PLANNING FOR RESETTLED COMMUNITIES: A STUDY OF INTERNATIONAL REGULATIONS IN THE EXTRACTIVE INDUSTRIES IN GHANA

A Thesis Presented to the Faculty of Architecture and Planning
COLUMBIA UNIVERSITY

In Partial Fulfillment
Of the Requirements for the Degree
Master of Science in Urban Planning

by

Jae Young Paek

May 2012
# Table of Contents

Abstract  
4  
Chapter 1: Introduction  
4-7  
1.1 Research Context  
4-5  
1.2 Rationale  
5-7  

Chapter 2: Literature Review  
8-15  
2.1 Power  
8-9  
2.2 Regulation and Uneven Power  
9-10  
2.3 Corporate Social Responsibility and Power  
10-12  
2.4 Benefit Sharing and Symmetric Power Dynamics  
12-13  
2.5 The Extractive Industries and Unbalanced Power Distribution  
13-15  
2.6 Regulation of the Mining Sector  
15  

Chapter 3: Method and Design  
16-17  

Chapter 4: Findings and Analysis  
18-32  
4.1 Planning, regulations and resettlement in Ahafo, Ghana  
18-21  
4.2 Ahafo Case Study: Compliance with IFC Resettlement guidelines  
21-27  
4.3 Power Imbalances in Planning: Conflicts of Interest in the Resettlement Guidelines  
27-32  

Chapter 5: Recommendations  
33-37  

Chapter 6: Conclusion  
38-39  

Chapter 7: Future Direction of the Study  
40  

Appendix  
The World Bank Operational Manual  
Operational Directive 4.30  
41-48  
International Finance Corporation Performance Standards  
49-54  

References  
55-56
PLANNING FOR RESETTLED COMMUNITIES:
A STUDY OF INTERNATIONAL REGULATIONS IN THE EXTRACTIVE INDUSTRIES IN GHANA

Ahafo, Ghana 2003

Ahafo, Ghana 2006
Abstract

The wealth generated by the mining sector comes at a substantial developmental cost, along with environmental damages and economic exclusion of the marginalized. This has led to new ways of thinking in which mineral wealth can be converted into sustainable development benefits for local communities. Understanding how international regulations on resettlement induced by the extractive industries are interpreted and implemented by multinational mining corporations is essential in understanding what is essential for elucidating effective balanced power dynamics and benefit sharing in mineral extraction. This study looks at how IFC guidelines are implemented while elucidating the limitations to them. The study further recommends how resettlement regulations can change in a way for more socially responsible firm behavior and benefit sharing.

Chapter One
Introduction

1.1 Research Context

Liberalization of mining laws in Africa, high metal prices, liberalization of international markets and discovery of resources in unexploited places all led to a boom in foreign mining company investments in Africa. Currently, investors and developers are being drawn to more remote areas at an increasing rate (Madeley, 1999; Brohman, 1996). Since the 1990s, seventy countries, including thirty-one from Africa, have opened up to foreign mining companies through changes to their regulatory and legal regimes (Madaley, 1999).

The extractive industries incur environmental, economical and social externalities in a community, including loss of biodiversity, loss of agriculture business potential, and displacement of indigenous communities. Also, the revenue acquired from the resource extraction is unjustly distributed, such that it is not recycled back to the majority. Mineral policies in place tend to favor the public sector, rather than civil society that take on the burden of the industry. The revenues gained from the minerals have been used for rent seeking and increased individual consumption rather than reinvestment. The phenomena
that occurs is referred as the ‘resource curse,’ which states that developing countries with large mining sectors are economically worse off than countries without large mining sectors (Ross, 2001 in Weitzner, 2002:9)

Furthermore, as the livelihoods and survival of these communities are strongly tied to the land (McShane and Danielson, 2001; McMahon and Strongman, 1999; Govier, 1997), escalating development not only threatens the livelihoods of the people in resource frontiers, but also raises environmental and sustainability concerns. With this there is debate on whether foreign mining companies contribute to economic development in Africa and whether their development initiatives are effective.

1.2 Rationale

Located in Sub-Saharan Africa, where many countries are politically unstable, Ghana is recognized by the international community as having functioning democratic institutions and has been labeled a middle-income country, according to UNCTAD. The international community has viewed Ghana in recent years as an African success story. Free and fair elections, peaceful changes of government, have demonstrated that there are no inherent barriers to democratization in Ghana, while the management of the economy has been professionalized, providing investors and entrepreneurs with reassurance about the prospects for economic stability. According to Aryee, 2001, the mining sector has been a significant contributor to Ghana’s economic development.

The reason for choosing Ghana is due to its long history of gold mining and the fact that it’s the second biggest gold producing country in Africa. There has been an increase in foreign mining companies that have operated in Ghana. However along with
an increase in their presence has been a rise in criticism of their operations. Critics have been skeptical on mining companies’ treatment of the local communities and their impact on the environment. To respond to these criticisms, international aid agencies have planned for a range of initiatives to support host communities and to prove they are socially responsible. This study looks at how IFC resettlement guidelines are implemented while elucidating the limitations to them. The study further recommends how resettlement regulations can change in a way for more socially responsible firm behavior and benefit sharing.

In this study, I attempted to answer the following question:

- What strategies are adopted by multinational mining companies in Ghana to comply with IFC resettlement regulations?
- What are the limitations to the IFC resettlement regulations?
- How can the IFC regulations improve in providing more equitable benefit sharing to the impacted communities?

In order to answer this question, I undertook the following research:

- Semi-structured interviews were conducted with representatives of a mining company in Ghana to establish current strategies and limitations to the IFC resettlement guidelines
- Semi-structured interviews were undertaken with representatives of civil society and government in Ghana to ascertain their views on commercial mining,
community development pertaining to mining and issues relating to the resettlement in Ahafo.

• Archival research using published project documents by the International Finance Corporation (IFC) and Newmont Mining Corporation as well as media reports, scholarly literature about regulations were used in this study.
Chapter Two
Literature Review

2.1 Power

Definitions of power seek to answer how power is distributed among different units in society and the magnitude of power held by one party in society with respect to the other parties (Dahl 1992). Max Weber defines power as the ability to achieve desired goals despite resistance. ‘Resistance’ is used as a measure of relative power between two parties conflicting over an issue (Lukes, 1992; Weber 1992).

There are three models to explain who has more power in society (Macionis and Gerber, 1999). The pluralist model states that power may be relatively concentrated or diffused among many competing interest groups in society and individuals’ or group’s share of power may be great or small. Proponents contend that economic or corporate elites (including mining companies) and bureaucratic elites (including government machinery) are the most powerful institutions in society. According to this model, government and corporate elites are highly integrated, accommodating each other in order to keep the system working (Ali and Behrendt, 2001; Macionis and Gerber, 1999).

The power-elite model argues that power is concentrated among the rich such that the voice of the average person is hardly heard in society. This model explains that power can successfully be resisted by the disadvantaged in society, who form themselves into political associations, civil society or other interest groups to confront the powerful units in society. The model also affirms that corporations and governments are the most powerful units in society.
Lastly, the Marxist political economy model states that power not only attributes the power imbalance in society to the disproportionate wealth and riches of individuals, but also to the bias rooted within the system’s institutions, particularly its economic institutions. Proponents argue that the economic system of a society determines how the political system operates, and thus power elites are products of capitalism. All three models conclude that power is not evenly distributed among individuals or actors in social relations. The models also recognize that corporations and governments are the most powerful units in society.

2.2 Regulation and Uneven Power

Regulations are reflective of power dynamics as they are indicative of who creates the regulations, who the regulations are to serve and how the regulations are monitored. According to Levi-Faur, the definition of regulation is difficult to define and it changes depending on different people. For far right groups, regulation represents the heavy hand of an authoritarian government and for far left groups, regulation is structure that serves the interests of the dominant class (Levi-Faur, 2010). Some people believe that regulation comprises mostly of rule making while others extend it to include rule monitoring and rule enforcement (Hood, Rothstain, Baldwin, 2001). In any case, regulations involve continuous action of monitoring, assessment, and refinement of rules (Levi-Faur, 2010).

There are various types of global regulations including environmental, social and environmental regulations. Regulatory solutions that were shaped in North America and Europe are increasingly becoming internationalized and projected globally (Levi-Faur
These international guidelines help substantiate the weak state that many developing countries face that hinder proper development or protection of their citizens’ rights. However, there are limitations to these international regulations. These regulations at times can be guidelines that are overly prescriptive or guidelines that are often too general. These regulations must be in compliance and aligned to the host country’s regulations. Further these regulations have a potential in breaking down when there is a lack of monitoring, lack or transparency, lack of accountability, lack of community participation, lack of enforcement and when the regulations are either too vague or too narrow.

According to public interest theory, regulation can be explained by the need to prevent or correct undesirable market results. The correction of undesirable market results can furthermore also be considered desirable for other than economic reasons, such as considerations of justice, paternalistic motives or ethical principles. In other case, public interest theory is more broadly interpreted and regulation is accounted for as aiming to correct inefficient or inequitable market practices (Posner, 1974). According to this last view, regulation can be accounted for as aiming for a socially efficient use of scarce resources.

