PROJECT PROPOSAL: YEMEN

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

Fumigant

- Terminal phase-out of methyl bromide (second tranche) Germany
## Project Evaluation Sheet - Multi-Year Projects

### Yemen

#### (I) Project Title

<table>
<thead>
<tr>
<th>Substances</th>
<th>Aerosol</th>
<th>Foam</th>
<th>Halon</th>
<th>Refrigeration</th>
<th>Solvent</th>
<th>Process Agent</th>
<th>MDI</th>
<th>Lab Use</th>
<th>Methyl Bromide</th>
<th>Tobacco Fluffing</th>
<th>Total Sector Consumption</th>
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<tr>
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<td>Methyl Bromide</td>
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</tbody>
</table>

#### (II) Latest Article 7 Data (ODP Tonnes)

- **CFC:** 247.7
- **CTC:** 0
- **Halons:** 0.6
- **Methyl Bromide:** 29.8
- **TCA:** 0

#### (III) Latest Country Programme Sectoral Data (ODP Tonnes)

- **Montreal Protocol Consumption Limits:**
  - **2008:** 25.21
  - **2009:** 25.08
  - **2010:** 25.09
  - **2011:** 0
  - **2012:** 0
  - **2013:** 0
  - **2014:** 0
  - **2015:** 0
  - **Total:** 0

- **Maximum Allowable Consumption (ODP Tonnes):**
  - **2008:** 30
  - **2009:** 30
  - **2010:** 20
  - **2011:** 20
  - **2012:** 10
  - **2013:** 10
  - **2014:** 0
  - **2015:** 0
  - **Total:** 0

- **Project Costs (US$):**
  - **Germany:**
    - **Project Costs:** 201,450, 200,000, 200,000, 25,325, 76,159
    - **Support Costs:** 25,325, 25,325, 25,325, 25,325, 25,325

- **Total Funds Approved in Principle (US$):**
  - **Project Costs:** 201,450, 0, 0, 0, 0
  - **Support Costs:** 25,325, 25,325, 25,325, 25,325, 25,325

- **Total Funds Released by the ExCom (US$):**
  - **Project Costs:** 109,740, 91,710, 0, 0, 201,450
  - **Support Costs:** 13,896, 11,613, 0, 0, 25,325

- **Total Funds Requested for Current Year (US$):**
  - **Project Costs:** 200,000, 0, 0, 0, 200,000
  - **Support Costs:** 25,325, 25,325, 25,325, 25,325, 25,325

#### (IV) Project Data

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<tr>
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#### (V) Secretariat’s Recommendation:

Blanket Approval
PROJECT DESCRIPTION

1. On behalf of the Government of Yemen, the Government of Germany has submitted to the 62nd Meeting of the Executive Committee a request for funding for the implementation of the second tranche of the terminal phase-out of methyl bromide (MB) plan, at a total cost of US $200,000 plus agency support costs of US $25,325. The submission also includes a progress report on the implementation of the MB plan during 2009-2010 and the implementation programme for 2011-2012.

Background

2. At its 56th Meeting, the Executive Committee approved US $601,450 as the total funds that will be available to Yemen to achieve the complete phase-out of controlled uses of MB in soil fumigation. It also approved an agreement between the Government and the Executive Committee, and the first tranche of the project at a total cost of US $201,450 plus support costs of US $25,509 (i.e., US $123,636 approved at the 56th Meeting and the balance of US $103,323 at the 57th Meeting of the Executive Committee).

Progress report

3. The following activities have been implemented since the approval of the first tranche of the project: MB imports have been controlled through the licensing and quota system; 53 training courses for over 150 farmers and engineers have been conducted; the solarization technology has been implemented on 45 farms; the biofumigation with local radish seeds is under implementation in one region of the country. Specifications for materials to be used in solarization and bio-fumigation technologies were finalized. Agricultural engineers received training in the use of grafting technology, and the construction of a nursery for grafted plants is planned in 2011 (due to the tense security situation in the Sadah area in Yemen). A roundtable meeting was held with agricultural engineers to introduce alternative technologies in the cut flowers sector; awareness campaigns on alternatives to soil fumigation were conducted by two other associations under the supervision of the MB phase-out project staff. Coordination with the Sana’a University Faculty of Agriculture was started in order to hold workshops on alternatives to MB, provide on-the-job training at the faculty farm, and support research. Awareness material on MB alternatives was disseminated among major stakeholders.

4. As of August 2010, of the US $201,450 approved for the first tranche, US$196,653 had been disbursed. The balance of US $4,797 will be disbursed during 2011.

2011-2012 Work programme

5. Through the implementation of the second tranche of the project, the Government of Yemen will implement the following activities: additional training to farmers (including MB importers and engineers) in the introduction of alternative technologies in the various climatic regions in the country (a total of 1,000 farmers and 100 engineers will be trained by the end of 2014). Technical support will be given to the Yemeni Inventory Researchers Association and the Faculty of Agriculture on using traditional herbs for soil treatment; validation trials related to the soil diseases and treatments will be conducted by graduate students of the Faculty of Agriculture. Second tranche implementation will also include public awareness and information dissemination activities.

SECRETARIAT’S COMMENTS AND RECOMMENDATION

COMMENTS

6. The 2009 MB consumption reported by the Government of Yemen under Article 7 of the Montreal Protocol of 25.0 ODP tonnes is 5.0 ODP tonnes below the maximum allowable level for that
year under the agreement between the Government and the Executive Committee. The Government has informed that, through the MB quota system, the total amount of MB to be imported in 2010 cannot exceed the maximum level of 20 ODP tonnes set under the agreement.

7. Issues related to the long-term sustainability of the various alternative technologies being introduced, and the extent to which they have been accepted by the growers were discussed and addressed. Several factors support the long-term sustainability of solarization and biofumigation as replacement technologies, including a ban on importation of MB from 1 January 2015 by law; the low cost and relatively simple use of the technologies selected; the training programmes provided to farmers and traders of agricultural materials; a participatory role for farmers’ associations, key stakeholders and vocational agricultural institutes and agricultural colleges. Furthermore, an agreement is being developed with the Yemeni Inventors and Researchers Association to identify and use traditional herbs (that were used in the past) in the fumigation of heavily infected soils in order to introduce a natural, low-cost, locally available and acceptable alternative.

RECOMMENDATION

8. The Fund Secretariat recommends that the Executive Committee:

   (a) Takes note of the progress report on the implementation of the first tranche of the terminal phase-out of methyl bromide (MB) plan for Yemen; and

   (b) Approves the 2011-2012 annual implementation programme associated with the second tranche.

9. The Secretariat further recommends blanket approval of the 2011-2012 plan associated with the second tranche of the MB plan, with associated support costs at the funding level shown in the table below.

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Project Funding (US $)</th>
<th>Support Costs (US $)</th>
<th>Implementing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Terminal phase-out of methyl bromide (second tranche)</td>
<td>200,000</td>
<td>25,325</td>
<td>Germany</td>
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