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REPORTS ON IMPLEMENTATION OF APPROVED PROJECTS AND ACTIVITIES WITH SPECIFIC REPORTING REQUIREMENTS

## STATUS REPORT ON PROGRESS IN THE IMPLEMENTATION OF APPROVED METHYL BROMIDE PROJECTS

## **Background**

- 1. UNDP, UNEP and UNIDO have submitted for the consideration of the Executive Committee at its 41<sup>st</sup> Meeting progress reports on the implementation of the following projects and activities in the fumigant sector:
  - (a) <u>Macedonia</u>: Phase out of methyl bromide in tobacco seedling and horticulture production sector (UNIDO), approved by the Executive Committee at its 32<sup>nd</sup> Meeting at a total cost of US \$1,075,207;
  - (b) <u>Malawi</u>: Phase-out of all non-essential and non-QPS methyl bromide (UNDP), approved by the Executive Committee at its 32<sup>nd</sup> Meeting at a total cost of US \$2.999.824:
  - (c) <u>Uganda</u>: Phase out of methyl bromide in cut flowers (UNIDO), approved by the Executive Committee at its 34<sup>th</sup> Meeting at a total cost of US \$228,800;
  - (d) <u>Uruguay</u>: Phase out of methyl bromide in horticulture (tomatoes and cut flowers) (UNIDO), approved by the Executive Committee at its 34<sup>th</sup> Meeting at a total cost of US \$469,370;
  - (e) <u>Zimbabwe</u>: Phase out of methyl bromide in cut flowers (UNIDO), approved by the Executive Committee at its 31<sup>st</sup> Meeting at a total cost of US \$904,200;
  - (f) <u>Region Africa</u>: Technical assistance for methyl bromide reductions and formulation of regional phase-out strategies for low-volume consuming countries (UNDP), approved by the Executive Committee at its 38<sup>th</sup> Meeting at a total cost of US \$550,000 on the understanding that:
    - (i) Botswana and Cameroon would not be included in the project proposal, since the demonstration projects previously approved for UNIDO would result in the complete phase-out of methyl bromide consumption in those countries;
    - (ii) Because UNIDO had been requested by the Governments of Ethiopia and Zambia to formulate investment projects once ratification of the Copenhagen Amendment had been finalized, the project would include those two countries only insofar as policy support was required to allow for the ratification of the Copenhagen Amendment and that any future investment work post-ratification, as deemed necessary, would be undertaken with UNIDO;
    - (iii) The project will provide technical assistance to achieve methyl bromide reductions to meet the 20 per cent reduction step in Congo, Democratic

- Republic of Congo, Nigeria, Sudan and Swaziland, without further assistance from the Multilateral Fund for the said 20 per cent reduction;
- (iv) The project would also provide assistance to countries to put in place appropriate mechanisms to reduce and eventually ban imports of methyl bromide;
- (v) UNDP would request all the governments participating in the project, except those in paragraph (iii) above, to submit letters indicating their understanding that in accepting this project they would not return for further methyl bromide funding in future, as per the terms of the revised methyl bromide strategy and guidelines; and
- (vi) UNDP agreed to report to the Executive Committee on progress achieved on an annual basis (Decision 38/26);
- (g) Global: National farmer's training and establishment of farmer's field school (UNEP), approved by the Executive Committee at its 27<sup>th</sup> Meeting at a total cost of US \$60,000 on the understanding, based on assurances given by the representative of UNEP, that the projects had been so designed as to ensure that the educational materials and training activities actually reached their intended small farmer target groups (Decision 27/44).
- 2. The Secretariat reviewed the progress reports in light of the original project proposals and MB data reported by the Governments concerned to the Ozone Secretariat under Article 7 of the Montreal Protocol.
- 3. This document consists of summaries of progress so far achieved in the implementation of the project proposals; comments by the Secretariat and related responses by relevant implementing agencies, and the Secretariat's recommendation.
- 4. The document is divided into the following two sections:
  - Section I: Progress reports submitted by the Governments of Macedonia, Malawi and Uruguay and the UNDP for the regional programme in Africa, for which the Executive Committee is invited to note the reports; and
  - Section II: Progress reports submitted by the Governments of Uganda and Zimbabwe and the UNEP global training programme, for which the Executive Committee's guidance on specific issues is sought.

