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COMITÉ EJECUTIVO DEL FONDO MULTILATERAL PARA LA APLICACIÓN DEL PROTOCOLO DE MONTREAL Cuadragésima Tercera Reunión Ginebra, 5 al 9 de julio de 2004

## INFORME SOBRE LA APLICACIÓN DE LA DECISIÓN 42/49 EN EL CONTEXTO DE LA DECISIÓN EX.I/2

#### Introducción

- 1. En el curso de la 42ª reunión del Comité Ejecutivo, la representante de Argentina sometió a consideración un proyecto de decisión relativo a los proyectos de eliminación anticipada del metilbromuro en países que operan al amparo del Artículo 5, de conformidad con la Decisión EX.I/2 de la Reunión Extraordinaria de las Partes<sup>1</sup>.
- 2. Durante el debate, algunos miembros subrayaron la importancia de que se adoptaran criterios para la prórroga de los acuerdos de eliminación acelerada; a la inversa, otros miembros convinieron en que la elaboración de criterios generales y su aplicación ulterior a cada proyecto individual plantearía dificultades de procedimiento. También se propuso que la Secretaría se limitara a recopilar la información disponible actualmente sobre los proyectos relativos al metilbromuro en un solo documento y sin que debiese incluir sus pareceres.
- 3. Reconociendo que para poder aplicar la Decisión Ex.I/2 era preciso disponer de mayor información sobre el estado de la ejecución de los proyectos de eliminación acelerada del metilbromuro aprobados, el Comité Ejecutivo decidió:
  - a) Pedir a la Secretaría del Fondo Multilateral que preparase, para presentarlo en la 43ª Reunión del Comité Ejecutivo, un documento adecuado en el que se expusiese el estado de la ejecución actualizado de los proyectos de eliminación acelerada del metilbromuro aprobados, basado en la información de que disponen la propia Secretaría y los organismos bilaterales y de ejecución pertinentes;
  - b) Invitar a los Miembros del Comité Ejecutivo a que presentasen a la Secretaría, antes del 30 de abril del 2004, sus comentarios acerca de la aplicación de la Decisión Ex.I/2 de las Partes, y
  - c) Considerar, en su 43ª Reunión, la necesidad de establecer un grupo de contacto encargado de revisar el documento preparado por la Secretaría, así como las eventuales comunicaciones de los Miembros del Comité Ejecutivo. (Decisión 42/49.)
- 4. En aplicación de la Decisión 42/49 del Comité Ejecutivo, la Secretaría preparó ese documento.

<sup>&</sup>lt;sup>1</sup> Las Partes en el Protocolo de Montreal decidieron (Decisión Ex.I/2): 1) pedir al Comité Ejecutivo que adoptase un enfoque flexible al determinar las medidas adecuadas para hacer frente a casos en los que un país no hubiese cumplido con una etapa de reducción especificada en su acuerdo de eliminación acelerada del metilbromuro como resultado de circunstancias específicas no previstas en el momento de su adopción; 2) invitar al Comité Ejecutivo a que considerase, a petición de una Parte, una prórroga de la etapa final de reducción, pero no hasta después de 2015, así como la cronología de la financiación correspondiente prevista en el acuerdo existente de la Parte para la eliminación acelerada del metilbromuro en los casos en que la Parte interesada hubiese demostrado que existían dificultades para aplicar las alternativas inicialmente consideradas como alternativas técnica y económicamente viables; 3) pedir al Comité Ejecutivo que adoptase criterios para la prórroga de los acuerdos de eliminación acelerada, cuando así lo solicitasen las Partes interesadas. Al elaborar dichos criterios, el Comité Ejecutivo podría pedir asesoramiento al Grupo de Evaluación Tecnológica y Económica y al Comité de Opciones Técnicas sobre el Metilbromuro y estudiar toda la información disponible relativa al proyecto de eliminación de la Parte interesada.

## Estructura del documento

5. El documento comprende dos secciones, a saber:

Sección I: Presentación del estado de ejecución de los proyectos sobre el metilbromuro; incluye una sección sobre el cumplimiento que podría resultar útil al Comité Ejecutivo en tanto que información de trabajo

adicional.

Sección II: Comentarios de Miembros del Comité Ejecutivo.

6. El documento también incluye un Anexo en el que se exponen todos los datos disponibles sobre los proyectos relativos al metilbromuro.

## Sección I: Estado de ejecución de los proyectos sobre el metilbromuro

## Metodología adoptada por la Secretaría

- 7. Para cumplir con el párrafo a) de la Decisión 42/49, la Secretaría creó una base de datos sobre los proyectos dirigidos a la eliminación del metilbromuro en países que operan al amparo del Artículo 5 (y que comprende los proyectos de inversión y de asistencia técnica, pero no incluye los proyectos de demostración). En la Tabla I se expone la lista de los proyectos sobre el metilbromuro examinados.
- 8. La Secretaría extrajo los datos pertinentes sobre cada uno de los proyectos de la información comunicada a la Secretaría del Ozono de conformidad con el Artículo 7; el Inventario de Proyectos Aprobados; las hojas de evaluación de proyectos correspondientes presentadas a las reuniones del Comité Ejecutivo; los acuerdos celebrados entre los gobiernos interesados y el Comité Ejecutivo, cuando procedía; los informes finales de las Reuniones del Comité Ejecutivo y las propuestas de proyectos.
- 9. La Secretaría envió la base de datos a cada Parte que presta ayuda bilateral (a saber, Alemania, Canadá, Francia e Italia) y organismo de ejecución (PNUD, ONUDI y Banco Mundial) interesados y los invitó a que revisaran las informaciones y actualizaran el estado de ejecución de los proyectos de sus carpetas (en particular, las fechas exactas de celebración del acuerdo con los Gobiernos, la fecha del primer desembolso, las cantidades exactas de metilbromuro eliminado y los fondos desembolsados cada año). La Secretaría también pidió a los organismos bilaterales y de ejecución que le presentaran un informe sucinto (de dos o tres párrafos como máximo) sobre el estado actual de ejecución del proyecto, que incluyera los resultados que ya se han obtenido, los principales asuntos abordados, las actividades que se ejecutarán en el futuro, así como todo comentario adicional sobre el proyecto (por ejemplo, la necesidad de cambiar alguna información en la base de datos de los proyectos).
- 10. La Secretaría recibió informaciones de todos los organismos bilaterales de ejecución y preparó un informe refundido que se adjunta en el Anexo I de este documento.

# Estado de la producción y el consumo de metilbromuro en los países que operan al amparo del Artículo 5

- 11. De la totalidad de los proyectos y actividades de eliminación del metilbromuro que el Comité Ejecutivo ha aprobado hasta la fecha, actualmente 18 países cuyos proyectos fueron aprobados podrán cumplir el objetivo de eliminación gradual antes de 2005 (su producción básica total asciende a 5 867,7 toneladas de PAO y los últimos datos de consumo notificados a 5 496,3 toneladas de PAO) y 26 países cuyos proyectos fueron aprobados para la eliminación total del metilbromuro (su producción básica total de metilbromuro es de 2 064,6 toneladas de PAO y los últimos datos de consumo notificados de 1 450,4 toneladas de PAO).
- 12. Veintidós países podrían necesitar una asistencia inmediata para alcanzar el objetivo de eliminación del metilbromuro en 2005 (es decir, una financiación adicional para la eliminación de 79,7 toneladas de PAO). La producción básica total de metilbromuro de esos países es de 398,35 toneladas de PAO y los últimos datos de consumo notificados de conformidad con el Artículo 7 ascienden a 375,5 toneladas de PAO).
- 13. Por otra parte, 36 países sea tienen una producción básica de metilbromuro equivalente a cero, sea no la han calculado, sea actualmente no lo consumen y 22 países todavía no son Parte de la Enmienda de Copenhague. En otros dos países más (Argelia y Túnez, cuya producción básica es de 13 toneladas de PAO), el metilbromuro se utiliza para rehidratar dátiles de manera intensiva y, de conformidad con la Decisión XV/12 de la 15ª Reunión de las Partes, se aplazó el examen de su situación relativa al cumplimiento.

## Países en situación de incumplimiento

- 14. Los siguientes países, que cuentan con uno o varios proyectos aprobados para eliminar el metilbromuro, se encuentran en situación de incumplimiento en materia de consumo de metilbromuro:
  - a) <u>Botswana</u>: (Decisión XV/31): En 2002, Botswana se encontraba en situación de incumplimiento de las obligaciones estipuladas el Artículo 2H del Protocolo de Montreal. Botswana presentó un plan de acción para garantizar su pronto retorno al cumplimiento de las medidas de control del metilbromuro. Con arreglo a ese plan, Botswana se comprometió a reducir el consumo de metilbromuro de 0,6 toneladas de PAO en 2002 a 0 toneladas de PAO antes del 1° de enero de 2005. El Comité Ejecutivo, en su 25ª Reunión, aprobó un proyecto de demostración relativo al metilbromuro para Botswana que permitirá terminar la eliminación de esa sustancia en el país;
  - b) <u>Camerún</u>: (Decisión XV/32): En 2002, Camerún se encontraba en situación de incumplimiento de las obligaciones estipuladas en el Artículo 2H del Protocolo de Montreal. Por consiguiente, se pidió al Gobierno que presentase al Comité de Aplicación un plan de acción que garantizase su pronto retorno al cumplimiento de las medidas de control del metilbromuro. El Comité Ejecutivo, en su 25ª Reunión, aprobó un proyecto de demostración relativo al metilbromuro para Camerún que permitirá terminar la eliminación del metilbromuro en el país;

- c) <u>Egipto</u>: (Decisión XV/25): En su 15ª Reunión, las Partes señalaron que se suponía que Egipto se encontraba en situación de incumplimiento potencial en materia de consumo de metilbromuro en 2002. Por consiguiente, se pidió al Gobierno que presentase al Comité de Aplicación una explicación sobre su exceso de consumo, junto con un plan de acción que garantizase su pronto retorno a una situación de cumplimiento;
- d) Guatemala: (Decisión XV/34): En 2002, Guatemala se encontraba en situación de incumplimiento de sus obligaciones estipulado, entre otros, en el Artículo 2H del Protocolo de Montreal. Guatemala presentó un plan de acción para garantizar su pronto retorno a una situación de cumplimiento de las medidas de control del metilbromuro. En ese plan, y sin perjuicio del recurso al mecanismo financiero del Protocolo, Guatemala se comprometió a reducir el consumo de metilbromuro de 709,7 toneladas de PAO en 2002 a 286 toneladas de PAO en 2008. En aplicación de la Decisión XV/34 de la 15ª Reunión de las Partes, el Comité Ejecutivo, en su 42ª Reunión decidió modificar el calendario de eliminación del metilbromuro que se había acordado anteriormente, en el momento de la aprobación de la propuesta de proyecto, durante su 38ª Reunión (Decisión 42/14, párrafo a));
- e) <u>Honduras</u>: (Decisión XV/35): En 2002, Honduras se encontraba en situación de incumplimiento de sus obligaciones estipuladas en el Artículo 2H del Protocolo de Montreal. Honduras presentó un plan de acción para garantizar su pronto retorno al cumplimiento de las medidas de control del metilbromuro. En ese plan, Honduras se comprometió a reducir su consumo de metilbromuro de 412,5 toneladas de PAO en 2002 a 207,5 toneladas de PAO en 2005. En aplicación de la Decisión XV/35 de la 15ª Reunión de las Partes, el Comité Ejecutivo, en su 42ª Reunión, decidió modificar el calendario de eliminación del metilbromuro que se había acordado anteriormente, en el momento de la aprobación de la propuesta de proyecto, durante su 37ª Reunión (Decisión 42/14, párrafo c));
- f) Uganda: (Decisión XV/43): En su 15<sup>a</sup> Reunión, las Partes aprobaron una solicitud de modificación del consumo básico de metilbromuro de Uganda (de 1,9 toneladas de PAO a 6,3 toneladas de PAO). Incluso tras la modificación del consumo básico de metilbromuro, en 2002 Uganda se encontraba en situación de incumplimiento de las obligaciones estipuladas en el Artículo 2H del Protocolo de Montreal. Uganda presentó un plan de acción para garantizar su pronto retorno al cumplimiento de las medidas de control del metilbromuro. En ese plan, y sin perjuicio del recurso al mecanismo financiero del Protocolo, Uganda se comprometió a reducir su consumo de metilbromuro de 30 toneladas de PAO en 2002 a 0 toneladas de PAO antes del 1° de enero de 2007. En aplicación de la Decisión XV/43 de la 15<sup>a</sup> Reunión de las Partes, el Comité Ejecutivo, en su 41<sup>a</sup> Reunión, decidió modificar el calendario de eliminación del metilbromuro que habían acordado el Gobierno de Uganda y ese Comité en el momento de la aprobación de la propuesta de proyecto, durante su 34ª Reunión (Decisión 41/78, párrafo c));

g) <u>Uruguay</u>: (Decisión XV/44): En 2002, Uruguay se encontraba en situación de incumplimiento de las obligaciones estipuladas en el Artículo 2H del Protocolo de Montreal. Uruguay presentó un plan de acción para garantizar su pronto retorno al cumplimiento de las medidas de control del metilbromuro. En ese plan, Uruguay se comprometió a reducir su consumo de metilbromuro de 17,7 toneladas de PAO en 2002 a 0 toneladas de PAO antes del 1° de enero de 2005.

## Sección II: Comentarios de los Miembros del Comité Ejecutivo

15. En aplicación del párrafo b) de la Decisión 42/49, el Gobierno de Argentina sometió a la consideración del Comité Ejecutivo los siguientes comentarios sobre la aplicación de la Decisión Ex.I/2 de las Partes, y una propuesta relativa a los criterios destinados a los proyectos de eliminación acelerada del metilbromuro cuya aplicación tropieza con dificultades. Ningún otro miembro del Comité Ejecutivo presentó comentarios.

## Comentarios del Gobierno de Argentina

- 16. "Actualmente, Argentina está ejecutando los siguientes proyectos de inversión para eliminar el metilbromuro en el cultivo de fresas, hortalizas de invernadero y flores cortadas (proyecto ARG/FUM/30/INV/105), y de tabaco y hortalizas al aire libre (proyecto ARG/FUM/36/INV/129) y se ha comprometido a eliminar totalmente el consumo de ese producto antes de 2007. Además, muchos otros países de la región, que no son Miembros del Comité Ejecutivo, están aplicando proyectos similares.
- 17. "Argentina considera que, para aplicar la Decisión Ex.I/2, el Comité Ejecutivo debería, en primer lugar, definir una serie de criterios generales que se aplicarían posteriormente al caso particular de cada proyecto que tropieza con dificultades de ejecución y que la Parte que lo esté ejecutando someta a su consideración. La elaboración de criterios generales para el examen de proyectos con dificultades de aplicación permitiría una mayor transparencia y, también, garantizaría el tratamiento equitativo e igualitario de los casos que se sometan al Comité Ejecutivo.

