



**United Nations
Environment
Programme**

Distr.
LIMITED

UNEP/OzL.Pro/ExCom/38/30
26 October 2002

ORIGINAL: ENGLISH



EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Thirty-eighth Meeting
Rome, 20-22 November 2002

PROJECT PROPOSALS: DOMINICAN REPUBLIC

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

Fumigant

- Phase-out of methyl bromide in melon, flowers and tobacco UNIDO

Halon

- National halon bank management plan development UNDP

**PROJECT EVALUATION SHEET
DOMINICAN REPUBLIC**

SECTOR: Fumigant ODS use in sector (2001): 144 ODP tonnes

Sub-sector cost-effectiveness thresholds: n/a

Project Title:

(a) Phase-out of methyl bromide in melon, flowers and tobacco

Project Data	Methyl bromide
Enterprise consumption (ODP tonnes)	144.00
Project impact (ODP tonnes)	60.6
Project duration (months)	48
Initial amount requested (US \$)	691,587
Final project cost (US \$):	
Incremental capital cost (a)	1,418,250
Contingency cost (b)	141,835
Incremental operating cost (c)	168,782
Total project cost (a+b+c)	1,728,867
Local ownership (%)	100%
Export component (%)	0%
Amount requested (US \$)	
Cost effectiveness (US \$/kg.)	
Counterpart funding confirmed?	
National coordinating agency	Comision Gubernamental del Ozono
Implementing agency	UNIDO

Secretariat's Recommendations	
Amount recommended (US \$)	
Project impact (ODP tonnes)	
Cost effectiveness (US \$/kg)	
Implementing agency support cost (US \$)	
Total cost to Multilateral Fund (US \$)	

PROJECT DESCRIPTION

Phase-out of methyl bromide in melon, flowers and tobacco

1. The project is to phase out 60.6 ODP tonnes of methyl bromide (MB) used for soil fumigation in melons (where 73 per cent of the total amount of MB is used), cut flowers (12 per cent) and tobacco crops (5 per cent) in Dominican Republic, representing 43 per cent of the total MB consumption in the country. Implementation of the project will achieve the 20 per cent reduction in MB baseline consumption by 2005. The project proposal will be the only investment project that the Government of the Dominican Republic proposes to achieve the complete phase out of MB.
2. All farms are nationally-owned with the exception of one melon farm with a 50 per cent foreign ownership. The export components for melons and cut flowers are about 100 per cent and 50 per cent, respectively.
3. The selected alternatives are alternative chemicals in combination with solarisation (melons), steam pasteurisation (cut flowers) and the floating tray system (tobacco). A demonstration project on alternatives to the use of MB in soil fumigation was approved by the Executive Committee at its 26th Meeting at a total cost of US \$324,500 (UNIDO).
4. The demonstration project was completed in 2001 and the alternative technologies proven to be technically and economically viable for the prevailing conditions in Dominican Republic. Specifically, steaming, alternative chemicals (metam sodium and telone) and the floating tray system, have been selected by the farmers to be applied according to specific locations and crops.
5. The use of steam pasteurisation in cut flowers crops requires 6 boilers (US \$317,000). The floating tray system requires installation of micro-tunnels, with floating trays and conductivity meters (about US \$1 million). The project also includes a training programme and one international consultant (US \$233,200). Incremental operating costs amount to US \$169,000.
6. The Government of Dominican Republic is committed to a permanent reduction in aggregate consumption of controlled uses of MB, and to achieve the complete phase out of MB by 2006, through the implementation of the project in full.
7. The project will be implemented by UNIDO under the co-ordination of the Ozone Office and the Ministry of the Environment, in close co-operation with INTABACO (Tobacco Institute) and the Dominican Agro-industry Association.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

8. The total project cost was adjusted taking into account the foreign ownership component of one of the melon farms where MB is applied.

9. The Secretariat pointed out that the export component to non-Article 5 countries was not taken into consideration in the calculation of the project cost. UNIDO indicated that while the production of melon is for export, however, the project was only covering 50 per cent of the surface area (because of foreign ownership) and the Government was only requesting funding to cover part of the incremental operating costs. The export of cut flowers varies depending on price fluctuations; and the cut flowers production is not exclusively for export to non-Article 5 countries.

10. The Secretariat and UNIDO discussed issues related to the cost of boilers for steaming (at US \$50,000/unit), labour costs which are associated with the operating costs, and the long-term sustainability of the technologies proposed for cut flowers taking into consideration their relatively high incremental operating costs (US \$1,162/ha). UNIDO informed the Secretariat that the project was designed so that the equipment would be shared by small producers. From other similar projects it has been proven that the requirement for mobility increases the price of the equipment considerably. Recent quotations received for boilers for Uruguay were in the order of US \$50,000/unit.

11. Regarding the sustainability of steam pasteurisation, UNIDO indicated that the price of MB will increase in the future and, consequently, the cost difference will decrease; the use of steam is proposed within an IPM programme in order to be cost-effective; steam pasteurisation has also the additional advantage of no waiting time needed after its application. The fuel consumption of 6,000 l/ha is based on data from the equipment supplier used in the demonstration project. This consumption rate also depends on other factors such as type of soils, humidity of the soil and depth of application.

12. The labour for the application of metam sodium is similar to the application of MB. However, the project proposes solarisation combined with metam sodium (at reduced rates) which requires additional labour for preparation of the soil to keep an appropriate structure, irrigation to field capacity; plastic covering/uncovering and continuous monitoring of temperature and humidity.