### 2.3 Corporate Social Responsibility and Power

Corporate Social Responsibility (CSR) is also reflective of uneven power between stakeholders. As there have been innumerable instances of conflict between indigenous communities and mining companies, the conflict usually involves the struggle of local
people facing appropriation of the lands, environmental threats and violation of their rights. In the late 1990s, a Canadian mining transnational came under scrutiny after a series of environmentally disastrous spills in Guyana, the Philippines and Spain. These types of events pose threat to transnational mining firms and can place them at a disadvantage when attempting to acquire new mining concession and have thus acquired corporate social responsibility initiatives.

Over the years, an increasing number of transnational mining companies have adopted Corporate Social Responsibility policies dealing with social, environmental and ethical issues. The development of the concept of corporate social responsibility has quickly expanded since the days when it was considered that “the social responsibility of business is to increase profits (Friedman, 1970)”. According to Andrews, 1988, “corporate strategy is the pattern of decisions in a company that determines and reveals its objectives, purposes, or goals, produces the principal policies and plans for achieving those goals, and defines the range of business the company is to pursue, the kind of economic and human organization it is or intends to be, and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees and communities.” Warhurst et al., 2000 states that corporate social responsibility is “the internalization by the company of the social and environmental effects of its operations through proactive pollution prevention and social impact assessment so that harm is anticipated and avoided and benefits are optimized (Warhurst, 1998; citied in Downing et al., 2002). It is suggested that corporate social responsibility contributes to social justice in the work place as well as human rights and development within the host countries of the operations. Warhurst, 1998 states that the changing perceptions and expectations’ are
cited as the root cause for more companies adhering to accountability (Warhurst, 1998; cited in Downing et al., 2002).

A representative of a mining consulting firm stated that, “mining companies are definitely using more CSRs these days. The private sector is pushing this more and more. These companies to a certain extent are competing against each other to get access to resources. If you can demonstrate that in certain cases you’ve achieved all this economic development, that’s one way they can get access to those resources. On the business side, doing these social practices and in financing, they have to do these best practices to get the loan. Every corporation has CSR, but whether its actually being achieved on the field is questionable” (Interview with Replan representative).

2.4 Benefit Sharing and Symmetric Power Dynamics

A piece of regulation to see if its working or not working depending on how it benefits the affected communities, which some scholars call benefit sharing, which can occur through non-asymmetric power dynamics or can result in equal power dynamics. Benefit sharing refers to a commitment to channel some kind of return, whether monetary or non-monetary, back to the range of designated participants: affected communities, or source nations, balancing the power dynamic between the actors.

In one view, benefit sharing in this context is a compensatory activity, geared towards those who have taken risks and accepted the possible inconveniences that are necessary for research to take place and possibly succeed. There are a variety of structures and processes that can be used as vehicles for delivering development benefits to communities impacted by resource projects. These include company-controlled social
investment programs, government-approved community development and impact mitigations plans, development forums, bilateral and multi-sector partnerships and collaborations, formal agreements, and community-controlled trusts and development funds.

Benefit distribution of natural resource extraction is generally skewed towards the state and operating companies, thus relegating to the background the interest and welfare of the host communities on whose lands the resources are extracted. However, “It is an elementary principle of social justice that if wealth is being produced from resources in an area, at a social cost, then everybody should receive some compensatory adjustments to the change of lifestyles (Stevens 1995).

2.5 The Extractive Industries and Unbalanced Power Distribution

For centuries, the extractive industries have been prevalent in the developing world, especially in Sub-Saharan Africa. This industry involves oil, gas and various mining industries, such as gold, diamond and bauxite. These extractions usually occur in communities of disempowered populations that bear most of the burden from these industries.

Some critics have argued that the “extractive industries have come to be seen as representing the potential for economic advantages for rural regions that often have few other competitive strengths” (Freudenburg, 1992). For example, to allow for an increase in mining interest in Africa, international organizations such as the World Bank have aimed at improving the capacity of African states governing power by liberalizing the mining regulations (McMahon & Remy, 2001). The chief executive officer of Ghana’s
largest gold mining company acknowledged that, “for us in Ghana, the impressive FDI we saw in the early 1990s were almost all in the natural resource sector” (Johan, 2001).

Gold mining is a significant activity for Ghana. In 2009 Ghana’s Internal Revenue Service collected USD$ 243 million in taxes from the mining sector, equivalent to almost 20% of total tax collections. The sector directly employed more than 17,000 workers, and job growth has averaged over 4% per year since 2002. Overall, the mining sector contributed 6.3% to Ghana’s 2009 Gross Domestic Product and 43% of its exports.

Despite these statistics, some Ghanaian stakeholders assert that mining has not had a significantly positive impact on the nation’s economy. It is perceived by some to be with few spillover effects, meaning that few within Ghana benefit from this activity while most of the profits go offshore. There is further contestation about the environmental and social impacts of mining, given the physical and human displacement caused by large scale projects.

In many countries in Africa, during the 1980s, high corporate tax rates, revenue based rather than profit based taxes, and restrictions in foreign ownership caused disincentive for foreign mining firms to invest in African mines. In response, mining reforms were made in 1990 to increase foreign investment in this industry, which included reduced taxation levels and liberated import tax exemptions for equipment (Abugre & Akabzaa, 1998). Rather than addressing the issue of increasing the community’s legitimate claim over the resources, these policy changes were implemented to create a favorable investment environment at the industry level. Rather than an instrument in bringing more economic development for the community, many scholars argue that the extractive industries does not bring about long-term economic development
in the communities where mining occurs, rather it harms the local communities (Collier, 2007).

2.6 Regulation of the Mining Sector

In 2006, the Government of Ghana developed a new mining law, Minerals and Mining Act to replace the Minerals and Mining Law, 1986 (PNDCL 153). The minister responsible for the mining sector in Ghana is also responsible for the overall management of Ghana’s mineral resources and policy-making, including the granting of minerals rights. The Minerals Commission, established in 1986, is responsible for the administration of mining in Ghana while playing an advisory role for the Minister regarding mineral policy and granting mineral rights. It was set up to ensure a one-stop service for investors and to minimize bureaucracy. This agency is responsible for the formation of regulations, amending and modifying existing legislation. It also develops guidelines and standards for monitoring of the environmental aspects of mining activities.

The Environmental Protection Agency is responsible for the environment. The Forestry Commission and the Water Resources Commission have key roles to play in the environmental regulation of the mining sector. The Ministry of Finance, the Ghana Revenue Authority and the Bank of Ghana are in collaboration with the Minerals Commission who regulates the fiscal aspects of the mining policy.

Other regulations that have developed for the mining sector in Ghana are the Compensation and Resettlement Regulations, Explosives Regulation, Minerals (Royalties) Regulations, Mines (Support Services) Regulations, Mining Regulations (Health and Safety), General Regulations and Mining Licensing Regulations.
Chapter 3
Methods & Design

The case of the resettlement program in Ahafo, Ghana where the Canadian mining company Newmont followed IFC resettlement guidelines to enable benefit sharing was an attempt in Ghana to solve a long term natural resource conflict but still encountered company-community conflicts. As Newmont had never prepared a resettlement before, their approach in using the IFC involuntary resettlement guidelines was innovative for the company as well as “a demonstration case on how to handle environmental, social and community development cases in Ghana” (IFC representative).

Archival research using published project documents by the International Finance Corporation (IFC) and Newmont Mining Corporation as well as media reports, scholarly literature about regulations and interviews with stakeholders were used in this study.

In early 2012, ten semi-structured interviews with local activists, an IFC representative, Minerals Commission representatives, Newmont representatives, and consultants involved with the Ahafo resettlement were conducted to assess their expectations and perceptions during and after the resettlement. The selection of participants is based on a snowball sampling through referrals of NGOs working in the extractive industries in Ghana. The interviews with the NGOs and activists were transcribed and analyzed. After various conversations with stakeholders, the extent to which mining companies interpret international principles and guidelines and act with social responsibility in the social, economic and environmental development of affected communities became a salient issue in the resettlement of Ahafo.
The goal is to understand the company and NGO’s perspective on how a company implements a resettlement plan by following IFC guidelines, when conflicts or failures occur in the process, and where there are limitations to the IFC guidelines. This study looks at how IFC guidelines are implemented while elucidating the limitations to them. The study further recommends how resettlement regulations can change in a way for more socially responsible firm behavior and benefit sharing.
Chapter 4
Findings and Analysis

4.1 Planning, regulations, and resettlement in Ahafo, Ghana

Even before the colonial period, Ghanaian locals were performing small-scale artisanal gold mining. In the late 19th Century, British and other foreign investors started large-scale mining. During the 1980s, Structural Adjustment Programme (SAP) by the World Bank and International Monetary Fund were undergoing in Ghana and in the mineral industry worldwide. Many mineral rich developing countries were encouraged to put in place a policy framework that would encourage private participation in the mining sector. The World Bank and the International Monetary Fund advocated for international private investor participation for Ghana’s mining sector. For this to occur, the country must provide a conducive legislative and administrative framework conducive for business through a privatization program—the Structural Adjustment Programme (SAP). The purpose of the SAP was to reduce the role of the state in the economy and improve business competitiveness and efficiency; to reduce the fiscal deficit by using the proceeds from the sales to retire external and domestic debt, and the generate new cash flows through investment and tax revenues. This was to shift towards a more neo-liberal position that allowed the market to allocate resources. Ghana shifted its focus from direct state investment in the mining sector to the promotion and regulation of private companies.

