Environmental justices and injustices of large-scale gold mining in Ghana: a study of three mining communities near Obuasi

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Over the last decades, mining sector reforms in Sub-Saharan Africa have created a favourable climate for foreign investment. The reform in the eighties focused on the withdrawal of state involvement, mainly, the privatization of state-owned large-scale minerals operations and deregulation (Campbell 2003a). Under the advice of the World Bank (WB) and the International Monetary Fund, the focus of the nineties was legislative and institutional "capacity-building"(Campbell 2003b). The reforms were well-defined in two WB documents: the 1992 "Strategy for African Mining" and the 1998 "Assistance for Mineral Sector Development and Reform in Member Countries". The government was recognized as a key stakeholder in minimizing political, geological, and economic risks. After a decade of reforms, foreign investment in the minerals sector in Africa increased from $200 billion in 1993 to about $1.2 trillion by 2000 (Frick 2002).

These attempts to "re-regulate" the state prioritized attracting foreign investment above all (Campbell 2009). Several consequences of these "re-regulations" are identified. First, the contribution of mining to sustainable development strategies, given that the mining sector is characterized as an "enclave", where foreign linkages exceed domestic linkages (Bush 2009, Larsen et al. 2009). Second, states are unable effectively to monitor or to enforce norms and standards due to financial and technical constraints (Campbell 2003b, Glazewski 2003). One major concern surrounding large-scale mining operations is the impact on the livelihoods of local communities and the environment. In recent years, grievances have arisen due to competition over resources between the mining companies and the local communities in the surrounding area (Carruthers 2008, Moloi 2003, Hilson 2002a, Bush 2009). There has been a competition over land and water particularly between subsistence-farming communities and large-scale operations.

To assess the environmental and social impact of large-scale gold mining (LSGM) in the case of Ghana, I have employed a theory of justice. Various scholars (Schlosberg 2007, Dobson 1998, Young and Hunold 1998) have demonstrated the usefulness of examining the disproportionate distribution of environmental burdens on certain groups in society as a matter of justice using theories of social justice. This method has been applied by some authors (Urkidi and Walter 2011, Urkidi 2011, McDonald et al. 2003) to evaluate community mobilization and social movements grounded on "environmental justice" and "environmentalism of the poor" to combat environmental "injustices". However, I will use theories of social justice, as referred to by McDonald (2003) as a "negative" employment of environmental justice, which employs the theory of justice to identify the types of grievances communities face.

I have selected a communitarian theory of justice for four reasons. First, communitarian theory re-imagines the traditional categories of justice of liberal theory (distributive and procedural justice) by paying attention to local understandings of distribution and procedures. Secondly, communitarian theory treats procedural justice as bifocal or inseparable from participation. Thirdly, communitarian theory uncovers the structural causes (recognition) of distributive and participation-based injustices that confront mining communities. Fourth, communitarian theory can explain how procedural justice can be accompanied by distributive

and participation-based injustices through the consideration of recognition. While liberal theory offers but two categories to evaluate justice (distributive and procedural), a communitarian approach provides four categories (distributive, procedural, participation, and recognition) of analysis.

Based on primary fieldwork conducted in Ghana in 2012 and the analysis of recent legislations (primarily the Mines and Minerals Act of 2006 and the six subsidiary regulations of 2012), I will argue that the three communities of Kokotenten, Nhyiaeso, and Dokyiwaa situated near the AngloGold Ashanti's (AGA) LSGM operation in Obuasi suffer from distributive, procedural, participation-based, and recognition-based injustices. I will demonstrate that the recent legislative changes in Ghana are deemed 'procedurally just' under a Rawlsian account but fail under Miller's criteria for procedural justice.

Using Fraser's (1995a, 1995b) distinction between affirmation and transformation, I will explain that distributive, participation-based, and recognition-based injustices persist despite recent legislations to re-regulate the minerals sector, because these legislations are affirmative. Affirmative policies focus solely on redistribution, where the underlying cultural, political and economic structures that create inequalities are unchallenged.

Social Justice Theory and the Evaluation of Environmental Grievances

By providing brief summaries of Rawls, Dworkin, Miller, and Barry's conceptualization of liberal justice, two analytic categories to evaluate justice are developed. These categories will be used to assess the environmental impact of LSGM in Ghana. By representing the variations in liberal theory, I will derive a more comprehensive liberal approach to procedural and distributive justice.

In *A Theory of Justice* (1971), Rawls presented a systematic alternative to utilitarian and intuitionist theories of justice. Rawls' justice as fairness provides a framework to evaluate existing social institutions in terms of procedural and distributive justice. Procedurally, just institutions ought to treat all individuals equally. Instead of evaluating a society on the basis of equal distribution (outcome), Rawls focuses on formal equal opportunity (procedures) (Lamont 2013).

Many liberal theorists such as Dworkin, Miller, and Barry have contested Rawls' position on procedural equality regarding the distribution of resources. Dworkin criticizes Rawls' treatment of equality as "flat" because he fails to distinguish expensive tastes from natural misfortunes (Young 2001: 5). Dworkin proposes his theory of liberal equality, which is more consequentialist than procedural (Dobson 1998). Dworkin's theory is ambition-sensitive and endowment-insensitive, and "redeems" liberalism by treating the equality of resources as the base of justice (Vujadinovic 2012: 2). Dworkin argues that Rawls' treatment of distributional equality as procedural is insufficient, especially with issues of natural disadvantages (Dworkin 1981).

Miller contributes to the clarity of a liberal theory of justice in two ways (Miller 1997, 2002). First, he argues that there are two conceptualizations of equality: distributive and social equality. The first equality does not concern distributive equality but has distributive consequences; Miller is speaking of equal opportunity and equal status as citizens. The second equality refers to the distribution of goods. Miller (1999) stretches Rawls' and Dworkin's notion of distributive goods by including environmental "goods". He treats

environmental goods and bads as directly tied to other primary goods, such as health and education. Environmental goods fit perfectly under the Rawlsian definition of a primary good, for a good is "that which every rational man is presumed to want" and "normally have a use whatever a person's rational plan for life" (Rawls 1971: 62). An environmental "bad" is something that can be distributive and is harmful to human life. Pollution is seen as a burden while having access to clean water free of pollution is considered a benefit. Environmental goods and bads can be interpreted as social benefits and burdens. Miller concludes that the distribution of environmental goods, in addition to traditional liberal accounts of primary goods, is inherently a matter of social justice.

Miller (1999) and Barry (1997) suggest that distributive justice concerns future distribution or intergenerational distribution. Miller claims that the environment is valued based on human claims as opposed to a position that grants nature an inherent value. Barry suggests that "sustainability" or the preservation of environmental goods for future generations is a human matter when framed in the following light: there is a value that ought to be maintained into an indefinite future if it is within our power such that future generations may pursue a specific life, regardless of changing preferences (50-1). Broadening the scope of liberal justice theory, Barry and Miller are able to clarify the types of goods that fit into the framework of distributive justice.

If we synthesize the aspects of justice into an evaluative framework, two components are drawn: procedural and distributive justice. Procedural justice will be based on Rawls' two principles and Miller's four criteria of fair procedures for fairer outcomes. Its applicability to LSGM is evident. For instance, the existence of courts and legislation regulating mining activities guarantees that all individuals are able to have access to legal protection if necessary. Distributive justice, based on Dworkin, Miller, and Barry, has two components: contemporary and intergenerational distribution. Because Miller and Barry have extended distributive goods to include environmental goods, they have facilitated a measurement of the environmental impact of activities in a society.

