

RAPOTUER'S REPORT ON

THE WORKSHOP

"SMALL SCALE MINING IS HERE TO STAY"

HELD ON 21 – 23RD JULY 2004

MINE ENTRA EXHIBITION

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INTRODUCTION

The workshop “Small Scale Mining is Here to Stay” was organised and hosted by Gold Mining and Minerals Development Trust from 21-23rd July 2004. The Workshop drew a total number of participants approximating 120 on the first day and 100 on the second day. Numbers were restricted as a result of size of venue available otherwise the number of participants would have risen to 150. The workshop topics presented were broad and the workshop stole the main business of the Mine Extra Exhibition. The event was officially opened by the Honourable Minister Comrade Ambassador Amos Midzi on the 22nd of July and his opening speech was captured as is without any alteration. Rapotuers chose to include the unmodified version of the Minister’s speech so as to keep it on record.

Presenters were drawn from Zimbabwe, Zambia and Tanzania whilst the audience was drawn from across the board including ASMs, Governments Ministries, and NGOs, other stakeholders. The papers presented ranged from ASM characteristics, financial opportunities and challenges, Safety and health Issues, Women in Mining, Environmental degradation, experiences from Tanzania and Zambia and challenges for sustainable development in ASM. The workshop was also supported by delegates from UNECA, UNIDO, and MSDP-ZAMBIA showing how well the workshop was marketed.

The first day of the workshop covered a field visit to a gold custom milling centre in Hope Fountain Area in Bulawayo where participants were taken through the whole process of ore crushing and liberation of gold. Of particular importance was the resistance of technology versus traditional myths, which tend to disadvantage the miners. Therefore purpose of the field trip was to educate and promote technological advancement. The other remaining two days of the workshop saw a series of presentations.

Overall, the workshop was well received and made a positive contribution to policy making. It is hoped that the relevant ministries will take stock of issues raised and recommendations made so as to improve the ASM sector.

RAPOTUER'S BACKGROUND'S

This document was prepared by Mr Chris Dube and Wordsworth Dube both from the Ministry of Mines and Mining Development based at the Bulawayo Regional Office. Mr C. Dube is a regional metallurgist who has worked with the Ministry for more than 10 years whilst Mr W. Dube has served the 5 years as a regional geologist with the same institution. Mr C. Dube holds a BSc Hons in Metallurgy whilst Mr W. Dube holds a BSc Hons in Geology attained from the University of Zimbabwe.

Acknowledgements

We are greatly indebted to the assistance we received from the Gold Trust employees during the compilation of this report. Our special thanks go to the presenters themselves for the information they gave. The School of Mines, Bulawayo is also thanked for its help with IT.

HOPE FOUNTAIN FIELD TRIP REPORT

FIELD trip was conducted on the 21st of July 2004 , to Hope Fountain Gold Custom Milling Centre to get an appreciation of comparisons of gold processing techniques with regards to efficiencies and in turn the benefit to the miner. Thirty participants attended Field Trip. The milling centre uses a stamp mill for crushing and milling, and has various options for concentration viz; a copper plate, rubber strakes, blanket long tom, and a centrifugal concentrator. The tailings sand are leached using cyanide leaching with carbon in leach. Participants were able to observe and appreciate the whole gold processing and recovery from ore up to the final smelting and purchase point as all these structures are incorporated into the milling centre function system. It was interesting to note that a majority of the miners in Zimbabwe still embraced the old, inefficient techniques not realizing value for their work.

Field trip also covered a field visit to mine workings where a group of women and men were working as a cooperation on a disused mine formally owned by Ngezi Mine. Purpose of the trip was to advise the cooperation to make a formal application to register their workings so as to operate within the law. Safety, environmental and health issues were also addressed by the chief mining commissioner who was part of the participants.

The trip was also an exposure to other participants who were not familiar with gold processing.

Welcome Remarks by Resident Minister of Bulawayo, Cde Cain Matema

The Resident Minister of the Metropolitan City of Bulawayo, Cde Cain Matema, highlighted on the bad state of the economy in Bulawayo and Zimbabwe as a whole. He emphasized that the workshop as a result should be perceived as a platform to enhance economic outlook. In general, mining is a cornerstone for the Bulawayo Metropolitan and the associated downstream industries have adversely been affected by the bad economy, have been closed or operate at 10-30% capacity. In the SADC region leaders have agreed that our countries cannot continue being suppliers of raw materials for other countries. Where a primary product is produced, value should be added to that product by means of beneficiating before reaching an intended consumer or customer. In mining environmental DEGRADATION is not caused only by panners but by large companies as well. Land reclamation should be considered where damage of the environment is imminent. Small scale miners need to be empowered by making funds/ loans available.

SPEECH BY HONOURABLE MINISTER OF MINES AND MINING DEVELOPMENT, AMBASSADOR A. MIDZI.

AT THE OFFICIAL OPENING OF THE “SMALL SCALE MINING IS HERE TO STAY WORKSHOP, MINE ENTRA 22 JULY 2004

The Chairman of Gold Mining and Mineral Development Trust

Invited Guests

Ladies and Gentlemen

It gives me great pleasure to be afforded this opportunity to address this gathering of small to medium scale miners from across the country and beyond our borders. I would like to congratulate GMMDT and all the sponsors for organising this seminar.

In the beginning I am taking the view that workshops should go beyond being an industry in itself. Workshops or seminars must, each time they are organized or run have a clear objective of coming up with specific results oriented recommendations or solutions.

I take it that this workshop was designed, not as a way of riding the political wave, which has created an expectation demanding justice for the small player, not only in the mining sector, but across the economy. Let us all go beyond a romantic view of indigenous businesses and begin to be real.

SUPPORT TO SMM

By putting in place the Mining Industry Development Fund (MIDF) whose purpose is to provide development support to small to medium scale miners in Zimbabwe the ministry is implementing a clear government policy. The MIDF was originally established in 1904 under the Audit and Exchequer Act as the Mining Industry Loan Fund. It is funded through regular grants from Government, which are disbursed annually. In 2000, the Secretary for Mines and Mining Development suspended the operations of the Fund on account of administrative difficulties. Some of the

problems included poor funding and debt collection, unsecured loans and plant/equipment maintenance cost escalations.

A review of the Fund that was carried out in 2003 revealed that the small scale mining promotion and development process which relies heavily on the level of support provided by the technical departments of the Ministry had been affected by the budgetary constraints faced by the technical departments. The review also revealed that the legal and institutional framework under which the Fund operated was appropriate and supportive of the objective of the Fund. There was however need to amend and strengthen the Fund's Constitution and change the detailed administrative structure and reporting arrangements in order to strengthen accountability.

The newly constituted fund was renamed the Ministry Industry Development Fund and its objectives are as follows:-

- To provide on a sustainable basis financial and material support to the small to medium scale mining sector in Zimbabwe.
- To provide support in the form of loans and access to plant, equipment and tools as well as technical support.
- Reduce/subsidies the cost of mining for small to medium scale miners.
- Provide additional support by allowing small to medium scale miners through access to the Fund's workshops.

The support will be provided on condition that the Ministry's regional technical offices have assessed the mining project and confirmed its viability.

The specific forms of support that the Fund will provide are as follows:

- Speculative development loan
- Mining establishment loan
- Mine expansion, replacement and maintenance loan
- Plant and equipment procurement
- Working Capital Loan
- Plant and equipment lease to buy scheme

- Repair and maintenance facilities.

The Fund was allocated a budget of \$5 billion for 2004. To date 9 projects have been funded countrywide to the tune of \$1.35 billion. I expect that the new look fund will go a long way in improving delivery.

LEGAL FRAMEWORK

The small scale mining sector should be mindful of the fact that in order to achieve sustainability and growth it has to operate within a regular Legal Framework. The expected amended Mines and Minerals Act, once enacted shall be the Bible not only for the bigger players, but for the smaller ones as well.

Currently a number of instruments e.g. S.I 328 and 329 of 2002 were put in place to support small scale gold mining. Results have been pleasing. Also, the Ministry, together with the Reserve Bank of Zimbabwe, will from time to time, continue to review the price of gold which is paid to small-scale miners and panners. Currently small scale miners are paid \$71 000 per gram.

GOLD PRODUCTION FIGURES 2004(KG\$)

Month	\$\$M/Custom Mills	Large Scale	Total (Kg\$)
Feb	853.1800	633.2153	1486.3953
Mar	904.8200	932.7424	1837.5624
April	932.6900	714.9103	1647.6003
May	1054.5400	777.9922	1832.522
June	1032.5657	845.7475	1878.3132
TOTAL\$	4777.7957	3904.6077	8682.4034

ENVIRONMENTAL DEGRADATION DUE TO SSM ACTIVITIES

The existing Act gives very clear guidelines on how prospecting, mining, abandonment and rehabilitation should be carried out. For example, a prospecting licence does not give a person the right to prospect or mine everywhere. There is certain ground which is not open to prospecting and mining activities

(Section 31 and 34). The Act also gives requirements for working of alluvial, eluvial and other designated mineral deposits. The Act has a whole part (Part XVI) dedicated to procedures of abandonment.

