UNITED NATIONS

EP

United Nations Environment Programme

Distr.
GENERAL

UNEP/OzL.Pro/ExCom/58/29
9 June 2009

ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Fifty-eighth Meeting
Montreal, 6-10 July 2009

PROJECT PROPOSALS: CHINA

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

Fumigant

- National phase-out of methyl bromide (phase II, fourth tranche) — Italy and UNIDO

Process agent

- Sector plan for phase-out of ODS process agent applications (phase II) and corresponding CTC production: 2009 annual programme — World Bank

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

China

(I) PROJECT TITLE	AGENCY
Methyl bromide	Italy, UNIDO

(II) LATEST ARTICLE 7 DATA (ODP Tonnes)			Year: 2007	
CFC: 5832.1	CTC: 265.1	Halons: 594.5	MB: 384.1	TCA: 251.1

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP Tonnes)					Year: 2007							
Substances	Aerosol	Foam	Halon	Refrigeration		Solvent	Process Agent	MDI	Lab Use	Methyl Bromide		Tobacco fluffing	Total Sector Consumption
				Manufacturing	Servicing					QPS	Non QPS		
CFC	440.	237.4			2,854.2			340.5					3,872.1
CTC									265.1				265.1
Halons			788.3										788.3
Methyl Bromide										1,059.5	313.5		1,373.1
Others													0
TCA						251.1							251.1

(IV) PROJECT DATA			2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Montreal Protocol Consumption Limits		MB	1,102.1	1,102.1	1,102.1	881.7	881.7	881.7	881.7	881.7	881.7	881.7	881.7	881.7	881.7	0.	
Maximum Allowable Consumption (ODP Tonnes)		MB	1,087.8	1,087.8	1,087.8	880.	723.8	570.6	390.	250.	209.	176.	150.	100.	50.	0.	
Project Costs (US$)	UNIDO	Project Costs		4,086,600.				1,200,000.	1,800,000.	1,300,000.	600,000.	500,000.	500,000.	500,000.	302,742.		10,789,342.
		Support Costs		306,495.				90,000.	135,000.	97,500.	45,000.	37,500.	37,500.	37,500.	22,706.		809,201.
	Italy	Project Costs				4,000,000.											4,000,000.
		Support Costs				470,000.											470,000.
Total Funds Approved in Principle (US$)		Project Costs		4,086,600.		4,000,000.		1,200,000.	1,800,000.	1,300,000.	600,000.	500,000.	500,000.	500,000.	302,742.		14,789,342.
		Support Costs		306,495.		470,000.		90,000.	135,000.	97,500.	45,000.	37,500.	37,500.	37,500.	22,706.		1,279,201.
Total Funds Released by the ExCom (US$)		Project Costs		4,086,600.		4,000,000.		1,200,000.	1,800,000.	0.	0.	0.	0.	0.	0.		11,086,600.
		Support Costs		306,495.		470,000.		90,000.	135,000.	0.	0.	0.	0.	0.	0.		1,001,495.
Total Funds Requested for Current Year (US$)		Project Costs								**1,300,000.**							1,300,000.
		Support Costs								**97,500.**							97,500.

(V) SECRETARIAT'S RECOMMENDATION:	Blanket approval

PROJECT DESCRIPTION

1. On behalf of the Government of China UNIDO, as the lead implementing agency, has submitted to the 58th Meeting of the Executive Committee a request for funding for the implementation of the fourth tranche (2009 work programme) of phase II of the national methyl bromide (MB) phase-out plan for China, at a total cost of US $1,300,000 plus agency support costs of US $97,500 for UNIDO. The submission also includes a progress report on the implementation of the MB phase-out plan during 2008 and the implementation programme for 2009. The project is being implemented with assistance from the Government of Italy.

Background

2. At its 44th Meeting, the Executive Committee approved in principle the national plan for the phase-out of MB in the consumption sector in China at a total funding level of US $14,789,342 (including the amount previously approved for UNIDO at the 41st Meeting to phase out 389 ODP tonnes of MB). It also approved an Agreement between the Government of China and the Executive Committee (decision 44/30). Since then, the Executive Committee has approved the first three tranches of the project at a total value of US $7,000,000 plus support costs of US $695,000 (US $470,000 for the Government of Italy and US $225,000 for UNIDO).

Progress report

3. As agreed with the Government of China, the third tranche of the project focused on the phase-out of MB used for soil fumigation in the tobacco and agricultural sectors and in the fumigation of commodities.

