Comments on the MMSD Draft Report

By Dr. Jack Testard, Head of the Mineral Resources Department, BRGM[1]
and by Dr. P. Christmann, Mineral Resources Department, BRGM

The views expressed herein are the sole views of the authors. They do not represent an official statement of BRGM.

[1] BRGM – The French Geological Survey – Service Ressources Minérales – B.P. 6009 F-45060-ORLEANS CEDEX 2 (France) – Telephone: + 33 2 38643811 – Fax: +33 2 38643861 – e-mail: j.testard@brgm.fr and p.christmann@brgm.fr

By the quality of its balanced analysis, taking into account the views of a wide range of stakeholders, the Draft MMSD Report presents a first-time overview of many of the complex issues faced by the stakeholders of the global mining industry. It represents a tremendous amount of work. The MMSD Project generated valuable material for further work by those interested by this little known sector of human activities. All those who made this possible, should be thanked for their efforts.

However, despite its qualities this report can only be considered as a step in a progressing work, much depending on the contents of the Agenda for Change, and how this Agenda will be implemented, by whom and with what effective means.

Some key actors are not well identified/ identifiable in the Draft Report, although their role may be critical for the implementation of any substantial Agenda for Change:

- **Among the role and responsibilities of the governments, Geological Surveys play an essential role. This role should be fully recognised, in the Draft Final as well as the need for the strengthening of North-South co-operation between Surveys.**
- **The key development assistance partners should be identified, and every effort should be undertaken to convince them to join and support the implementation of the Agenda for Change. So far the role of the European Commission and of the European bilateral development assistance bodies is largely understated in the Draft Report, although they could be a major source of support, especially since Sustainable Development is high on their agendas.**

More research and much more easily accessible data is needed to develop Sustainability Indicators. These can play an important role in reversing the current image of mining. Mining companies can play an important role in making such data easily accessible to the research community.

The proposed Sustainable Development Support Facility can play a key role in the implementation of the Agenda of Change, if sufficient support from development assistance partners can be obtained and its scope is broadened, i.a. to address sectoral issues in transition or developing countries.

1 - Comments on the MMSD draft report

The purpose of these comments is to highlight a series of points which may have been partly overlooked in the MMSD report, although they have a possibly great significance for the later design and implementation of the Agenda for Change.

1.1 – Minerals and the developing world

Many less developed, or transition countries, have minerals among their main sources of exports, hard currency and "endogenous" budgetary income (vs. "exogenous" sources of income, i.e; from development aid). This pattern remembers what probably the case was in the 19th century in the USA and in several European countries, nowadays enjoying the benefits of

highly diversified and performing economies… born from minerals, agriculture, cattle raising … and little attention to the environment up to the recent years.

There are more mineral dependent countries then the 34 countries[2] listed in table 2-3 of the Draft Report, which should be corrected to better reflect the reality and further emphasize the importance of minerals for the developing world. Some of these countries host also most valuable biodiversity (such as rainforests) and diversified local cultures, which all may be threatened if mining is done in unsustainable ways. There is an urgent need to support these countries through the implementation of the Agenda for Change.

1.2 – Are'nt the European Union's development assistance partners key actors ?

The MMSD project is an important contribution to the long process leading towards sustainable development and it well described most of the issues and challenges faced by all the actors concerned both by mineral resources and sustainable development. However, it apparently failed to identify some of the key development assistance partners such as the European Commission and the EU bilateral cooperation agencies, whose participation would be of great significance for the implementation of the proposed Agenda for Change.

The European Union is the main global importer of mineral commodities. Its institutions, and particularly the European Commission, are key actors of the global sustainable development agenda. Together the Commission and the EU bilateral co-operation agencies are the largest global donor of development assistance grants. There is an urgency to convince them to join other key actors such as UNEP or the World Bank Group to support the follow-up actions deriving from the MMSD project, possibly through support to the Sustainable Development Support Facility.

The timing may be appropriate to launch a high-level action aiming at convincing these actors to participate to the discussion and the implementation of the proposed Agenda for Change. The Commission announced at the Monterrey summit that, in addition to the 13.5 billions € of development assistance grant funds it will add an extra 8 bn €/ year development aid over each of the next three years. There is a progressing awareness that Europe's mineral resources largely come from developing countries, and that sustainability issues cannot be addressed through progress limited to the sole member countries.

