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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Sixty-ninth Meeting  
Montreal, 15-19 April 2013

**PROJECT PROPOSAL: MEXICO**

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

Fumigant

- National methyl bromide phase-out plan (fourth tranche) Canada/Italy/Spain/UNIDO

**PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS**  
**Mexico**

<b>(I) PROJECT TITLE</b>	<b>AGENCY</b>
Methyl bromide	Canada, Italy, Spain, UNIDO

<b>(II) LATEST ARTICLE 7 DATA (ODP Tonnes)</b>				<b>Year: 2011</b>	
CFC: -8.8	CTC: 0	Halons: 0	MB: 488.2	TCA: 0	

<b>(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP Tonnes)</b>										<b>Year: 2011</b>			
Substances	Aerosol	Foam	Halon	Refrigeration		Solvent	Process Agent	MDI	Lab Use	Methyl Bromide		Tobacco fluffing	Total Sector Consumption
				Manufacturing	Servicing					QPS	Non QPS		
MBR										311.8	488.2		

<b>(IV) PROJECT DATA</b>			2008	2009	2010	2011	2012	2013	Total
<b>Montreal Protocol Consumption Limits</b>		MB	904.6	904.6	904.6	904.6	904.6	904.6	
<b>Maximum Allowable Consumption (ODP Tonnes)</b>		MB	895.	795.	675.	525.	325.	0.	
<b>Project Costs (US\$)</b>	Canada	Project Costs	500,000		500,000				1,000,000
		Support Costs	58,527		58,527				117,054
	Italy	Project Costs	1,000,000						1,000,000
		Support Costs	120,000						120,000
	UNIDO	Project Costs	2,000,000		2,000,000		1,200,000	422,379	5,622,379
		Support Costs	150,000		150,000		90,000	31,678	421,678
	Spain	Project Costs			800,000		800,000		1,600,000
		Support Costs			93,000		93,000		186,000
<b>Total Funds Approved in Principle (US\$)</b>		Project Costs	3,500,000		3,300,000		2,000,000	422,379	9,222,379
		Support Costs	328,527		301,527		183,000	31,678	844,732
<b>Total Funds Released by the ExCom (US\$)</b>		Project Costs	3,500,000		3,300,000		2,000,000	-	8,800,000
		Support Costs	328,527		301,527		183,000	-	813,054
<b>Total Funds Requested for Current Year (US\$)</b>		Project Costs						<b>422,379</b>	422,379
		Support Costs						<b>31,678</b>	31,678

<b>(V) SECRETARIAT'S RECOMMENDATION:</b>	<b>Blanket approval</b>
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## PROJECT DESCRIPTION

1. On behalf of the Government of Mexico UNIDO, as the lead implementing agency, has submitted to the 69<sup>th</sup> meeting of the Executive Committee a progress report on the implementation of the third tranche of the national methyl bromide (MB) phase-out plan for Mexico, and a request for funding for the fourth (and final) tranche of the project. The level of funding requested is US \$422,379 plus agency support costs of US \$31,678 for UNIDO.

### Background

2. The MB phase-out plan was approved in principle at the 54<sup>th</sup> meeting at a total funding level of US \$9,222,379, to be implemented by the Governments of Canada, Italy and Spain and by UNIDO. The first (US \$3,500,000), second (US \$3,300,000), and third (US \$2,000,000) tranches of funding were approved at the 54<sup>th</sup>, 60<sup>th</sup> and 66<sup>th</sup> meetings, respectively. At its 63<sup>rd</sup> meeting, the Executive Committee approved the transfer from the Government of Canada to UNIDO of US \$417,522, plus agency support costs of US \$31,314 associated with the 2012 and 2013 work programmes for the phase-out of MB in commodities in Mexico, and the revised agreed conditions for the phase-out of MB in Mexico (decision 63/13(d)).

### Progress report

3. The national MB phase-out plan proposes to phase out almost 900 ODP tonnes of MB used in several crops and for the fumigation of commodities and structures as shown in Table 1 below.

**Table 1. Distribution of MB consumption according to the national phase-out plan**

<b>Crop</b>	<b>Area using MB</b>	<b>MB (ODP tonnes)</b>	<b>No. of farmers</b>
Strawberries	570	57.6	94
Tomato	1,023	214	90
Chile bell	1,097	257.6	69
Melon	205	36.5	118
Berries	161	36.7	83
Garlic	630	148.2	113
Other	54	12.7	28
Flowers	341	41.1	99
Commodities/structures		90.0	
<b>Total</b>	<b>4,081</b>	<b>894.4</b>	<b>694</b>

4. Implementation of the first three tranches of the project has resulted in the phase-out of 449 ODP tonnes of MB used in soil fumigation plus 75 ODP tonnes used in post-harvest applications through the introduction of alternative technologies. Voluntary agreements with new farmers to eliminate the use of MB in their farms were reached whereby greenhouses or extensions to existing ones, farm equipment for the introduction of alternative chemicals, and technical assistance were provided. The phase-out of MB in soil fumigation has been supported with training and technical assistance activities. National experts have been hired on a full-time basis to provide training and know-how in the various alternative technologies. A summary of the activities implemented since the approval of the project up to the end of 2012 is shown in Table 2.