The Communitarian Inclusion of Recognition and Participation-Based Justices

Although communitarian theorists criticize liberal accounts of justice, communitarians do not propose a grand communitarian theory to be adopted in place of liberal theory (Bell 2012). Communitarians offer alternative ways to re-imagine procedural and distributive justice (Walzer 2006) based on communitarian ontology of the person and groups (Young 2011, Sandel 1982).

If we accept the communitarian assumptions of the ontology of the person and community, then the categories of justice under a liberal framework would be insufficient. I will explore three contributions of communitarian theory to existing theories of social justice: the existence of structural inequalities under procedurally neutral institutions, the need for recognition-based justice, and the role of participation-based justice.

Young (2011) and Fraser (1995) discuss the possibility of oppression in social institutions that only attend to individual freedom. While neutral state institutions have good intentions, they contain systemic forces that compel unfair distribution due to social patterns of representation (Young 2001). Social structures, or "rules and resources, recursively implicated in reproduction of social systems" (Giddens 1984: 13), produce and reproduce cultural norms that can be biased. These norms can be institutionalized in the economy and

the state, thus influencing distributions in the public sphere and in the everyday (Fraser 1995). These structures produce inequalities in terms of cultural valuation are embedded in the political economy.

The lack of account of structural inequalities in liberal theory gives rise to the two communitarian accounts of injustice: recognition-based and participation-based. The need for recognition-based justice stems from the existence of misrecognition, or degradation and devaluation at the cultural and individual level that may lead to distributive injustice (Schlosberg 2007). Injustices from misrecognition are tied to institutionalized inequity that is based on the practice of cultural domination (Young 1991, Fraser 2001), where the misrecognized group lacks confirmation of worth (Honneth and Margalit 1992).

Another injustice stemming from structural inequalities is the impediment to participation. While liberal accounts of procedural justice assume participation, communitarian theorists argue that participation is hampered by distributive and recognition-based inequities, leading to exclusion (Young 2011). Distributive inequalities and institutionalized misrecognition inhibit participation in decision-making processes. Since the lack of active public participation deprives a person or a group an opportunity to demand political recognition and distributional equity, a disadvantaged group that is barred from participation cannot challenge structuralized inequalities. These obstacles can be purely distributive, even if there are procedural rules that allow for active participation (Fraser 1998). Contrasting liberal procedural justice, communitarians demonstrate that having procedural justice does not entail actual participation.

While communitarians do not reject the merits of distributive and procedural justice established by liberal theory, they would argue that injustices must not be reduced to distribution alone. Communitarians demonstrate that justice is "bivalent" and need both cultural-valuational and political-economic structural changes to remedy injustices (Fraser 1995). To assess the environmental impact of LSGM in Ghana, the additional two categories will flesh out the exact source and types of injustice faced by the communities.

After considering both liberal and communitarian accounts of justice, I will use the four categories of analysis to assess the impact of LSGM in Ghana:

1. Distributive Justice

Distributive justice concerns the distribution of goods. Drawing on Dworkin, Miller, and Barry, distributive justice fundamentally questions how society distributes benefits (freedoms, opportunities, resources) and burdens (risks, costs). Distributive justice would consist of evaluating the distribution of environmental goods and bads, including potential bads from LSGM. This will be weighed against the potential social goods that come with LSGM, such as formal employment, physical infrastructure, and development of the economy.

Although assessing the distributive aspect of environmental hazards seem to provide a clear indication on the type of environmental impact (see Carruthers 2008 on uneven development and urban disparity in South Africa), there are two limitations to using distributive justice as an evaluative framework. First, while an evaluation of distribution of environmental and social goods and bads can be quantified, for instance, through measuring the exposure of communities to mercury, Walzer (2006) suggests that distribution is socially interpreted as well. Distribution ought to be assessed in absolute terms (e.g. mercury contamination in water

sources) and in terms of the social meaning and understanding (e.g. how people perceive the distribution). Second, as Young and Hunold (1998) cautions, those who are situated near environmental hazard sites may suffer exclusion from discussions about siting (issues of participation). They argue that focusing on distributive equity assumes the institutional structures as given without necessarily looking at the structural causes to maldistribution. The inclusion of how affected persons perceive the meaning of the distribution of hazards has been employed in Tschakert and Singha's (2007) study of mercury contamination in galamsey (artisanal mining) in Ghana.

Based on this understanding of distributive justice, three areas will be addressed. First, the contemporary distribution of environmental and social goods and bads in the communities around Obuasi, including the intergenerational legacy of existing environmental bads will be examined. Second, I will posit whether those who suffer from environmental burdens are receiving the social goods such as employment and opportunities that come from LSGM.

2. Procedural Justice

Procedural justice is defined as fairness in decision-making processes and at deriving outcome distributions (Tyler 1987). There are two components to procedural justice: fairness in institutions and fairness in trials. Rawls (1977) refers to former as the basic structures or social institutions, where the two principles of justice are satisfied. Laws and institutions must treat each person fairly and equally, without preferential treatment. Regarding distribution, a fair institution following the difference principle will mandate that some sort of distribution of basic primary goods. Fairness in treatment should translate into fairness in fair distributions and entitlements.

Concerning disputes, Miller (1999) outlines essential criteria to increase the likelihood that fair procedures translate into fair outcomes. First, there must be "equality" or rules that favour the claimant. Second, there must be "accuracy" or access to all relevant information; this guarantees that allocation and distribution of goods for compensation are fair and based on facts. Third, there must be "publicity" where all the rules and criteria of the procedures are clear to all claimants; this ensures that all persons involved, regardless of the outcome, can appreciate the fairness of the process (100-101).

3. Participation-Based Justice

While participation is often assumed under procedural justice, procedural justice does not necessitate active public participation in decision-making processes. Ending systemic social inequalities is a necessary condition for true participation (Fraser 1997). Some authors (Urkidi and Walters 2011) treat participation as part of procedural justice; however, I am making a clear distinction between having institutions that allow for participation in the decision-making processes and having participation for two reasons. First, this separation will allow for an evaluation of fairness of institutions from a liberal theory of procedural justice and a communitarian approach of procedural justice as participation-based. Second, distinguishing participation as a separate category will allow for an examination of how distributive inequities and misrecognition can impact real participation.

True participation means persons are able to participate in decision-making, expressing their views, feelings, and perspectives on social life (Young 2011). They ought to be able to participate on matters that affect them or their actions directly. Fraser (2008) argues that

"participatory parity" can be denied on the basis of who is included and excluded. In the circle of those included (i.e. government institutions), there is the question of who is entitled to participate. The level of inclusion and exclusion is determined by the "political space", or social structures in place, which determines who "count(s)" (147).

Based on this definition and existing applications of procedural justice, several questions are formulated. First, we can assess whether there are legislative protection against negative environmental impacts. Second, we can examine the types of state institutions that govern minerals extraction, examine their responsibilities, and determine whether they are fulfilling their basic obligations. In case of environmental degradation, we can determine whether the Ghanaian state offers procedures regarding issues of compensation and disputes.