The enforcement of provisions of the Act will ideally result in the eradication of environmental degradation due to mining activities. It should however be understood that the fight against environmental damage by illegal miners and panners must be a combined and coordinated effort by all of us, panners themselves included.

For the purpose of mining deposits, Statutory Instrument 275 of 1991 gives guidelines on how to extract gold from rivers in an environmentally friendly and sustainable manner. The working of alluvial gold should be confined to the bed of the stream and be conducted at least three meters from the lowest point of the banks of the stream workings should not be more than 1.5 m deep and undercutting is prohibited. Mined out areas are required to be rehabilitated by backfilling as mining progresses. Permit holders are required to dispose of all their gold to the Reserve Bank or its agent.

WAY FORWARD

The Ministry has managed to initiate the re-origination of the small scale miners associations into one umbrella body, The Zimbabwe Miners Federation, where they are now easier to manage and assist both technically and financially. I expect that this initiative will see the small scale mining sector growing into a vibrant and prosperous sector. As depicted by the theme of this year's Mine Extra Exhibition, Tight Fit, it is important for you to work together closely for you to achieve the desired success.

I wish you a successful seminar and I hope you will be able to learn and implement some of the ideas that are going to be presented here. I now declare the seminar officially opened.

Thank you

Status of Small Scale Mining in Zimbabwe: Keynote Address

By Forbes Mugumbate

The presenter highlighted growth of the small-scale mining sector and characteristics of small-scale mining in Zimbabwe. He also indicated that the problems of artisanal and small scale mining (ASM) emanated from the lack of proper definition of “a small scale miner in the Mines and Minerals Act chapter 21.05”. Various definitions of a small-scale miner were presented which are based on the different aspects of mining vis

- (i) Mineral being worked,
- (ii) Mining methods being used,
- (iii) Level of investment,
- (iv) Number of employees,
- (v) Size of reserves,
- (vi) Gross annual income,
- (vii) Degree of capitalization,
- (viii) Energy consumption,
- (ix) Productive capacity.

It was noted that a universal definition of small-scale mining is difficult to arrive at considering the varying aspects associated with it. The most plausible definition that was arrived at was “we recognize small-scale miners when we see them.”

Presenter also noted that the ASM sector had grown tremendously over the past decade from 10% of active mining in 1978 to over 95% of the current mining activities. An estimated 1 000 000 people are engaged in this sector. In 2004, gold production from ASM contributed 50% of the monthly production from this sector. Growth of this sector was attributed to:

- (i) ease to accessibility to mineral rights since independence.
- (ii) intermittent droughts 1980, 1991-1993 2002-3
- (iii) economic reforms programmes that forced many people out of employment.
- (iv) general recession of the economy coupled with lack of foreign currency.
- (v) a thriving parallel market that offered a ready market for gold and attractive commodity price.

The growth of ASM created an excess burden on the available technical and financial resources hence ASM needs were not met. As a result of the lack of adequate resources allocated to ASM, the ASM activities became chaotic and haphazard resulting in inefficient and unsafe mining practices, environment degradation and illegal trading of minerals.

In a bid to formalize the ASM sector, the government has amended the Mines and Minerals Act in order to in co-opt ASM needs.

- (i) S.I 271 – permitted mining along certain river sections under the supervision of local authorities.

- (ii) S.I 328 – Decentralize the gold buying activities to allow easy accessibility to the legal market.
- (iii) S.I 329 – Registration of all gold milling plants in order to monitor and control their operations.

Overallly, it was noted that the ASM in Zimbabwe had grown significantly and its contribution towards foreign currency generation was visible. Participants called for an urgent intervention from government with regards to tackling issues of mineral rights, financial support, improvement of service delivery to the sector and environmental degradation.

The Legal and Regulatory Impediments to the Transition from Informal Mining to Formal Sustainable Enterprises in Zimbabwe; recommendations

By C Matanga

Presenter highlighted the sections of the Mines and Minerals Act, which are hindering the progression of the ASM sector. Top on the list of facts were;

- (i) Lacks of a definition of a small scale mine in the Act. The act is not explicit as to who is defined as a small-scale miner. Hence there are no clear guidelines to monitor and regulate this sector.
- (ii) Lack of adequate resources within the Extension Services Department. The growth of the ASM was not met with an adequate allocation of resources within the Ministry of Mines Departments.
- (iii) Acts invest a lot of powers in the office of the Mining Commissioner, which is open to abuse.
- (iv) Current act allows speculative pegging to take place in order to cover up for illegal deals. This also creates an unnecessary administration burden on the part of the Ministry of Mines.
- (v) Blockage by large mining companies where by large mining houses are allowed to retain mineral rights without working them.

The paper called for the need to amend the Mines and Minerals Act in order to suit the needs of the ASM as well as large-scale mining resources. It also requested for the Ministry of Mines to be restructured so that it can adopt an aggressive developmental policy, which is driven by trends. The Ministry of Mines should be allocated with adequate financial and technical resources in order to offer efficient service delivery. The concept of “mine it or loose it” was proposed so as to allow ground to be open to players who would utilize it. Regular technical and business training skills were very important and should be steered by the Ministry of Mines.

Initiatives with a communities based approach in developing a sustainable small scale mining sector-the Zimbabwean experience.

By Patience Singo

The presenter laid out strategies which had been tried and implemented by the Gold Mining and Minerals Development Trust to come up with a communities based program for small scale mining ensuring sustainable development of the sector. The presenter reiterated on the growth of small scale sector in Zimbabwe over the past 4 years due to economic hardships, droughts and land exposure due to economic reforms. However the main concern was to ensure that in this growth there was need for proper mining and environmental control, financial and technical assistance to miners to improve productivity, need for communities to benefit from mineral endowment amidst an increased spate of illegal gold trading suffocating national mineral economic gain. It was highlighted that even though there had been growth in the sector some fundamental limitations bedevil ASM to achieve sustainability which are:

- Lack of funding for the mining cycle activities.
- Lack of funding for mine services (sampling and ore transportation).
- No financial reserves for milling costs.
- Lack of training in proper mining practice
- Lack of business skills by mining operators.
- Small workers threatened by “big fish” on their richer claims using corrupt mining officials.

The strategies implemented were to achieve the following:

- To design a model of sustainability, economic growth and poverty alleviation.
- To reinforce technical/financial assistance.
- Establishing mechanisms for manpower training.
- Access to appropriate mining equipment and services for improved productivity.

Sustainability programs were run through GMMDT's gold buying agents who would cascade financial and technical assistance to the miners in their areas of operation. Assistance was also monitored through associations to enhance good corporate governance. Proper mining practice was enforced and encouraged and gold purchases were done on site to ensure miners had cash and some services the miner paid back in gold. The miners were organized into groups or associations, and the Rural District Councils were involved to ensure community policing as well as its involvement in the mineral affairs of its community. A royalty to of 0.5% was paid to council and GMMDT advised councils to set up a Mining Fund for sector development engaging the proper skills and carrying out campaigns and training workshops.

These initiatives saw the following developments

- Miner had increased production.
- Safe and properly mined operations.
- Gold sold to authorized dealers.

- Accountability of royalty to the RDCs.
- Subsequent development of the local area.

And benefits

- High productivity.
- Gold recovery and collection.
- Business unit generated.
- Proper mining practice.
- Eventually miner self sustaining

Unfortunately before the full success of this program, the GMMDT gold buying licence was cancelled to make way for a new regulation on gold buying. As a result the program never got to its intended end. However the following observations and recommendations were made for achieving sustainability among communities.

- Milling centres to offer service to miners in the following strategy.
 - Identify reliable customers.
 - Field visit to miner for sampling, geological and mining input.
 - Hire compressor for the miner.
 - Provide explosives and blasting services.
 - Transport ore to the plant.
 - Miner pays back services in gold equivalent at a determined price below the official price.
- RDCs to engage own mining experts from mineral royalties to develop industry.
- Mining associations to value training as most of the miners are not trained.
- As an end note it was noted that “sustainability does not come by chance but we work for it! Otherwise we pass on the virus to the next generation”.

Getting Zambia's Non-Traditional Mining Moving

By A. Mutale

The presenter gave a background to the inception of Mining Sector Diversification Programme which was initiated in 2002 in an effort to diversify the economy of Zambia, which is largely dependent in copper and cobalt. MSDP is a five-year EU funded programme which is implemented under the 8th EU-ACP Symin facility for Economic Diversification. The small and medium scale-mining sector was realized as one of the sectors which can contribute positively to the ailing economy of Zambia. However, the presenter noted that the small-medium scale mining sector faces a lot of challenges summarized below:-

- (i) Lack of detailed geological information to quantify the deposits.
- (ii) Lack of technical and business management skills to execute duties in a professional way.
- (iii) Access to capital is hampered by lack of detailed geological information on ore reserves estimation. Hence, financial institutions consider this area as very high risky business ventures.
- (iv) Disorganized marketing system such that value for product is not fully realized.
- (v) Lack of support from Mining Regulatory Authorities.

Having realized the potential of small and medium scale mining sector and the problems that hinder its advancement, there was need to execute a well planned initiatives as to make the sector to become an effective contributor to the national economy.