4. Since 2007, MB is no longer used for commodity fumigation. The performance assessment programme initiated in 2006 to monitor the effectiveness of MB alternatives with regard to pest resistance was carried out in 34 pilot grain storage facilities. The technical assistance programme for all grain storage facilities in China continued to provide training to grain storage managers and technical staff, and assisted in the formulation of guidelines, protocols and directives for pest management in grain storage facilities. Several staff members from the State Administration of Grain participated in conferences and study tours on the fumigation of stored products and pest resistance.

5. Since 2008, MB is no longer used for the fumigation of tobacco seedlings. All 17 technology transfer centres (consisting of greenhouses and equipment for the production of seedlings based on the floating tray system) have been constructed. Technical assistance activities have been implemented to ensure the permanent and sustainable phase-out of MB. Additionally, the technical capabilities of nursery managers and technical staff have been strengthened through training programmes and study tours, and the monitoring and evaluation systems have been consolidated.

6. Compared to the grain fumigation and tobacco sectors, MB phase-out in the agriculture sector poses a greater challenge, owing to the size of the sector, the variety of crops for which MB is used and their geographical distribution throughout almost all provinces of China. Furthermore, a structured farmers' association is lacking in the country, which makes it difficult to reach large numbers of farmers simultaneously. To address this major issue, a memorandum of understanding defining the responsibilities and tasks of major stakeholders was signed by the relevant authorities in China. So far, 62 model farms producing strawberries, cucumbers and ginger (i.e., commercial farms managed by independent farmers, through which training and awareness on alternative technologies and agriculture practices are provided to farmers) have been established. Alternative technologies to MB have been selected based on efficacy and the results of cost-effectiveness analysis. Training material and protocols

for trainers, fumigators and farmers have been developed and distributed; 317 trainers have been trained on alternative technologies and equipment operation and, through them, about 11,000 farmers have been trained. Staff from fumigation companies have also been trained in the safe and effective use of toxic fumigants, mainly chloropicrin and metham sodium. A study tour to Japan to inspect innovative equipment for the application of chloropicrin or mixtures with 1,3-dichloropropene (1,3-D) has been conducted. The monitoring and evaluation plan has been developed and is currently being implemented.

7. The import and export licensing system has been in effect since 1 January 2004. Regulations banning the use of MB for commodity applications and for tobacco seedlings were issued in September 2006 and November 2008 respectively. The regulation on MB sales, which has been in effect since 2008, applies to the three existing MB producers in China. MB producers have to obtain and keep records of production licenses; fumigation certificates issued for quarantine and pre-shipment (QPS) applications, delivery orders, transportation orders and application type. Since 2008, the Government of China audits MB producers annually to check whether sales are in accordance with production quotas.

8. As of March 2009, of the US $7,000,000 approved for the first three tranches, US $6,180,000 had been disbursed. An additional US $820,000 will be disbursed by UNIDO once relevant progress reports are submitted by different authorities in the Government of China.

2009 work programme

9. Although the use of MB has been phased out in the commodity (2006) and tobacco seedlings (2008) sectors, several activities are still under current implementation. In the commodity sector, these activities include the continued operation of the monitoring system that was established in 2006 to ensure that the MB phase-out so far achieved is permanent and sustainable. In the tobacco sector, these activities include completing the inspection of the technology transfer centres and continuing to implement the technical assistance and training programme to consolidate the alternative technology and sustain MB phase-out. For MB used as a soil fumigant, equipment and farm materials will be provided to farmers to phase out its consumption in various regions and several crops, mainly in strawberry, cucumber, tomato and ginger crops. Training programmes and study tours on the proper use of the alternative technologies will continue to be conducted for farmers.

10. The following policy and regulation will be developed in 2009: Implementation of the harmonized system codes for QPS and feedstock uses of MB; monitoring and supervision regulations for QPS and feedstock uses of MB; and promoting the registration of (1,3-D) alone and in mixture with chloropicrin.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

11. The 2007 MB consumption reported by the Government of China under Article 7 of the Montreal Protocol of 384.1 ODP tonnes was already 497.6 ODP tonnes below that of 881.7 ODP tonnes allowed under the Protocol, and 186.5 ODP tonnes below that of 570.6 ODP tonnes allowed under the Agreement between the Government and the Committee. MB consumption in 2008 has been estimated at 380 ODP tonnes. Since the approval of the phase-out plan, with assistance from the Government of Italy and UNIDO, the Government of China has achieved greater reductions in MB consumption than those stipulated in the Agreement, as shown below:

Sector/Year	MB consumption (ODP tonnes)					
	2003	2004	2005	2006	2007	2008
Allowable consumption						
Commodity	126.0	126.0	46.0	25.2	-	-
Tobacco	427.8	427.8	300.0	164.6	124.6	-
Agriculture	534.0	534.0	534.0	534.0	446.0	390.0
Total	1,087.8	1,087.8	880.0	723.8	570.6	390.0
Actual consumption						
Commodity	126.0	52.2	32.1	7.0	-	-
Tobacco	427.8	227.8	54.0	21.0	32.4	-
Agriculture	534.0	534.0	534.0	282.1	351.7	380.0
Total	1,087.8	814.0	620.1	310.0	384.1	380.0

12. During implementation of the previous tranches of the MB phase-out plan, a number of potential risks were identified for each of the major MB applications (i.e., commodities, tobacco seedlings and agriculture) and potential solutions have been suggested. These solutions have been incorporated into the 2009-2010 work programme.

