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Dear Luke

MINING MINERALS & SUSTAINABLE DEVELOPMENT DRAFT REPORT FOR COMMENT

CASM (Communities and Small-Scale Mining) is a multi-donor initiative aimed at addressing sustainable development issues in small-scale mining. Information about CASM aims and objectives can be found on the CASM website (www.casmsite.org). As chair of CASM, I have asked the CASM network for comments on artisanal and small-scale mining aspects of the MMSD report.

Please find below a collation of comments. These refer primarily to Chapter 13 (Artisanal and Small-Scale Mining) and Chapter 16 (Agenda for Change).

I have grouped the comments into general comments, followed by specific comments on the text, with some comments on data inconsistencies and textual errors last.

General Comments

1. Chapter 13 of the draft report gives a creditable overview of the present state of the artisanal and small-scale mining sector. Whilst it contains little that substantially adds to the current body of knowledge on artisanal and small-scale mining, we hope that the information and comment in the MMSD report will further raise awareness of issues in this poverty driven sector of mining and help raise the profile of artisanal and small-scale mining in the context of sustainable development. We hope that the outcomes of the MMSD encourage engagement with the CASM initiative to address the serious development issues surrounding artisanal and small-scale mining.
2. Within Chapter 13, there are several errors of fact, some assumptions that require substantiation and some inconsistencies with data. These tend to detract from the analysis and proposed solutions. Specific comments relating to these issues are given below in the specific comments on the text.



INVESTOR IN PEOPLE

3. There needs to be clearer linkages between the substantial amount of work that was carried out in the country and regional studies covering Southern Africa, South America, Asia and Western Africa. Chapter 13 of the draft report comes across as being very general and does not bring out the regional differences in the nature of artisanal and small-scale mining that are reflected in the background work. An outline of this work were included in Chapter 13 would be useful in strengthening the links between the pieces of work and emphasising the overview nature of Chapter 13.
4. The recommendations of Chapter 13 are not well carried through into the Agenda for Change (Chapter 16). Artisanal and small-scale mining is mentioned only three times in Chapter 16, once to state that 'a significant proportion of world mineral production comes from artisanal and small scale miners (therefore stressing its importance)', once in relation to the CASM programme and once in relation to financial surety.
5. We suggest better linkages between the two chapters be made. e.g. Actions for Governments (16-13) should include incorporation of artisanal and small-scale mining activities into regional and local development programmes; policy and regulatory frameworks; at industry level policies should address the issue of artisanal and small-scale mining, there should be coherent policy covering the whole range of mining activities and so on.
6. There need to be more examples and correlation between research and field work

Specific Comments on the text – Chapter 13

Introduction

Page 13-3 Para 2, last sentence. artisanal and small-scale mining revenue can also become the actual reason for the conflict as well as a means of finance to support conflict. In some areas there is also a major issue of a change in social order where a move from subsistence agriculture to artisanal mining occurs.

Page 13-3 Para 3, last sentence. This is a strong accusation and should be backed up by examples or at least a reference.

Page 13-3 Para 4. Clarify that artisanal and small-scale mining is an important source of livelihoods as it is a livelihood choice, but the choice is often a choice between nothing or a survival livelihood – hence important, but this does not necessarily mean it is an important contributor to sustainable development (one view could be that artisanal and small-scale mining is sustainable poverty, as in many cases you can do it all your life and never make more than a subsistence wage).

Page 13-4 Para 1 – This sentence is too simplistic. Artisanal and small-scale mining may still provide livelihood options, even if there are more attractive options, perhaps seasonally. Also, a number of artisanal and small-scale mining activities, if formalized and managed in a collective way could become sustainable. In many areas where artisanal mining is practiced, for example, on a low intensity scale seasonally, mining activity can occur over an extremely long period (there are many areas where artisanal mining has been practices for several hundred years).

Characteristics and Products of artisanal and small-scale mining

Page 13-5 Para 3. 1st sentence. Conversely is there any evidence to suggest that in countries with expanding economies there is a marked reduction in the number of people working in artisanal and small-scale mining. If so it would be useful to outline it here.

Page 13-5 Para 3. It is over simplistic to say that the increase in mobile phone use alone resulted in a surge of informal mining of Columbite-Tantalite (“coltan”) – there were a number of other very significant factors at work here – including conflict, mining and non-mining interests from outside DRC, shortage on the world market etc. (also, see correction of terminology below)

Page 13-6 Para 3. 1st sentence – Is there data available to support this - It would be interesting to know to what extent and how and why this happens when it is still difficult for women to get support as outlined later in the paragraph.

Page 13-7 Para 1. Is there any correlation in the data that suggests that the more women that work at the mine the more children there may be as well?