Objectives of the programmes include:-

- (i) To increase export earnings through economic diversification.
- (ii) To generate employment opportunities.
- (iii) To alleviate poverty.

Projects provide assistance by way of offering technical assistance (40% of allocated resources) and credit facility (60% of total funds). Small scale miners can benefit from the fund in any of the three ways indicated below:

- (i) Preproduction Facility; can be accessed by those doing mining and trading aimed at assisting applicants to prepare documents and technical information required for applying loans
- (ii) Technical Assistance; administered by the bank. MSDP facilitates access to funds from the banks.
- (iii) Capacity Building in the Ministry of mines so as to improve service delivery
- (iv) Marketing; to facilitate marketing of gemstones.
- (v) Miners Associations whereby by all problems are channeled through the association.

Notable achievements of the programme include

- (i) Improved accessibility of geo-information.

- (ii) Technical and business training.
- (iii) Credit generating and investment promotion.
- (iv) Access to international markets and improved technology

Participants welcomed the initiatives being implemented under MSDP but expressed concern over delays in implementation of the credit financing program considering that it is a five year programme. Chances are that, it is unlikely that the programme would have made maximum use of funds at the end of the programme. It also noted lack of involvement of other relevant bodies.

Developments in Government Support towards Small Scale Mining (SSM) Initiatives; the Past and Present

By C Tahwa

The presenter acknowledged that SSM had a noticeable position in the Mining Sector although its contribution has been severely underrated due to numerous constraints. Main problems have been the lack of adequate financial resources and inadequate support from extension services. He noted that recently the government has been called upon to make clear policies, strategies and implementation styles to develop this sector. As a result the government revitalized the outdated Mining Industry Loan Fund facility to a new programme renamed Mining Industry Development Fund. The previous MILF was flawed with so many loopholes hence the need to modify it. Under the new MIDF, ASM sector is allocated funds for the development of the small-medium mining sector in Zimbabwe. The funding is a deliberate policy to support ASM and hence the fund is not expected to be driven by profitability or the achievement of return on capital utilized.

ASM can access the funds through various options outlined below:-

- (i) Speculative Developments loans earmarked for exploration,
- (ii) Establishment loan for supporting mining operation.
- (iii) Working Capital loan,
- (iv) Plant and equipment hire scheme.

It was noted that the funds allocated to the MIDF is very small such that government is still far from realizing its ambition. Miners also expressed concern over lack of transparency in disbursement of funds.

Formalisation of Artisanal and Small Scale Mining Sector:- Experiences from Tanzania

By C Kinabo

In Tanzania ASM are mainly concentrated in gold and gemstone mining. An estimated 400 000 to 600 000 people are engaged in this sector. Although the government of Tanzania recognises the ASM sector, the sector still faces problems related to social, legal, economic and environmental issues. Presenter also noted that ASMs activities are usually wasteful and their benefits are not fully realized by the government considering the illegal marketing syndicates that characterize the sector.

In response to the challenges cited above, the government of Tanzania has pledged its full support to the sector to allow a smooth transition of the sector into organized and modernized entities. The government formulated a Mineral Policy in 1997, a new Mining Act in 1998 and Regulations in 1999. The acts altogether make provisions for legal mining operations and transparent marketing policies which were intended to curb illegal mining operations and smuggling of precious minerals and stones. ASMs are now issued with mining licences either as individuals or companies. In addition the government is now offering extension services to monitor ASM activities. Tanzania has also benefited from a World Bank Funding through Mineral Sector Development Project whereby the legal and regulatory framework was overhauled in 2000 in order to improve the licensing procedures and also incorporate safety and environmental management practices. The legal framework also allowed the right to trade mineral rights with any partner and access to free and fair markets. The recent trend in Tanzania has seen mutual cooperation (social, technical, and economical) between large and small-scale mining operations. In conclusion, the presenter noted that the lessons to be learnt by Zimbabwe from Tanzania are good governance, a safe and stable government, an enabling fiscal policy, and a legal and regulatory environment to attract local and foreign mineral investors.

SMALL SCALE MINING IN ZIMBABWE: ISSUES FOR ITS SUSTAINABILITY

BY Prof. J. Simukanga

Following the poor performance of large-scale mining sector Zambia has initiated a process of restructuring the mining sector. One of the key elements that was targeted was the promotion of the small scale-mining sector. Small-scale mining in Zambia is widespread and include gemstones, industrial minerals and precious stones such as gold and silver. He cited the gemstone mining as the most vibrant small-scale mining activity in Zambia. Gemstones produced include emeralds, amethyst, aquamarine, green beryl, and tourmalines. In 2001, Zambia exported gemstones with a value of US\$20,3 million. The ASM sector share the same problems faced in other countries such as lack of investment capital, lack of technical support, acquisition of mining equipment and poor marketing framework. He noted that these issues must be addressed if the sector had to grow. In addition the gemstone industry is flawed with illegal trading such that exact statistics of overall production are not exactly known.

Government of Zambia undertook various initiatives to improve small-scale mining in Zimbabwe. The country ran a series of World Bank funded projects called ERIPTA programmes 1 and 2. EIPTA programme 1 concentrated on road shows and seminars meant to acquaint ASM with prospecting, pitting, resources evaluation, proper mining methods, processing of gemstones, environmental protection, business management and mining legislation skills. The second programme focused on establishing bureaus in areas with active gemstone mining. The bureaus were to provide extension services to the miners by giving technical advise. However, poor funding and lack of technical human resources resulted in the concept of bureaus failing. Zambia is also currently benefiting from a 5 year EU funded programme called Mining Sector Diversification Programme (MSDP) which is meant to assist miners as indicated in the presentation done by Mr A. Mutale of MSDP.

In conclusion he noted that although Zambia had taken a huge stride in terms of promotions of the ASM sector a lot of issues still have to be tackled for its sustainability.

SAFETY, HEALTH AND ENVIRONMENTAL ISSUES IN ASM ACTIVITIES

BY V.E. DHEGE

Presenter cited that ASM activities had safety, health and environmental concerns that require urgent attention. In most cases ASM activities operated outside the legal framework. The different provisions of the act that deals with safety, health and environmental issues were presented e.g. the Mines and Minerals Act of 1961, Chapter 21.05; Mining (Management and Safety) regulations of 1990, the Hazardous Substances Control act of 1972, chapter 15.05, the Mining (alluvial Gold) Public Streams (regulations 1991), the Water Act (1976), the Natural Resources Amendment Act (1975), the Forest Act(1971) and the Pneumocomiosis Act. Despite all these acts, ASM activities continue to be chaotic, risky and endangering the environment. What is lacking on the part of the relevant ministries is the implementation of these acts in small-scale mining sector.

Presenter then looked into details of all the possible hazards in the working environment of small-scale miners. These include, the depth and width of tunnels, wall support, exposure to hazardous and toxic gases, non-availability of sanitary facility, poor lighting, and noisy environment. A lot of environmental challenges also come with ASM activities e.g. destabilization of indigenous forestry and wildlife, soil structure disturbance, water and air pollution, and damage to infrastructures (building, roads, railways).

Presenter recommended that regular training sessions be held with associations and monitoring of ASM should be decentralized to local authority levels. Also demonstration of safe handling of mercury, cyanide and other toxic substances should also be carried out. Miners should be made aware of the long-term health problems associated with mercury. Occupational, safety and health regulations should be revised to ensure that special requirements of ASM are adequately covered. The Mining Inspectorate Department of the Ministry of Mines should play an active role in supervising and monitoring ASM activities. Presenter also noted that the legislations are fragmented and incomplete. Many ministries are involved resulting in poor coordination in implementing and policing the laws and areas of conflicts are created. Therefore there is need to set up a steering committee representing all the ministries involved that can overlook and monitor the activities of ASM.

Informal Small-scale mining in Zimbabwe: poverty reduction or poverty exacerbation ?

By MC Manyanhaire

The presentation critically reviewed the positive aspects of ASM versus the negative aspects associated with it. It was noted that ASM contributes approximately 8% to GDP, employing between 500 000-600 000 people, providing relief to the unemployed. Added to that ASM's gold production has substantially increased owing to the marketing reforms and the crunch on the illegal gold trading. This year alone ASM is anticipated to produce about 10.5 tons of gold against an expected gold output of 22 tones from both small and large scale mines. As a result ASM sector plays a very significant role in foreign currency generation as well as poverty alleviation. ASM activities also led to the discovery of the Chimanimani alluvial deposits which contributes approximately 50 kgs of gold per month.

On the other hand ASM activities are awash with environmental degradation, destruction of infrastructure e.g. railway line and buildings in Kwekwe, safety, and other social ills such as prostitution, HIV and Aids, drug abuse and alcoholism and child labor. ASM has claimed 100 lives due to mine accidents in 2004. Children have abandoned school in search of the yellow metal. At the end of the day it is not clear whether the positive gains of ASM outweigh its negative aspects considering that the livelihood of small scale miners do not change irrespective of the huge contribution they make. The presenter called for a holistic approach involving government support, safety and environmental awareness and change of mind set on the part of the miner in order to bring sanity to the operations of ASM.