**Table 2. Phase-out activities implemented so far under the MB phase-out plan**

Sector	Alternatives	Equipment provided	Area (ha)	MB phased out (ODP t)	US\$ disbursed
Melons, watermelons	Grafting	Two new greenhouses; extension of an existing greenhouse	760	106.0	1,053,000
Tomatoes	Grafting	Five greenhouses; extension of two existing greenhouses	1,000	123.0	2,963,208
Strawberries	Chemicals, substrate, greenhouse	Alternative chemicals, substrate, two spading machine	395	108.0	184,289
Flower nurseries	Steam and integrated pest management (IPM)	One steam machine and accessories	2	100.0	90,000
Flowers	IPM and steam (one user)	One chopping machine; solar boxes <sup>1</sup>	31	12.0	80,000
Technical assistance					2,134,838
Total			2,188	449.0	6,505,335

5. Implementation of the post-harvest component of the phase-out plan began in October 2009. Through this, the following activities have been carried out: technical assistance to companies which selected and applied alternatives to MB, namely phosphine, sulphur fluoride and heat treatment; demonstration and training workshops for the dissemination of alternatives in different regions of Mexico (290 technicians already trained); the procurement of equipment for fumigation with phosphine and sulphur fluoride, as well as the use of heat treatment.

6. The phase-out activities have been supported with regulatory controls by the Government of Mexico through the licensing and quota systems as well as with regulations for pesticides, nutrients for plants, and toxic or dangerous substances and materials. Based on both controls, the Government has the required tools to reduce MB imports in accordance with its agreement with the Executive Committee, while at the same time, assisting farmers and fumigators in adopting alternative technologies.

7. As of February 2013, of the total funding of US \$7,800,000 approved for the soil fumigation component, US \$6,505,335 had been disbursed or obligated. The balance of US \$1,294,665 will be disbursed in 2013. Of the total funding of US \$1,000,000 approved for the commodities component, US \$954,711 had been disbursed or obligated. The balance of US \$45,289 will be disbursed in 2013.

#### Plan of action

8. The Government of Mexico has committed to achieving the complete phase-out of MB by the end of 2013. The main target is to address the phase-out of MB used in soil fumigation for the production of strawberries and berries, through the introduction of alternative chemicals and promoting the use of substrates in order to guarantee the long-term sustainability of technologies. Installation of greenhouses will be completed, and additional pieces of equipment and farm material will be distributed among strawberry, berry, and tomato producers. Technical assistance to consolidate the technology transfer already completed, and training for growers along with monitoring of MB users and the performance of MB alternatives will continue to be provided. The technologies to be introduced are substrate in strawberries and berries, grafting in tomatoes and biofumigation in addition to alternative chemicals in strawberries and berries.

<sup>1</sup> A device developed by Embrapa, Brazil, which use the sun as the source to heat substrates.

9. For commodities and structural fumigation, training will be provided in the use of heat treatment equipment in conjunction with awareness-raising workshops and technical assistance on a continuous basis to fumigation enterprises.

## **SECRETARIAT'S COMMENTS AND RECOMMENDATION**

### **COMMENTS**

10. The 2011 MB consumption reported by the Government of Mexico under Article 7 of the Protocol of 488.2 ODP tonnes was already 36.8 ODP tonnes below the 525.0 ODP tonnes allowed for that year under the Agreement with the Executive Committee. MB consumption in 2012 has been estimated at 325.0 ODP tonnes (based on the licensing and quota system), i.e., equal to that allowed under the Agreement.

11. Based on the information contained in the progress report and supported by the major reduction on MB consumption so far achieved (i.e., from 895 ODP tonnes in 2008 to 325 ODP tonnes in 2012), it can be concluded that the implementation of the project is going very well. It also appears that the technologies selected by farmers have been successfully introduced in the various crops throughout the country despite the relatively large surface area and the geographical distribution where MB is applied. UNIDO further explained that the project had been designed based on "voluntary agreements with farmers", in which they were encouraged to introduce the alternative technologies. For each crop and region, the largest MB consuming farms were selected to implement the various technologies. Technical assistance and training was provided to all farmers by national experts who were located in all producing regions in the country and received continuous training and/or technical support from international experts. In the case of post-harvest fumigation, the project focussed on fumigator enterprises and high consumers of MB, and was supported by national consultants who provided training and technical assistance to end-users.

12. UNIDO also explained that the MB used for the production of strawberries and berries currently represents the largest consumer of MB in the country. During the last tranche of the project, the use of metham sodium applied with a spading machine, as the most viable alternative technology, will continue to be demonstrated among farmers. UNIDO will also promote the use of substrate (coconut fibre) in different regions of the country based on the experience gained from one large farm that had recently introduced this technology. In addition, a workshop on alternative technologies for the phase-out of MB in strawberries will be conducted in May 2013 with the participation of representative of the Government of Mexico, farmers, national and international experts and UNIDO.

13. In addition to the license and quota systems, the Government of Mexico will issue a regulation banning the import of MB for controlled uses as of 1 January 2014.

### **RECOMMENDATION**

14. The Fund Secretariat recommends that the Executive Committee:

- (a) Takes note of the progress report on the implementation of the third tranche of the national methyl bromide (MB) phase-out plan in Mexico;
- (b) Approves the 2013 annual implementation programme associated with the fourth (and final) tranche; and
- (c) Requests the Government of Mexico, UNIDO and the Governments of Canada, Italy and Spain to submit the project completion report to the Executive Committee soon after completion of the 2013 annual implementation programme.

15. The Secretariat further recommends blanket approval of the 2013 plan associated with the fourth (and final) tranche of the national MB phase-out plan with associated support costs at the funding level as shown in the table below.

	<b>Project Title</b>	<b>Project Funding (US \$)</b>	<b>Support Cost (US \$)</b>	<b>Implementing Agency</b>
(a)	National methyl bromide phase-out plan, (fourth tranche)	422,379	31,678	UNIDO

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