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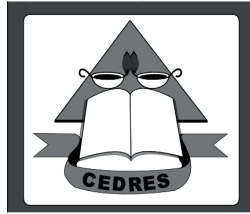
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EDITORIAL

Le premier numéro de l'année 2018 (N°65) présente huit articles et s'inscrit sous l'angle de la régularité et de la qualité. Les thèmes de recherche abordés sont de type variés avec le taux de change, les déterminants de crédit ou encore les relations croissance production manufacturière. Des questions microéconomiques sont traitées telle l'efficacité en micro finance, la vulnérabilité à la pauvreté et les chocs climatiques.

Dans le premier article, **D. ACCLASSATO** (Université d'Abomey-Calavi) mesure l'efficacité technique des institutions micro finance. Par la méthode DEA multicritères, l'auteur montre que le statut de l'institution de microfinance ne garantit pas sa réussite sur le marché.

A. CHIAPO (Institut National Polytechnique Félix Houphouët-Boigny) dans le second article fait une revue de la question d'efficacité technique pour l'agriculture contractuelle. Il énonce la théorie de l'efficience X et celle des contrats comme fondements théorique de la question. L'auteur comme outil de mesure les modèles frontières de production et les modèles a variable dépendante limitée.

Le troisième article d'**Antoine YERBANGA** (Université Ouaga2) analyse la stratégie dominante dans un jeu ou les politiques de lutte contre la corruption, de mobilisation des recettes et des dépenses publiques sont différentes stratégie devant conduire à la recherche d'un optimum.

Abdou-Fataou TCHAGNAO (Université de Kara) met en balance les effets d'importation de l'énergie aux effets d'incorporation sur la croissance. Il montre que les effets positifs d'incorporation l'emportent sur ceux négatifs d'importation pour un pays exclusivement dépendant des importations.

Le cinquième article de **Salamata LOABA** (Université Ouaga 2) traite de l'effet de la structure du marché bancaire de l'UEMOA sur le risque de crédit. L'auteur montre que la faible concurrence sur le marché bancaire induit une hausse sur le risque de crédit.

Lassana YOUNGBARE (Université Ouaga 2) dans le sixième article fait une analyse des effets des régimes de change fixe, intermédiaire et flottant sur le niveau de l'inflation en Afrique subsaharienne. L'auteur approfondit son analyse par une comparaison des effets intra et inter régime de change selon les quantiles d'appartenance.

Dans le septième article de ce numéro, **Jérôme Ballet et al.** passent en revue la responsabilité environnementale pour l'entreprise minière. Les auteurs analysent la pertinence du principe de compensation au regard de son caractère inclusif.

Habi KY (Université Ouaga 1) et **Sandrine DURY** (CIRAD) identifient les déterminants de la diversité alimentaire en milieu rural. Les auteurs mettent en avant comme résultats l'efficacité technique comme un déterminant fondamental.

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Directeur de Publication

Corporate Environmental Responsibility of Mining Industry in Madagascar : A Case study

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Abstract

The mining sector is subject of criticism but also progresses in environmental responsibility. In some developing countries, a framework is established around a compensation principle. We study, in the case of Madagascar, a mining project and the implementation of this principle by using a case study methodology. We show that this principle is inadequate because it does not take into account reactions of populations with respect to the companies' actions. The population began to deforest after the mining project began. Consequently we argue for a stakeholders approach, in the logic of the ethics of care.

Keywords: Ethics of care, Corporate responsibility, Mining sector, Madagascar.

1. Introduction

During the last decades, Madagascar has experimented a considerable increasing in mining industry because it is a key sector for the development of the economy (Reed, 2002). Since 2000, rules and regulation are favourable to obtaining mining licences. In the same time, the government launched a conservation strategy for Nature. This double thrust creates interferences between environmental protection and mining development. As a result, the State department of Energy and Mining were to defining exclusion areas for mining exploitation. The *Commission interministérielle des Mines et des Forêts (Mines and forest Commission)* was also created in 2004, with the role to prevent overlapping areas for the mining sector and areas for the protection of Nature.

Meanwhile, in spite of these arrangements, mining concessions overlap protected areas for Nature for 33% (Cardiff and Andriamanalina, 2007). This illustrates the conflict between the need to exploit natural resources and environment protection. The lack of efficient policy framework to solve the conflict reinforces the importance of the mining corporate responsibility towards environment, especially because environmental impacts of the mining sector are significant (Walker and Howard 2002; Hamann and Kapelus 2004). This is true for precious stones (Duffy, 2005), graphite exploitation (République de Madagascar, 2003) or others mining exploitations (Friends of the Earth, 2004).

