EXTRACTING VALUE FOR ENTERPRISES

ENTERPRISE DEVELOPMENT IN THE MINING INDUSTRY IN SUB-SAHARAN AFRICA

TECHNICAL NOTE

September 2009

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FOREWORD

This technical note, derived from a more detailed research paper of the same name, is a useful addition to the literature on the promotion of enterprise development in the process of mining in Africa. For more detailed information on this topic, please visit the Business Growth Initiative project website to read the full research paper. It draws on a body of literature and personal interviews to synthesize some lessons learned about best practices in how to plan and execute enterprise development programs for mining companies, governments and donors.

This paper begins with an analysis of mining activity in Sub-Saharan Africa (SSA) that places the topic of enterprise development in the context of current and future trends in mining in Africa.

The paper then focuses particularly on how to engage and employ local enterprises as part of a local content program. Three examples from different mining companies in Africa are presented with a description of the various phases and considerations involved in designing and implementing the programs. It ends with a summary of key success and failure factors to be considered in this process.

The Business Growth Initiative (BGI) project is pleased to have supported the research and development for this paper and the BGI Team hopes that readers will find it useful as a guide in how to establish enterprise development programs in mining programs. Many of the lessons learned in this report go beyond being Africa specific and are also applicable to other regions of the world. We trust that you will find it interesting and we would be interested in feedback on this paper and on the other activities of the BGI project. Please visit our website at www.businessgrowthinitiative.org to get information on other aspects of enterprise development as well.

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ACRONYMS AND ABBREVIATIONS

APDF	Africa Project Development Facility
BEE	Black Economic Empowerment
CDM	Cervejas de Mocambique
CPI	Centro de Promoçao de Investimentos
DRC	Democratic Republic of the Congo
EPCM	Engineering, Procurement, Construction and Management sector
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
HDSA	Historically Disadvantaged South Africans
IFC	International Finance Corporation
IIED	International Institute for Environment and Development
MMSD	Mining, Minerals and Sustainable Development project
NGO	Non Governmental Organization
SME	Small and Medium Enterprise
SMEELP	Small and Medium Enterprise Empowerment Program
SSA	Sub-Saharan Africa
WBCSD	World Business Council for Sustainable Development

INTRODUCTION

1.1 Purpose and Rationale of Paper

The extractive sector comprises a significant percentage of foreign and domestic direct investment in Sub-Saharan Africa, and this is likely to increase over time due to a rising demand for, and supply of, large amounts of untapped mineral resources.

Because of its nature (scale, duration, extraction methods, and location), the extractive industry can have significant economic, social, physical and environmental impacts in host countries. How mining operations are regulated and managed can determine whether their impacts are positive or negative.[1] In this regard, host country governments, mining companies, local communities, and donors are all stakeholders with interdependent interests. Central to all four – but for different reasons – is a preoccupation with the welfare and development of host communities. This has led mining corporations – strongly encouraged by governments, monitored by communities, and sometimes in cooperation with donors – to engage communities through on-the-ground, development-oriented programs.

Within this context, this paper examines programs that offer economic opportunities to indigenous small and medium sized enterprises (SMEs) within the mine's supply chain. We begin with a brief overview of the mining sector in Sub-Saharan Africa, the constraints faced by mining corporations, and some of the corporate responses (i.e. social mining programs). We then outline the rationale and general principles of local supplier development programs and present specific examples. We conclude with an analysis of our findings and some guidelines for future program design and implementation.

THE MINING SECTOR IN SUB-SAHARAN AFRICA

2.1 Importance to National Economies

Mining is a key economic component of most Southern African nations.[2] In the region, mining (including processed minerals) provides 60 percent of foreign exchange.[3] In Guinea, the mining sector accounts for 70 percent of exports. Diamond production accounts for almost 40 percent of Botswana's GDP. Despite concerns about relying on a single sector for exports – in terms of real exchange rate appreciation and the resulting damages to other export-based sectors – the potential of mining in terms of sustainable development cannot be overlooked.

2.2 Current and Future Trends

In December 2008, Southern and Western Africa accounted for almost a third of all mining projects in Sub-Saharan Africa (37.5 percent and 27.8 percent respectively). In the same year, 45.1 percent of all projects in Sub-Saharan Africa were in the pre-feasibility stage, followed by

[1] World Bank and International Finance Corporation. 2002. Large Mines and Local Communities: Forging Partnerships, Building Sustainability.
[2] We use MMSD's country categorization, which considers the following countries to belong to the Southern African region: Congo DRC, Tanzania, Zambia, Angola, Malawi, Mozambique, Zimbabwe, Namibia, Botswana, Swaziland, Lesotho, and South Africa.
[3] MMSD Southern Africa. 2002. Mining, Minerals and Sustainable Development in Southern Africa. University of Witwatersrand.