## Propuestas de criterios

- 18. "A esos efectos, se presentan a la consideración del Comité Ejecutivo los siguientes criterios aplicables al examen de los proyectos sobre la eliminación acelerada del metilbromuro que tropiezan con dificultades de aplicación:
  - a) El Comité Ejecutivo evaluará cada proyecto individual a solicitud de la Parte que esté aplicándolo;
  - b) Los proyectos tendrán que estar en curso de ejecución y deberá demostrarse que este tiene avances significativos en su implementación;

- c) La Parte que esté ejecutando el proyecto deberá someter la solicitud de nuevo examen, junto con toda la información pertinente para justificar su caso, a la Secretaría del Fondo Multilateral; ésta última la transmitirá a los Miembros del Comité Ejecutivo, con suficiente antelación, antes de su siguiente reunión;
- d) La información presentada por la Parte deberá incluir, además de los otros elementos que juzgue pertinentes:
  - i) La descripción de las dificultades imprevistas a partir de la fecha de la firma del compromiso, que afectan la ejecución del proyecto (Nota: entre otros motivos, esas dificultades podrán incluir: las alteraciones del mercado, la imposibilidad de procurarse la alternativa propuesta en el mercado, la imposibilidad de aplicar la alternativa propuesta a nivel local en determinadas condiciones o a un cultivo específico, la imposibilidad de registrar una alternativa, la cancelación del registro de una alternativa, etc.);
  - ii) En los casos en que la dificultad imprevista se deba a que las alternativas no son factibles o viables desde un punto de vista técnico o económico, la prueba de que se obtuvieron resultados negativos con las alternativas al metilbromuro en la región correspondiente;
  - Un plan de acción o un calendario alternativo para la eliminación del metilbromuro (Nota: El plan de acción o el calendario alternativo propuesto debe coincidir, en todo lo posible, con la medida de control del Protocolo de Montreal aplicable al metilbromuro;
- e) La nueva negociación de los desembolsos no podrá afectar, en modo alguno, la continuidad del proyecto vista la importancia de que no se interrumpa el proceso de transferencia de tecnología a causa de las características de la producción agrícola;
- f) Al examinar los proyectos que tropiezan con dificultades, el Comité Ejecutivo deberá tomar en consideración las exenciones por uso crítico que han podido concederse a países que no operan al amparo del Artículo 5 para el cultivo objeto del proyecto y sus volúmenes."

#### Creación de un grupo de contacto

19. De conformidad con el párrafo c) de la Decisión 42/49, el Comité Ejecutivo podría examinar la necesidad de establecer un grupo de contacto encargado de revisar el documento que preparó la Secretaría, así como todas las eventuales comunicaciones de los Miembros del Comité Ejecutivo.

Tabla 1

Lista de los proyectos de inversión y de asistencia técnica relativos al metilbromuro aprobados hasta la fecha por el Comité Ejecutivo en países que operan al amparo del Articulo 5

País	Código	Titulo del Proyecto	Organismo	Toneladas de PAO
Argentina	ARG/FUM/30/INV/105	Eliminación del metilbromuro en el cultivo de fresas, hortalizas de invernadero y flores cortadas	ONUDI	331
Argentina	ARG/FUM/36/INV/129	Eliminación del metilbromuro en almácigos de tabaco y hortalizas al aire libre	PNUD	29
Bolivia	BOL/FUM/35/INV/16	Eliminación total del metilbromuro, excluidas las aplicaciones de cuarentena y previas al envío	PNUD	1,5
Bosnia y Herzegovina	BHE/FUM/41/INV/17	Eliminación del metilbromuro en los sectores del cultivo de almácigos de tabaco, hortalizas y flores	ONUDI	11,8
Brasil	BRA/FUM/28/INV/142	Eliminación del metilbromuro en todo el sector del cultivo de tabaco	ONUDI	84,4
Chile	CHI/FUM/32/INV/143	Proyecto de demostración y eliminación del metilbromuro en la fumigación del suelo para el cultivo de frutales y replante	PNUD	76,2
China	CPR/FUM/41/INV/407	Eliminación nacional del metilbromuro	ONUDI	389
Costa Rica	COS/FUM/35/INV/25	Eliminación total del metilbromuro en la fumigación de melones, flores para cortadas, plátanos, almácigos de tabaco y viveros, excluidas las aplicaciones de cuarentena y previas al envío	PNUD	84,4
Côte d'Ivoire	IVC/FUM/42/INV/19	Eliminación del uso de metilbromuro en la fumigación de productos básicos y almacenados	ONUDI	8,5
Croacia	CRO/FUM/35/INV/14	Eliminación del metilbromuro en almácigos de tabaco	ONUDI	16,2
Cuba	CUB/FUM/26/INV/11	Eliminación del metilbromuro en el sector del tabaco	ONUDI	48
República Dominicana	DOM/FUM/38/INV/33	Eliminación del metilbromuro en melones, flores y tabaco	ONUDI	141
Ecuador	ECU/FUM/26/TAS/23	Proyecto de demostración/asistencia técnica para probar alternativas al metilbromuro en el tratamiento de los suelos en la industria del cultivo de flores	BIRF	15
Ecuador	ECU/FUM/38/INV/31	Cambio de tecnología para la eliminación del metilbromuro en el sector de viveros de rosales	BIRF	37,2
Egipto	EGY/FUM/38/INV/86	Eliminación nacional del metilbromuro en la horticultura y fumigación	ONUDI	185,6
Georgia	GEO/FUM/37/TAS/13	Asistencia técnica para eliminar el metilbromuro en la fumigación de los suelos	ONUDI	6
Ghana	GHA/FUM/37/TRA/18	Programa de formación sobre la eliminación del uso del metilbromuro, excluyendo las aplicaciones de cuarentena y previas al envío	PNUD	6,3
Guatemala	GUA/FUM/38/INV/29	Eliminación nacional del metilbromuro	ONUDI	468
Honduras	HON/FUM/37/INV/10	Eliminación del metilbromuro en los sectores del cultivo de melones y plátanos y en almácigos de tabaco	ONUDI	213

País	Código	Titulo del Proyecto	Organismo	Toneladas de PAO
Indonesia	IDS/FUM/41/INV/158	Eliminación del uso del metilbromuro en el almacenamiento de granos	Canadá	37.8
Irán	IRA/FUM/29/INV/57	Eliminación del metilbromuro en usos importantes no críticos ni esenciales los tratamientos post-cosecha	ONUDI	12,4
Jordania	JOR/FUM/29/INV/54	Eliminación total del uso del metilbromuro en Jordania	Alemania	180
Kenya	KEN/FUM/38/INV/31	Transferencia de tecnología para eliminar el uso del metilbromuro en la fumigación de los suelos de cultivo de flores	PNUD	10
Kenya	KEN/FUM/39/INV/33	Transferencia de tecnología para eliminar el metilbromuro en la fumigación de los suelos de todos los otros cultivos hortícolas	Alemania	5
Kirguistán	KYR/FUM/41/TAS/08	Proyecto de asistencia técnica para instalar alternativas y eliminar el metilbromuro	PNUD	14,2
Líbano	LEB/FUM/34/INV/44	Eliminación del metilbromuro en la fumigación de los suelos de cultivo de fresas	ONUDI	6
Líbano	LEB/FUM/34/INV/46	Eliminación del metilbromuro en los sectores de cultivo de hortalizas, flores para cortar y tabaco	PNUD	25,8
Macedonia	MDN/FUM/32/INV/16	Eliminación del metilbromuro en almácigos de tabaco y el sector hortícola	ONUDI	27,2
Malawi	MLW/FUM/34/INV/16	Segundo desembolso del programa nacional de eliminación de todas las aplicaciones no esenciales ni de cuarentena o previas al embarque del metilbromuro	PNUD	20,9
México	MEX/FUM/42/TAS/118	Asistencia técnica para cumplir con la eliminación del 20% de metilbromuro antes de 2005	ONUDI, Canadá, España	107,2
Marruecos	MOR/FUM/29/INV/37	Eliminación del metilbromuro en la producción de flores para cortar y plátanos	Francia	61
Marruecos	MOR/FUM/32/INV/41	Eliminación del metilbromuro en la fumigación de los suelos de cultivo de fresas	ONUDI	155
Marruecos	MOR/FUM/34/INV/44	Eliminación del metilbromuro en la fumigación de los suelos de cultivo de tomates	ONUDI	109,8
Perú	PER/FUM/31/INV/28	Eliminación del metilbromuro en la fumigación de los suelos	PNUD	4
Rumania	ROM/FUM/34/INV/19	Eliminación del metilbromuro en la horticultura	Italia	93,9
Senegal	SEN/FUM/26/INV/12	Eliminación del metilbromuro en la fumigación de cacahuetes de siembra en Novasen Ltd.	ONUDI	0,7
Sri Lanka	SRL/FUM/38/TAS/21	Eliminación del metilbromuro en todos los usos remanentes, excluidas las aplicaciones de cuarentena y previas al envío	PNUD	3,3
Siria	SYR/FUM/34/INV/80	Eliminación del metilbromuro en almacenes de granos	ONUDI	5
Turquía	TUR/FUM/31/INV/69	Eliminación del metilbromuro en el sector de producción de higos secos	BIRF	30
Turquía	TUR/FUM/29/INV/56	Introducción de alternativas al metilbromuro en el cultivo de fresas, pimientos y berenjenas de invernadero en la región del Mediterráneo oriental y en las fresas en la provincia Aydm de Turquía	BIRF	50

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Turquía	TUR/FUM/35/INV/74	Eliminación del metilbromuro en el cultivo de tomates, pepinos y claveles de invernadero	ONUDI	29,2
Uganda	UGA/FUM/34/INV/08	Eliminación del metilbromuro en flores para cortar	ONUDI	12
Uruguay	URU/FUM/34/INV/35	Eliminación del metilbromuro en la horticultura (tomates y flores cortadas)	ONUDI	24
Yemen	YEM/FUM/41/TAS/21	Programa de asistencia técnica para la eliminación del metilbromuro en la agricultura	Alemania	9,1
Zimbabwe	ZIM/FUM/31/INV/21	Eliminación del metilbromuro en de flores cortadas	ONUDI	132

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1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
169.2	265.8	409.8	465.0	504.6	468.0	465.6	358.8	168.6		411.3

#### Project proposal:

Phase-out of methyl bromide in strawberry, protected vegetables and cut flower production (ARG/FUM/30/INV/105), implemented by UNIDO

Phase out of MB used for soil disinfestation in protected vegetables (tomato, lettuce, pepper, celery, spinach, cucumber, melon) and cut flower production, covering 728 ha which represents the total commercial production in the country; and 121 ODP tonnes of MB used for soil disinfestation in strawberry production, covering 130 ha for strawberry nurseries and 970 ha for production (open field), representing the entire commercial strawberry production in the country. The alternatives selected are metam sodium, for controlling the main soil-borne pests and diseases in the production of horticulture and flowers (428 ha) and strawberries (790 ha); and steam pasteurization, for controlling weeds and nematodes in heavily infested soil. It includes a training programmes (over 3,900 farmers distributed through out the country, of which 600 work in strawberries production and 3,300 in flowers and vegetables). It also proposes the establishment of farmers' associations during the first year of project implementation, responsible for: keeping the equipment provided under the project, providing steam service to farmers, distributing consumable agricultural inputs, and collecting fees associated with basic operating costs.

The Committee approved US \$3.183 million as the total funds that will be available to achieve commitments for the phase reduction in the use of MB. Argentina commits to reduce total consumption of controlled uses of MB to no more than the following levels in during the 12-month period of the following listed years: in 2001 no more than 471.9 tonnes, in 2002 no more than 405.8 tonnes, in 2003 no more than 306.6 tonnes and in 2004 no more than 174.4 tonnes. It also commits to sustain this phase-out of MB through the use of bans in the use of MB for, at least, the uses covered by the project. Argentina may have additional projects approved that will add to the reductions noted above. UNIDO agrees to educate related farmers on ways to limit the use of metam sodium through the enhanced use of IPM techniques. UNIDO shall report to the Committee annually on the progress in meeting reductions by this project and on annual costs related to metam sodium and the use of steam boilers. Following initial disbursement of 33% in 2000-2001, funding for later years the project will be disbursed in accordance with the following schedule, with the understanding that a subsequent year's funding will not be disbursed until the Committee has reviewed the prior years progress report: in 2002, 33% and in 2003, 34% (full text of the agreement is included as Annex III to document UNEP/OzL.Pro/ExCom/30/41).

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	Actual completion
Mar-2000	Feb-2001	Apr-2000	Jul-2000	Sep-2004	

#### Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed		33.2	66.2	99.2	132.4						331.0
Actual		33.2	92.3	99.0							224.5

#### Total funds approved by the Executive Committee (US\$):

#### Total funds disbursed by UNIDO to the Government of Argentina (US\$):

Proposed		1,050,500	1,050,500	1,082,390				3,183,390
Actual	3,024	666,816	545,843	662,978				1,878,661

#### Current status of project implementation:

Phase out of 99 tonnes occurred in 2003 and an additional phase out of 106.6 tonnes is expected in 2004.

## Project proposal:

Methyl bromide phase-out in tobacco and non-protected vegetable seedbeds (ARG/FUM/36/INV/129), implemented by UNDP The alternative technologies in the production of tobacco seedlings are the floating and non-floating tray systems installed in microtunnels and alternative chemicals (metam sodium) in specific areas. The selection of these technologies is based on the results of 2 demonstration projects, one for tobacco seedbeds (UNDP) and another for strawberry, cut flower and protected vegetable sectors (UNIDO). In addition, this project will be accompanied by a package of policy measures to ensure that the MB phased out by this project will not be re-introduced at a later stage.

The Executive Committee approved in principle, an additional US \$3,588,000 as the total funds that will be available to Argentina to achieve the complete phase out of MB used in tobacco and non-protected vegetable seedbeds (178 ODP tonnes), excluding quarantine and pre-shipment applications. Of the amount to be phased out from the project, 22.8 ODP tonnes will be phased out without the assistance from the Multilateral Fund. The remaining consumption in the country is 18 ODP tonnes, used for post-harvest fumigation of cotton and citrus. The cost effectiveness of the project is US \$23.15/kg.

#### Project implementation dates:

Date of a	approval	Signature	agreement	Start-u	p date	1st disbu	rsement	Completion	ı (proposal)	Actual co	ompletion
Mar-	2002	Aug-	2002	May-2002		Apr-2002		Dec-	2006		
Total amo	unt of MB	phased out	t (ODP toni	ıes):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			29.0	21.0	16.0	33.5	79.3				178.8
Actual			53.6	29.0							82.6
Total fund	ls approved	l by the Exc	ecutive Con	ımittee (US	T\$):						
Approved			1,720,000	467,000							2,187,000
Total fund	s disburse	d by UNDP	to the Gov	ernment of	Argentina	(US\$):					
Proposed			1,720,000	467,000	467,000	467,000	467,000				3,588,000
Actual			1,547,990	602,776							2,150,766

#### Current status of project implementation:

The second year of Argentina's Methyl Bromide Phase-out Project achieved a phase-out of 29.05 ODP T of methyl bromide in the tobacco production sector, thereby surpassing its 2003 commitment tpo phase-out 21 ODP T, as per the project's Agreed Conditions. Despite the deep economic crisis that Argentina faced in 2002, during 2003 the economy recovered greatly, demonstrating growth of 8.7%. In tandem, the tobacco sector expanded its planted area, achieving 19% growth, but as a result of the national project team's work, and the commitment on the part of grower's organizations, the sector's overall consumption of MeBr nevertheless dropped by 31.24%, indicative of the high grade of sustainability in adoption of alternative technology. The project continued making excellent progress in the northwest region (Misiones, Corrientes and Chaco provinces) through the involvement of thousands of small-scale growers. Since the launch of the project's implementation over 4,500 growers have received training. Distribution of inputs required for conversion to use of floating tray system continued and will ultimately impact 18,000 growers.

On 16 September 2003, International Ozone Day, in the presence of high level policy makers from the ministries of environment and agriculture, representatives of Argentina's tobacco growers' organizations, as well as representatives of the main tobacco companies, a public declaration was signed by all stakeholders as a sign of the sector's commitment to the principles of the Montreal Protocol and to phase-out MeBr consumption in the sector by 2007.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
0.2	0.3	0.3	0.3	1.5	0.6	0.4	1.5	0.3		0.6

#### Project proposal:

Terminal methyl bromide phase-out, excluding QPS applications (BOL/FUM/35/INV/16), implemented by UNDP

The project will adapt to local conditions the following alternative technologies to MB: solarization in combination with alternative chemicals (strawberry and vegetable nurseries), bio-fumigation and floating tray systems (vegetable nurseries) and steam pasteurization (potato seeds and cut flowers). The main equipment requirements are 3 small-capacity boilers and other farm materials (plastic trays, soil thermometers, seeders). The Government is proposing: to establish a national commission for the replacement of MB, procure and disburse the equipment and materials to nurseries/farms who use MB; implement an initial technology transfer and training programme to a small number of MB users and technicians and then extended to all MB users; raise awareness among farmers about the need to phase out MB; and develop a policy package and MB action plan to ensure that the alternatives selected will be sustainable, and to ensure that MB will not be re-introduced after it has been phased out. This will include measures to restrict imports of MB to comply with the agreed schedule.

