waste cordinantion with PROPER team	9.815.000
515.304.13	Waste cordination cost	750.000
515.304.13	Processing meeting and calibration cost	18.868.000
515.304.13	Environment cordination cost	1.000.000
515.304.13	BLH (Badan Lingkungan Hidup Jatim cordination cost	5.000.000
515.304.13	Cost of training	36.628.704
Total		184.402.704
Total Environment Management Cost 2013		1.002.524.000
Presentase Upstream Cost 2013		18.39%

Source: PG Djombang Baru 2014

From the Table 15 for Upstream Cost 2012 provide the contribution as much 12.63% from the total environment management cost 979.991.000 and Table 16 for Upstream Cost 2013 provide the contribution as much 18.39% from the total environment management cost 1.002.524.000. Upstream cost shows that preparation from PG Djombang Baru is managed well before they do the production process. It is important to be done because the company has to has the anticipation or another plan if there are some problem that occur outside the plan. Thus, PG Djombang Baru need to make coordination with the third parties related to environment managemen, doing training and other preparation.

Table 17 Downstream Cost 2012

Account no	Description	Total (Rp)
515.304.01	Cost of spray pond cleanup	6.471.696
515.304.01	Cost of IPAL cleanup	8.667.450
515.304.02	Cost of reconditioning IPAL pipe	1.500.000
515.304.02	Cost of pump service	250.000
515.304.05	Cost of cleanup rabat floor	52.300.000
515.304.07	Cost of cleanup cooling trog	4.181.818
515.304.07	The cost of cleaning drains	13.900.000
515.304.08	Cost of juice heater floor reparation	26.300.000
515.304.08	Cost of inhouse keeping reparation	50.896.800
515.304.11	Cost of ashes pool cleanup	70.000.000
515.304.12	Cost of IPAL cleanup	29.930.000
Total		264.397.764
Total Environment Management Cost 2012		979.991.000
Presentase Downstream Cost2012		26.98%

Source: PG Djombang 2014

Table 18 Downstream Cost 2013

Account no	Description	Total (Rp)
515.304.01	Cost of IPAL disposal	13.762.860
515.304.01	The cost of sugar building cleaning	5.100.000
515.304.02	The cost of cooling tower IPAL service	18.270.000
515.304.07	The cost of cleaning drains	12.465.691
515.304.11	Reconditioning aerator cost	24.480.000
515.304.13	Cleaning drilling cost	4.500.000
515.304.13	Culverts/Gorong-gorong cleaning cost	750.000
Total		79.328.551
Total Environment Management Cost 2013		1.002.524.000
Presentase Downstream Cost 2013		7.91%

Source: PG Djombang Baru 2014

From the Table 17 for Downstream Cost 2012 provide the contribution as much 26.98% from the total environment management cost 979.991.000 and Table 18 for Downstream Cost 2013 provide the contribution as much 7.91% from the total environment management cost 1.002.524.000. There is significant differentiation presentase between year

2012 and 2013. It is occur because in 2012 there some recondition of equipment such as inhouse keeping reparation, juice heater floor reparation, pump service and reconditioning IPAL pipe. While in 2013 the cost that issued only for cleanup the equipment.

c. Administrative Activities

Administrative costs are costs for management activities generated by the company in environmental conservation activities. Costs involved in administrative activities are:

- 1) The cost for implementation and improvement of the environmental management system.
- 2) The cost of the disclosure of environmental information relationship with the environment and activities
- 3) Costs of monitoring environmental impact.
- 4) Costs for environmental improvement activities.

Table 19 Administration cost 2012

Account no.	Description	Total (Rp)
515.304.02	Cost of cordination with BLH Jatim	2.500.000
515.304.09	Cost of Hyperkes (Higien Perusahaan Ergonomi dan Keselamatan) Jatim cordination	3.500.000
515.304.09	Cost of waste sampling cordination	5.000.000
515.304.09	Cost of emission certification	27.430.000
515.304.10	Cost of PPLHD (Pejabat Pengawas Lingkungan Hidup Daerah) BLH prov. Jatim Cordination	3.000.000
515.304.10	Cost of PROPER team cordination	25.000.000
515.304.13	Cost of cordination with environmental about PG	9.000.000
515.304.13	Cost of making waste monthly report 3(month)	511.850
515.304.13	Cost of waste meeting cordination	1.943.950
	Total	77.885.800
	The environmental management cost 2012	979.991.000
	Presentase of administration cost 2012	7.95%