#### **Section I:** Progress reports to be noted

## Macedonia: Phase out of methyl bromide in tobacco seedling and horticulture production sector (UNIDO)

- 5. Through the implementation of this project, the Government of Macedonia has committed to completely phase out 27.2 ODP tonnes of MB by the end of 2005, representing the total MB consumption in the country.
- 6. The 2002 MB consumption reported to the Ozone Secretariat was 5.3 ODP tonnes which is below the 2002 maximum remaining national MB consumption of 12.2 ODP tonnes, as indicated in the agreement between Macedonia and the Executive Committee.
- 7. As reported by UNIDO, on the basis of the outstanding work undertaken by tobacco growers and the Faculty of Agriculture (as the national coordinating agency) and the commitment of the Ozone Office, it is expected that MB would be completely phased out by the end of 2003.

### Fund Secretariat's recommendation

8. The Executive Committee may wish to take note of the progress report on the implementation of the MB phase out project in Macedonia and commend the Ozone Unit of the Government of Macedonia and UNIDO for their efforts in completing the project ahead of the 2005 target.

## Malawi: Phase-out of all non-essential and non-QPS methyl bromide (UNDP)

- 9. At its  $32^{nd}$  Meeting, the Executive Committee approved in principle US \$2,999,824 as the total funds that will be available to phase-out 111 ODP tonnes of MB used in tobacco seedlings in Malawi. So far, the Executive Committee has approved three funding tranches totalling US \$2.15 million for the implementation of the project. The Executive Committee approved for funding the third tranche of the project (US \$750,000) at its  $40^{th}$  Meeting and requested UNDP to present a further report on the implementation of the project at the 41st Meeting (Decision 40/43).
- 10. Subsequently, UNDP submitted a revised comprehensive progress report on the implementation of the project for the consideration of the Executive Committee. As a result of the activities undertaken since July 2003, an organogramme was prepared and agreed upon by all key stakeholders including the Steering Committee (with this organogramme the implementation of the project activities is smooth, with clear reporting lines). The new structure includes ARET Plant Pathologist and ARET Principal Agronomist who are actively involved in project field activities. This will ensure sustainability of project activities by ARET when the project ends. In addition, a detailed September 2003-December 2004 work programme was agreed upon, with specific activities, milestones and responsible officers.
- 11. Given the imperative in having accurate consumption data available to assess success in the sustained and permanent elimination of MB as a result of project implementation, a

comprehensive survey was commissioned in June 2003. The survey was completed and a final report was presented to UNDP. Results from the survey revealed that from 1997 to 2001, the average annual consumption of MB was 65.8 ODP tonnes. The lowest imports were recorded in 2002 (26 ODP tonnes) and 2003 (41.1 ODP tonnes); this could be a result of the activities in the MB phase-out project.

## Fund Secretariat's recommendation

12. The Executive Committee may wish to take note of the progress report on the implementation of the MB phase out project in Malawi.

## **Uruguay: Phase out of methyl bromide in horticulture (tomatoes and cut flowers) (UNIDO)**

- 13. The 2000 MB consumption reported by the Government of Uruguay to the Ozone Secretariat was 25.5 ODP tonnes (i.e., the reported consumption when the project was prepared). The MB baseline for compliance for Uruguay is 11.6 ODP tonnes; as a result, it appeared that Uruguay would not meet the 2002 MB freeze.
- 14. At the time of the submission of the project proposal UNIDO stated that the Government of Uruguay, being aware that it will not be able to meet the 2002 MB freeze, agreed to completely phase out MB by the end of 2005 through the implementation of the project. Based on the Government's commitment, the Executive Committee approved the MB phase-out project, at its 34<sup>th</sup> Meeting, in July 2001.
- 15. The 2002 MB consumption reported to the Ozone Secretariat by the Government of Uruguay is 17.7 ODP tonnes which is below the 2002 maximum remaining national MB consumption of 20.0 ODP tonnes, as indicated in the agreement between Uruguay and the Executive Committee.
- 16. As reported by UNIDO, the boilers required for the implementation of the steam technology has been purchased and training on the use of alternative technologies (biofumigation and solarization combined with alternative chemicals) has been provided to farmers. Upon a request by the Secretariat, UNIDO confirmed that by the end of 2003, the maximum level of MB consumption in Uruguay would be 12 ODP tonnes, in accordance with the level agreed between the Government and the Executive Committee.

