PROJECT PROPOSAL: TUNISIA

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

Fumigant

- Technical assistance for the final phase-out of methyl bromide in the palm dates sector

UNIDO
PROJECT EVALUATION SHEET – NON-MULTI-YEAR PROJECTS
TUNISIA

PROJECT TITLES

| (a) Technical assistance for the final phase-out of methyl bromide in the palm dates sector |
|------------------------------------------|------------------------------------------|
| BILATERAL/IMPLEMENTING AGENCY            | UNIDO                                   |

NATIONAL CO-ORDINATING AGENCY

National Agency for Environmental Protection

LATEST REPORTED CONSUMPTION DATA FOR ODS ADDRESSED IN PROJECT

A: ARTICLE-7 DATA (ODP TONNES, 2014, AS OF SEPT 2014)

<table>
<thead>
<tr>
<th>ODS Name</th>
<th>Sub-sector/quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl bromide</td>
<td>6.6</td>
</tr>
</tbody>
</table>

B: COUNTRY PROGRAMME SECTORAL DATA (ODP TONNES, 2013, AS OF SEPTEMBER 2014)

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CURRENT YEAR BUSINESS PLAN ALLOCATIONS

<table>
<thead>
<tr>
<th>Funding US $</th>
<th>Phase-out ODP tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>823,900</td>
<td>6.6</td>
</tr>
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</table>

PROJECT TITLE:

ODS to be phased out (ODP tonnes): 6.6
Project duration (months): 12
Initial amount requested (US $): 477,400
Final project cost:
  Incremental Capital Cost (US $): 364,000
  Contingency (10%) (US $): 36,400
  Incremental Operating Cost (US $): 0
  Total Project Cost (US $): 400,400
Export component (%): n/a
Requested grant (US $): 400,400
Cost-effectiveness (US $/kg): n/a
Implementing agency support cost (US $): 28,028
Total cost of project to Multilateral Fund (US $): 428,428
Status of counterpart funding (Y/N): n/a
Project monitoring milestones included (Y/N): Y

SECRETARIAT'S RECOMMENDATION

Blanket approval
PROJECT DESCRIPTION

1. On behalf of the Government of Tunisia, UNIDO as the designated implementing agency, has submitted to the 73rd meeting a request for funding for technical assistance to phase out 6.6 ODP tonnes of methyl bromide (MB) in the palm dates sector at the amount of US $477,400, plus agency support costs of US $33,418 as originally submitted. This technical assistance project will assist the Government of Tunisia to completely phase out all controlled uses of MB by 1 January 2015.

Background

2. The agricultural sector occupies an important place in the Tunisian economy, generating over 10 per cent of gross domestic product (GDP). One of Tunisia’s important agricultural exports is palm dates with an annual production estimated at 193,000 tonnes, of which 70 per cent are of the Deglet Noor variety. This variety has very specific characteristics which make it unique in the world market as reflected in higher international market prices compared to other varieties. In value terms, Tunisia is the leader in the international export market for Deglet Noor dates, followed by Algeria. The dates processing sector in Tunisia is very well organized and all exporters are grouped in an association named Groupement Interprofessionnel des Fruits (G.I.F).

3. Palm dates processing is socially and economically important in the south of Tunisia generating revenues for the small farmers, and is ecologically important in ensuring the biological balance of the oasis. Palm dates are collected in branches from September to December and processed in about 70 licensed processing units. Some of these units (48) are simply collectors, who purchase dates from the farmers, clean and, if dry, disinfect them using mainly phosphine. Fumigation is done in chambers or under tarpaulins. These dates are then transported to bigger processing centres (22) where they are disinfected again with MB or phosphine, and directly processed and packed, or stored in cold chambers for later processing and packing, and export. The total MB consumption is 6.6 ODP tonnes/year.

4. In Tunisia, controlled use of MB is exclusively for the fumigation of dates. Regulations are already in place to control the import and use of MB, to monitor consumption and to ensure compliance with the requirements of the Montreal Protocol. These are under the responsibility of the Ministry of Trade, the Customs authority and in close coordination with the National Ozone Unit.

5. At the 24th meeting, the Executive Committee approved US$ 301,730 plus support costs for a project to demonstrate alternative technologies to MB in post-harvest disinfection of palm dates for UNIDO. At that time, no viable alternatives for dates were available. Subsequently, the Executive Committee approved a regional demonstration project for Algeria and Tunisia at the 54th meeting to demonstrate the use of alternatives for MB for high moisture dates.