Under the 8th European Development Fund (1995-2000), the Sysmin Special Financing Facility made 575 M€ available to support actions in favour of countries signatories to the revised 4th Lomé Convention, a unique international cooperation framework linking the 15 European Union member states and over 70 countries from the African, Caribbean and Pacific (ACP) regions. EC funds coming from the Sysmin facility, are presently used to support an innovative large-scale programme (30 M€) to support small-scale mining in Zambia, and a large assistance programme (50 M€) to strengthen the geological, mining and environmental institu-

[2] The table 2-3 "Mineral Dependence in the Structure of Exports, 1999" would need a revision, since quite a few countries with a heavy share of mineral exports vs. total exports are missing. Some examples are: Botswana (71%, including 67% from diamonds -1998 data), Central African Republic (46%, exclusively from diamonds), Ghana (34%, including 0,5% from diamonds – 1998 data), Guyana (35%), Mali (40,5%), Namibia (60%, including 40% from diamonds), Zimbabwe (29%, including 9% from ferrous alloys, iron and steel – provisional 1999 data). Source of the data shown here: IMF Country Reports, see www.imf.org)

tional capacities in Papua New Guinea, to address environmental issues at the Pueblo Viejo gold mine in the Dominican Republic or to acquire new geological data in Burkina Faso.

The successor to the Lomé Convention is the Cotonou Agreement, signed by 76 countries from the ACP regions and the 15 EU member states. Although the Sysmin facility has been discontinued, the Cotonou Agreement clearly provides a framework to support actions in favour of the geoscience and mineral resources sectors as instruments of sustainable development and fight against poverty. An excerpt of relevant parts of the Cotonou Agreement is given in Appendix 1.

Hence, the Draft Final Report should be amended, to provide a more correct and comprehensive panorama of the actors, even if they did/ could not actively participate to the MMSD project.

1.3. – Are Geological Surveys key actors ?

Various chapters (i.e Executive Summary, Chapters 1, 3, 14 and 16) list the key actors of the global mineral resources scene, their respective roles and responsibilities. However, within the role and responsibilities of Governments, the roles and responsibilities of the Geological Surveys are understated, although they are key actors.

No mining project started without geoscientific[3] data showing that there is a mineral potential somewhere, and all developments included in the MMSD report would become pointless if such data would not be made available by governments and their Geological Surveys. Geoscientific data is also an important component to the environmental pillar of sustainable development.

The importance of geoscientific information is briefly, and incompletely hinted at in Chapters 8 "Minerals and Economic Development", p. 8-12; 12 "Access to information", p. 12-5. In the sub-Chapter "Challenges for Specific Components of the Mining Sector", in the section on National Governments and Regulators (p. 12-16) the list of a Government's duties again fails to include the provision of reliable, sufficiently detailed geoscientific data: "*Government's role in pursuing mining and minerals development as a viable development alternative (…) includes establishing an institutional framework for gaining access to mineral resources, setting up effective and efficient legal systems, levying appropriate taxes, and designing an environmental regulatory system to prevent and control environmental impacts from mining activities.(…). Moreover, environmental regulatory systems can only be pertinent if they take into account a country's or, better, a region's natural baseline conditions, which need to be carefully assessed prior to authorising a mining project*."

Only about 40% of Africa's landmass is covered by geological maps at 1:200,000 scale, and even less is covered by airborne geophysical surveys or by geochemical surveys. This means that there are still important stretches which remain almost uncharted. Access to existing data, remains difficult, the existing data being scattered between Geological Surveys and research institutions from the South and the North. There are no funds to set-up one large database entailing easy access, via Internet, to existing data in a digital format. Such conditions are hardly conducive to sustainable development.

[3] "Geoscientific" is used here, rather than "geological", which would have have a too restrictive meaning

Geological Surveys are the source of essential data on the subsurface required to locate the mineral potentials and resources; to draft baseline studies, for land-use planning and for environmental impact assessments. This data is essential to promote a country's mineral potential and to attract private investment, to identify and manage important environmental issues, to assess and monitor geohazards. Their research in metallogeny is critical for the identification of new ore deposits and to assess their potential impact on the environment. Through R&D they also significantly contribute to the progress of a wide range of technologies such as geophysics, remote-sensing, geochemistry, modelling or ore beneficiation. Many "Northern" Surveys have a long tradition of co-operation with poorer "Southern" mineral sector institutions and an in-depth knowledge of institutional and capacity building issues, and further North-South co-operation should be considered as an important element of any strategy aiming at strengthening the linkage between mining, minerals and sustainable development.

