

# THE ARTISANAL AND SMALL SCALE MINING SECTOR & SUSTAINABLE LIVELIHOODS<sup>1</sup>

M. Hoadley<sup>1</sup> and D. Limpitlaw<sup>1</sup>

<sup>1</sup> School of Mining Engineering, University of the Witwatersrand, Johannesburg, South Africa,  
hoadley@egoli.min.wits.ac.za

## ABSTRACT

*The activities of the artisanal and small-scale mining (ASM) sector are largely poverty driven, and there is a correlation between the human development index (HDI) position of countries and the proportion of the total workforce involved in ASM. The trend is for countries with low HDI positions to have a high proportion of workers employed in ASM.*

*Estimates of ASM employment are neither current nor accurate, and given the growing incidence of poverty in developing regions, it is reasonable to estimate a significant growth in the number of ASM operators. It is also likely that the ASM sector will continue to grow. The paper investigates the extent to which ASM can contribute to sustainable development and poverty alleviation by assessing its contribution to the creation of sustainable livelihoods and sustainable communities. Some recommendations are presented as to how the sector can contribute to community well-being and sustainability. Buy-in from government is critical if this is to occur.*

*In the South African context, the paper examines current legislation and how it supports or constrains development of the ASM sector. This section of the paper also looks at the extent to which local government is empowered to include and develop ASM in its development plans and strategies.*

## 1 BACKGROUND

Estimates of the number of people who earn their living directly from artisanal and small-scale mining (ASM), or who depend on the sector, are speculative and likely to be highly inaccurate. In 1998 the International Labour Organization (ILO) estimated that 13 million people are directly employed in ASM, and up to 100 million depend on it. No recent estimates are available, and given the growing levels of poverty in sub-Saharan Africa, it is reasonable to assume that these numbers have increased significantly, and will continue to do so.

ASM activities often cause extreme environmental and social impacts and seldom contribute to government revenues. In their current form, they cannot be regarded as contributing to sustainable livelihoods, but they provide emergency poverty relief and daily sustenance.

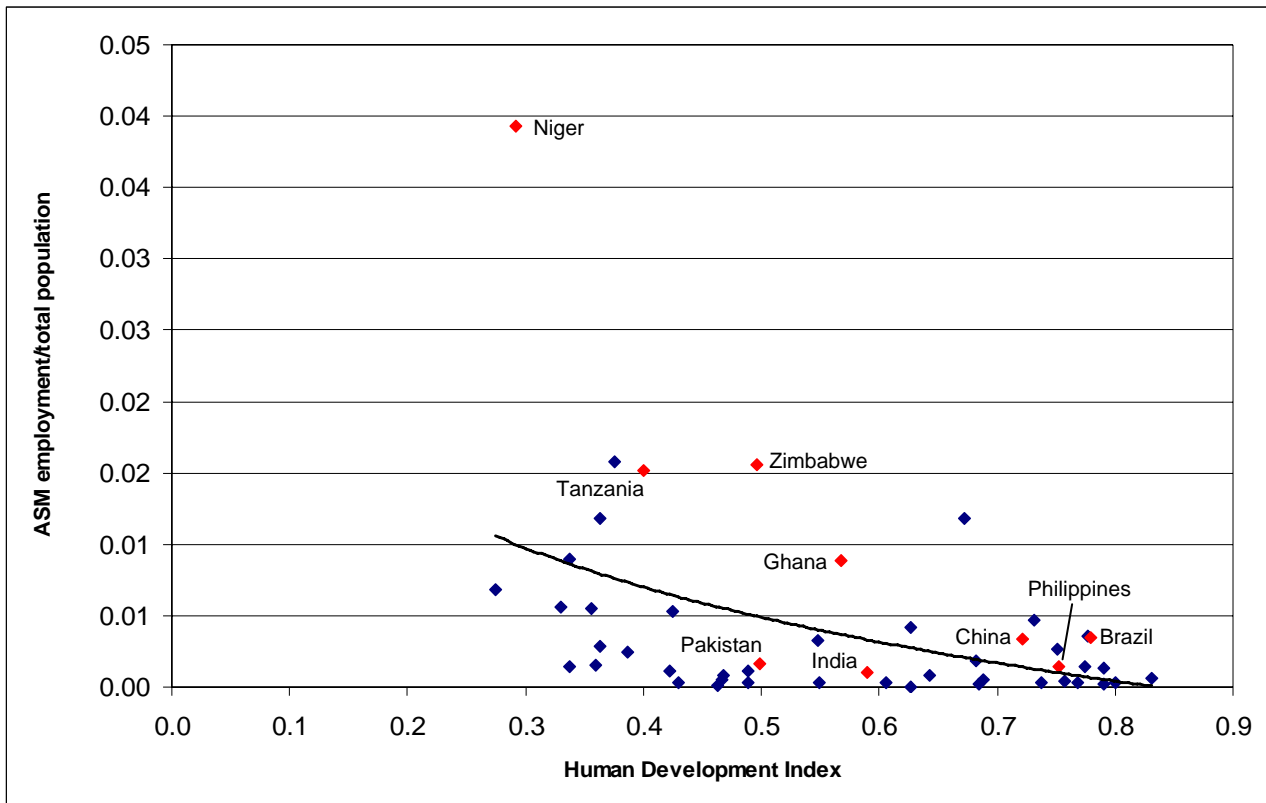
In South Africa, the number of miners involved in ASM is estimated to be in excess of 30,000 [1]. A substantial number of these are women, mostly as employees. The high representation of women in this marginalised economic sector has implications for the developmental potential of ASM. The South African Government has a stated intention to encourage small-scale mining to provide employment and to benefit the overall economy [2].