23.9 percent in the feasibility stage. This indicates that the number of mining projects is likely to increase in the coming years.

The most mined mineral was gold (41.5 percent of all projects) followed by diamonds at 13.3 percent. Western Africa had the largest number of gold projects while Southern Africa had the largest number of diamond projects. We were unable to examine the types of minerals involved at the feasibility stage, but based on our figures, we estimate that the bulk of future mining will take place in Southern and Western Africa in the gold and diamond sectors.

2.3 Mining Companies

In 2006, the top ten out of the 230 mining companies active in Sub-Saharan Africa controlled 35 percent of global mining.[4] Many mining operations fall under various forms of public-private partnerships with shared equity between the public and private sector (including other mining companies or multinationals). Furthermore, many operations are managed by "junior" mining companies, which are smaller exploration and mine development entities with, oftentimes, only one or two physical sites.

ENTERPRISE DEVELOPMENT AS A COMPONENT OF "SOCIAL MINING"

3.1 Social Mining

Mining companies have to cooperate with a multitude of stakeholders who expect mining projects to have a positive effect on socioeconomic development and the environment in the countries and communities where they take place. Host governments sometimes stipulate that mining operations demonstrate a positive affect on the local community before granting a license to begin operations.

The adverse social and environmental impacts of certain mines on local communities, some widely documented,[5] have created brand and reputational risk for the mining sector. This has caused negative consequences on investment generation and more generally investor confidence. Host country governments expect the benefits of mining operations to go beyond providing fiscal revenues and foreign exchange generation. Companies are also expected to materially contribute to development at the local level. Communities, and the local people that work for the mine, also expect a commitment to local development. They can be quite specific about how they envisage interventions should be implemented. Being that they live on or near the site, they can easily act as watchdogs and report on the company's performance such as stakeholder engagement, social and economic development or environmental hazards. Their grievances can be expressed through strikes, protests, and the occupation and destruction of property.

[4] Reuters http://uk. reuters. com/article/oilRpt/idUKL0882375320071108.

[5] See, for example: Human Rights Program, Harvard Law School. 2007."All that glitters: Gold mining in Guyana and the failure of government oversight and the human rights of Amerindian communities"; and Earthworks and Oxfam America. 2004. "Dirty metals: Mining, communities and the environment."

To avoid social unrest and keep open the prospects for future access to additional mineral reserves,[6] mining companies need to be more receptive to community demands. This need to gain the acceptance of the mine by all stakeholders – or obtain a so-called "social license to operate" – has led to "social mining" programs, where sustainable socioeconomic development is integrated into corporate management and strategy goals. Social mining is characterized by mechanisms where community consultation and participation form the basis for actions that are measured and evaluated, a departure from top-down approaches aimed at limiting damages and dispensing ad-hoc philanthropy.[7] Communities are now partners rather than mere beneficiaries of hand-outs.

Because stakeholder-expressed local development needs and expectations are often diverse, corporate-led community development initiatives touch upon numerous development sectors, including education, agriculture, health - HIV/AIDS, and sanitation, but also livelihoods enhancement and enterprise development.

3.2 Enterprise Development

The development of local enterprises is part of the set of interventions used by mining companies to gain their license to operate from host governments. We focus on enterprise development opportunities directly related to a mine's core business, excluding non-core-related programs (such as capacity building for a local clinic or poultry farm). These local supplier development – or "local content"– programs are coherent with social mining because they provide communities with economic opportunities. They also provide local enterprises with results (e.g. proposal quality and contract performance) that are tangible to mining companies[8] and directly related to their business.

In theory, local enterprises can competitively provide a large number of services to the mine, including general services, construction and trades services, and goods provision.[9] In practice, they often lack skills, experience dealing with large international companies, and the ability to raise credit.[10] [11] In response, local content programs provide local enterprises with financing, capacity building (business and technical skills) as well as modified procurement systems that are adapted to the characteristics of local SMEs.