What does artisanal and small-scale mining produce

Page 13-8 Para 3, last sentence. It is true that often large scale and small scale miners often find that their preferred deposits are different. However, there is often conflict over bodies both are interested in. For example, concentrated deposit caps can help offset mine setup costs, and a source of conflict can be fear that artisanal miners will mine this cap and “sterilise” the deposit for larger mining operations. This has been a particular issue in Papua New Guinea

Page 13-8 Para 5. This paragraph highlights the problem of definition of small-scale mining. Some artisanal operations use fairly sophisticated equipment (e.g. suction dredges, monitors, gravel pumps, backhoes and front-end loaders), so defining artisanal tools as “rudimentary” is misleading. Similarly in processing, particularly in alluvial old or lead-zinc, methods can be as sophisticated as in industrial processing – the problem is that these methods tend not to be used correctly, leading to low recovery rates and high environmental damage.

Page 13-8 Box 13-1. This box is a little too simplistic – The implication in the box is that there is usually a carefully thought out plan for recovery – whereas the situation tends to arise as a result of “evolution”. It also does not sit well with the characteristics of the artisanal mining sector, which, (as stated on p13-5) include ‘low rates or recovery’.

Social Impact

General – The social issues relating to artisanal and small-scale mining are expressed in a superficial way. The 1st paragraph states that most artisanal and small-scale mining takes place in remote rural areas, but the following paragraphs describe social problems related to a ‘rush’ situation, and an example of an ‘extreme’ case of conflict between small scale miners and local people. Social issues such as environmental health, health and safety, working conditions, child labour, exploitation, insecurity, land issues, conflict etc are not well addressed in this section (but many are included elsewhere in the report).

It is suggest that this section could be strengthened and perhaps a separate section on conflict and artisanal and small-scale mining be introduced with examples (Yanomami Indians, DRC, Sierra Leone, Angola etc)

Page 13-10 Last Para. This overly simplistic – this makes a causal effect of artisanal and small-scale mining seem like a development solution – Whilst artisanal mining is “traditional” in some areas, due to the extended period of time for which it has been carried out, it tends to be a supplementary livelihood strategy rather than the development driver implied in this statement.

Environmental Impact

Page 13-11 last sentence – It is also the case that governments are often reluctant to address these issues where artisanal and small-scale mining falls outside existing regulatory frameworks.

Hazards to Health

Page 13-13 3rd Para. Other problems are that in remote areas health care services may already at best be limited and a long way from the mining location, and that access may be very difficult especially during certain times of year. It is also often the case that there is little awareness of mining specific issues in rural health services, such as recognition of mercury poisoning and treatments.

Page 13-13 The statement about boom towns becoming regular and permanent communities is rather too broad a generalisation. If this is the case, then sustainable livelihoods are already a fact. Examples would be helpful to support this section. Also there is no clear link with the following paragraph. It would be useful to have an analysis of HIV/AIDS data to determine whether artisanal and small-scale mining communities pose a higher risk than other rural communities.

Relationships with Others

Page 13-14 4th Para. This is overly simplistic, and requires further analysis with examples.

Page 13-14 2nd Para. Examples should be given.

Page 13-15 4th Para. Another incentive for governments is that, where regulated properly, there can be a reduction in social problems and community conflicts associated with artisanal and small-scale mining, and in some circumstances (although not all), will also provide tax revenues

Page 13-15 6th Para. The increase in mining productivity in Tanzania in the late 1990's is not attributable largely to artisanal and small-scale mining as stated. Between 1998 and 2001, three new large mines (Golden Pride, Gieta, Bulyanhulu) were commissioned, involving investments of around US\$1.2 Billion over the last five years, with production estimated at around 40 Tonnes of gold of in 2001, mostly from large scale mining.

Page 13-16 Large Mining Companies, 3rd sentence. This assumes large scale and artisanal mining operations are viewed, by authorities, as starting from a point of equal legitimacy. However, a major issue is that in many areas, artisanal miners are viewed as illegal, and the conflict is as much about people being denied access to land that they have traditionally had rights to (either formally or informally). Generally this section requires more examples

Page 13-16 Large Mining Companies, 2nd Para. Example here would be useful.

Page 13-16 In the last paragraph – on human rights – a single example in 1995 seems a bit weak if there are as many incidents as the statement says there are. This generalisation needs to be either supported by data and references or modified.

Page 13-17 In the second paragraph it does not explain how and why companies have been ill equipped to build good relations. It would be helpful to have an analysis of the reasons this occurs – for example, is it a question of lack of will on the part of companies, or are there fundamental reasons for companies being ill-equipped to form pro-active relationships with an informal sector.