Without reliable geological data and the capacity to efficiently disseminate it there is no identifiable mineral resources potential, no private investment, and no need to proceed with regulatory frameworks and trust building dialogue with local communities.

In many developing or transition countries Geological Surveys lack the human and material and financial resources to efficiently implement their mandates, partly because many developing countries governments fail to understand what are the reasons to allocate scarce budgetary resources to activities where economic returns can only be measured over a period between 10 to 20 years, typical of the major mining projects, while there are so many pressing short-term issues. They also fail to understand the nature and size of these returns, their multiplier effects and the trade-offs. These factors possibly explain why so few developing countries allocate adequate resources to their sectoral institutions, and they are major obstacles on the road to sustainable development.

The same strategic myopia seems to have developed in the non-mining countries of the rich part of the world, where the mining culture is vanishing at a fast pace, except in Canada and Australia, forgetting the role mining played in their own economic take-off.

The draft report states p. 1-11: "*Sustainable development will require some structural changes in the ways different actors, alone or together, in all areas of economic, political and social life. (...) It will require defining and redefining the roles and responsibilities of different actors and the overlapping boundaries, which will have important political, institutional, capacity and budget implications*."

It further states p. 1-19: "*All actors need to develop the institutional culture, resources, and skills required for the transition to sustainable development. (...) Alliances will need to be constructed between the private sector, the public sector and external development assistance partners to manage many of the dimensions of sustainable development*."

The mentioned implications relate to the role of governments, and their institutions, as key actors of the global mineral resources scene, it also properly hints to the role of development assistance partners (i.e the World Bank group, the European Commission, the European Investment Bank, regional development banks and bilateral development assistance agencies).

Development assistance partners have a central role to play . There is a necessity to bring them around the table, including those who were not yet formally identified in the

MMSD Draft Report, to obtain their support for the implementation of the "Agenda for Change". Together, they could be very instrumental in launching and supporting the Sustainable Development Support Facility, outlined in the "Agenda for Change" (Chapter 16). Grant money is needed, as many activities related to sustainable development do not generate the direct financial returns needed to pay back loans, even on soft terms.

The role of governments is detailed in Chapter 3, p. 3-11: "*In the minerals sector, the national government is one of the most significant actors in managing the transition to sustainable development. Its responsibilities include reviewing environmental and social impact assessments, granting licences and permits, planning for regional and local development, upholding environmental standards with legislation and monitoring, protecting the rights of affected communities, and investing and distributing revenues from mineral development to build social and human capital. In many countries of the world however, governments lack the capacity to fulfil their duties due to scarce resources. (…)*"

There is no need to engage in any of the stated activities if there is no capacity to document geological potential and to communicate/ promote it towards potential investors ready to assume the risks of detailed mineral exploration projects. The description of a Government's roles should be reviewed accordingly.

It could be emphasised that there will be no progress in the development, and even more so in the sustainable development of the poorer countries, if most external assistance partners, with the noteworthy exception of the World Bank, fail to understand the sector, the benefits it can provide and the necessary trade-offs.

If development assistance partners are to be convinced to support such activities, the benefits expected from their support must be documented against the costs to be anticipated if no support is given.

1.4. - Any other actors?

Obviously, the implementation of any ambitious Agenda for Change will require significant financial resources. In any country, Ministers of Finance play a central role in defining the allocations of budgetary resources. They, and the Ministers of Economy and/ or Planning have a more important role in this process than the Ministers of Mines. In developing countries, National Authorising Officers (which sometimes are one of the mentioned Ministers) have an important role too, since they coordinate, at Government level, the relation with the European Union. If an Agenda for Change is to be designed and implemented, such actors are definitively to participate actively to the dialogue and to be convinced that support to the Mineral Resources and Geoscience sectors are in the long-term interest of their countries.

