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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Twenty-ninth Meeting
Beijing, 24-26 November 1999

PROJECT PROPOSALS: TURKEY

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

Fumigant

- Introduction of alternatives to methyl bromide in protected strawberry, pepper and eggplant in East Mediterranean region and in strawberry in Aydm province of Turkey

IBRD

**PROJECT EVALUATION SHEET
TURKEY**

SECTOR: Fumigant ODS use in sector (199): ODP tonnes

Sub-sector cost-effectiveness thresholds: US \$/kg

Project Titles:

- (a) Introduction of alternatives to methyl bromide in protected strawberry, pepper and eggplant in East Mediterranean region and in strawberry in Aydm province of Turkey

Project Data	Methyl bromide
Enterprise consumption (ODP tonnes)	
Project impact (ODP tonnes)	50.00
Project duration (months)	36
Initial amount requested (US \$)	366,440
Final project cost (US \$):	
Incremental capital cost (a)	
Contingency cost (b)	
Incremental operating cost (c)	
Total project cost (a+b+c)	
Local ownership (%)	100%
Export component (%)	0%
Amount requested (US \$)	366,440
Cost effectiveness (US \$/kg.)	
Counterpart funding confirmed?	
National coordinating agency	Ministry of Agriculture
Implementing agency	IBRD

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

PROJECT DESCRIPTION

Introduction of alternatives to methyl bromide in protected strawberry, pepper and eggplant in East Mediterranean region and in strawberry in Aydm province

1. MB consumption in the country has increased from 420 ODP tonnes in 1995 to 790 ODP tonnes in 1998. The Government of Turkey has decided to phase out 25 per cent of the use of MB in 2005 with a complete phase out by 2008.
2. The Government is submitting a project to phase out 30 ODP tonnes of MB used for soil disinfestation in strawberry, pepper and eggplant crops in the East Mediterranean region of Turkey. In the first year the project will demonstrate and evaluate the economic and technical feasibility of selected alternatives to MB (steam, substrates, soil solarization, biological control, low doses of alternative chemicals and bio fumigation in combination with an IPM system). In the second year, the best alternative technologies will be used for developing a training and extension programme which will be pilot-tested with selected groups of farmers. In years 2 and 3, training programmes will be implemented to ensure that farmers consuming 50 per cent of the MB become competent in replacing it with the alternative technology selected (2,100 strawberry farmers, 600 pepper producers and 300 eggplant producers).
3. Strawberry farmers in the Aydm province will also be trained on alternatives of MB. The project proposal did not provide data on exports of horticulture products and strawberries to non-Article 5 countries.
4. Policy development and awareness raising will also be undertaken to ensure that 90 ODP tonnes of MB will be phased-out permanently by 2008.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. The project proposal indicates that the Government of Turkey is committed to phase out consumption of MB in 2008. However, the regulatory framework and policy measures to achieve the phase out are not mentioned in the proposal.
2. The Executive Committee approved at its 25th Meeting a demonstration project to assess the technical and economical feasibility of five alternative methods to the use of MB in protected horticultural crops (tomatoes and cucumbers) and cut flowers (soil-solarization, bio-fumigation, low doses of alternative chemicals, non-soil techniques and steam pasteurization as part of an IPM system), and allocated US \$314,600 to UNIDO for its implementation. The project is being implemented in the Antalya province, the same region as the World Bank's project covering strawberry, pepper and eggplant crops. Taking into consideration that the results from the UNIDO project on tomatoes and cucumbers also apply to pepper and eggplants, the Secretariat informed the World Bank that the component of the project related to these two crops will constitute double counting.

3. The Secretariat also made several observations on the project proposal, including: (i) reliability of MB consumption data; (ii) consideration of the use of pathogen-free natural substrate as a very cost-effective and sustainable technology; (iii) the time for implementation of the full training programme which will start only in the 3rd year of the project; (iv) high cost of some equipment items and/or justification for the need of other pieces (boiler, thermometers and thermographs, transporter); and further clarification on non-personnel related costs.

4. The Secretariat also indicated to the World Bank that salaries constitute about 45 per cent of the total cost of the project. Besides the project coordinator (36 months), the services of specialists in DNA method, phytopathologist, nematologist, weed scientist, extension staff and technicians (for a total of 82 man/month) have been included. Based on the size and scope of the project, the use of so many professional staff on a full-time basis is not justifiable.

5. The Fund Secretariat is still discussing these issues with the World Bank. The results of the discussions will be communicated to the Executive Committee accordingly.

RECOMMENDATION

1. Pending.