Meanwhile, obvious changes have taken place in this sector in recent years (Jenkins and Yakovleva 2006). And studies have already analysed how mining companies' strategies do cater for local population into their projects (Kapelus 2002; Hamann 2004). In Madagascar, base on the category of licence, the law makes provision for mining companies to conduct an environmental impacts survey⁴. Base on the results of the survey, monetary compensations and transferred are made to organisations for environmental protection and/or to local communities.

Nevertheless, do such compensations are they sufficient to frame responsibilities of the mining companies? In particular, monetary compensations do not take into account changing

⁴In application of Order no. 99-954 dated 15 December 1999 concerning the Compliance of investments with the Environment (*Mise en Compatibilité des Investissements avec l'Environnement* (MICIE)), amended on 3 February 2004 by Order no. 2004-167 (art.4): "any implantation or changes in arrangement, work or studies likely, by their technical nature, or contiguity, or by their dimensions or the sensitivity of the context of their environment of their implantation, to have harmful consequences on the environment are subject to a study of their environmental impact before any work commences".

behaviours of local community members regarding the environmental protection. The economic literature has already underlined that the effectiveness of monetary incentives could encounter unexpected behavior (Gneezy and Rustichini, 2000), that behaviors are socially contingent (Nyborg et al., 2006), and more generally that an external intervention through monetary incentives or punishments may undermine intrinsic motivation (Frey and Jegen, 2001). As a result, monetary compensations are drawn in a logic of rights, which is very insufficient to face real issues of environmental protection. In our case study, we would like to highlight that local population change in behavior towards environmental protection is due to the mining companies' behavior. The perception of local population about the need for environmental protection is affected through mining companies' action. Following Siggelkow (2007), a case study can be used to illustrate a theoretical hypothesis. Our theoretical hypothesis is that the last perception of individuals towards environmental protection is negatively affected by the mining companies' behavior even if they have paid compensations. Our study has confirmed our theoretical hypothesis therefore we give credit to a reinterpretation of the stakeholders approach developed by Wicks et al. (1994) and Buchholz & Rosenthal (2005). Corporate responsibility must then be situated in a relation with community members, taking into account their potential effects on behavior. Relations between stakeholders cannot be resolved through a compensation mechanism. Corporate responsibility implies an ethics of care beyond an ethics of justice.

The paper is structured as follows: section two, presents the context, area and the study methodology; while section three elaborates mining project evolution and the monetary compensation mechanism; section four describes the results and section five is a discussion; section six is a conclusion.

2. Context, area of the study and methodology

Context

Madagascar is ranked 154th out of the 188 countries on the Human Development Index (UNDP 2015). In total, 76.5% of the population lives on less than US\$2 per day (INSTAT, 2010). In this context, companies involved in development projects have a huge responsibility to meet the expectations of the population and the government. As a result there is the trade-off between these expectations and the dependency on foreign direct investment to promote Madagascar development (Cocks 2005). In the late 1990s, the Government of Madagascar launched a poverty reduction strategy paper to promote growth and alleviate poverty. Foreign

direct investments were the cornerstone of this strategy (Sarrasin, 2006). Growth policy is conceived as a way to reduce poverty while reducing environmental degradation. Indeed, losses of forest surface and biodiversity are blamed on the local populations, due in particular to low agricultural productivity that reportedly forces them to constantly seek more land to farm and hence to stray into and clear forest areas (Cleaver and Schreiber 1998). Growth policy is then perceived as a mean to break a vicious circle of poverty-environmental damage by enabling people to find jobs on major projects financed by this foreign direct investment. This is the argument routinely presented to national governments by international funding institutions such as the World Bank and companies seeking to invest. This policy design creates a central space for the social responsibility of foreign corporations. Then corporate responsibility-driven development framework has been applied to the mining sector. The World Bank, with Malagasy government approval, has made the mining sector in Madagascar the key instrument for Integrated Growth Pole programme (Mission Economique de Tananarive 2007) in regions with good mining potential. Integrated Growth Pole programme are development programmes based on leading industries in each region. They aim to produce regional development which, multiplied in each region, is supposed to produce national development. The mining sector generates only a small proportion of national wealth, 4% of the GDP, but the Malagasy development plan hopes it represents for the future 30% of the GDP (Plan d'action Madagascar 2007–2012). Our case study therefore focuses on the mining sector and in particular on one of the largest ongoing projects in the mining sector.