Approved taking into account the country's possible non-compliance with the 2002 freeze, and the fact that the project is similar to demonstration projects approved by the Executive Committee in this sector. The project is to be implemented in accordance with the conditions for the phase-out of methyl bromide in Bolivia agreed between the Government of Bolivia and the Executive Committee (Note: the cost effectiveness of project excluding the demonstration component, is US \$33.6/kg).

Project implementation dates:

1	Signature a Aug-2 phased out	2002	Start-u	p date	1st disbu	rsement	•	(proposal)	Actual co	mpletion
of MB p	phased out				Dec-	2002	D	• • • •		
1		(ODP tonn			200	ZUUZ	Dec-	2004		
2000			es):							
-000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
	1.5	1.5	0.6							3.6
proved	by the Exec	cutive Com	mittee (US	<b>(\$):</b>						
	221,032									221,032
sbursed	by UNDP	to the Gove	ernment of	Bolivia (	U <b>S\$):</b>					
										0
										0
_		221,032	proved by the Executive Com 221,032	proved by the Executive Committee (US) 221,032	proved by the Executive Committee (US\$):	proved by the Executive Committee (US\$):	proved by the Executive Committee (US\$):  221,032			

## Current status of project implementation:

Workshops to present alternative technologies have taken place together with coordination meetings with national stakeholders. In addition, in February 2003, there was an initial proposal for the Reglamento de Gestion Ambiental de SAO. This Reglamento was circulated to the main stakeholders in each sector (refrigeration, foams, MBR, etc) for comments and discussion. Later during the year, a workshop to discuss their observations took place and modifications to the Reglamento were done based on these discussions. Such process brought improvements to the legislation.

Monitoring of Methyl Bromide use has been carried out regularly. The equipment has been selected and is in the process of being purchased. Materials on Methyl Bromide alternatives have been prepared and distributed to all stakeholders.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
2.4	2.4	3.6	3.9	4.2	6.2	6.2	11.8	11.8		3.5

#### Project proposal:

Phase-out of methyl bromide in tobacco seedling vegetables and flower production sector (BHE/FUM/41/INV/17), implemented by UNIDO

The alternative technologies to replace MB are in the floating tray system for the production of tobacco seedlings, and biofumigation and solarization for the production of vegetables and cut flowers. It includes a training programme in the use of the alternative technologies and application of integrated pest management systems. The Government is committed to phase out the entire consumption of MB (11.8 ODP tonnes) by end of 2006. Upon completion of the project, the Government will issue a regulation banning the use of MB in soil fumigation in the country. It will be implemented by UNIDO in coordination with the Ozone Unit and in cooperation with the Ministries for Agriculture, Water and Forestry and the Government of the District Brcko.

Approved on the understanding that the approval was without prejudice to the operation of the Montreal Protocol's mechanism dealing with non-compliance and in accordance with the conditions for phase-out of MB in horticulture (tomatoes and cut flowers) agreed between the Government of Bosnia and Herzegovina and the Executive Committee.

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	<b>Completion (proposal)</b>	Actual completion
Dec-2003	Dec-2003	Jan-2004		Dec-2006	

#### Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed						6.2	5.6				11.8
Actual											

#### Total funds approved by the Executive Committee (US\$):

		,					
Approved		229,000				229,000	

#### Total funds disbursed by UNIDO to the Government of Bosnia and Herzegovina (US\$):

Proposed						0
Actual						0

#### Current status of project implementation:

Mission to Sarajevo is planned for Mar 2004 to agree on implementation modalities.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
564.3	667.0	844.6	756.6	578.3	275.5	430.7	257.6	238.5		711.6

#### Project proposal:

Phasing out methyl bromide in the entire tobacco sector (BRA/FUM/28/INV/142), implemented by UNIDO

The project proposes to install 240,218 small micro-tunnels (25 m2 each) composed of 18 corrosion-protected arches, covered by UV protected plastic sheets. In the interior of the tunnel a small pool made with ceramic holders and black polyethylene film is filled with water to a depth of 6 cm. Expanded polystyrene trays filled with substrate float on the surface of the pool. The equipment set includes manual seeders, substrate compactors for sowing, elastic bidders, clipping devices and polystyrene trays. It will be coordinated by the Ozone Unit. At the completion of the project, the Government will issue a regulation banning the use of methyl bromide in the tobacco sector; in 1999, a register of importers of methyl bromide and re-sellers/ distributors will be established; effective 1999, methyl bromide will be included in the system to control trading of imports and exports; from January 2000, the Government has agreed on a 20% reduction annually on methyl bromide consumption and only essential and critical uses will be allowed beyond January 2005.

Approved a level of funding in the amount of US \$2.34 million as a national incentive and on an exceptional basis, to implement the project to phase-out at least 20% of the current methyl bromide used in the tobacco sector (from 421.8 to 337.4 ODP tonnes or less) over a period of 3 years from the time the project commences. To report back to the Executive Committee 3 years after project initiation with information on the experience gained in the phase-out, including related costs and remaining ODS consumption in the sector.

Project implementation dates:

Date of a	approval	Signature	agreement	Start-u	ıp date	1st disbu	ırsement	Completion	ı (proposal)	Actual co	mpletion
Jul-	1999	Feb-2	2000	Apr-	2000	Jun-	2000	Aug-	2002	Dec-	2001
Total amo	unt of MB	phased out	(ODP toni	ıes):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			84.4								84.4
Actual	24.4	60.0									84.4
Total fund	ls approved	by the Exe	cutive Con	ımittee (U.	S\$):						
Approved	2,320,784										2,320,784
Total fund	ls disbursed	d by UNID	O to the Go	vernment	of Brazil (	US\$):					
Proposed											0
Actual	1,623,829	696,954	1								2,320,784

#### Current status of project implementation:

Final report submitted in May 2002 to the MF Secretariat. PCR completed and submitted.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
119.4	176.8	236.2	139.0	298.1	107.1	242.5	239.0	165.2		212.5

#### Project proposal:

Demonstration and phase-out project for methyl bromide soil fumigation for fruit tree production and replant (CHI/FUM/32/INV/143), implemented by UNDP

To be implemented in 2 phases. In Phase I, alternative technologies to MB (chemical controls; IPM system and cultural practices; solarization in combination with IPM system and substrates and steam in nurseries) will be adapted and their technical and economic feasibility in key agricultural regions will be assessed during two agricultural seasons. Phase II will develop training and extension programmes to ensure that the alternative technologies are adopted by MB users. Phase II will proceed only if effective and economically viable alternatives are identified; however, Phase I has been designed to ensure successful adaptation of viable alternative technologies. Alternatives are proposed to be tested in the field: It includes workshops to assist in the design of the project and establish stakeholders' consultative groups for growers to be informed and consulted with during project implementation and a 'train the trainers' programme for extension staff, technicians and farmers; and training programmes for farmers on how to use the best alternatives. It will include field days, and preparation of brochures, technical manuals and a video. The leading trainers will train 1,000 technicians, extension personnel and farmers, to be selected on the basis that they are able to extend the alternatives effectively to others in the sector. Leading trainers will hold one-day meetings for 10 people on farms, and will make 5 follow-up visits to trainees during the active season.

UNDP will disburse the funds approved in tranches according to the proposed methyl bromide phase out schedule indicated in the agreement between the Government and the Committee; if Chile does not meet the reduction requirements outlined in the agreement, UNDP will withhold funding for the subsequent tranche until such time as the required reduction has been met. Also, UNDP will submit an annual progress report on the implementation of the project to the Fund Secretariat

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	Actual completion
Dec-2000	Aug-2001		Jul-2001	Jun-2006	

#### Total amount of MB phased out (ODP tonnes):

		I	, -								
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed				28.0			48.2				76.2
Actual											

#### Total funds approved by the Executive Committee (US\$):

Approved	805,000					805,000

## Total funds disbursed by UNDP to the Government of Chile (US\$):

	•			,					
Proposed	161,000	161,000	161,000	161,000	161,000			805,000	
Actual								0	

#### Current status of project implementation:

Technical trials (substrates & steam) continued during year 2003. Technical training mission for nursery technicians has taken place in May, 2003. Equipment and materials have been procured. Training by national project team is on-going. Policy action plan was launched with the Ministry of Agriculture. Active Monitoring and Evaluation system is in place.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
	372.0	720.0	1,356.0	1,960.2	1,598.4	2,100.6	1,567.8	1,087.8		1,102.1

#### Project proposal:

#### National phase-out of methyl bromide (CPR/FUM/41/INV/407), implemented by UNIDO

MB is used in the fumigation of soil for the production of strawberry, cucumber, tomato, eggplant, hot pepper, flowers and tobacco, and for the fumigation of commodities. The strategy to phase out MB production and consumption will be based on the following principles: enforce production and imports restrictions with a production and import quota system in order to comply with 2005 reduction of consumption; issue licenses for QPS applications for controlling QPS consumption; control MB consumption in the tobacco sub-sector under support of STMA and in the fumigation of commodities under support of State Bureau of Grain Reserve; implement training programmes to transfer the necessary alternate technologies to all MB users; make MB phase out verifiable at the country, state and growers levels; and give priority to the following crops/applications for which alternative technologies are already in use: tobacco seedbeds (floating technology is already in use by 50,000 growers); commodities fumigation (more than 4,000 tonnes of phosphine are already used); cucumbers and eggplants (where farmers have developed simple grafting techniques in use by more than 5,000 growers). The proposed MB alternative technologies by crop/application are as follows: strawberry: metam sodium injected into the soil; cucumber: grafting; tomato: metam sodium injected into the soil; eggplant: floating tray system in micro-tunnels; hot pepper: metam sodium injected into the soil; tobacco: floating tray system; flowers: sterilization; commodities: phosphine (tablets or pellets)

Approved on the understanding that the Government would have flexibility in utilizing the resources available for the phase out of methyl bromide in any crop or application it deems more appropriate; and UNIDO is requested to assist the Government to work towards the completion of a project proposal for the phase out of all controlled uses of MB for submission to the Executive Committee.

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	<b>Actual completion</b>
Dec-2003	Dec-2003	Dec-2003	Apr-2004	Jul-2006	

#### Total amount of MB phased out (ODP tonnes):

	··· · · · · · · · · · · · · · · · · ·	I	, -								
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed						389.0					389.0
Actual											

#### Total funds approved by the Executive Committee (US\$):

Approved		4.086,600				4.086,600

## Total funds disbursed by UNIDO to the Government of China (US\$):

Proposed						0
Actual						0

## Current status of project implementation:

Mission to Beijing in Feb 2004 to agree on implementation modalities.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
300.0	251.6	275.9	405.6	436.7	454.1	390.0	390.0	280.0		342.5

#### Project proposal:

Total methyl bromide phase-out used as a fumigant in melons, cut flowers, bananas, tobacco seedbeds and nurseries, excluding QPS applications (COS/FUM/35/INV/25), implemented by UNDP

Replacement of MB with solarization in combination with alternative chemicals (including 1,3-dichloropropene and metam sodium), bio-fumigation, floating tray system (tobacco seedbeds) and steam pasteurization (cut flower crops), in combination with an integrated pest management (IPM) programme (the technologies were selected on the basis of the results from the 2 demonstration projects on alternatives to the use of MB in melons and cut flower crops). The use of chemical alternatives requires modification of the irrigation systems currently available, rotovators and temperature monitors. Steam pasteurization technology requires 16 boilers and temperature monitors. The floating tray system requires the construction of micro-tunnels, manual seeders and conductivity meters. Incremental operating costs have not been claimed. The Government will implement a package of policy measures to ensure that the MB phased out will not be re-introduced at a later stage. The action plan will also ensure that the implemented alternatives to MB will be economically sound and environmentally sustainable. A labeling and certification system is envisaged as one part of the plan. MB import control systems and regulations will also be adopted/amended as necessary.

The Executive Committee agrees to approve, in principle, US \$4,845,283 as the total funds that will be available to achieve the phase-out of methyl bromide used for all purposes in Costa Rica, excluding quarantine and pre-shipment applications (for a total phase out of 426.9 ODP tonnes at a cost effectiveness of US \$11.35/kg), subject to the conditions agreed between the Government of Costa Rica and the Executive Committee.

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	<b>Actual completion</b>
Dec-2001	Jul-2003		Feb-2003	Dec-2007	
				1	

#### Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			84.4		89.0		83.6	169.9			426.9
Actual											

#### Total funds approved by the Executive Committee (US\$):

Approved 1,211,321	1,211,321
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## Total funds disbursed by UNDP to the Government of Costa Rica (US\$):

Proposed	1,211,321	969,057	969,057	969,057	726,791		4,845,283	
Actual							0	

#### Current status of project implementation:

Project launched in mid-03 after delays due to concerns of private sector participants overcome. A national Project Manager (former Minister of Agriculture, indicative of high-level commitment by Government and stakeholders to the process) was appointed and the project team was organised. A work plan was approved by the National Steering Committee and the procurement process was launched. After initial delays, the project is now on track.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
13.2	9.0	2.9	8.6	12.0	0.0	11.1	18.0	12.0		8.1

#### Project proposal:

Phase-out the use of methyl bromide commodities and storage fumigation (IVC/FUM/42/INV/19), implemented by UNIDO

Phase out all controlled uses of MB used for fumigation of commodities by converting to phosphine in carbon dioxide (ecofume technology), applied through the same pipes currently used for MB. The main differences between MB and the use of phosphine in carbon dioxide is the exposition time (1.5 days for MB and 3 days for ecofume under climatic conditions in Cote d'Ivoire), and the need to permanently and accurately monitor phosphine levels during treatment. The materials required are additional polythene cotton sheets to compensate for the longer exposure time required, phosphine detectors and masks for monitoring. Operating savings (4 years NPV) have been estimated. It will be implemented by UNIDO in coordination with the Ozone Unit and the Ministry of Agriculture.

Approved in accordance with the Agreement between the Government and the Executive Committee.

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	Actual completion
Apr-2004		Apr-2004	Apr-2004	Oct-2006	

## Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed					2.2	2.5	3.8				8.5
Actual											

## Total funds approved by the Executive Committee (US\$):

Approved		222,210			222,210

## Total funds disbursed by UNIDO to the Government of Cote D'Ivoire (US\$):

Proposed						0
Actual						0

#### Current status of project implementation:

Equipment purchase process will start in July 2004.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
16.2	16.8	17.4	16.8	11.7	16.1	10.7	5.4	0.9		15.7

#### Project proposal:

#### Phase-out of methyl bromide in tobacco seedlings (CRO/FUM/35/INV/14), implemented by UNIDO

Installation of micro-tunnels, covered with polyethylene sheets, with plastic trays, a training programme in the use of the alternative technologies (to be organized in collaboration with the Tobacco Institute, Zagreb. Approximately 2,870 farmers will be trained in the use of the floating tray system). The Government is committed to phase out the entire consumption of MB by 2006, with a proposed phase out of 5.4 ODP tonnes each year. Upon completion of the project, the Government will issue a regulation forbidding the use of MB in soil fumigation in the country.

Approved on an exceptional basis, given the unfavourable cost-effectiveness of about US\$30 per kg; the Government of Croatia called upon to undertake the utmost efforts to ensure cost-effectiveness and savings in the implementation of the project and full compliance with the phase-out schedule. The project is to be implemented in accordance with the conditions for the phase-out of methyl bromide agreed between the Government of Croatia and the Executive Committee.