ASM is practiced extensively as an alternative economic activity in times of stress. It is also largely informal and unregulated, short of finance, technologically backward, and a significant proportion of the sector's activities are illegal. Up to 50% of artisanal miners are women and in some countries, the proportion rises to three-quarters (Borla, 1997, UN 1996, both in [3]).

ASM provides a form of livelihood for the miners, but there is usually no net generation of wealth. The benefits provided by this activity are outweighed by the costs. These costs may be borne directly by the miners, such as poor safety and health conditions in the workings, or may be externalised onto the surrounding communities, such as environmental degradation in a wider area around the workings and social disruption, such as alcoholism. In some instances, profit can only be generated by employing family members at wages below subsistence levels. This promotes the exploitation of women and children. The relationship between development in selected countries and the percentage of their population engaged in ASM is shown in Figure 1.

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**Figure 1:** The relationship between a country’s human development index (HDI) and the proportion of its population engaged in ASM activities for selected developing countries (ASM data: [4]; population data: [5]; development index data: [6]). Two trends are apparent in the data: the first, at low HDI levels, shows a strong inversely proportional relationship between HDI and ASM employment. At higher HDI levels, this relationship is not apparent and ASM activity in these countries may arise due to opportunity rather than necessity.

Artisanal miners form part of a community, but because of its marginalized, frequently illegal and clandestine nature, the sector is usually regarded as one without a community context. If ASM is to be evaluated in terms of its contribution to sustainable livelihoods (SL), this needs to be done against the characteristics of a sustainable community.

## 2 ASM AND THE SUSTAINABLE LIVELIHOODS APPROACH

To promote sustainable livelihoods (SL), ASM should increase the sustainability of poor people’s livelihoods in four inter-related ways [7]:

- A. improving the community’s ability to cope with, and recover from, shocks and stresses;
- B. improving economic effectiveness, or the use of minimal inputs to generate a given amount of output;
- C. promoting ecological integrity by ensuring that livelihood activities do not irreversibly degrade natural resources within a given ecosystem; and
- D. enhancing social equity, which suggests that promotion of livelihood opportunities for one group should not reduce options for other groups, either now or in the future.