Page 13-17 The reference to CASM should be strengthened. The role of CASM as a network and facilitating initiative to promote small-scale mining as an important development issue that Governments, donors, multilateral agencies, NGOs and industry cannot ignore if we are to achieve sustainability should be highlighted. Also, the developing role of CASM as an information source for stakeholders in the artisanal and small-scale mining sector should be brought out. CASM was conceived as a community of interest, involving people with many different types of backgrounds and

experiences, that through its activities, its networking and coordinating efforts, would be able to channel attention, resources, and lessons already learned, more effectively than has been the case in the past. CASM will provide a forum that will facilitate coordination and communication among stakeholders; and actively promote the sharing of knowledge, lessons learned, good practices and policies, within the global community of small-scale miners, their associations, their communities, governments and development aid agencies and workers. CASM's mission is to enhance the developmental impact of work on the ground and at the policy level in ways that will directly contribute to reducing poverty and to realizing the integrated sustainable development of communities affected by or involved in artisanal and small-scale mining in developing countries.

However, it should also be noted that there have been similar attempts to address artisanal and small-scale mining issues in the past (and that CASM has evolved from several years of discussions in the donor community). Continued and increased support is needed for impact.

Page 13-17, last Para. DFID is also undertaking through its knowledge and research (KaR) programme research on artisanal and small-scale mining issues, which is a priority area under the Geoscience theme.

Maximising the Contribution

Page 13-18 2nd Para, last sentence. It is unclear what 'stabilising the mining operations' means, and what this envisaged to be undertaken under this activity.

Page 13-19 Box 13-3 This piece does not refer to the rapidly declining number of people engaged in artisanal and small-scale mining at the Sadiola site because of the better commercial opportunities provided by trading with workers in the large mine. This shows the link between artisanal and small-scale mining and poverty. As soon as something better turns up, people will take it. But what steps are being taken to address the situation when the mine closes?

Page 13-20 In the third paragraph, the wording of the second sentence should be changed, as it could be interpreted as improving conditions for children working in mines as an alternative to removing them from mines, which is not acceptable. The ILO convention on Child Labour is very clear that children should not be working in the most hazardous types of work, which includes children working in small-scale mining, and that immediate measures should be put in place to prevent this. It is important, however, that artisanal and small-scale mining activities be made healthy and safe for the adult workers. Otherwise, if an adult is sick or injured, there will be pressure on children to resume this work. ILO is also working in the Philippines, providing education and vocational training to children withdrawn from gold mining; working with parents and the communities to ensure that they do not return to this work by addressing issues such as micro-finance and alternative commercial opportunities in the communities.

Pag13-21 Para 1. Some clarification on uptake issues of the Minataur (iGoli?) process would be helpful. Developed in South Africa, and tested in some areas there, outside South Africa, the process was tested in the Geita region of Tanzania by independent consultants at the request of the Tanzanian government. However, it does not appear to have been pursued further and reports as to the reasons for this are not readily available.

For uptake of a new process, there must be immediate and obvious benefits to miners. Typically these drivers are financial or time incentives (i.e. is it cheaper, faster and provides higher yields than using mercury). It is also the case that in many areas, there is very limited general understanding of gold processing, leading to hugely excessive use of mercury and little understanding of the health and environmental consequences of this. Miners' working methods are unlikely to change for purely environmental reasons, and behaviour change is only likely to be sustained if the financial incentives outweigh maintaining the status quo.

An analysis of the deposits Minataur is suitable for would be helpful, as there seems to be a critical concentration of gold below which the process becomes less affective. Also, an analysis of the reasons for lack of uptake would help clarify why the process was not taken forward in Tanzania. (One of the biggest problems with uptake of new technology is lack of understanding and mistrust – retorts are mistrusted as (unless they are glass (and very breakable)) people can't see their product being processed. With the Minataur process, where gold is dissolved and precipitates back into a solid later in the process, it is possible that a significant barrier to building trust in the process is the dissolution of product, as even if you watch the dissolution, lack of knowledge of chemical processes (which is often significant in artisanal operations) could be a problem in convincing people the output has not been reduced by some slight of hand.

It is also worth mentioning carbon based recovery techniques for artisanal and small-scale mining are being researched (in a DFID KaR project). This research is generating promising results and will start field trials at the end of this year.

Page 13-22 Last para. A guaranteed market and better price stability are also advantages.

Page 13-23 First paragraph. This paragraph seems to contradict the previous statement on page 13-13 about permanent communities. This section seems rather superficial and needs strengthening.

