



## Government of Fiji

### United Nations Development Programme

#### **Technical Assistance to Install Alternatives, Achieve Compliance and Phase out Methyl Bromide in Fiji<sup>1</sup>**

##### **Brief description**

This project which is a component of a larger project being implemented by the Government of Fiji in cooperation with UNEP and UNDP aims to phase out all Methyl Bromide use in Fiji by 2010. The main activities under the larger project that will be supported by this component include: facilitating transfer of existing alternatives from other countries and piloting them if necessary, conducting training programs in alternatives for fumigators and other MB users, and training Border security officials to ensure the control of MB at the borders. This will be accompanied by the development of a policy package to ensure a successful, sustainable and orderly MB phase-out.

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<sup>1</sup> The full project as approved by the Executive Committee of the Multilateral Fund for the Implementation of Montreal Protocol is annexed to this document.

**SIGNATURE PAGE**

**Country: Fiji**

**UNDAF Outcome(s)/Indicator(s):** N/A

**Expected Outcome(s)/Indicator (s):** **Outcome:** Environment policy implemented to promote sustainable development opportunities.  
**Indicators:** State policies and supporting national policy consistent with globally accepted sustainable development criteria and local cultural arrangements. Appropriate institutional and legal arrangements for environmental and social assessment and monitoring of development activities.

**Expected Output(s)/Indicator(s):** **Output** Adoption of alternatives and successful training of technicians and MB users  
**Indicator:** Training and Technology transferred and infrastructure developed.

Implementing partner: Ministry of Environment

Other Partners: UNDP

**Programme Period:** 2006-2008  
**Programme Component:** Energy and Environment  
**Project Title:** Technical Assistance to Install Alternatives, Achieve Compliance and Phase out Methyl Bromide in Fiji  
**Project Code:**  
**Project Duration:** 3 years

**Total budget:** USD 50,000  
**Allocated resources:** \_\_\_\_\_  
 • **Government** \_\_\_\_\_  
 • **Regular** \_\_\_\_\_  
 • **Other:(including in-kind contributions)**  
     ○ Donor MLF \_\_\_\_\_  
     ○ Donor \_\_\_\_\_  
**Unfunded budget:** 0

**Agreed by (Government):** \_\_\_\_\_ **DATE** \_\_\_\_\_

**Agreed by (Implementing partner):** \_\_\_\_\_ **DATE** \_\_\_\_\_

**Agreed by (UNDP):** \_\_\_\_\_ **DATE** \_\_\_\_\_

## Part I. Situation Analysis<sup>2</sup>

Fiji operates under Article 5(1) of the Montreal Protocol (MP). The Government of Fiji acceded to the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol for the Phase-out of Ozone Depleting Substances (ODS) in 1989 and has ratified several amendments (Table 1). Fiji was the first developing country among the Pacific Island Countries to become a party to this multilateral environmental agreement.

**Table 1: Status of Ratification (Fiji)**

	Ratified
Vienna Convention (1985)	23.10.1989 (Ac)
Montreal Protocol (1987)	23.10.1989 (Ac)
London Amendment (1990)	09.12.1994 (Ac)
Copenhagen Amendment (1992)	17.05.2000 (Ac)
Montreal Amendment (1997)	-
Beijing Amendment (1999)	-

Methyl bromide (MB) was officially listed as an ozone depleting substance by the Montreal Protocol in 1992. Fiji is a low-volume consuming country with respect to methyl bromide with a baseline consumption of 0.671 ODP-tonnes for controlled uses under Article 2H. This project is foreshadowed in part in the draft Decision entitled 'Non-compliance with the Montreal Protocol by Fiji' to be considered at the 17th Meeting of the Parties in December 2005. The draft Decision addresses a stepwise return of Fiji to compliance in the case of methyl bromide phase out by 2008. In addition to meeting the time-specific deadlines of that draft Decision, the project aims to complete full phaseout of methyl bromide consumption in Fiji in advance of 1 January 2015, required for Article 5(1) Parties.

The National Ozone Unit (NOU) of the Department of Environment (DOE), Ministry of Local Government, Housing, Squatter Settlement and Environment was established in 1995. This unit is managed by an ODS Project Officer contracted under the UNEP Institutional Strengthening Project (IS). Activities within the country's phase-out programme are managed within the context of the Country Programme (CP), approved in March 1994. The CP adopted a multi-sector, policy-based approach to meet the country's commitments for phasing-out ODS. The NOU is located in Suva.