As in the case of other social mining programs, sector-based enterprise development initiatives are often designed and implemented in cooperation with donors, who can provide funding as well as assistance for mining corporations to solve the conflict between their core business needs and external pressures. Donors can be instrumental partners for mining companies that

[6] Engineers against poverty. Undated. Maximising the contributions of local enterprises to the supply chain of oil, gas & mining projects in low income countries: A briefing note for supply chain managers & technical end users.
[7] Tapiero, Dafna. 2009. Enhancing Benefits to Communities from Extractive Industry. Presented at the Extractive Industry Week, World bank/IFC, March 2009.
[8] A common grievance of mining corporations regarding social mining programs is their lack of measurability (see Tapiero, 2009).
[9] Engineers against poverty, undated. "Maximising the contributions of local enterprises to the supply chain of oil, gas & mining projects in low income countries: A briefing note for supply chain managers & technical end users."
[10] Ibid.
[11] Lozansky, Tanya. Undated. SME opportunities associated with large-scale projects in natural resource sector. International Finance Corporation.

often do not have sufficient know-how to design and implement local content programs in a development context.[12]

3.3 Examples of Enterprise Development Programs

3.3.1 MozLink

Introduction

Located near the Mozambican capital of Maputo, the Mozal aluminum smelter (operated by BHP Billiton) has encouraged local content through two programs: the Small and Medium Enterprise Empowerment Program (SMEELP) and the MozLink SME development program (MozLink).

SMEELP (2001-2003)

As a reaction to the lack of key capabilities observed in local SMEs following the first months of Mozal I, SMEELP was launched in 2001 as a partnership program among Mozal, CPI[13] and APDF-IFC.[14] Its aim was to prepare local SMEs to participate in the Mozal expansion phase (Mozal II). Using a database provided by CPI, EPCM contractors[15] visited and assessed 25 SMEs based on the capabilities sought by the smelter. The chosen SMEs then received training in tender preparation and contract execution. Upon contract award, each SME was assigned a mentor who supported and guided it throughout contract implementation. When needed, mentors with specialized skills were also available for advice.[16] SMEELP trained 16 companies that were awarded 28 contracts for a total of over $5 million. In 2003, it was taken over by CPI as a model for expansion to other industries[17].

MozLink (2003-2007 and 2007-2010)

Implemented by the Mozal aluminum smelter, the IFC, and the CPI, MozLink was set up in 2003 to replicate the results achieved through SMEELP. Between 2002 and 2007, operational spending with local companies increased from $5 million to $17 million per month and the number of local companies engaged to provide goods and services to Mozal rose from 40 to 250. The success of MozLink I (ended in 2007) prompted additional companies[18] in other industries[19] to create a three-year program, MozLink II, to achieve the same goals.

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[12] World Bank. 2007. Beyond Corporate Social Responsibility: The Scope for Corporate Investment in Community Driven Development.

[13] The Centro de Promoçao de Investimentos (CPI) is the Mozambican government's investment promotion center.

[14] The IFC-supported African Project Development Facility (APDF) is one of 12 SME development facilities established by the IFC to serve frontier markets.

[15] The Engineering, Procurement, Construction Management sector – in this case the contractor was SLMR.

[16] Mozal S. A. R. L. September 2002. Environmental and Social Performance Annual Monitoring Report (AMR).

[17] “MOZAL hands business empowerment programme to CPI”. Mozambique News Agency AIM Report No 256, June 2003.

[18] Mozal, Sasol, Cervejas de Mocambique (CDM), and Coca-Cola.

[19] Mining but also natural gas and others.

The MozLink Approach

The MozLink approach consists of five phases[20]: 1) Preparation; 2) Assessment I and Workshop I; 3) Execution of SME Improvement Plan; 4) Assessment II and Workshop II; and 5) Evaluation.

Phase 1: Preparation

This phase consists of finding internal champions and incorporating program values into the company's charter. Partners are then selected, and a steering committee is created to monitor the implementation and progress of the program. A strategy that integrates essential components of the program (e.g., procurement, finance, program monitoring and evaluation) is then designed. SMEs are selected and visited by program members to find out about their interest in the program. Finally, technical (company employees) and business (external consultants) mentors, who will coach and guide the SMEs through the program, are identified, recruited and trained.

Phase 2: Assessment I and Workshop I

The program's training and mentoring components are designed following the collection and analysis of baseline data on the SMEs' technical and business skills. The resulting curriculum is applied in one-day group training sessions, then during one-on-one mentoring sessions. A six-month improvement plan for each SME is developed, to be monitored by the SMEs and the mentors to ensure SME program ownership and commitment. Finally, a workshop is conducted to present to SMEs the status of their current skills (identified in the first assessment), and to provide them with an opportunity to meet with the mentors to discuss their improvement plan.

Phase 3: Execution of the SME Improvement Plan

Using the curriculum developed in phase 2, one-day workshops are delivered to the SMEs, who also implement their improvement plan and are encouraged to be in regular contact with their mentors. Mentors continue to be available after the program ends. Business and technical mentors evaluate progress and performance to-date three months into the implementation plan, using the same questionnaire used in the first assessment. Progress is then compared against the baseline data, and insufficient progress is addressed during subsequent meetings between the SMEs' management and the mentors. Finally, a steering committee meeting examines the progress of the overall program.