The SAPs in Ghana led to some successes such as a positive growth rate in GDP. There has also been an increase in confidence for foreign investment attraction and increased repairs in structural imbalances. (Aryee, 2001; Akabzaa and Darimani, 2001).
Gold in particular played a leading role in foreign exchange earnings. In 1994, gold exports represented 45% of total export revenue in Ghana. Through the SAPs, employment in the mining sector also increased. The labor sector in 1987 was 15,069 and rose to 22,500 by 1995 (Bird, 1994).


The principle minerals mined in Ghana are gold, diamond, manganese and bauxite. Among these, gold contributes the most to Ghana’s economy, accounting for 95% of mineral revenues (Aryee, 2001). In 2009 Ghana’s Internal Revenue Service collected USD$ 243 million in taxes from the mining sector, equivalent to almost 20% of total tax collections. The sector directly employed more than 17,000 workers, and job growth has averaged over 4% per year since 2002. Overall, the mining sector contributed 6.3% to Ghana’s 2009 Gross Domestic Product and 43% of its exports. My study focused mainly on gold mining operations because of the relatively high foreign direct investment in this sector.
Although Ghana is the second largest producer of gold in Africa, after South Africa, the transferring of its mineral wealth into economic development has been modest. Rather, there have been more environmental, social and developmental negative externalities from mining that have impacted the country. Most importantly, the local communities have been most affected by the socially and environmentally destructive impacts of mining. The effects of mining are particularly paramount for vulnerable groups at the local levels, who lack capacity to adequately negotiate with other stakeholders.

Mining has been associated with community resistance and community disenfranchisement. In the absence of a strong governmental regulatory capacity, IFC and the company have the responsibility to ensure that the project complies with the highest possible operational standards. NGOs have been involved to help advocate for indigenous people’s rights as well as capacity building in the government in promoting transparency issues. George Sauros initiated Publish What you Pay, which creates transparency, forcing governments and companies to publish what they pay. International agencies have been promoting and pushing firms to conduct more socially responsible actions and mitigate impact when dealing with the resettlement of a population. Mining companies, such as Newmont in Ahafo and Akyem, Golden Star in Prestea, have followed IFC best principles in aiding their mitigation of their resettlements. According to a Replan representative who focuses on the mining industry in West Africa, “Newmont is considered one of the better companies that have planned and implemented community development projects. To understand which principles
need to be further emphasized and studied, lessons that were learned from Newmont’s mining operations can be further investigated.”

Ahafo mine project was established in 2003 with the signing of a foreign investment agreement between Newmont and the Government of Ghana. The total mine area of the initial Ahafo Project was to replace 823 households where 399 households were to be resettled. The resettlement of Ahafo was to follow IFC resettlement guidelines to mitigate Newmont’s resettlement impacts. According to IFC management, “this project is expected to become a demonstration case for how to handle environmental, social and community development issues in Ghana. Ghana has a long history of mining and unfortunately in some cases mining operations have resulted in negative environmental and social impacts on local communities. It is expected that this project would become a model for other mining companies to follow; for example, the level of multi-stakeholder involvement in the resettlement process is expected to become the benchmark for the future.”

4.2 Ahafo Case Study: Compliance with IFC Resettlement Guidelines

This section focuses on assessing the project’s performance in planning and implementing resettlement using IFC guidelines as well as complying with OD 4.30. The IFC recommends the following ten components to a Resettlement Action Plan:

- identification of project impacts and affected populations
- a legal framework for land acquisition and compensation
- a compensation framework
- a description of resettlement assistance and restoration of livelihood activities
• a detailed budget
• an implementation schedule
• a description of organizational responsibilities
• a framework for public consultation, participation, and development planning
• a description of provisions for redress of grievances
• a framework for monitoring, evaluation and reporting

The following describes how the Ahafo Resettlement Action Plan follows the IFC Resettlement guidelines.

First, a socio economic survey, required in paragraph 11, used to identify the project impacts and affected populations. The description of the project impacts includes an overview of impacts on households, public facilities, public access and hosts communities.

Second, the legal framework, required in paragraph 12 for land acquisition and compensation was described. The legal and institutional context of resettlement in Ghana is complex at the national and international levels. The purpose of these regulations is to ensure that populations displaced by a project receives benefits from the development. Regulatory oversight of private sector land acquisition and resettlement related to mining activities and actions is governed by the 1992 Constitution of Ghana and two Acts. The 1992 Constitution of Ghana, ensures the protection of private property and establishes requirements for resettlement in the event of displacement from State acquisition. The State Lands Act of 1962 mandates compensation rates and sets procedures for public land acquisitions. The Minerals and Mining Amendment Act of 1992 allocates all mineral
rights to the State and requires adequate compensation for loss of assets on the surface of the land due to mineral operations. A new Bill focused on mineral rights will be before Parliament in the third quarter of 2005.

A company may look to existing guidelines and principles that provide direction on how to undertake a resettlement. For International Best Practice, there is the operational Directive 4.30 and the Equator Principles. The IFC requires that all of its clients abide by Performance Standards. The IFC provides loans, equity, structured finance and risk management products, and advisory services to build the private sector in developing countries. Performance standard 5 deals with land acquisition and involuntary resettlement, setting forth a number of specific provisions that will aid a corporation undertaking a village resettlement. While the IFC’s standards only bind those companies with which it does business, these standards provide a useful framework for a company designing a resettlement plan.

The Ahafo Resettlement Plan conducted a comparison of Internal, National and International Practices. Where conflict exists, international practice dictates that project proponents demonstrate how they will ‘bridge the gap’ between domestic requirements and international practice, however, in practice this didn’t fully materialize.

Third, in paragraphs 14-16, the guidelines suggest there be a valuation of and compensation for lost assets. Newmont’s procedure for exploration crop compensation is as follows: once geologists define the exploration program for a given area, Project community workers contact the relevant Chief Farmer and individual landholders. Prior to any impact, the community worker presents the agreed crop compensation rates to each responsible farmer and, together with the farmer, inventories the crops to be
impacted, and determines the compensation entitlement. The Chief Farmer for the area is normally present during this interaction. Agreement on appropriate entitlement usually precedes impact. Wherever practical, the Company allowed crop owners to salvage (harvest or transplant) their crops in advance of their destruction. Farmers who replant after exploration compensation are eligible for further compensation if the same land is subsequently taken by the Project.

Fourth, paragraph 18 requires access to training, employment and credit for the resettled communities. Newmont has adopted a three-pronged approach to livelihood enhancement and community development: aggressive local recruitment targets for both the company and its contractors, a money management course for all people receiving cash compensation from the company, and a comprehensive Livelihood Enhancement and Community Empowerment Program.

The Company contracted with OICI to prepare a high-impact, results-focused, sustainable livelihood enhancement and community development program. The resulting program focuses on economic growth, wealth creation, quality of life, and empowerment. The first phase of the program involves targeted assistance for Project-affected households to ensure livelihood enhancement during resettlement and relocation. The second phase of the program is in development and will involve long term community development initiatives. Community consultative workshops were held on 14 December 2004 and on 24 January 2005 to discuss the draft program with representatives of impacted persons / households, the local community, the Resettlement Negotiation Committee, and the district and regional government. The official program launch was on 15 February 2005.

Fifth, the company developed and published a detailed budget of
Sixth, the company published their implementation schedule of the resettlement.

Seventh, according to paragraph 6, the organizational responsibility should be described. The company is responsible for the implementation of the resettlement action plan, in consultation with the resettlement negotiation committee, and with the cooperation of government agencies at the district, regional and national level. The resettlement action plan describes the role and structures of the company, the government agencies, resettlement negotiation committee.

Eighth, paragraph 7-10 describes the need for community participation and integration with host populations. A framework for public consultation, participation, and development planning was developed in Ahafo. Company led consultation and disclosure commenced well ahead of negotiations in formal stakeholder meetings with community leaders and representatives; and as well as in daily, informal dialogue between Company compensation staff and Project-affected people. The objective has been to provide information, discuss anticipated impacts, and respond to concerns or questions. In 2000 and 2001 the Environmental Protection Agency held public hearings to present draft Project Environmental Impact Statements and hear community concerns.

In February 2004, the Resettlement Negotiating Committee was established that enabled multi-stakeholder involvement in the resettlement planning. The resettlement was a collaborate process where the committee involved representatives of villages, traditional authorities, local government, and non-governmental organizations, and Newmont who all came together to determine the resettlement principles, policies,
procedures and compensation rates. Negotiation has entailed intensive collaboration between members of the RNC and prior, informed, free consent among representatives of all Project affected persons. Opportunities Industrialization Centers International; nonprofit based in Philadelphia that trains community members contracted with Newmont to help the company with community development of resettlement.

“The OICI group spent day after day in the fields explaining to the people that were going to be affected. So they would explain about the crop compensation, the housing, what it meant for them to have to move, when the mine was going to be built, when they would have to move, how we would improve the schools, how we would provide training and transportation for the mine workers, how we would employ people, how we measured the land and calculated their crop compensated. All this was open. There was not one single issue that came up that wasn’t discussed in the public forum. It wasn’t always universally liked, but it was all discussed and all agreed to.”
– Interview with, Newmont representative

Ninth, a description of provisions for redress of grievances was given. According to its public statements, the company “…aims to engage as much as possible, with its local communities to ensure interactions are relevant, conflicts are resolved quickly and to the mutual benefit of both parties and in such a way that stakeholders feel positive about their involvement with the company” (www.newmont.com, 2004).

To meet its policy objectives, the company maintains both informal and formal grievance mechanisms.