Project proposal

6. The technical assistance project will phase out the remaining controlled consumption of MB by introducing the use of phosphine through providing improved phosphine plus CO₂ generators to MB users.

7. After consideration of the various alternative technologies available (e.g. heat, controlled atmospheres, ethyl formate, sulfuryl fluoride, phosphine), the GIF selected phosphine plus CO₂ through a generator as the most viable option, although it requires double fumigation time as compared to MB.

8. The project will involve the provision of phosphine generators mixed with CO₂ to 22 processing centres including piping and connections; increasing the volume of fumigation chambers in order to cope with the increase in fumigation time required by this technology; and provision of phosphine detection equipment, and training on the use of the new technology. In addition, assistance will be provided in training on better fumigation practices using phosphine, and capacity building to test potential insect
resistance so that they do not use MB in case of future infestation, in 48 small and medium units that currently use phosphine in their warehouse, and where fumigation is done under tarp.

9. With regard to the training component, the proposal included a list of topics that the training will cover which includes measurement of gas tightness, safety considerations for operating the generator, setting and recording fumigation parameters, use of measurement and testing equipment, testing for insect resistance, disposal of phosphine and by products, among others.

10. The total cost of the project (US $477,400) includes incremental capital costs (US $434,000) and contingencies (US $43,400), and no incremental operating costs are requested.

11. The project will be implemented by UNIDO in coordination with the National Agency for Environmental Protection. The estimated time frame for implementation of the project is 12 months.

SECRETARIAT’S COMMENTS AND RECOMMENDATION

COMMENTS

Decisions by the Parties to the Montreal Protocol

12. At the Fifteenth Meeting, the Parties recognized that there were no sustainable alternatives for the fumigation of dates with high moisture content and allowed an exemption to defer the consideration of the compliance status of countries (which included Tunisia) that use over 80 per cent of their consumption of MB on high-moisture dates, until two years after alternatives are identified, so long as the relevant Party does not increase consumption of MB on products other than high-moisture dates beyond 2002 levels (decision XV/12). The Methyl Bromide Technical Options Committee (MBTOC) of the Technology and Economic Assessment Panel (TEAP) reported\(^1\) that alternatives to MB are already available for this application, and this includes phosphine.

Issues related to MB consumption

13. The MB quota issued for 2014 was 6.6 ODP tonnes, similar to the consumption reported since 2008. UNIDO reported that the country is determined to meet the compliance target under the Montreal Protocol and, therefore will phase out MB by 1 January 2015. To ensure this, the national ozone unit is in the process of finalizing a national protocol related to MB import control, including import for quarantine and pre-shipment (QPS), a non-controlled use, and the regulation is expected to be issued by February 2015.

14. UNIDO has also provided a commitment in writing from the Government of Tunisia that it will ban the import of MB for controlled uses from 1 January 2015, and that a strict system will be in place to enforce the ban.

Technical issues

15. In discussing issues related to the number of phosphine generators required by the project, UNIDO informed the Secretariat that each of the processing centres would require a phosphine generator as these centres are located in different parts of the country. UNIDO did take into account the Secretariat’s suggestion to reduce the number of equipment based on consumption of the centres, and therefore would require only 18 instead of 22.

16. UNIDO also reported on the activities completed so far for the demonstration project currently under implementation in Tunisia and Algeria for alternatives to dates, which allowed for a better understanding of the technical issues related to the adoption of alternative technologies for this specific sector.

17. The Secretariat and UNIDO also discussed cost issues, and made some cost adjustments based on these discussions. The final agreed cost was US $400,400 in the revised project proposal submitted to the 73rd meeting.

**RECOMMENDATION**

18. The Secretariat recommends blanket approval of the technical assistance project for the final phase-out of methyl bromide in the palm dates sector in Tunisia at the level indicated in the table below, on the understanding that no additional funding will be provided for Tunisia for the phase-out of controlled uses of methyl bromide (MB) in the country; and the Government of Tunisia is committed to meeting the complete phase-out of MB by 1 January 2015 and banning imports for controlled MB uses as of that date.

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Project Funding (US $)</th>
<th>Support Cost (US $)</th>
<th>Implementing Agency</th>
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