Transforming Small scale Mining into a form of Sustainable Livelihood for Communities.

By Oliver Maponga

The presenter looked at a general overview of ASM, sustainable livelihood and poverty alleviation and tools for transformation as well discussed issues on the way forward for ASM. The sector contributes about 15% of world non-fuel mineral output. An estimated 13 million people are engaged in the sector worldwide (ILO, 1999) with 4 million miners in Africa alone and 80 to 90% in the SADC being informal. He highlighted that 80-100 million depend on ASM for livelihood worldwide with about 20 million in Africa, mainly in Sub Saharan Africa.

The sector though characterized by working small and marginal deposits, being much informal has great potential which are generation of income and its multiplier effects, poverty reduction/alleviation, employment in the range of skilled/semi-skilled/unskilled. It also complements other economic activities characterized by a micro-economic boom in other activities in active ASM areas resulting in cluster growth in associated industries, mining or non-mining activities.

Despite the contribution of the sector there appears to be a poverty loop associated with ASM characterized with large numbers of miners with limited assets and lack of entitlements to mineral rights and marginal resources leading to low income and lack of investment opportunities. Quite often inadequate and inappropriate technology results in low output, poor environmental and health and safety records. Hence there is a need to break it and transform the sector by availing skills development, ensuring miners access technical and financial resources, have linkages with markets – buyers and providing required information on geology, markets and technology. Sustainability will encompass economic opportunity i.e. source of livelihood, employment, income, capability thus being able to engage in a livelihood sustaining activity, security regarding tenure issues and empowerment that is ability to move towards one's destiny. The speaker reiterated that the idea is to transform ASM from marginal enclaves to sustainable communities through elimination of mono economic activity tendencies, unequal/uneven distribution of income and degraded environments to enhance overall sustainability. The sustainability facets will include economic, social, environmental issues and these three have a common factor with governance which has to foster a proper operating environment to achieve sustainability. Some approaches to sustainability which include the Yaoundé Declaration, 2002, and the Extractive Industries Review Group (WB) were mentioned. As a way forward the following issues were discussed viz: Integration of ASM into Poverty Reduction Strategies Programmes (PRSP) through legislation and policy which recognises ASM, Institutional Strengthening through resource allocation (financial, human resources), Land tenure issues, ownership of claims, advocacy at local, regional and international levels for assistance, mainstreaming poverty reduction into national policy making in all sectors including mining, promoting the sector as a catalyst and anchor for other productive activities.

In conclusion the presenter noted that a people first approach using participatory methodologies to strengthen organizational capabilities of mining communities

should be adopted. Promotion of private enterprise, including services, micro enterprises or coops, as possible alternative livelihoods should also be taken seriously. ASMs should be profiled for incorporation in PRSP through such information as: Who are they and how many, where are they operating, what are they producing, where and how are they marketing their output and how are they mining and processing?

The ancient way; vs. technological development in custom gold processing, does the miner benefit.

By Patience Singo

The presenter gave an overview of the rise of custom milling plants in Zimbabwe which constitute about 600 stamp mills and less than 50 ball mills for gold processing. A record of use of stamp mills was traced to be a century ago yet surprisingly their use is still on the increase, despite their technological limitations both in comminution and gold concentration. The objective of the presentation was to highlight recovery loss due to grindability limitations, gravity concentration circuits, and mineralogical association and recommend best practices for enhanced recoveries.

A comparison was highlighted between stamp mills and ball mills showing that the ball mill has an extraction efficiency of > 85% against 40-60% achieved by a stamp mill depending on ore mineralogical association and screen sizes used. An analysis of concentration techniques which include the following: skin hides (used as early as 4000BC), copper plates, corduroy/blanket/sisal strakes, rubber strakes, James table, shaking tables and centrifugal concentrator were made to highlight the technological limitations and efficiencies the miner will recover on liberated gold recovery. The centrifugal concentrator was recommended as the most efficient technology to be adopted by the miners.

The main concern of the presentation was the fact that the miners preferred to use stamp mill and old methods of concentration because these are open techniques where they feel they have control of the security of their gold, despite that they are losing by approximately 40-50 % of recoverable gold.

Recommendations put forward were as follows

- Small scale sector to adopt better technology for enhanced recoveries.
- Financial resources to be put towards better processing technology by government, donor agencies and private sector.
- Ministry of Mines to ensure compliance with regulations S.I 329.
- Rigorous awareness campaigns to educate the miners with demonstrations, sampling tailings.
- It can be made law that all new plants should be ball mills with concentrators to encourage technology growth in the small sector.

A practical best practice processing circuits were recommended to have

- Crusher
- Ball mill
- Concentrator

OR

- Crusher
- Stamp mill
- Concentrator

Women in Mining in Africa: Opportunities and Constraints

By Namakau Kaingu

Women in mining have managed to find a place in the mining industry, which has been historically male, dominated. They have advocated and carried out a lot of lobbying among the policy makers and all those who form part of the industry until places were created for them and now women are recognised as a very special group of persons who are contributing a lot to poverty reduction through job creation, income generation and earners of foreign exchange. They have successfully lobbied for the lifting of the ILO law that bars women from working underground.

Some of the activities involving women include, the SADC Women Miners Trust of 1997, the 1st African Women in Mining Workshop of 1999, in Ethiopia, the African Women in Mining Network which was launched in September 2003 in Elmina, Ghana. Despite this position women face a lot of constraints in the sector which include gender discrimination, access to credit, lack of technical skills, no availability of information i.e. on markets, products, investment opportunities, joint venture prospects, environmental and HIV awareness programs. However opportunities exist which include the recognition and acceptance of women by governments and other agencies. Women are now employers of a number of youths. A number of women small scale miners are now economically empowered and are able to get better food, education and health for their children. Women are now invited to be part of the decision making process in their countries and are able to organize their own training workshops according to what they want. Women are being supported in many different ways like being funded to go out and sell their products.

The Financial Opportunities and Constraints for the Small-Medium Scale Miners.

By Ngoni Mudekunye

The speaker analysed some of the risks associated with the mining industry which are outlined below:

International commodity prices:

A thorough analysis of the products and markets would need to be done at project/loan appraisal stage to ascertain the levels of risk associated to commodity markets and prices.

Management risk

Most of the operations are one man or family ventures without the requisite skills depth. The risk associated with such operations includes lack of succession planning, financial management skills, record keeping and adequate capitalisation to acquire the necessary equipment.

Labor

Non engagement of skilled manpower hinders operation from realising full potential.

Seasonal

Most of the mines are seasonal and difficult to amortize loans on a monthly basis.

Proposed Risk mitigation

- 1) Best to register small scale mines as companies to ensure continuity
- 2) Working with organisations such as the Zimbabwe Miner's Federation to determine creditworthiness and eligibility of applicants and ZMF to be engaged in recovery.
- 3) Record keeping and financial management would be prerequisite for future lending.

The bank has therefore innovated a financing scheme for the small scale mining sector in which Genesis Bank grants loans to millers, the millers buy equipment like excavators and compressors, which they then lease to the small scale miners. The small scale miners then deliver the gold to the respective millers for sale, who in turn delivers it to Fidelity Printers. The Bank will have a stop order arrangement with Fidelity for the purposes. The tenure of the loans to the millers would have to be long term as they are for capital expenditure. The bank has identified a specialist to run with the portfolio. Participants were wary on the punitive interest rates offered by the private institutions.

A banker's perspective towards ASM financing.

By Mr Tanyanyiwa of Stanbic Bank

The presenter highlighted on the accusations that have been levelled against bankers from different sectors of the economy for supporting already stable businesses and acknowledged the huge challenges faced by the ASM with regards accessing credit facilities. Hence a banker's perspective was provided. The highlighted concerns were depositor's funds, number of defaulters especially in a bad economy, regulatory framework, and information asymmetry and credit risk analysis. However the presenter highlighted various approaches that have been emerging to provide a solution to this challenge. These are;

- (i) structured finance in which the risk associated with small scale mining is accepted but ways to manage the risks are employed through tracking and monitoring the project cash cycle as opposed to giving money and expecting to be paid at the expiry of the facility,
- (ii) (2) group lending, to a group of people as opposed to one person, this tends to reduce risk associated with one project. The key success factors being a legally constituted association, giving low priced funding, good working relations among players, honest players and monitoring process, and general business approach to activities.

As with the previous presenter the participants were interested in knowing the level of interest rates for the loans. The presenter could not tie himself down to giving the exact rates as these will be determined on a case by case basis.

The GLOBAL MERCURY PROJECT

By D. SHOKO, United Nations

The presenter noted that there was a lot of sloganeering on ASM problems without offering practical solutions to tackling these problems. His presentation looked at mineral processing techniques and use of mercury and its effect on the environment. The presentation is based on a research being implemented under the Global Mercury Project which was started in Sept 2002 and funded by GEF. The research focused on the Kadoma –Chakari area where there is a high density of ASM mining and milling operations. This area has 70 stamp mills and 5 ball mills which require approximately 5tons of mercury on a monthly basis hence the need for intervention. The presentation noted that there was excessive loss of Hg into the atmosphere, the person exposed to it and to the tailings from the copper plate during the amalgamation process at mill sites.