13. In the agricultural sector, monitoring and management systems have recently been established, but their implementation is still limited in that some technologies have been demonstrated to be effective MB replacements but are not yet registered. Also the number of certified companies that can apply fumigants is very limited, and so is the competition for price and quality of services. Furthermore, the absence of a structured farmers' association limits the capacity to manage the programme at a centralized level. In this particular sector, UNIDO pointed out that the field activities started only in 2008. The issues that were identified in the previous season have been carefully addressed in the work plan for 2009 including: the registration of new alternative fumigants; certifying more fumigation companies; promoting integrated pest management practices to reduce dependence on chemical alternatives; hiring additional staff with a strong technical background in the agriculture sector; engaging a qualified procurement agency to take charge of equipment procurement; and strengthening the monitoring and evaluation system.

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 phase II of the national methyl bromide (MB) phase-out plan for China; and

(b) Approves the 2009-2010 annual implementation programme.

15. The Secretariat further recommends blanket approval of the fourth tranche (2009-2010) of phase II of the national MB phase-out, with associated support costs at the funding level shown in the table below.

	Project Title	Project Funding (US $)	Support Costs (US $)	Implementing Agency
(a)	National phase-out of methyl bromide (phase II, fourth tranche)	1,300,000	97,500	UNIDO

VERIFICATION OF THE CONSUMPTION OF CTC AS A PROCESS AGENT IN 2008 OF THE CTC SECTOR PLAN (PHASE II)

Introduction

16. The World Bank is submitting to the 58th Meeting, on behalf of the Government of China, the request for the release of the fourth 2009 funding tranche at US $1.5 million and US $112,500 as support costs for the implementation of the 2009 work programme under Phase II of the China CTC sector plan. The Executive Committee approved the 2009 work programme at its 56th Meeting but withheld the funds until the World Bank would submit the verification of the CTC consumption in 2008 for Phase II of the sector plan; the related information can be found in document UNEP/OzL.Pro/ExCom/56/24. A summary of the verification report is provided below and the report itself could be made available to members of the Executive Committee upon request.

Verification of CTC consumption under phase II of the CTC sector plan in 2008

17. The verification was carried out in April 2009 by the same consultant who had been contracted by the World Bank for the verification in previous years. The team visited 13 CTC-consuming enterprises, which are covered under Phase II of the sector plan; at this time, 17 enterprises are still operating. The verification requirements under this plan foresee a sample of verifications to be carried out.

18. The consultant followed the following established methodology in conducting the verification:

(a) Briefed by the plant management on plant history, plant identification, and plant activities on the production of products using CTC as process agents and CTC consumption/purchase in 2008, and in the case of plant closures activities on shutting down the CTC-related production;

(b) Verified CTC purchases by reviewing the purchase orders and CTC daily movement records into the plant warehouse;

(c) Verified CTC opening and closing stocks by checking the inventory records, including the amount of CTC stored in the plant warehouse and what remained in the production system;

(d) Verified CTC consumption on the basis of CTC purchase plus CTC opening stock minus CTC closing stock;

(e) Verified production and sales by reviewing daily production logs, product packaging/transfer slips and daily movement records in and out of the product warehouse;

(f) Verified the opening and closing stocks of products by reviewing the product inventories;

(g) Verified the number of operating days by reviewing the daily plant production logbooks;

(h) Made a cross check of financial records by reviewing all VAT invoices related to the CTC purchased in 2008; and

(i) Inspected the production site, or the dismantled site in those cases of plant closures, and took photographs.

19. The report on each of the companies visited includes a description of the history, its main product lines, and the product line which is the focus of the verification. The results of the verification are presented by showing the opening stock, purchase, consumption, other uses and closing stock of CTC in the plant for 2008, including products. The verification covers the number of days that are dedicated to the products concerned and the ratio of CTC consumption per unit of product manufactured. It concludes by presenting the issues and problems that came out of the visit, and the actual CTC purchased by the plant in 2008 and the CTC quota received from the Ministry of Environmental Protection (MEP).

