

Appendix I

Environmental Impact Assessment of the Geovic Mining Project at Nkamouna. Archeological Survey



Environment and Rural Development
Strategic Planning, Monitoring & evaluation
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RAINBOW ENVIRONMENT CONSULT

ENVIRONMENTAL IMPACT ASSESSMENT
OF MINING PROJET OF GEOVIC AT NKAMOUNA

ARCHAEOLOGICAL SURVEY

RAINBOW ENVIRONMENT CONSULT (REC)

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1. TERMS OF REFERENCE

Within the framework of the development of cobalt and nickel deposits in the Upper Nyong Division of the Eastern Province, Rainbow Environmental Consult (REC Sarl) signed a contract with Raymond Asombang, senior lecturer of Archaeology in the University of Yaounde I. to conduct an archaeological survey of the project area as part of the environmental and social impact assessment.

This is a report of a five day field trip to the area from June 7-11, 2004.

According to the contract, the terms of reference were:

- 1.1. Conduct an archaeological survey of the cobalt-nickel project development area in Lomie Sub-Division with a view to suggesting the safeguard and or rescue of any archaeological heritage that may be threatened by the project.
- 1.2. Develop a methodology of work
- 1.3. Summarise the legal framework concerning archaeological and cultural heritage sites in Cameroon
- 1.4. Analyse the data
- 1.5. Prepare a report.

2. GEOGRAPHICAL AND HISTORICAL BACKGROUND

2.1. Geographical Background

Lomie Sub-Division is situated in the South East of the Tropical rainforest in South Cameroon, about 127 km South East of Abong Mbang, the administrative centre of the Upper Nyong Division.

It is very sparsely populated by a mixture of Bantu and Baka Pygmy populations who are settled in small villages along the main access roads. The total population of the Sub-Division is estimated at about 20.000 inhabitants. They are engaged in hunting, fishing, small scale subsistence agriculture and minor trading.

2.2. Historical Background

Historically, some researchers credit the pygmy population of Cameroon with being the first settlers (Vansina 1984:143). On the other hand, there is a near consensus that the Bantu population in Africa originated from the Cameroon-Nigeria boarder area, between the Benue and Cross River basins. Migration waves from the core area passed through the Savanna lands of the continent to the East and through the Tropical rainforest to the South, finally meeting in the Congo basin from where they spread to Southern Africa (Greenberg, 1963; Ehret, 1982; Vansina, 1984).

Archaeological research in Cameroon is unfortunately very unevenly distributed with some areas remaining archaeological virgin land. Lomie Sub-Division is one of such areas. This situation is partly explained by the erroneous contention that the forest was a hostile environment to habitation by prehistoric man. The more plausible explanation I believe, is that the area is difficult to access by road.

3. WORK METHODOLOGY

The Nkamouna cobalt-nickel project area is about 10 km north of Kongo, the nearest village inhabited by one of the Bantu tribes called the Nzime. The area is criss-crossed by North-South and East-West profiles. A number of tracks created by logging companies as well as Geovic (the mining company) also exist. All of these permit movement through the forest.

- 3.1. Part of the methodology consisted of walking selected profiles to check for the presence of any man-made prehistoric structures such as furnaces for iron smetting.
- 3.2. All the logging and mining tracks were also systematically surveyed as was a representative sample of the hand dug pits (Annexe 1).

Approximately two hundred and fifty (250) shafts out of the several hundred that have been dug in the area were surveyed. Of these, only seventy six (76) were still open; the rest had been backfilled. In addition, all areas where there had been earth movement, such as gravel quarries within or around the project area were systematically surveyed.

Figure 1: One of the open shafts

- 3.3. The nearest village to the project area i.e. Kongo – was surveyed and some of the eldest members of that community were interviewed in connexion with their history of origin and settlement in the area, their material culture, relation to the forest etc. The surveyed centred around the main settlement along both sides of the road and especially around the premises of Government School Kongo. In all, five elderly members of this community were interviewed (i.e. Abomo Appolinaire, Charmant Medjou, Boamit Nkoulou Marius, His Majesty Douam Boamit Cyprien and mother of Abomo Appolinaire - Zolabot Abomo). Their choice was influenced by their role in the community, their age and their availability.

4. LEGAL FRAMEWORK FOR CULTURAL AND ARCHAEOLOGICAL SITES IN CAMEROON

The legislation currently in force is law n° 91/008 of 31st July 1991.

5. RESULTS OF SURVEY

5.1. Survey of profiles.

Our survey of the profiles criss-crossing the project area was in the hope of finding any man-made prehistoric structures such as furnaces; or slag heaps that might have resulted from smelting activities. No evidence for such activities was found. An ephemeral make shift camp of an Nzime hunter was the only indication of recent cultural manifestation in the forest (fig. 2).

Figure 2: A make-shift camp

It consisted of a plastic paper roof on pickets. A bed also made of pickets, the presence of a hearth with a burning fire, pots, an enamel plate and bowl, left no doubt that someone stayed in this make-shift camp at least for a few days.