## Implementation Committee

- 17. Regarding MB consumption in Uruguay, the Implementation Committee, at its 31<sup>st</sup> Meeting, *inter alia*,
  - (a) Uruguay's MB baseline is 11.2 ODP tonnes. It reported consumption of 17.7 ODP tonnes of MB in 2002. As a consequence, for 2002, Uruguay was in non-compliance with its obligations under Article 2H of the Montreal Protocol;
  - (b) Noted with appreciation Uruguay's submission of its plan of action to ensure a

prompt return to compliance with the control measures for MB, and noted further that, under the plan, Uruguay specifically commits itself to reduce MB consumption from 17.7 ODP tonnes in 2002 as follows:

- (i) To 12 ODP tonnes in 2003;
- (ii) To 4 ODP tonnes in 2004;
- (iii) To phase out MB consumption by 1 January 2005, as provided in the plan for reduction and phase out of MB consumption, except for critical uses that might be authorized by the Parties;
- (c) Noted that the measures listed above should enable Uruguay to return to compliance by 2004, and urged Uruguay to work with the relevant implementing agencies to implement the plan of action and phase out consumption of MB;
- To resolve to monitor closely the progress of Uruguay with regard to the (d) implementation of its plan of action and the phase-out of MB. To the degree that Uruguay is working towards and meeting the specific Protocol control measures, it should continue to be treated in the same manner as a Party in good standing. In this regard, Uruguay should continue to receive international assistance to enable it to meet these commitments in accordance with item A of the indicative list of measures that might be taken by a Meeting of the Parties in respect of noncompliance. Through this decision, however, the Parties caution Uruguay, in accordance with item B of the indicative list of measures, that, in the event that it fails to return to compliance in a timely manner, the Parties shall consider measures, consistent with item C of the indicative list of measures. These measures may include the possibility of actions available under Article 4, such as ensuring that the supply of methyl bromide (that is the subject of non-compliance) is ceased and that exporting Parties are not contributing to a continuing situation of non-compliance.

## Fund Secretariat's recommendation

18. The Executive Committee may wish to take note of the progress report on the implementation of the MB phase-out project in Uruguay.

# Region Africa: Technical assistance for methyl bromide reductions and formulation of regional phase-out strategies for low-volume consuming countries

- 19. The objectives of the project are:
  - (a) Phase out of MB consumption to meet the 20 per cent reduction step in Congo, Democratic Republic of Congo (DR Congo), Nigeria, Sudan, Swaziland through technical assistance programmes; and
  - (b) Provide assistance to 23 countries that have not reported MB consumption to the

Ozone and Fund Secretariats and prevent introduction and use of MB in these countries (Angola, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, Djibouti, Eritrea, Gabon, Gambia, Guinea, Mali, Mauritania, Mozambique, Niger, Rwanda, Sao Tomé and Principe, Seychelles, Sierra Leone, Somalia, Tanzania and Togo).