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	Actual completion
Dec-2001	Nov-2002	Jan-2002	Jul-2002	Jan-2007	

#### Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			3.2	3.2	3.2	3.2	3.4				16.2
Actual			6.2	3.2							9.4

#### Total funds approved by the Executive Committee (US\$):

### Total funds disbursed by UNIDO to the Government of Croatia (US\$):

Proposed		14,242	97,900				112,142
Actual							0

#### Current status of project implementation:

Equipment delivered and phase out of 3.2 tonnes occurred in 2003. An additional phase out of 6.8 tonnes is expected in 2004.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
27.0	48.0	63.3	19.8	70.8	62.1	22.8	15.2	21.1		50.5

#### Project proposal:

#### Phasing out methyl bromide in the tobacco sector (CUB/FUM/26/INV/11), implemented by UNIDO

The proposed technology involves the use of soil-less floating seedbeds inside plastics, tunnel-shaped greenhouses. In 1996 the floating tray technology was introduced in the country on an experimental basis, and has now been optimized. According to data from the Cuban Tobacco Institute, the transplants produced by this method are of the best quality and at almost the same operational cost as those produced by the traditional system. The capital cost is for the construction of the tunnel-shaped greenhouses. Training programmes would be implemented in order to transfer the technology to more than 2,000 farmers and cooperative personnel. Incremental operating savings were calculated for 4 years at net present value based on the costs of raw material (methyl bromide, seeds, substrate, Trichoderma), plastic sheets, labor and rental of seedbed land). At the end of the project the use of methyl bromide in tobacco cultivation will be de-certified, and a ministerial decree will be issued sanctioning the use of methyl bromide in tobacco cultivation.

The implementing agency was requested to confer with the Government of Cuba to see if it would be possible to implement the project in less than four years.

## Project implementation dates:

Date of a	pproval	Signature	agreement	Start-u	ıp date	1st disb	st disbursement   Completion (proposal)		Actual co	mpletion		
Nov-1	1998	Nov-	1998	Dec-	1998	Mar-1999 Dec-2002			2002	Dec-2001		
Total amou	int of MB	phased out	(ODP ton	nes):								
	<2000	2001	2002	2003	2004 2005		2006	2007	2008	2009>	Total	

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed	19.2	9.6	9.6	9.6							48.0
Actual	32.0	16.0									48.0

## Total funds approved by the Executive Committee (US\$):

		•	,				
Approved	1,673,324						1,673,324

## Total funds disbursed by UNIDO to the Government of Cuba (US\$):

Proposed								0
Actual	1,310,304	161,927	138,040	21,213				1,631,484

## Current status of project implementation:

Financial completion in December 2003.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
49.2	69.0	101.9	102.0	144.0	77.4	176.4	144.0	77.1		104.2

#### Project proposal:

Phase-out of methyl bromide in melon, flowers and tobacco (DOM/FUM/38/INV/33), implemented by UNIDO

The selected alternatives are alternative chemicals in combination with solarization (melons), steam pasteurization (cut flowers) and the floating tray system (tobacco). A demonstration project was completed in 2001 and the alternative technologies proven to be technically and economically viable for the prevailing conditions in the country. 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. The use of steam pasteurization in cut flowers crops requires 6 boilers; the floating tray system requires installation of micro-tunnels, with floating trays and conductivity meters. It also includes a training programme and one international consultant. The Government 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.

The Executive Committee noted that Dominican Republic's baseline consumption of MB is 104 ODP tonnes, its latest MB consumption reported for 2001 to the Ozone Secretariat is 141 ODP tonnes and, therefore, Dominican Republic might not be in compliance with the 2002 freeze target; agreed that, notwithstanding this fact, and without prejudice to the operation of the Montreal Protocol's mechanisms dealing with non-compliance issues, funding of \$922,900 plus agency support costs is approved in the accordance with the agreement between the Government of Dominican Republic and the Executive Committee approved at the 38th Meeting

#### Project implementation dates:

Proposed

Actual

Date of a	approval	Signature	agreement	Start-u	p date	1st disbu	rsement	Completion	ı (proposal)	Actual co	mpletion
Nov-	2002							Dec-	2006		
Total amou	unt of MB	phased ou	t (ODP toni	nes):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed				40.0		60.0	41.0	)			141.0
Actual				40.0							40.0
Total fund	ls approved	l by the Ex	ecutive Con	nmittee (US	5\$):						
Approved			922,900								922,900
Total fund	s disburse	d by UNID	O to the Go	vernment (	of Domini	can Republi	c (US\$):	*	•		

276,870

## Current status of project implementation:

Agreement between the ozone office and the users are under preparation. 40 tonnes of ODS phased out in 2003.

323,015

323,015

1,763

922,900

1,763

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
74.4	39.4	70.0	64.3	91.2	122.4	122.4	369.8	40.8		66.2

#### Project proposal:

Demonstration/technical assistance project for testing methyl bromide alternatives in soil treatment for the flower growing industry (ECU/FUM/26/TAS/23), implemented by IBRD

To demonstrate the application of alternatives to methyl bromide to control pests in flowers (roses and carnations) grown in greenhouses in 4 production areas: Imbabura, Pichincha, Cotopaxi and Azuay. Alternatives to be tested include a combination of solarization, steam pasteurization, substrate modifications, alternative agro-chemicals in low doses and an integrated pest management system (IPM). Each of the alternatives to be tested will include a minimum of 3 field tests in each of the production areas The expected results are an analysis of utilization of proposed alternatives to methyl bromide, training of at least 5 agronomists and/or crop specialists and dissemination of the results of the demonstration project.

At its 40th Meeting the Executive Committee decided to reclassify the project as a technical assistance project and note that it would achieve additional phase-out of 15 ODP tonnes

#### Project implementation dates:

Date of a	Date of approval Signature agreement				ıp date	1st disbursement		Completion	(proposal)	Actual completion	
Nov-	Nov-1998 Mar-2003				2003	Dec-	2003	Nov-2005			
Total amo	unt of MB	phased out	t (ODP ton	nes):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed					15.0						15.0

Total funds	annroved	l hv the	Frecutive	Com	mittoo	(IIC\$).

Approved	244,244					244,244

#### Total funds disbursed by IBRD to the Government of Ecuador (US\$):

Proposed	50,000					50,000
Actual	50,000					50,000

#### Current status of project implementation:

Six alternative treatments are being tested in the province of Cotopaxi. First results expected by May 2004. Dissemination workshop planned for the second half of 2004. No information on the outcome of the trials available to the Bank yet.

#### Project proposal:

Actual

Technology change for the phase-out of methyl bromide in the rose plant nursery sector (ECU/FUM/38/INV/31), implemented by IBRD

Production under the alternative technology proposed consists of cultivating the graft in a carrier plant, under protected greenhouse conditions; once the graft is strong, it is transplanted into the coconut substrate and wrapped in biodegradable paper. Once the plant reaches maturity, it is stored and prepared for shipping. The plant grown under the proposed alternative is more delicate and requires careful handling during harvesting. In addition, the transportation cost increases because of the higher weight of the plant (wrapped with leaves and hydrated coconut substrate). The company is committed to provide additional financial resources associated with the alternative technology, namely civil works and part of the training costs. The Government is committed to reduce the consumption of MB in the country and in consultation with major stakeholders, will develop policy measures to ensure that the MB phased out in this project will not be re-introduced.

Approved on the understanding that: (a) Ecuador has a baseline consumption of 66.2 ODP tonnes; (b) Ecuador will maintain compliance with the MB freeze during 2003 and 2004; (c) a 56% reduction in the MB baseline consumption will be achieved through implementation of the project, bringing the national level of consumption of controlled uses of MB to a maximum level of 29 ODP tonnes by January 2005; (d) the Government of Ecuador commits to permanently sustain this reduction at the maximum level of consumption of controlled uses of MB (29 ODP tonnes) through implementation of the project and the use of import restrictions and other policies that it might deem necessary; and (e) the World Bank will report to the Executive Committee annually on progress in this project and in full in 2006 once the project had been completed and the phase-out under the project had been achieved

## Project implementation dates:

Date of a	pproval	Signature	agreement	Start-u	ıp date	1st disbu	1st disbursement		ı (proposal)	Actual completion			
Nov-	2002	May-	-2003	Dec-	2003	Dec-	2003	Nov-	2005				
Total amou	Total amount of MB phased out (ODP tonnes):												
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total		
Proposed					37.2						37.2		
Actual	59,794.0										59,794.0		
Total fund	s approved	by the Exc	ecutive Com	mittee (U.	S\$):								
Approved	597,945		597,945								1,195,890		
Total fund	s disbursed	l by IBRD	to the Gove	rnment of	Ecuador (	US\$):							
Proposed											0		
Actual	59,794										59,794		
Current sta	itus of pro	ject implen	nentation:										

Project not yet started. Due to the status of implementation no technical information available yet.

MB consumption	reported to the	<b>Ozone Secretariat</b>	(ODP tonnes)
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1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
90.0	270.0	190.2	252.0	240.0	409.2	420.0	432.0	270.0		238.1

#### Project proposal:

National phase-out of methyl bromide in horticulture and commodities fumigation (EGY/FUM/38/INV/86), implemented by UNIDO

Phase out of MB used for soil fumigation in strawberry, flowers, cucumber, pepper, melon, medicinal plants and lettuce crops and fumigation of commodities and structures in Egypt, representing 49 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 selected alternative technologies, for each of the crops and applications where MB is currently used, including the estimated costs are the following: Medicinal and lettuce (9.9 tonnes) soilless and substrates; cut flowers (28.0 tonnes) steam pasteurization; strawberry (89.1 tonnes) bio-fumigation; strawberry nursery (32.8 tonnes) steam pasteurization; melon and cucumber (38.7 tonnes) grafting; pepper (16.1 tonnes) soilless and substrates; tomato (13.1 tonnes) bio-fumigation; commodities fumigation (114.0 tonnes) phosphine fumigation; and structural fumigation (36.0 sulphuryl fluoride). The equipment include steaming equipment for cut flowers and strawberry nurseries; mixing and blending equipment for tomato and strawberry production; grafting equipment for melon and cucumber; equipment for expanding bio-antagonist inoculums; phosphine and sulphuryl fluoride fumigation equipment. The Government is committed to a permanent reduction in aggregate consumption of controlled uses of MB, through import restrictions and controlled uses of MB for all non-exempt uses. The Government is also committed to complete phase-out the use of MB by 2009, through the implementation of the project.

Approved on the understanding that Egypt will: (a) meet the MB freeze consumption during 2003 and 2004; (b) permanently sustain the reduction in the consumption of MB through the implementation of this project component, bringing the total aggregate national consumption in controlled uses of MB to 190.4 ODP tonnes. This will enable Egypt to achieve the 20 % reduction in the baseline consumption by 2005; (c) completely phase-out MB consumption by 2009, bringing the national aggregate consumption of controlled uses of MB down to zero, provided that a second portion of the project (agreed funding of \$2,259,408) is approved; and (d) sustain this phase-out of MB agreed above through import restrictions and controlled use of MB for all non-exempt MB uses

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	<b>Actual completion</b>
Nov-2002	Nov-2002	Jan-2003	Sep-2003	Nov-2006	

Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed					80.0	105.6					185.6
Actual											

#### Total funds approved by the Executive Committee (US\$):

Approved		2,750,592				2,750,592

#### Total funds disbursed by UNIDO to the Government of Egypt (US\$):

Proposed						0
Actual		3,209				3,209

## Current status of project implementation:

Agreement was signed by the Ministry of Environment. Phase-out should occur upon completion of the project

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
	21.0	14.4	10.8	8.4	10.5	13.2	10.8	10.5		13.7

#### Project proposal:

Technical assistance for the phase-out of methyl bromide for soil fumigation (GEO/FUM/37/TAS/13), implemented by UNIDO

The alternatives selected are solarization combined with alternative chemicals (metam sodium, dazomet, oxamyl), bio-fumigation and soiless cultivation, in combination with an integrated pest management programme. The application of metam sodium requires installation of polyethylene pipes, a storage tank and a pump to inject the pesticide into the irrigation flow. Soiless cultivation requires installation of an irrigation system including polyethylene pipes, pump, valves, manometers, and other accessories. Biofumigation requires installation of polyethylene pipes, pressure regulators, valves and other accessories

Approved on the understanding that it was a technical assistance programme that would achieve a phase-out of 6 ODP tonnes of methyl bromide, representing the entire consumption for soil fumigation

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	<b>Actual completion</b>
Jul-2002	Jul-2002	Aug-2002	Feb-2003	Aug-2006	

## Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed							6.0				6.0
Actual											

#### Total funds approved by the Executive Committee (US\$):

Approved	220,000			220,000
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## Total funds disbursed by UNIDO to the Government of Georgia (US\$):

Proposed						0
Actual		34,828				34,828

## Current status of project implementation:

Sub contract signed, first progress report was sent, workshop done and the first phase completed. Phase-out should occur upon completion of the project

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
0.0	0.0	0.0	0.0	0.0	4.5	6.3	0.0	0.0		0.0

#### Project proposal:

Training programme for terminal phase-out of methyl bromide use, excluding QPS applications (GHA/FUM/37/TRA/18), implemented by UNDP

Phase out 6.3 ODP tonnes of MB used for soil fumigation of melons through training and demonstration of alternatives to the use of MB. It will be implemented in 2 stages: Stage I, development of policy package to freeze and reduce MB consumption, initial training and installation of alternatives, demonstration and adaptation of alternatives to local conditions; Stage II, training and installation of alternatives on remaining farms. Alternatives will be transferred from other countries and adapted to local conditions

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	Actual completion
Jul-2002	Dec-2002	Oct-2002		Aug-2005	

#### Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed						6.3					6.3
Actual											

## Total funds approved by the Executive Committee (US\$):

Approved	101,550				101,550
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#### Total funds disbursed by UNDP to the Government of Ghana (US\$):

	•		,				
Proposed						0	
Actual		25,105				25,105	

#### Current status of project implementation:

Formal National Steering Committee established in late 2002 to guide implementation of the project. Policy work conducted and Ozone Depleting Regulations updated in 2003, as per requirements of Phase I of the project. Training mission to train-the trainers scheduled in 2nd quarter of 2004, with further training and adoption of alternatives to continue. Project on track.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
57.0	242.7	255.6	525.0	579.5	514.6	702.0	786.6	709.4		400.7

#### Project proposal:

#### National phase out of methyl bromide (GUA/FUM/38/INV/29), implemented by UNIDO

Phase out of MB used for soil fumigation in melon, tomato, strawberry and cut flowers crops in Guatemala (60% of the total consumption). The total surface area where melons are produced and MB is applied is 4,665 ha. Of this area, 1,208 ha are owned by non-Article 5 companies, with a total MB consumption of 217.4 ODP tonnes of MB. The selected alternatives are grafting (melons), metam sodium in combination with solarization (tomatoes) and steam pasteurization of the substrate (cut flowers and strawberries). Grafting requires the installation of greenhouses and an acclimatized workshop for grafting, a sowing machine, a germination room, and trays. The application of metam sodium in combination with solarization requires modification to the irrigation system. The use of steam pasteurization in cut flowers and strawberry crops requires 24 boilers of different capacities, a pasteurization kit (PVC sheets with steam inlets) and a pasteurization tunnel. The Government is committed to a permanent reduction in aggregate consumption of controlled uses of MB, banning its use in soil furnigation and any other non-critical uses. The Government is also committed to a complete phase-out in the use of MB by 2008, through the implementation of the project.

