NEWS FROM OUR AFFILIATES...

AGID: Regional Workshop on Strategies for Small Scale Mining and Mineral Industries

Case-studies on talc, gypsum, and fluorspar operations in Zambia, Tanzania and Kenya, stimulating papers on problems of small scale gold, diamond and gemstone mining, general talks on stone technology, mineral processing and industrial minerals - all crowded the agenda at a most successful workshop organized by AGID in Mombasa, Kenya, April 14-25, 1980.

Following each paper (or series of papers), small discussion groups met to debate key questions raised during the plenary sessions and to make recommendations concerning a wide range of issues relating to small scale mining. A small ad hoc committee then rearranged the recommendations into a more coherent form discussed in full during later plenaries. The final 28 recommendations are aimed at governments, mineral agencies, and geoscientists in general, encouraging, for example, such things as the collection and storing of basic information on small mineral deposits in a form that the small scale miner can use. Collectively, the recommendations provide the basis for sound national policy in small mineral development. *(Copies of the recommendations may be obtained from the Mines and Geological Department, Box 30009, Nairobi, Kenya.)*

A Proposal for a Small Mining Network made during the closing sessions of the Workshop received enthusiastic support. Its aims would be to facilitate on-going communications, improve the management of geoscience information, and provide assistance for R and D, processing, and training activities related to small scale mining. The Mombasa workshop participants will be asking their organizations to signify interest in the Network by assigning one or more small scale mining projects to the Network, agreeing to share non-confidential information and experiences gained in return for modest support (equipment, field visits, materiel). The UK-based Intermediate Technology Development Group expressed interest in taking part and possibly funding field tests and pilot operations. The Commonwealth Geological Liaison Office also seemed willing to assist, perhaps through the production of a newsletter. AGID sponsorship of the Network would mean that the Association would accept overall responsibility for it and

would provide the necessary legal and financial framework, as for example, by assisting in securing funds and providing modest support for central administration.

The Workshop was organized at an opportune time: with Kenya's recent changes in government, there has been considerable reorganization and rethinking of policies, including those for minerals. Serious consideration is being given to the strengthening of the small mining sector, particularly with respect to industrial minerals; major contributions to the recommendations in this area were made by representatives of Kenya's Mines and Geological Department.

Local arrangements for the Workshop were conducted by an energetic National Organizing Committee under the chairmanship of **Mr. C.Y.O. Owayo**, Chief Mining Engineer and Acting Head, Mines and Geological Department of Kenya. Support was also received from **Mr. V. Kahr** of the UNESCO Regional Science office in Nairobi. Plans are now underway for the editing and publication of the Workshop papers in the form of an AGID Report.

A.R. Berger
Councillor, AGID

Barite washing plant (15 tons/hour), Vitengeni Mine near Kilifi, Kenya.

CGMW: Guidelines on Map Compilation and Publication

The following guidelines were prepared this spring by CGMW for IGCP Project Leaders. EPISODES publishes them here for the general interest of others who may be contemplating the publication of maps.

The intricacies of map compilation, preparation and publication are foreign to a great many geologists, in spite of this having been a traditional method of synthesizing and correlating geological data. To save time and money, the constraints inherent in the final stages (printing) should be observed before launching a project. Fundamental questions to be asked include: Does the information to be plotted warrant a special map, or could it be incorporated into an existing series, thereby improving the latter? What scale corresponds best to the intensity of data? What thematic background is best suited to the data? Could other data be simultaneously incorporated to provide a more complete picture?

The following brief guidelines were compiled primarily for the use of IGCP Project Leaders, although CGMW would be glad to provide any further advice on this topic.

1. Many sets of data do not warrant a special map; information could be incorporated in map syntheses being undertaken by other organizations. Such insertion of data

collected by IGCP Projects would contribute to modernizing other projects and ensure that the latter provide the information required by IGCP Projects. On the other hand, the plotting of specific parameters on a well selected thematic base map can enhance the value of resulting correlations.

2. As early as possible in a map project, the leader should locate a source of funds to underwrite preparation and printing and/or arrange for a governmental map publishing agency to do the cartography and print the map.

3. The map publishing agency or commercial printer should be approached to learn the maximum size of available presses and their recommendations regarding the most suitable materials for compilation and techniques to be used in preparing copy for the printing negatives.

4. The best available geographic base map should be obtained in a projection that covers the entire area as areally true as possible. If the base has been published, obtain a copy

of the negative (single colour or black 50% screen), or of the negatives if the base is multicoloured (blue for water, black for culture, and brown for topographic contours or hachures). If no base is available, have such a base prepared in advance of any compilation.

From the scale-stable photographic negative or a combined negative of the multicolour base, have several copies made using a wipe-on dye that will produce an image that can be dropped photographically or physically removed. Be sure the image is left reading (reversed) so that the compilation can be made on the right reading side and erasures will not remove the base image. Being on the reverse side, the base image can be removed without harming the compilation.

The USGS uses a green image (no black in the dye) base that can be dropped by photography, but when printed in an ozalid or other dry paper print machine, the geographic base will print subdued while the black ink compilation prints strongly. If photographic facilities (large camera and large vacuum frame) are available, blue-line prints on drafting plastic can be used for compilation. In the latter case, the base negative is screened 50% and an unscreened punch-registered, compilation negative is exposed to give a positive from which direct paper prints can be made that clearly differentiate base from compilation.

5. Never colour the compilation copy with coloured pencils which will reproduce as different tones of grey in a direct paper printing machine or on black and white photographic paper. Place letter symbols directly on the compilation copy. Never fold or crease the drafted plastic compilation copy.

6. Other working group members, if they are to submit a draft of the area for which they are responsible, will require a copy of the base map and instructions for colours and symbols (purchase and despatch of a series of Lettraset or similar symbols can accelerate and homogenize compilation). Regional drafts can be to double scale, or to scale.

7. For peer review of scientific content, send coloured copies to others in the working group for their contribution. Colour out several paper prints of the compilation for

simultaneous mailing to reviewers.

8. With the fine printing techniques now available, a considerable amount of information can be illustrated on small-scale maps which are still legible. The most suitable scale of a compilation becomes apparent during stage 7 above.

9. After peer review, request the assistance of CGMW to arrange for an experienced map editor to review format, symbols, and legend, and to advise on alternative methods of preparation of final black line copy and alternative methods of obtaining separation copy for colour printing. This latter advice is critical if funds for printing in colour are inadequate according to the commercial map publishing company consulted under 2, and less important if an established map printing agency of government has agreed to prepare and print the map. Alternative methods of preparation and printing may be suggested by CGMW that will make publication feasible and speed it up as well. Advice of CGMW should be sought after stage 2 if satisfactory resolution of problems is not made or if available base maps are inadequate.

10. Negotiate with established map distribution channels (publishing house, map dealer, national geological society, governmental or earth science agency), so that the published map becomes available to earth scientists at the lowest price possible on a continuing basis. This requires a careful evaluation of the total market and a strict limit of "author" copies so that the market is not inundated with a flood of complimentary copies.

11. The Project Leader may not be the most competent project member to compile the map and may not have the necessary logistic support. Production of coloured maps is a continuum - one should have a good idea of the production sequence if maps are to be compiled, reviewed, drafted, and printed in a minimum of time and at low cost.

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