Source: PG Djombang 2014

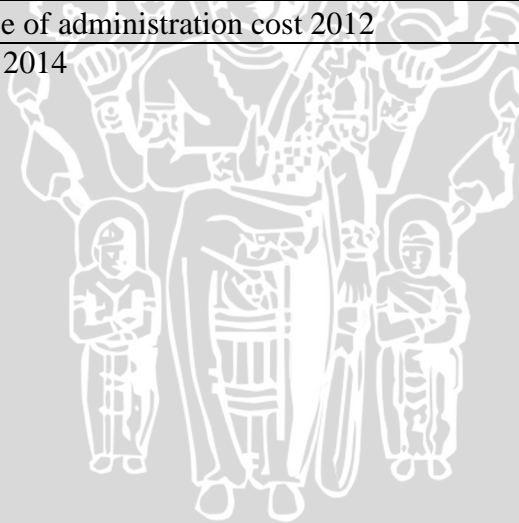


Table 20 Administration cost 2013

Account no.	Description	Total (Rp)
515.304.01	Cost of cordination milling season 2013	10.000.000
515.304.04	Cost of environment seminar	500.000
515.304.04	Cost of processing department meeting	770.700
515.304.04	Cost of ISO meeting	422.800
515.304.04	Cost of BLH Jatim mentoring	15.020.500
515.304.04	Cost of mentoring ISO ministry	1.175.000
515.304.04	Cost of guidance of ISO 9001	2.352.000
515.304.04	Cost of mentoring ISO and IT	2.442.664
515.304.09	Cost of BLH team acomodation	5.250.000
515.304.13	Environmental seminar cost	1.200.000
515.304.13	Cost of waste cordination with PROPER team	9.815.000
515.304.13	Waste cordination cost	750.000
515.304.13	Environment cordination cost	1.000.000
515.304.13	BLH Jatim cordination cost	5.000.000
515.304.13	RK PSB form self PROPER BLH Jatim	11.404.500
515.304.13	Cost of training	36.628.704
Total		103.731.868
The Environmental management cost 2013		1.002.524.000
Presentase of administration cost 2013		10.35%

Source: PG Djombang Baru 2014

Table above shows the administration cost. Table 19 for administration cost 2012 give the contribution as much 7.95% from the total environment management cost 979.991.000 and Table 20 for administration cost 2013 give the contribution as much 10.35% from the total environment management cost 1.002.524.000. The highest cost occur for the cost of PROPER team because every year PROPER team make assesment in order to control the management of waste in the company.

d. Social and Development Activities

Costs for research and development activities are allocated to the conservation of the environment, these costs include:

- 1) Research and development costs for the development of products that help conserve the environment.
- 2) The cost of research and development to limit the environmental impact on the processing of products.
- 3) The cost of research and other developments related to the environmental impact of restrictions on the distribution or marketing of products.

Table 21 Cost of Social and Development activities 2012

Account no	Description	Total (Rp)
515.304.09	Cost of upgrade software puteran HGF	1.500.000
515.304.09	Cost of certification quality emission measurement result	30.630.000
515.304.10	Cost of liquid waste analyze	33.000.000
Total		65.130.000
The environmental management cost 2012		979.991.000
Presentase of administration cost 2012		6.64%

Source: PG Djombang Baru 2014

Table 22 Cost of Social and Development Activities 2013

Account no	Description	Total (Rp)
515.304.09	Cost of cordinating air quality measurement	76.100.000
515.304.10	Cost of solid waste analyze	1.510.000
515.304.13	Cost of laboratory test of water bodies	1.000.000
Total		78.610.000
The environmental management cost 2013		1.002.524.000
Presentaseof administration cost 2013		7.84%

Source: PG Djombang Baru 2014

From the Table 21 for cost of production and development activities 2012 provide the contribution as much 6.64% from the total environment management cost 979.991.000 and Table 22 for cost of production and development activities 2013 provide the contribution as much 7.84% from the total cost environment management cost 1.002.524.000. The table above give the information about the development activities in PG Djombang Baru, it is mean there are an effort from the company to manage the waste maximally.

e. Social Activities

The cost of social activities related to environmental conservation are generated for social welfare. The cost considerations for environmental conservation efforts of social activities indirectly related to the business activities of the company. The cost of social activities, among others:

- 1) The cost of greening
- 2) The cost related with donation
- 3) The cost related with other social activities

Table 23 The Social Activities Cost

Account no	Description	Total (Rp)
519.20	Cheap market activity	110.100.000
	Khitan Massal	1.000.000
	Blood donor	4.500.000
	Environmental contribution	84.433.731
	Ikatan Istri Keluarga Besar (IIKB) activity	71.935.426
	Religi activity	8.740.000
	Dinas Tenaga Kerja (Disnaker)	971.999
	Dinas Perkebunan (Disbun)	4.009.500
	Badan Lingkungan Hidup (BLH) Jombang	4.131.000
	Musyawaharah Pimpinan Daerah (Muspida)	19.405.487
	Bakti Sosial (baksos)	10.503.000
	Konsumsi dokter gigi	875.000
	Opening milling season	5.467.493
	House renovation	110.564.900
	Road asphaltting in Desa Sumbernongko	118.409.091
Greening Cost	25.700.000	
Mosque renovation	16.519.000	
	Total	597.265.627

Source: PG Djombang Baru 2014

From the Table 19 (the social activities cost) shows that PG Djombang Baru has been doing the CSR activities. This activities include cheap market, khitan massal, blood donor, religy activity, social activities (free medical treatment), house renovation greening and other. This estimates cost still hidden cost because its included into other operational cost.