4. Recognition-based Justice

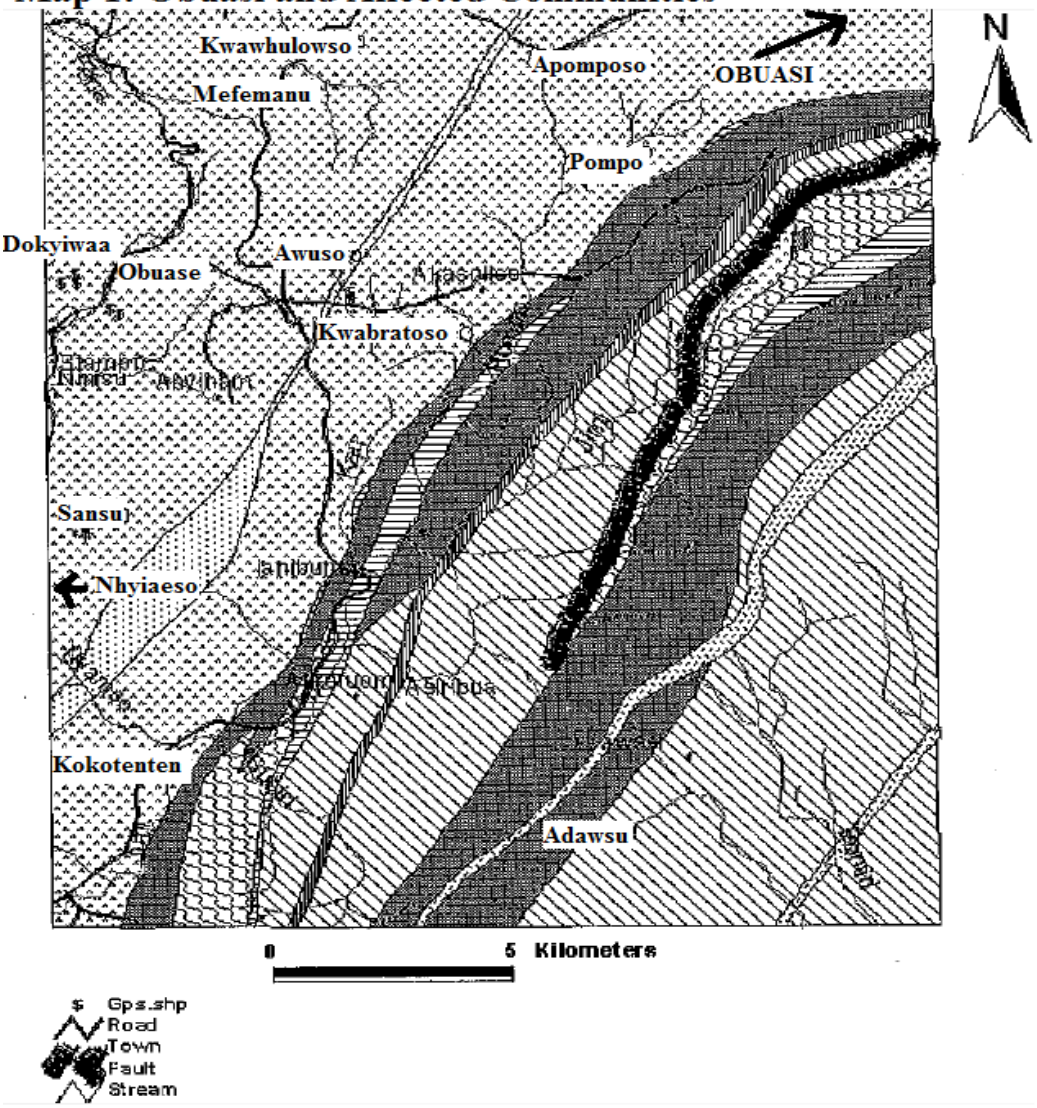
Communitarian theorists like Young, Honneth, Taylor, and Fraser agree that misrecognition is an injustice comparable to an inadequate distribution of goods, and that recognition or misrecognition cannot be assessed under the framework of distributive justice (Young 1990). However, they disagree on the focal point on assessing misrecognition (Schlosberg 2004, 2007). Fraser focuses on structural and institutional embodiments of misrecognition, she argues that the psychological and structural aspects of misrecognition are not dichotomous and can occur simultaneously. For Honneth and Fraser, the recognition-based justice framework is aimed to work alongside distributive and participatory issues for a fuller account of inequities.

Psychologically, misrecognition will be assessed on the basis of what the "victims" claim they perceive. Honneth discusses a form of "disrespect" that occurs when a social value or form of self-realization (Honneth 1992: 194-5). Consequently, a person's lifestyle choices would be denied. This psychological component, however, cannot be separated from the potential structural causes of misrecognition. Social structures may produce norms and forms of cultural domination that are embedded in a society's political economy, wherein certain forms of life are devalued.

The Environmental Injustices of Large-Scale Gold Mining in Ghana: The Case of AngloGold Ashanti in Obuasi

Connected to the regional capital Kumasi, Obuasi is a municipality of 220,000 in the Adansi district of the Ashanti region (see **Map 1**). Obuasi is a settlement founded on mining.

Map 1: Obuasi and Affected Communities



One of the most striking features of the city is the juxtaposition of the modern, pristine, and fenced-off corporate buildings with the dilapidated metal-sheet-roofed residential shanties. While the AGA-owned residences are well connected to the asphalt roads, many of the local shanty communities are connected.

Historically known as Ashanti Goldfields Corporation (AGC), AGA has been in operation since 1897. The Municipal Development Officer (18) identified AGA as a major "stakeholder" in the development of Obuasi by providing social infrastructure, financial resources for the District, and engaging in sponsoring community events:

> "You see directly, their contribution to our development is enormous. In 2011, AGA gave this Assembly 306,000 cedis (103,000 USD) and money put aside for school buildings. They paid a property rate of about 400,000 cedis (200,000 USD) last year."

However, a local mining activist and a government official described AGA's contribution to the local economy differently:

- "We realize as an Obuasi person, mining has been here for more than 130 years. There is nothing to show. Since the colonial days to now, the story has been the same. There has been nothing for the local people. There is no strategic development of

Obuasi." (6)

- "Because gold mining is not conceived as fiscal planning and development, the towns are not properly structured and developed. Gold extraction is accompanied by a barrage of poverty." (1)

This trend of mining operations failing to benefit the local economy has been highlighted extensively. Hilson (2004) and Campbell (2003a, 2003b) argue that the push to make minerals extraction more attractive in West Africa have created a favourable investment climate with fewer benefits to the local economy. In terms of the social contribution of LSGM, Akabzaa et al. (2007) and Akabzaa (2001) demonstrate that mining in Obuasi and Tarkwa failed to increase local employment.

In the post-Economic Recovery Programme period in Ghana, AGC/AGA has adopted a series of modern technologies to process lower grade ores.[1] Currently, AGA uses cyanide and arsenic to extract gold from sulfide ores; sulfide ores are roasted or treated with rock-eating bacteria before cyanide leaching. Gold can also be extracted from deposits that contain heavy metals such as copper, nickel, arsenic, zinc, lead, mercury, and cobalt (Akabzaa et al. 2007).
An ex-EPA official explains the environmental consequences of LSGM in Obuasi (4):

> "Gold mining has an impact on the air and water quality, leads to cyanide leakages, and the loss of biodiversity. The extraction of gold from arsenic through roasting leaves behind arsenic oxide and sulphur oxide. If arsenic oxide is inhaled, it negatively affects human health. Sulphur oxide is released into the air contributes to acid rain. Acid rain erodes buildings with iron sheet roofs of shanty residences common in Obuasi and its surrounding communities. It raises the pH level of the soil, which affects plant yield."

A more serious environmental devastation from LSGM is a potential cyanide spillage. Cyanide left in the tailings dams may leak into the surrounding environment due to bursts from heavy rainfall. These bursts lead to the contamination of water sources. There was a major cyanide spillage in 1998 that occurred due to a structural defect in the AGC cyanide containment pond. Since the spillage was upstream from many communities located outside of Obuasi, the cyanide floated downstream, destroying farmland and contaminating water.

