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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: CHILE

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

Fumigant

- National phase-out of methyl bromide - terminal project (second tranche) UNIDO/UNEP

PROJECT DESCRIPTION

1. On behalf of the Government of Chile UNIDO, as the lead implementing agency, has submitted to the 69th Meeting of the Executive Committee a progress report on the implementation of the first tranche of the terminal project for a national phase-out plan for methyl bromide (MB), and a request for funding for the second (and final) tranche. The level of funding requested is US \$557,917 plus agency support costs of US \$41,844 for UNIDO.

Background

2. The MB national phase-out plan was approved in principle at the 60th meeting at a total funding level of US \$1,657,917, plus agency support costs of US \$124,344 for UNIDO, and US \$73,000, plus agency support costs of US \$9,490 for UNEP, on the understanding that no additional funding would be provided to Chile for the phase-out of controlled uses of MB in the country. At the same meeting, the first tranche of the phase-out plan was also approved at a total cost of US \$1,100,000, plus agency support costs of US \$82,500 for UNIDO, and US \$73,000, plus agency support costs of US \$9,490 for UNEP.

Progress report

3. The objective of the project is to phase out 170 ODP tonnes of MB used as a soil fumigant in the production of tomatoes, strawberries (fruit and runners) and fruit tree nurseries. The selected alternative technologies to phase out MB are: grafting in the tomato production area, and use of alternative chemicals (e.g., chloropicrin, 1,3-dichloropropene combined with chloropicrin, metham sodium and/or metham potassium). The design of the project was based on the introduction of the alternative technologies in pilot trials with the voluntary participation of growers, supported through technical assistance and training activities.

4. An Advisory Committee integrated by the Ministry of Environment, the Ministry of Agriculture, and UNIDO was established to coordinate and advise on the strategy of the national MB phase-out plan. In addition, the Methyl Bromide Board (that was already established with representatives from farmers, different institutions related to agriculture, and providers of agriculture materials and chemicals), is participating as a policy advisory body. A national project coordinator and a national advisor had been hired for project coordination and implementation.

5. UNEP provided assistance on policy development and on designing a system for monitoring imports of MB, that would also prevent MB imported for quarantine and pre-shipment applications (QPS) being used as a soil fumigant (i.e., for controlled uses). Relevant modifications to the current norm to control the use of MB have been drafted and are under review by relevant authorities.

6. Based on results achieved thus far, grafting, biofumigation, and metham sodium plus 1,3-dichloropropene in combination with chloropicrin are the alternative technologies that could successfully replace the use of MB in the production of tomatoes. In support to the pilot demonstration, several training programmes have been implemented. For example, in December 2012, two workshops on the management of grafted plants, biofumigation and the use of substrates were conducted with the participation of about 100 people.

7. The introduction of alternatives in the strawberry sector has been more difficult than anticipated. During the demonstration workshop conducted to present the phase-out plan, farmers questioned the overall plan and how the funds would be used. In spite of this situation, four pilot sites were established to demonstrate the use of alternative chemicals in strawberry fields. However, the results of the demonstration could not be processed. Also, the largest consumer of MB for strawberry nurseries conducted trials in September 2012 using metham sodium with a spading machine. Preliminary results for replacing MB were satisfactory and promising. In 2013, the use of this technology will continue to be

tested in a more systematic and methodological manner. In support of the trials, several training workshops and conferences have been conducted including for soil borne diseases and their control.

8. As of February 2013, of the total funding of US \$1,173,000 approved for the first tranche, US \$985,804 had been disbursed. The balance of US \$187,196 will be disbursed in 2013.

2013-2014 work programme

9. The Government will continue liaising with national institutions and providing technical support on the control of soil pathogens without the use of MB as a way to guarantee the sustainability of the phase-out of MB.