This project is compatible with Fiji's Country Program and Terminal Phase-out Management Plan for ODS. In the MB sector, Fiji has not as yet carried out any projects, and has not had a demonstration project.

This project also links closely with the priorities set forth in the UNDP Results Resource Framework which has the overall goal of supporting Fiji's national development strategies for

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<sup>2</sup> A thorough situation analysis containing detailed information on MeBr situation in Fiji can be found in the approved project document annexed to this document. The information provided in this document has been extracted from the annexed MLF approved project document.

achieving an improvement in the capacity of national authorities to plan and integrate approaches to environmental management and energy development that responds to the needs of the poor while building capacity and ensuring a sustainable environment.

As there is no production of MB in Fiji, all MB is imported. The MB for fumigation is imported from New Zealand. Fiji's officially reported baseline MB 'consumption' (i.e. average in 1995-98) is 0.67 ODP t. Between 1995 and 1998 only three methyl bromide service providers existed in Fiji: Rentokil Initial, Flick and Quarantine Department of Ministry of Agriculture, Sugar and Land Resettlement.

The Government of Fiji has implemented its import licensing system for ODS since 2000. In accordance with government strategy, Fiji will continue to ban the import Annex A and B substances and Fiji will establish quotas for the import of Annex E-I: Methyl bromide starting in 2006. This will ensure Fiji will be able to return to compliance with all control measures for methyl bromide by 2008.

Consumption of Methyl Bromide<sup>3</sup> is found in the following sectors:

- Insect Pest Control in Mills
- Deratting of Ships
- Insect Pest Control in Stored Grains
- Treatment of Tobacco Seedbeds
- Disinfestation of museums, cultural materials and wooden artifacts (including vau roses)
- Quarantine and Pre-shipment uses

Fiji is in a unique situation as a low volume user and with regard to current use of methyl bromide. Methyl bromide importation is to be regulated under a quota system in 2006, but there are a number of items of legislation and regulation that require updating or modification in order to achieve an orderly and well regulated phase out of methyl bromide. It is likely that there will be a small number of methyl bromide applications in Fiji that are difficult to replace easily through lack of locally available feasible alternatives. Total quantity of methyl bromide required for such treatments is unlikely to exceed 0.1 tonnes a year.

There is potential to harvest methyl bromide from QPS applications and reuse it for applications subject to phaseout without contributing to 'consumption', allowing effective phaseout of MB in Fiji.

One system for *recapture* of methyl bromide is commercially available at present, with others under development.

A thorough analysis of MeBr alternatives and technology transfer issues is provided in the full project annexed to this document.

## Part II. Strategy

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<sup>3</sup> Detailed consumption data and analysis is provided in the full project document annexed to this document.

The Technical Assistance project that includes this UNDP implemented component aims to deliver a graduated phaseout of controlled methyl bromide in Fiji according to the schedule given in Table 5 and figure 4, without disruption of trade and in a safe manner.

**Table 6. Proposed reduction in controlled MB usage (ODP tonnes) in Fiji by use sector**

	2003	2004	2005	2006	2007	2008	2009	2010
Tobacco seedbeds	0.60	0.60	0.491	0.291	0.00	0.00	0.00	0.00
Flour Mills	0.323	0.400	0.400	0.400	0.400	0.070	0.00	0.00
Mill Silos	0.200	0.229	0.229	0.229	0.220	0.100	0.050	0.00
Stored Products (cereals, spices)	0.213	0.150	0.150	0.150	0.150	0.100	0.050	0.00
Vau roses & wooden artifacts	0.005	0.009	0.009	0.009	0.009	0.009	0.009	0.00
Ship Fumigation	0.123	0.187	0.187	0.187	0.187	0.187	0.100	0.00
Building fumigation	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.00
Others (household and artifacts)	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.00
<b>Total</b>	<b>1.468</b>	<b>1.609</b>	<b>1.500</b>	<b>1.300</b>	<b>1.00</b>	<b>0.500</b>	<b>0.243</b>	<b>0.00</b>

The whole project will be carried out in two phases. The first phase will be to put in place a package of policy measures to ensure sustainable and orderly phase-out. This will be carried out with assistance of the Quarantine Department and the Methyl Bromide Consultative Working Group. The second phase will to facilitate transfer of effective technologies from other countries and install them at MB user sites, to improve and modify selected non-MB techniques already in use in Fiji and provide best practice training in the new and improved techniques. It will also carry out awareness raising with regard to methyl bromide phase-out.