According to the research on heavy metals in the water conducted by Akabazaa et al. (2007), the river downstream from Obuasi contains highly acidic water, beyond World Health Organization guidelines. High concentrations of arsenic are found in water in streams, taps, hand-dug wells, and boreholes, particularly areas downstream from mining processing and

[1] To reduce rising debt and stagnation in the 1980's, under the advice of the International Monetary Fund and the World Bank, the Government of Ghana (GoG) adopted the ERP as part of its Structural Adjustment Program (SAP). While the ERP entailed a series of comprehensive restructuring of the Ghanaian economy, the minerals sector was specifically targeted. The goal of minerals reform was to encourage a "private-sector based strategy" through the immediate privatization of state-owned operations and the assignment of regulatory and monitoring duties to the state (WBTP 1992: xiii).
As Hilson (2004) analyzes, the ERP has two phases. While the first phase of the ERP (1983-6) focused on increasing exports and outputs, the second phase of the ERP (1986 onwards) emphasized the structural causes to past economic failure. In this second phase, the GoG decreased its control in the minerals industry through the privatization of state-owned enterprises. The GoG implemented the Minerals and Mining Law of 1986 (PNDCL 153), which liberalized the minerals sector and provided extensive benefits to investors (Hilson and Potter 2005). The GoG allowed companies to import equipment and machinery free of duty and offered companies generous tax incentives (Tsikata 1997) and the right to keep up to 80 percent of all foreign exchange earnings in off-shore accounts. The GoG's efforts have been characterized as "generous" (WBTP 1992: 72).
Since the implementation of the Economic Recovery Program (ERP) in 1983, between the period of 1983 and 1998, over 1.2 billion US was generated through mining. Since 1992, the minerals sector has contributed to 40% of Ghana's total exports. 95% of all total mineral exports come from gold (Garvin et al. 2009).

waste storage facilities. These findings confirmed by research conducted by Huago (2011).

A Study of Three Neighbouring Communities

Based on research conducted in Kokotenten, Dokyiwaa, and Nhyiaeso, and triangulating group interviews, semi-structure interviews, and interviews with NGO and government officials, the impact of AGC/AGA's operations, since 1992, on the three communities is presented.

Kokotenten

Kokotenten is a farming village with a population of approximately 600, situated along a river named after the local god Nyame. As several villagers describe (9), Kokotenten was "lush with plantains, cassava, and yams". The river Nyame provided clean water, fish, and irrigation for the young cocoa nurseries. Some villagers sell young cocoa plants to neighbouring communities for income.

Kokotenten was affected by a cyanide spillage in 1992. Two interviewees recalled:

- "The company did not tell us immediately. When they did, they told the villagers to be careful of the 'blue' in the water, which is considered to be poisonous. They told us to use a cloth to cover our faces when we approached the river." (9a)
- "We knew something was wrong when all the fish in the river started dying."(9b)

Many of the stated grievances surround the deprivation of a source of livelihood. The interviewees characterized themselves as subsistence farmers. The major issues they identify is the deprivation of livelihood, since they are dependent on their land and water:

- "The river is the source of livelihood for the people. [Now] the cocoa nurseries and other plants are destroyed. The palm trees bare no fruit." (9c)
- "The local people used to live as subsistence farmers, husbands and wives. Now we have no source of livelihood. Women are left at home, not doing anything, because of no source of work." (9d)

They claim that they have been deprived of income-generating activities (the nurseries). Two interviewees argued that this has a tremendous impact on the children in the community:

- "Many children are pulled out of school as a result, because their parents can no longer afford it." (9e)
- "Now that people have no livelihood, what about all the children in the village?" (9c)

Several interviewees noted that their grievances are based on the loss of income-generation and its impact on the ability to send children to school.

According to the interviewees (9) and activists (6,7,8), because the affected farmers are mostly illiterate and lack post-secondary qualifications, they have been unable to attain alternative employment, particularly at AGA. Several interviewees admitted to participating in galamsey (illegal small-scale mining) to support themselves and their families. Two interviewees stated:

- "The young resort to galamesy. Galamesy pollutes and [is] dangerous, but we have no other way of feeding ourselves." (9e)
- "I have to do galamesy everyday so I can feed my wife and daughter." (9b)

Furthermore, interviewees expressed dissatisfaction with the informal and formal routes of filing complaints about the cyanide spill. One interviewee (9f) recalled the initial attempts to

request assistance from the ministries:

> "Despite appeals to the ministries and to AGA directly, there was a lack of response. The District Officials do not respond, the ministries do not reply.

After failing to hear from the ministries, Green Ghana Initiative (GGI), a local mining advocacy group, assisted the community in formalizing a demand for compensation in 2009. As requested by the EPA, meetings were held between AGA, the EPA, GGI, and the community. Although AGA did offer compensation, several interviewees claimed that the crops were undervalued.

According to one interviewee (9c), they were dissatisfied with the evaluation, because they were "only given a final number by AGA on a piece of paper". There was no dialogue about the value of their crops, particularly concerning the nurseries that were planted along the river. The interviewees hope for financial compensation for the fruitless palm trees, plants, and the destroyed nurseries along Nyame River.

Dokyiwaa

Dokyiwaa is a farming community of 1,200 situated next to the AGA tailings dam. In 2009, AGA informed the inhabitants that they had to be resettled due to the potential collapse of the dam. AGA entered into an agreement to resettle the community. One interviewee (10a) described the negotiations:

> "AGA promised us before that once we came here [to new Dokyiwaa], [AGA] would give land to us for farming."

One community activist (15) said that during the bargain, several concessions were agreed to:

> "We were told that the dam would collapse… so we agreed, we proposed we should have a community school, a market, employment for the boys."

After the discussions, AGA sent an investigation team to survey the sizes of households and plots, and calculated the cost of house-keeping money (24). AGA evaluated the land that was kept in old Dokyiwaa for future generations.

The community activist (15) recalled when they were asked to resettle, two weeks before Christmas of 2011:

> "AGA came and told we should get keys for their new settlement. We declined because there hasn't been proper documentation of the processes…should any issue arise. We said without the company providing that, we will not move."

The activist said four activists formed a barricade in protest. He said one of Dokyiwaa's sub-chiefs informed the land evaluation consultant of AGA, which led to the police arriving. The police demanded that the community turn over the "four ring-leaders" of the dissidence. After two further incidents of police confrontation, they recalled:

> "Four people from this community were detained in the police station for no apparent reason. On the fourth day, they were sent to court, but finally released. The traditional rulers said if they do not leave the area, they will make sure the four people will be permanently jailed."

They (10) claimed that they agreed to move as a result.

According to the activist (15), the community is divided over the resettlement plans and the resettlement package AGA offered (500 cedis, half a bag of rice, and cooking oil). He said:

> "One group is still with (us), and we are the group that has not collected the [package], but we moved. Another group dissented and went to Kumasi to get legal settlement. Some took the money."

While the group that rejected the resettlement entirely and the group that refused the package are united in pursuing a legal case against AGA, one group accepted the resettlement offer. The group that fully accepted the resettlement holds did not follow in pursuing a legal settlement. This group did not participate in the interviews.

The group (10) I interviewed identified three grievances. More than ten interviewees claimed that the houses are poorly furnished and are smaller than the home they had in old Dokyiwaa. All the interviewees (10) argued that they were not allocated the promised replacement farmland. This was confirmed by an EPA official in Accra (24). Without land for subsistence farming, many women interviewees reported that:

- "Back in our old community, we did not have problems with food because we are not buying them. Now, even if we want to cook, we have to buy cassava." (10b)
- "We only received 500 cedis since December, it did not take a month and the money is finished." (10c)
- "How do you prepare food in this situation?" (10d)

Several interviewees, including one of the sub-chiefs (10e,10f,11), argued that their fish farm and rabbit farms were not compensated.