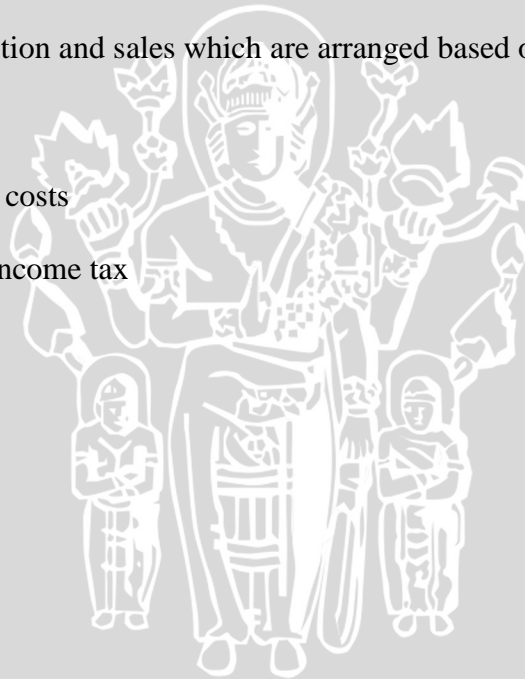
Table 24 Recapitulation of Environmental Conservation Cost 2012-2013

No.	Description	2012	2013
1.	The Cost of Pollution Prevention	7.32%	12.27%
2.	The Cost of Global Warming Prevention	7.41%	10.03%
3.	Upstream Cost	12.63%	18.39%
4.	Downstream Cost	26.98%	7.91%
5.	Administration Cost	7.95%	10.35%
6.	Cost of Social and Development	6.64%	7.84%
Total of Environmental Conservation Cost		68.93%	66.79%
Other cost		31.07%	33.21%
Total		100%	100%

Source: PG Djombang Baru 2014

That's the amount of activities for the waste cost allocation of PG Djombang Baru. It would be better if made separate report related to the waste cost allocation because otherwise separated will cause some impact as it is difficult to know the real profits and not in accordance with generally accepted accounting principles. Actually, the activities related with the social activities and environmental management can reduce the tax income. Thus, if the company shows the budget related with its activities transparently it can give the benefit to the company. It is according to the Government Regulation about income tax 21 number 36 year 2008 article 6 verse 1 : The amount of taxable income for taxpayers in domestic and the business permanent, determined based on gross income less costs to obtain, collect, and maintain income, including: (a) Costs that are directly or indirectly related to the business activities, such as:

1. Costs of purchasing materials
2. Costs related with the work or services, including wages, salaries, honorarium, bonuses, gratification, and allowances provided in the form of money
3. Interest, rents, royalties
4. Accomodation costs
5. Waste management cost
6. Premi assurance
7. Costs of promotion and sales which are arranged based on finance minister regulation
8. Administration costs
9. Taxes, except income tax



CHAPTER V

CONCLUSION

A. Conclusion

Based on the analysis of data and discussion of the results it can be concluded as follows:

1. PG Djombang has implemented a corporate social responsibility, such as free medical treatment, cheap market, house renovation and greening programs. The area that has the main priority for social activities are Desa Sumbernongko, Desa Jagalan, Desa Jombang and Desa Gentengan. The program gets a positive response from the society because it helps the society, particularly for free medical treatment programs and cheap market program. Corporate responsibility is not only done limited to conduct social programs but also in accounting, the company has allocated the costs of social activities and costs related with environmental conservation.
2. PG Djombang Baru produces three kinds of waste such as *abu*, *blotong* and water. The waste has been getting good treatment. Water waste is the waste that can not reused so before poured into the river requires prior management system using IPAL system (Waste Water Management). In this system the production of excess water will be filtered through several



stages at the last stage, the water will be tested first whether it is feasible or not to be circulated into the river. For *abu* and *blotong* waste can be reused as fertilizer biocompost.

3. PG Djombang Baru has not applied the environmental accounting. It is seen from the allocation of costs related environmental conservation and social activities are still moderately paid attention in the financial statement. Environmental conservation costs are allocated into cost of production, especially in estimation management cost with number account 515 especially in smaller sub account with number account 515.304. Environmental conservation Costs that issued by the company prioritized for the cost of environmental management activities by the company around PG Djombang Baru used as a place of production activity. Costs related social activities are still allocated into outside the company's cost estimates. The cost of this social activities are prioritized for the free medical treatment, greening, cheap market and renovation several facilities around PG Djombang Baru area.

B. Suggestion

There are some suggestions given by authors associated with the above conclusion, namely:

1. PG Djombang Baru is a company that produce several waste and require substantial funding in its management. Therefore, the cost is quite influential in the income statement, it would be better if PG Djombang

Baru make a reports separately to allocate the costs related to the environmental management and social activities.

2. PG Djombang Baru has allocated the cost of waste into smaller subs account with account number 515.304 but it is still there in processing account. It would be better if the waste cost is made transparantly so that it can help companies reduce the corporate income tax as mentioned in the previous discussion.
3. There are several different estimates between 2012 and 2013 in the approximate account of environmental management, such as account opening milled estimates listed in 2013 but in 2012 is not included. Authors suggest it would be better if the company establishes the same account to make easy the delivery of information.

C. Sugession for the next author

1. There are a lot of themes that can be used related to environmental accounting issues, such as air pollution problem, the calculation of environmental costs, the application of ISO 26000 to the company and so forth. The theme was not raised in the present study and can be used as a sugession for next authors.
2. Research on environmental accounting is very interesting, because it relates to the continuation of human life in the present and the future. With the implementation of environmental accounting is expected that the quality of human life will remain awake until the next generation.