The methodologies being implemented under this project include socio-economic surveys, environmental surveys, health surveys and awareness and training campaigns. Preliminary results from the health surveys show that:

- High Hg values obtained in fish samples from the Muzvezve river,
- That 49% men, 15% children and less than 3% women were intoxicated in the Kadoma area
- Figures expected to rise in final report after more analyses are obtained.

In conclusion the presenter concluded that there was need to carry out an aggressive practical approach through the use of the following methods:

- Transportable Demonstration Unit (TDU)-showing proper use of mercury, retorts and mercury recovery.
- Awareness campaigns –through holding seminars with ASMs and conferences
- Engaging partner institutions such as the EPA (USA) and Minamata (Japan)
- Synergies with mercury abatement programmes at UNEP
- Awareness campaigns - print and electronic media, cartoons
- Treatment of extreme cases

Participants called for the programme to be expanded to other regions and the fast implementation of TDU and cartoon displays.

Discussions and Recommendations

At the close of the workshop participants were grouped into groups of four and ten groups were formed. An executive summary of the recommendations are presented below whilst the detailed report on the workshop discussions and recommendations have already been forwarded with the main report.

EXECUTIVE SUMMARY ON WORKSHOP RECOMMENDATIONS

1. LEGISLATION AND INSTRUCTIONAL FRAMEWORK

- (i) The Mines and Minerals Act should incorporate issues that are unique to Artisanal and Small Scale Miners (ASM) by addressing issues relating to the formalisation of the sector, land titles, marketing of mineral commodities, and environmental guidelines.
- (ii) Devolution of power and control in order to allow district level and other stakeholder participation. The Act must come up with specific guidelines on the execution of Mining Commissioner's Duties. Formalisation of district level mining zones/association will ensure efficient provision of services to the ASM.
- (iii) Legal and institutional framework must be practical, simple and easy to follow.
- (iv) The Act should allow ASM to get licences for prospecting before pegging in a manner similar to EPOS granted to large-scale mining operations. This will reduce speculative pegging.
- (v) Legislation should recognise small-scale miners and mainstream them as important player in the mining sector.
- (vi) Fast track mining sector reform programs must be implemented in order to allow access to ground for prospecting by small-scale miners in areas largely controlled by large mining companies.
- (vii) Concept of "mine it or lose it" should be implemented to allow access of ground to other players.
- (viii) Markets should be easily accessible to ASM. MMCZ should devise marketing strategies that are suitable to the ASM sector.
- (ix) Promote partnership with large-scale mining companies, equipment supplies and financiers in exchange of commodity produced.

2. Ministry of Mines and Mining Development (MMMD)

- (i) The Ministry of Mines and Mining Development must be restructured as what happened with RBZ and ZIMRA.
- (ii) MMMD should enforce the provisions of the Mines and Minerals Act on production declaration, and inspections.
- (iii) MMMD should carry out regular metallurgical accounting/audit of all milling operations in order to ascertain production potential from ASM.

- (iv) MMMD should be adequately funded so that it can monitor and enforce mining regulations so as to bring sanity in the ASM sector.
- (v) MMMD should be proactive and have a positive attitude towards ASM. It should spearhead provision of technical and business management skills to the sector.

3. Decentralisation and Role of Communities in Sustainable Development

- (i) Devolution of power and control to district level participation so that communities feel they have a role to play in sustainable development.
- (ii) Engage communities in tackling social ills associated with ASM activities e.g. environmental degradation, HIV and Aids, and child labour.
- (iii) Implement community based initiatives similar to CAMPFIRE projects to ensure communities benefit from resources within their environs.
- (iv) Set-up pilot projects in all provinces, which can be used as case studies to roll out a countrywide programme.

4. Financial Support

- (i) Finance sector should have a change of attitude towards ASM and should design appropriate financing models for the ASM sector.
- (ii) Financial institutions should have professionals with mining background e.g. the recent move by the RBZ to engage mining engineers, metallurgists and geologists.
- (iii) Government to allocate adequate and cheap loans for ASM activities e.g. setting up an ASM mining bank.

5. Gender Issues in Mining.

- (i) Make a deliberate policy to advance women's initiatives in the mining sector through providing adequate funding, support and technical skills.
- (ii) Identify women role models in mining who can play pivotal role in mentoring entrepreneurial skills, training and encouraging other women in this sector.
- (iii) Information dissemination on opportunities available for women in this sector e.g. mining supplies, value addition, mineral processing, mining etc.

6. Environmental Issues

- (i) Devise Environmental Impact Assessment (EIA) package suitable for ASM.
- (ii) Rehabilitation of mine workings should be mandatory.
- (iii) Proper mining methods should be used.
- (iv) Instill a sense of belonging to ASM through community-based approaches involving local communities.

7. Health and Safety

- (i) Enforce inspection of working places by the mining inspectorate department of the MMMD.
- (ii) Awareness campaigns on the prevention of diseases such as malaria, water borne diseases, STIs, HIV and Aids.
- (iii) Provision of protected water sources and sanitary services.
- (iv) Awareness on good living conditions and good diet.

Conclusion

The workshop was a success and managed to come up with sound recommendations, which must be implemented, by the Ministry of Mines and Mining Development. The workshop was also held at the right time since the Mines and Minerals Act is currently being amended. However the onus is on the MMMD to implement the recommendations since most of the recommendations deals with amending the law.

The poster presentations on the Chimanimani Alluvial gold was an eye opener to policy makers who had not visited the area and there was commitment to deal with the extensive damage being caused by the ASM sector.

It is hoped that such types of workshops will be held regularly as checks and balance to improve the sector and to monitor progress. It was also an important forum where represented countries shared experiences and mapped the way forward.

Gold Mining & Minerals Development Trust (GMMDT)

SMALL SCALE MINING - WORKSHOP PARTICIPANTS - 22-23 JULY 2004

No.	NAME	ORGANISATION	STATUS
1	Hon.Minister A.Midzi	Ministry of Mines & Mining Development	Guest of Honour
2	Governor C.Mathema	Governor & Resident Minister of Bulawayo City	Guest of Honour
3	C.Chigaru	Zimbabwe International Trade Fair	Guest of Honour
4	F.Mugumbate	Min. of Mines & Mining Development	Invited Presenter - Zimbabwe
5	C.Tahwa	Min. of Mines & Mining Development	Invited Presenter - Zimbabwe
6	A.Mutale	Zambia	Presenter
7	Prof. Simukanga	Zambia	Invited Presenter
8	Ms Kaingu	Zambia	Invited Presenter /World Bank - CASM Rep.
9	Dr Kinabo	Tanzania	Invited Presenter
10	O.Hager	South Africa	Presenter
11	N.Mudekunya	Genesis Bank	Invited Presenter - Zimbabwe
12	W.Tanyanywa	Stanbic Bank	Presenter
13	Dr O.Maponga	UNECA	Presenter - Zambia
14	Dr D.S.M.Shoko	UNDP Representative	Presenter
15	G.Kawonza	Zimbabwe Miners Federation	Presenter
16	H.J.Mudzamba	Zimbabwe Gold Millers Association	Presenter
17	M.Ndava	Ministry of Mines & Mining Development	Chairing
18	R.Kaisi	Ministry of Mines & Mining Development	Chairing
19	B.Maunze	Zimbabwe School of Mines	Chairing
20	Kamwemba	Zimbabwe School of Mines	Chairing
21	C.Dube	Ministry of Mines & Mining Development	Rappoteur
22	W.Dube	Ministry of Mines & Mining Development	Rappoteur
23	L.Ndlovu	Small Scale Miner - Filabusi	Participant
24	F.Tshuma	Rainbow 6 Mine	Participant
25	Lovemore Moyo	Nkalakatha Mine	Participant
26	S.Malunga	S.Malunga Mining	Participant
27	M.Munetsi	Nokutenda Mining	Participant
28	P.C.Manyaza	Natural Resources	Participant
29	D.Magwada	Natural Resources	Participant
30	B.Basera	Natural Resources	Participant
31	T.Chipepera	Bvuma Mine	Participant
32	M.Moyo	Pansikwe Minerals	Participant
33	D.D.Dube	Darlcon Enterprises	Participant
34	N.H.Paradzai	Hems Africa	Participant
35	E.Musharu	Zimbabwe Women in Mining Association	Participant
36	F.Jabulani	Zimbabwe Women in Mining Association	Participant
37	P.Bangira	Zimbabwe Women in Mining Association	Participant
38	C.Mudimu	Zimbabwe Women in Mining Association	Participant
39	F.D.Karonga	University of Zimbabwe	Participant
40	B.Jirah	University of Zimbabwe	Student/Participant
41	A.Gumba	Zimbabwe Miners Federation	Participant
42	D.Gurure	Zimbabwe Miners Federation	Participant
43	C.Manyika	Zimbabwe Miners Federation	Participant
44	M.Makoni	Zimbabwe Miners Federation	Participant
45	V.Rupende	Zimbabwe Miners Federation	Participant
46	I.K.Kaguru	Zimbabwe Miners Federation	Participant
47	S.Nkomo	Zimbabwe Miners Federation	Participant
48	E.Ruzvidzo	Zimbabwe Miners Federation	Participant
49	C.Tshuma	Zimbabwe Miners Federation	Participant
50	C.Langa	Zimbabwe Miners Federation	Participant
51	L.W.Ncube	Zimbabwe Miners Federation	Participant
52	C.Mudimu	Zimbabwe Gold Millers Association	Participant
53	N.K.Misi	Zimbabwe Gold Millers Association	Participant
54	W.Siziba	Zimbabwe Gold Millers Association	Participant
55	Million Moyo	Filabusi Miners Association.	Participant
56	King Moyo	Filabusi Miners Association.	Participant
57	C.Manomano	Mazoe Rural District Council	Participant
58	A.Y.Gora	Mazoe Rural District Council	Participant
59	Dr J.Mapiravana	Minerals Marketing Corporation of Zimbabwe	Participant
60	C.Mushoriwa	Minerals Marketing Corporation of Zimbabwe	Participant
61	M.Moyo	PMZ Mguza Mine	Participant
62	S.Chikowore	Exporein Mining	Participant
63	M.Kurenjekwa	Renaissance Bank	Participant
64	J.Nengomasha	Zimbabwe Mining Development Corporation	Participant
65	L.Shato	Small Scale Miner	Participant
66	A.M.G.Guhu	BMG Mining	Participant
67	F.N.Chisale	Patfra	Participant
68	D.C.Moyo	Patfra	Participant
69	F.Ndlovu	Leebof Investment	Participant
70	G.Sakuhuni	Knickers Mine	Participant
71	R.Ruona	BMA Fasteners	Participant
72	N.Nkomo	Newmatic Tools	Participant