Reflecting upon the resettlement process, the interviewees seem to be satisfied with the initial negotiations. However, AGA did not provide the written documentation, formalizing the negotiations. With the help of GGI, EPA came to evaluate the resettlement homes before they agreed to move in. The grievances of the interviewees concern the complaint process after resettlement in December 2011. Two interviewees said:

- "We had meeting with Assembly and wrote to MC about children not going to school, we have no positive result." (10e)
- "We have complained to AGA. No response. Local assemblies. No response. Nobody listens and nobody cares." (10g)

Given that they feel they have exhausted all avenues in addressing their grievances, they have pursued a legal case against the company.

Nhyiaeso

Nhyiaeso is a farming community that requested compensation more than 19 years ago. The community entered a concession agreement with AGC during the colonial period. Although the land legally belonged to AGC, the locals cultivated cocoa and palm on the land for many generations. During the year of renegotiating the renewal of the concession in 1994, AGC officials told the community that they intended to pursue underground mining.

According to the interviewees (17), AGC bulldozed the community farms claiming that the land was theirs according to the new concession. After bulldozing, one interviewee (17b) said that AGC set up explosives and dynamite without informing the locals:

> "When they came, they lie[d]. They said they do temporary job. But we didn't know they were going to do surface mining… after setting fire, AGC came to the village to drive everyone away, and told people to evacuate because of an eminent explosion."

Upon returning to the village, several interviewees (17a, 17b) claimed that many of the buildings were cracked while some had collapsed entirely. One interviewee (17c) claimed that his father, among other elderly residents, was injured during the explosion:

> "Old women and men who cannot walk were left behind, and they were crushed by their roofs during the explosion. [My father] was killed because the whole roof collapsed on him. He didn't die immediately… he died a few years later. There was

> no compensation at all."

The first grievance concerns the immediate effects of AGC's blasting. They felt that they were not informed about AGC's intentions on the concession. Some villagers were reportedly left behind, were injured and subsequently died.

After the blasting activities, AGC evacuated the site and left a massive pit, situated 100 metres from the village, that filled with water over time, which is visible today. One interviewee said (17f):

> "After mining, they abandoned the pit with much water, two children died [drowning] in the pit. We called AGC to come, but they didn't do anything."

Several interviewees (17b,17d) complained that the pit "is a breeding ground [for mosquitoes]" leading to increased mosquito bites and increased malaria in the community. The second grievance in the interviewees' substance frame is the failure to decommission the land after blasting with deaths and increased heath impacts.

The third grievance is the loss of livelihood due to water and soil contamination. One interviewee (17c) commented:

> "All our streams are polluted. We used to drink from rivers, but because of cyanide and other chemicals from the mines, polluted the whole river, the river we used to get fish for food no longer feeds us."

Two interviewees described the impact on their farmland and livelihood:

- "On the few remaining lands, AGA put pipes through it. The few cassava plants that we grow are now polluted. AGA even came back to say that 'the cassava is polluted and don't eat it'. They said 'if you eat it you will die'." (17a)
- "The soil cannot get maximum yield because of chemicals. We used to have an orange plantation but it got poisoned, now we lost the sweetest local oranges." (17d)

Interviewees (17) said they filed numerous appeals to the company, including a petition in 1994 and numerous letters. They asked AGC to decommission the land, either by covering the hole or converting it into a fishing pond. An interviewee (17a) commented on AGC's response: "we called AGC to come and take a look, but they didn't do anything." Recently, in the letters, the community asked for alternative sources of livelihood through employment at AGA, which was supposedly promised during the negotiations for the concession. One interviewee (17b) recalled that "AGA said we do something small in terms of jobs". The sub-chief (17b) explained that AGA refused to uphold their promises because:

> "AGA said we need to produce documents that they made this promise. But we have no documents!"

While the verbal agreement was not legally binding, the interviewees expected the company to comply. Several interviewees (17b,17c) characterized AGC as a company that "tricked" them.

The interviewees characterized the response of the MC and the DA as negative. One interviewee (17d) commented:

> "The District Assembly will not help, AGA pay money to them, and believe it absolves their responsibilities. The MC [does] not say anything to hold AGA responsible. Even writing letters through the Assembly, nothing good comes from it."

The interviewees felt that both AGA and the government failed to meet their expectations (or aspiration frame) of compensation.

Distributive Justice and Injustice in the Three Communities

Despite the different ways the communities have been affected, the three communities face an uneven distribution of environmental bads and the deprivation of environmental goods due to AGC/AGA's operations. The communities face the distribution of pollution, mainly heavy metals, which affected their access to clean water and land. This phenomenon is described as "accumulation by dispossession" (Harvey 2003; Bebbington et al. 2008: 2890), where ownership of land by large-scale enterprises has led to the environmental degradation of the region, affecting the access to environmental goods for local communities.

From an impartial evaluation of the distribution of environmental goods, Kokotenten is situated downstream from the tailings dam. The community is adversely affected based on its location. The community receives a distribution of the environmental bad of cyanide contamination. The Nhyiaeso inhabitants suffered from falling gravel and rocks due to blasting, leading to the destruction of infrastructure in the community. The lack of proper decommissioning of the surface mining pit led to three environmental bads: an open pit with water, and pollution. In Dokyiwaa, the distribution of environmental goods would still be assessed as unfair, for the inhabitants are still exposed to environmental bads: proximity to mine facilities, cyanide in boreholes, and air pollution.

This unequal distribution of environmental bads can be described as increased "vulnerability" (Walker and Bulkeley 2006), where inhabitants of Kokotenten, regardless of their source of livelihood, are deprived of potential access to environmental goods. This is similar to Miller's (1999) understanding of environmental goods, where the distribution of environmental burdens is unjust because it affects the access to primary goods in two ways. First, environmental goods are a primary good such that every rational being would want in life, such as access to clean water. The deprivation of an environmental good through an environmental burden prevents an individual or group from having a primary good. Second, environmental goods are seen as inherently tied to primary goods. AGA's operations have deprived the three communities of farmland, which has led to the decrease in education for many children in the community and increased health risks. Since education and health are considered to be primary goods, the distribution of environmental bads becomes a matter of social justice in two ways: the distribution of environmental burdens impacts other primary goods and environmental goods are fundamental primary goods.

As Barry (1997) suggests, distributive justice can include intergenerational distribution of environmental goods. The loss of farmland, water, and plantations in the communities has intergenerational implications. Regardless of their decisions in choosing a particular lifestyle, without compensation, the future generations have lost the opportunity to work as subsistence farmers.

Thus, under the category of distributive justice, the communities are facing injustice in three ways. Firstly, the communities suffer injustice as they receive environmental bads as they are situated near AGA's operations. Secondly, due to the deprivation of environmental goods, the communities necessarily suffer from the deprivation of social goods. Consequently, the communities suffer from intergenerational distributive injustice, as the notion of "sustainability" is not upheld.

The Test of Procedural Justice

As indicated by a UNDESA Report (2010), in the early 2000s, the government of Ghana began reviewing and drafting a new minerals code (Act 703). This process involved the participation of NGOs, traditional authorities, local government officials, investors, and academics. Act 703 improved upon PNDC153 of 1986, which consisted of basic mining legislation to a more comprehensive code, to "reflect contemporary trends in minerals and mining legislation" (5). The key changes relevant to our analysis include: an elaborate compensation provision (s.74-5) and subsidiary legislations to expand the powers of Act 703 (s. 110).