A. ASM is often a short-term coping mechanism in the face of shocks and stress, but it is a hand-to-mouth activity and does not promote long-term sustainability. In the case of a gold-rush, the sector is itself responsible for placing the local community under stress, and contributes little that could increase the community’s coping mechanisms. The inherent characteristics of the sector – resilience and adaptability – are used for short-term and individual gain or survival. A co-operative or communal objective is usually lacking in the activities of the sector.

B. ASM is not economically effective as the patrimony of the community is often consumed for short-term individual gains. Such activities do not contribute to the financial capital of communities, even when inputs are low, as the wealth generated is minimal and often enriches middlemen. A lack of access to formalized financial institutions inhibits saving, and a lack of access to technology inhibits investment in the mining operation. Consequently, there is a

tendency for men to spend their money on prostitution, gambling and alcohol [8]. It is left to women, who earn very little in the ASM sector, to spend money on their families.

C. Ecological integrity is compromised and can preclude other economic activities, such as agriculture. In extreme cases, ASM activities result in the destruction of the ecosystem, not only in the immediate vicinity of the operation, but frequently across national boundaries by pollution of the water sources. Deforestation, river siltation and water-course diversion are just some of the impacts.

D. ASM has a significant negative impact on communities. ASM activities accelerate the destruction of traditional livelihoods and leadership structures and increase social ills. The threat of HIV/AIDS increases, as does the incidence of prostitution and excessive consumption of alcohol.

Sustainable livelihoods require participation and social capital development. They require access to good governance and ecological, socio-cultural, and economic resources. Fundamental requirements are equity, ownership of resources and participatory decision-making. The nature of the ASM sector, and the manner in which its activities are conducted, do not align with any of these requirements. Social capital comprises social networks – ASM does not contribute to the formation of such capital, except in those relatively few cases where miners have formed co-operatives. The characteristic individuality of miners excludes participation, while the illegal nature of many ASM operations bars access to good governance. Most miners do not have title to the land, nor the minerals deposits that they mine. Consequently they are not concerned by sterilisation of these resources during mining operations. They thus deprive themselves, and adjacent communities, of ecological resources. They are isolated from society and the risky nature of their business denies them access to economic resources.

In its current form, the ASM sector only has value as a disaster-coping mechanism. However, poverty is increasing globally. Global warming is contributing to increased frequency of natural disasters, such as the current famine which threatens millions of lives in Southern Africa. Civil war and internal strife lead to higher levels of unemployment and reduced opportunities for traditional livelihood activities. These factors contribute to an increase in the numbers of artisanal miners.

Growth in the ASM sector is rapid, as the sector has the potential to provide a quick route to riches and, more realistically, a means of ensuring daily sustenance. Because the miners are used to working in the most primitive conditions, and with the most rudimentary equipment, they are able to carry out their activities in harsh and remote environments where governments have not kept pace with the growth of the sector, or have ignored it. ASM also flourishes in environments where the rule of law has collapsed and where unscrupulous traders can acquire minerals and metals without having to pay taxes or levies, and under conditions favourable only to themselves.

In mineralised regions, and in developing countries, ASM appears to be the most favoured economic response to crisis and poverty. It is critical that a way be found for the sector to contribute to SL and the alleviation of poverty. Its activities are currently not sustainable, and the sector should not be promoted without significant restrictions on where and how it carries out these activities. The answer could lie in the seeming paradox of shrinking the sector in order to develop it. Further expansion is not an option. Many current ASM activities are viable only if costs are externalised onto the environment in the form of degradation, and onto the workforce in the form of exploitation. The only winner is the middleman. Operations are too labour intensive, too geologically poor and too inefficient to provide a decent living, hence the paradigm must be changed. There are livelihood opportunities in ASM, but not for all.

Integrated Rural Development Plans should include ASM, but they should also include viable and attractive alternative employment opportunities. Currently, there are usually few, and in some cases no, alternatives to ASM. Many people willingly enter the sector because they see it as an attractive alternative, but many more are forced into it because of poverty and a lack of other employment opportunities.

