

**UNITED NATIONS
DEVELOPMENT
PROGRAMME**



Distr.
GENERAL

DP/430
17 December 1979

ORIGINAL: ENGLISH

GOVERNING COUNCIL
Twenty-seventh session
June 1980
Agenda item 7 (d)

**UNITED NATIONS REVOLVING FUND FOR NATURAL RESOURCES EXPLORATION
PROJECT RECOMMENDED BY THE ADMINISTRATOR**

Base and Precious Metal Exploration on Samar, Philippines, (PHI/NR/79/001)

I. Background

1. In response to a request of the Government in January 1979, several mineral prospects in the Philippines were considered as possibilities for a Revolving Fund project. Eventually, three prospects were evaluated in the field, and it was found that the most suitable of these was the Lawaan area of Samar.
2. The Lawaan prospect is currently being explored by the Bureau of Mines under the Samar-Leyte Mineral Resources Development Programme (SLMRDP). This programme, approved by the President of the Philippines on 16 December 1976 and started in January 1977, was originally designed for Samar alone, but subsequently it was decided to co-ordinate this programme with the Samar-Leyte Integrated Rural Development Project (SLRDP), and the island Province of Leyte, which adjoins Samar to the west, was included. Samar is the third largest island in the Philippines, with an area of 13,430 sq. kms. and a population of just over 1 million. It was selected for development aid in accordance with the President's desire to concentrate the Government's development programme on the "depressed provinces".
3. Samar has good mineral potential as evidenced by the existence of prospects distributed throughout the island, including the almost exhausted Bagacay Copper Mines, which has produced more than 170,000 metric tons of copper from massive sulphides of the Kuroko type over a period of 20 years. There are also numerous mining claims on which geological investigations have been requested from the Bureau by claim-owners which demonstrate additional interest in the area. Bureau of Mines geologists conducting exploration on Samar have revealed the presence of significant amounts of both metallic and non-metallic mineralization, including a promising residual bauxite deposit. Four prospects for chromite, one for manganese and two for bauxite are being actively investigated by the Bureau of Mines. In addition, the Bureau is investigating the Lawaan area, where massive sulphides carrying significant copper, zinc and lead values have been discovered at the surface.

4. The orebodies at Bagacay mines are flat-lying massive sulphides of syngenetic volcanogenic origin, related to acid volcanic rocks of probable Lower Miocene age within a predominantly intermediate volcanic sequence. The same rocks extend through the exploration area.
5. The Bureau has explored energetically in the immediate Lawaan area and has identified three targets which it has defined by mapping, geophysics and geochemistry and which it has just begun to drill. In addition, prospectors have located another outcropping target of the same type at Bilwang, carrying economic values of copper, zinc, silver, gold and lead in the northern part of the area. To adequately explore these promising finds, additional funds and specialized technical input will be necessary.
6. The proposed exploration area of 318 sq. kms. in the centre of Samar is considered both to offer an above-average exploration situation and to meet the Revolving Fund's operational criteria. The prospects of rapidly putting a discovery into production are considered to be excellent. Any resulting discovery would be extremely beneficial to the economic development of Samar and the Philippines, and would be expected to provide a replenishment contribution to the Fund.

II. The project

7. The principal objective of the project is to evaluate known targets of massive sulphides of copper-zinc-lead possibly carrying recoverable amounts of gold and silver. Additional targets of the same or similar type will also be sought within the area, and evaluated as warranted.
8. The Minimum Work will include:
 - (a) Continuation of drilling already initiated by the Bureau of Mines in the immediate vicinity of the village of Lawaan;
 - (b) Re-evaluation and completion of the reconnaissance stream sediment geochemical survey of the area, together with follow-up, and geologic mapping of the entire area;
 - (c) Re-interpretation and re-surveying of existing geochemical and geophysical grids near Lawaan, and establishment of new grids at Bilwang and elsewhere;
 - (d) Detailed geologic mapping of the grids in conjunction with activities (a) and (c) above; and
 - (e) Fielding a drill into the northern part of the area, initially to test the Bilwang occurrence and then other targets generated by the above work as warranted.

9. In carrying out the Minimum Work described above, the Fund will expend not less than the equivalent of \$624,000 over a period of approximately 18 months to finance the services of international and national staff, as well as the provision of necessary supplies, equipment and contract services.

10. If the results of the Minimum Work are favourable, it is estimated that an additional amount of up to \$1,500,000 would be required to carry out a detailed evaluation of the economic potential of any discovery, including preliminary feasibility work.

III. Financial data

<u>11. Revolving Fund allocation</u>	<u>\$US</u>
Minimum Work	624 000
Possible additional expenditure for further activities following the Minimum Work	1 500 000

The financial assets of the Fund are adequate to meet the costs of this project.

IV. Recommendation

12. The Administrator recommends that:

The Governing Council,

(a) Approve this project involving a Minimum Work at a cost equivalent to \$624,000, as an obligation of the United Nations Revolving Fund for Natural Resources Exploration, and possible additional expenditures for further activities, to a maximum of \$1,500,000 bringing total possible expenditure to the equivalent of \$2,124,000;

(b) Decide that this approval shall be cancelled unless the Government of the Philippines and the Fund shall have signed a Project Agreement within a period of nine months after the date of this approval, it being understood that the Governing Council shall be notified if any such cancellation at the Council's first session after such action has been taken.