The subsidiary regulations, through consultation with NGOs, were published in 2012. While LI2175 exclusively targets issues of compensation, one section of LI2173 expands the regulatory role of the MC. In LI2173 section 20(e), the MC has the right to investigate mining operations to ensure regulations are followed and the right to give direct mandates.

The LI2175 deals with two community issues: compensation and resettlement. As the MC official (23) stated:

> "Section 74 of Act 703 talked about prompt and adequate compensation payment. The new regulations stipulated how it should be paid."

When I raised criticisms from NGO and government official interviewees (1,3,6,7,8,19) regarding the difficulties in implementation of mineral regulations, the MC official responded:

> "This is why we did the regulation, which will allow us to enforce. The Act is general, when we have the regulation (LI2175), it specifies how it should be done, now we can enforce the provisions and stipulate HOW that enforcement should be done. We know we have challenges in enforcement, but we are going to enforce it."

In comparison to Act 703 and the PNDC153, the LI2175 lists detailed and more restrictive procedures for compensation and resettlement. Firstly, crucial time deadlines for mineral rights holders to draft resettlement and compensation plans are limited to 60 days to ensure "prompt and adequate" compensation. Secondly, this new subsidiary legislation invites the Land Valuation Board to play an active role in making valuations on behalf of claimants. The L12175 extends what can be claimed for compensation: the loss of expected income from businesses, land use, and expected income from crops. Thirdly, if a company fails to give prompt compensation (within three months), the company must pay an interest rate of 10 percent for each unpaid month. Finally, given any "dissatisfaction" (s5), the claimants or the rights holder may go to High Court to resolve compensation issues.

The existing regulatory framework specifies that the major enforcers – or those equipped with the power to punish those who fail to comply with state-stipulated guidelines – are the state institutions (MC and EPA) and the corresponding Ministers (Mines and Environment). Before obtaining a minerals right, a company must follow due procedure clearly stipulated in both Act 703 and Act 409. The company will be informed of all domestic guidelines and requirements, which are required in the submission of an Environmental Impact Assessment. The MC's subsidiary regulations, enacted in 2012, on Compensation and Resettlement provide a list of comprehensive of entitlements for communities prior to and during operations. Considering the legislative changes since the ERP, all stakeholders have procedural requirements and guarantees equally.

All major stakeholders are given access to consultations to offer input. The opportunity to consult in order to give input is procedurally entrenched both before and during operations. If inhabitants are dissatisfied with the results from consultations and arbitrations, the claimants

are entitled and encouraged to go through the legal system. The claimants have a right to sue the EPA and the MC for their management of the disputes.

Given the regulatory framework, Rawls' two tests of fairness of existing institutions are met. Firstly, the existing institutions treat all major stakeholders equally and fairly. Each group of stakeholder is treated as individual entity. Each is given equal weight in the negotiations and arbitrations. Procedurally, all stakeholders are entitled to arbitration and consultation from the regulatory bodies. Secondly, the claims made by stakeholders are taken seriously or "respected" (Rawls 1977). LI2175 offer additional representation for the communities by inviting three inhabitants to the negotiations. Overall, the existing regulatory framework would pass most of the liberal tests of "fairness" of institutions.

Under Miller's evaluation of the "equality" of institutions, one of three conditions is fulfilled. The first condition of procedures favouring claimants is fulfilled. Under section 2 subsection 4, each stakeholder is permitted to appoint a "qualified person" to negotiate compensation. The favouring of the claimants is evident in section 2 subsection 5, whereby the costs of appointing a committee must be pre-financed by the mining company. Section 3(a) guarantees that compensation should be dealt with before mining operations begin.

The second condition of access to all information can be assessed in two ways. First, if we look at strictly procedures, then the "accuracy" or all relevant information is accessible. At all intervals of the operations, the communities are procedurally entitled to receive information about plans. The "general public" is entitled to attend a meeting, make comments, and ask questions about the EIA and the potential impact of mining activities (LI1652 s.16). The communities affected are informed of future mining operations within 14 days after a mineral right is granted (LI2175 s.1).

In a second interpretation, the communities could be disadvantaged because of their lack of technical and legal expertise. Although the communities (and NGOs) have access to all information procedurally, they may not hold the expertise to understand the information provided. Meanwhile, the company, government officials, and NGOs with technical and legal knowledge are able to access all information. Legal guarantees to information may not translate to access for all stakeholders.

The third condition of procedural equality is limited, for access to knowledge regarding all procedures and entitlements in the communities is limited. According to an interviewee (20), many persons in farming communities are unaware of the existing and recent legislation on mining. Persons in communities affected by mining may be unaware of what they are legally entitled to or can claim from the company even if the laws are clearly outlined and publicly accessible.

The LI2175 procedurally privileges the claimant by guaranteeing that evaluations and consultations are pre-financed, hence passing Miller's first test. Although all stakeholders are procedurally entitled to information and procedural equality, they may lack the expertise to actually gain access. The mismatch between procedural justice and unjust outcomes will be explained using communitarian theory.

Procedural Justice and Participation-based Injustice

There are two that barriers prevent the implementation or government participation in minerals regulation. First, key regulatory institutions are understaffed and unable to perform

their legislated functions. Second, although the role of regulatory bodies is outlined in legislation, they are often uncoordinated and fail to work together.

One common complaint is the lack of enforcement of existing laws (mentioned by government officials interviews 1, 4, 22 and NGO interviews 3, 6, 7, 8, 13, 15, 19, 20, 21). While several interviewees (1, 4, 6, 7, 8, 15) agreed that the EPA is on the whole more responsive to community complaints, the EPA is highly understaffed. Several who were interviewed noted:

- "The weakness is the capacity for the EPA to enforce compliance because they are understaffed and lack capacity." (1)
- "Now that EPA is to set out proactive monitoring, but the biggest problem is that they are understaffed. The capacity to do monitoring... after the permit, the companies decide not to comply." (4)

Because the EPA is understaffed, the EPA is unable to enforce changes despite the requirement for companies to conduct Environmental Impact Assessments (EIAs) and Quarterly Monetary Returns (QMRs) to track environmental effluents. As explained by an interviewee (4):

> "The QMR try to look at effluents discharged into the environment. Based on this, they get the AKOBEN rating. Because they are understaffed, they cannot do the monitoring."

Although the AKOBEN was intended to encourage compliance using public pressure, the AKOBEN ratings for AGA remained "red" from 2009 to (AKOBEN GHANA). Hence, the EPA is unable to fulfil its legislated duties and implement its policies effectively.

Second, an LC official said they are often not invited to conduct valuation. He (22) commented:

> "If the farms are disturbed, we are supposed to be called in. The law is different from administration. We are often not notified so we cannot get onto the ground. Without being told, we have no way of knowing."

This is comparative to Taabazuing et al.'s (2012) findings in Ghana, as interviews with the Forestry Department revealed that the MC is reported to grant permits without coordinating with their Department or the EPA.

There are three structural barriers preventing communities from engaging in "real participation" (Hunold and Young 1998: 86). First, one barrier is the lack of legal knowledge. Several interviewees commented on the communities' knowledge of legal and technical procedures:

- "Despite recent legislative changes, one big oversight is underprivileged position of farmers. Farmers do not know better." (22)
- "You have people who don't know their rights, they don't understand the issues, they become very vulnerable and cannot articulate their voice." (20)

To compound the lack of expertise knowledge, many farmers are illiterate or not well-versed in English, as several interviewees noted:

> "Some farmers do not speak English well. Illiteracy is a real problem." (20)

From personal observation in the communities, although many farmers could speak some English, their mother tongue is Twi. All the laws, government institutions, and courts use English.