Area of the study

The project we analyze is that of the company Sherritt Ambatovy. This is a nickel and cobalt mining project in the town of Moramanga, in the center of Madagascar. Specifically, we do not analyze the mine site itself, but the construction of a pipeline carrying crude ore from Moramanga to the port of Toamasina, capital of the Atsinanana region in eastern Madagascar. This pipeline goes through the town of Andasibe. It is the passage on this town we have chosen to analyze. The reason for this choice is related to the characteristics of the city of Andasibe.

Andasibe is located at 138 km east of Antananarivo, the capital of Madagascar. It was one of the first town of Madagascar benefiting from the implementation of a resources conservation program set up since the time of the colonial period. Andasibe has two protected areas which are the Special Reserve of Analamazaotra and the National park of Mantadia. Basically, according to the Development Plan of the town (Commune rurale d'Andasibe, 2007), these

two protected areas occupy a surface of 8,312 ha (810 ha for the special reserve and 7,502 ha for the national park). The two protected areas are managed by Madagascar National Park⁵. They comprise more than one thousand of species of fauna and flora, with a very high rate of endemism, close to 77%. Only for the orchids, the species are 140. For fauna, there are 14 species of lemurs, 113 species of birds, 53 species of reptiles, 260 species of insects and 81 species of Amphibians. The rate of endemism is very high for certain species like the Amphibians (80%) or the lemurs (100%) (Holloway, 2000).

Thereby Andasibe is one of the main destinations for tourists of nature or ecotourists and is in the third place of the protected areas of Madagascar most visited by the foreigners (ATW, 2009). This site constitutes also an important area for local tourists and plays a major function in teaching environmental protection by the frequent visits of school children classes. In fact, in 2006, the number of local visitors was higher than that of foreigners. While gathering local and foreign visitors, Andasibe is the second most visited site of Madagascar (Ministère de l'Environnement et des Forêts,). Part of the entry fees to the protected areas (50%) belongs to the municipality of Andasibe and must be used for micro projects funding.

However, like other rural areas in Madagascar, the agricultural sector dominates the economic activities of the municipality. For food crops, as for almost all rural areas of Madagascar, rice cultivation, whether on sleazy areas or slash and burning (or *tavy* according to its local name), is the most widespread. It occupies about 90% of the cultivated area. There are also other crops such as sugar cane, coffee, bananas. The practice of *tavy* for rice cultivation, however, represents a major risk of damage to forest protected areas (Aubert et al., 2003)⁶. Two major points are to be considered here: first, rice remains the basic food for the population as for virtually all Malagasy and its culture is practiced by almost all households; secondly, in terms of area, protected areas occupy an important place, which reduces the area available for agriculture. The arable land covers an area of 3996.55 ha (Commune Rurale d'Andasibe, 2008) for a total municipality area of 363 km², that is to say a cultivable surface which accounts for only 11% of the entire surface of the town. It should be noted that the rural town of Andasibe is in a fairly mountainous area where there is not much sleazy lands. The practice

⁵ Called in the past National association for the Management of Protected areas (ANGAP), MNP is a parastate structure which is charged to manage the protected areas of Madagascar

⁶ This practice does not of course explain the phenomenon of deforestation and must be put in perspective with the socio-economic context where it is exerted; see for example: Green and Sussman (1990), Jarosz (1993), Ganzhorn and Al (1997), Kull (2000), UNDP et al (2000), Moser (2006), Seagle (2010).

of *tavy*, although essential for the survival of the population of that locality, is a major risk for the sustainability of forests and protected areas and the resources they contain.

To avoid encroachment of agriculture on protected areas, and according to the framework of the law GELOSE⁷, five natural resource management contracts⁸ were implemented throughout the rural municipality of Andasibe, representing a total area of 12 930 ha. These 12,930 ha are added to the 8312 ha of the special reserve and the national park. These surfaces surround the special reserve and the national park. Local people are involved in the management of these areas. The purpose of these agreements is clearly to prevent an encroachment takes place on protected areas. However, areas devolved to the natural resource contracts exercise themselves pressure on opportunities for culture. In this context of vulnerability of population, we analyze the impact of the pipeline passing over the population behaviors.