Page 13-26 Box 13-5 Another objective of the project was to provide local training capacity in mining, to build up a core of trained mine workers in the region, which would be beneficial for the company and also those miners who did not wish to join the formal sector, as training would improve their ability to mine more effectively

Page 13-27 3rd Para. Need to clarify who the 'other actors' are likely to be

Recommendations

Page 13-27 2nd bullet. It is important that any framework recognises the linkages between the large and artisanal and small scale mining and that there is coherence in policy, regulation and legislation of the whole spectrum of mining activities. Also, management would be a better term to use than "control".

3rd bullet. CASM is not specifically a World Bank initiative. The World Bank are co-sponsors with other donors, multilaterals, NGOs and development institutions. Suggest wording similar to Para 4 of page 13-17.

4th bullet. It is also the case that the general public does not often differentiate between large scale mining and small-scale mining, so the consequences of environmental damage, social problems etc in artisanal and small-scale mining rebound on the industry as a whole, so the mining industry should be proactive in addressing small-scale mining issues as a form of reputation protection .

6th bullet. Education and regulation are of course very important but are likely to be largely ineffective on their own. The key to replacement of mercury is developing mercury free processes that are financially more attractive to small scale miners.

Comments on Chapter 16 – Agenda for Change

Chapter 16. The only mention of CASM is in 16-19, under actions for the World Bank. As previously noted, CASM is a multi donor initiative chaired by DFID, with the secretariat being housed by the World Bank. CASM is a community of interest, involving people with many different types of backgrounds and experiences, that through its activities, its networking and coordinating efforts, would be able to channel attention, resources, and lessons already learned, more effectively than has been the case in the past. CASM will provide a forum that will facilitate coordination and communication among stakeholders; and actively promote the sharing of knowledge, lessons learned, good practices and policies, within the global community of small-scale miners, their associations, their communities, governments and development aid agencies and workers. CASM's mission is to enhance the developmental impact of work on the ground and at the policy level in ways that will directly contribute to reducing poverty and to realizing the integrated sustainable development of communities affected by or involved in artisanal and small-scale mining in developing countries.

There could be some text about CASM on 16-25 in the section on specific initiatives.

Inconsistency of data and errors in the text.

The following specific comments regarding data and errors are given:

Page 13-4 It seems unlikely that there are 1 million small-scale miners in Myanmar, let alone at one location. This would be equivalent to 8% of the estimated world total (13m). If true, this large proportion of small-scale miners is not reflected in Table 13.1 and 13.2.

Page 13-5 Para 3 The correct term for the mineral “coltan” is Columbite-Tantalite. Tantalum is the metal from the mineral Tantalite, and is used in capacitors in (amongst many other electronic goods) mobile phones. Columbite is a mineral analogue of Niobium. Both minerals are opposite end members of the solid-solution series Columbite-Tantalite. The term Coltan was originally used in HC Strack, a German tantalum company, subsequently used in Southern Africa between dealers and small-scale miners, whence it found its way into the press. This clarification should be made in the text.

Page 13-6 Table 13.1 For what stages of the mining process to the figures refer (i.e. with reference to Para. below the table?) Also, the figure of 22% proportion for women in Bolivia seems low (40% appears more accurate).

Page 13-9 Table 13.2 How robust are these figures? The figure of 30,000 small-scale miners in Zambia seems low. Some of these numbers do not tally with those in table 13.1, e.g. Ecuador 92,000 workers vs 62,000 in Table 13.1.

The table states that there may be up to 15 million small-scale miners in China although the world "total" of 13 million (13-5) is not disputed), and it does not sit well with the number for small-scale coal miners in Box13.2.

Many of the production figures appear to be out by orders of magnitude, e.g. Chinese coal production (millions of tonnes); gems or diamonds (thousands of carats?); gold (normally reported in kg). Units require specifying

Page 13-14 Box 13.2 The statement that employment is between 1 and 7 million does not appear to be based on sound data. Also, if it is the case that there are 15 million small-scale miners in China, then this figure "loses" somewhere between 8 and 14 million people. These data need to be checked and rationalised. The statement about 6,000 deaths is misleading. These figures refer to official figures from (some) legal mines. They do not include information from illegal operations.

Page 13-15 The last paragraph talks about mining export revenues in Tanzania, but it is not clear if this relates to commercial or small scale mining or both. The vast increase may also be due to better monitoring and control rather than increased production. The value of exports does not seem to tally with the production figures in Table 13.2.

Page 13-16 last paragraph – typographical error – spelling is Bulyanhulu

Reference 28 "MEDMIN/COSUDE (1998)" - The correct reference is "Wotruba, H. Hrushka, F. Preister M, Hentschel, T.: Manejo Ambiental en la Pequena Minería, COSUDE/MEDMIN, La Paz, Bolivia 1998"

Yours sincerely

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