1.5. - The need of sustainability indicators and data

Mining needs to be better understood on the basis of cost-benefit analysis, documenting the economic, social and environmental impacts and trade-offs of mining projects. It is also necessary to compare the likely advantages and disadvantages of mining with those of other key economic activities. This requires indicators, and a lot of data, to measure the various impacts. Indicators adapted to the needs of the various stakeholders, requiring data, are necessary for a wide range of purposes, i.a. to help all stakeholders to better understand the issues, negotiate

and decide trade-offs. No algorithm, whatever its degree of sophistication, will ever be able to replace the human capacity to negotiate and decide compromises between the economic, social and environmental pillars of sustainable development, but the availability of factual data, and confidence in its reliability is likely to help stakeholders to base their decisions on evidence rather than on beliefs. It is a powerful way to build trust.

The report prepared by Pr. Alyson Warhurst[4] for the Minerals and Energy Research Network (MERN), one of MMSD's valuable working papers, is an important milestone for the work on indicators. It underlines the importance of research for the design of specific indicators, designed to suit the needs of distinct stakeholders. It also stresses that their development requires time, resources, and commitment.

People, methodologies based on shared vocabularies, data, research and its financing are necessary if progress is to be made on Sustainable Development Indicators. Here, the mining industry can help in making data about the economic, environmental and social impacts of its mining projects easily accessible on a voluntary basis. These indicators are needed for a series of purposes, including the calculation of multiplier effects of sectoral projects financed out of public funds, such as the national/ regional mapping and exploration projects carried out by Geological Surveys. Nowadays, it is easy to find production and even cash-cost data –although the cost of accessing the information remains sometimes quite high- but it remains difficult to obtain the data necessary to evaluate the economic flows between a given mining project and its various stakeholders, or to obtain data on its social or environmental impacts. Comparative sustainability studies between mining and other economic activities are also needed to reply to questions such as "What are in a given country, the alternatives to mining capable to generate comparable returns, and what are their likely environmental impacts?"

A significative research effort is needed to assess if mining projects in developing countries are something else than sources of Dutch disease and environmental legacies to be borne by governments and local communities, who in many countries have already to cope with the dire constraints of poverty. This research, and its unbiased outputs are necessary if development assistance partners are to be convinced to further support the mineral resources sector.

2 – Conclusions: the Agenda for Change and the need for a Sustainable Development Facility

Chapter 16 – Agenda for change – lists the principal roles of Governments (p. 16-13). It may be desirable to see "*promote the national assets*" included here. It certainly is a Government's role to identify what the competitive assets of a country are, and to undertake all practical steps necessary to attract investment to unlock their potential, while ensuring maximal returns to the various national stakeholders, within the framework of sustainable development.

The suggestion of a Sustainable Development Support Facility is a very valuable one, if its scope is enlarged to support South-South and North-South institutional partnerships, needed to help developing countries sharing their experiences, to develop common vocabularies and indicators; to strengthen their institutional capacities and human capacities; to engage new data acquisition campaigns and disseminate their results; to identify existing data and make it

[4] Warhurst, A. 2001. Sustainability Indicators and Sustainability Performance Management – MMSD Working Paper

available in digital formats; to work on the drafting of sustainability indicators for mining projects; to conceive and implement the International Mining and Minerals Database suggested p. 12-27.

It could help to address a series of problems and constraints depicted in the Draft Report and in this paper. The question raised in the draft report, p. 16-15: *"(….) is the idea sufficiently attractive to aid donors that they would provide it with the modest funding it would require*", is an important one.

Two comments ought to be made: first, the needs are far from being "modest", and substantial funding is required. Hundreds of millions of $ and € were disbursed since the eighties by the World Bank, the European Commission and bilateral cooperation agencies, to help developing countries improve their capacities to regulate and promote their mineral resources activities, with important successes (e.g.: Ghana, Mali, Tanzania). Nevertheless, much remains to be done.

One may wish that the Commission, with the support of the European Member States, as the largest single source of grants, can be included in the future work needed to turn the visions of the Draft Report into practical action. Development Assistance funds need to be set aside, safe from pressing short-term issues, to support the Sustainable Development Facility. This is an essential condition to implement actions focused on the long-term issues related to mining and minerals and to help developing countries to unlock their mineral resources treasure chest within the framework of sustainable development.

To obtain such a result would be a brilliant consequence for the MMSD project, a significant step towards a more sustainable development and in the battle against poverty.