Finally, in paragraphs 21-22, the implementation schedule, monitoring and evaluation process is described. For Ahafo, a framework for monitoring, evaluation and reporting was described in the Resettlement Action Plan report. Monitoring consists of internal monitoring by the company as an integral part of company management and
external monitoring by company appointed consultants, working with impacted communities. Monitoring will be done by audit, conventional sample surveys and community participation. Broadly speaking, the Company itself will monitor inputs, outputs and impacts. Reviews on the resettlement and compensation components were undertaken in July and December 2005 by an independent resettlement specialist, under the contract with Newmont. The reports of these reviews are publicly available on Newmont’s website and IFC’s website. These reviews were undertaken based on Terms of Reference jointly prepared by Newmont and the IFC, which focused solely on resettlement and compensation.

**4.3 Power Imbalances in Planning: Conflicts of Interest in the Resettlement Guidelines.**

To comply with IFC’s policies all sponsors of projects resulting in involuntary resettlement are required to prepare and publicly disclose a Resettlement Action Plan. The Resettlement Action Plan must be prepared through a process of public consultation with all interested and affected parties.

Community consultation in Ahafo was not an instance where communities were prevented from sharing their views, but was one where the Company and IFC failed to translate these concerns into a collaborative practice in the decision making process about the development components of the Ahafo mine project.

In February 2004, the Resettlement Negotiating Committee was established that enabled multi-stakeholder involvement in the resettlement planning. The resettlement was a collaborate process where the committee involved representatives of villages,
traditional authorities, local government, and non-governmental organizations, and Newmont who all came together to determine the resettlement principles, policies, procedures and compensation rates. This committee was created with the intention that adequate community engagement and cooperation would occur. However, on the field, this wasn’t exactly how decisions were made. A Newmont representative states that if Newmont were to have redone this resettlement, they regret not having “a higher level of communication with this people.”

The representatives from the committee were supposed to go back to the community and explain to the rest of the population what the meetings were about and what was negotiated. However, this did not occur so minutes were taken during the meetings and translated into the local language, which got distributed to the communities. However, to complicate matters worse, a lot of times “people could not read, so there was always a lot of confusion about what was actually agreed to” (Interview with Jim Stinson, January 18, 2012). According to a representative from Mining Watch, “The decision making was not collective, it was not the village that agreed to move, it was that a large enough portion of the villagers individually signed an agreement to move. And then they built them new houses. There is another big conflict about that because the houses were not what they wanted. They looked nice, but they didn’t correspond to the sort of traditional village life. “

The lack of collaboration for enhanced equitable development decisions was manifested in innumerable sectors in the resettlement: the home design, the kitchen size, and the installation of the KVIP latrines are among a few topics that illustrate this issue. At times, the company would implement compensation packages for the community, but
would fail to first understand the cultural and social norms and fail to adequately train the community members in adequately utilizing their new homes. The following explanations illustrate this point.

“Every single person who got a house got a KVIP latrine. So these are really low maintenance; its essentially a two hole outhouse that are self composting. So the idea is that you use one side (one KVIP is able to support a family of two for one year or something). The idea is that you use one side of it and then close it off. The anaerobic activity breaks down all the human waste while they use the other side. There was a vent that opened up in the back that enabled them to removal all that dried up waste and uses it for fertilizer and uses the other side. And alternate back and forth. They were ventilated so that there was no smell to them. It’s a very simple and very efficient system. Well of course people didn’t know how to use it. They would use both sides of it, they didn’t know about composting. They were trained in all this—it was explained to every single individual family. And then people would use it to store their tools in, and reasons other then use them as a bathroom. And a lot of people didn’t like it because they were used to going to the toilet outside. They were using the toilet outside all their lives, so why would they use a small little house for that when they can use it for some other reason. I mean there were a million things that went on you can’t even imagine. And they were very expensive to build- they were $3500 a piece and the company just went ballistic over that. You built a hole in the ground and you build two cinder block shield compartments. You have to build two cylindrical walls in each of these holes so that you can isolate one from each other plus with a vent on the back- these are expensive to build (interview with Newmont Representative).”

29
Newmont’s policy to provide kitchens only to those households who had a kitchen in the previous situation. The issue is complicated by the fact that people are reported to have shared kitchens in their original location, with the implication that only one household was then eligible to kitchen replacement and the other users remaining without a kitchen in their resettlement home. Also, several households having received kitchens were observed to use them as additional bedrooms “If they had a kitchen no matter what it was we would replace their kitchen but they would traditionally use an open fire pit to cook. So if we built them a kitchen they couldn’t even cook inside the kitchen because it was too hot. So some people leaned toward a kitchen and some people did not and they were upset about that. Because if you gave one guy more than his neighbor, it creates a social jealousy that creates more social problems. So we had to come up with an equivalency—if you had this, you’ll get it. If you have a kitchen, you’ll get a kitchen. I want four rooms in my house, no, I have two rooms, ok, then that’s what you get. So you can always err on building everyone a palace and electrify them and air condition them but it doesn’t work. It can’t work. They don’t know how to maintain it. It doesn’t work culturally, socially and economically. You have to improve the quality of their life without over kill.

“I believe that every single person in Ahafo should have a personal counselor that they can go to for any thing so that they can talk about these things. Just the mere fact that they can talk about these things was important. In a way it kind of worked that way. The OICI people were able to talk to these people on an individual basis.” (Interview with Newmont representative). The Newmont representative further indicated that, “we
didn’t plan this resettlement properly, we should have spent more time educating the people there. The communities didn’t fully understand the impact of the resettlement.”

For constructive community collaboration, all parties must have perfect knowledge and power to express their thoughts and have equal leverage to negotiate. As there are international guidelines for mining as well as resettlements, whether these guidelines were translated into understandable terms for the local communities to understand their rights and be given the power to negotiate is contentious.

To increase transparency, Newmont and the IFC had the responsibility of publishing their resettlement action plan, monitoring reports, and evaluating reports, which were all published. However, when speaking to a Newmont representative about getting a hold of the baseline survey and maps of the resettlement, they declined to disperse this information to the public. According to the IFC regulations, this information should be in the public realm in order for accountability and transparency of their project impacts.

Further the third party consultant who monitors the project also published their report to the public. However, the independent consultant was hired by Newmont. In order for checks and balances, there should be a governmental or NGO monitoring system that also checks how the company is impacting the communities. However, currently, there are not mechanisms in place for the affected communities and NGOs to effectively monitor company operations. The IFC regulations should include a clause that requires active monitoring of the projects not only by a third party consultant hired by the mining company, but also by someone hired by someone who is not affiliated with neither the government nor the company.
Chapter 5
Recommendations

In the literature review, I raised the issue of power, uneven regulation, and benefit sharing. What has become evident from my field work is that one should have skepticism to what the World Bank/IFC regulations can accomplish as they are currently defined because the conflicts of interest that I have found in my field work point to serious power asymmetry between the different actors.

Figure 2. Existing Power Dynamics between stakeholders

There is an imbalance in the power structure between all the stakeholders that inhibit equitable community engagement in the resettlement process. Among the stakeholders, the most powerful entities are the Ghanaian state, the IFC and the private mining firms. The bargaining structure of the guidelines are too one sided that the
companies can interpret them in their own way without proper checks from the state or the World Bank. From the community, only the chiefs and a community representative are involved in ‘community engagement’ meetings that the company held rather than having the entire community involved. When signing contracts with the community, a large proportion of the population had not agreed to sign contracts. Further, the guidelines allow for no accountability because decisions were not made collectively and the company was the sole entity who monitored and published audits.

The rent seeking Ghanaian state works with the IFC funded private mining firms rather than on behalf of the communities, which compounds on the power asymmetry between the stakeholders. As land and minerals in Ghana are owned by the state, once the Ghana Minerals Commission allows for a multinational company to set up concessions, the company is able to mine in their site without much local government supervision, leaving the local communities without agency.

The power asymmetry can be mitigated through changes in the IFC guidelines that will allow for more equitable citizen engagement and unbiased project monitoring.
The World Bank IFC resettlement guidelines are in place to help mitigate and ensure that the populations displaced by mining projects receives benefits from it.

Restructuring, reprioritizing and rewording the World Bank/IFC resettlement guidelines that mining companies are required to comply by can be an integral tool in shifting away from the rent seeking phenomena of the Ghanaian state and allowing for more equitable mining and resettlement practices.