Essential and enforced legislative requirements will improve environmental performance, and health and safety at operations, and will reduce and finally eliminate the worst aspects of the sector, such as child labour. These measures will increase costs, making the activity even less profitable. Some practitioners will leave, or reduce their workforce. This means fewer people working an orebody, which, when coupled with increased productivity, can result in an improved opportunity for profit and a decreased probability of environmental degradation. A smaller sector will also be easier to monitor and this will contribute to improved governance in the sector.

It has become a cliché that legalisation is the most important step to developing the sector. Many countries, such as Tanzania and Ghana, have enabling legislation in place, but in general, developing countries' governments usually lack the capacity (and, in some cases, the political will) to enforce and monitor legislation. Every step which could be taken to developing ASM depends on the support of the state. If ASM is to contribute to sustainable livelihoods, it has to fall within the ambit of the law.

## 2.1 How can the ASM sector be transformed to build the different capitals of sustainable livelihoods?

Without state support, measures to build the different capitals of sustainable livelihoods can only have limited success, but the following potential is present:

- A. Formation into co-operatives and associations will increase:
  - social capital, by involving ASM in networks,
  - human capital, by making it possible to access training to skills and information relevant to the sector,
  - physical capital, by improving access to appropriate technology, and
  - natural capital, by the exploitation of viable ore bodies.Co-operatives and associations have internal self-regulation, and present greater potential for ASM to contribute to economic efficiency and environmental integrity.
- B. Co-operatives and associations reduce marginalization, open access to funding, training, technology and extension services (building social, human, physical capital).
- C. Legalized buying and selling channels ensure a fair price for miners. The state is then in a position to insist on licensing and paying of taxes. The sector can thus become a revenue generator.
- D. Operation outside of the law increases social instability and decreases access to social security nets, health and education services. Legalizing the sector will reduce these negative characteristics.
- E. Very few NGOs or development agencies focus on ASM. Extension services to small scale mines should be encouraged and adequately resourced. Recognition of, and capacity building in, development partners in the sector (such as NGOs, local government and development agencies) can compensate for the lack of enforcement/monitoring capacity. This will increase natural, economic and social capital.
- F. Government capacity to enforce and monitor ASM operations can be augmented if ASM associations insist that members recognise their responsibility towards the surrounding community and accept responsibility for a large degree of self-regulation. The community can be involved in aspects such as monitoring.

The correlation between low HDI and high employment in the ASM sector emphasizes the poverty alleviation potential that poor people see (and to some extent, find) in ASM. Governments in developing countries, who are serious about poverty alleviation, and have committed themselves to achieving the millennium goals of poverty reduction, need to focus on a sector where a large percentage of their citizens are trying to earn a livelihood in conditions which could be much more favourable, and contribute to the potential for sustainable livelihoods in rural communities.

Government, large-scale industry and the ASM sector itself can play a role in enabling the sector to contribute to sustainable livelihoods and to the local, regional and national development agenda. Key instruments are in place which, used optimally, can be channels for improving the development contribution of the ASM sector. These include legislation and regulation, and social plans, Integrated Development Plans (IDPs), Regional Development Plans (RDPs) and Local Economic Development (LED) strategies.

## 3 GOVERNMENT

The Department of Minerals and Energy (DME) has sole regulatory control, which is governed by national/central policy/legislation, and regulation of the minerals sector is highly centralized. The issuing of licences and permits, monitoring, enforcement and closure are the preserve of the DME.

Current legislation and policy does not unlock the developmental potential of ASM. The DME's White Paper of 1998 does not indicate that the government views artisanal as having development potential. The document refers to the advantages of **promoting, assisting** and **developing** small-scale mining, but it states that "resources need to be employed by the State to **control** artisanal mining as effectively as possible" (authors' emphasis) [2]. The Minerals and Petroleum Resources Development Act of 2002 (MPRDA) does not distinguish between artisanal and small-scale mining, nor, with the exception of the requirements for the issuing of a permit, does it distinguish between large-scale and small-scale mining operations. Some of the different requirements for the issuing of permits and rights are detailed in Table 1.