Training for Border protection officers (e.g. Customs and Quarantine officers) will be carried out as part of the RMP. It will be specifically to intercept any illegal trade in methyl bromide and prevent rebadging or transfer of QPS methyl bromide to phased out uses.

Objectives for the whole program that the UNDP implemented component will contribute to achieve are summarised as follows:

*Objective 1:* Awareness-raising to inform MB users of the Montreal Protocol commitments, need for action, technical information about successful alternatives, publicity for training courses, etc. This component also includes production and distribution of technical brochures for services providers and end users.

*Output:* raised awareness among MB users, increased participation in training courses.

*Objective 2:* To conduct a review of the legislation and make the necessary amendments to both the regulations and Act. It is possible to program a quarterly submission to amend the regulations while the Act can be amended over a longer period. The review of the Legislation which has a bearing on methyl bromide phase out has a bearing includes: ODS Act 1998, Plant and Quarantine Act, Fruit and Marketing Act, Animal Importation Act, Customs Act 1986, Pesticides Act, Pharmaceutical and Poisons Act and associated regulations, including Marine Board Regulations 1990.

*Output:* Codes of Good Practice for MB fumigations and alternative practices, standards for fumigation of containers, specified requirements to obtain a license and permit to import, store and handle MB.

*Objective 3:* To develop control measures to monitor licenses and permits issued by the Director of Environment to technicians and companies to handle, store and import MB.

*Output:* Proper management of MB phaseout and minimisation of potential misuse of QPS MB for phased out applications.

*Objective 4:* Transfer of successful technologies (rapid phosphine treatments, heat treatments) from other countries, adapting them to the needs of local MB users including conduct of demonstration trials if necessary.

*Output:* Adoption of alternatives in all parts of the country where MB is currently used (linked to training programs). Elaboration of heat treatment technology to suit local conditions. Production of best practice manuals for MB, phosphine, hydrogen cyanide and, possibly, sulphuryl fluoride and ethyl formate for Fijian conditions.

*Objective 5:* Implement training program for trainers, technicians, and MB users, so that they become able to use MB alternatives successfully, safely and cost-effectively.

*Output:* successful training of 30 technicians and MB users.

### **Part III. Management Arrangements**

This project will be executed under the National Execution Modality. The national counterpart for this project is the National Ozone Unit (NOU) of the Department of Environment (DOE), Ministry of Local Government, Housing, Squatter Settlement and Environment. As it is outlined above, this project is a component of a larger project being implemented by the Government of Fiji with the assistance of UNEP. UNDP's component will be implemented in coordination with UNEP counterparts and as per the work plan developed by the Government of Fiji<sup>4</sup>.

The UNDP implemented component will focus on assisting the Government of Fiji with training, equipment purchase and infrastructure development. This component's implementation will be carried out in close cooperation with UNEP and in line with the work plan development by the Government of Fiji.

#### **Part IV. Monitoring and Evaluation**

Project monitoring and evaluation will be conducted in accordance with established UNDP procedures and will be provided by the UNDP Country Office (UNDP-Fiji). The Logical Framework Matrix provides *performance* and *impact* indicators for project implementation along with their corresponding *means of verification*. These will form the basis on which the project's Monitoring and Evaluation system will be built.

The following sections outline the principle components of the Monitoring and Evaluation Plan that would be utilized in the duration of the project.

##### **1.1. Monitoring responsibilities and events**

A detailed schedule of project reviews meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives.

*Day to day monitoring of implementation progress* will be the responsibility of the Project Manager based on the project's consultancy work plan and its indicators. The Government of Fiji will inform the UNDP-Fiji of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion.

##### **1.2. Project Monitoring Reporting**

The Project Manager in conjunction with the UNDP extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process.

###### **(a) *Technical Reports***

Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. Technical Reports would be prepared by external stakeholders and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project and its sites. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

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<sup>4</sup> A detailed work plan is part of the MOU signed by the Government of Fiji and the United Nations Environment Programme.