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Appendix 1 Free medical treatment









Appendix 2 House renovation program





Appendix 3 Cheap market program



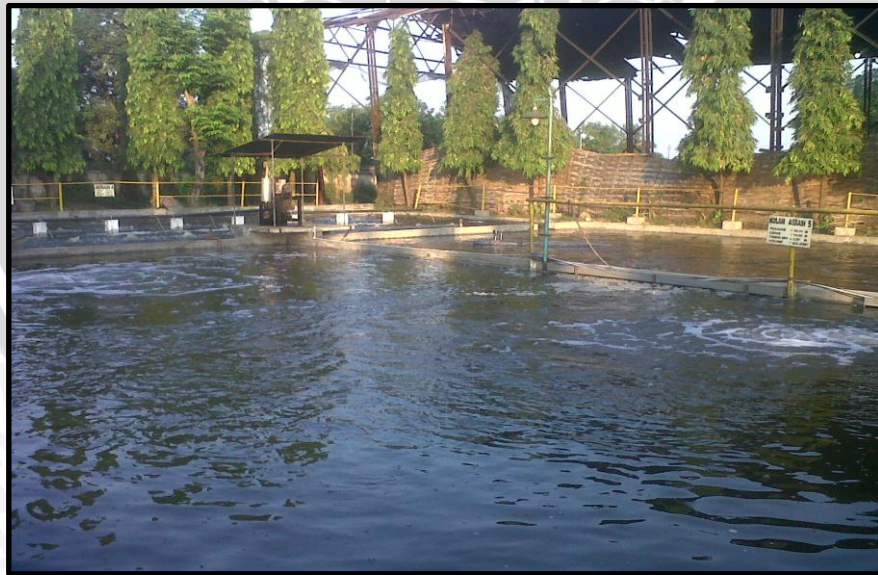


Appendix 4 Greening program





Appendix 5 Water waste management using IPAL system





Appendix 6 Biokompos management



PT PERKEBUNAN NUSANTARA X (PERSERO)
PABRIK GULA - DIOMBRANG BARU

PROGNOSA TAHUN 2012
PERHITUNGAN LABA/RUGI
(BERDASARKAN KONDISI PER 31 DESEMBER 2012)

