

HERDU LIB.

REHABILITATION OF DIS-USED MINES
AND QUARRIES IN KENYA

BY:

29 APR 1986
F. OMOLO

DEPARTMENT OF PHYSICAL PLANNING
MINISTRY OF WORKS, HOUSING & PHYSICAL PLANNING.

PAPER PRESENTED AT A SEMINAR:
"INTERACTION OF MAN, SPACE AND ENVIRONMENT
OVER TIME"

ON 4TH APRIL 1986.

ORGANISED BY: UNIVERSITY OF NAIROBI AND PUBLIC
LAW INSTITUTE

SPONSORED BY I.D.R.C.

HERDU LIBRARY COPY
DO NOT REMOVE

Rehabilitation of Abandoned Quarries In Kenya:

Mining has disturbed the natural aesthetics and created certain dangers to some people in Kenya. Under Section 35 (2) (a) Cap. 306 - Obligation on Abandonment, the mining act requires the mining company of an abandoned mine to fence, fill up, or secure, all shafts, pits, holes and excavations and remove all notices, beacons and boundary posts thereon, to the satisfaction of the Commissioner of Mines and in default of so doing shall be guilty of an offence and liable to prosecution. It is evident from the numerous abandoned quarries that the law is not enforced at all.

Rehabilitation of mines may be defined as creating conditions for a new and substantially different use of the mine site. The land so damaged by industrial or other development that it is incapable of beneficial use without treatment.

Rehabilitation of mined lands requires strict laws under which they are allowed to open for example provision for reclamation thus avoiding the derelict land stage. Secondly, financial incentives are necessary to assist and encourage the rehabilitation of derelict land.

It is difficult to establish ownership of long-abandoned mined lands and the current owner may not be the original mining company: therefore government funding is essential. Lastly, types of mining methods must be devised to facilitate after-use. The methods of rehabilitation identified and possible solutions will be suggested.

Abandoned quarries are widespread around Nairobi and many urban areas. There are a result of extraction of sand and gravel from river beds and cutting stone for building industry. Around Nairobi between Koma Rock Road and Thika Road there are building stone quarries. To the West and South-West - Otiende, Wilson, Langata and Ongata Rongai areas there are Murram pits and stone quarries along Motoine River flowing into Nairobi dam. To the North-West of Nairobi, Limuru area, there are some scattered quarries in the area.

In the Rift Valley area there are building stone quarries, gravel and murram pits, sand pits, and flourspar mines. Similarly in western Kenya there are similar quarries, pits, and Gold mines in Kakamega and Migori. At the Coast region there are similar quarries, pits and Coral mines while north-eastern have precious stone mines.

These lands produce their greatest threat to the people near the mine sites. They are dangerous because people and animals live near those abandoned sites. Some of these hazardous conditions of abandoned mined lands include dangerous piles or embankments, slides, highwalls, subsidence prone areas, clogged streams, hazardous mining equipment or facilities, areas prone to unauthorized disposal of industrial or residential wastes, and unauthorized use of water bodies for recreational purposes. Even though the people often know of the dangers, they continue to build houses, roads, schools, Commercial buildings and farm nearby lands. Last year it was reported in one of daily newspaper of the death of some people after an abandoned coral reef collapsed on them at the coast.

The hazardous condition of abandoned quarries and mines can be abated by proper reclamation techniques. A combination of techniques may be employed to efficiently rehabilitate the mined lands. Each mine must be addressed individually and techniques must be customdesigned to rehabilitate each site. Some rehabilitation techniques are stream diversion, refuse disposal in abandoned surface mines and quarries, process and use of refuse for road construction and building materials. Other techniques are the sealing of refuse with clay or red soil, recreational use, fishing, boating, parks, motorcycle trails, race tracks, nature trails, and swimming. Most of these potential land uses are determined by location and landscaping.

There are various impacts which are imposed on the local population by abandoned mined lands. They include revegetation which is expensive due to toxic spoils, soil erosion, which is common where topography has considerable relief, and reduced tillable lands which is apt to take place on nearby agricultural lands. In addition, water bodies are often polluted by acid forming spoils and downstream flooding, and siltation can occur from water running off mine sites. To the local population abandoned mined lands are aesthetically degrading areas.

Bamburi Portland Company has started rehabilitating some of their mined land. This shows the awareness of impacts realized by individual companies of degradation and the need to rehabilitate the mined lands.

HRDU LIBRARY COPY
DO NOT REMOVE