APPENDIX 1 – EXCERPTS FROM THE COTONOU PARTNERSHIP AGREEMENT

Art. 1 of the Cotonou Partnership Agreement

(…)

The partnership shall be centred on the objective of reducing and eventually eradicating poverty consistent with the objectives of sustainable development and the gradual integration of the ACP countries into the world economy.

(…)The partnership shall provide a coherent support framework for the development strategies adopted by each ACP State.

Sustained economic growth, developing the private sector, increasing employment and improving access to productive resources shall all be part of this framework.

Compendium on co-operation strategies (excepts)

1 – Introduction

The present compendium of texts on co-operation strategies is intended to provide detailed reference texts as regards objectives, policy orientations and operational guidelines in specific areas or sectors of co-operation, as provided for in article 20(3) of the ACP-EC Partnership Agreement. These orientations and guidelines will be developed and applied within the framework of the integrated approach for co-operation strategies as set out in the Agreement and on the basis of the provisions on development finance co-operation.

(…)

2.4. **Mineral Resources Development**

33. Many ACP countries are significant mineral producers and exporters. For some countries of these mineral exports represent a significant proportion of the value of their total exports. Several additional countries bear a significant, yet mostly untapped, potential. To unleash this potential requires the further strengthening of the State (regulator, promoter, provider of geoscientific data at national and regional scales)/ Private Sector (investor and entrepreneur) partnership.

34. Mineral resources include a wide range of commodities e.g metallic minerals (such as aluminium, copper, gold, iron, nickel, tin), industrial minerals (such as clay minerals, lime, feldspar, gypsum, magnesite, phosphate, salt), precious and semi-precious minerals (such as agate, amethyst, diamond, emerald, tourmaline), ornamental and dimension stones (such as granite and marble) and construction materials (stone, crushed rock aggregates, sand and gravel).

35. The sector has potential to be an even more important contributor to sustained growth, through the development of the private sector since minerals are a key productive resource of many ACP countries. Its development lies within the objectives of the Partnership Agreement. The importance of the access to productive resources is a component of sustainable and equitable development and beyond, a factor for a stable and democratic political environment. The development of a competitive mining sector, while encouraging private sector involvement and development, is a component of the productive resources encompassed in the Agreement.

The objective of the parties is to develop the access to these resources and facilitate their sustainable exploitation.

36. The parties recognise that the sustainable development of this sector, for the social and economic benefit of the concerned countries, is dependent on a series of factors:

- clear definition of the policy of the State on the matter;
- existence of an enabling legal, regulatory and fiscal environment applicable to investments into the exploration and exploitation of mineral resources, inciting for the investors while guaranteeing the interests of the State;
- focusing of the State on its essential regulator and promoter functions, shifting away from the economic and technical risks as mining entrepreneur/ operator;
- provision of the investors with reliable and sufficiently detailed geoscientific data, to lead potential investors towards promising target areas;
- mobilisation of the human, technical, technological and financial resources necessary to ensure an effective functioning of the sectorial institutions needed to:

    - promote and manage the mining sector (compliance of the private operators with the regulatory framework and/or their contractual commitments);

    - acquire, process and disseminate geoscientific data;

    - monitor and protect the environment.

37. In order to successfully manage these key factors of success, co-operation shall provide technical and financial assistance for the:

- development of sectoral policy documents;
- revision of mining codes (and their co-ordination with other regulatory texts such as environmental, fiscal, work, health and safety regulations;
- procedures and means necessary to allocate and manage exploration and mining securities;
- monitoring of the activities of exploration and mining companies, including their environmental performance;
- sustainable development of small and medium-sized mining enterprises;
- identification, drawing-up and implementation of new viable projects;
- acquisition, conservation, processing and dissemination of geoscientific (such as remotely sensed, topographic, geological, geochemical and other mineral exploration data);
- preparation, on this basis, of data subsets needed for natural resources exploration, prevention of natural hazards, environmental management and general development purposes;
- development of environmental regulatory frameworks and their enforcement;

- training and access to information related to these activities; and
- networking and matchmaking with European investors, sectoral institutions and providers of technology, equipment and specialised works.

38. Subject to the agreement reached between the parties when designing the strategies for private development, co-operation may also, in accordance with the principles set out in the Agreement on private sector development and on investments support, assist and/or contribute to the establishment, strengthening and operation of institutions providing information, promotion, and transfer of technology facilities and services in the mining sector.