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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Twenty-fifth Meeting
Montreal, 29-31 July 1998

PROJECT PROPOSAL: CAMEROON

This document includes the comments of the Fund Secretariat on the following project proposal:

Fumigant

- Demonstration project - two alternatives to the use of methyl bromide: non-soil cultivation techniques and application of various mixtures of other chemicals in low doses in tobacco

UNIDO

PROJECT EVALUATION SHEET **CAMEROON**

SECTOR: FUMIGANT ODS use in sector (1994-97): 12.5 ODP tonnes

Sub-sector cost-effectiveness thresholds: N/A

Project Title:

Demonstration project - Two alternatives to the use of methyl bromide: non-soil cultivation techniques and application of various mixtures of other chemicals in low doses (tobacco)

Project Data	Methyl Bromide
	SITABEC-CLTC
ODS phase-out (ODP tonnes)	-
Proposed project duration (months)	24
Total incremental costs (US \$)	196,900
- including contingency (%)	10
Total project cost (US \$)	196,900
Local ownership (%)	100
Export component (%)	-
Amount requested (US \$) {Original}	196,900
{Revised}	
Cost effectiveness (US \$/kg)	-
National Coordinating Agency	Ozone Unit, Ministry of Environment & Forestry
Implementing Agency	UNIDO
Technical review completed?	n/a

<i>Secretariat's Recommendations:</i>	
Amount recommended (US \$)	Pending decision of the Executive Committee
Project impact (ODP tonnes)	
Cost effectiveness (US \$/kg)	
Implementing Agency support cost (US \$)	
Total cost to Multilateral Fund (US \$)	

PROJECT DESCRIPTION

Demonstration project - Two alternatives to the use of methyl bromide: non-soil cultivation techniques and application of various mixtures of other chemicals in low doses (tobacco)

1. According to a survey undertaken by the Ozone Unit in Cameroon, in 1996-1997 more than 19.5 tonnes of methyl bromide were used in Douala harbor for treatment of commodities for pre-shipment and quarantine purposes as requested by importing countries; 2.32 tonnes were used in storage; and 3.16 tonnes were used in soil fumigation. During UNIDO's mission for project preparation, the team "was informed that the use of methyl bromide for storage purposes is nil or negligible as the "Office national du café et du cacao" no longer treats these commodities. Although, the information obtained is not completely reliable, it was concluded that phasing out the use of methyl bromide in soil fumigation in the only company using methyl bromide, would eliminate the use in the country". Methyl bromide consumption data reported to the Ozone Secretariat in 1996 was 33.2 tonnes.
2. In Cameroon, two companies produce cigarettes mainly for the local market: British and Cameroon Tobacco (BAT) and SITABAC. BAT imports all the raw material; they do not treat tobacco leaves with methyl bromide. Between 1994 and 1997 SITABAC consumed 12.5 tonnes of methyl bromide for treating containers importing tobacco leaves, and soil fumigation for tobacco seedbeds. The company liaises with nearly 400 growers covering an area of 400 ha; it produces seedlings on their own land and distributes them to tobacco growers. The company is planning to expand the cultivated area to 1,500 ha in the next three years and to 5,000 ha in a subsequent development phase. Under this plan, the company intends to have some growers producing seedlings, to overcome difficulties of transporting seedlings long distances, and intends to use methyl bromide unless an effective alternative is presented.
3. The project is to demonstrate the technical and economical feasibility of two proven alternative methods to the use of methyl bromide in tobacco seedling production, namely, non-soil cultivation techniques and application of low doses of other pesticides, both in combination with an Integrated Pest Management (IPM) programme.
4. Integrated pest management (IPM) approach for crop protection utilizes a combination of cultural practices, including crop rotation, cover crops, fertilization and plant nutrition; physical methods, including steam, solarization, and heat, and use of chemical compounds. Implementation of an IPM reduces the dosage for mixtures of pesticides and fungicides applied.
5. The project will be coordinated by the Ozone Officer and will be implemented by UNIDO in close cooperation with the Cameroon Leaf Tobacco Corporation, a subsidiary of

SITABAC. The total costs for human resources is US \$110,000 and the cost of equipment is US \$44,000. A cost breakdown is attached to the project evaluation sheet.