Phase 4: Assessment II and Workshop II

At the end of the implementation plan, end-line data is collected and compared with previous data, with a focus on improvement and the SMEs' willingness to improve. A second workshop is conducted during which the mentors present the results of the second assessment to the SMEs. The next steps are outlined and focus on the SMEs' need to diversify to avoid dependence on the lead company. The SMEs are also informed that an evaluation of their new organizational structure and business model will take place after two years and that mentorship will be available after the end of the program.

Phase 5: Evaluation

In this phase, changes in the procurement patterns of the lead company vis-à-vis local SMEs, change in employment, change in the quantity and size of contracts, change in turnover, and change in the number of client companies (client diversification) are measured. The end-line

[20] This section is derived from Jaspers, Frans-Jozef; and Mehta, Ishira. 2008. Developing SMEs through Business Linkages—The MozLink Experience. A Manual for Companies, NGOs, and Government Entities, Version 1. 0. International Finance Corporation.

data collected during this phase are compared against baseline data. Because some changes are only visible a couple of years after the end of the program, subsequent evaluations are needed to get an accurate sense of its effects.

3.3.2 The Anglo Zimele Development and Empowerment initiative

Introduction

The Anglo Zimele Development and Empowerment initiative[21] has been operated since 1989 by Anglo American to empower BEE[22] entrepreneurs in South Africa. It is made up of three funds, articulated around three roles: 1) the provision of financing for local junior mining companies, 2) enterprise development, and 3) supply chain development. All three funds are managed by Anglo Zimele Management Services.

Financing for local junior mining companies is provided through the *Anglo Khula Mining Fund*, a joint initiative between Anglo American and government-owned Khula Enterprise Finance Limited. Enterprise development falls under the responsibility of the *Small Business Start-Up Fund* and provides loan finance in the communities residing around the mining operation. In addition, small business hubs provide technical assistance in essential business skills (e.g., setting up business plans) through mentoring and training. The *Supply Chain Development Fund* provides loan and equity financing as well as technical assistance. It is the oldest of the three funds and is focused on in this paper, as it is most relevant to the scope of this study.

The Supply Chain Development Fund

Bringing local SMEs into the mining supply chain is done in three phases: (1) pre-approval, (2) approval, and (3) post-approval.

Phase 1: Pre-approval

Anglo Zimele staff match supply (i.e., local SMEs) and demand (i.e., procurement opportunities at Anglo American) in the value chain by approaching or being approached by local SMEs, and by approaching the company's procurement departments.

Prospective entrepreneurs apply for funding by submitting a business plan, meeting a set of investment criteria, and demonstrating that they have sufficient determination and drive.[23] Applicants are given technical assistance to write a business plan on a needs basis. Funding is granted upon approval by the Anglo Zimele board, after which Anglo Zimele acquires an equity stake in the business.

Lastly, an investment proposal that includes a formal business plan, financial evaluations, and the financial structure (composed of debt and equity) and mechanics (i.e., marketing, etc.) of the deal is put forth.

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[21] A more detailed presentation can be found at: Anglo Zimele Development and Empowerment Initiative Ltd, and International Finance Corporation. 2008. The Anglo Zimele Model: A Corporate Risk Capital Facility Experience, from which this section is drawn.

[22] The Black Economic Empowerment (BEE) Strategy was created by the South African Government to increase the participation of Historically Disadvantaged South Africans (HDSAs) in the country's economic growth.

[23] The investment criteria and a sample business plan are made available to prospective SMEs beforehand.

Phase 2: Approval
The investment proposal is submitted and presented to an investment committee made up of members of the Anglo Zimele board and staff. If it is approved, it is examined by the Anglo Zimele board of directors as well as senior managers from Anglo American who are experts in various disciplines (e.g., technical, social, financial, etc.) for ratification.

Phase 3: Post-Approval
Following approval, the entrepreneur's ability to run a business is assessed by examining psychological factors such as focus, drive, and ambition; business skills and knowledge; and the extent to which they have a business mindset, as well as any past business history.

The results determine the contents of an improvement plan designed to bring the entrepreneurs to the desired level of business and technical skills. Capacity is built in four ways and on an on-going basis: (1) formal or informal training programs and/or on-the-job training; (2) a technical mentor – an individual or a company – transferring specific knowledge or skills; (3) Zimele staff provide assistance at the management, marketing, operational, and financial stages; and (4) one-on-one guidance and mentoring by Anglo Zimele staff.