1=Rp.1.000,-

URAIAN	REALISASI	TAKSASI	PROGNOSA	RKO	RKAP	% PROG THD	
	S/D BLN INI	BLN YAD S/D DES	TAHUN INI	TAHUN INI	TAHUN INI	RKO	RKAP
A PENDAPATAN							
1.GULA							
Penjualan gula eks tahun ini	Harga/Ton 9.314,739	0	9.314,739	7.391,481	7.391,294	126,0	126,0
	Ton 93.655,153	0	93.655,153	99.103,803	95.831,011	94,5	97,7
Penjualan gula eks tahun lalu	Harga/Ton 7.728,686	0	7.728,686	0	0	0,0	0,0
	Ton 407,209	0	407,209	0	0	0,0	0,0
JUMLAH A1		0	94.062,364	99.103,803	95.831,011	94,9	98,2
2.TETES							
Penjualan tetes eks tahun ini	Harga/Ton 1.274,820	0	1.274,820	800,000	800,000	159,4	159,4
	Ton 16.050,551	0	16.050,551	5.996,360	5.830,488	267,7	275,3
Penjualan tetes eks tahun lalu	Harga/Ton 926,240	0	926,240	0	0	0,0	0,0
	Ton 130,674	0	130,674	0	0	0,0	0,0
JUMLAH A2		0	16.181,225	5.996,360	5.830,488	269,9	277,5
JUMLAH A		0	110.243,589	105.100,163	101.661,499	104,9	108,4
B HARGA POKOK PENJUALAN							
1.GULA							
Persediaan awal gula ekonomis (+)	324,940	12.871,976	324,940	0	0	0,0	0,0
Persediaan awal gula sisan (+)	735,136	0	735,136	0	0	0,0	0,0
Biaya produksi :							
510 Pimpinan dan tata usaha	11.139,311	(2.461,018)	8.678,293	5.861,265	5.878,112	148,1	147,6
510.81 Penyusutan aktiva benda	6.974,185	(29,863)	6.944,322	8.938,148	8.935,302	77,7	77,7
511 Pembibitan	951,474	(6,604)	944,870	545,249	545,075	173,3	173,3
512 Tebu giling	11.545,082	1.918,992	13.464,074	14.377,062	14.407,493	93,6	93,5
513 Tebang dan angkut tebu	5.634,066	210,476	5.844,542	6.442,004	6.439,952	90,7	90,8
514 Pabrik	23.444,484	2.768,489	26.212,973	21.418,910	21.587,312	122,4	121,4
515 Pengolahan	7.316,582	131,005	7.447,587	14.196,922	14.206,667	52,5	52,4
518.60 Pembelian tetes milik PTR	1.585,278	178,674	1.763,952	1.277,459	1.250,149	138,1	141,1
599 Quality Control (QC)	2.153,295	(120,817)	2.032,478	2.487,199	2.514,667	81,7	80,8
	70.743,757	2.589,334	73.333,091	75.544,218	75.764,669	97,1	96,8
Persediaan akhir gula sisan (-)	0	(1.201,194)	(1.201,194)	0	0	0,0	0,0
Persediaan akhir gula ekonomis (-)	(12.871,976)	(11.572,040)	(11.572,040)	0	0	0,0	0,0
JUMLAH B1	58.931,857	2.688,076	61.619,932	75.544,218	75.764,669	81,6	81,3
2.TETES							
Persediaan awal tetes (+)	53,831	1.133,665	53,831	0	0	0,0	0,0
Biaya produksi :							
510 Pimpinan dan tata usaha	1.751,918	(343,864)	1.408,054	358,904	361,922	392,3	389,0
510.81 Penyusutan aktiva benda	1.096,854	29,863	1.126,717	547,311	550,157	205,9	204,8
511 Pembibitan	149,642	3,663	153,305	33,387	33,561	459,2	456,8
512 Tebu giling	1.815,736	368,812	2.184,548	880,353	887,082	248,1	246,3
513 Tebang dan angkut tebu	886,089	62,189	948,278	394,464	396,516	240,4	239,2
514 Pabrik	3.687,196	565,862	4.253,058	1.311,547	1.329,155	324,3	320,0
515 Pengolahan	1.150,704	57,668	1.208,372	869,322	874,720	139,0	138,1
518.60 Pembelian tetes milik PTR	338,656	(8,887)	329,769	152,289	154,831	216,3	213,3
599 Quality Control (QC)	10.876,795	735,306	11.612,101	4.547,587	4.587,944	255,3	253,1
Persediaan akhir tetes (-)	(1.133,665)	(1.284,504)	(1.284,504)	0	0	0,0	0,0
JUMLAH B2	9.796,961	584,467	10.381,428	4.547,587	4.587,944	228,3	226,3
JUMLAH B	68.728,818	3.272,543	72.001,360	80.091,805	80.352,613	89,9	89,6
C LABA/RUGI KOTOR USAHA (A-B)	41.514,771	(3.272,543)	38.242,229	25.008,358	21.308,886	152,9	179,5
D BIAYA UMUM DAN ADMINISTRASI	44,880	0	44,880	0	0	0,0	0,0
E LABA/RUGI BERSIH USAHA (C-D)	41.469,891	(3.272,543)	38.197,349	25.008,358	21.308,886	152,7	179,3
F PENDAPATAN LAIN-LAIN							
Pendapatan kompos	500,265	0	500,265	1.500,342	1.500,342	33,3	33,3
Pendapatan batubara	0	0	0	0	0	0,0	0,0
Bunga deposito / jasa giro	99,700	0	99,700	80,000	80,000	124,6	124,6
Anusuk	359,976	0	359,976	0	0	0,0	0,0
Pendapatan lain-lain	908,806	0	908,806	400,000	400,000	227,2	227,2
JUMLAH F	1.868,747	0	1.868,747	1.980,342	1.980,342	94,4	94,4
G BIAYA LAIN-LAIN							
Biaya kompos	588,138	20,481	608,619	1.212,819	1.212,819	50,2	50,2
Biaya batubara	0	0	0	0	0	0,0	0,0
Biaya di luar perusahaan	572,030	0	572,030	1.336,032	1.336,032	42,8	42,8
JUMLAH G	1.160,168	20,481	1.180,649	2.548,851	2.548,851	46,5	46,3
H LABA/RUGI SEBELUM PPh (E-F-G) EXCL. RS	42.178,470	(3.293,024)	38.885,447	24.459,507	20.740,377	159,1	187,5
I RAW SUGAR							
Pendapatan							
Penjualan gula eks raw sugar	0	0	0	0	0	0,0	0,0
Penjualan tetes eks raw sugar	0	0	0	0	0	0,0	0,0
JUMLAH PENDAPATAN RAW SUGAR	0	0	0	0	0	0,0	0,0
Biaya							
Biaya pengolahan gula merah / nira kental	0	0	0	0	0	0,0	0,0
JUMLAH BIAYA RAW SUGAR	0	0	0	0	0	0,0	0,0
JUMLAH I	0	0	0	0	0	0,0	0,0
J LABA/RUGI SEBELUM PPh (H-I) INCL. RS	42.178,470	(3.293,024)	38.885,447	24.459,507	20.740,377	159,1	187,5
K HRG POKOK PRODUKSI PER TON GULA EK. TER	5.898,368	0	6.114,258	5.634,407	5.843,699	108,5	104,6
L HRG POKOK PRODUKSI PER TON TETES EK. TER	775,336	0	827,751	606,713	629,511	136,4	131,5
M HRG POKOK PRODUKSI PER TON GULA EX. RS	0	0	0	0	0	0,0	0,0

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38,885,447

PT PERKEBUNAN NUSANTARA X (PERSERO)
PABRIK GULA - DJOMBANG BARU

PROGNOSA TAHUN 2013
PERHITUNGAN LABA/RUGI
(BERDASARKAN KONDISI PER 31 DESEMBER 2013)