Therefore, I have two sets of recommendations. In the first, the table below shows specific guidelines and how they can be modified in the IFC based on the evidence. And the second, I show a particular prioritizing of the resettlement guidelines themselves.
Table 1. Conflict of Interest in Planning Processes evident in the World Bank Operational Directive Resettlement Guidelines

<table>
<thead>
<tr>
<th>World Bank Operational Directive Guideline</th>
<th>Conflicts of Interest in Resettlement Guidelines</th>
<th>Recommendations to the IFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paragraph 8 states that &quot;To obtain cooperation, participation, and feedback, the affected hosts and resettlers need to be systematically informed and consulted during preparation of the resettlement plan about their options and rights. They should also be able to choose from a number of acceptable resettlement alternatives.&quot;</td>
<td>One major complaint about the Ahafo project was that the homes were not large enough, which could have been mitigated with more community consultation and options for the communities to choose from.</td>
<td>As one of the policy objectives is for community participation in planning and implementation, it should be a requirement for the communities to be able to choose among acceptable resettlement alternatives.</td>
</tr>
<tr>
<td>Paragraph 8 states that &quot;Local NGOs can provide valuable assistance and ensure viable community participation&quot;</td>
<td>Many times the mining company has no experience working in the particular communities being affected and will not be familiar with the cultural and social norms of the communities.</td>
<td>To do a resettlement, local NGOs should be required to be an integral part in the project planning and implementation, as a third party mediator advocating for the community. Partnering with local NGOs will help elucidate cultural and social gaps and allow for more fluid discussion.</td>
</tr>
<tr>
<td>Paragraph 8 states that &quot;institutionalized arrangements, such as regular meetings between projects officials and communities, should provide for resettlers and hosts to communicate their concerns about the resettlement program to project staff throughout planning and implementation.&quot;</td>
<td>Community consultation in Ahafo was not an instance where communities were prevented from sharing their views, but was one where the company and IFC failed to translate these concerns into a collaborative practice in the decision making process.</td>
<td>The resettlers and hosts should not only be able to communicate their concerns about the resettlement program, but should be able to negotiate with the project staff throughout planning and implementation. These negotiations need to be recorded and available to the public.</td>
</tr>
<tr>
<td>Paragraph 19 states that &quot;since community or self-built houses are often better accepted and more tailored to the resettlers' needs than contractor-built housing, provision of a building site with suitable infrastructure, model plans, building materials, technical assistance, and construction allowances is an option communities should be offered.&quot;</td>
<td>One major complaint about the Ahafo project was that the homes were not large enough, which could have been mitigated with more community consultation and options for the communities to choose from. Further, the installation of the KVIP latrines and home kitchens were not customary to the households, which were both used as storage facilities rather than what they were originally intended to be used as.</td>
<td>It should be a requirement for communities to choose all these factors for their new homes.</td>
</tr>
</tbody>
</table>
Paragraph 22 states that "arrangements for monitoring implementation of resettlement and evaluating its impact should be developed by the borrower during project preparation and used during supervision."

If the monitoring and evaluating of the project is developed solely by the company, there is no accountability in their project.

The monitoring and evaluating of the project should be developed by the company and the community together. If the community does not have the leveraging capacity to negotiate with the company, a third party representative should step in to develop this.

Paragraph 22 states "In-house monitoring by the implementing agency may need to be supplemented by independent monitors to ensure complete and objective information."

If the monitoring is conducted by the company and being published on the company's website, there is no way the project is being supervised.

Monitoring should be required to be conducted by third party unbiased consultants to fully understand the project impacts. There should also be another channel of publishing their audits outside of the company's website.

In order for the IFC to do socially accountable lending, they will have to reprioritize their operational guidelines. Among the guidelines, there are priorities that the IFC should focus on as non-negotiables that should be at the top of the list of guidelines and every other guideline should be subservient to this set. These priority guidelines include: community participation that includes communication and negotiation between stakeholders, non-biased monitoring and evaluating the project, and the involvement of more third party consultants that will help facilitate more equitable resettlements.
Table 2. Top priorities in the World Bank Resettlement Guidelines

<table>
<thead>
<tr>
<th>Priorities in Resettlement Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paragraph 8: &quot;institutionalized arrangements, such as regular meetings between projects officials and communities, should be provided for resettlers and hosts to communicate their concerns about the resettlement program to project staff throughout planning and implementation.&quot;</td>
</tr>
<tr>
<td>Paragraph 22: &quot;arrangements for monitoring implementation of resettlement and evaluating its impact should be developed by the borrower during project preparation and used during supervision.&quot;</td>
</tr>
<tr>
<td>Paragraph 22: &quot;In-house monitoring by the implementing agency may need to be supplemented by independent monitors to ensure complete and objective information.&quot;</td>
</tr>
</tbody>
</table>
Chapter 6
Conclusion

Mineral policy reforms in Ghana have contributed to an enormous increase in mining investment as well as an increase in gold production and the generation of external earnings. However, the wealth generated from the mines tends to neither benefit the national economy nor the communities located near the mines. The World Bank and IFC constantly inform and consult with governments about how they are rent seeking.

The World Bank IFC resettlement guidelines are in place to help mitigate and ensure that the populations displaced by mining projects receives benefits from it. The IFC is an agency that provides loans to multinational mining companies to aid them in establishing mining concessions in foreign countries, which is one of the first steps a company takes in establishing their mining site. The resettlement guidelines that the IFC require these companies to comply by can be an integral tool in shifting away from the rent seeking phenomena of the Ghanaian state.

By providing funding for multinational corporations to work in developing countries and requiring them to abide by their guidelines is providing some positive results for the host country and can be considered progress. However, their guidelines are not necessarily enhancing the livelihoods of the lost populations, but allowing for the status quo to occur. The case of Ahafo exemplifies this exactly, as Newmont was known to have followed the IFC resettlement guidelines fairly precisely, innumerous conflicts arose and continue to arise in Ahafo.

The leverage points to push for change and allow trust between all stakeholders would lie on building the capacity for the local communities to negotiate on behalf of
themselves, creating more transparency between the stakeholders, and ensuring that third party unbiased consultants are present at every stage of the resettlement. Capacity building for the local communities to negotiate can be through the use of knowledgeable local NGOs, who will help to advocate on behalf of the community. Also, enabling the communities to observe the internal audits conducted by the companies to ensure the validity of the audits while provide the community with information. The audits and plans that the company develops need to be in consultation with the community while being transparent throughout the whole project. Further, developing, monitoring and evaluating the project cannot be solely done by the firm, but needs a constant presence of an unbiased third party consultant.

The World Bank IFC resettlement guidelines are in place to help mitigate and ensure that the populations displaced by mining projects receives benefits from it. Restructuring, reprioritizing and rewording the World Bank/IFC resettlement guidelines that mining companies are required to comply by can be an integral tool in shifting away from the rent seeking phenomena of the Ghanaian state.
Chapter 7
Future Direction of the Study

This is a focused study on one mining induced resettlement case in Ghana that elucidated the limitations of IFC regulations in resettlement. This study can be replicated in other mining induced resettlements that occurred after the resettlement of Ahafo to further understand the limitations and recommendations of how these guidelines should be implemented. Further, this study observed the perspective of NGO representatives, consultants and government officials who were involved with the Ahafo resettlement to gain an understanding of how the project complied by the IFC Resettlement Guidelines and what limitations there were to the guidelines that hindered equitable benefit sharing. To gain an understanding of the community impact and perspective of the mining operations and how regulations were implemented to date, community surveys and interviews can be further undertaken at Ahafo and other resettled communities that followed IFC guidelines.
Appendix

The World Bank Operational Manual
Operational Directive 4.30
June 1, 1990

Introduction

1. This directive describes Bank policy and procedures on involuntary resettlement, as well as the conditions that borrowers are expected to meet in operations involving involuntary resettlement. Planning and financing resettlement components or free-standing projects are an integral part of preparation for projects that cause involuntary displacement. Any operation that involves land acquisition or is screened as a Category A or B project for environmental assessment purposes should be reviewed for potential resettlement requirements early in the project cycle.

2. Development projects that displace people involuntarily generally give rise to severe economic, social, and environmental problems: production systems are dismantled; productive assets and income sources are lost; people are relocated to environments where their productive skills may be less applicable and the competition for resources greater; community structures and social networks are weakened; kin groups are dispersed; and cultural identity, traditional authority, and the potential for mutual help are diminished. Involuntary resettlement may cause severe long-term hardship, impoverishment, and environmental damage unless appropriate measures are carefully planned and carried out.

Policy Objectives

3. The objective of the Bank's resettlement policy is to ensure that the population displaced by a project receives benefits from it. Involuntary resettlement is an integral part of project design and should be dealt with from the earliest stages of project preparation, taking into account the following policy considerations:

(a) Involuntary resettlement should be avoided or minimized where feasible, exploring all viable alternative project designs. For example, realignment of roads or reductions in dam height may significantly reduce resettlement needs.

(b) Where displacement is unavoidable, resettlement plans should be developed. All involuntary resettlement should be conceived and executed as development programs, with resettlers provided sufficient investment resources and opportunities to share in project benefits. Displaced persons should be (i) compensated for their losses at full replacement cost prior to the actual move; (ii) assisted with the move and supported during the transition period in the resettlement site; and (iii) assisted in their efforts to improve their former living standards, income earning capacity, and production levels, or at least to restore them. Particular attention should be paid to the needs of the poorest groups to be resettled.

(c) Community participation in planning and implementing resettlement should be encouraged. Appropriate patterns of social organization should be established, and existing social and cultural institutions of resettlers and their hosts should be supported and used to the greatest extent possible.
Resettlers should be integrated socially and economically into host communities so that adverse impacts on host communities are minimized. The best way of achieving this integration is for resettlement to be planned in areas benefiting from the project and through consultation with the future hosts.

Land, housing, infrastructure, and other compensation should be provided to the adversely affected population, indigenous groups, ethnic minorities, and pastoralists who may have usufruct or customary rights to the land or other resources taken for the project. The absence of legal title to land by such groups should not be a bar to compensation.

Resettlement Planning

Where large-scale population displacement is unavoidable, a detailed resettlement plan, timetable, and budget are required. Resettlement plans should be built around a development strategy and package aimed at improving or at least restoring the economic base for those relocated. Experience indicates that cash compensation alone is normally inadequate. Voluntary settlement may form part of a resettlement plan, provided measures to address the special circumstances of involuntary resettlers are included. Preference should be given to land-based resettlement strategies for people dislocated from agricultural settings. If suitable land is unavailable, nonland-based strategies built around opportunities for employment or self-employment may be used.