The improvement plan is implemented only after all the agreements have been finalized and signed and a new company has been created as a proprietary limited vehicle. Funds are released to the SME after the business has been registered and a bank account has been opened.

ANALYSIS AND CONCLUSIONS

4.1 Are Local Content Programs Successful?

What to look for

The mining company's objectives
From a mining company's standpoint, there are two reasons for engaging local enterprises: maintaining a social license to operate, and having a competitive and steady local supply base.

Local content programs are often conducted in conjunction with other social mining programs, and it is challenging to attribute to them any changes in stakeholder perceptions. However, it appears based on this research, that many programs have a significant and positive impact on how companies are perceived.

Do the benefits (a capable, cheap and readily available supply base) outweigh the real and opportunity costs of investing in local content programs? Local SMEs have been contracted by mining companies, but it is not possible to solely attribute this to real improvements in proposal quality. However, in at least one of the programs examined, all contracts were implemented successfully by the participating SMEs, and some programs were extended or replicated. This indicates that a competitive local supplier base was created.

The donor's objectives
From a donor's standpoint, success is typically determined by the amount of income generated by the new economic opportunities provided by the programs, and by the degree of empowerment and sustainability eventually gained by the participating local suppliers.

No data was found on the magnitude of income increases generated by local content programs. It is the view of the authors, however, that local content programs build skills and generate measurable amounts of income. In many cases, it was found that local SMEs broke their dependence on the mines and outlived the programs; this suggests that empowerment and sustainability goals were met, at least in part.

4.2 Key Success and Failure Factors

A number of studies have drawn observations and lessons from experiences with these programs. These studies, as well as insights drawn from our own interviews, provide valuable guidelines for the design and implementation of local content programs and are listed below.

1. Local content programs are often designed, funded, and implemented by several actors, so clarity of purpose and roles are essential. For example, there can be a conflict between the motivations of mining companies (i.e., short- or medium-term performance within their own supply chain) and the donors' (i.e., to empower SMEs so that they are capable of diversifying outside the mine).

2. Knowing the demand for supplier services is essential. In at least two of the programs studied, careful attention was paid to finding out whether or not a practical and relatively foreseeable need for local services existed, and to determine precisely what these were. Two individuals familiar with IFC local content programs stressed the importance of engaging the mining company's procurement units.

3. Knowing the supply base is as important, because differences in sophistication, skills, and connections impact the type of services available.

4. The above means that the training and mentoring of each program will differ in terms of curriculum contents, delivery methods, and the type of consultants and training institutions used, across and/or within programs.

5. Regulations regarding local content vary from country to country. As previously mentioned, because operating a mine largely depends on government approval, knowing these requirements is essential.

6. The conditions to expect on the ground and how to adapt to them is important. Knowledge of local ways of doing (and not doing) things or of the local language, for example, can make a significant difference in how a local content program is perceived, trusted, and understood.[24]

7. The degree to which a company's senior management commits to local enterprise development is a key determining factor of program success. Finding champions in the company who can influence procurement is a significant factor in positively influencing the process of integrating local vendors into the supply chain.[25]

8. One of the programs changed the prevalent practice of using a competitive bidding process to not using one. However, we have not seen mention of this in other programs.

[24] Jenkins, Beth; Ishikawa, Ishiro; Barthes, Emma; and Marisol Giacomelli. 2008. International Finance Corporation, Harvard Kennedy School of Government, and International Business Leaders Forum.
[25] Ibid.

At any rate, the lesson here is that a potential impact of local content programs is a change in the local business culture towards more competitive processes.

9. The nature of local content engagement will differ along with the characteristics of the mining operation. Mining companies and donors should consider them to be able to plan programs that are adapted and effective.

4.3 Conclusions

In this paper, the most known and successful local content initiatives in Sub-Saharan Africa were presented and the complex contexts in which they have, and will occur. Why these programs were implemented, general principles of implementation, as well as success and failure factors and lessons learned were outlined.

It is our hope that by synthesizing a large portion of information into a succinct format, we have provided a guide and starting point for further research on local content programs in Sub-Saharan Africa and other regions of the world. In this regard, we can only stress the need for more information, data, documents and studies to be made publicly available. We also hope this paper will help the mining sector, donors, and host governments to further optimize the ways in which they work together to find and achieve common goals that are beneficial to all – including local communities.

While we see a trend toward local content initiatives in other sectors, we cannot say the mining sector was an initiator or leader in this regard. That said, while a comparative study of local content approaches across sectors is beyond the scope of this paper, it is our view that sharing information on local content programs in the mining sector can be valuable to other sectors investing in or outside Sub-Saharan Africa.

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