I=Rp.1.000,-

URAIAN		REALISASI S/D BLN INI	TAKSASI BLN YAD S/D DES	PROGNOSA TAHUN INI	RKO TAHUN INI	RAKAP TAHUN INI	% PROG THD RKO	% PROG THD RAKAP
A PENDAPATAN								
1.GULA								
Penjualan gula eks tahun ini	Harga/Ton	8,430,091	0	8,430,091	8.487.400	8.684.881	99,3	97,1
Total harga		58,336,392	0	58,336,392	108.746.074	108.679.258	53,9	53,7
Penjualan gula eks tahun lalu	Harga/Ton	9,091,165	0	9,091,165	8.482.804	8.679.883	107,2	104,7
Total harga		17,630,323	0	17,630,323	17.294.075	17.695.677	101,9	99,6
JUMLAH A1		75,966,715	0	75,966,715	125,610,109	126,315,915	60,5	60,1
2.TETES								
Penjualan tetes eks tahun ini	Harga/Ton	1,121,405	0	1,121,405	900,000	900,000	124,6	124,6
Total harga		13,891,876	0	13,891,876	6.243.417	6.243.209	232,5	232,5
Penjualan tetes eks tahun lalu	Harga/Ton	1,087,924	0	1,087,924	900,000	900,000	120,9	120,9
Total harga		1,859,080	0	1,859,080	65.340	65.340	2,845,2	2,845,2
JUMLAH A2		15,750,956	0	15,750,956	6,308,757	6,308,649	249,7	249,7
JUMLAH A		91,717,671	0	91,717,671	131,918,866	132,624,564	69,5	69,2
B HARGA POKOK PENJUALAN								
1.GULA								
Persediaan awal gula ekonomis (+)		11,572,041	2,281,540	11,572,041	13.537.772	13.537.772	85,5	85,5
Persediaan awal gula sisan (+)		1.201.193	0	1,201,193	0	0	0,0	0,0
Biaya produksi :								
510 Pimpinan dan tata usaha		9,746,342	(491,343)	9,254,999	7,455,770	7,524,108	124,1	123,0
510.81 Penyusutan aktiva benda		0	7,977,638	7,977,638	13,085,805	13,088,575	61,0	61,0
511 Pembibitan		108,480	0	108,480	470,104	470,204	23,1	23,1
512 Tebu giling		7,935,969	873,811	8,809,780	11,036,519	11,255,396	79,8	78,3
513 Tebang dan angkut tebu		5,110,510	908,528	6,019,038	6,171,474	6,213,538	97,5	96,9
514 Pabrik		26,474,537	1,989,582	28,464,119	22,133,857	22,565,873	128,6	126,1
515 Pengolahan		7,982,375	134,117	8,116,492	15,254,015	15,441,551	53,2	52,6
Pengepungan		925,429	28,487	953,916	1,103,474	977,727	86,4	97,6
599 Quality Control (QC)		2,220,225	58,613	2,278,838	2,347,238	2,391,056	97,1	95,3
		60,503,867	11,479,433	71,983,300	79,058,256	79,928,028	91,1	90,1
Persediaan akhir gula sisan (-)		0	(2,273,450)	(1,886,455)	0	0	0,0	0,0
Persediaan akhir gula ekonomis (-)		(2,281,540)	(394,998)	(245,903)	(53,867)	(55,570)	456,5	442,5
JUMLAH B1		70,995,561	11,092,525	82,624,171	92,542,161	93,410,230	89,3	88,5
2.TETES								
Persediaan awal tetes (+)		1,284,504	(33,993)	1,284,504	52.554	52.554	2,444,2	2,444,2
Biaya produksi :								
510 Pimpinan dan tata usaha		2,244,729	(113,164)	2,131,565	433,099	433,384	492,2	489,6
510.81 Penyusutan aktiva benda		0	1,837,369	1,837,369	760,143	757,373	241,7	242,6
511 Pembibitan		24,984	0	24,984	27,308	27,208	91,5	91,8
512 Tebu giling		1,827,772	201,252	2,029,024	641,872	652,064	316,1	311,2
513 Tebang dan angkut tebu		1,177,027	209,248	1,386,275	358,496	359,548	386,7	385,6
514 Pabrik		6,097,483	458,230	6,555,713	1,285,736	1,305,780	509,9	502,1
515 Pengolahan		1,838,461	30,888	1,869,349	886,092	893,529	211,0	209,2
518.60 Pembelian tetes milik PTR		0	0	0	0	0	0,0	0,0
599 Quality Control (QC)		511,351	13,499	524,850	136,340	138,359	384,9	379,9
		13,721,807	2,637,322	16,359,129	4,529,095	4,569,245	361,2	358,0
Persediaan akhir tetes (-)		33,993	33,993	(2,284,504)	0	0	0,0	0,0
JUMLAH B2		15,040,304	2,637,322	13,289,044	4,581,649	4,621,799	335,2	332,3
JUMLAH B		86,035,865	13,729,847	97,983,215	97,123,810	98,032,029	100,9	100,0
C LABA/RUGI KOTOR USAHA (A-B)		5,681,806	(13,729,847)	(6,265,544)	34,795,056	34,592,535	(18,0)	(18,1)
D BIAYA UMUM DAN ADMINISTRASI		225,588	0	225,588	0	0	0,0	0,0
E LABA/RUGI BERSIH USAHA (C-D)		5,456,218	(13,729,847)	(6,491,132)	34,795,056	34,592,535	(18,7)	(18,8)
F PENDAPATAN LAIN-LAIN								
✓ Pendapatan Kompos		196,568	0	196,568	1,804,205	1,804,205	10,9	10,9
✓ Pendapatan batubara		0	0	0	0	0	0,0	0,0
Bunga deposito / jasa giro		110,666	0	116,666	80,000	80,000	145,8	145,8
Amplas		538,848	0	538,848	700,000	700,000	75,5	75,5
Pendapatan lain-lain		842,082	0	842,082	2,584,205	2,584,205	32,6	32,6
JUMLAH F		1,688,164	0	1,688,164	5,178,410	5,178,410	15,5	15,5
G BIAYA LAIN-LAIN								
Biaya kompos		182,219	23,739	205,958	1,510,474	1,510,474	13,6	13,6
Biaya batubara		0	0	0	0	0	0,0	0,0
Biaya di luar perusahaan (CSR activity)		815,393	0	815,393	1,957,694	1,984,688	41,7	41,1
JUMLAH G		997,612	23,739	1,021,351	3,468,168	3,495,162	29,4	29,2
H LABA/RUGI SEBELUM PPh (E-F-G) EXCL. RS		5,300,688	(13,753,586)	(6,670,401)	33,911,093	33,681,578	(19,7)	(19,8)
I RAW SUGAR								
Pendapatan		0	0	0	0	0	0,0	0,0
Penjualan gula eks raw sugar		0	0	0	0	0	0,0	0,0
Penjualan tetes eks raw sugar		0	0	0	0	0	0,0	0,0
JUMLAH PENDAPATAN RAW SUGAR		0	0	0	0	0	0,0	0,0
Biaya		0	0	0	0	0	0,0	0,0
Biaya pengolahan gula merah / nira kental		0	0	0	0	0	0,0	0,0
JUMLAH BIAYA RAW SUGAR		0	0	0	0	0	0,0	0,0
JUMLAH I		0	0	0	0	0	0,0	0,0
J LABA/RUGI SEBELUM PPh (H-I) INCL. RS		5,300,688	(13,753,586)	(6,670,401)	33,911,093	33,681,578	(19,7)	(19,8)
K HRG POKOK PRODUKSI PER TON GULA EK. TER		8,685,492	0	10,333,395	6,190,607	6,386,313	166,9	161,8
L HRG POKOK PRODUKSI PER TON TETES EK. TER		1,096,783	0	1,307,584	657,877	658,676	200,3	198,5
M HRG POKOK PRODUKSI PER TON GULA EK. RS		0	0	0	0	0	0,0	0,0