Methodology of the study

The study was conducted in three stages. The first stage involved an initial contextualization based on secondary information (Communal Development Plan, etc.). This first step was to obtain historical information about the town. The second stage involved the actual survey. The latter was carried out by immersion on the site for a period of one month (October 2009). Interviews with local officials and key conservation actors on the site (Mayor of Andasibe, head of *fokontany*⁹, person in charge of associations, etc.), as well as numerous discussions with local people, helped us to collect qualitative information. In total 50 formal interviews were conducted. To the extent that the objective was, firstly to get some historical information about the area and secondly to have an idea of the perception by the population of the current situation and problems related to the conservation of natural resources, a semi-structured interview guide was developed. The aim was to collect mainly qualitative information. Verification of information by visual observations was made when necessary, by moving to the site. After clarifying the information, a third stage of the study, a second mission on the

⁷ The law GELOSE is a law on local safe management of natural resources and land tenure. According to the 96-025 of September 30th, 1996 act, the local populations being member of an association become the local based communities (CLB or VOI for Vondron' Olona Ifotony in Malagasy) with which the Central government through its decentralized engineering services can draw up contracts allowing to transfer management from certain natural resources. The drawn up contracts also allow the decentralized territorial collectivities to intervene which marks the decentralization policy forwarding steps.

⁸ They are the natural resource management contracts regularly indexed at the level of the Regional constituency of the Environment and of National Forestry Commission (CIREEF) of Moramanga. Those which have not yet fulfilled the legal requirement were not taken into account yet.

⁹ The *fokontany* is the smaller territorial administrative unit. A commune can thus contain several *fokontany* which is almost quarters.

site was carried out in order to supplement (in January 2011) and to bring up to date the information collected at the time.

3. Mining in the town

The goal of this part is to draw up an inventory of the mining history of the area we study. The mining past of the town is important in our analysis because people are actually accustomed to mining. We therefore can not interpret their reactions to the new mining project as a simple reaction to new project coming from outside. Instead, we must understand their reactions to that specific mining project and not as a rejection of mining projects in general. Mining in the town is marked by two distinct periods. In the first period, from the 1940s to the mid 2000s, graphite mines played an important role. In the second period, the collapse of the graphite mines was offset by the passage of the pipeline for the exploitation of cobalt and nickel.

An important mining past

Andasibe is, because of geological formations, rich in graphite. This ore is mined in the town for many years. The company Arsène Louys began operating the graphite during the colonial era, since 1940. The same year, the establishment René Izouard started its graphite extraction. Until 2005, on average, the company René Izouard operated 1.200 tons/year and the company Arsène Louys 5-6 00 tons/year. The activity of these companies declined sharply from 2006. Due to the extraction of graphite, a high demand for labor was felt and many people migrated into the area from the perspective of getting a job in one of the two companies. In 2005, the company Arsène Louys employed 150 people of the municipality, while the company René Izouard employed 250 people.

Mining has played a major role in economic and social development of Andasibe, not only through the jobs and training that was provided but also through taxes that the town could take. Thus in 2003, the municipality has received 548.656 ariary¹⁰ of mining rights. According to the mayor, this is the last year that the town has benefited from the mining rights. Mining has gradually entered into crisis. The drop in the price of graphite at the global level and competition from China¹¹, have destroyed the mining industry in the region. The company Arsène Louys has significantly reduced its activities since 2006. The company René

¹⁰ 1 US\$=2500 ariary

¹¹ According to an interview with a manager of the company Arsène Louys.

Izouard also sharply reduced its activity. From 250 employees, this last company has declined to 14 employees in September 2009. In 2010, the two companies have completely closed their door. However, the majority of unemployed workers now work for the company Sherritt Ambatovy, as part of the construction of the pipeline carrying crude ores of nickel and cobalt. Also, at the time of our case study, most of the employees had found new jobs.

The pipeline for nickel and cobalt and the monetary compensation

The passage of the pipeline project we study began in early 2004. The company Sherritt Ambatovy, at that time DYNATEC Corporation, started the feasibility study of the nickel and cobalt mining project in the district of Moramanga. This project extended its mining footprint to three rural communes for the passage of the pipeline, namely Ambohibary, Andasibe and Morarano. After the positive conclusion of the results of the study in 2007, infrastructure construction has begun. The first phase consisted in the construction of a pipeline carrying crude ore. As noted above, a large part of the employees of Rene Izouard and Arsene Louys companies were hired by the company Sherritt Ambatovy, which reduced the economic stress on these households.

As required by the legislation, an impact study was carried out and compensations have been defined for people suffering damage. In particular, landowners where the pipeline passes received monetary compensation by the project for their expropriation. At the time of our surveys, only one land conflict persisted, on a parcel, subject to a reforestation program belonging to an environmental preservation association, the association Mitsinjo. For all other owners, no land dispute was reported. This suggests that compensation mechanisms were sufficient in the eyes of the owners.

