THE MINERAL RESOURCES UNIT
United Nations University, Institute for Natural Resources in Africa, Mineral Resources Unit (UNU/INRA-MRU)
School of Mines, University of Zambia

Introduction
From the on-set it was envisaged that the creation of UNU-INRA will require in its first phases a capital endowment fund of some US$50 million which was then expected to be yielding US$6 to 7 million per annum in interests. It was expected that this capital fund will at least guarantee a minimum annual income for effective, creative work on a continuing and assured basis.

The Government of the Republic of Zambia (GRZ) made a generous pledge of US$2.0 million towards the Institute’s endowment fund and, because of its vast mineral resources and long history of mining, offered to host the Institute’s Mineral Resources Unit (MRU) at the School of Mines of the University of Zambia. As the first “Cell of excellence” or Operating Unit of UNU-INRA.
By 1990 GRZ had made a total down payment of US$1,241,387.34 to the UNU towards the endowment fund of UNU-INRA, leaving a balance of US$758,612.66. An MoU signed between GRZ and UNU in 1985 gave effect to the establishment and locating of the Mineral Resources Unit (MRU) at the School of Mines, University of Zambia where it started operations in April 1991 as the first “Cell of Excellence” or “Operating Unit” of the Mineral Resources Unit.

Raison d’être
As noted in the Lagos Plan of Action, African governments were rightly concerned about formidable obstacles that undermined the ability of the African countries to benefit fully from their vast mineral resource endowment. The contribution of the mining industry to the economies of many African countries has been minimal. Africa at the moment depends on the industrialized countries for technical expertise needed for mining and for the development of its minerals and mineral products.

Clearly, there is need in Africa to solve these problems effectively and to take bold action in order that the various countries can benefit properly from their mineral resources endowment. In particular, there is a need to formulate different mineral resource policies, especially in the fields of mineral exploration, mining development, mineral processing, taxation and value addition for internal or multi-country use and industrialization in Africa which are of crucial importance for self-reliant development. Therefore, there is an urgent need for African countries to ensure that enough trained manpower is available in technical, managerial and policy areas. UNU-INRA will make a contribution to these efforts through professional manpower training programs, related R & D work, policy studies, and information dissemination.

It was envisaged that the offer by the Government of Zambia to host the Mineral Resources Unit will enable UNU-INRA to undertake such projects without delay, by building on the work and facilities of the School of Mines of the University of Zambia where the Unit is located. The work of INRA would benefit from this well-established mining sector in Zambia and neighboring countries where field work could be carried out.

Under the general directions of UNU-INRA and within the framework of the Institute’s strategy the MRU would concentrate its work in the priority areas of mineral resource endowment, technology and management, and mineral policy options through:

- Undertaking research and development work
- Provide advanced training for scientists, technologists, managers and engineers
- Participate in scientific and technological information activities
- Host conferences, seminars, workshops and panels
- Provide consultancy services
- Facilitate the work of networking with other stakeholders such as members of the College of Research Associates (CRA) of UNU-INRA and industry.

Some Achievements
Under a scenario of severe constraints in resources inflow, research and training has been going on at the MRU at a very low level mostly with support in form of small grants from UNU and INRA. To date work at MRU has been doing research which is directed at contributing to the improvement of household food security. The areas of priority for the MRU currently include the restoration and maintenance of soil fertility including the use of indigenous agro-minerals such as phosphate rock, agriculture lime, gypsum etc. as affordable soil improvement ‘fertilizers’ for use by resource-poor rural farmers.

The activities carried out so far by the MRU in collaboration with various stakeholders include the following:

This course brought together participants from various parts of Africa in various disciplines related to natural resources management.

Legal experts from all over Africa considered and exchanged views on legal issues crucial to mineral resources management in Africa.

Topics covered included finance, market- ing and operational and processing constraints faced by women, mostly gemstone and precious metals small-scale miners. Issues of environmental impact of mining were also covered.

Workshop on Constraints Faced by Women in Mining Sector, 27-29th October, 1998, Lusaka, Zambia

- Topics covered included finance, marketing, and operational and processing constraints faced by women, mostly gemstone and precious metals small-scale miners. Issues of environmental impact of mining were also covered.
- A workshop on the economic and legal issues affecting the management of mineral resources in Africa was held in 1992.
- A conference on phosphate resources and environment in Africa was held in 1997.
- A workshop on constraints faced by women in mining sectors was held in 1998.

Outlook
Under the general directions of UNU-INRA and within the framework of the Institute’s strategy the MRU would concentrate its work in the priority areas of mineral resource endowment, environmental, aspects, technology and management, and mineral policy options.

Challenges
The objective of MRU is to carry out research and development work and provide post graduate or advanced training for scientists, technologists and engineers in the priority area of mineral resource exploitation for sustainable development of Africa. This has been greatly impeded by constraints in financial resources inflow to MRU to carry out its mandate.

Conclusion
Consequently the MRU’s dependence on payment by GRZ of its balance to INRA’s endowment fund has been going on with various government’s official including the Secretary to the Treasury. Clearing this balance will make a little bit more resources available for MRU’s work.

A PhD study was carried out at MRU since inception was designed to streamline all parameters to ensure efficient recovery and cost effective production of PAPR for easy affordability by resource-poor rural farmers.

Field Excursion for Participants
All international and national meetings are followed by field excursion for participants.