Plan Content

5. The content and level of detail of resettlement plans, which will vary with circumstances, especially the magnitude of resettlement, it should normally include a statement of objectives and policies, an executive summary, and detailed provision for the following:

(a) organizational responsibilities (para. 6);

(b) community participation and integration with host populations (paras. 7-10);

(c) socioeconomic survey (para. 11);

(d) legal framework (para. 12);

(e) alternative sites and selection (para. 13);

(f) valuation of and compensation for lost assets (paras. 14-16);

(g) land tenure, acquisition, and transfer (para. 17);

(h) access to training, employment, and credit (para. 18);

(i) shelter, infrastructure, and social services (para. 19);

(j) environmental protection and management (para. 20); and

(k) implementation schedule, monitoring, and evaluation (paras. 21-22).

Cost estimates should be prepared for these activities, and they should be budgeted and scheduled in coordination with the physical works of the main investment project.
Organizational Responsibilities

6. The responsibility for resettlement rests with the borrower. The organizational framework for managing resettlement must be developed during preparation and adequate resources provided to the responsible institutions. The organization responsible for resettlement should be strengthened when entities executing infrastructure or other sector-specific projects lack the experience and outlook needed to design and implement resettlement. One alternative is to create a special resettlement unit within the project entity: this can facilitate the involvement of other line agencies. Another is to entrust resettlement to the regional or town administration that knows the population and area, can mobilize local expertise, speaks the resettlers' language, and will ultimately be responsible for the integration of resettlers into the host population and area. There also may be considerable scope for involving nongovernmental organizations (NGOs) in planning, implementing, and monitoring resettlement.

Community Participation and Integration with Host Population

Most displaced people prefer to move as part of a preexisting community, neighborhood, or kinship group. The acceptability of a resettlement plan can be increased and the disruption caused by resettlement can be cushioned by moving people in groups, reducing dispersion, sustaining existing patterns of group organization, and retaining access to cultural property (temples, pilgrimage centers, etc.), if necessary, through the relocation of the property.

8. The involvement of involuntary resettlers and hosts in planning prior to the move is critical. Initial resistance to the idea of involuntary resettlement is to be expected. To obtain cooperation, participation, and feedback, the affected hosts and resettlers need to be systematically informed and consulted during preparation of the resettlement plan about their options and rights. They should also be able to choose from a number of acceptable resettlement alternatives. These steps can be taken directly or through formal and informal leaders and representatives. Experience has shown that local NGOs can often provide valuable assistance and ensure viable community participation. Moreover, institutionalized arrangements, such as regular meetings between project officials and communities, should be provided for resettlers and hosts to communicate their concerns about the resettlement program to project staff throughout planning and implementation. Particular attention must be given to ensure that vulnerable groups such as indigenous people, ethnic minorities, the landless, and women are represented adequately in such arrangements.

9. The plan should address and mitigate resettlement's impact on host populations. Host communities and local governments should be informed and consulted. Any payment due the hosts for land or other assets provided to resettlers should be promptly rendered. Conflicts between hosts and resettlers may develop as increased demands are placed on land, water, forests, services, etc., or if the resettlers are provided services and housing superior to that of the hosts. Conditions and services in host communities should improve, or at least not deteriorate. Providing improved education, water, health, and production services to both groups fosters a better social climate for their integration. In the long run, the extra investment will help prevent conflicts and secure the project's aims.

10. Successful resettlement requires a timely transfer of responsibility from settlement agencies to the settlers themselves. Otherwise, a dependency relationship may arise, and agency resources may become tied up in a limited number of continually supervised schemes. Local leadership must be encouraged to assume responsibility for environmental management and infrastructure maintenance.
Socioeconomic Survey

11. Resettlement plans should be based on recent information about the scale and impact of resettlement on the displaced population. In addition to describing standard household characteristics, socioeconomic surveys should describe (a) the magnitude of displacement; (b) information on the full resource base of the affected population, including income derived from informal sector and nonfarm activities, and from common property; (c) the extent to which groups will experience total or partial loss of assets; (d) public infrastructure and social services that will be affected; (e) formal and informal institutions (such as community organizations, ritual groups, etc.) that can assist with designing and implementing the resettlement programs; and (f) attitudes on resettlement options. Socioeconomic surveys, recording the names of affected families, should be conducted as early as possible to prevent inflows of population ineligible for compensation.

Legal Framework

12. A clear understanding of the legal issues involved in resettlement is needed to design a feasible resettlement plan. An analysis should be made to determine the nature of the legal framework for the resettlement envisaged, including (a) the scope of the power of eminent domain, the nature of compensation associated with it, both in terms of the valuation methodology and the timing of payment; (b) the legal and administrative procedures applicable, including the appeals process and the normal time frame for such procedures; (c) land titling and registration procedures; and (d) laws and regulations relating to the agencies responsible for implementing resettlement and those related to land compensation, consolidation, land use, environment, water use, and social welfare.

Alternative Sites and Selection

13. The identification of several possible relocation sites and the demarcation of selected sites is a critical step for both rural and urban resettlement. For land-based resettlement, the new site's productive potential and locational advantages should be at least equivalent to those of the old site. The Bank encourages "land for land" approaches, providing replacement land at least equivalent to the lost land. For rural settlers, irrigation, land reclamation, tree crop development, intensification of production, and other innovations often can provide adequate production potential on limited amounts of land to resettle agriculturalists, even in countries with high population densities. In selecting sites, attention must be paid to the availability of sources of off-farm income (fishing, gathering forest products, seasonal wage employment) to complement farm income. For urban resettlers, the new site should ensure comparable access to employment, infrastructure, services, and production opportunities. For both rural and urban resettlement, the borrower needs to (a) develop institutional and technical arrangements for identifying and preparing relocation sites, e.g., pooling together small plots, wasteland reclamation, land leveling, and terracing; (b) draft and expense budgets for site preparation and transfer; (c) make legal arrangements for transferring titles to resettlers; and (d) consider, when necessary, a temporary freeze on land transactions within the relocation area to prevent land speculation. Though the Bank does not normally disburse against land acquisition, it can finance land improvement to accommodate resettlers.

Valuation of and Compensation for Lost Assets

14. Valuation of lost assets should be made at their replacement cost. Compensation is facilitated by (a) paying special attention to the adequacy of the legal arrangements concerning land title,
registration, and site occupation; (b) publicizing among people to be displaced the laws and regulations on valuation and compensation; (c) establishing criteria for determining the resettlement eligibility of affected households, e.g., households that have only partially lost their assets but are no longer economically viable should be entitled to full resettlement; and (d) developing mechanisms to prevent illegal encroachers and squatters, including an influx of nonresidents entering to take advantage of such benefits, from participating in the compensation arrangements, by an early recording of the numbers and names of affected populations entitled to compensation/rehabilitation.

15. Some types of loss, such as access to (a) public services; (b) customers and suppliers; and (c) fishing, grazing, or forest areas, cannot easily be evaluated or compensated for in monetary terms. Attempts must therefore be made to establish access to equivalent and culturally acceptable resources and earning opportunities.

16. Vulnerable groups at particular risk are indigenous people, the landless and semi-landless, and households headed by females who, though displaced, may not be protected through national land compensation legislation. The resettlement plan must include land allocation or culturally acceptable alternative income-earning strategies to protect the livelihood of these people.

**Land Tenure, Acquisition, and Transfer**

17. Resettlement plans should review the main land tenure and transfer systems, including common property and nontitle-based usufruct systems governed by locally recognized land allocation mechanisms. The objective is to treat customary and formal rights as equally as possible in devising compensation rules and procedures. The plan should address the issues raised by the different tenure systems found in a project area, including (a) the compensation eligibility of land-dependent populations; (b) the valuation procedures applicable to different tenure types; and (c) the grievance procedures available for disputes over land acquisition. Plans should contain provisions for conducting land surveys and regularizing land tenure in the earliest stages of project development. Planning should also anticipate the approximate time needed to acquire and transfer land.

**Access to Training, Employment, and Credit**

18. Normally, general economic growth cannot be relied upon to protect the welfare of the project-affected population. Thus, alternative employment strategies are needed for nonagricultural displaced people, or where the land that can be made available is not sufficient to accommodate all the displaced farmers. The resettlement plan should, where feasible, exploit new economic activities made possible by the main investment requiring the displacement. Vocational training, employment counseling, transportation to jobs, employment in the main investment project or in resettlement activities, establishment of industries, incentives for firms to locate in the area, credit and extension for small businesses or reservoir aquaculture, and preference in public sector employment should all be considered where appropriate.

**Shelter, Infrastructure, and Social Services**

19. To ensure the economic and social viability of the relocated communities, adequate resources should be allocated to provide shelter, infrastructure (e.g., water supply, feeder roads), and social services (e.g., schools, health care centers). Site development, engineering, and architectural designs should be prepared for shelter, infrastructure, and social services. Since community or self-built houses are often better accepted and more tailored to the resettlers' needs than
contractor-built housing, provision of a building site with suitable infrastructure, model plans, building materials, technical assistance, and "construction allowances" (for income foregone while resettlers build their houses) is an option communities should be offered. Planning for shelter, infrastructure, and services should take into account population growth.