Secondly, if the cases are not resolved through arbitration, the communities are disadvantaged in seeking a lawyer. While communities often contact public interest lawyers (i.e. through Centre for Public Interest Law CEPIL), one interviewee commented:

> "CEPIL undertakes many of these cases on a *pro bono* basis. Because there is a lack of funding, we are not well-ingrained in what is going on." (21)

Consequently, communities that are dissatisfied with the negotiations over compensation (as in the three communities of this study) they can go to Court. As identified by Madihlaba (2003), communities who hire private lawyers face the risk of indebtedness from the legal process.

Thirdly, there is a physical challenge to accessing both the regulating institutions and the Courts. Several interviewees commented:

- "Accessibility is a problem because most of these community members are poor so a farmer would have to travel from the village to court in regional capital. Consequently, travelling from the farming communities to the regional court or offices, or the capital for court becomes expensive for the already disadvantage." (21)
- "To seek the powers of attorney when you are dissatisfied, one has to travel to high court. Law does not allow people to address problems in local courts. We have a high court in Kumasi, those in small villages have to travel to that place. They go there, with no money, no lawyer." (13)

The communities were unable to have discussions prior to being "situated" in "risky" situations (Young 2001). While the LI2175 and the LI1652 guarantees that communities are consulted on the potential impact of the operations, the situation that the three communities are in pre-dates the law (particularly the LI2175).The communities were not guaranteed the consultations, negotiations, and bargaining that LI2175 provides.

Although the institutions and regulations pass the test of procedure justice, the conditions of participation-based are not met, due to structural barriers to effective implementation. Using Fraser's (2008) terms, the communities and some government officials (due to being understaffed or not contacted) have been excluded from the political space.

Recognition-based Justice

Using Fraser's framework (1995a), I argue that the LI2175 is aimed at redistribution as opposed to transformation. First, there is a hierarchy of values that prioritizes gold extraction over community interests. Second, the state fails to acknowledge existing power-relations and its impact on real participation over potential distributive environmental burdens; without the recognition of group difference, I will argue that the farming communities cannot fully participate in negotiations that are guaranteed by the new legislations. Without recognition (transformation) through restructuring and challenging the norms that lead to structural inequalities, the mismatch between procedural and participation-based justice will continue. Therefore, some groups are structurally excluded and disadvantaged in the decision-making and negotiating processes due to the underlying norms and values.

The structure of Ghana's economy has changed drastically since the implementation of the ERP. As Kraus (2002) argues, Ghana has adopted a development strategy based on "neoliberal policies and capitalist renewal" (395). Akabzaa (2009) and Aryee (2001) identify that the first generation mineral laws aimed to quickly attract outside investment as a way to turn around the economy.

Since the expansion of the mining sector in Ghana, there has been an increase in land competition between the mining companies and the farming communities. There is direct competition as communities have lost agricultural land to mining companies (i.e. Nhyiaeso) through concessions. The potential pollution of water and land means that communities are constantly at risk of losing their farmland due to mining operations. This phenomenon has been summarized by Urkidi and Walter (in Latin America) as the "misrecognition of their material and cultural dependence on agriculture" (2011, 685).

Due to the prioritization of increasing foreign investment in "first generation legislations", many farming communities have been deprived of their way of life. Most inhabitants of communities near the AGA mines in Obuasi live as subsistence farmers. They are dependent on the land and water for their livelihood. Farming is not only a form of survival, but a way of life. Land competition, which prioritizes minerals activity over agricultural use, has led to the devaluation of certain social and cultural values.

Legislations that provide community and environmental protection were implemented only in recent years. The first environmental regulations were implemented 16 years after the ERP. The regulations and instructions concerning compensation and resettlement (LI2175) came about in 2012, six years after establishing Act 703. The delay in implementing comprehensive procedures is problematic, for many of the mineral rights were negotiated and granted before the existence of these laws. While the second generation of minerals law addresses the perceived problems with the old laws, the "competitive" investment incentives through low royalties remained (Rutherford and Ofori-Mensah 2011: 4).

Laws that appear as "neutral, value-free, legal, or scientific" (Sutton 1999: 14) must be treated critically in order to identify the underlying "discursive formations" (Hewitt 2009: 5). Although the new legislations aim to incorporate all stakeholders (contrasted with the top-down approach under the PNDC laws), a critical examination of social structures and power-relations will demonstrate how "dominant voices actually flow throughout the policy domain" (Woodside-Jiron's 2004: 175). Through a recognition-based analysis, a different understanding of the procedures regarding negotiations between the stakeholders is available.

While the new law provides legal guarantees "suitable alternative land and resettlement, economic well-being and socio-cultural values of persons to be resettled" or an "improvement" is provided (LI2175 s6.1), the "socio-cultural values" preserved may not be the values the communities hold. There are embedded norms and assumptions about what those values ought to be. During an interview with an EPA official (24) regarding the resettlement of Dokyiwaa, he stated:

> "I think they are better off" in terms of "physical infrastructure, sanitation, and accessibility to portable water…The principle is that the company give better condition (comparing the mud-houses to the concrete-houses) than what pre-existed. What you take is what you provide in a better state."

This statement is embedded with a "hierarchy of societal values", where a person's form of living is downgraded (Honneth 1992: 192). The mud-houses and lack of indoor plumbing in Old Dokyiwaa is considered inferior in infrastructure than the AGA-built concrete-resettlements, although many inhabitants stressed they preferred living in their old community. This presupposition of what the "socio-cultural values" ought to be is captured in Hilson's (2007) assessment of Newmont's alternative livelihoods program. He demonstrates that there are stark differences between the preferences of local communities and the

programs implemented by the companies. Regardless of the recommendations made by the government and the communities, the company itself insisted on a specific type of alternative livelihood.

Secondly, while LI2175 intended to provide fair representation of all key stakeholders in negotiations for compensation and resettlement, challenging powerful stakeholders is difficult due to existing power-relations. Regarding the negotiations with AGA, Several who were interviewed noted:

- "It is hard to be an advocate. Either you are excluded from job opportunities (including your family) or someone will hire someone to arrest you or kill you, or silence you. It reaches a point where the company satisfies him by giving him money, or sub-contract... I know a few people who started advocacy and then betrayed the cause. They turn indigenous people against you, you may be harassed or be deemed a societal misfit. They think that you have gone against their work." (13)
- "They threatened me (local activist) saying I am the 'lawyer' of Obuasi, advising communities to act. They make sure I am put into jail." (8)
- "They can have their way because of their big purses. They can even buy security services. There is an imbalance in the bargaining power." (21)

The reliance on CSR and expecting a win-win situation fails to account for the uneven exertions of power between the communities and the company (Blowfield and Frynas 2005).

The LI2175 also fails to account for the power-relations between the communities and traditional leaders. The assumption underlying these negotiations is that traditional leaders represent the interests of their people. Two officials noted:

- "The committee for the case of Dokyiwaa involved representatives of the community. We included the company, the DA, the Chief, who appointed people to represent the people. These are the ones who negotiate."(24)
- "The DA and the Chiefs are the custodians of the land." (23)

Multiple interviewees in the communities and NGOs commented on the collusion between AGA and traditional leaders:

- "The EPA officer who came to consult said that the elders of the town have looked out for concerns for the company at the expense of their local communities." (15)
- "The company has bought all the big men in Obuasi and Ghana." (6)
- "The trick the company uses is to go the Big Chiefs that cheat on their own people. Big Chiefs get parcels from AGA to shut up." (17f)
- "When issues come, maybe the Chiefs are getting profit so they keep quiet." (13)
- "In our local setting, you have community people rounding around their Chiefs. Mining distorts this social dynamic. You have chiefs that become contractors for the mines. The Chiefs will not articulate the peoples' voices." (20)

This problem is similar to the Dumasi complaint against Golden Star Resources Ltd., in which the community failed to receive the compensation because the money was given to the chief for affirmation/redistribution (Hilson 2007).