73	T.Mwafuka	Chimanimani Rural District Council	Participant
74	F.Matukutire	G&F Mining	Participant
75	A.M.Dzingire	Dyno Nobel	Participant
76	T.Musukutwa	Reserve Bank of Zimbabwe	Participant
No.	NAME	ORGANISATION	STATUS
77	J.Mhlophe	Nala mine	Participant
78	U. Sakupwanyanya	Small Scale Miner	Participant
79	L.Chimusasa	Ministry of Mines & Mining Development	Participant
80	T.M.Hawadi	Ministry of Mines & Mining Development	Participant
81	S.A.Gaihai	Panganai Mining	Participant
82	R.Dziruni	Throl Enterprises	Participant
83	S.Kore	Ministry of Mines & Mining Development	Participant
84	J.Nhorivo	Ministry of Mines & Mining Development	Minister's Secretary - Participant
85	B.Marungwana	Ministry of Mines & Mining Development	Minister's Personal Assistant - Participant
86	C.Bhebhe	Zimbabwe International Trade Fair	ZITF Public Relations - Participant
87	S.Mguni	President's Office	Officer - Participant
88	I.Doro	Criminal Investigation Department -Bulawayo	Detective Sergeant - Participant
89	S.Simbanegavi	Criminal Investigations Department -Gwanda	Detective Sergeant - Participant
90	P.Kaviya	Criminal Investigations Department -Gwanda	Officer - Participant
91	W.Mukazi	Nuccia 9 Mine	Participant
92	S.Ndlovu	Waylon Mining	Participant
93	D.Mukondiwa	Dunleth Mine	Participant
94	S.Nkulumo	Fork Bend	Participant
95	M.Marahwa	Macem Enterprises	Participant
96	J.C.Bidi	Miners Association	Participant
97	S.Musindo	How Mine	Participant
98	G.Mwale	Zimbabwe Alloys	Participant
99	K.Nyahoja	Zimbabwe Alloys	Participant
100	C.Manomano	Mazoe Rural District Council	Participant
101	A.Y.Gora	Mazoe Rural District Council	Participant
102	Dr J.Mapiravana	Minerals Marketing Corporation of Zimbabwe	Participant
103	C.Mushoriwa	Minerals Marketing Corporation of Zimbabwe	Participant
104	N.J.Masuku	Gold Mining & Minerals Development Trust	Exec.Chairman/Participant
105	Dr Nyangulu	Gold Mining & Minerals Development Trust	Trustee/Participant
106	V.Madzimbamuto	Gold Mining & Minerals Development Trust	Trustee/Participant
107	A.Mandal	Gold Mining & Minerals Development Trust	Trustee/Participant
108	Chief Malisa	Gold Mining & Minerals Development Trust	Trustee/Participant
109	S.P.Ngwenya	Gold Mining & Minerals Development Trust	Trustee/Participant
110	P.J.Sai	Gold Mining & Minerals Development Trust	Staff/Participant
111	M.C.Manyanhaire	Gold Mining & Minerals Development Trust	Staff/Participant
112	P.Singo	Gold Mining & Minerals Development Trust	Staff/Participant
113	C.Matanga	Gold Mining & Minerals Development Trust	Staff/Participant
114	V.Dhege	Gold Mining & Minerals Development Trust	Staff/Participant
115	S.Chibanda	Gold Mining & Minerals Development Trust	Staff
116	M.Mandongwa	Gold Mining & Minerals Development Trust	Staff
117	W.Shoko	Gold Mining & Minerals Development Trust	Staff
118	S.Dube	Gold Mining & Minerals Development Trust	Staff
119	J.S.Kangai	Gold Mining & Minerals Development Trust	Staff
120	M.Banda	Gold Mining & Minerals Development Trust	Staff
121	J.Mavhiza	Gold Mining & Minerals Development Trust	Staff
122	Mike Ndlovu	Mike Studios	Videoman
123	M.Sibanda	Chronicle	Reporter
124	E.Maravanyika	Chronicle	Reporter
125	R.Muचेचेtere	New Ziana	Reporter
126	Busie Ndlovu	Newsnet	Reporter
127	S.Ngwenya	National TV	Reporter
128	S.Nyathi	Sunday News	Reporter
129	M.Mafirakurewa	Sunday News	Reporter
130	L.Sadambura	Daily Mirror	Reporter
131	S.Pangai	Daily Mirror	Reporter
132	M.Zondo	ZIANA	Reporter

WORKSHOP PROCEEDINGS

"SMALL SCALE MINING IS HERE TO STAY".

DAY ONE - 21st July 2004				
	TIME	TOPIC	VENUE	
1	8.30 – 5.00	Poster presentation & Registration of Participants.	GMMDT Stand MineEntra	
2	2.30 – 4.30	Pre-Workshop Field Visit to Hope Fountain.	Hope Fountain	
DAY TWO – 22nd July 2004				
	TIME	TOPIC	PRESENTER	VENUE
1.	9.00 – 9.05	Welcome Remarks	Chairman Z.I.T.F/ Mr D. Chigaru	Conference Venue
2.	9.05 – 9.10	Welcome Remarks	Cde C.Mathema Resident Minister & Governor, Bulawayo.	Conference Venue
3.	9.15 – 9.30	Introduction & Welcome	Mr N.J. Masuku Executive Chairman GMMDT	Conference Venue
4.	9.30 – 9.50	Official Opening	Hon. Amos Midzi Minister of Mines & Mining Development Zimbabwe	Conference Venue
TEA BREAK				
5.	10.20 - 10.50	Status of Small Scale Mining in Zimbabwe. "Key Note Address"	Mr F. Mugumbate Geological Survey Zimbabwe	Conference Venue
6.	10.55-11.25	The Legal and Regulatory Impediments to the Transition from Informal Mining to Formal Sustainable Enterprises: - Recommendations.	Mr C. Matanga GMMDT Zimbabwe	Conference Venue
7.	11.35 – 12.00	Power Quality Management Electroflow: Energy Saving Technology.	Mr O. Hager Iskus South Africa	Conference Venue
8.	12.05 – 12.30	Getting Zambia's Non- Traditional Mining Moving.	Mr A. R. Mutale Zambia	Conference Venue
LUNCH BREAK				
9.	2.00 – 2.30	Developments in Government Support towards Small Scale Mining Initiatives:- The Past and Present.	Mr C. Tahwa Ministry of Mines and Mining Development Zimbabwe	Conference Venue
10.	2.35 - 3.05	Formalisation of Artisanal and Small-Scale Mining Sector:- Experiences from Tanzania.	Dr C. Kinabo Tanzania	Conference Venue
TEA BREAK				
11.	3.30 – 4.00	Small Scale Mining in Zambia: Issues for its Sustainability.	Prof. S. Simukanga Zambia	Conference Venue
12.	4.05 – 4.30	Safety, Health and Environmental Issues in Artisanal and Small Scale Mining.	Mrs V. E. Dhege GMMDT Zimbabwe	Conference Venue