The Executive Committee: (a) noted that Guatemala's baseline consumption of MB is 400.7 ODP tonnes, its latest MB consumption reported for 2001 to the Ozone Secretariat is 788.6 ODP tonnes and, therefore, Guatemala might not be in compliance with the 2002 freeze target; (b) agreed that, notwithstanding this fact, and without prejudice to the operation of the Montreal Protocol's mechanisms dealing with non-compliance issues, funding of \$3,257,377 plus agency support costs is approved on the basis that (i) the implementation schedule proposed in the project is planned to achieve a total reduction in consumption of 468 ODP tonnes in 2005; of this amount 100 tonnes would be reduced by non-Article 5 companies. Furthermore, 388 ODP tonnes would be reduced in the calendar year of 2004 and additional 80 ODP tonnes in the calendar year 2005 in order to enable Guatemala to meet the MB freeze and 2005 reduction targets, respectively; (ii) Guatemala commits to permanently sustain the reduction in the consumption of MB through the implementation of the project and the use of import restrictions and other policies that it might deem necessary, bringing the total aggregate national consumption in controlled uses of MB to 320.6 ODP tonnes. This will enable them to achieve the 20% reduction in the baseline consumption by 2005; (iii) Guatemala will completely phase-out MB consumption by 2008, bringing the national aggregate consumption of controlled uses of MB down to zero, provided that a second portion of the project (\$3,264,389) is approved; and (iv) Guatemala will sustain this phase-out of MB agreed above through import restrictions and controlled use of MB for all non-exempt MB uses

## Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	Actual completion
Nov-2002	Nov-2002	Dec-2002	Mar-2003	Nov-2008	
Total amount of MR	phased out (ODP ton	nas)·			

#### Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			79.2	181.4	36.0	132.0	25.0	25.0	24.0		502.6
Actual											

#### Total funds approved by the Executive Committee (US\$):

#### Total funds disbursed by UNIDO to the Government of Guatemala (US\$):

Proposed						0
Actual		1,036,125				1,036,125

#### Current status of project implementation:

The working arrangement was signed. The first greenhouse units, for grafted plant production, have been delivered, installation is expected to be completed in January 2004. Delivering and installation of the second unit and completion of 2003/2004 crop season training is expected to be finalized by April 2004. The fist tranche of equipment for metam sodium application has been delivered and installed, the related training course has been completed. The project will be completed by end 2008 in line with Dec. 42/14 (a) (b). After the 42nd Meeting of the Executive Committee, decision regarding the new phase out schedule, the project impact has been increased from 468 ODP tonnes to 502.6 ODP tonnes.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
	249.9	254.9	263.8	269.1	292.1	377.7	510.9	412.5		259.4

#### Project proposal:

Phase-out of methyl bromide in melon and banana production sector and tobacco seedling (HON/FUM/37/INV/10), implemented by UNIDO

Phase out of MB used for soil fumigation in melon (360 ODP tonnes) and banana (38.2 ODP tonnes) production and tobacco seedlings (4.7 ODP tonnes) The alternatives are grafting (melons), dazomet in combination with glifosfate (banana) and the floating tray system (tobacco). Grafting requires the installation of greenhouses and acclimatized workshop for grafting, a sowing machine, a germination room, and trays. Tobacco seedbeds will be replaced with the floating tray system in micro-tunnels. Control of the moko disease in banana crops will be achieved through implementation of preventive measures and establishment of a monitoring system, and in cases of infection, through disinfestation of the soil with alternative chemicals. The Government has already issued a regulation banning use of MB in the horticultural sector by the end of 2010; the Government will set limits on the import and national sale of MB. Before completion of the project, the Government will strengthen its efforts to introduce labeling of vegetables produced without the use of MB

Approved noting that the Government of Honduras undertook to permanently sustain this reduction in the consumption of methyl bromide through implementation of the project and the use of import restrictions and other policies that it might deem necessary; requested UNIDO to report to the Executive Committee once the project had been completed and the phase-out under this project had been achieved; and noted that the Executive Committee would consider additional funding of the project for Honduras at that time, if it determined that an additional reduction was a priority

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	Actual completion
Jul-2002	Mar-2003	Aug-2002	Nov-2002	Aug-2007	

#### Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed				42.5	63.9	106.6					213.0
Actual				102.9							102.9

#### Total funds approved by the Executive Committee (US\$):

Approved		1 977 454				1 977 454
Abbrovea		1.7//.434				1.7//.434

#### Total funds disbursed by UNIDO to the Government of Honduras (US\$):

Proposed							0
Actual		3,190	1,323,936				1,327,126

#### Current status of project implementation:

The first greenhouse units, for grafted plant production, have been delivered and installed, the first training have been performed. Delivering and installation of the second unit and completion of 2003/2004 crop season training is expected to be finalized in April 2004. The project will be completed by end 2005 in line with Dec. 42/14 (c). The MB consumption reported for 2003 is 309.6 ODP tonnes, corresponding to 102.45 ODP tonnes phased out instead of 42.5 ODP tonnes as planned.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
138.6	152.4	118.8	145.2	126.0	0.0	0.0	75.6	37.8		135.6

#### Project proposal:

#### Phase-out of the use of methyl bromide in grain storage (IDS/FUM/41/INV/158), implemented by Canada

To replace all controlled uses of MB in storage applications with phosphine tablets and an integrated stored pest management (ISPM) system. It includes implementation of an ISPM system, training for fumigators in the use of phosphine tablets, and the provision of basic tools and equipment for proper application of phosphine (such as phosphine meters, gas sampling lines and gas masks). It also includes a training programme (six trainers) on insect biology related to sanitation and proper use of equipment and methods of applying phosphine. The trainers will in turn train individuals within the fumigation companies. The ISPM system will be implemented through workshops and manuals amount of rice loss due to insects. BULOG will be the coordinating agency for the ISPM training and will provide the material and equipment required for this purpose. The programme also includes drafting and enforcement of policy, legislative and regulatory actions concerning the import and use of MB.

Approved on the understanding that this project would phase out all remaining controlled uses of methyl bromide and that the Government would not seek additional funding from the Multilateral Fund for the phase out of controlled uses of MB.

#### Project implementation dates:

Date of a	Date of approval Signatu		agreement	eement Start-up date		1st disbu	rsement	Completion	(proposal)	Actual completion	
Dec-	Dec-2003 Aug-2004		-2004	Sep-2004		Sep-2004		Dec-2007			
Total amo	unt of MB	phased out	t (ODP ton	nes):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed					9.0	9.0	9.0	10.8			37.8
Actual											
Total fund	ls approved	l by the Exc	ecutive Con	nmittee (US	S\$):						
Approved				350,000							350,000
Total fund	ls disburse	d by Canad	la to the Go	vernment (	of Indonesi	a (US\$):					
Proposed					38,400	241,300	66,100	4,200			350,000
Actual											0

#### Current status of project implementation:

The project was approved at ExCom 41 in December 2003 and has not commenced its activities as of yet. An agreement between the Government of Canada, UNIDO and the Government of Indonesia is currently being discussed and is planned to be signed by August 2004. The first disbursement would be made in September 2004, the same time at which project activities would begin. For 2004, it is proposed the development and reproduction of good phosphine fumigation practices training manual and implementation of public awareness seminars. For 2005, it is proposed to the implementation of training workshops (good phosphine furnigation practices and ISPM train-the-trainers); development and reproduction of ISPM training manual; purchasing of equipment (phosphine fumigation equipment and ISPM equipment); development of policy and regulation framework; and project coordination and monitoring. For 2006, it is proposed the implementation of refreshment training in good phosphine furnigation practices, public awareness seminars and ISPM regional training workshops; and purchasing of additional ISPM equipment.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
73.2	15.0	42.0	21.6	28.2	33.0	22.2	27.6	5.4		26.7

#### Project proposal:

Phasing out of the important non critical, non essential use of methyl bromide for post-harvest treatment (IRA/FUM/29/INV/57), implemented by UNIDO

Phase out all major non-critical, non-essential uses of MB in post-harvest treatment, including the fumigation of dried fruits and vegetables, nuts, grains and seeds, through the use of phosphine. It includes procurement of 100 phosphine detectors for monitoring fumigation space and 100 phosphine detectors for monitoring the surrounding work space, 50 self-contained breathing apparatus, international expertise and two 5-day training programmes. Contracts for implementation of the major project component will be awarded on the basis of competitive bids. Upon completion of the project, the Government will issue a regulation banning the use of MB in non-essential, non-critical stored commodity treatment of dried fruits, dried vegetables, nuts, grains and seeds, and will prohibit it for new applications in non-essential, non-critical treatment for stored commodities. It also agrees to counter the illegal import and use of MB in the country.

### Project implementation dates:

Date of a	Date of approval Signature agreement		agreement	Start-up date		1st disbursement		Completion (proposal		) Actual completion	
Nov-	Nov-1999 Sep-2001		2001	Jan-2000		Apr-	Apr-2000		2001		
Total amo	unt of MB	phased out	(ODP toni	nes):							
-	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed		12.4									12.4
Actual											
Total fund	s approved	l by the Exe	cutive Con	nmittee (U.	S\$):						
Annrowed	260 608										260 608

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Proposed								0
Actual	12,009	17,486	1,771	136,436				167,702

#### Current status of project implementation:

Training took place and equipment delivered. The project will be completed in 2004.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
199.8	180.0	180.0	165.0	180.0	88.8	105.3	105.6	90.6		176.3

#### Project proposal:

Complete phase-out of the use of methyl bromide in Jordan (JOR/FUM/29/INV/54), implemented by Germany

Phased reduction and elimination of all controlled uses of MB in the country. This is the total funding that would be available to Jordan from the Multilateral Fund for the total permanent cessation of all uses of MB controlled by the Montreal Protocol (i.e. quarantine and preshipment use is currently exempt from this agreement). This agreement is predicated on the commitment by Jordan that it will not produce MB. If at any time, Jordan initiates production of MB, then this agreement becomes void, and all payments made pursuant to this agreement must be returned to the Multilateral Fund. Jordan agrees that in exchange for the funding level approved, it will reduce its total consumption/imports of MB (except for quarantine and preshipment uses, which are currently exempt) in accordance with the following schedule: 180 ODP in 2001; 108 ODP in 2004; 54 ODP tonnes in 2006; 27 ODP tonnes in 2008, 0 tonnes by 2015. The funds approved will be disbursed as follows. US \$1 million will be released upon approval at the 29th ExCom Meeting; an additional US \$1 million will be disbursed when Jordan demonstrates, based on audited data, that its consumption has achieved 108 ODP tonnes in 2004, or met the target of 108 ODP tonnes, whichever comes first; an additional US \$900,000 will be provided when Jordan has demonstrated that it has met its agreed target of 54 tonnes not later than 2006; the final funding would be made available to Jordan when it has met its target of 27 tonnes not later than 2008, and demonstrated that it has a sustainable plan to maintain and phase out the remainder of its controlled uses of methyl bromide use by 2015. The ExCom provides Jordan with maximum flexibility in using the agreed funds to meet the reduction requirements agreed. Jordan agrees that the funds agreed in principle for complete cessation of the use of MB for non-quarantine and preshipment uses is the total funding that will be available to it to enable its full compliance with the obligations it assumed above, as well as the obligations it currently has or may in the future assume under the Montreal Protocol, and that no additional Multilateral Fund resources will be forthcoming for any further activities related to the phase-out of MB. Jordan and the Multilateral Fund and its implementing agencies and bilateral donors will neither provide nor request further Multilateral Fund-related funding for the accomplishment of the total phase out of MB in accordance with the schedule noted above and the terms of the strategy being approved (this includes but is not limited to funding for farmer compensation and all technical assistance including training). Jordan understands that if the ExCom meets its obligations under this agreement, but Jordan does not meet the reduction requirements outlined (above), the implementing agency and Multilateral Fund will withhold funding for the subsequent tranche of funding until such time as the required reduction has been met. Jordan understands that the Multilateral Fund will reduce the subsequent tranche and therefore, total funding for the MB phaseout, on the basis of US \$20,000 per ODP tonne of reduction not achieved in any year of this agreement (NEP/OzL/Pro/ExCom/29/65 Annex V).

The Committee approved in principle a total of US \$3.4 million for the phased reduction and elimination of all controlled uses of MB as the total funding that would be available from the Fund for the total permanent cessation of all uses of MB controlled by the Protocol (quarantine and preshipment is exempt). Commitment by Jordan that it will not produce MB; if at any time, Jordan initiates production of MB, then this agreement becomes void, and all payments made pursuant to this agreement must be returned to the Fund. Jordan agrees that in exchange for the funding level, it will reduce its total consumption/imports of MB (except for quarantine and preshipment uses) in accordance with the following schedule:180 ODP in 2001; 108 ODP in 2004; 54 ODP tonnes in 2006; 27 ODP tonnes in 2008, 0 tonnes by 2015 US \$1 million will be released upon approval at the 29th Meeting. An additional US \$1 million will be disbursed when Jordan demonstrates (audited data) that its consumption has achieved 108 ODP tonnes in 2004, or met the target of 108 ODP tonnes, whichever comes first. An additional US \$900,000 will be provided when it has met its agreed target of 54 tonnes not later than 2006. The final funding would be made available when it has met its target of 27 tonnes not later than 2008, and demonstrated that it has a sustainable plan to maintain and phase out the remainder of its controlled uses of MB use by 2015 (other specific conditions of the agreement are included in Annex V to the document UNEP/OzL.Pro/ExCom/29/65).

#### Project implementation dates:

Date of approval Signa	ature agreement	Start-up date	1st disbursement	Completion (proposal)	Actual completion
Nov-1999	Oct-2000	Mar-2000	Mar-2000	Dec-2008	

Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006 2007	2008	2009>	Total
Proposed					72.0		54.0	27.0	27.0	180.0
Actual										

Total funds approved by the Executive Committee (US\$):

## **JORDAN**

Approved	3,063,000										3,063,000	
Total funds disbursed by Germany to the Government of Jordan (US\$):												
Proposed	1,000,000				1,000,000		900,000		163,000		3,063,000	
Actual											0	

Current status of project implementation:

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
216.0	195.0	204.0	236.4	234.6	60.0	92.6	90.0	139.1		217.5

#### Project proposal:

Technology transfer leading to methyl bromide phase-out in soil fumigation in cut flower component (KEN/FUM/38/INV/31), implemented by UNDP

Replacement of MB with steam pasteurisation and soilless media for cut flower crops. Steam requires 8 boilers and bunkers for steaming the substrate for roses; soilless media includes the use of cocopeat as substrate, receptacles for the media, an irrigation system including injection systems. It also includes training programme, technology transfer and policy development. It proposes to develop policy measures to ensure that the MB phased out will not be re-introduced at a later stage. It will be implemented jointly by the Government of Germany (funded throuh a separate project) and by UNDP in co-operation with the Horticultural Crops Development Authority, the Flower Council, the Fresh Produce Exporters Association and the Agro-Chemicals Association under the national co-ordination of the Ozone Unit.

In accordance with the agreement between the Government of Kenya and the Executive Committee approved at the 38th Meeting

Project implementation dates:

Date of approval Signature agreement		Start-up date		1st disbursement		Completion (proposal		Actual completio			
Nov-	Nov-2002 Mar-2004						Dec-	2009			
Total amo	unt of MB	phased out	t (ODP toni	nes):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed					10.0		21.0		22.0	10.0	63.0
Actual											

Total	funds	approved	bv	the	Executive	Committee	(US\$):
I Olli	,	uppi oreu	$\boldsymbol{\sigma}_{\boldsymbol{y}}$		Dice Citie	Committee	$(\mathcal{L}\mathcal{L}\varphi)$ .

Approved		510,660				510,660

#### Total funds disbursed by UNDP to the Government of Kenya (US\$):

Proposed		510,660	287,247	478,743	319,161		1,595,811
Actual							0

#### Current status of project implementation:

Project approved in Nov. 02. Project implementation delays were incurred in 2003 due to delays in project signature that resulted from a convolluted negotiation process amongst the different national stakeholders. UNDP reminded the Gov't continuously of the performance-based nature of the project & the need to reach specific phaseout levels of MB in order to secure additional funding in future. Interest generated amongst growers at national level during the preparatory phase of the project has nevertheless kept momentum high and growers are ready to launch project activities now that the Project Document is signed.

## Project proposal:

Technology transfer leading to methyl bromide phase-out in soil fumigation in all other horticulture (KEN/FUM/39/INV/33), implemented by Germany

Replacement of MB with alternative chemicals for horticultural crops and a floating tray system in seedbeds. The alternative chemical (metam sodium) requires modification of the irrigation systems; the floating tray system requires the construction of microtunnels, manual seeders and conductivity meters. It also includes training programme, technology transfer and policy development. It proposes to develop policy measures to ensure that the MB phased out will not be re-introduced at a later stage. It will be implemented jointly by the Government of Germany and by UNDP (funded throuh a separate project) in co-operation with the Horticultural Crops Development Authority, the Flower Council, the Fresh Produce Exporters Association and the Agro-Chemicals Association under the national co-ordination of the Ozone Unit.

To be implemented in accordance with the agreement between the Government of Kenya and the Executive Committee approved at the 38th Meeting.