- 20. UNDP submitted a comprehensive report on the activities implemented since the approval of the project. Specifically:
  - (a) As per Decision 38/26 (e), UNDP requested all the Governments of LVC countries interested in participating in the project to submit a letter indicating their understanding that in accepting this project, they would not request further MB funding in future. As of October 2003, responses from Burkina Faso, Cape Verde, Guinea Bissau, Libya, Rwanda, Sierra Leone and Tanzania were not received;
  - (b) Priority was given to the group of five countries to assist them in meeting the 20 per cent compliance objective by 2005. UNDP worked with the countries to identify their particular MB phase-out needs and to collect detailed sectoral data. Evaluation missions were conducted (in DR Congo, Congo, Sudan and Swaziland; the mission to Nigeria was scheduled for 15 November 2003) to identify the principal MB users, alternatives that may be adapted to local conditions; and means to adapt, if necessary, and adopt such alternatives. On the basis of the results from the missions, UNDP will draft contracts with the Ozone Units to put in place the national execution mechanism;
  - (c) UNDP also participated in the 2003 regional network meeting for African Ozone Officers, and presented reports on status of project planning and implementation. Dialogue was initiated with the remaining participating countries in order to solicit their commitment to the project objectives, allow them to determine the requirements of the sector at the national level, discuss strategy concerning the implementation of regional/sub-regional policy measures, and
  - (d) In early 2004, development of regional/sub-regional strategies for harmonised control of MB will begin in close cooperation with participating countries.

### Fund Secretariat's recommendation

21. The Executive Committee may wish to take note of the progress report on the implementation of the technical assistance for MB reductions and formulation of regional phase-out strategies for LVC countries in Africa.

## Section II: Progress reports for which Executive Committee guidance is sought

## **Uganda: Phase out of methyl bromide in cut flowers (UNIDO)**

Background

- 22. The 2000 MB consumption reported by the Government of Uganda to the Ozone Secretariat was 12.0 ODP tonnes (i.e., the reported consumption when the project was prepared). The MB baseline for compliance for Uganda is 1.9 ODP tonnes; as a result, it appeared that Uganda would not meet the 2002 MB freeze.
- 23. However, through the implementation of the project submitted for the consideration of the Executive Committee, the Government committed to achieve the complete phase out of MB by 2005, according to the phase out schedule below, and to sustain the phase out through the use of import restrictions and other policies:

2002	10.0 ODP tonnes
2003	8.0 ODP tonnes
2004	4.0 ODP tonnes
2005	0.0 ODP tonnes

24. Based on the above considerations the Executive Committee approved full funding for the MB phase out project at its 34<sup>th</sup> Meeting.

*Increase in MB consumption* 

- 25. According to the report submitted by UNIDO on the implementation of the project, in 2002 the Government of Uganda informed UNIDO that the 1995 to 2001 MB consumption data reported to the Ozone Secretariat was incorrect; therefore, the Government of Uganda considered that the terms of the phase-out project approved by the Executive Committee would need to be re-discussed.
- 26. In this regard, the Executive Director of the National Environment Management Authority of Uganda (NEMA) sent an official communication to Ozone Secretariat requesting changes to MB consumption levels for the period 1995-2002. Additionally, the Government submitted a document for consideration by the Implementation Committee at its 30<sup>th</sup> Meeting, supporting the request for revision of the MB baseline for compliance in Uganda, including a phase-out action plan (Annex II of document UNEP/OzL.Pro/ImpCom/30/2). This request was considered by the Parties to the Montreal Protocol at its 15<sup>th</sup> Meeting.
- 27. On the basis of the revised MB consumption data reported by the Government of Uganda, the MB baseline for compliance would be 6.3 ODP tonnes, and the 2000 to 2002 consumption would be 15.9 ODP tonnes, 22.2 ODP tonnes and 30.0 ODP tonnes, respectively. The main reason for the increase in MB consumption was the rapid growth of the cut flower industry since 1995 (i.e., from 2 ha of cultivated land in 1995 to 140 ha in 2002).

