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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Twenty-eighth Meeting
Montreal, 14-16 July 1999

PROJECT PROPOSALS: NEPAL

This document includes the comments and recommendations of the Fund Secretariat on the following project proposals:

Refrigeration

- Monitoring activities included in the Refrigerant Management Plan (RMP) UNDP
- National Programme for Recovery and Recycling of Refrigerants UNDP
- Refrigerant management plan: policy development and related information dissemination UNEP
- Refrigerant management plan: training in monitoring and control of CFC and establishment of import/export licensing system UNEP
- Refrigerant management plan: training of trainers in refrigeration UNEP

PROJECT EVALUATION SHEET NEPAL

SECTOR: Refrigeration ODS use in sector (1998): 33.16 ODP tonnes
 RMP
 Sub-sector cost-effectiveness thresholds: n/a US \$/kg

Project Titles:

- (a) National Programme for Recovery and Recycling of Refrigerants
- (b) Monitoring activities included in the Refrigerant Management Plan (RMP)
- (c) Refrigerant management plan: policy development and related information dissemination
- (d) Refrigerant management plan: training in monitoring and control of CFC and establishment of import/export licensing system
- (e) Refrigerant management plan: training of trainers in refrigeration

Project Data	RMP	RMP	RMP	RMP	RMP
	(a)	(b)	(c)	(d)	(e)
Enterprise consumption (ODP tonnes)					
Project impact (ODP tonnes)	6.00				
Project duration (months)	30	30	12	24	18
Initial amount requested (US \$)	107,532	15,455	16,000	67,400	78,000
Final project cost (US \$):					
Incremental capital cost (a)	98,520	14,050	6,000	54,000	76,000
Contingency cost (b)	9,012	1,405			2,000
Incremental operating cost (c)					
Total project cost (a+b+c)	107,532	15,455	6,000	54,000	78,000
Local ownership (%)	100%		100%	100%	100%
Export component (%)	0%		0%	0%	0%
Amount requested (US \$)	107,532	15,455	6,000	54,400	78,000
Cost effectiveness (US \$/kg.)					
Counterpart funding confirmed?					
National coordinating agency	Bureau of Standards and Meteorology		National Ozone Unit		
Implementing agency	UNDP	UNDP	UNEP	UNEP	UNEP

<i>Secretariat's Recommendations</i>					
Amount recommended (US \$)	88,577	8,894	6,000	44,400	70,000
Project impact (ODP tonnes)	6.00				
Cost effectiveness (US \$/kg)					
Implementing agency support cost (US \$)	11,515	1,156	780	5,772	9,100
Total cost to Multilateral Fund (US \$)	100,092	10,050	6,780	50,172	79,100

PROJECT DESCRIPTION

- (a) National Programme for Recovery and Recycling of Refrigerants**
- (b) Monitoring activities included in the Refrigerant Management Plan (RMP)**
- (c) Refrigerant management plan: policy development and related information dissemination**
- (d) Refrigerant management plan: training in monitoring and control of CFC and establishment of import/export licensing system**
- (e) Refrigerant management plan: training of trainers in refrigeration**

Refrigerant Management Plan

1. In 1998, the total ODS consumption in the refrigeration sector in the country was estimated at 33.2 ODP tonnes for servicing domestic and commercial refrigeration equipment. Based on data gathered during a survey completed in 1998, there are about 500 formally trained refrigeration technicians and 500 unskilled ones in the country, and 350 service workshops of different sizes. These workshops carry out maintenance and repair of domestic, commercial and industrial refrigeration equipment.

2. The Government's Action Plan proposes to develop and implement during 1999-2000 specific control measures including establishment of legal and regulatory systems for CFC monitoring including a licensing system; ban of CFC based equipment and a national policy for storage of CFC-11 for old systems; establishment of a code of good practices; training and certification of refrigeration and air-conditioning service technicians and implementation of a national programme for recovery and recycling of refrigerants.

3. The RMP identified two basic training programmes: (i) training for customs officers and establishment of an import/export licensing system, to identify and develop techniques for collecting and reporting consumption of ODS import and ODS-based refrigeration equipment, a license/quota system for CFC imports and development of a database on consumption by importers, users and retailers; this programme includes a request for US \$6,400 for ODS identification kits; and (ii) a "train the trainers" programme for refrigeration technicians in good management practices, aimed at improving service practices to prevent release of CFCs into the atmosphere and thus making it possible for refrigeration equipment to operate to the end of its useful life.

4. The project includes a request for policy development and related information dissemination. The proposed outputs are: code of good refrigeration practices, a certification system and labeling.

5. The RMP also includes a subproject for the establishment of a recovery and recycling network comprising 12 recovery units (including units to be used in the training programme on good servicing practices) and 2 recycling centres for servicing commercial and industrial refrigeration equipment, at a total cost of US \$80,177. This activity also provides for 2 one-day workshops for service technicians on practical demonstrations on recovery and recycling equipment.

6. Implementation of these projects will lead to recovery and recycling of 6 tonnes of CFC each year. This amount would be additional to the amount of refrigerant which might be saved from the teaching of good service and maintenance practices at the training seminars.

7. Nepal's Ozone Secretariat will be responsible for the monitoring, co-ordination and implementation of proposed phase-out activities in the RMP. It will monitor the programme and ensure that the sale price of the recycled refrigerant is balanced in such a manner that the operators of the recycling centres will not incur financial loss or profit. The project also includes a request in the amount of US \$17,464 for engaging a local consultant to collect data from all the service workshops that are included in the recovery and recycling project.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. UNEP and the Secretariat discussed the scope of the sub-project on policy development and related information dissemination in assisting the Government of Nepal to establish the policy framework and the regulatory and legislative measures needed for a successful implementation of the RMP.

2. The level of funding requested for the training programmes was revised after adjusting costs associated with logistic arrangements for the workshops and the request for project assistance, monitoring and evaluation.

3. The Secretariat and the implementing agencies (UNDP and UNEP) also discussed the size of the recovery and recycling programme in relation to CFC consumption level and its sectoral distribution. UNEP and UNDP agreed to adjust the level of funding accordingly.

RECOMMENDATION

1. The Fund Secretariat recommends blanket approval of the project with associated support costs at the funding level shown in the table below:

	Project Title	Project Cost (US\$)	Support Cost (US\$)	Implementing Agency
(a)	National Programme for Recovery and Recycling of Refrigerants	88,577	11,515	UNDP
(b)	Monitoring activities included in the Refrigerant Management Plan (RMP)	8,894	1,156	UNDP
(c)	Refrigerant management plan: policy development and related information dissemination	6,000	780	UNEP
(d)	Refrigerant management plan: training in monitoring and control of CFC and establishment of import/export licensing system	44,400	5,772	UNEP
(e)	Refrigerant management plan: training of trainers in refrigeration	70,000	9,100	UNEP

2. The Executive Committee may also wish to request UNEP and UNDP not to proceed with the disbursement of funds approved for the customs training programme and the recovery and recycling programme until the regulatory and legislative requirements and fiscal steps proposed by the Government of Nepal are put into place.