20. The field visits by the consultant conclude that the 13 enterprises purchased a total of 3,643.7 ODP tonnes of CTC against a total quota of 3,756.5 ODP tonnes issued by MEP. A summary of the results of the verification of the 13 enterprises, with data on the name of the enterprise, products that use CTC, production, CTC purchase, CTC consumed, opening CTC stock and closing stock, and status of the production line (operating or closed), is contained in Annex I of this document.

21. The submission from the World Bank included an annex containing the 2008 PA II verification records and closure activities. Two supporting documents, Annexes II and III to the report, were available from the World Bank. They contain the photographs from verification visits and visual documentation from plant closures.

Comments from the Secretariat

22. The methodology provided for in the Agreement of Phase II of the CTC sector plan for conducting the verification of the CTC consumption requires that "the Bank will verify consumption by companies and applications covered by the PA II Sector Plan. The annual verification should cover a random selection of at least 30 per cent of all enterprises representing at least 30 per cent of the PA II consumption". The results of the verification are set out in paragraph 20. The agreement foresees that only a sample of the enterprises in the sector need to be verified. The selection of enterprises for verification satisfies the requirement in the Agreement, covering 31.71 per cent of the total number of PA II enterprises of the Sector and 76.47 per cent of the PA II enterprises in operation in 2008. The 2008 CTC procurement by the 13 verified enterprises represented with 3,643.7 ODP tonnes 96.9 per cent of the total CTC procurement in 2008.

23. The verification could therefore confirm the validity of the total consumption as reported by MEP of 3,760.3 ODP tonnes. The consultant verified that the total CTC consumption under Phase II in 2008 was well below the maximum level allowable of 6,945 ODP tonnes as set in the Agreement for 2008, representing only 54 per cent of the maximum allowed consumption.

Recommendation

24. The Secretariat recommends that the Executive Committee:

(a) Takes note of the verification of the CTC consumption of Phase II of the CTC sector plan in 2008; and

(b) Approves the disbursement of US $1.5 million and US $112,500 as support costs for the World Bank for the implementation of the 2009 work programme of Phase II of the CTC sector plan.

Annex I

Summary of 2008 verification results of the thirteen visited PA II enterprises

Plant No.	Name of enterprise	Products that use CTC PA	Annual production in 2008 (MT)	CTC purchase, uses and stocks in 2008 (ODS tonne)				
				Year beginning stock	CTC purchase*	CTC use**	Other uses***	Year end stock
21	Shunde Antai Printing Ink****	CPP	165.68	27.90	128.00	95.40	0.00	60.50
		CEVA	78.83					
		CPP-CEVA	0.59					
22	Jincheng Chemical	CPP	1,816.74	449.45	1,014.42	788.32	0.00	675.55
		CEVA	319.28					
40	Hunan Gofar	MIC	1,239.04	20.25	210.00	183.50	0.00	46.75
41	Hunan Haili	MIC	895.12	6.25	132.62	103.89	0.00	34.98
47	Changshu Xiangyang	CPP	172.07	70.70	225.96	283.67	0.00	12.99
		CEVA	145.51					
63	Jiangsu Changlong	MIC	1,488.94	151.97	614.87	225.37	0.00	88.52
		Buprofenzin	3,991.74			452.95		
80	Yangnong Group	Imidacloprid	601.65	25.65	244.50	227.37	0.00	42.78
		Mospilam	90.36					
86	Jintan Huashneg	MPB	720.01	111.94	0.00	111.88	0.06	0.00
106	Shanghai Fengjiang	Chlordane Mirex	0.00	0.00	0.00	0.00	0.00	0.00
115	Yancheng Runhua	CPP	0.00	0.00	0.00	0.00	0.00	0.00
118	Yancheng Sanhua	CPP	519.51	69.79	262.06	321.48	0.00	10.37
204	Taichang Xintang No. 2	Chlordane Mirex	0.00	0.00	0.00	0.00	0.00	0.00
208	Yixing Yonggu	CPP	484.03	139.87	480.02	445.07	0.00	174.82
		CEVA	14.43					
Total verified CTC purchase, consumption and stocks in 2008			ODS tonne	1,073.77	3,312.45	3,238.90	0.06	1,147.26
			ODP tonne	1,181.15	3,643.70	3,562.79	0.07	1,261.99

* Actual amount of CTC delivered into the plant warehouse in the verification year.

** Actual amount of CTC use in 2008 for the production of the product(s) that use CTC as a PA.

*** Self uses in plant for other applications.

**** CPP-CEVA is a special product made from PP and EVA for special printing ink applications.

- - - -