**Environmental Protection and Management**

20. The screening process for an environmental assessment (EA) normally classifies projects involving involuntary resettlement as Category A. The EA of the main investment requiring the resettlement should thus cover the potential environmental impacts of the resettlement. The resettlement plan must be developed in coordination with the EA and define the boundaries of the relocation area, and calculate incremental population density per land unit. In agricultural projects (involving, for example, relocation to the catchment surrounding a reservoir, or to a downstream command area), if the incoming resettled population is large in relation to the host population, such environmental issues as deforestation, overgrazing, soil erosion, sanitation, and pollution are likely to become serious and plans should either include appropriate mitigating measures, including training of oustees, or else should allow for alternative sites to be selected. Urban resettlement raises other density-related issues (e.g., transportation capacity, access to potable water, sanitation systems, health facilities, etc.). Constructive environmental management, provided through the EA's mitigation plan, may provide good opportunities and benefits to resettlers and host populations alike (e.g., project-financed compensatory afforestation not only replaces the forests submerged by reservoirs but also offers gainful employment). If the likely consequences on the environment are unacceptable, alternative and/or additional relocation sites must be found.

**Implementation Schedule, Monitoring, and Evaluation**

21. The timing of resettlement should be coordinated with the implementation of the main investment component of the project requiring the resettlement. All resettlement plans should include an implementation schedule for each activity covering initial baseline and preparation, actual relocation, and post-relocation economic and social activities. The plan should include a target date when the expected benefits to resettlers and hosts would be achieved.

22. Arrangements for monitoring implementation of resettlement and evaluating its impact should be developed by the borrower during project preparation and used during supervision. Monitoring provides both a warning system for project managers and a channel for the resettlers to make known their needs and their reactions to resettlement execution. Monitoring and evaluation units should be adequately funded and staffed by specialists in resettlement. In-house monitoring by the implementing agency may need to be supplemented by independent monitors to ensure complete and objective information. Annual and midterm reviews are desirable for large-scale resettlement. The borrower should be required to continue impact evaluation for a reasonable period after all resettlement and related development activities have been completed. The borrower should also be required to inform the Bank about the findings.

**Bank Role and Project Options**

23. The Bank supports borrowers' efforts through (a) assistance in designing and assessing resettlement policy, strategies, laws, regulations, and specific plans; (b) financing technical assistance to strengthen the capacity of agencies responsible for resettlement; and (c) direct financing of the investment costs of resettlement. The Bank may sometimes finance resettlement even though it has not financed the main investment that made displacement and resettlement
necessary (para. 26).

24. The task manager (TM) should inform the borrower of the Bank's resettlement policy. Starting early in the project cycle, the TM with the support of Bank operational, research, and legal staff should assess government policies, experiences, institutions, and the legal framework covering resettlement. In particular, the TM needs to ensure that involuntary resettlement is avoided or minimized, that laws and regulations concerning displaced people provide compensation sufficient to replace all lost assets, and that displaced persons are assisted to improve, or at least restore, their former living standards, income earning capacity, and production levels.

25. The adequacy of the resettlement plan should be reviewed by appropriate social, technical, and legal experts. Resettlement specialists should visit the possible resettlement sites and review their suitability. In the case of large-scale relocation, such experts should be included in independent technical or environmental review boards.

26. Bank financing of resettlement can be provided as follows: (a) As a component of the main investment project causing displacement and requiring resettlement. (b) If large enough, as a free-standing resettlement project with appropriate cross-conditionalities, processed and implemented in parallel with the investment project that causes the displacement. The latter may better focus country and Bank attention on the effective resolution of resettlement issues. (c) As a sector investment loan. Where the specific resettlement needs of each subproject are not known in advance, the borrower would need to agree to resettlement policies, planning principles, institutional arrangements, and design criteria that meet Bank policy and requirements as a condition of the loan. An estimate should be provided of total population to be displaced and overall resettlement costs, as well as an evaluation of proposed resettlement sites. Subprojects in sector investment loans should be screened by the implementing agency to ensure consistency with this directive, and approved individually by the Bank. For countries with a series of operations requiring resettlement, efforts to improve the policy, institutional, and legal framework for resettlement should form part of the Bank's ongoing country and sector dialogue with the government. These efforts should be appropriately reflected in economic and sector work and in country strategy papers and briefs.

**Processing and Documentation**

27. The Regional Vice President (RVP) should be kept informed of major resettlement issues, and his guidance sought where necessary. The Regional Environment Division (RED), the Legal Department (LEG), and settlement specialists in Sector Policy and Research (PRS) should be consulted or included as necessary in peer reviews on involuntary resettlement issues throughout the project cycle.

**Identification**

28. The possibility of involuntary resettlement should be determined as early as possible and described in all project documents. The TM should (a) briefly summarize in the Initial Executive Project Summary (Initial EPS) the magnitude, strategy, and timing of the resettlement; (b) inform borrowers of the Bank's resettlement policy; (c) review past borrower experience with similar operations; (d) invite agencies responsible for resettlement to discuss their policies, plans, and institutional, consultative, and legal arrangements for resettlement; and (e) where appropriate, ensure that technical assistance is provided early to borrowers. Such assistance should include the use of project preparation facility (PPF) resources for planning resettlement and building
institutional capacity.

**Preparation**

29. During project preparation, the feasibility of resettlement must be established, a strategy agreed upon, the resettlement plan drafted, and budget estimates prepared. The full costs of resettlement should be identified and included in the total cost of the main investment project, regardless of financing source. The costs of resettlement should also be treated as a charge against the economic benefits of the investment project that causes the relocation. Any net benefits to resettlers (as compared to the "without project" circumstances) should be added to the benefit stream of the main investment. While the resettlement component or free-standing project need not be economically viable on its own, it should be the least cost approach consistent with the policies laid out above.

**Appraisal and Negotiation**

30. Submission to the Bank of a time-bound resettlement plan and budget that conforms to Bank policy is a condition of initiating appraisal for projects involving resettlement, except for sector investment loans as discussed in para. 26. All final EPSs should confirm that this requirement has been met. The appraisal mission should ascertain (a) the extent that involuntary resettlement and human hardship will be minimized and whether borrowers can manage the process; (b) the adequacy of the plan, including the timetable and budget for resettlement and compensation; (c) the soundness of the economic and financial analysis; (d) the availability and adequacy of sites and funding for all resettlement activities; (e) the feasibility of the implementation arrangements; and (f) the extent of involvement of beneficiaries. At negotiations, the borrower and the Bank should agree on the resettlement plan. The resettlement plan and the borrower's obligation to carry it out should be reflected in the legal documents. Other necessary resettlement-related actions must be covenanted. The Staff Appraisal Report and the Memorandum and Recommendation of the President should summarize the plan and state that it meets Bank policy requirements.

**Implementation and Supervision**

31. Resettlement components should be supervised throughout implementation. Supervision that is sporadic or left until late in implementation invariably jeopardizes the success of resettlement. Bank supervision missions should be staffed with the requisite social, economic, and technical expertise. Annual reviews of large-scale resettlement and in-depth Bank reviews of midterm progress are highly desirable. These reviews should be planned from the outset to allow the Bank and the borrower to make necessary adjustments in project implementation. Complete recovery from resettlement can be protracted and can often make it necessary to continue Bank supervision until well after populations have been relocated, sometimes even after a project has been closed.

**Ex Post Evaluation**

32. The project completion report submitted to the Operations Evaluation Department should evaluate resettlement and its impact on the standards of living of the resettlers and the host population.
Introduction

Performance Standard 5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons that use this land. Involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood) as a result of project-related land acquisition and/or restrictions on land use. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in physical or economic displacement. This occurs in cases of (i) lawful expropriation or temporary or permanent restrictions on land use and (ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.

Unless properly managed, involuntary resettlement may result in long-term hardship and impoverishment for the Affected Communities and persons, as well as environmental damage and adverse socio-economic impacts in areas to which they have been displaced. For these reasons, involuntary resettlement should be avoided. However, where involuntary resettlement is unavoidable, it should be minimized and appropriate measures to mitigate adverse impacts on displaced persons and host communities should be carefully planned and implemented. The government often plays a central role in the land acquisition and resettlement process, including the determination of compensation, and is therefore an important third party in many situations. Experience demonstrates that the direct involvement of the client in resettlement activities can result in more cost-effective, efficient, and timely implementation of those activities, as well as in the introduction of innovative approaches to improving the livelihoods of those affected by resettlement.

To help avoid expropriation and eliminate the need to use governmental authority to enforce relocation, clients are encouraged to use negotiated settlements meeting the requirements of this Performance Standard, even if they have the legal means to acquire land without the seller’s consent.
Objectives

- To avoid, and when avoidance is not possible, minimize displacement by exploring alternative project designs.
- To avoid forced eviction.
- To anticipate and avoid, or where avoidance is not possible, minimize adverse social and economic impacts from land acquisition or restrictions on land use by (i) providing compensation for loss of assets at replacement cost and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected.
- To improve, or restore, the livelihoods and standards of living of displaced persons.
- To improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure at resettlement sites.

Requirements

Project Design

The client will consider feasible alternative project designs to avoid or minimize physical and/or economic displacement, while balancing environmental, social, and financial costs and benefits, paying particular attention to impacts on the poor and vulnerable.