Beyond the monetary compensation related to expropriations, “visible” environmental damages were compensated. It should be so for cut forest areas. As such, a local association of environmental conservation, the VOI Tarata, received monetary compensation for the pipeline passing through a forest area for which the association could have received funding for an alternative reforestation project. This association was indeed engaged in a reforestation project. With the passage of the pipeline, the project was abandoned and the association was compensated for the loss of earnings it would have received with the implementation of the reforestation project. Although differences of opinion between the members exist on the effective use of this monetary compensation, the amount of compensation is not the subject of litigation.

The monetary compensation provided by the company Sherritt Ambatovy is certainly not without critics. In particular, many immediate effects were felt on the environment, such as water pollution and the destruction of rice paddies by burying sludge carried by the pipeline. Given all these elements, although they are still problems (pollution has not been fully compensated, land dispute persists) the compensation mechanism seems to have leveled the risks of injustice that might have been feeling the populations.

4. The effects of the pipeline on villagers' behavior

Despite the monetary compensation that seems to satisfy all people concerned, the mining project of the company Sherritt Ambatovy poses a major problem. It has changed the behavior of the villagers. Since the start of the construction work for the passage of the pipeline, the villagers have revived their culture practice of slash and burn (*tavy*) by encroaching on forest areas. From our interviews we decipher the reasons for this change in behavior.

As we have pointed out, the municipality of Andasibe is very oriented towards the preservation of the environment, from which it derives significant financial resources, including the entry fees in the national park and the special reserve that are on the town. As we also indicated, in the town, five local associations are at work for managing natural resources and involve many villagers. Since the 1996 law, many efforts have also been made in this county to improve the preservation of the environment, with the participation of the population, and at the time of our investigations, a reforestation project was in place, with an important benefit for local people who participated in this project. Lands for reforestation benefit from payment for environmental services¹². And during our interviews, all interviewees stressed the importance of preserving the environment.

¹² In 2004, a project called TAMS or Tetik' Asa Mamody Savoka (project of restoration), financed by the World Bank, was initiated by the ONG Conservation International with the support of the Tourism, Forest and Environment Department to restore the natural forest of the forest corridor Zahamena-Ankeniheny, more precisely on the periphery of the Mantadia national park. In 2005, this project was taken again by ONG Tanimeva, and management was delegated to the National association of Environmental Actions (ANAE) starting from 2007. After a phase of development, the project of reforestation started in 2006. In the rural district of Andasibe, seven organizations (also called facilitating agents) ensure this activity of reforestation and engage the local population to take part in the project, namely association MITSINJO, association AGA (Association of the Guides of Andasibe), the SAF/FJKM (Sampan' Asa Fampandrosoana/Fiangonan' I Jesosy Kristy eto Madagasikara), the association of the experts and the consultants within the Faculty of Science at the university of Antananarivo, Ecophysiology (ECOPHI), ONG the Man and the Environment (MATE), the GERP (Group of Study and Research for the Primates of Madagascar), the foundation Natur und Artenschutz in den Tropen (NAT) and also Madagascar Park National.

However, the mining project has damaged this preservationist vision. The mayor of the municipality, representatives of local associations, but also other respondents, all emphasized that the sense of injustice was formed between the project that was "allowed" to destroy large areas of forest and local people who can not even make *tavy* for survival. People no longer understand why so much effort is required of them to protect the environment, while a foreign company in a relatively short period of time, caused substantial and visible environmental damage. The feeling was so developed that differentiated treatments exist depending on the economic and political power. In other words, the idea of preserving the environment for the common good has little meaning in this context, which inevitably affects the perception of the villagers on the usefulness of conducting conservation actions.

The compensation principle can not change that. It is not at issue. It is simply not adapted. He played his role in the monetary compensation for the people who have suffered harm, but it can in no way affect the perception of the people on the need to preserve the environment. As we noted earlier, "visible" environmental damages were offset by monetary compensation at a local natural resource management association, and the amount of compensation is not subject to dispute. The problem dwells in the difference of treatment which are subject the populations and the firm vis-à-vis the constraints of environmental conservation. Environmental preservation efforts have been requested for many years to people. And these people have the impression not only that similar efforts are not charged to firms, but more than their efforts were useless, since a company reduces their efforts to nothing to develop a project in which it will derive the benefits.