#### *Implementation Committee*

- 28. Regarding MB consumption in Uganda, the Meeting of the Parties, at its 15<sup>th</sup> Meeting, inter alia,
  - (a) Noted that Uganda has presented sufficient information to justify its request for a change in its MB baseline consumption from 1.9 ODP tonnes to 6.3 ODP tonnes, and that this change is therefore approved;
  - (b) Noted, however, that Uganda reported consumption of 30 ODP tonnes of MB in 2002. As a consequence, for 2002, even after the revision of its baseline, Uganda was in non-compliance with its obligations under Article 2H of the Montreal Protocol;
  - (c) Noted with appreciation Uganda's submission of its plan of action to ensure a prompt return to compliance with the control measures for MB, and noted further that, without prejudice to the operation of the financial mechanism of the Montreal Protocol, under the plan, Uganda specifically commits itself to reduce methyl bromide consumption from 30 ODP-tonnes in 2002 as follows:
    - (i) To 24 ODP tonnes in 2003 and in 2004;
    - (ii) To 6 ODP tonnes in 2005;
    - (iii) To 4.8 ODP tonnes in 2006;
    - (iv) To phase out MB consumption by 1 January 2007, as provided in the plan for reduction and phase out of MB, except for critical uses that might be authorized by the Parties;
  - (d) Noted that the measures listed above should enable Uganda to return to compliance by 2007, and urged Uganda to work with the relevant implementing agencies to implement the plan of action and phase out consumption of MB.

#### Change of technology

- 29. The project proposal, approved by the Executive Committee at its 34<sup>th</sup> Meeting, aimed to replace MB in soil fumigation for cut flower production by steam pasteurization, which was considered the only viable alternative technology. However, according to the report submitted by UNIDO, steaming is not a viable and cost-effective alternative for the production of roses (i.e., bad road conditions and high operating costs of steaming).
- 30. Based on the above considerations, the Government of Uganda requested UNIDO to revise the project proposal to include, in addition to steam pasteurization, the use of alternative chemicals (metham sodium) and soiless media. The Government agreed to completely phase out the use of MB by 2007.

31. The revised project budget is at the same level of the budget of the original project proposal, with the following cost breakdown:

Description	Unitary cost	Cost (US\$)
Consultant in IPM	1w/m @16,000	16,000
Consultant in substrates	2w/m@16000	32,000
Training programme	60,000	60,000
Small steam unit	35,000	35,000
Two spading machines (metham sodium injectors)	2 @ 30,000	60,000
Substrates 300 bags	10,000	10,000
Sub-total		213,000
Contingencies (10%)		21,300
Total cost		234,300

- 32. UNIDO indicated that the revised project proposal only includes one small boiler for steaming the substrates, at a lower cost compared to the original project. The cost for international consultants has been reduced to US \$48,000. In order not to depend only on imported substrates, there is a need to assess and evaluate the best combination of local materials for the preparation of local substrate. For this purpose, the project should provide international assistance in identifying local materials.
- 33. Based on the above situation and following the agreement between the Government of Uganda and the Executive Committee, UNIDO has been very cautious to disburse the funding approved and has opted to report the changes on the data consumption and technology selected to the Executive Committee.

#### Fund Secretariat's recommendation

- 34. In the light of agreed conditions for the implementation of the MB phase out project and the latest MB consumption data reported by Uganda, the Executive Committee may consider whether it wishes to:
  - (a) Approve the change of technology foreshadowed in the progress report; and
  - (b) Provide guidance to the Government of Uganda on how to proceed with the implementation of the approved project proposal.

### **Zimbabwe: Phase out of methyl bromide in cut flowers (UNIDO)**

35. Through the implementation of the project proposal, the Government of Zimbabwe committed to phase out 132 ODP tonnes of MB (i.e., the total MB consumption used for soil fumigation for the production of cut flowers) by 2004, according to the following annual reductions in consumption:

2002	41.0 ODP tonnes
2003	39.6 ODP tonnes
2004	51.4 ODP tonnes

36. The project proposed to replace MB soil fumigation by steam pasteurization using 20 boilers.

### Starting point for reduction

37. According to the data reported in the project proposal submitted to the Executive Committee in July 2000, the 1999 MB consumption level was 598 ODP tonnes. The agreement between the Government of Zimbabwe and the Executive Committee therefore indicates 598 ODP tonnes as the starting point for permanent reductions in MB consumption. However, the 1999 MB consumption level subsequently reported by the Government of Zimbabwe to the Ozone Secretariat was 490.3 ODP tonnes (UNEP/OzL.Pro.13/3/Add.1), i.e., 108 ODP tonnes less than the amount indicated in the agreement.