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PABRIK GULA . DJOMBANG BARU

PROGNOSA TAHUN 2012
BIAYA TAHUN INI
 (BERDASARKAN KONDISI PER 31 DESEMBER 2012)

1-Rp.1.000,-

NO PERK	NAMA PERKIRAAN	REALISASI S/D BULAN INI			TAKSASI BULAN YAD S/D DESEMBER			PROGNOSA TAHUN INI			RKO	RKAP	% PROG T		
		FIXED	VARIABLE	JUMLAH	FIXED	VARIABLE	JUMLAH	FIXED	VARIABLE	JUMLAH	TH INI	TH INI	TOT. BPROG	RKO	
515	Penghasilan							0							
515.0	Gaji dsb karyawan tetap	2,070,832	0	2,070,832	34,487	0	34,487	2,105,319	0	2,105,319	2,324,757	2,324,757	2.5	90.	
1	Gaji dsb karyawan tidak tetap (kampanye)	0	1,210,885	1,210,885	0	6,554	6,554	0	1,217,439	1,217,439	1,161,658	1,161,658	1.4	104.	
20	Gaji dsb karyawan tidak tetap (musiman)	0	722,152	722,152	0	0	0	0	722,152	722,152	1,090,629	1,090,629	0.9	66.	
22	Gaji dsb karyawan tidak tetap (KKWT)	0	0	0	0	0	0	0	0	0	0	0	0.0	0.	
30	Rekondisi peralatan dan pengolahan gula														
300	Pembersihan pipa	215,964	176,697	392,661	0	0	0	215,964	176,697	392,661	685,627	760,627	0.5	57.	
301	Kegiatan laboratorium	0	0	0	0	0	0	0	0	0	0	0	0.0	0.	
302	Pemeliharaan timbang	153,085	0	153,085	0	0	0	153,085	0	153,085	213,693	213,693	0.2	71.	
303	Pengolahan gula	0	2,517,529	2,517,529	0	62,500	62,500	0	2,580,029	2,580,029	2,090,221	2,030,364	3.0	123.	
304	Rekondisi & pengelolaan lingkungan hidup	0	979,991	979,991	0	0	0	0	979,991	979,991	970,441	970,441	1.2	101.	
		369,049	3,674,217	4,043,266	0	62,500	62,500	369,049	3,736,717	4,105,766	3,959,982	3,975,125	4.8	103.	
40	Pengemasan, angkut dan timbun gula														
400	Pengemasan	0	2,608,499	2,608,499	0	1	1	0	2,608,500	2,608,500	2,858,835	2,777,558	3.1	91.	
401	Angkut dan timbun	236,518	354,776	591,294	0	0	0	236,518	354,776	591,294	178,303	172,373	0.7	331.	
		236,518	2,963,275	3,199,793	0	1	1	236,518	2,963,276	3,199,794	3,037,138	2,949,931	3.8	105.	