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	Actual completion
Apr-2003	Feb-2004	Apr-2003	Jul-2003	Dec-2009	

#### Total amount of MB phased out (ODP tonnes):



-	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed					5.0		12.0		12.0	5.0	34.0
Actual											
Total fund	ls approved	l by the Ex	ecutive Co	mmittee (U	S\$):						
Approved				287,247	172,347						459,594
Total fund	ls disburse	d by Germa	any to the C	Governmen	t of Kenya	(US\$):					
Proposed				287,247	172,347	114,898					574,492
Actual											0

Current status of project implementation:

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
13.8	13.8	15.4	13.8	13.7	15.4	0.0	13.8	12.0		14.2

#### Project proposal:

Technical assistance project to install alternatives and phase-out methyl bromide (KYR/FUM/41/TAS/08), implemented by UNDP

MB is mainly used for fumigation of stored wheat to control insect infestations and, to a lesser extent, in flour mills, dried fruit and nut storage, museums and other non-food locations. It proposes the transfer of alternative MB technologies from other countries and their adaptation to local conditions complemented with awareness raising, policy development and training for customs officers. For the second phase, it is proposed training for the remaining MB users and assistance to install alternative technologies. It will be implemented with assistance of the Ozone Centre's workers, the Expedition for Protection of Cereal Reserves and involvement of experts from other organizations.

Approved on the understanding that the Government will not seek additional funding for the phase-out of controlled uses of MB.

Project implementation dates:

Date of a	approval	Signature	agreement	Start-	up date	1st disbu	bursement   Completion (proposal)   Actual c		Completion (proposal)		mpletion	
Dec-	2003			Jun-	2004			Dec-2	2008			
Total amo	Total amount of MB phased out (ODP tonnes):											
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total	
Duanagad						2.0	2.5	2.5	4.2		142	

	~2000	2001	2002	2005	2007	2003	2000	2007	2000	2007-	Iotai
Proposed						3.0	3.5	3.5	4.2		14.2
Actual											
Total fund	s approved	l by the Ex	ecutive Cor	nmittee (U	S\$):						

Approved		300,000		
Total funds dishursad	l by UNDP to the C	overnment of Kw	ravzetan (IJCC).	

10ա յսու	is aisvarse	a vy UNDF	to the Got	vernmeni oʻ	j Kyrgytsia	ın (US\$).			
Proposed									0
Actual									0

## Current status of project implementation:

Funds received from MLF Treasurer in February 2004. Project document sent to Government for signature. Work plan for 2004 formulated and to be endorsed by national stakeholders. Training to be organised for 3rd quarter 2004.

300,000

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
136.2	151.2	179.4	168.0	110.9	139.3	234.3	219.0	197.3		152.4

#### Project proposal:

Sectors phase-out of methyl bromide in vegetable, cut flower and tobacco production (LEB/FUM/34/INV/46), implemented by UNDP

The technologies selected are: solarization in combination with alternative chemicals (metam sodium, 1,3-dichloropropene) and biofumigation. The use of chemical alternatives requires modification of the irrigation systems currently available in farms. Replacement of MB in tobacco seedlings requires installation of micro-tunnels covered with polyethylene sheets, with 100 plastic trays. Replacement of MB in cut flowres requires mobile steam boilers with accessories. The Government will be responsible for providing the legal framework for phasing out MB uses; the required infrastructure for reaching the farmers involved; and the institutional support.

## Project implementation dates:

Date of a	approval	Signature	agreement	Start-u	p date	1st disbu	rsement	Completion	n (proposal)	Actual co	ompletion
Jul-2	2001	Dec-	2001	Nov-2	2001	Jan-2002		Dec-2002			
Total amo	unt of MB	phased out	(ODP toni	nes):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			25.8	36.0	54.0	36.0	34.3	3			186.1
Actual			26.0	39.8							65.8
Total fund	ls approved	l by the Exe	cutive Con	nmittee (US	5\$):						
Approved		800,000	600,000	500,000							1,900,000
Total fund	ls disbursed	d by UNDP	to the Gov	ernment of	Lebanon	(US\$):					
Proposed		800,000	600,000	500,000	400,000	300,000					2,600,000
Actual		702,468	722,615								1,425,083

#### Current status of project implementation:

During 2003, a total of 1,472.5 dunums converted to the use of alternative technologies, resulting in an actual phase out of 39.76 ODP T of MeBr. The Year 2003 target was therefore exceeded by 10.44 %.

Project activities in the vegetable sector extended over 683 greenhouse sites located in the different agricultural areas of the country. A total of 2,049 farmers were trained on the appropriate application of the alternative methods proposed by the project. The number of farmers that chose non-chemical alternatives proposed by the project (solarization, biofumigation and grafted plants) increased from 85 % in 2002 to 96.63 % in 2003, and from 90 % to 96.54 % in terms of total phase out area.

The elimination of consumption was supported by the following activities: Train the trainers programme; Organization of farmers training sessions in North and South Lebanon and in the Beka'a; Procurement of alternatives and delivery of the alternatives to farmers having successfully completed a training programme; and, Coordination with the Ministry of Agriculture for the establishment of new legislation to control use of methyl bromide.

In coordination with the tobacco Régie of Lebanon and local NGOs, the Methyl Bromide Alternatives Project initiated its activities in the tobacco sector in February 2003, using the floating tray technique as the main alternative. Pool construction was launched and a technical training mission was hosted in August 2003.

In order to support the overall sustainability of the project, plant production residues, traditionally burned for disposal, causing negative air quality concerns, were composted, turning the waste into organic material suitable for use as a soil amendment. From an economic perspective this initiative contributes to reduction of production costs for farmers who can make use of the compost originating from their sites instead of purchasing organic material. In addition, Lebanese production capacity in grafted plants increased from one agricultural company to four in 2003, the results of positive promotion of the alternative by farmers. And lastly, a local initiative to recycle used polyethylene allowed farmers to be compensated for used PE by the tonne, while in turn also provided more cost-effective, locally produced materials required for the sustainable use of alternatives.

Completion (proposal) date for the project should read December 2006, not December 2002.

## Project proposal:

Phase-out of methyl bromide for soil fumigation in strawberry production (LEB/FUM/34/INV/44), implemented by UNIDO The technology selected is negative pressure steam which requires installation of pipes in the soil, an electric fan, and the use of 12 steam generators. The Government will be responsible for providing the legal framework for phasing out MB uses; the required infrastructure for reaching the farmers involved; and the institutional support.

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	Actual completion
Jul-2001	Jul-2001	Mar-2001	Apr-2002	Dec-2002	

#### Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			6.0	10.1	14.2	11.1	9.0				50.4
Actual			6.0	10.1							16.1

## Total funds approved by the Executive Committee (US\$):

Approved	350,000 421,946	450,000				1,221,946
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#### Total funds disbursed by UNIDO to the Government of Lebanon (US\$):

Proposed	350,000	421,946	450,000	350,000	250,000			1,821,946
Actual		129,502	228,667					358,169

## Current status of project implementation:

Phase I and phase II completed, phase III approved the 41st Meeting of the Executive Committee (December 2003). Additional equipment and training expected in 2004 with a phase out of 14.20 tonnes. Due to the escalating cost of diesel oil, operating cost for soil steam pasteurization has increased sharply. At the present time soil steam pasteurization is not economically viable any more. The progress report has been submitted, asking to reorient the project implementation, as for decision Ex.I/2 para 2. - First Extraordinary Meeting of the Parties, Montreal, March 2004.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
	12.0	12.0	12.0	12.9	27.2	23.4	19.9	5.3	0.0	12.2

#### Project proposal:

Phase-out of methyl bromide in tobacco seedling and horticulture production sector (MDN/FUM/32/INV/16), implemented by UNIDO

The alternative technology to replace MB in the production of tobacco seedlings is the floating tray system, which requires installation of micro-tunnels with a surface area of 10 m2, covered with polyethylene sheets, with 36 plastic trays. The alternative technology selected for the seedlings in greenhouses and protected crops is solarization in combination with biofumigation (farmers readily accept this alternative technology since it is an effective method for soil treatment, improves soil fertility and is cheap). It also includes training programmes in the use of the alternative technologies, which is organised in collaboration with the kombinats and provided by the staff of the Faculty of Agriculture. Approximately 12,570 farmers will be trained in the use of the floating tray system including installation of micro-tunnels; handling and cleaning a seeder and pelletized seeds; preparation of trays; monitoring water conductivity; clipping the seedlings; selecting pesticides; transplanting of the seedlings to an open field; in addition, 1,200 farmers will be trained in the used of solarization in combination with biofumigation technology

UNIDO will disburse the funds approved in tranches according to the proposed methyl bromide phase out schedule indicated in the agreement between the Government and the Committee; if Macedonia does not meet the reduction requirements outlined in the agreement, UNIDO will withhold funding for the subsequent tranche until such time as the required reduction has been met. Also, UNIDO will submit an annual progress report on the implementation of the project to the Fund Secretariat

### Project implementation dates:

Date of a	approval	Signature	agreement	Start-u	p date	1st disbu	rsement	Completion	ı (proposal)	Actual co	mpletion
Dec-	2000	Dec-	2000	Dec-2	2000	Oct-2001		Jan-2006			
Total amo	unt of MB	phased out	(ODP toni	nes):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			15.0	2.5	1.9	7.8					27.2
Actual			15.0	4.4							19.4
Total fund	ls approved	by the Exe	ecutive Con	nmittee (US	5\$):						
Approved	1,075,207										1,075,207
Total fund	ls disbursed	d by UNID	O to the Go	vernment d	of Macedor	ıia (US\$):					
Proposed	322,562		268,802	268,802	215,041						1,075,207
Actual		247,190	673,760	50,800							971,750

#### Current status of project implementation:

Training of farmers continued as planned and 4.4 tonnes of ODS phased out in 2003 including the planned phase out of 1.9 tonnes of 2004. Progress Report submitted to the 41st ExCom Meeting.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
121.8	98.2	124.8	102.0	126.0	129.0	79.2	68.0	55.4		112.7

#### Project proposal:

Second payment under the national programme for the phase out of all non-essential and non-quarantine and pre-shipment applications of methyl bromide (MLW/FUM/34/INV/16), implemented by UNDP

The main activities to be implemented are: train of trainers and farmers in construction and use of micro-tunnel float system, use of basamid and IPM programmes; visit a country where the floating tray system is already implemented by representatives of farmers and trainers; construction of micro-tunnels by farmers, led by trainers; preparation by farmers of seedbeds with basamid; monitor performance of alternatives versus MB (such as seed germination rate, seedling survival, seedling growth, transplant survival; tobacco yields, quality and grade of leaf, costs); farm visits by trainers to follow up and on-site assistance; continuous training of farmers for later sowings; preparation of additional basamid beds for late sowing; field days for farmers and technicians to see alternative plots to MB; farmer-to-farmer information exchange; discuss with potential local suppliers of trays and soiless media and develop a plan for future in-situ production (possibly by 2003); prepare detailed workplan for implementation of Phase II; preparation for video; review and amend work plan for 2002 as required and necessary; preparation and dissemination of information through ARET'S phone hotline, including comparison of yields, tobacco leaf quality, costs, profits, and farmer views and 2-day workshop with trainers and farmers to get feedback before submission of a full report.

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	<b>Completion (proposal)</b>	Actual completion
Jul-2001	Apr-2001		Apr-2002	Aug-2002	

#### Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed		19.3	20.9	41.1	49.3						130.6
Actual											

#### Total funds approved by the Executive Committee (US\$):

Approved		1,000,000		750,000							1,750,000	l
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#### Total funds disbursed by UNDP to the Government of Malawi (US\$):

Proposed	1,000,000	750,000	1,249,824				2,999,824
Actual							0

#### Current status of project implementation:

To date, a total of 77.51 ODP T of Methyl Bromide have been phased out. In 2001, 18.45 ODP T were phased-out, in 2002, 24.35 ODP T were phased out, and in 2003, phase out of 34.71 ODP T was achieved, falling slightly short of the 41.1 ODP T goal. This shortfall will be addressed during 2004, thanks to the strong national commitment to the project's aims.

The project contracted a regional consultant from Zimbabwe, Dr. Upenyu Mazarura, an expert in floating tray systems to conduct training and lead field days. ARET scientists and extension staff trained by Dr. Mazarura continued to conduct training over the remainder of the year. A total of 15 field days and demonstrations were organized for commercial and smallhold farmers and extension officers, with members of government, NGOs, the Tobacco Association of Malawi (TAMA) and members of the press invited to attend. In total 783 people received training in 2003 in situ on producing farms and estates. These sessions were organized in close cooperation with companies that supply alternatives to MeBr in order to allow farmers to evaluate their respective effectiveness and use

In 2003, the project intensified research to produce substrates locally using pine bark, through consultation with a local company, Wood Industries Corporation (WICO). Such initiative is aimed at encouraging long term sustainability of the MeBr phase-out achieved.

Amendments to Malawi's Environmental Management Act, to include MeBr control, that have been submitted to Ministry of Justice and will allow for enforcement of the ban on MeBr after 31st December 2004.

The Project is implemented by the Environmental Affairs Department through Agricultural Research and Extension Trust (ARET). Project implementation is guided by the Project Steering Committee (PSC) which is chaired by the Ministry of Agriculture,

Irrigation and Food Security. Other members of the PSC include Environmental Affairs Department as secretariat, ARET as executing agency, Tobacco Association of Malawi (TAMA), Pesticide Association of Malawi, Agricultural Development and Marketing Corporation (ADMARC), Ministry of Finance, Bunda College of Agriculture, Coordination Unit for Rehabilitation of Environment (CURE), National Smallholder Farmers Association of Malawi (NASFAM), Pesticides Control Board and UNDP-Malawi.

The information under the section entitled "Total funds disbursed to the Government by the bilateral/implementing agency" should be revised. In 2000, US \$400,000 of the total approval value (US\$2,999,824) was approved and disbursed as a 'demonstration' component of the overall phase-out project. As a result, the value of the final tranche of funding stands at US \$849,824, to be disbursed in 2004. In addition, the US \$750,000 tranche under this section should fall under the year 2003, as it was only requested and approved for disbursement in July 2003. The US \$1,000,000 tranche, while approved in 2001, was only disbursed over the course of late 2001-2002 due to delays in finalisation of the demonstration phase.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
3,252.6	1,438.3	750.6	1,126.8	1,207.5	839.4	867.0	1,100.1	1,067.5		1,130.8

#### Project proposal:

Technical assistance to comply with 2005 phase-out of 20% of methyl bromide (MEX/FUM/42/TAS/118), implemented by UNIDO, Canada, Spain

The Government is proposing to enforce MB import restrictions to ensure a maximum consumption level of 904.6 ODP tonnes of MB by January 2005; implement a training programme with all MB users on available alternative technologies (phase-out activities will focus on awareness, training, verification and dissemination of results achieved by those farmers who are volunteering to achieve substantial reductions in their consumption); implement technology transfer phase-out programmes working closely with farmers; and verify reductions in MB consumption at the regional, state and country levels. The proposed alternative technologies include: the use of an alternative chemical for soil fumigants alone or with solarization and the use of non-chemical alternatives (biofumigation, soilless substrates, steam, floating tray system and grafting), all of them to be implemented with integrated pest management systems.

The project is being jointly implemented by the Governments of Canada and Spain (bilateral cooperation) and UNIDO.

