



# Uis small scale mining – conclusions

by Magnus Ericsson

The results of the Uis project can so far be summarised in 10 points:

1. Sustainable small scale pegmatite mining is economically feasible but the profitability is marginal.
2. Tin and tantalite must be extracted in parallel.
3. Mechanisation is necessary but pre-concentration should be made manually.
4. Local Uis resources are enough for mechanisation.
5. Organisation and training are key elements which consume lots of time.
6. Buyers for tin are available and competition between buyers gives much better prices.
7. The environmental problems are small and manageable.
8. The business environment for small scale miners needs improvements.
9. The small miners need their own organisation.
10. Future support is necessary in geology, mining engineering and marketing.

## Organisation

In Phase III of the project the organisational issues will be in focus. The micro scale miners are hard pressed from many sides. Firstly they are not used to work in groups and to set their own production goals particularly not with the daily demand of high production created by the plant running on two shifts. Secondly there are many sharks who want to high jack the project once its success seems more probable. Finally their general level of education is very low.

A two tiered organisation will be evaluated in 1997. It consists of a service cooperative and a not for gain company, which together serve to protect both the short term and the long term interest of all parties including the micro miners themselves, the Uis community, the Ministry of Mines and Energy and the original funders.

The not for gain company (section 21 under Namibian law) will have three main functions:

- \* Hold all assets of the cooperative.
- \* Employ the cooperative's manager.
- \* Guide the cooperative until its members have the full capability to do so on their own.

The company will conclude a management contract with the cooperative to: employ a manager to run the daily business of the cooperative; hold and take care of all assets of the cooperative including setting up funds for depreciation, major repairs and other unforeseen costs; apply for further funding for new capital investments; act as general advisors to the cooperative in all suitable matters.

When the cooperative has matured and can find among its own members persons that can fulfill the role of the not for gain company this company can be dismantled and the cooperative left on its own.

The cooperative would be a service cooperative under the new Namibian cooperative law. Members of the cooperative would be the micro miners doing the actual mining and cobbing of tin. All others in particular the drill and blast team, the group operating the plant, the transport team and also others not directly involved in the mining operation would be employees of the cooperative. The remuneration of the cooperative members would be based on the amount of tin produced by each member and the price obtained for the product.

The micro miners themselves should with the active support of the NDT and the Department for Cooperative Development of the Ministry of Agriculture define the articles of association, elect its officers and carry out all necessary training to do this democratically and efficiently. The basis for this is the present articles of association for the project, the code of conduct which has been adopted by the project and all other experiences gained so far in the project.

The future of the Uis small mining project hinges primarily on continued training on all levels. Remaining technical problems such as water recirculation and tantalite separation can surely be solved. ■

Magnus Ericsson is a member of Raw Materials Group and manager of the Uis small scale tin mining project.