Compensation and Benefits for Displaced Persons

When displacement cannot be avoided, the client will offer displaced communities and persons compensation for loss of assets at full replacement cost and other assistance to help them improve or restore their standards of living or livelihoods, as provided in this Performance Standard. Compensation standards will be transparent and applied consistently to all communities and persons affected by the displacement. Where livelihoods of displaced persons are land-based, or where land is collectively owned, the client will, where feasible, offer the displaced land-based compensation. The client will take possession of acquired land and related assets only after compensation has been made available and, where applicable, resettlement sites and moving allowances have been provided to the displaced persons in addition to compensation. The client will also provide opportunities to displaced communities and persons to derive appropriate development benefits from the project.

Community Engagement

The client will engage with Affected Communities, including host communities, through the process of stakeholder engagement described in Performance Standard 1. Decision-making processes related to resettlement and livelihood restoration should include options and alternatives, where applicable. Disclosure of relevant information and participation of Affected Communities and persons will continue during the planning, implementation, monitoring, and evaluation of compensation payments, livelihood restoration activities, and resettlement to achieve outcomes that are consistent with the objectives of this Performance Standard. Additional provisions apply to consultations with Indigenous Peoples, in accordance with Performance Standard 7.

Grievance Mechanism

The client will establish a grievance mechanism consistent with Performance Standard 1 as early as possible in the project development phase. This will allow the client to receive and address
specific concerns about compensation and relocation raised by displaced persons or members of host communities in a timely fashion, including a recourse mechanism designed to resolve disputes in an impartial manner.

**Resettlement and Livelihood Restoration Planning and Implementation**

Where involuntary resettlement is unavoidable, either as a result of a negotiated settlement or expropriation, a census will be carried out to collect appropriate socio-economic baseline data to identify the persons who will be displaced by the project, determine who will be eligible for compensation and assistance, and discourage ineligible persons, such as opportunistic settlers, from claiming benefits. In the absence of host government procedures, the client will establish a cut-off date for eligibility. Information regarding the cut-off date will be well documented and disseminated throughout the project area.

In cases where affected persons reject compensation offers that meet the requirements of this Performance Standard and, as a result, expropriation or other legal procedures are initiated, the client will explore opportunities to collaborate with the responsible government agency, and, if permitted by the agency, play an active role in resettlement planning, implementation, and monitoring (see paragraphs 30–32).

The client will establish procedures to monitor and evaluate the implementation of a Resettlement Action Plan or Livelihood Restoration Plan (see paragraphs 19 and 25) and take corrective action as necessary. The extent of monitoring activities will be commensurate with the project’s risks and impacts. For projects with significant involuntary resettlement risks, the client will retain competent resettlement professionals to provide advice on compliance with this Performance Standard and to verify the client’s monitoring information. Affected persons will be consulted during the monitoring process.

Implementation of a Resettlement Action Plan or Livelihood Restoration Plan will be considered completed when the adverse impacts of resettlement have been addressed in a manner that is consistent with the relevant plan as well as the objectives of this Performance Standard. It may be necessary for the client to commission an external completion audit of the Resettlement Action Plan or Livelihood Restoration Plan to assess whether the provisions have been met, depending on the scale and/or complexity of physical and economic displacement associated with a project. The completion audit should be undertaken once all mitigation measures have been substantially completed and once displaced persons are deemed to have been provided adequate opportunity and assistance to sustainably restore their livelihoods. The completion audit will be undertaken by competent resettlement professionals once the agreed monitoring period is concluded. The completion audit will include, at a minimum, a review of the totality of mitigation measures implemented by the Client, a comparison of implementation outcomes against agreed objectives, and a conclusion as to whether the monitoring process can be ended.

Where the exact nature or magnitude of the land acquisition or restrictions on land use related to a project with potential to cause physical and/or economic displacement is unknown due to the stage of project development, the client will develop a Resettlement and/or Livelihood Restoration Framework outlining general principles compatible with this Performance Standard. Once the individual project components are defined and the necessary information becomes available, such a framework will be expanded into a specific Resettlement Action Plan or Livelihood Restoration Plan and procedures in accordance with paragraphs 19 and 25 below.

**Displacement**
Displaced persons may be classified as persons (i) who have formal legal rights to the land or assets they occupy or use; (ii) who do not have formal legal rights to land or assets, but have a claim to land that is recognized or recognizable under national law; or (iii) who have no recognizable legal right or claim to the land or assets they occupy or use. The census will establish the status of the displaced persons.

Project-related land acquisition and/or restrictions on land use may result in the physical displacement of people as well as their economic displacement. Consequently, requirements of this Performance Standard in respect of physical displacement and economic displacement may apply simultaneously.

**Physical Displacement**

In the case of physical displacement, the client will develop a Resettlement Action Plan that covers, at a minimum, the applicable requirements of this Performance Standard regardless of the number of people affected. This will include compensation at full replacement cost for land and other assets lost. The Plan will be designed to mitigate the negative impacts of displacement; identify development opportunities; develop a resettlement budget and schedule; and establish the entitlements of all categories of affected persons (including host communities). Particular attention will be paid to the needs of the poor and the vulnerable. The client will document all transactions to acquire land rights, as well as compensation measures and relocation activities.

If people living in the project area are required to move to another location, the client will (i) offer displaced persons choices among feasible resettlement options, including adequate replacement housing or cash compensation where appropriate; and (ii) provide relocation assistance suited to the needs of each group of displaced persons. New resettlement sites built for displaced persons must offer improved living conditions. The displaced persons’ preferences with respect to relocating in preexisting communities and groups will be taken into consideration. Existing social and cultural institutions of the displaced persons and any host communities will be respected.

In the case of physically displaced persons under paragraph 17 (i) or (ii), the client will offer the choice of replacement property of equal or higher value, security of tenure, equivalent or better characteristics, and advantages of location or cash compensation where appropriate. Compensation in kind should be considered in lieu of cash. Cash compensation levels should be sufficient to replace the lost land and other assets at full replacement cost in local markets.

In the case of physically displaced persons under paragraph 17 (iii), the client will offer them a choice of options for adequate housing with security of tenure so that they can resettle legally without having to face the risk of forced eviction. Where these displaced persons own and occupy structures, the client will compensate them for the loss of assets other than land, such as dwellings and other improvements to the land, at full replacement cost, provided that these persons have been occupying the project area prior to the cut-off date for eligibility. Based on consultation with such displaced persons, the client will provide relocation assistance sufficient for them to restore their standard of living at an adequate alternative site.

The client is not required to compensate or assist those who encroach on the project area after the cut-off date for eligibility, provided the cut-off date has been clearly established and made public.

Forced evictions will not be carried out except in accordance with law and the requirements of this Performance Standard.
Economic Displacement

In the case of projects involving economic displacement only, the client will develop a Livelihood Restoration Plan to compensate affected persons and/or communities and offer other assistance that meet the objectives of this Performance Standard. The Livelihood Restoration Plan will establish the entitlements of affected persons and/or communities and will ensure that these are provided in a transparent, consistent, and equitable manner. The mitigation of economic displacement will be considered complete when affected persons or communities have received compensation and other assistance according to the requirements of the Livelihood Restoration Plan and this Performance Standard, and are deemed to have been provided with adequate opportunity to reestablish their livelihoods.

If land acquisition or restrictions on land use result in economic displacement defined as loss of assets and/or means of livelihood, regardless of whether or not the affected people are physically displaced, the client will meet the requirements in paragraphs 27–29 below, as applicable.

Economically displaced persons who face loss of assets or access to assets will be compensated for such loss at full replacement cost.

In cases where land acquisition or restrictions on land use affect commercial structures, affected business owners will be compensated for the cost of reestablishing commercial activities elsewhere, for lost net income during the period of transition, and for the costs of the transfer and reinstallation of the plant, machinery, or other equipment.

In cases affecting persons with legal rights or claims to land which are recognized or recognizable under national law (see paragraph 17 (i) and (ii)), replacement property (e.g., agricultural or commercial sites) of equal or greater value will be provided, or, where appropriate, cash compensation at full replacement cost.

Economically displaced persons who are without legally recognizable claims to land (see paragraph 17 (iii)) will be compensated for lost assets other than land (such as crops, irrigation infrastructure and other improvements made to the land), at full replacement cost. The client is not required to compensate or assist opportunistic settlers who encroach on the project area after the cut-off date for eligibility.

In addition to compensation for lost assets, if any, as required under paragraph 27, economically displaced persons whose livelihoods or income levels are adversely affected will also be provided opportunities to improve, or at least restore, their means of income-earning capacity, production levels, and standards of living:

For persons whose livelihoods are land-based, replacement land that has a combination of productive potential, locational advantages, and other factors at least equivalent to that being lost should be offered as a matter of priority.

For persons whose livelihoods are natural resource-based and where project-related restrictions on access envisaged in paragraph 5 apply, implementation of measures will be made to either allow continued access to affected resources or provide access to alternative resources with equivalent livelihood-earning potential and accessibility. Where appropriate, benefits and compensation associated with natural resource usage may be collective in nature rather than directly oriented towards individuals or households.
If circumstances prevent the client from providing land or similar resources as described above, alternative income earning opportunities may be provided, such as credit facilities, training, cash, or employment opportunities. Cash compensation alone, however, is frequently insufficient to restore livelihoods. Transitional support should be provided as necessary to all economically displaced persons, based on a reasonable estimate of the time required to restore their income-earning capacity, production levels, and standards of living.
Bibliography


McMahon & Remy, (2001). Large Mines and the Community: Socioeconomic and Environmental Effects in Latin America, Canada, and Spain

McMahon and Strongman, 1999. The rise of communities. Mining Environemtnal Management. 7:8-11


