



**United Nations
Environment
Programme**



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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Twenty-sixth Meeting
Cairo, 11-13 November 1998

COUNTRY PROGRAMME: NEPAL

This document consists of:

- Country Programme Evaluation Sheet (prepared by the Fund Secretariat)
- Comments and Recommendations of the Fund Secretariat
- Transmittal Letter from the Government of Nepal
- Country Programme Cover Sheet
- Country Programme (Executive Summary)

NEPAL COUNTRY PROGRAMME EVALUATION SHEET

National Ozone Committee

Status of ratification of the Vienna Convention and the Montreal Protocol

	Signature	Ratification	Entry into force
Vienna Convention (1985)		06-Jul-94	04-Oct-94
Montreal Protocol (1987)		06-Jul-94	04-Oct-94
London Amendment (1990)		06-Jul-94	04-Oct-94
Copenhagen Amendment (1992)			

Production of controlled substances: No controlled substances produced

Consumption of controlled substances (1996) 29.1 metric tonnes
29.1 weighted tonnes (ODP)

(tonnes)	CFC-11	CFC-12	CFC-113	CFC-114	CFC-115	TOTAL	Halon1211	Halon1301	TOTAL	CTC	MCF	TOTAL	Me-Br
ODS		29.1				29.1							
ODP		29.1				29.1							

Distribution of ODP by substance: CFC 100.0% Halon CTC and MCF

Distribution of ODP by sector: Aerosol Foam Halon Refrigeration Solvent Other

Consumption (ODP tonnes): 0.0 0.0 0.0 29.1 0.0 0.0

Percent of total: 100.0%

Country Programme

Duration of country programme: 12 years (1998-2010)

ODS phase out target: Complete phase out by 2010

Phase out priority area: Refrigeration servicing sector

Cost of activities in country programme: \$367,000

Strategy:

The Government's policy framework within which the phaseout of ODS will be managed is based on restrictions on imports; industry initiated support for new systems; training of service technicians on new systems and refrigerants; cooperation between government and importers to conduct an awareness campaign with the public and industry, development of regulatory instruments, maintaining supply of ODS for existing equipment until new systems have been commissioned and substitutes are readily available, and implementation of public and industry awareness campaigns.

COMMENTS AND RECOMMENDATIONS OF THE FUND SECRETARIAT

COMMENTS

1. The Country Programme conforms to the format of the approved guidelines. The total ODS consumption in the country is estimated at 29 ODP tonnes, CFC-12 is only used for manufacturing and servicing domestic refrigerators (15.8 tonnes) and air conditioning equipment (13.2 tonnes).
2. There are four manufacturers of refrigeration and air conditioning equipment in the country: Prabish Technology Co., Weather Maker, Hilltake Air Conditioner (commercial refrigeration equipment) and Chitwan Refrigerator Plant (200 domestic refrigerators). The commercial refrigeration manufacturing plants have already shifted to HCFC-22 refrigerant.
3. There are over 100 refrigeration-servicing enterprises and 500 service technicians. The Nepal Refrigeration and Air Conditioning Maintenance Association represents about three quarters of the people servicing refrigeration equipment. Most of the service companies are very small in size, staffed with one or two people, and are mainly located in Kathmandu and Pokhara. About 80% of the servicing demand is in the Kathmandu region. There are no formal qualifications required to service refrigeration equipment, although about half of the service people do have a technical education, from courses organized by the Institute of Engineering.
4. The country programme also includes a project for the establishment of an Ozone Unit within the Ministry of Industry (institutional strengthening) at a cost of US \$77,000. The Fund Secretariat's Comments and Recommendations regarding this request are presented under UNEP work programme amendments (UNEP/OzL.Pro/ExCom/26/20).

RECOMMENDATIONS

The Fund Secretariat recommends as follows:

1. To approve the Nepal Country Programme. Approval of the Country Programme does not denote approval of the projects identified therein or their funding levels.
2. To request the Government of Nepal to present annually information to the Executive Committee on progress being made in the implementation of the country programme, in accordance with the decision of the Executive Committee on implementation of country programmes (UNEP/OzL.Pro/ExCom/10/40, para 135). Using the approved format, the initial report, covering the period 15 November 1998 to 31 December 1999, should be submitted to the Fund Secretariat no later than 1 May 2000.

The Chief Officer
Secretariat of the Multilateral Fund for the Implementation of
the Montreal Protocol
1800 McGill College
27th Floor, Montreal, Canada H3A 3J6

Dear Sir,

I have the honor to submit herewith the Country Program of Nepal for the consideration and approval of the Multilateral Fund for the Implementation of the Montreal Protocol.

The Government of Nepal adhered to the Protocol on 6th July 1994 and became a Party on 4th Oct 94. It is classified as operating under paragraph 1 of Article 5 of the Protocol.

I would like to place on record the appreciation of the Government of Nepal of the assistance extended to it through the UNEP IE Ozone Action Program for the preparation of the Country Program which started during December 1996. I am pleased to say that the Government is committed to the implementation of the actions contained in the Country Program.

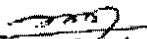
I further assert that it is the Government's intention to monitor compliance with the Protocol. If necessary, further and different actions from those specified in the Country Program will be updated and submitted to the Executive Committee of the Multilateral Fund.

