

***Common Terms of Reference for Regional/Country Studies on Artisanal  
and Small-Scale Mining for the MMSD Project  
Prepared by J. Davidson***

***This outline is based on Latin American and Southern African plans for  
work on SSM, the SSM global report objectives and recent discussions  
between researchers in London following the CASM meeting***

**The Research Challenge**

In this exercise, it will be important to try to capture as best as possible an understanding of the variety of realities and faces of artisanal and small-scale mining, as practiced in the various countries and regions being studied. We also want to provide examples of how artisanal/small-scale mining can adapt and progress with the times.

Research foci were identified during regional and international discussions, which occurred between December 2000 and March 2001. They will hopefully provide a common basis for the reporting of information and evaluation of trends between regions in the MMSD global report. The common terms of research do not prevent a regional initiative from collecting additional information or analyzing additional topics or themes. The list of tasks on first glance may appear to be extensive, but some of the indicated work should be fairly straightforward, especially those tasks which involve the identification and referencing of documents (I and V), or the identification and documentation of specific events, projects or persons (IV, VI, VII and VIII). Task II, an attempt to define the characteristics of the sub-sector quantitatively, will involve a review of published and possibly unpublished statistics, the extrapolation of data where little may exist, and the identification and interpretation of trends. This will probably be the most difficult of the list to complete. Task III, a description of the technical and environmental characteristics, is optional, but information on these themes should be picked up in the bibliographic compilation (Task V).

In any case, this will be a limited “research” exercise, based principally on the identification and review of secondary sources. Direct familiarity on the part of the researchers, with the characteristics of small-scale mining as it occurs in the countries being studied, should facilitate the work. If information is non-existent or very difficult to obtain, this should be explicitly noted. The research effort will assist in identifying critical information gaps. Researchers should keep in mind that their work will probably not be nor will it need to be definitive. It should be as complete as time and circumstances permit. Nevertheless, the results obtained may only be of an indicative or suggestive nature, requiring additional work beyond the scope of this effort, to lend real clarity to the issues. This is in fact what is expected - that the work will establish the points of departure for more in-depth studies and evaluations, or new initiatives, beyond the life of MMSD.

## Research Tasks

### I. Characterize the **current legal status** of artisanal and small-scale mining in the region

Legal definitions may or may not take the differences in types of small scale mining into account [see end note]. Most legal definitions, when they exist, distinguish between types of small-scale mining based on the technology applied to the exploitation (manual tools, machines), the depth of exploitation, or their projected daily or annual output. In a few cases, a special type has been defined (e.g. Venezuela), the “mancomunidad”, a collective or group of people united in a common activity, in this case small-scale mining. In some countries, the government may distinguish between small-scale mining of metals (including precious minerals), industrial minerals, and energy minerals (like coal and uranium), with different rules and regulations applying in each case.

- a) Document **official definitions** of artisanal and/or small-scale mining, if any, used by government for administrative or policy purposes as described in mining codes, special decrees or mineral policy statements (include references)
- b) inventory all **legal codes and regulations** (mining, environment, tax, marketing), or specific chapters or clauses therein, which pertain to artisanal and/or small scale mining practice and its regulation
- c) identify and reference any **official policy statements** or sections of policy statements that relate to artisanal and small-scale mining
- d) describe any **changes** to the legal or policy framework that have occurred during the past 10 years (e.g. promulgation of a new code specific to small-scale mining or new regulations)

Have the changes identified had any discernible impact on rationalizing or regulating existing and promoting new activity within the sub-sector ? Identify any promising new policy directions.

### II. Characterize the actual status, role and importance of artisanal and small-scale mining in the region

- a) collect any **official statistics** on registered or **formal miners**, artisanal and small-scale, on mill, processing or fabricating operations that serve the needs of the small miners, on licensed buying and marketing agents; try to break these out on the basis of mineral or mineral group (industrial minerals, energy minerals, precious minerals (gold, silver, platinum, diamonds, colored stones), and metals)
- b) collect/compile any official and/or unofficial statistics **on mineral production or revenues** derived from artisanal and small-scale mining activities, by mineral, and according to whether production is registered or unregistered

- c) compile any official or unofficial estimates of **participation in non-formal** or non-registered mining, processing and marketing activities, and break them out to whatever extent possible
- d) try to estimate the **numbers being supported** by the income generated from artisanal and small-scale mining activities
- e) try to estimate the relative importance (e.g. percentage breakdown) of the **different social-economic formations** [see end note] across the sub-sector, or for the most important mineral(s) or mineral group(s) being exploited, if possible
- f) identify and describe the various ways in which **production and processing activities** are organized and carried out (i.e. as individuals, as family groups, as informal partnerships, as formal civil associations or cooperatives, as informal or formal small companies (miners and mill operators as employees, or as partners), and try to determine their relative importance across the sub-sector, or for the most important mineral(s) or mineral group(s) being exploited
- g) try to estimate **the net income** to the miners, generated by the different types of activities, within one or two selected minerals or mineral groups, if possible
- h) try to estimate the number and identify the **roles of women and children** involved in the various types of activities identified within the countries being studied
- i) try to estimate the indirect economic benefits or **multiplier effects** of the identified activities
- j) identify and try to quantify the **negative impacts on environment**, surrounding communities, and on **health**, that can be linked to small-scale mining activities in the country or region