**Table 1:** Requirements for the issuing of permits and rights [9].

<b><i>Mining right</i></b>	<b><i>Mining permit</i></b>
<u>Requirements</u>	<u>Requirements</u>
Prospecting complete	Life of project must be less than two years
Financial ability	Area must be smaller than 1,5 hectares
Technical ability	Environmental plan
Economic programme	
Work programme	
Environmental Management Plan	
Social plan	
Labour plan	
<u>Conditions</u>	<u>Conditions</u>
Payment of royalties	Payment of royalties
<b>Comply with Charter</b>	May not be leased or sold, but is mortgageable

Particularly relevant to this paper is the absence of requirements for a social plan for the issuing of a mining permit. The requirements of the social plan for a mining right are extensive, and designed to ensure that communities associated with mining receive an equitable share of the benefits of mineral exploitation. It would seem logical that ASM, which is part of the community, and which frequently has severe negative impacts on the community, should be subject to social requirements and obligations towards the community that it so impacts on. Such obligations would need to be down-scaled to be implementable by ASM, but it should also be extensive enough to prevent the destruction of livelihood opportunities and the social fabric of the community within which it operates.

Further requirements for a mining right that could be included in the requirements for a permit is that of proven financial and technical ability. Low levels of technical and financial skills are two of the constraining characteristics of ASM. Much ASM is carried out for years without these essential skills, and this lack impacts on every aspect of sustainability – environmental, economic, health and safety.

Government policy states that “The interests of the country and the community demand that all forms of mining, whether large, small or artisanal, should be subject to the same requirements in respect of licensing, safety, health and the environment” [2]. It is debatable whether these intentions are carried through in the legislation. However, the requirements for the different sizes of operations are aligned in the requirements to submit environmental plans and to pay royalties.

These are onerous conditions for operators in ASM to meet. Most of them are poor, and the financial obligations could encourage them to continue to operate illegally. Compliance with regard to paying a deposit for rehabilitation has proved to be low, with many small miners simply not registering applications for prospecting or mining permits [10]. The requirements to pay royalties would have the same effect.

The definition of a small-scale mining operation in the MPRDA is one where (a) the mineral in question can be mined optimally within a period of two years; and (b) the mining area in question does not exceed 1.5 hectares in extent. No provision is made in the MPRDA for artisanal mining.

The size required for an operation to qualify for a mining permit is small, compared to a number of other countries such as Zambia (up to 400 hectares), Cote d’Ivoire (25-100 hectares) and Tanzania (up to 10 hectares). In addition, countries such as Ethiopia, Zambia and Zimbabwe distinguish between artisanal and small-scale mining.

It is doubtful whether 1.5 hectares is large enough to allow a viable operation to develop within two years. Certainly, the conditions attached to such a permit make it difficult to justify the expenditure of capital, effort and expertise for very small or no returns. The finance, skills and effort required to obtain a permit and conduct operations within the ambit of the law are such that a “one-man” operation is no longer feasible, and it is unlikely that the area of operation would make an undertaking profitable for more than one person, if that.

The following guidelines are contained in “The Compendium on Best Practices In Small-Scale Mining in Africa”: “Although actual sizes should be determined at the country level depending on various considerations, the following are given as guidelines: 400 hectares (4 km<sup>2</sup>) for reconnaissance, 200 hectares (2 km<sup>2</sup>) for prospecting and 100 hectares (1 km<sup>2</sup>) for mining activities for all minerals, other than gemstones and building materials. Fifty hectares (0.5 km<sup>2</sup>) should be the maximum concession size for mining of gemstones and building materials.” [11].