**(b) Project Publications**

Project Publications will form a key method of crystallizing and disseminating the results and achievements of the Project. These publications may be scientific or informational texts on the activities and achievements of the Project, in the form of journal articles, multimedia publications, etc. These publications can be based on Technical Reports, depending upon the relevance, scientific worth, etc. of these Reports, or may be summaries or compilations of a series of Technical Reports and other research. The Biofuels Development Unit will determine if any of the Technical Reports merit formal publication, and will also (in consultation with UNDP, the government and other relevant stakeholder groups) plan and produce these Publications in a consistent and recognizable format. Project resources will need to be defined and allocated for these activities as appropriate and in a manner commensurate with the project's budget.

**1.3 Audit Clause**

The Government of Fiji will provide the Resident Representative with certified financial statements, and with a final audit of the financial statements relating to the status of UNDP funds at the end of the project term, according to the established procedures set out in the Programming and Finance manuals. The Audit will be conducted by the legally recognized auditor, or by a commercial auditor engaged by the Government of Fiji.

**Part V. Legal Context**

This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the Government of Fiji and the United Nations Development Programme, signed by the parties on [date]. The host country implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that Agreement.

The UNDP Resident Representative in Fiji is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has assured that the other signatories to the Project Document have no objection to the proposed changes:

- a) Revision of, or addition to, any of the annexes to the Project Document;
- b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;
- c) Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and
- d) Inclusion of additional annexes and attachments only as set out here in this Project Document

### **Part III—other agreements**

This project is part of a larger project funded by the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol. The other component of this project that focuses in policy, awareness, training will be implemented by UNEP. The Government of Fiji has signed a Memorandum of Understanding with UNEP where specific objectives and a detailed work plan are outlined. A copy of the MOU can be found in Annex     .

**Annex 1 PROJECT RESULTS AND RESOURCES FRAMEWORK**

<p><b>Intended Outcome as stated in the Country Results Framework:</b> Increased capacity to better comply with country-level requirements emanating from global environmental treaties, conventions and agreements as ratified by Fiji, such as the Convention on Biodiversity, Montreal Protocol mandates, and Rio Declaration</p>			
<p><b>Outcome indicator as stated in the Country Programme Results and Resources Framework, including baseline and target.</b> Increased capacity and better coordination to access global facilities such as GEF and Montreal Protocol</p>			
<p><b>Applicable MYFF Service Line:</b> <b>Goal 3. Energy and environment for sustainable development</b></p>			
<p>3.1 Frameworks and strategies for sustainable development</p>			
<p>3.6 National/sectoral policy and planning to control emissions of ozone-depleting substances and persistent organic pollutants</p>			
<p><b>Partnership Strategy National Execution</b></p>			
<p><b>Project title and ID:</b> FU/PHA/47/TAS/15- Technical Assistance to Install Alternatives, Achieve Compliance and Phase out Methyl Bromide in Fiji</p>			
Intended Outputs	Output Targets for (years)	Indicative Activities	Inputs
1. Adoption of alternatives and successful training of 30 technicians and MB users	2006 - 2008	1.1. Training and Technology transfer 1.2. Infrastructure Development	US\$29,000 US\$21,000
<b>TOTAL</b>			<b>US\$ 50,000</b>

**Annual Work Plan**

**Year 2006**

EXPECTED OUTPUTS & MONITORING ACTIVITIES	Key Activities <i>List all the activities to be undertaken during the year towards stated output</i>	TIMEFRAME				RESPONSIBLE PARTNER	PLANNED BUDGET		
		Q1	Q2	Q3	Q4		Source of Funds	Amount	
		Training and Technology transfer	Training				X	X	NOU
	Equipment Purchasing				X	NOU	63030	Service Contract	3,000
Infrastructure Development	Demonstration of sealing of bins for PH3 treatment				X	NOU	63030	Equipment	13,000
					X	NOU	63030	Service Contract	6,000
<b>TOTAL</b>									<b>28,000</b>

**Year 2007**

EXPECTED OUTPUTS & MONITORING ACTIVITIES	Key Activities <i>List all the activities to be undertaken during the year towards stated output</i>	TIMEFRAME				RESPONSIBLE PARTNER	PLANNED BUDGET		
		Q1	Q2	Q3	Q4		Source of Funds	Amount	
		Training and Technology transfer	Training	X	X		X	X	NOU
Infrastructure Development	Construction of an off site fumigation hard standing for PH3	X	X			NOU	63030	Service Contract	15,000
<b>TOTAL</b>									<b>22,000</b>