Describe to the extent that you can, any trends or significant changes that have occurred over the past 10 years, with respect to the numbers of people involved, the relative importance of the socio-economic formations, the commodity focus, the involvements of women and children, the formalization of activity, the extent of local processing and its multiplier effects, the regional or country perspective on negative impacts (whether environmental, community or health related), etc.

III. Identify and describe the **range of practices** in mining, processing and environmental control currently in use across the sub-sector, and any significant changes that may have occurred during the past 10 years (optional)

IV. Inventory the following **support activities** for small-scale mining that have functioned or been initiated during the past 10 years

- a) **financing or credit schemes**
- b) **producer associations** (umbrella organizations, federations, mining chambers, regional or national associations)

- c) formal **technical assistance projects**, training programs
  - government initiated or coordinated
  - ngo initiated or coordinated
  - private sector initiated or coordinated (private consulting group or mining company)
  - international development agency coordinated (e.g. UNDP, World Bank)

Describe any innovations in practice, program focus or implementing strategies or new initiatives that have occurred during the past 10 years. Try to assess the impact of these support activities on improving the practice, organization, and productive potential of the intended beneficiaries. Identify any promising new approaches.

V. Develop a preliminary **bibliography of published work** related to small-scale mining during the past 10 years, with special reference to the following theme areas

- a) legal codes and regulations, and legal reviews
- b) policy statements
- c) mining and processing practices
- d) environmental impacts, their management and control
- e) financing and marketing schemes
- f) technical assistance projects and programs
- g) organizational issues, including forms of work organization
- h) gender and child labor issues
- i) technology research
- j) environmental and community health
- k) occupational health and safety

VI. List and describe the interactions which have occurred during the past 10 years between **small-scale miners and medium and large exploration and mining companies** (state-owned, private foreign owned, or private domestic owned), both negative and positive.

Refer to such events as land expropriation and population displacement, invasion of concessions, collaborative activities, informal assistance, company policies viz. artisanal mining, etc.

VII. Record some examples (vignettes or short stories), which describe **positive change or successful interventions** in any of the various theme areas (e.g. the elimination of child labor from a small-mining operation, the successful adoption of the use of mercury retorts, the learning and application of environmental management practices, a woman owned and operated mining venture, the use of steel toed boots, a day care center at the mine, etc)

VIII. Compile a **list of resource people** and contacts with experience or current involvement in the support, evaluation, administration or control of small-scale mining activities in the countries being studied.

IX. Produce a **written summary**, which highlights the most important features of artisanal and small-scale mining in the country being studied, any significant progress made in legal reform, environmental management, and other sustainability issues, any success stories, and important weaknesses or deficiencies which remain to be addressed in order to strengthen or consolidate the sub-sector's ability to be a constructive factor in the development of sustainable rural livelihoods.

**Note to Researchers:**

An Excel template will be created within the next few weeks that will allow for the entry and compilation of data related to Tasks I, IV,V, VI and VIII.

**End Note**

**Characterization of artisanal and small-scale mining activity in the regions**

MMSD has chosen to try to understand the different social-economic formations of small-scale mining in terms of their livelihood functions and potential. Four types are defined:

- a) mining activity which is **full-time, year round** and is the **principal livelihood** of the household or individual
- b) mining activity which is **full-time, but seasonal**, complementing other subsistence or commercial activities, like farming, fishing, or animal husbandry, and is fully integrated into the household economic cycle
- c) mining activity which is **part-time, may be year round or occasional**, and provides a **supplement to household income** or meets a special need
- d) mining activity which tends to be **full-time, but short-term**, undertaken
  - i) in **response to economic or environmental stress** in the home area or,
  - ii) **to take advantage of a potential bonanza opportunity** (e.g. a gold rush).

Type (d) would typically end when other livelihood opportunities become available in the home area or the bonanza opportunity is played out.

These activities may be legally registered (or formal), or they may be “unauthorized”, informal. Those types which are formalized, potentially, but do not always, include Types (a), (b), and (d, ii).

Women and children may be involved in all of them, but the nature and extent of their involvement may vary dramatically, between types, and between cultures and regions.

All or some of these types may exist within a country or region. The small-scale production of a specific mineral commodity may be characterized by all of the types enumerated above, while the production of others may involve only one or some.