DAY THREE – 23rd July 2004				
1.	9.00 – 9.10	Financial Opportunities.	Mr W. Tanyanyiwa Stanbic Bank	Conference Venue
2.	9.15 – 9.35	Informal Small-Scale Mining in Zimbabwe:- Poverty Reduction or Poverty Exacerbation?	Mrs M.C. Manyanbare GMMDT Zimbabwe	Conference Venue
3.	9.40 – 10.05	Transforming Small Scale Mining into a Sustainable Form of Livelihood.	Dr O. Maponga UNECA-SA, Lusaka Zambia	Conference Venue
TEA BREAK				
4.	10.30 – 10.35	Zimbabwe Miners Federation	Mr G. Kawonza President Zimbabwe Miners Federation	Conference Venue
5.	10.35 – 10.40	Zimbabwe Gold Miners & Millers Association	Mr H.J. Mudzamba Secretary General Zimbabwe Gold Miners & Millers Association	Conference Venue
6.	10.45 – 11.15	The Ancient Ways vs Technology Development In Custom Gold Processing: Does the Miner Benefit?	P. Singo GMMDT Zimbabwe	Conference Venue
7.	11.20 – 11.25	Women in Mining.	Ms C. Mudimu President Zimbabwe Women In Mining, Zimbabwe	Conference Venue
8.	11.25 – 11.45	Women in Mining in Africa - Opportunities and Constraints.	Mrs A. Kaingu Zambia	Conference Venue
9.	11.50 – 12. 15	Initiatives with a Communities based Approach in Developing a Sustainable Small-Scale Mining Sector:- The Zimbabwean Experience.	Mr P. Singo GMMDT Zimbabwe	Conference Venue
10.	12.20 – 12.55	The Financial Opportunities and Constraints for the Small -medium Scale Miners.	Mr N. Mudekunya Genesis Bank Zimbabwe	Conference Venue
Lunch				
11.	2.00 –2.30	Global Mercury	Dr D.S. M. Shoko UNDP	Conference Venue
12.	2.35 – 4.30	Workshop Observations and Recommendations.	Mr P.J. Sai GMMDT Zimbabwe	Conference Venue
13.	4.35	Closing Remarks and Vote of Thanks.	Mr N.J. Masuku GMMDT Zimbabwe	Conference Venue
THANK YOU FOR ATTENDING OUR WORKSHOP. PLEASE TRAVEL SAFELY.				

GOLD MINING AND MINERALS DEVELOPMENT TRUST

"SMALL SCALE MINING IS HERE TO STAY"

GROUP DISCUSSIONS AND RECOMMENDATIONS

GROUP 1.

Status of Small-scale Mining in Zimbabwe

(i) Observation

Over 80% of small scale miners are involved in gold mining leaving 20% handling all the other minerals.

Questions

- a) *Why is this so?*
- b) *Is it a question of price, technology, funding or other?*
- c) *Do small-scale miners have a chance of success in other minerals?*

Recommendation:

Local level mining zones should be established in order to identify available minerals at local level and provide information to client at grass-root level about mining.

ii) Observation

Panning has provoked a national outcry owing to negative economic, social and environmental consequences.

Question

How do we avoid these negative consequences from small-scale mining?

Recommendation:

Devolution of authority, control and benefits to authorities for example, Gold Mining and Minerals Development Trust (GMMDT), Ministry of Mines and Mining Development and Rural District Councils e.t.c.

iii) Observation

Only 10% of the 20 000 registered small scale mining claims are in active production, leaving the remainder of the claims to be held primarily for speculation instead of mine production and mineral production.

Is this really a cause for concern at this point in time? If so, what strategies could be used to increase the number of active claims?

Recommendation:

Ministry of Mines and Mining Development should be fully equipped with both physical and human resources so that tight monitoring and supervision of claims is implemented. Markets should be easily accessible to the miners. Pricing policy should be **PROACTIVE**.

iv) Observation

The majority of small-scale gold miners use custom milling centres which have mushroomed throughout the country.

Questions

- a) *Do we really have enough custom milling centres in Zimbabwe?*
- b) *How efficient are the custom milling centres in gold production? Is a miner really cheated/robbed by a mill?*
- c) *What other problems are being encountered in the area of custom milling centres.*
- d) *How can these problems be eliminated?*

Response and Recommendations

- (i) There should not be a limit as to the number of milling centres but the Ministry of Mines should ensure that all milling centres are registered and that their gold deliveries are tracked so as to minimise gold leakages.
- (ii) Custom Milling technology is outdated and currently used to benefit millers at the expense of the miner. Ministry of Mines and Mining Development should be proactive in advancing technology.
- (iii) Legal and institutional framework to be practical and simple, easy to follow and straight forward.
- (iv) Rationalise or standardise the costing structures among millers.

v) Observation

Despite the increase in small scale mining activities there has not been a matching upsurge in production declaration of some minerals from the sector, suggesting possible illicit dealings. In general, although small-scale miners comprise of over 90% of active mines, their contribution to the National Mineral Output is unknown.

Question

- a) *What should be done to encourage mineral declarations to the national mineral output?*

Recommendation:

- (i) Markets should be easily accessible to millers and miners.
- (ii) Ministry of Mines and Mining Development should carry out regular metallurgical accounting/audit of milling and mining operations in order to ascertain production potential from this sector.
- (iii) Allocate adequate funding to small-scale mining activities so that production is increased.
- (iv) Enforce provisions of the Mines and Minerals act on production declaration.

GROUP 2.

The Legal and Regulatory Impediments to the Transition from Informal Mining to Formal Sustainable Enterprises in Zimbabwe.

Eight observations together with their respective recommendations are contained in pages 3 to 6 of the workshop booklet;

(i) Observation

Legal and regulatory impediments.

Recommendation:

The Ministry of Mines should make deliberate action/effort to formalise informal miners.

(ii) Observation

Mines and Minerals Act's lack of definition of a small-scale miner

Recommendation

The Mines and Minerals Act should incorporate issues that are unique to Artisanal and Small Scale Miners (ASM) by addressing the following:-

- (a) land titles
- (b) marketing
- (c) environmental guidelines designed specifically for A.S.M.
- (d) A.S.M mining bank in order to have access to funding.

(iii) Observation

Lack of adequate resources at the Ministry of Mines and Mining Development.

Recommendation

Ensuring adequate resources by allocating a certain % of proceeds from A.S.M to be ploughed back into assisting the sector for example by improving resources in the Ministry of Mines and Mining Development.

(iv) Observation

Lack of technical and basic business skills.

Recommendation

Encourage training through local mining associations for example, ZIGMA, ZMF etc. Ministry of Mines and Mining Development should spearhead this course of action.

(v) Observation

Blockage by large mining companies.

Recommendation:

Unless under special circumstances concept of mine it or lose it, should be incorporated in the act.

(vi) Observation

Too many powers vested with the Mining Commissioner.

Recommendation

Come up with specific guidelines in regulations as to how Mining Commissioners execute their functions for example, renewal of mining claims.

(vii) Observation

Speculative pegging of claims.

Recommendation

The Act must afford the miner a chance to verify mineral occurrence before pegging.

(viii) Observation

Provision to grant protection to small-scale miners to enable prospecting before pegging.

Recommendation

The Act should allow ASM to get licenses for prospecting before pegging in a manner similar to EPOs granted to large scale mine operations.

GROUP 3.

Initiative; With Communities Based Approach In Developing Sustainable Small Scale Mining Sector. The Zimbabwean Example;

Observation

Gold Mining and Minerals Development Trust (GMMDT) undertook a community based approach initiative in developing a sustainable small-scale mining sector in Filabusi in the year 2003.

How feasible is this initiative in Zimbabwe in terms of rolling it over to all corners of Zimbabwe?

What recommendations are necessary in order for Zimbabwe and its communities to benefit from this initiative?

Response

The programme is very feasible on the basis of the following reasons;

- (i) Zimbabwe has successfully implemented other similar programmes e.g. Campfire Project; Aids Programmes etc.
- (ii) Zimbabwe has abundant technical expertise to roll the programme over.

Recommendations;

In order to re-implement the **Community based approaches** it is important that the following steps be taken into consideration for a successful roll over programme.

- (i) Review the existing GMMDT's initiatives programmes and repackage it in a manner that suits the ASM.
- (ii) Setting up an enabling legal and political framework so as to enforce the programme. This requires a deliberate policy (political will) to solve problems associated with ASM.
- (iii) A serious drive or commitment towards advocacy and awareness campaign in order to stimulate communities by way of the following:
 - Role indication and appreciation-does the community have a role to play.
 - Sense of belonging /ownership-why is the programme vital to them
 - Bottom up approach for example Camp fire Project - to ensure easy adoption of programmes as communities feel to be part of the programme.
- (iv) Set up pilot projects in all provinces - Adaptations

Responsibilities

For continuity, GMMDT must be given adequate resources and support to re-implement the programme and report to a national steering committee comprising of various Stakeholders (Ministry of Mines and Mining Development, Natural Resources

Board, Tourism, RDCs etc). The Government and Ministry of Mines and Mining Development should set-up an enabling operating environment to ensure success of the programme.

GROUP 4.

The Zambian Non-Traditional Mining Sector (NTMS) Experience

How far has Zimbabwe moved into non-traditional mining? What lessons can be drawn from the Zambian cases on this development and on issues for the sustainability of small scale mining for application to Zimbabwe. What specific recommendations can be made and to whom?

Observation

Zimbabwe has made strides in NTMS by realising the importance of sector as an important economic sub-sector.

Zimbabwe should also mobilise external support in terms of financial resources in development of NTMS.

