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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Twenty-seventh Meeting Montreal, 24-26 March 1999

# PROJECT PROPOSAL: SRI LANKA

This document consists of the comments and recommendations of the Fund Secretariat on the following project:

#### **Fumigant**

• Demonstration project: alternatives to methyl bromide for eradication of tea UNDP nematodes

# PROJECT EVALUATION SHEET SRI LANKA

SECTOR: FUMIGANT

ODS use in sector (1997):

3.9 ODP tonnes

Sub-sector cost-effectiveness thresholds:

#### N/A

#### Project Title:

Demonstration project: alternatives to methyl bromide for eradication of tea nematodes

Project Data	Methyl Bromide		
	Ministry of Forestry and Environment		
ODS phase-out (ODP tonnes)	-		
Proposed project duration (months)	24		
Incremental capital cost (US \$)	366,850		
- including contingency (%)	10		
Incremental operational cost (US \$)			
Total project cost (US \$)	366,850		
Local ownership (%)	100		
Export component (%)	-		
Amount requested (US \$) {Original}	366,850		
{Revised}	310,200		
Cost effectiveness (US \$/kg)	-		
National Coordinating Agency	Ministry of Forestry and Environment		
Implementing Agency	UNDP		
Technical review completed?	Yes		

Secretariat s Recommendations:			
Amount recommended (US \$)	310,200		
Project impact (ODP tonnes)	N/A		
Cost effectiveness (US \$/kg)	N/A		
Implementing Agency support cost (US \$)	40,326		
Total cost to Multilateral Fund (US \$)	350,526		

## **PROJECT DESCRIPTION**

#### Demonstration project: alternatives to methyl bromide for eradication of tea nematodes

1. The project is to demonstrate the application of alternatives to methyl bromide used to control pests in tea production. The chosen alternatives are steam sterilization, other nematicides, soil solarization alone and in combination with nematicides and soil substitutes, organic amendments, biological control, integrated pest management (IPM) and the use of tolerant tea clones. The proposed alternatives were chosen considering the local availability of different materials such as organic substances (green manure crops) and agricultural by-products (rice and coconut husks).

2. The laboratories of the Tea Research Institute are well equipped to perform the analysis of samples required for this project. The Institute has an active outreach programme to communicate information to the tea industry; it is in direct contact with plantation owners and small co-operatives and growers to provide advice on pest control and other agronomic issues regarding tea production.

3. Alternative technologies will be demonstrated in estate nurseries, commercial nurseries and infested fields of both small holdings and company managed estates to evaluate the feasibility of the alternatives in the different climatic tea growing districts. Demonstration sites will be designed and set up on plantations with suitable controls. Each treatment will cover over 1,000 plants for the nursery demonstrations ranging from 0.12 and 0.25 hectares for a replanted tea field. The project proposes to analyse approximately 2,500 plant and soil samples. Results will be disseminated to other interested parties from Article 5 countries.

4. The expected results from project implementation are: (i) a technical and economic analysis of utilisation of proposed alternatives to methyl bromide, (ii) development of training material including manuals, workshop videos, and training of personnel in the alternative technologies used and (iii) dissemination of the results of the demonstration project. The total cost of human resources is US \$71,000, soil analysis and identification of biological control agents (US \$27,000), nematode samples, design and implementation of the IPM system (US \$120,000), equipment (US \$10,000), and dissemination of information (US \$29,500) and study tours and national travel (US \$53,000).

5. The project will be co-ordinated by the Ministry of Forestry and Environment and implemented by UNDP in cooperation with the Tea Research Institute.

## SECRETARIAT S COMMENTS AND RECOMMENDATIONS

## COMMENTS

1. The Government of Sri Lanka ratified the Copenhagen Amendment on 7 July 1997.

2. Tea is not among the priority list of crops included in the current strategy and guidelines; however, consumption of methyl bromide has been increasing in the last several years, and this

crop represents a major component of the national economy of the country (13% of total export earnings).

3. UNDP indicated that during project preparation and design, stakeholders carefully considered the availability of soil substitutes and organic amendments in situ. Steam sterilization of soil will be used only for tea nurseries where the seed-beds are small. Testing areas for soil solarization in combination with other alternative technologies was carefully selected taking into consideration where solar heating can be used without having to sacrifice land suitable for cultivation of other crops.

4. The Secretariat and UNDP discussed issues regarding, information dissemination, study tours and internal travel. Subsequently, the project cost was adjusted.

## RECOMMENDATION

Taking into consideration the above comments, the Fund Secretariat recommends blanket approval of the project with associated support costs at the funding level shown in the table below:

Project Title	Project Cost	Support Cost	Implementing
	US \$	US \$	Agency
Demonstration project: alternatives to methyl	310,200	40,326	UNDP
bromide for eradication of tea nematodes			