The size allowed to obtain a mining permit might be more suited to artisanal mining, but this distinction is not made in the MPRDA. As artisanal mining is usually practiced by the very poor, the finance and operating requirements put it beyond the reach of such operators. Effectively, then, the provisions of the MPRDA relating to small-scale mining are a severe constraint on the ability of the small-scale sector to contribute to poverty alleviation.

A number of legislative instruments could be expected to address ASM issues. These include the Skills Development Act of 1998, the Basic Conditions of Employment Act of 1997 and the Mines Health and Safety Act of 1996. Petersen [10] concludes that the regulatory impact of these, and other Acts, on the ASM sector is limited. The legislation has been promulgated to meet the requirements of the formal mining sector, and much of it does not apply to the ASM sector and/or is difficult for that sector to implement.

The authors have received comments on the complicated nature of the applications that need to be completed, even though Section A.4 of the Environmental Management Plan states that the application “is designed for use by non-professionals and newcomers to the environmental management industry and it incorporates a very simple Environmental Impact Assessment (EIA)” [12]. However, potential applicants report that they have to use consultants to complete the forms for them, which adds considerably to the costs of the application, and does not ensure that the applicant is fully aware of the legislative and regulatory obligations imposed by the granting of a permit. This applies too, when regional offices of the DME assist applicants in completing the necessary applications.

Applicants are required, not only to familiarise themselves with the relevant sections of the MPRDA, but also to be aware of other legislation which may apply. This includes The National Monuments Act, 1969, National Parks Act, 1976, Environmental Conservation Act, 1989, National Environmental Management Act, 1998, Atmospheric Pollution Prevent Act, 1965 and a significant number of other Acts. These are largely unintelligible to lay persons, and much more so practitioners in the ASM sector who are frequently semi-literate at best. The problems are compounded by language difficulties. In the Richtersveld, for example, the predominant language is Afrikaans, but none of the documentation is provided in that language.

A notable feature of the initiatives, organisations and programmes that are intended to develop and assist the ASM sector, technically and financially, is the low involvement of local and municipal government. This failure to involve local government in the regulation of ASM, and addressing its problems, has led to uncertainty in local government as to the exact nature of the sector and what is required to use it as a tool in development strategies, particularly for rural areas.

A survey of a few development plans of Local Governments reveals that this tier of government is unclear as to how it best can incorporate ASM into development plans. Small-scale mining initiatives are generally referred to in vague terms, and a considerable amount of further conceptual development work is required before project proposals can be formulated. This lack of clarity, based on a lack of the necessary authority and resources, would also lead to a lack of motivation.

Where more comprehensive statements are made about promoting the ASM sector, such as those in The Ekurhuleni LED Policy and Strategy documents, [13] and [14], it is difficult to see how the strategies will be implemented, as there is no apparent authority vested in Local Government to do so.

The DME must be engaged when IDPs are drawn-up and reviewed, as it has the technical expertise and understanding of the legislation to provide guidance to local authorities on ways in which ASM can be included in development plans. At such meetings, local governments will also be in a position to negotiate for the additional resources required to carry out its development mandate with respect to small-scale mining. If the DME attended annual review meetings of local development plans, its expertise could further assist in the monitoring of such plans.

The White Paper affirms the government’s intention to create an enabling environment within which municipalities, in Local Economic Development strategies and Integrated Development Plans, can optimise the potential of the mineral sector to contribute to development and poverty alleviation [2]. This places an onus on Local Government to “support the development and emergence of small-scale mining” but it has no mandate or authority to do more than promote the sector and include small-scale mining in its IDP’s/LED strategies. All decision-making regarding mining is the preserve of the DME. Local Government has very little ability to influence developments in small-scale mining projects (authorisation, monitoring, closure etc.), yet this tier of government is the most affected by the negative impacts

of the sector and the risks it can pose to the community. In urban and peri-urban areas, in particular, it also has to deal with the potential disruption to the community by the influx of people from different socio-economic group.