Recommendation

(a) To the government:

- (i) To build sufficient capacity in the mining regulatory framework in order to monitor and enforce mining regulations in order to bring sanity in the sector.
- (ii) Improve information dissemination.
- (iii) Allocate adequate resources to Ministry of Mines and Mining development and Teaching Institutions in order to offer efficient service and carry out research for the benefit of NTMS.

(b) To financial institutions:

- (i) To have positive attitude towards NTMS.
- (ii) Financial institutions should have professionals who understand the sector (mining, geology and metallurgy) e.g., the recent move by RBZ in engaging mining expertise in its structure.

(c) To high learning institutions:

- (i) Should be proactive and assist the sector to develop appropriate technology for NTMS.
- (ii) Should assist in providing vital information e.g., mineral occurrence, processing.

- (iii) Should assist in training of NTMS e.g., exploration, mining, processing and business skills.

(d) To miners or mill operators:

- (i) Change of attitude. Miners must have a sense of responsibility and not to be viewed as lawless and reckless people.
- (ii) Adopt safe working conditions.
- (iii) Be proactive in environment rehabilitation.
- (iv) Have a sense of social responsibility and reduce HIV and AIDS.
- (v) Should be concerned about good health.

GROUP 5.

Government Support toward; Small Scale Mining Initiatives, the Past and the Present

Questions;

- (a) *What have been the major obstacles to Government support towards the small scale mining up to now?*
- (b) *How can these obstacles be overcome?*
- (c) *Make specific recommendations, specifying required facilities/services*

Obstacles;

- (i) Inherited baggage from the past. The act has not been amended for a long time to suit small-scale miners needs.
- (ii) Attitude of both politicians and civil servants towards the small-scale miners has negatively affected growth of this sector.
- (iii) Chamber of Mines failure to recognise and assist the small-scale miners has also derailed growth in this sector.
- (iv) Limited resource allocation in the budget.

How to Overcome

- (i) Need to change attitude towards Small scale mining.
- (ii) Restructuring of the Ministry of Mines.
- (iii) Amend the Mining Act so that it recognises the importance of the sector
- (iv) Deliberate allocation of resources to the sector.

Recommendations

- (i) Identify role models and pilot projects per mining district which can be used for case studies to spearhead development of this sector.
- (ii) Restructuring of Ministry of Mines for example, as what happened with R.B.Z and Zimbabwe Revenue Authority (ZIMRA).
- (iii) Recognition of Small Scale Mining through Annual Awards.
- (iv) Re-allocation of budgetary resources.

- (v) Lobbying by government for financial institutions to change attitude and conditions.
- (vi) M.M.C.Z to devise marketing strategies suitable to Small Scale Miners.

GROUP 6.

Tanzanian Experience in Formalization of Artisanal and Small Scale Mining Sector

Questions

- a) *What lessons can Zimbabwe draw from the Tanzanian experience? (See page 14 of Booklet)*
- b) *Make specific recommendations for implementation in Zimbabwe.*

Response

- (i) The Tanzanian Mining Act has specific provisions which support artisanal and small scale miners.
- (ii) Procedure is simple, clear and transparent for small scale miners to follow when selling, transforming rights e.t.c.

Recommendations

- (i) The state should not determine the market price of the minerals, but instead it should offer a competitive price for the minerals or facilitate the marketing.
- (ii) Deliberate policy to formalise A.S.M.
- (iii) Promoting partnerships with large scale mining companies, equipment suppliers and financiers in exchange for selling the products to them.

GROUP 7.

Safety, Health and Environmental Issues in Artisanal and Small Scale Mining

- a) *What are the critical/key issues?*
- b) *How can these issues be dealt with? – Make specific recommendations.*

Safety-Critical issues

- (i) No protective clothing.
- (ii) Unsafe working places that is, disused mines, unplanned mining, and no benching.
- (iii) No training in use of explosives.
- (iv) No first aid training and kits or equipment.
- (v) No safety awareness on use of chemicals for example, cyanide, mercury, and general safety.

Recommendations

- (i) Protective clothing should be accessible and mandatory.
- (ii) Enforce inspection of working places to ensure that they are safe (Ministry of Mines).
- (iii) Ministry of Mines, NGOs, Associations e.t.c should conduct training in proper mining and processing including first aid, use of explosives, chemicals e.t.c.

Health-Critical issues

- (i) Poor sanitation.
- (ii) Malaria, Cholera, TB, STIs, HIV & A.I.D.S
- (iii) Poor living conditions.
- (iv) Poor diet.

Recommendations:

- (i) Protected source of water for example, borehole.
- (ii) Provision of toilets.
- (iii) Awareness Campaigns on the prevention of diseases such as malaria, water borne diseases, STIs, HIV and AIDS.
- (iv) Awareness of importance of good living conditions.

Environmental Issues-Critical issues

- (i) Siltation of rivers and water pollution.
- (ii) Deforestation and destabilisation of ecological systems.
- (iii) Gullies and trenches pose great danger to animals and human beings
- (iv) Air pollution.
- (v) Disturbance of socio-cultural values of the community near mining areas.

Recommendations

- (i) Rehabilitation of mines should be mandatory.
- (ii) Proper mining methods should be used.
- (iii) Community based approaches to be set-up to tackle environmental degradation.
- (iv) Instil a sense of belonging to small scale mines through community based approaches involving local authorities e.g., RDCs

GROUP 8.

Transformation of Small Scale Mining into Sustainable Livelihoods

What specific recommendation should be made to achieve transformation of small scale mining into a sustainable livelihood for communities and reduction of poverty in the sector?

Recommendations

- (i) Legislation should recognise Small Scale Miners and mainstream them as major players in the mining industry.
- (ii) Fast Track Mine Sector Reform Programmes by setting up a committee to draft a policy and implementation strategy for the small scale mining sector.
- (iii) Adequate resources allocation especially financial and technical towards the Small Scale Mining sector.
- (iv) Human Resources should increase in the Ministry to cater for all areas where there is mining.
- (v) Rural District Councils need to be more proactive towards getting revenue and royalties from mining sector – use this for poverty alleviation in their districts – schools, health facilities e.t.c.
- (vi) Miners need to be given education in mining techniques, business management, and legislation e.t.c.
- (vii) Miners need to be socially responsible – environmental management, workers welfare.

GROUP 9.

Women in Mining in Africa

- a) *What opportunities are there for women in mining?*
- b) *What should be done to ensure that women play a significant role in mining in Zimbabwe and by whom?*

Opportunities

- (i) Mining supplies e.g. supply of chemicals, spares and equipment.
- (ii) Mining and Processing-e.g., gold, precious stones and base metals.
- (iii) Services e.g., offering transport, laundry, safety clothing, health education, accounting, secretarial, consultancy, security services, buying agents.
- (iv) Value addition e.g. jewellery manufacturing

Recommendations

- (i) Make a deliberate policy to advance women's initiatives in the mining sector through providing funding, support and training skills.
- (ii) Identify women role models in mining who can play a pivotal role in mentoring entrepreneurial skills, training and encouraging other women in this sector.
- (iii) Gender – specific fund for mine development.
- (iv) Various stakeholders to have a soft spot towards assisting women in mining e.g., Rural District Councils, Ministry of Mines, GMMDT, Ministry of Finance, R.B.Z, Fidelity, District Level Associations and National Associations.

GROUP 10.

Financial Support (capital) for Small-scale Mining Sector.

Question

(a) What opportunities are there for easily accessible and inexpensive financial support (capital) for sector.

Response

ORGANISATION	EASILY ACCESSIBLE	INEXPENSIVE	GENERAL COMMENT
1. Government	NO	YES	Limited resources not adequate for the sector
2. Financial Institutions	YES	NO	Abundant financial resources but lending rates a major deterrent.
3. Large Scale Miners	YES	YES	Limited collaboration between the LSM and ASM. The latter is viewed as nuisance by the LSM.
4. Other (GMMDT, SEDCO)	YES	YES	Limited resources not adequate for the sector

(b) *How can the following play significant roles in the supply of capital to the sector:-*

(i) **Government**

- To have proper policy.
- Have adequate finance.
- Adequate technical skills (human and equipment).
- Government to guarantee loans.
- To have mining services unit.

(ii) **Financial Institutions**

- To come up with affordable lending rates.
- To have mining services unit that deals with appraisal of mining projects.
- Adopt a change of attitude towards the sector.

(iii) **Small scale miners**

- To be well organised groups for easier assistance.
- To be trained to keep record keeping business skills.
- To be disciplined.

(iv) **Large scale miners**

- To contract small scale miners to mine their uneconomic deposits.
- Should give support (plant and equipment).
- Give training in skills.

(v) Other private sector players. (G.M.M.D.T, Z.M.D.C, NGOs)

- Take leading role in supply of capital support.
- Plant, equipment, human and transport support.
- Multi-disciplinary team and service centre adequacy.

(c) Is it really a question of shortage of capital or mismanagement of it?

Response

It is not really a question of shortage of capital but inappropriate fiscal policy. The mining sector should be given the appropriate attention similar to the agriculture sector considering the contribution it has made to the economy.

End of Discussions and Recommendations