We hope that the Executive Committee will approve the request for assistance made in respect of the following actions:

- a) Institutional Strengthening

Please accept, Sir, the assurance of my highest consideration.

Sincerely yours,


(Dr. S.R. Jishi)

Senior Metrologist

Nepal Bureau of Standards and Metrology

COUNTRY PROGRAMME COVER SHEET

Date received: _____

Country : NepalLead National Agency : Nepal Bureau of Standards and Metrology,
Ministry of Industry,
His Majesty's Government of NepalPeriod covered
by Country Programme : 1998-2010**1. Phase Out Schedule**

Substances	Current consumption (ODP-tonnes in 1996)	Planned total consumption till phase out (ODP-tonnes)	Planned year of phase out
CFC-12	29.058	244.027	2010
Total	29.058	244.027	2010

* The HCFC-22 consumption in 1996 was 23 tonnes.

2. Government Action Plan (policy framework)

Year(s)	Description of Action	Sector	Intended effect
1999	Registration of ODS importers	RAC	Regulation of imports
1999	Accreditation of servicing enterprises	RAC	Regulation of consumption, and identification of training needs
1999	Ban on Halon imports	Fire fighting	Control of future imports
1999	Ban of import of CFC-containing equipment	RAC	Minimization of servicing needs
2000-2010	Regulation of ODS imports and sales	RAC	Meet Protocol commitments
2000-2010	Tax on CFCs	RAC	Economic incentive to adopt non-CFC equipment

3. Summary of Projects being submitted with this Country Programme

Year(s)	Type of project	Project description	Project cost	Incremental cost	Participating implementing agencies (if any)	Tonnes x ODP Phased Out
1999-2001	Institutional strengthening	Creation of National Ozone Unit	\$ 77,000	\$ 77,000	UNEP	-
1999	Project preparation	Development of Refrigeration Management Plan	\$ 30,000	\$ 30,000	UNEP	-

4. Summary of projects expected to be submitted later

Year(s)	Type of project	Project description	Project cost	Incremental cost	Participating implementing agencies (if any)	Tonnes x ODP Phased Out
1999-2005	Training	Training of servicemen etc.	\$ 50,000	\$ 50,000	UNEP	-
1999-2005	Training	Training of custom officers	\$ 40,000	\$ 40,000	UNEP	-
1999-2005	Investment	Recovery & recycling facilities	\$ 150,000	\$ 150,000	-	28
1999-2001	Investment	Conversion of commercial refrigeration manufacturing enterprises	\$ 20,000	\$ 20,000	-	1

5. Costs

Costs of Activities and Projects in Country Programme (US \$)	: 107,000
Estimated cost of complete phase out (US \$)	: 367,000
Estimated cost effectiveness (US \$)	: 12,655 per tonne x ODP

Executive Summary

The Government of Nepal ratified the Montreal Protocol on Substances that Deplete the Ozone Layer in 1994, and this Country Programme presents a comprehensive action plan to phase out ODS consumption.

Nepal depends heavily on refrigeration and air conditioning, which are required for key segments of its economy - preservation and transport of food, and tourism. Many refrigeration and air conditioning systems contain CFC-12, which damages the stratospheric ozone layer, and has been classified as a controlled substance under the Montreal Protocol.

Nepal's current consumption of Annex A CFCs is 0.0013 kg per capita, hence, it operates under paragraph 1 of Article 5 of the Protocol and is eligible for assistance from the Multilateral Fund.

A 1996 survey of ODS consumption in Nepal found that 29 tonnes of CFC-12 and 23 tonnes of HCFC-22 were consumed in Nepal during that year. Approximately 1.0 tonnes of CFC-12 is used in new equipment, and the balance 28 tonnes is for servicing (15.8 tonnes for domestic refrigerators and 12.2 tonnes in commercial and industrial refrigeration and air-conditioning).

The Action Plan, contained in the Country Programme, envisages complete phase out of CFC-12 within the timeframe established by the Montreal Protocol. The Action Plan is linked with the broad strategy to be adopted in India for CFC phase out. This is because of the long border shared between the two countries, and a large percentage of CFC imports in Nepal being acquired in India. The Action Plan contains a comprehensive range of measures that will ensure that this target is met.

The main features of the Action Plan are legislative bans and restrictions of CFC and equipment based on CFC. For any phase out Programme to be successful it must be based on a high level of awareness of its objectives, and ownership by the main stakeholders. Therefore, the Action Plan depends on the conduct of a public and industry awareness campaign.

Industry is an important partner for carrying through many elements of the Plan: Through a recovery and recycling system, registration for the purchase of CFC and accreditation to use CFC, the refrigeration service industry will play its part in conserving existing stocks of CFC by

reducing unnecessary emission. Training will be provided to the refrigeration servicing sector to ensure that they have the skills required to effectively maintain and repair equipment with minimum release of CFC to the atmosphere.

An Ozone Unit will be set up to coordinate the phase out activities.

Through this Country Programme, Nepal is requesting financial assistance from the Multilateral Fund to implement an Institutional Strengthening project (US\$ 77,000) and develop a Refrigerant Management Plan (US\$ 30,000).