10. Additional training and technical assistance will be provided to the tomato sector for the management of grafted plants; and farm materials will be given to complete the pilot demonstrations. With regard to the strawberry sector, several training and technical assistance programmes will be implemented; farm equipment will be purchased and distributed among farmers. Eight dissemination workshops on soil pathogens and their control will be organized in four different horticulture regions with the participation of main stakeholders, universities and research institutes.

11. Through the implementation of the second (and final) tranche, the Government of Chile will achieve the complete phase-out of MB by 1 January 2015.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

12. The 2011 MB consumption reported by the Government of Chile under Article 7 of the Protocol of 166.3 ODP tonnes was approximately 22 per cent below the baseline of 212.5 ODP tonnes. MB consumption in 2012 has been estimated at 166.6 ODP tonnes.

13. In regard to regulations controlling MB in the country, UNIDO explained that the Ozone Law enacted in 2006 had established the maximum annual import of MB according to the phase-out schedule of the Montreal Protocol. Importers, distributors and users of MB must report quantities purchased, stored, distributed and used, by specific activity, to the Ministry of Agriculture every three months. Any modification to the law or introduction of a new regulation to change the phase-out schedule would take several years as it would require public consultation with all stakeholders. Accordingly, the Government of Chile has committed to completely phase out consumption of MB by 1 January 2015. Moreover, customs authorities in Chile are very efficient in controlling imports, by covering controlled uses of MB, uses in QPS applications, as well as amounts that have been regenerated. To avoid deviation from the use of MB for QPS applications to soil fumigation, UNEP will provide further assistance in reinforcing the database system within the customs authorities so as to control and trace imports of MB by identifying the final use.

14. Noting that the project has been developed rather as a demonstration project than as an investment project, the effectiveness and long-term sustainability of the alternatives were questioned. UNIDO advised that the pilot cases are intended to demonstrate how to control soil borne diseases in a sustainable manner; the effectiveness of alternative technologies under local conditions has been demonstrated to farmers, who will then be able to select the best alternative technology. UNIDO also indicated that farmers that were reluctant in the past to phase out MB are now introducing non-chemical alternatives (e.g., biofumigation or substrates) or reduced doses of alternative chemicals and that there is an increase in the production of grafted tomato plants in nurseries which are sold to farmers.

15. In regard to the long-term sustainability of the selected technologies once the project is completed, the Advisory Committee together with UNIDO and UNEP has directed the MB phase-out plan to focus on the control of pathogens in the soil and not just in phasing out MB by end of 2014, so as to reach sustainable production of tomatoes and strawberries. Through the implementation of the MB phase-out plan Chile has strengthened its national capacity for the use of alternative technologies. The introduction of non-chemical alternatives to farmers further supports the long-term sustainability of the phase-out of MB. Although the use of alternative chemicals appears to be more cost-effective in the short period of time, their long-term sustainability is questionable given their impacts on the environment and market trends. Accordingly, additional technical support and training in this direction is proposed during the implementation of the last tranche of the project.

16. Furthermore, the Government of Chile, with the assistance of UNEP and UNIDO, has liaised with different institutions (including the National Agriculture Research Institute and various universities) to facilitate the introduction of alternative technologies in order to guarantee the long-term sustainability of the phase-out.

RECOMMENDATION

17. The Fund Secretariat recommends that the Executive Committee:

- (a) Takes note of the progress report on the implementation of the first tranche of the terminal project for a national phase-out plan for methyl bromide (MB) in Chile;
- (b) Approves the 2013 – 2014 annual implementation programme associated with the second (and final) tranche; and
- (c) Requests the Government of Chile, UNIDO and UNEP to submit the project completion report to the Executive Committee, soon after completion of the 2013 – 2014 annual implementation programme.

18. The Secretariat further recommends blanket approval of the 2013 - 2014 plan associated with the second (and final) tranche of the terminal project for a national phase-out plan for MB, with associated support costs at the funding level shown in the table below:

	Project Title	Project Funding (US \$)	Support Cost (US \$)	Implementing Agency
(a)	Terminal project for a national phase-out plan for MB, (second tranche)	557,917	41,844	UNIDO