The main modalities of interaction between Local Government and the DME are:

- A. from local government to DME: usually received in the form of complaints such as small-scale miners undermining roads or other servitudes. The DME has the authority and duty to respond and enforce compliance with legislation. According to DME officials, Local Government has no authority to stop dangerous/illegal activities [15];
- B. from DME to local government: Local Government is considered an interested and affected party (I&AP) and is consulted, together with a number of other stakeholders, as part of the consultative process associated with mining and prospecting authorisation.

The need for a mechanism for Local Government to engage more comprehensively with DME on these issues is absolutely critical. Greater levels of communication and coordination are required. Without such a mechanism, sustainable development in ASM could well remain a pipedream.

A frequently cited reason for the failure of governments to address the issue of ASM effectively is that of lack of capacity, and this is as true of the DME as it is of other government departments in Southern Africa. It would make sense for local governments to be provided with the skills and resources to regulate the sector within their locality. They are familiar with the area, with the community and with events within their jurisdiction, and are in a better position to monitor and enforce regulations justly and efficiently. They would also be able to respond rapidly to ASM activities which pose a threat to the health and safety of the miners or the community. Currently, all local government can do about such circumstances is report them to the DME. Local Governments, in consultation with the DME and other role-players, should be given the authority to formulate regulations which are appropriate to ASM, flexible enough to be adapted to local conditions and which will not be perceived by small miners as threatening their livelihood opportunities.

Consideration should be given to decentralising authority to local government in the case of commodities mined for local consumption and sale, such as sand, clay and building materials. Local Government should have authority over such activity and also be in a position to waive or collect the royalties and taxes. A sound policy, drawn up by the DME in consultation with all the role-players, will ensure the appropriateness and uniformity of Local Government practice.

The current, highly centralised structure of authorisation and enforcement vested in the DME is a hangover from a time when the Government was exclusively concerned with regulating large, technically complex mines which were of strategic importance. The recent development of community-based small-scale mining is not adequately serviced by the bureaucracy set up for large-scale mining.

## **4 LARGE-SCALE MINING**

The contribution of the formal sector to ASM is complicated by a number of factors, not least the traditional stand-off between the two. A number of companies have entered into agreements with ASM operators, not always with notable success. However, the idea of partnerships and co-operation between the two sectors is a relatively recent development, and both will still have to work towards a *modus vivendi*.

The Social Plan, the Mining Charter and IDP/LED strategies open significant possibilities for the development of ASM, but these opportunities cannot be exploited under current circumstances.

Mining companies are required to align their social plans with IDPs and LED strategies, and it would be opportune, given their expertise in the minerals sector, for them to support small-scale mining development projects. This would require a significant degree of coordination, mediation and consultation between Local Government, mining companies and small miners. The onus will fall on local government, as the implementer of IDPs and LED strategies. The co-ordination of such partnerships is constrained by the fact that Local Government does not have coordinating authority with respect to small-scale mining, and Local Government, large-scale companies and all three parties are subject to the DME, which holds all effective authority. Further constraints regarding the inclusion of small-scale mining in IDPs and LED strategies have been discussed above.

In spite of the difficulties mining companies are faced with in participating directly in ASM development through local development plans, there are a number of ways in which they can contribute to the advancement of the ASM sector.

- Large-scale operations should design their social plans to provide livelihoods alternate to those of ASM. As many small miners practice mining and agriculture on a rotating basis, skills-upliftment in agriculture would be one such alternative. If appropriate alternate livelihoods are chosen, and if the appropriate skill training is undertaken, there should be an opportunity to draw some of the small miners away from the mining sector. This would result in shrinkage of the sector and an increase of its viability.