Project implementation dates:

1 oject till	prementin	<del></del>									
Date of a	approval	Signature	agreement	Start-	up date	1st disb	ursement	Completion	n (proposal)	Actual co	ompletion
Apr-	2004							Dec-	2005		
Total amo	unt of MB	phased out	t (ODP ton	nes):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed					162.3						162.3
Actual											
Total fund	ls approved	d by the Exe	ecutive Con	nmittee (U	S\$):						
Approved					1,105,000						1,105,000
Total fund	ls disburse	d by UNID	O, Canada,	Spain to 1	the Governi	ment of Mo	exico (US\$	i):			
Proposed											0
Actual											0

Current status of project implementation:

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
530.4	778.8	651.0	399.0	959.4	409.2	870.2	1,621.4	387.0		697.1

#### Project proposal:

Phase-out of methyl bromide use in the cut flower and banana production (MOR/FUM/29/INV/37), implemented by France Phase out of 36 ODP tonnes of MB use in banana production and 25 ODP tonnes in cut flower production, which represent the entire consumption of the respective subsectors. The alternative technologies are negative pressure steam pasteurization (covering a surface of 9 ha) and alternative chemicals (dichloropropene and metam sodium) combined with soil solarization. Banana is cultivated in plastic houses along the Atlantic coast; the producers are organized in an association (Association des Producteurs de la Banane). MB fumigation is only applied once in four years. The main cut flowers are carnations, roses, gladioli and sterlitzia. Only carnations are cultivated in plastic houses, the others are either cultivated in plastic houses and in open fields. The producers are organized in an association (Association Marocaine des Producteurs et Exportateurs des Fleurs). The soil of the beds is fumigated between the end of the harvest and the transplanting of the new seedlings in the same beds over a 2-month period (May and June). It includes a training programme covering approximately 400 end-users. It will be implemented in cooperation with the Direction de la Protection des Végétaux, des Contrôles Techniques et de la Repression des Fraudes and the Institut Agronomique et Vétérinaire Hassan II. The Government has established a register of MB importers and re-sellers/distributors. Upon completion of the project, the Government will issue a regulation which prohibits the use of MB in the whole cut flower and banana production subsector.

## Project implementation dates:

1 roject iii	prementan	on unics.									
Date of a	approval	Signature	agreement	Start-u	p date	1st disbu	ırsement	Completion	ı (proposal)	Actual co	ompletion
Nov-	1999							Dec-2003			
Total amo	unt of MB	phased out	t (ODP tonn	ies):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			40.0	21.0							61.0
Actual											
Total fund	ls approved	by the Exe	ecutive Com	ımittee (US	(\$):						
Approved	1,006,652										1,006,652
Total fund	ls disbursed	d by France	e to the Gov	ernment of	Morocco	(US\$):					
Proposed											0

## Current status of project implementation:

Set up of a DB to monitor the use of MB, through a detailed survey per year. Awareness day carried out in Kenitra on 9 April. Trainers have been identified. Part of the equipment arrived. On-site training was carried out. MB use decreased by 2 ODP tonnes in the banana sector, and by 8.4 ODP tonnes in the cut flower sector.

### Project proposal:

Actual

Phase out of methyl bromide for soil fumigation in strawberry production (MOR/FUM/32/INV/41), implemented by UNIDO

The alternative technologies selected for phasing out MB are: solarization in combination with metam sodium (in 285 ha); solarization in combination with dichloropropene (in 223 ha); biofumigation (in 247 ha); and negative pressure steam (in 169 ha), all in combination with an IPM programme. The use of chemical alternatives requires modification of the irrigation systems currently available in farms. Negative pressure steam technology requires installation of perforated pipes in the soil (at a depth of at last 60 cm to be protected from plugging) and an electric fan, and the use of 9 steam generators. Each steam generator is used to treat a surface area of 20 ha. It also includes training programmes in the use of the alternative technologies, which will be organized in collaboration with the Association Marocaine des Producteurs de Fraise. Approximately 370 farmers and 5 extension agents will be trained in the proposed alternative techniques. The extension agents or trainers will first receive a two-week training by national and international experts in the field of IPM. During the five years of the project, extension agents will train 370 farmers. Upon completion of the project in 2005, the Government will issue a regulation banning MB in the entire strawberry production subsector

## Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	Actual completion
Dec-2000	Dec-2000	Feb-2001	Jan-2001	Jan-2006	

0

Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed		23.4	15.6	20.4	42.2	50.0					151.6
Actual		36.0	23.0	20.4							79.4

#### Total funds approved by the Executive Committee (US\$):

Approved	2,189,729										2,189,729	
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#### Total funds disbursed by UNIDO to the Government of Morocco (US\$):

Proposed	547,432	547,432	547,432	547,433			2,189,729
Actual	107,044	244,572	536,756				888,372

#### Current status of project implementation:

Phase I is completed and phase II will start soon. A phase out of 20.4 tonnes occurred in 2003. Additional equipment expected in 2004 with a phase out of 42.2 tonnes. Since more phase out was achieved in previous years than planned in the agreement, the phase out target for 2005 is only 33.4 ODP tonnes. Due to the escalating cost of diesel oil, operating cost of soil steam pasteurization has increased sharply. The alternative, at the present time, is not economically viable any more. For the implementation of the phase II the project strategy has to be re-evaluated accordingly, as for decision Ex.I/2 para 2. - First Extraordinary Meeting of the Parties, Montreal, March 2004.

## Project proposal:

Phase-out of methyl bromide for soil fumigation in tomato production (MOR/FUM/34/INV/44), implemented by UNIDO

Replacement of MB with solarization in combination with alternative chemicals (including 1,3-dichloropropene and metam sodium), bio-fumigation and negative pressure steam pasteurization, in combination with an integrated pest management (IPM) programme. These technologies have been selected on the basis of the results from the demonstration project on alternatives to the use of MB in horticulture. The use of chemical alternatives requires modification of the irrigation systems currently available in farms; negative pressure steam technology requires installation of pipes in the soil, electric fans and 8 steam generators.

#### Project implementation dates:

Date of approval	Date of approval Signature agreement		1st disbursement	<b>Completion (proposal)</b>	Actual completion
Jul-2001	Jul-2001	Mar-2001	Oct-2002	Dec-2006	

Total amount of MB phased out (ODP tonnes):

	<i>,</i>		,								
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			109.8	52.9	52.1	77.9	97.2				389.9
Actual											

### Total funds approved by the Executive Committee (US\$):

Approved 400,000			400,000
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#### Total funds disbursed by UNIDO to the Government of Morocco (US\$):

Proposed	400,000	1,185,948	1,185,948	1,185,948			3,957,844
Actual		1,684	2,578				4,262

## Current status of project implementation:

Government is requesting restructuring of the project. Due to the escalating cost of diesel oil, operating cost of soil steam pasteurization has increased sharply. The alternative, at the present time, is not economically viable any more. Therefore the soil steam pasteurization component has to be re-evaluated accordingly, as for decision Ex.I/2 para 2. - First Extraordinary Meeting of the Parties, Montreal, March 2004.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
1.3	0.8	0.1	0.3	3.9	3.1	29.3	0.1	0.1		1.3

#### Project proposal:

#### Phase-out of methyl bromide in soil fumigation (PER/FUM/31/INV/28), implemented by UNDP

To demonstrate 5 techniques to MB: tray method (soil is replaced with a substrate); steam heat; soil solarization; biological controls; and a reduced use of chemicals, under an IPM framework. The project will commence in demonstration plots in leading farms as the basis for demonstration and training (training of trainers followed by training of farmers). Training modules and teaching materials will be developed by technicians and experts together with MB users. Training will take place at farm level and will include farm visits, field workshops and tuition from technicians. Field workshops will be held to demonstrate partial results and to share successful experiences between farmers. Through targeted communication channels, information on demonstrative plots and shared experiences will be disseminated to other MB users. The best alternatives to MB will be transferred to other farmers through training programmes. A package of policy measures will be developed to ensure that by the end of 2002, MB consumption will be reduced to the baseline level, and will be completely phased out by the end of 2005. Additionally, measures taken to ensure that MB is not re-introduced after users have stopped using it.

Approved on the understanding that UNDP would disburse the funds approved in tranches according to the proposed methyl bromide phase-out schedule indicated in the project proposal; if Peru did not meet the reduction requirements outlined in the proposal, UNDP would withhold funding for the subsequent tranche of funding until such time as the required reduction had been met; UNDP would submit an annual progress report on the implementation of the project to the Fund Secretariat; a package of policy measures would be developed to ensure that, by the end of 2002, methyl bromide consumption for soil fumigation would be reduced to the baseline level, and would be completely phased out by the end of 2005. Such measures would also ensure that methyl bromide was not re-introduced after users had stopped using it.

#### Project implementation dates:

Date of a	approval	Signature	agreement	Start-u	p date	1st disbursement		t Completion (proposal		Actual co	mpletion
Jul-2	2000	Dec-	2000	Dec-2	2000	Mar-	2001	Aug-	-2003		
Total amo	unt of MB	phased out	(ODP toni	nes):							
-	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed				4.0							4.0
Actual											
Total fund	ls approved	l by the Exe	cutive Con	nmittee (US	5\$):						
Approved	209,770										209,770
Total fund	ls disbursed	d by UNDP	to the Gov	ernment of	Peru (US	5\$):					
Proposed											0
Actual											0

## Current status of project implementation:

The project has complied with the established objective of phasing out 4 ODP tones of MB in the fumigation of soil, thanks to the commitment of the local institutions and users. The main users have committed to stop the use of MB and the imports have been reduced. In order to ensure the definitive phase out, the formulation of a national regulation to ban the MB was approved. It has been formulated based on the initiatives of the users and other stakeholders, and has been reviewed by the different institutions involved.

The MB alternatives were identified and validated, and there was consensus at the regional teams on the alternatives that should be adopted and mainstreamed in the crops that had traditionally used MB. Thirteen evaluations of different selected alternatives to the MB were done in each one of the regions, achieving that the users adopt the most efficient and less expensive ones. Steam was adopted in tobacco, solarization and the use of Trichoderma were adopted in the production of the basic seed of potatoes, the production of almacigo for onion and paprika. In addition, fifteen technical training events were completed and 25 awareness activities on the problematic of MB and its alternatives were completed with active participation of the different stakeholders involved in the project.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
12.0	172.0	100.2	71.1	102.6	33.6	20.0	18.1	70.9		111.5

#### Project proposal:

#### Phase out of methyl bromide in horticulture (ROM/FUM/34/INV/19), implemented by Italy

The alternatives selected are solarization combined with metam sodium (covering 110 ha) and grafting (covering also 110 ha), applied in combination with an integrated pest management programme. The application of metam sodium requires installation of polyethylene pipes, a storage tank and a pump to inject the pesticide into the irrigation flow. It also includes a training programme in the use of the alternative technologies for farm managers, national experts and a group of employees selected from each farm's staff. It will be conducted at the Research and Development Institute for Horticultural Products Marketing (Horting Institute). The Government is committed to phasing out the entire consumption of MB by 2005. Upon completion of the project, the Government will issue a regulation forbidding the use of MB in the entire tobacco and horticultural producing subsectors. The Government has already issued a regulation banning use of MB in the entire horticultural sector by the end of the year 2001; however, this regulation has not been enforced. In order to accomplish the proposed phase-out schedule, it will establish fixed limits on imports and national sale of MB. The Government is also considering the introduction of a labelling programme for vegetables produced without MB, possibly by 2004.

The Government of Italy should disburse the funds allocated in tranches according to the proposed MB phase-out schedule indicated in the project proposal; if Romania does not meet the reduction requirements outlined in the proposal, the Multilateral Fund, through Government of Italy will withhold funding for the subsequent tranche until such time as the required reduction has been met.

#### Project implementation dates:

1 rojeci im	риетепши	on autes.									
Date of a	approval	Signature a	agreement	Start-u	p date	1st disbu	rsement	Completion	n (proposal)	Actual co	mpletion
Jul-2	2001	Aug-2	2001	Jan-2002		Feb-2002		Aug-2005			
Total amo	unt of MB	phased out	(ODP toni	nes):							
-	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			9.4	28.1	27.9	28.5					93.9
Actual			9.4	28.1	22.1						59.6
Total fund	ls approved	l by the Exe	cutive Con	nmittee (US	(\$):						
Approved		630,517									630,517
Total fund	ls disburse	d by Italy to	the Gover	nment of R	omania (U	VS\$):					
Proposed			207,209	207,209	216,099						630,517
Actual			207,209	207,209							414,418

## Current status of project implementation:

Metam sodium an dazomet in combination with grafted seedlings, are effective alternative technologies under the Romanian environment. The proposed alternative technologies have been adopted at the commercial scale. For the production of grafted seedlings (a relatively complex process), a pilot nursery unit is under current installation (to be completed by August 2004) and will be used during the 2004-20045 crop season. About technology development and transfer we are now working on alternatives efficiency and costs and crops quality. Further improvement concerning weeds control using biodegradable mulching films, the efficacy of the alternatives and the quality of the crops produced with non-MB fumigation, are under current consideration.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
209.6	199.2	12.0	0.7	0.7	0.7	0.0	0.0	0.0		53.2

#### Project proposal:

Phase-out of methyl bromide used in peanut seed fumigation in Novasen Ltd. (SEN/FUM/26/INV/12), implemented by UNIDO

Complete elimination of the current use of methyl bromide in the country by replacing it with phosphine which has been demonstrated as an effective, economic and practical alternative treatment. It includes a series of 5-day phosphine fumigation procedures in the presence of Novasen technicians who will receive on-the-job training. Operational guidelines will be issued. A seed viability check will be carried out in the Kaolack laboratory to monitor any changes as a consequence of fumigation. The second part of the project is the implementation of the use of phosphine in the company on a full commercial scale. Fumigation technicians will be trained in the principles of phosphine fumigation, alternative stacking arrangements to the pyramid prior to fumigation, application of phosphine tablets, sealing sheets and maintaining gas-tightness, gas measurement, safe application of fumigant and disposal of residues, correct handling and storage of fumigation sheets, and Integrated Commodity Management (ICM). The project states that policy measures against methyl bromide import, trade and use (license) have to be combined with the investment project to assist Novasen in the phase out of methyl bromide.

Project implementation dates:

Date of a	approval	Signature a	agreement	Start-u	ıp date	1st disbu	ırsement	Completion	ı (proposal)	Actual completion				
Nov-	1998			Apr-1998		Dec-1999		Dec-2000		Dec-2001				
Total amo	Total amount of MB phased out (ODP tonnes):													
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total			
Proposed	0.7										0.7			
Actual		0.7									0.7			
Total fund	ls approved	bv the Exe	cutive Con	nmittee (U.	S\$):									

Total funds approved by the Executive Committee (US\$):

Approved   62,945	Approved
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Total funds disbursed by UNIDO to the Government of Senegal (US\$):

Proposed							0
Actual	44,539	9,916	5,169				59,624

Current status of project implementation:

Project completed. PCR submitted in October 2002.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
0.0	2.7	8.3	1.6	3.8	6.5	4.8	1.1	1.9		4.1

#### Project proposal:

Methyl bromide phase-out for all remaining uses excluding QPS applications (SRL/FUM/38/TAS/21), implemented by UNDP

Development of policies (licensing scheme, awareness initiatives, links with relevant agencies including Customs, Import Control, Agriculture, Environment, and regulations under the Environment Act and Pesticides Act) to meet the phase-out commitments, adapt MB alternatives to Sri Lanka's conditions and training to farmers. Through the implementation of the proposed activities, 3.2 ODP tonnes of MB used in agriculture and protection of stored products (flowers, ornamental plants, potatoes, peppers, tomatoes and strawberries) will be phased out. Some MB is also used for stored products, in particular by the Paddy Marketing Board and for timber. The Government is also proposing to put in place appropriate modalities (such as incentives, legislation and regulations) to ensure and enforce the phase out of MB in the country. It will be overseen by a national advisory committee.

Project implementation dates:

Troject im	риетенин	on unies.									
Date of a	approval	Signature	agreement	Start-ı	up date	1st disbu	irsement	Completion	ı (proposal)	Actual co	mpletion
Nov-	-2002	Nov-	2003					Nov-	2005		
Total amo	unt of MB	phased out	t (ODP toni	nes):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed						3.3					3.3
Actual											
Total fund	ls approved	l by the Exe	ecutive Con	nmittee (U	S\$):						
Approved			130,000								130,000
Total fund	ls disburse	d by UNDP	to the Gov	ernment o	f Sri Lank	a (US\$):					
Proposed											0
Actual											0

## Current status of project implementation:

Project Manager has been engaged. The technical expert has been identified. The work plan was endorsed by National Management team. Technical mission slated for Quarter 2 of 2004. After slight delays with regard to ProDoc signature, project is now on track.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
	153.0	289.2	240.0	72.0	89.3	112.3	165.1	152.7		188.6

#### Project proposal:

#### Phase-out of the use of methyl bromide in grain storage (SYR/FUM/34/INV/80), implemented by UNIDO

Phase out all uses of MB in storage and structural applications, through the use of phosphine. This technology has been selected on the basis of the results from the demonstration project on alternatives to the use of MB in horticulture and commodity fumigation in Syria. It includes procurement of 135 phosphine detectors for monitoring fumigation space, installation of gas sampling lines and enhancement of the sealing of facilities to reduce the consumption of phosphine and a training programme. Fumigation with phosphine will be implemented in stages, as the grains currently stored (and treated with MB) are being consumed.