PROGNOSA TAHUN 2013
BIAYA TAHUN INI
(BERDASARKAN KONDISI PER 31 DESEMBER 2013)

1=Rp.1.000,-

NO PERK	NAMA PERKIRAAN	REALISASI S/D BULAN INI			TAKSASI BULAN YAD S/D DESEMBER			PROGNOSA TAHUN INI			RKO TH INI	RKAP TH INI	% PROG THD			
		FIXED	VARIABLE	JUMLAH	FIXED	VARIABLE	JUMLAH	FIXED	VARIABLE	JUMLAH			TOT. BPRD	RKO	RKAP	
515	Pengeluaran															
515.0	Gaji dsb karyawan tetap	2,724,440	0	2,724,440	34,636	0	34,636	2,759,076	0	2,759,076	2,548,770	2,548,770	3.1	108.3	108.3	
1	Gaji dsb karyawan tidak tetap (kampanye)	0	1,535,635	1,535,635	0	0	0	0	1,535,635	1,535,635	1,283,375	1,283,375	1.7	119.7	119.7	
20	Gaji dsb karyawan tidak tetap (musiman)	0	1,582,809	1,582,809	0	0	0	0	1,582,809	1,582,809	1,518,623	1,518,623	1.8	104.2	104.2	
22	Gaji dsb karyawan tidak tetap (KKWT)	0	0	0	0	0	0	0	0	0	26,097	26,097	0.0	0.0	0.0	
30	Rekondisi peralatan dan pengolahan gula															
300	Pembersihan pipa	0	335,122	335,122	0	0	0	0	335,122	335,122	649,716	683,912	0.4	51.6	49.0	
301	Kegiatan laboratorium	0	9,139	9,139	0	0	0	0	9,139	9,139	0	0	0.0	0.0	0.0	
302	Pemeliharaan timbang	0	185,091	185,091	0	0	0	0	185,091	185,091	166,766	175,543	0.2	111.0	105.4	
303	Pengolahan gula	0	2,140,650	2,140,650	0	7,644	7,644	0	2,148,294	2,148,294	1,895,250	1,995,000	2.4	113.4	107.7	
304	Rekondisi & pengelolaan lingkungan hidup	0	1,002,524	1,002,524	0	0	0	0	1,002,524	1,002,524	897,750	945,000	1.1	111.7	106.1	
		0	3,672,526	3,672,526	0	7,644	7,644	0	3,680,170	3,680,170	3,609,482	3,799,485	4.2	102.0	96.9	
40	Pengemasan, angkut dan timbun gula								0	0						
400	Pengemasan	0	1,719,189	1,719,189	0	54,255	54,255	0	1,773,444	1,773,444	2,616,000	2,400,000	2.0	67.8	73.9	
401	Angkut dan timbun	0	446,659	446,659	0	0	0	0	446,659	446,659	348,380	348,380	0.5	128.2	128.2	
		0	2,165,848	2,165,848	0	54,255	54,255	0	2,220,103	2,220,103	2,964,380	2,748,380	2.5	74.9	80.8	



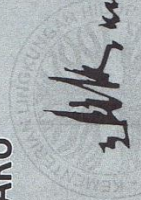
**KEMENTERIAN LINGKUNGAN HIDUP
MENGANUGERAHKAN PENGHARGAAN
PROGRAM PENILAIAN PERINGKAT KINERJA PERUSAHAAN
DALAM PENGELOLAAN LINGKUNGAN HIDUP**



PERINGKAT
BIRU
KEPADA

PTPN X (Persero) PG DJOMBANG BARU

PERIODE TAHUN 2012 - 2013



Prof. Dr. Balthasar Kambuya, MBA
Menteri Lingkungan Hidup





KEMENTERIAN LINGKUNGAN HIDUP
MENGANUGERAHKAN PENGHARGAAN
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PERIODE TAHUN 2011 - 2012



Prof. Dr. Balthasar Kambuaya, MBA
Menteri Lingkungan Hidup



Pabrik Gula Djombang Baru

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E-mail : pg_dbu@telkom.net

Website : www.pgjombang.com



SURAT KETERANGAN

No. : IC-SURKT / 14.001

Yang bertanda tangan di bawah ini Manajer SDM PT. Perkebunan Nusantara X (Persero) Pabrik Gula Djombang Baru menerangkan bahwa :

Nama : LINA ANDRIYANTI
 NIM : 105030200121006
 Fakultas / Jurusan : ILMU ADMINISTRASI / ADMINISTRASI BISNIS
 Perguruan Tinggi : UNIVERSITAS BRAWIJAYA – MALANG

Telah melaksanakan penelitian di PT. Perkebunan Nusantara X (Persero) Pabrik Gula Djombang Baru, dengan judul skripsi "An Analysis of Waste Cost Allocation in a Sugar Manufacture (A Case Study of Environmental Accounting Implementation in Pabrik Gula Djombang Baru)" mulai tanggal 15 Januari 2013 s/d 22 Pebruari 2013.

Demikian untuk menjadikan maklum.

Jombang, 05 April 2014
 PT. Perkebunan Nusantara X (Persero)
 Pabrik Gula Djombang Baru



ABD. BADER BA'LAWI, SE
 Manajer SDM

PT PERKEBUNAN NUSANTARA X (PERSERO)