

Central African Regional Program for the Environment

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## Abstract

## SOS Fund number - # 6b.098

Proposal Title: EVALUATION OF PHYTOMEDICINE

DEVELOPMENT AS AN ECONOMIC INCENTIVE FOR BIODIVERSITY CONSERVATION IN CAMEROON

Start date: 4/1/99
Duration: 14 months
Total Grant amount: \$31,809

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Plants and herbal products have been used as major component of therapeutic agents and sources of chemical diversity in drug discovery programs. In recent years, renewed interest has been shown in the use of medicinal plants and traditional medicine as phytomedicines and nutraceuticals. Pushed by the accelerating search for new active ingredients, pharmaceuticals companies are actively screening medicinal plants for potential new active substances. Related sectors, such as cosmetics and the flavors and fragrances industries worldwide, are also increasingly looking at the utilization of plants and herbs. The flora of central Africa are particularly rich in plant materials with medicinal or other useful properties. Several bioprospecting projects are currently conducted in parts of Central Africa and the contractual arrangements are such that crude plants are collected from the region and exported overseas for processing. The financial returns to the source countries have been minimal due to low value given to crude plant materials in drug discovery and development. Since the Rio Conference in 1992 companies are under increasing pressure to give appropriate compensation for access to biological resources. It has been argued that rather than export unprocessed vegetable drugs and crude extracts that it would be more profitable for developing countries to process the plant materials themselves as phytomedicines and other standardized but low-tech herbal products.

The fundamental issue for decisions for or against bioprospecting in comparison with phytomedicine manufacturing lies in the overall economic assessment of drug development, the technological capacity and capability of source countries to produce phytomedicine, and the relative impact of the enterprise on conservation of biological diversity.

The project aims to:

- Evaluate the status of plants from Central Africa as sources of raw materials for drug discovery and assess the current bioprospecting activities in the region.
- Compare the net returns to source countries from the trade on unprocessed medicinal plants and extracts with the potential value of processed phytomedicines and other herbal products. Assess the available capacity and capability in Cameroon (and if possible Gabon) to process medicinal plants as phytomedicines.

 Assess the possible impact of phytomedicine industry to the conservation of biodiversity in the source countries.

The project will evaluate the marketing chain (from forest, through the village to the cities) of various methods of medicinal plant utilization and assess the relative financial returns and other non-monetary benefits to the source community, region and the country. Rapid appraisal of national and regional capabilities and capacities to undertake commercially feasible phytomedicine production projects. Prices and volumes of the major medicinal plants currently traded in international markets will be collected and compared to the value which can be captured by processing the plants into finished products. The methodology requires only limited field surveys and interviews since the project will utilize existing database on the ethnobotany of the region and the sample frames of producers and traders of herbal products in previous BDCP projects.