If the population feels a difference in treatment, it also boasts especially equal responsibility. This is not so much the issue of rights which is at stake, as the respective rights were respected. However, responsibilities are not symmetrical. The responsibilities are not a simple corollary of rights. They cover a more diffuse object which is the common good. The financial compensation does not take into account this common good. As unique way of license to operate, the financial compensation does not allow to cope with spillover effects on the behavior of the local population induced by the difference in treatment in favor of mining companies. The ethical legitimacy of the activities of the companies is not a matter of rights and justice. It also includes how companies manipulate the environment and the mutual perception of the company and its social environment (Sethi, 1979). Behind the concept of license to operate, there is the idea that mining companies are not just economic structures but also social entities and must exercise their responsibility to the common good, manifesting through social expectations of equality of environmental responsibility. The issue is

behavioral. Financial compensation should be a means to compel mining companies to behave responsibly. Financial compensation, as an ethic of justice did little incentives to go further in the pursuit of a fair environmental responsibility in the eyes of the people. The feeling of injustice is therefore not about the rights as such, but about the responsibilities.

Because people perceive asymmetrical responsibilities with the firm regarding the preservation of the common good, they also release their responsibilities. Our interviews show that, in such a context, people abandon their responsibility and challenge to clear forest areas for agriculture, thus ruining many years of efforts.

5. Discussion

Such an effect would certainly have been reduced if the firm Sherritt Ambatovy had established a more personal relationship with the local people. If it had shown its concern for the environment, while explaining the technical constraints. The challenge in this case study is based on mutual understanding of responsibilities that have priority over the rights. In fact, rights are not the base of responsibilities in our case. It is rather the responsibility that underpins rights.

The compensation principle is based on a conception of justice in terms of rights. Rights of local people to be compensated. This principle is quite in line with much of contemporary moral theories, in the sense of Anscombe (1958), but also with economists compensation principle (see eg Kaldor, 1939; Hicks, 1940; Arrow, 1951; for origins). Stocker (1976) however stressed that contemporary moral theory leads to the promotion of a petty or schizophrenic moral life; precisely because it forgets that individuals are not atoms with rights, but beings in relationships with each other. The ethics of care (since Gilligan, 1982; and Tronto, 1993; among others) also emphasized that ethic of justice based on the rights does not solve many conflicts of rights and was particularly inadequate in many concrete and ordinary situations. As Baier (1985) says, in many situations, morality can not be reduced to a moral theory which would be based on justice

Our case study perfectly illustrates this issue and highlights the indispensable need to take into account the reactions of individuals to situations. Indeed, despite the overall compensation that seems fair for the people who have suffered damage, the project has affected the perception of environmental conservation by the population.

Such an effect is possible because the stakeholders continue to be thought in an atomistic individualism framework. And the compensation principle is generally based on the idea that

individuals are motivated by their interests alone rather than by intrinsic motivations related to the care and responsibility (Salzman, 2005). But the relational aspects are crucial. Wicks et al. (1994), Buchholz and Rosenthal (2005), in line with the ethics of care, have stressed the need to develop the relationship between the company and its stakeholders, not as a relationship of separate entities, but as a whole composed of related elements.

What illustrates our example is that the failure to take into account relational implications leads to neglect the reaction effects of stakeholders vis-à-vis the company's actions. In this case, treating the stakeholders as mere entities outside the company, just answering them in respecting their rights, neglects their need for recognition and efforts they are willing to do. Fraser (2000), Honneth (1996), Fraser and Honneth (2003) emphasized the incompleteness of theories of justice. They point out that the focus on the rights and the issue of redistribution leaves out an essential element which founds the good-living together, i.e. recognition. Our case study emphasizes that this oversight is harmful because it leads to reactions of people who do not feel recognized or whose efforts are not recognized. And that's the whole identity of the company that is affected.

6. Conclusion

Our case study emphasizes that ethics of rights-based justice is not suitable. It does not solve some fundamental practical problems. In particular, a compensation principle is not sufficient to address the effects induced by certain projects on people's behavior. In such circumstances, we can bet that a procedure for discussion and explanation with the population on the importance of the mining project, which would have put into perspective the role of both the project and the importance of the environment, and the technical constraints facing the project, would certainly greatly reduce the feeling of the people of different responsibilities. This procedure does not need to refer to an ethics of discussion in the strong sense (Habermas, 1981; Appel, 1992) but might settle for an ethical forum (Elster, 2003) in which a particular focus would have been on the mutual concern for the environment and recognition of the efforts of stakeholders.

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