UNIDO is requested to disburse the funds allocated in tranches according to the proposed MB phase out schedule indicated in the project proposal; if Syria does not meet the reduction requirements outlined in the proposal, the Multilateral Fund, through UNIDO will withhold funding for the subsequent tranche until such time as the required reduction has been met.

## Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	Actual completion
Jul-2001	Jul-2001	Oct-2001	Aug-2002	Dec-2005	
-					

## Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			5.0	29.8	34.8	35.4					105.0
Actual				5.0							5.0

#### Total funds approved by the Executive Committee (US\$):

Approved 300,000 351,725 651,72
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#### Total funds disbursed by UNIDO to the Government of Syria (US\$):

	•			,	,			
Proposed	300,000	351,725	216,828	215,586				1,084,139
Actual		165	41,594					41,759

#### Current status of project implementation:

Training is ongoing. Equipment will be delivered by the end of April 2004. Equipment for phase II will be delivered in June 2004. Additional training planned.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
	421.2	578.4	504.0	415.2	342.6	342.6	43.8	280.8		479.7

#### Project proposal:

Introduction of alternatives to methyl bromide in protected strawberry, pepper and eggplant in East Mediterranean region and in strawberry in Aydm province of Turkey (TUR/FUM/29/INV/56), implemented by IBRD

Phase out of MB used for soil disinfestation in strawberry, pepper and eggplant crops in the East Mediterranean region. In the first year, the project will demonstrate and evaluate the economic and technical feasibility of steam pasteurization, 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 pilottested with selected groups of farmers. In years 2 and 3, training programmes will be implemented to ensure that farmers consuming 50% of the MB become competent in replacing it with the alternative technology selected (2,100 strawberry farmers, 600 pepper producers and 300 eggplant producers). Strawberry farmers in the Aydm province will also be trained on alternatives of MB. Policy development and awareness raising will also be undertaken to ensure that 90 ODP tonnes of MB will be phased-out permanently by 2008.

#### Project implementation dates:

Date of a	pproval	Signature	agreement	Start-up date		1st disbursement		Completion (proposal)		Actual completion	
Nov-	v-1999 Mar-2000		Mar-2000		Oct-2000		Dec-2002		Jul-2003		
Total amou	unt of MB	phased out	(ODP tonn	ies):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			50.0								50.0
Actual											
Total fund	s approved	by the Exe	cutive Com	mittee (U	S\$):						
Approved	366,440										366,440

Total funds disbursed by IBRD to the Government of Turkey (US
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Proposed						0
Actual	366,440					366,440

#### Current status of project implementation:

The project has been completed successfully and the PCR is under preparation. Progress report available for distribution.

#### Project proposal:

#### Phase-out methyl bromide in the dried fig sector (TUR/FUM/31/INV/69), implemented by IBRD

To demonstrate the use of CO2 under pressure (modified atmosphere) and magnesium phosphide in combination with heat as alternative technologies for MB used for the fumigation of dried figs. The modified atmosphere technology uses CO2 at a very high pressure (20-30 bars pressure) for a short period of time (2 to 3 hours). It requires field trials before being introduced into routine fumigation systems, and thus it is proposed to undertake semi-field studies using a modified atmosphere fumigation chamber. The Government will absorb any additional cost that it may realize for phasing out the 30 ODP tonnes of MB used for fumigation of dried figs by 2003, with no additional request for funding. It will be implemented by the Agricultural Faculties of Ankara and Ege Universities. The Aegean Exporters' Union and the Union of Agricultural Sales Cooperatives (TARIS) will provide infrastructure, laboratory facilities and technical personnel, and will be responsible for disseminating project results to stakeholders.

Approved on the understanding that the Government would ensure that the total national aggregate methyl bromide consumption in the sector would be permanently reduced to a level no higher than its 1999 national aggregate consumption, less the phase-out proposed in the project; the Government of Turkey, through the World Bank, would provide to the Fund Secretariat an annual progress report on the implementation of the project, including data on aggregate methyl bromide consumption phased out by the project.

#### Project implementation dates:

Date of approval	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	Actual completion
Jul-2000	Oct-2000	Oct-2000	Jun-2001	Oct-2002	Jul-2004

## Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed		10.0	10.0	10.0							30.0
Actual											
Total fund	ls approved	by the Exe	cutive Con	nmittee (US	S\$):						
Approved	479,040										479,040
Total fund	ls disbursed	l by IBRD i	to the Gove	rnment of	Turkey (U	<b>(S\$):</b>					
Proposed											0
Actual	357,320										357,320

#### Current status of project implementation:

Contract signed with the supplier and equipment under delivery. Due to the status of implementation, no technical information available yet.

#### Project proposal:

Phase-out of methyl bromide in protected tomato, cucumber and carnation crops (TUR/FUM/35/INV/74), implemented by UNIDO

Replacement of MB with solarization in combination with alternative chemicals, bio-fumigation, soil-less media and negative pressure steam pasteurization, in combination with an integrated pest management (IPM) programme ( the technologies have been selected on the basis of the results from the demonstration project on alternatives to the use of MB in protected horticulture and ornamental crops). The use of chemical alternatives requires modification of the irrigation systems currently available in farms, including the installation of a metam sodium storage tank, a Venturi-injector (for a uniform distribution of the chemical) and additional piping. The negative pressure steam technology (for carnations) requires installation of perforated pipes in the soil, electric fans and 10 steam generators that will be shared among growers. The soil-less culture technology requires installation of inert media. It also includes a training programme and project management. Incremental operating costs have not been claimed. The Government will be responsible for providing the legal framework for phasing out MB in vegetables and cut flower production; the infrastructure for reaching all farmers involved; and the institutional support for implementing and monitoring progress.

The Executive Committee approved in principle US \$3,408,844 as the total funds that will be available to Turkey to achieve the complete phase-out of MB used in protected tomato, cucumber, and carnation crops (for a total phase out of 292.2 ODP tonnes with a cost effectiveness of US \$11.67/kg), subject to the conditions agreed between the Government of Turkey and the Executive Committee.

Start-up date

1,000,000

#### Project implementation dates:

Date of approval

Dec-	2001	Feb-2	2003	Jan-20	002	Aug-2	2002	Dec-	2006		
Total amo	unt of MB	phased out	(ODP toni	ıes):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			29.2	58.0	58.0	89.0	58.0				292.2
Actual				29.2							29.2

1st disbursement | Completion (proposal) | Actual completion

## Total funds approved by the Executive Committee (US\$):

Total founds dishunged by UNIDO to the Consumment of Trushay (USC).

1,000,000

Signature agreement

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Proposed		1,000,000	1,000,000	700,000	708,844				3,408,844
Actual			3,363	60,415					63.778

#### Current status of project implementation:

Phase I was completed in December 2003. Additional equipment expected for April and June 2004. Training programme will continue.

2,000,000

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
	1.5	1.8	10.2	11.7	10.5	15.9	22.2	30.0		6.3

## Project proposal:

#### Phase-out of methyl bromide in cut flowers (UGA/FUM/34/INV/08), implemented by UNIDO

The project is to replace all MB uses with steam pasteurization in combination with an integrated pest management system. The steam technology requires the use of three steam generators. The markets in Europe are demanding flowers grown without MB and with limited use of other chemicals such as metam sodium, dichloropropene and dazomet. Several growers in Uganda have been requested to either join a flower-labeling programme and/or produce following the Code of Practice developed by the Ugandan Flower Exporters Association, which also limits the use of pesticides. The Government has already established an import licensing system preventing the increase in the use of MB. Once the project is fully implemented, the Government will ban the use of MB. The MB baseline consumption has been established at 1.9 ODP tonnes and the 2000 consumption at 12 ODP tonnes. The Government is aware that it would not be possible to comply with the MB freeze; however, expects to phase out the use of MB in soil furnigation by the end of 2005, through the implementation of this project.

#### Project implementation dates:

Date of a	pproval	Signature a	agreement	Start-u	p date	1st disbur	sement	Completion	(proposal)	Actual co	mpletion
Jul-2	2001	Jul-2	2001	Aug-2001		Oct-2002		Aug-2	2007		
Total amou	unt of MB	phased out	(ODP toni	nes):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed					6.0	18.0	1.2	4.8			30.0
Actual											
Total fund	s approved	d by the Exe	cutive Con	nmittee (US	5\$):						
Approved		228,800									228,800
Total fund	s disburse	d by UNIDO	) to the Go	vernment d	of Uganda	(US\$):					
Proposed											0
Actual			11,415	8,279							19,694

Current status of project implementation:

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
13.8	14.9	2.7	16.4	10.8	21.7	23.8	37.8	17.7		11.2

#### Project proposal:

Phase-out of methyl bromide in horticulture (tomatoes and cut flowers) (URU/FUM/34/INV/35), implemented by UNIDO

Phase out the entire consumption of MB used for soil disinfestation in horticulture (88% of total consumption), cut flowers (7%) and other crops (4%). The use of MB for commodity fumigation, quarantine and other applications is negligible. Based on the results from the demonstration project on alternatives to the use of MB as a soil fumigant in protected horticultural crops, seedbeds, and nurseries the technologies selected are solarization in combination with metam sodium and bio-fumigation (for horticultural crops) and steam (for cut flowers). The use of metam sodium requires additional accessories and modification to the irrigation systems currently available in the greenhouses, equipment for incorporating organic matter to the soil and 2 boilers for the use of steam. It also includes a training programme. The country has effective means to control the use and import of pesticide, including MB, through the Ministry of Agriculture, Livestock and Fisheries. The Government proposes to establish additional systems to monitor and control the consumption of MB.

The MB baseline consumption has been established at 11.6 ODP tonnes and the 2000 consumption at 25.5 ODP tonnes. The Government is aware it will not be able to meet the 2002 MB freeze; however, by implementing this project, the total consumption of MB in soil fumigation will be completely phased out by the end of 2005

UNIDO is requested to disburse the funds allocated in tranches according to the proposed MB phase out schedule indicated in the project proposal; if Uruguay does not meet the reduction requirements outlined in the proposal, the Multilateral Fund, through UNIDO will withhold funding for the subsequent tranche until such time as the required reduction has been met.

#### Project implementation dates:

Date of approval S	Signature agreement	Start-up date	1st disbursement	Completion (proposal)	<b>Actual completion</b>
Jul-2001	Dec-2001	Aug-2001	Feb-2002	Aug-2005	

#### Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			4.0	8.0	8.0	4.0					24.0
Actual			5.0	8.0							13.0

#### Total funds approved by the Executive Committee (US\$):

Annrowed	469.370					469 370
Approved	409,370					409.370

#### Total funds disbursed by UNIDO to the Government of Uruguay (US\$):

Proposed						0
Actual		145,213	111,026			256,239

#### Current status of project implementation:

Training of farmers continued as planned and 8.0 ODP tonnes of ODS phased out in 2003. Uruguay was not in compliance with its obligations under Article 2H of the Montreal Protocol. The 15th Meeting of the Parties accepted the plan of action submitted by Uruguay to ensure prompt return to compliance. The action plan is based on the targets agreed with the Executive Committee for the implementation of the project.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
	1.2	1.2	1.2	0.6	57.6	60.0	65.4	52.8		1.1

## Project proposal:

Technical assistance programme for the phase-out of methyl bromide in agriculture (YEM/FUM/41/TAS/21), implemented by Germany

MB is used in soil fumigation for production of cucumber, tomato, ornamental trees, onion, okra, eggplant, pepper and others. It will assist farmers to apply alternative technologies to MB, including solarization in combination with bio-fumigation, alternative chemicals within an integrated soil pest management (IPM) approach. The technologies will be selected mainly on the basis of discussions as well as limited demonstrations with the concerned farmers themselves. Strategic proposals for policy, legislative and regulatory action concerning the trade and use of MB will be worked out in close cooperation with the Government as well as the authorities in governorates and tribal areas.

Approved on the understanding that approval was without prejudice to the operation of the Montreal Protocol's mechanisms dealing with non compliance issues.

#### Project implementation dates:

Date of a	pproval	Signature	agreement	Start-u	ıp date	1st disb	ırsement	Completion	ı (proposal)	Actual co	mpletion
Dec-	Dec-2003			Feb-2004		Feb-2004		Dec-2006			
Total amou	unt of MB	phased out	t (ODP ton	nes):							
	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed					9.1						9.1

Actual Cons	1	l I 41. a E	a andina Car	:44 (17)	(CC).			
Total fund	ls approvea	l bv the Exc	ecutive Con	nmittee (U	SS):			

## Approved 250,000 250,000

# Total funds disbursed by Germany to the Government of Yemen (US\$): Proposed 0 Actual 0

Current status of project implementation:

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Baseline
376.8	405.6	424.2	579.0	819.0	490.3	370.7	544.2	250.2		557.0

#### Project proposal:

#### Phase-out of methyl bromide in cut flowers (ZIM/FUM/31/INV/21), implemented by UNIDO

The application of the steam technology requires the use of 20 mobile steam generators, 14 units with a capacity of 400-600 kg/h and 6 units with a capacity of 1,800-2,000 kg/h. The steam generators will be distributed to about 270 farmers through the main flower growers association, the Export Flower Growers Association of Zimbabwe. During the first phase of the project, 2 to 3 steam generators will be purchased in order to determine treatment conditions for particular pests and soil types in the different growing areas. It includes training programmes in the use of the alternative technologies using extension personnel from EFGAZ in conjunction with the Blackfordby Agricultural Training Institute. The Government has agreed to (i) prevent the increase in the use of MB in the cut-flower sector by establishing an import license system for MB; (ii) work closely with EFGAZ to ascertain the phase-out of MB according to the following phase out schedule: 26.4 ODP tonnes during the second year of the project, 39.6 ODP tonnes during the third year and complete phase out (66 additional ODP tonnes) during the fourth year of the project; and (iii) enactment of a regulation banning the use of MB in the production of cut flowers once the project is completed.

Approved on the understanding that UNIDO would disburse the funds approved in tranches according to the proposed methyl bromide phase-out schedule indicated in the project proposal; if Zimbabwe did not meet the reduction requirements outlined in the proposal, UNIDO would withhold the subsequent tranche of funding until such time as the required reduction had been met; the Government would ensure that the total national aggregate methyl bromide consumption in the sector would be permanently reduced to a level no higher than its 1999 national aggregate consumption, less the phase-out proposed in the project; the Government of Zimbabwe, through UNIDO, would provide to the Fund Secretariat an annual progress report on the implementation of the project, including data on aggregate methyl bromide consumption phased out by the project.

#### Project implementation dates:

	ial completion
Jul-2000   Nov-2000   Aug-2000   Mar-2001   Aug-2004	

#### Total amount of MB phased out (ODP tonnes):

	<2000	2001	2002	2003	2004	2005	2006	2007	2008	2009>	Total
Proposed			41.0	39.6	51.4						132.0
Actual			41.0	39.6							80.6

#### Total funds approved by the Executive Committee (US\$):

Approved	904,200					904,200
Tipprovea	, , <b>_</b>					, , , , , , ,

#### Total funds disbursed by UNIDO to the Government of Zimbabwe (US\$):

•		•			, ,			
Proposed	298,386		298,386	307,428				904,200
Actual		174,670	630,958	13,206				818,834

#### Current status of project implementation:

Training of farmers continued as planned and 39.60 tones of ODS phased out in 2003. Changes in the staff of the Ozone Unit have caused some disruption in data reporting.