13. The Secretariat and UNIDO also discussed the level of costs associated with consultants and training in light of the small surface area treated with MB which is concentrated in relatively few farms. UNIDO indicated that although the number of cut flowers farms is low, a large number of tobacco farms need to be trained on the floating tray system.

14. The Secretariat and UNIDO are finalising discussions on the project cost. The results of the discussions will be finalised prior to the 38th Meeting of the Executive Committee.

RECOMMENDATION

15. Pending.

**PROJECT EVALUATION SHEET
DOMINICAN REPUBLIC**

SECTOR: Halon ODS use in sector (2001): 3 ODP tonnes

Sub-sector cost-effectiveness thresholds: n/a

Project Titles:

(a) National halon bank management plan development

Project Data	Banking
Enterprise consumption (ODP tonnes)	3.00
Project impact (ODP tonnes)	3.00
Project duration (months)	24
Initial amount requested (US \$)	50,000
Final project cost (US \$):	
Incremental capital cost (a)	
Contingency cost (b)	
Incremental operating cost (c)	
Total project cost (a+b+c)	40,000
Local ownership (%)	100%
Export component (%)	0%
Amount requested (US \$)	40,000
Cost effectiveness (US \$/kg.)	n/a
Counterpart funding confirmed?	n/a
National coordinating agency	National Ozone Unit
Implementing agency	UNDP

Secretariat's Recommendations	
Amount recommended (US \$)	40,000
Project impact (ODP tonnes)	3.00
Cost effectiveness (US \$/kg)	
Implementing agency support cost (US \$)	5,200
Total cost to Multilateral Fund (US \$)	45,200

PROJECT DESCRIPTION

16. This project would establish a national halon bank for the Dominican Republic. The halon bank management plan (HBMP) will ensure that Dominican Republic can meet its obligations under the Montreal Protocol. The HBMP allows for the development of a compliance strategy by enabling the country to maintain its current halon levels for critical fire protection requirements; gradually reduces dependence on halons; ensures identification of, and provision for, critical uses of halons; and avoids unnecessary economic disruptions.

17. The activities under this project include the formulation of a national HBMP, the provision of technical support and required recovery & recycling and quality control equipment, and the inclusion of the Dominican Republic's national HBMP within the context of a Regional Halon Bank Management Plan (RHBMP) for the Caribbean in order to encourage regional coordination of phase-out efforts. The 26th Meeting of the Executive Committee approved a bilateral project for the Government of Canada to develop a regional halon bank management plan for selected countries in the Caribbean including: Bahamas, Barbados, Grenada, Guyana, Jamaica and Trinidad & Tobago. The Dominican Republic would join that regional halon bank.

Halon Consumption Background

18. In the Dominican Republic, halons are widely used in the chemical industry because of its high efficiency in fire protection. Halon is also installed in telecommunications equipment, civil defense and fire brigade, military and civil aviation, commercial banks, electrical utilities, and ferries and sea vessels. The proposal indicated that there were no manufactures of fire protection systems in the country.

19. The Dominican Republic's baseline for the purposes of compliance with the halon control measures of the Montreal Protocol is 4.2 ODP tonnes and its 2001 consumption was 3.0 ODP tonnes. The estimated installed capacities of halons in the country is 15 to 30 ODP tonnes and this data will be verified during the development of the national HBMP.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

20. The guidelines for halon banking (Decision 18/22) provide for US \$25,000 for countries with a low level of installed capacity to qualify for a one time funding of US\$25,000 which can be used for the acquisition of recycling equipment or as an incentive to recover halons from existing systems or the establishment of exchange programmes to be decided by the country (para.a (iii)). Vietnam (at the 29th Meeting) and Macedonia (at the 37th Meeting) have chosen the option of an incentive payment where the funds were transferred to the Government. The proposed activity for the Dominican Republic involves both national and international activities. UNDP indicated that the Government of the Dominican Republic was aware of this option, but had elected to adopt a regional approach in order to be able to benefit from a centralized,

regional mechanism that would assist the participating countries in trading recovered and refurbished halons in the future. The funds allocated for regional activities amounting to US \$15,000 to cover the costs of co-ordination, communication amongst members of the Network, information-sharing, translation of information documents (developed through the regional project with input from the Dominican Republic), training of end-users, database maintenance, and participation (travel, per diem) in meetings of the Caribbean Halon Bank Network.

21. The Executive Committee has approved regional halon banking where the total amount of funds on a country basis was about US \$50,000, however, regional activities were included. This first occurred for the regional halon bank for East and South Africa English-speaking countries. Subsequently, the Committee approved a similar amount for West Africa.

22. UNDP indicated that one of the goals of the halon bank manager for the first two years of operation will be to devise and implement a strategy to allow the project to continue beyond the Multilateral Fund's support by considering options such as Government support, a user's fee or a mixture of the two.

23. UNDP indicated that the Government of the Dominican Republic understood that this would be last project that it would receive from the Montreal Protocol for the halon sector.

RECOMMENDATIONS

24. The Fund Secretariat recommends blanket approval for this project to the Executive Committee in the amount of US \$40,000 plus support costs based on a 13 per cent agency fee of US \$5,200.

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	National halon bank management plan development	40,000	5,200	UNDP