The significance of this is that even though cultural manifestation in the forest may go back to pre-historic times, it might not have survived because of its ephemeral nature.

The interviews in Kongo village revealed that when a hunter goes into the forest (about 10-15km away from the village), he can spend about 2-3 days in such a make shift camp before coming home. This was enough time for him to set up his traps and verify them. In addition, other make shift camps outside the Nkamouna project area are more durable and can accommodate 2-4 people for a continuous stay lasting from several days up to and above a week. As they were outside the study area, they were not studied directly.

5.2. Survey of logging and mining tracks, shafts and quarries.

Some logging tracks were probably dug through the forest to permit the transport of logs long before the start of Geovic's cobalt and nickel project. New tracks continue to be made. All of these including those recently created by Geovic were surveyed for any possible cultural material. The results were all negative. A doubtful quartz tool was found in one of the laterite quarries.

Figure 3: Heavy duty quartz tools ?

In a very similar environment in the Kribi area, cultural material including pottery, iron ornaments, flaked and waisted heavy duty stone tools all dating between 550 BP and 3000 BP were found (Nlend Nlend: 2001) during a road construction between Kribi and Campo.

However, it should be emphasized that the Kribi project consisted of reconstructing an old road along which permanent villages had existed from time immemorial. Secondly, the road from Kribi to Campo more or less follows the meandering of the beach which is a favourable environment for settlement. In other words, the discovery of prehistoric settlements here was to be expected unlike in the Nkamouna area.

5.3. Surveys in the village of Kongo and interviews.

The village of Kongo is situated about 10km South of the Nkamouna project area. Its population is estimated to be about 200 inhabitants. The closest pygmy camp according to one of the elders, Abono Appolinaire, is at Mayang about about 8km away. A survey in Kongo village produced pottery and a doubtful quartz hammer stone tool.

Most of the sherds were found in front of a new building of the Government School Kongo. Very few sherds are decorated. Motifs on decorated sherds include twisted chord or twisted string roulette and grooved lines (Fig. 4). The pottery is generally made from a yellowish red clay. On the basis of this data alone, the village of Kongo is not considered to be very old.

Figure 4: Decorated pottery from Kongo village

According to Mr. Abono Appolinaire (57 years), very few women in the village (among whom was his mother) made pottery in the past. (Fig.5).

Figure 5: Locally made pottery

The clay came from Melene, about 16 km away. It was usually pounded and mixed with a slimy substance from the forest. The pot was molded using coils of clay that were later smoothed.

It is clear from the household utensils of Zolabot Abono that pottery manufacture in this village is now a thing of the past. Enamel plates and pots etc have taken over.

The villagers of Kongo came to their present site from Nkwakom, some 28km away on the road to Messok. Smelting and smithing are not very well known activities here. The lone smith known in this village is Abomo Pierre who now lives in another village some 19km away. However, it is clear that he no longer practised his trade (Fig.6) and that when he did, he only worked scrap iron. Nobody in the village had any idea about the smelting of iron. In addition, no evidence of smelting was found during the field surveys.

Figure 6: Smithing tools of Abomo Pierre

Despite the lack of cultural evidence inside the forest, this survey of the village and the interviews reveal that the culture of the Nzime people, and by extrapolation, that of the other ethnic groups including the pygmies, is largely rooted in the forest according to His Majesty Douam Boamit Cyprien (48 years), chief of the third class chiefdom of Kongo. All their totems (eagles, vipers, pythons and tortoises) all live in the forest. Without these totems, their culture would not be the same.

Moreover, their material culture is based on products of the forest, be it the house which are made of wattle and daub and a thatch roof (Fig.7), the fishing nets and baskets made of cane or the furniture made of wood and bamboo (Fig.8).

Figure 7 : A typical dwelling of an Nzime woman

Figure 8: Cane baskets

The Nkamouna forest is a place for hunting and fishing and although it may not contain perceptible cultural material, it constitutes the foundation of the material culture of the neighbouring populations. It has possibly played this role since prehistoric times.

CONCLUSION

The results presented here are constrained by limited access on certain profiles and the fact that only large vestiges of human activity such as furnaces or huge deposits of slag would be visible on the profiles. Smaller cultural evidence on the surface is not visible under these circumstances (Fig.9).

Figure 9: One of the selected profiles surveyed

Besides, the dry season would afford better conditions for a survey than the rainy season. It would also be more profitable to carry out the surveys when the pits are freshly dug.

Notwithstanding these constraints, the surveys I have carried out permit me to conclude that there is no major archaeological/cultural heritage in this part of the forest area of Cameroon as to impede the cobalt-nickel development project. However, since field Archaeology sometimes depends on the vagaries of fortune. (Asombang 1988:429), I would like to warn that care be taken to verify this absence as the project advances. Finally my recommendation is that it is important to pursue the surveys in the rest of the project area since no previous archaeological work was carried out in this region. As Geovic is building a long-term presence in the region (up to 200 years) for mining multiple sites, it is in Geovic's interest to fund further archaeological research of a general nature in the area.

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