A third problem with representation under the LI2175 is disadvantaged position of local activists and NGOs. While national-level organizations such Wassa Association of Communities Affected by Mining (WACAM) and Third World Network (TWN) receive funding from international organizations (1,3,5,20), local-level NGOs are mostly self-funded. Several activists commented:

- "We can't get funding because we are seeking funding from those major stakeholders

of the company. They won't give you money from their masters. Sometimes, I don't go to the meetings because of funding. For me, I may eventually quit this NGO thing." (13)

- "The funding, we get ourselves. We go to the communities in a taxi. The communities ask us for help. The government will not fund NGOs." (6)
- "Finance is a big issue, even for a national NGO. But finance is always a challenge." (19)

For NGOs to act as representatives of local communities, they pay for their own transportation to national-level meetings in Accra and visits to communities. Because the inhabitants in affected communities may not have access to legal expertise or consultant knowledge, they rely on NGOs. In the three communities, complaints were formalized only with the assistance of GGI. The failure to recognize the power-relation between the stakeholders prevents any negotiation with a fair representation of all stakeholders.

Thirdly, the new mining regulations (Act 703 and LI2175) assume that compensation is a sufficient remedy to the harm inflicted upon affected communities. Resettlement of entire communities is fair if there is "replacement" or belief that the replacement allows persons to live the way they have (s.6.1). Shrader-Frechette's (2002) comments, monetary compensation or potential benefits is treated as a justification or pay-off for uneven distribution of environmental burdens. Similarly, Martinez-Alier (2001) argues that the payment of a fine is seen as an entitlement to inflict harm on a person.

There is no clause in the LI2175 for communities to reject the request for resettlement. Neither is there a clause to reject compensation and the right to stop mining operations. A lawyer (21) commented on the concerns surrounding resettlement:

> "The community sees the issue of poverty because most are farmers. Once you get them off your farmland, regardless of compensation, the issue of sustainable income becomes a problem. The compensation is due in a matter of months, but [they are still] in abject poverty as opposed if they were involved in their past livelihood. Once you get them off the land, no matter the compensation, there is dislocation and always a problem."

Regardless of the actual choice of actions for communities – short of having to go through court – it is restricted. The norms governing the new legislation presuppose that the communities ought to accept compensation and resettlement as part of "redistribution" to correct the preeminent environmental burdens imposed by LSGM.

- The limitation of actions available to communities reflects the norms and values that govern current legislations. Several respondents commented:
- "They say, at all costs, go for gold." (13)
- "The way the ERP was designed has key consequences. One, the focus has been on exploiting mineral resources, period, without any well-thought out policies about other parts of the economy or social and environmental issues." (19)
- "Gold mining does not have any impact in the fiscal planning of our country. Gold is just for export." (1)
- "Even though there may be a case against a mining company in court, the activities still go on, [there is] no injunction to stop production. They are making money all the same." (21)

Ghana, like many Sub-Saharan African countries, as Hilson and Haelip (2004) and Campbell (2003) argue, has regulations that prioritize the attraction of FDI above local and national interests. Consequently, sustainable development and social environmental protection has fallen short.

According to Fraser (2001), the causes of misrecognition (i.e. the valuation of gold mining above subsistence farming of local communities) and distributive injustice (distribution of uneven environmental burdens) stem from the same "system". She suggests that cultural valuation (recognition/misrecognition) and the political economy (distributive justice/injustice) must be analyzed as bifocal, or intertwined. In cultural valuation terms, the dependency of these communities on land and water is not recognized, as existing compensation scheme suggest that monetary compensation is a sufficient remedy. Compensation through alternative livelihood projects, as demonstrated by Hilson (2007) across Ghana, shows that programs that are offered fail to take into consideration of the communities' value or wants or needs. In political economy terms, farmers do not have a choice to move away from the sites. They lack the skills and education to move to the cities away from mining operations.

The prioritization of mining activities in Ghana, in an attempt to be "competitive" (Rutherford and Ofori-Mensah 2011: 3), has led to the creation of legislation that attempts to deal with the distributive injustices affected communities face through redistribution. Because redistribution necessarily treats all stakeholders equally (Fraser 1995a), the difference between the groups, the power-relations between groups (i.e. between traditional leaders, companies, and the communities), and the ability of different groups to participate fully in negotiations are not taken into account. Affected communities face misrecognition in terms of cultural valuation (and hierarchy of values), with the result that subsistence farming communities participate in a form of livelihood that is trumped by the interests of expanding minerals operations.

Conclusion

In this paper, I have demonstrated that social justice where environmental issues are treated as matters of social justice deepens the understanding of the environmental impact of LSGM in developing countries. By including the categories of participation-based and recognition-based justice, a communitarian approach to justice offers an explanation as to why procedural justice co-exists with distributive, participation-based, and recognition-based injustice.

Applying the four categories of justice of communitarian theory, the types of injustices the three communities face are disaggregated. Firstly, the communities situated downstream from AGA's operations suffer from intragenerational and intergenerational distributive injustice. They are exposed to land and water pollution, and heavy metals that are harmful to human health. They have been deprived of access to primary goods like clean water, arable land, which affected their access to livelihood and meaningful employment. Some youth in the communities have resorted to other dangerous forms of employment, such as galamsey and prostitution. There are intergenerational distributive injustices: children are pulled out of school and "sustainability" is not upheld, as future generations are deprived of an opportunity to pursue a specific livelihood.

The existing legislations and institutions are procedurally just, as all stakeholders are free to participate before mining operations begin. During the operations, stakeholders are allowed to request assistance and file complaints with the corresponding regulatory body. Specifically outlined in LI2175, all major stakeholders are invited to negotiate compensation. In cases of resettlement, major stakeholders are included in the review committee. The existing institutions are procedurally just under a Rawlsian framework. Using Miller's test of equality,

Ghana's legislation only pass one of the three criteria.

There are two structural barriers preventing government institutions from performing their duties. Government institutions are restricted as they are understaffed and lack administrative coordination in working with other government bodies. Communities are unable to have real participation due to three structural barriers. Because most farmers are illiterate and mostly converse in Twi, they are unable to access the technical and legal knowledge in existing legislation in English. Since the inhabitants in these communities are subsistence farmers, they lack the income to hire a lawyer or a consultant for advice. Due to the lack of resources, farmers often do not have the means to travel to the courts in the regional and national capital. Communities face participation-based injustices despite the existence of just procedures

The communities face structural recognition-based injustices. Farmers in communities as a "group" are disadvantaged because they are rural, illiterate, and depend on land and water for subsistence. Since the cultural norms and political economy of Ghana privileges increasing minerals extraction subsistence farming, the communities are structurally disadvantaged. These norms are embedded in the law, as the new legislations are affirmative and not transformative. Because the laws are affirmative, the focus is on redressing distributive injustice as opposed to the structural causes of injustices. The new laws implicitly justify the displacement and its impact on local communities with monetary compensation. According to Fraser (1995a), this ends up creating recognition-based injustices, as mining operations are privileged and considered more valuable than farming activities.

Failure to address the structural causes of inequalities based on group negates attempts to increase the participation of all stakeholders in LI2175; thus it will not translate into real participation. Instead, there is a "participation imparity" (Fraser 2005), as some groups are excluded (the communities) whilst others are included (AGA, government officials, some NGOs).

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