6. The expected results from project implementation are: a technical and economic analysis of utilization of the two proposed alternatives to methyl bromide, and dissemination of the results of the demonstration project among the small producers.

SECRETARIAT'S COMMENTS

1. The project concept follows the Executive Committee's guidelines. Cameroon ratified the Copenhagen Amendment on 25 June 1996.
2. UNIDO informed the Secretariat that, during project preparation, special emphasis has been put in working with the institutions, organizations, professionals and agro-industries which are transferring the technology to the farmers.
3. The Secretariat asked if UNIDO had contacted Article 2 countries with a view to recruiting government experts from those countries (as per Decision 24/18). In this regard, UNIDO indicated that "the use of external expertise is needed only when the local institutions require advice in using state of the art techniques of which there is only a theoretical knowledge in Article 5 countries".
4. Regarding national and international consultants, UNIDO stated that the project coordinator will be a national expert and included only an international consultant on non-soil technique to assist in start-up of the project, selection of subtracts, and periodic visits to supervise project implementation.
5. Notwithstanding the emphasis placed by UNIDO on working with local institutions and on seeking to reduce salary costs, the concept and cost structure of this project is similar to projects initially approved by the Executive Committee. Taking this into consideration, the Executive Committee may consider whether it wishes to approve the project with associated support costs at the funding level shown in the table below:

Project Title	Project Cost US \$	Support Cost US \$	Implementing Agency
Demonstration project. Two alternatives to the use of methyl bromide: non-soil cultivation techniques and application of various mixtures of other chemicals in low doses (tobacco)	196,900	25,597	UNIDO

ANNEX I

PRELIMINARY EQUIPMENT AND EXPENDABLES

The equipment specifications and breakdown of costs are as follows:

BUDGET LINE	DESCRIPTION	TOTAL COST (US \$)
41.01	Expendables consisting of six different soilless media and chemicals	20,000
41.02	Trays, floating beds, fixed beds, etc. to test three different systems of the size required for the demonstration plots	24,000
	TOTAL NON-EXPENDABLES	44,000
	TOTAL EQUIPMENT AND EXPENDABLES	44,000

ANNEX II

RESPONSIBILITIES OF THE COUNTERPART FOR IMPLEMENTATION OF THE DEMONSTRATION PROJECT

The counterpart will provide the following services/inputs:

1. The services of one technical person who would liaise with the national and international experts (24 w/m).
2. Transportation of the experts from the premises to the demonstration fields.
3. Transportation of the international experts from the central premises to the demonstration fields.
4. Cooperate with the experts in the preparation of an economic study on the availability and costs of the chemicals as well as organic or inert media for soilless seedbeds.
5. Preparation of at least six seedbeds of the size needed to plant one hectare with each alternative to be tested.
6. Soil preparation and planting of at least one hectare with each alternative selected.
7. Manual workers to set up and regularly maintain the demonstration plots.
8. Cooperate with the experts in the preparation of a technical and economic study of the alternatives tested comparing their operational and investment costs with the methyl bromide technology currently in use.
9. Cooperate with UNIDO and the experts in the organization of at least two workshops, with visits to the fields, for 20-25 small producers.

ANNEX III

PROJECT BUDGET

Budget Line	Description	W/M	US \$
11.51	Consultant in soilless cultivation	4 x 0.5	38,000
17.01	National expert	24	72,000
35.00	Workshops		25,000
41.00	Expendables		44,000
	Subtotal		179,000
51.00	Contingencies (10%)		17,900
99.99	TOTAL PROJECT COSTS		196,900
	Overheads (13%)		25,597
	TOTAL PROJECT BUDGET		222,497