- An ASM community is particularly difficult to resettle, as their traditional livelihoods and the land they practice it on, are difficult to replace. Resettlement should be avoided if at all possible, but if it is essential, resettlement plans involving ASM communities should be designed in such a way that the community has the opportunity to practice alternative forms of livelihoods and to move away from dependence on mining.
- One of the characteristics of the ASM sector is gender inequity. A further pressing one is health, as illegal miners cannot access formal social networks. Companies should incorporate aspects of gender and health into their social plans. This can be done without disrupting the operation of the company's activities.
- Mining companies have extensive expertise in the technical, safety and environmental aspects of mineral extraction. Where feasible, they should assist small miners with this expertise. However, ASM needs are different to those of large companies, and many of them cannot be incorporated in company training. The Mining Qualifications Authority is currently developing programmes for skills acquisition by the ASM sector, and mining companies should facilitate the access of ASM operators to such programmes.
- Small miners could be allowed to work marginal or non-viable parts of the company's land and/or allowed to rework tailings. These activities are suited to the technology and economic resources of ASM. In Ghana small-scale mining was legalized in 1989 and in five years artisanal miners brought in over \$US130 million from gold and diamonds, mostly from abandoned waste dumps the value of which would otherwise have gone unrealized.
- Companies can conclude tribute agreements with ASM associations, and pay market-prices for products. Assured market and prices mean small miners are not at the mercy of middlemen, which is an important way for the sector to escape from the poverty trap.
- Joint ventures with local entrepreneurs in mining, ancillary supplies and services; the private sector's direct involvement in ASM is usually very limited, but it can have a positive influence on smaller operations.
- Marginal or small deposits, which are not suitable for mining on a large scale, can be voluntarily returned to the national mineral inventory for re-allocation to small miners on a formal and legal basis.
- Companies can undertake joint or sole sponsoring of demonstration projects, training programmes or mining schools; such as those offered by Mintek and MEETI. Small miners should be strongly encouraged to acquire skills, possibly by tying concessions to their acquisition.
- A severe constraint in the design of small-scale mines is a lack of geological knowledge and optimal design specifications. Small-scale miners avoid hiring professionals because of the expense, and large-scale mining companies could provide significant capacity by making their own resources available to small mines.

## 5 ASM

- ASM operators should be encouraged to operate within the law. Considerable awareness-raising will have to be done (by government, NGOs and mining companies) so that small miners have the security that legalization, formalization and licencing do not threaten livelihood opportunities.
- The sector must recognise its responsibility towards the surrounding community. Its marginalization is only partially imposed by external perceptions. In many cases, the way its activities are conducted is not conducive to good relations with the community. While this aspect of small operations is not regulated by legislation, it will require a large degree self-regulation, which would optimally be achieved within ASM associations and co-operatives
- Operators in the sector should exploit their particular skills, such as their ability to prove deposits, to co-operate with major mining companies on a joint venture basis.
- The sector must make full use of opportunities and programmes to develop itself. In South Africa, there are numerous such opportunities, and the projects and programmes available could ensure that ASM develops into an activity which is not just resource-based, but also, and substantially, knowledge-based.

## 6 CONCLUSION

ASM has much-vaunted potential for poverty alleviation. In an unregulated state, this potential is seldom realised and governments across SADC are grappling with mechanisms to improve the regulatory environment under which ASM is practiced.

The manner in which the Department of Minerals and Energy envisages the ASM sector to contribute to poverty alleviation and the equitable distribution of wealth is currently unclear to operators, regulators and to those who are working to facilitate the progress of the sector to sustainable development. The MPRDA has only recently promulgated, but preliminary investigations show that there is considerable confusion, uncertainty and scepticism around the ability of the legislation to achieve its stated aim of equity and poverty alleviation. Without clear guidelines and objectives from central government, it is unlikely that the sector can achieve these aims and so contribute to sustainable livelihoods. Guidance from government should support the formation of partnerships between large-scale mining and ASM. These partnerships are a vehicle for making a significant corporate social responsibility investment.



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- [15] DME (Department of Minerals and Energy) (2004) (pers. comm.) – focus group meeting with the Small-Scale Mining Directorate: Ms. S. Bansi, Acting Director, Mr G. Mthobweni, Assistant Director and Mr C. Makama, Assistant Director, 18 February, 2004.