## UNIDO's response

- 38. UNIDO pointed out that the consumption reported for 1997 and 1998 was 579 and 819 ODP tonnes, respectively, and indicated its views that this data supported the use of a figure of 598 ODP tonnes as the starting point for the project, rather than the reported 1999 consumption of 490.3 ODP tonnes.
- 39. The progress report has not indicated the level of MB phased out from the implementation of the investment project; it reported, however, that the 2002 level of MB consumption in the cut flower sector is about 33 ODP tonnes. Therefore a reduction in MB consumption appears to have been achieved, but it cannot be fully credited to the project. For various reasons, the surface area under cultivation for flowers and the investment by farmers have each been reduced (e.g., less MB has been used). However, training on integrated pest management systems was provided, enabling farmers to reduce MB consumption.
- 40. Subsequently, the Secretariat discussed with UNIDO a proposal to invite the Executive Committee to consider a technical clarification to the agreement to incorporate the correct starting point for Zimbabwe, based on the officially reported 2002 MB consumption of 490.3 ODP tonnes. The reduction in MB consumption funded under the project would remain unchanged, but would be applied to the corrected starting point. The relevant text for the technical clarification is as follows:

"As reported to the Ozone Secretariat, the methyl bromide baseline for compliance for Zimbabwe is 557 ODP tonnes, and the methyl bromide consumption for 1999 was 490.3 ODP tonnes.

Reductions resulting from the implementation of the project will ensure that Zimbabwe will meet the reduction schedule listed below. In this regard, Zimbabwe commits, through the implementation of the project, to reduce total national consumption of controlled uses of methyl bromide to no more than the following levels during the 12-month period of the following listed years:

2000-2001	490.3 ODP tonnes
2001-2002	449.3 ODP tonnes (reduction of 41 ODP tonnes from 2000 level as
	in project document)
2002-2003	409.7 ODP tonnes (reduction of 39.6 ODP tonnes from 2001 level
	as in project document)
2003-2004	358.3 ODP tonnes (reduction of additional 51.4 ODP tonnes as in
	project document)"

41. UNIDO is still discussing the proposal by the Secretariat with the Government of Zimbabwe. The outcome of the discussion will be communicated to the 41<sup>st</sup> Meeting.

## Global: National farmer's training and establishment of farmer's field school (UNEP)

- 42. The objectives of the project approved at the 27<sup>th</sup> Meeting at a cost of US \$60,000 are to:
  - (a) Raise awareness among MB users about the existence of effective MB alternatives;
  - (b) Organize two training activities for trainers who will in turn instruct extension workers and other agents in Africa and Latin America;
  - (c) Implement a Farmer's Field School (FFS) exercise for alternatives to MB in one country; and
  - (d) Leverage existing agricultural resources and programmes in Africa and Latin America to sustain the use of MB alternatives.
- 43. UNEP/FAO conducted two "train the trainers" programmes in Brazil (Cruz das Almas) and Kenya (Nairobi), through demonstrations on implementation of cost-effective alternatives to MB. The training programme in Kenya led to the establishment of a farmer field's school in Naivasha where growers of ornamental crops were trained in the use of MB alternatives. As a result, several farms replaced MB with alternative technologies (biofumigation using local manure and compost, and application of trichoderma), achieving a reduction in MB consumption from 46.2 ODP tonnes to 3.6 ODP tonnes. Additionally, two training activities were coordinated in Ecuador and Guatemala.
- 44. Two documents were prepared, published and posted on the UNEP DTIE web site: a global report on validated alternatives to MB (published in 2001); and a manual for training extension workers (published in English, French and Spanish).
- 45. UNEP is considering the submission of a new farmer field's school project proposal for consideration by the Executive Committee at a future meeting.

## Fund Secretariat's recommendation

46. The Executive Committee may wish:

- (a) To take note of the progress report on the implementation of the national farmer's training and establishment of farmer's field school project; and
- (b) Provide guidance to UNEP on whether a similar national farmer's training and establishment of farmer's field school project could be prepared for its consideration at a future meeting, taking into consideration the UNEP Compliance Assistance Programme.

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