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Executive Committee of
the Multilateral Fund for the
Implementation of the Montreal Protocol

Twentieth Meeting
Montreal, 16-18 October 1996

COUNTRY PROGRAMME: PAKISTAN

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 Pakistan
- Country Programme Cover Sheet
- Country Programme (Executive Summary)

PAKISTAN COUNTRY PROGRAMME EVALUATION SHEET

Ozone Cell, Ministry of Environment, Urban Affairs, Forestry and Wildlife

Status of ratification of the Vienna Convention and the Montreal Protocol

	Signature	Ratification	Entry into force
Vienna Convention (1985)		18/Dec/92	18/Mar/93
Montreal Protocol (1987)		18/Dec/92	18/Mar/93
London Amendment (1990)		18/Dec/92	18/Mar/93
Copenhagen Amendment (1992)			

Production of controlled substances: No controlled substances produced

Consumption of controlled substances (1995) 2,586.0 metric tonnes
2,538.9 weighted tonnes (ODP)

(tonnes)	CFC-11	CFC-12	CFC-113	CFC-114	CFC-115	TOTAL	Halon1211	Halon1301	TOTAL	CTC	MCF	TOTAL	Me-Br
ODS	695.0	1,191.0	3.0		3.0	1,892.0	7.0		7.0	559.0	128.0	687.0	
ODP	695.0	1,191.0	2.4		1.8	1,890.2	21.0		21.0	614.9	12.8	627.7	

Distribution of ODP by substance: CFC 74.4% Halon 0.8% CTC and MCF 24.7%

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

Consumption (ODP tonnes): 270.0 21.0 1,617.8 630.1

Percent of total: 10.6% 0.8% 63.7% 24.8%

Country Programme

Duration of country programme: 15 years (1996-2010)

ODS phase out target: Complete phase out of CFC by the year 2000 except for refrigeration servicing sub-sector. Complete ODS phase out by 2010

Phase out priority area: Foam, refrigeration and solvent sectors

Cost of activities in country programme: \$16,937,426

Strategy:

The Government is proposing, inter alia, the adoption of an early technological and industrial conversion to prevent subsequent supply problems in the different sectors that use ODS, and to ensure an early assimilation of new technologies; a national public awareness campaign and a clearing house for exchanging information and data; provision of financial incentives in the form of lower import tariffs on equipment and materials required for implementing the phase out; banning the manufacture and import of equipment operating with ODS; development of regulations and technical guidelines.

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 2,538.9 tonnes. The largest consumption of ODS is in the refrigeration sector (1,617.8 tonnes, including 1,038 tonnes used for servicing refrigeration equipment), followed by the solvent (630.1 tonnes) and the foam (270 tonnes) sectors.
2. The Executive Committee has approved several investment projects in the foam and refrigeration sectors that will lead to the phase out of 350 ODP tonnes of controlled substances. The Committee at its Fourteenth Meeting also approved a project for the establishment of a National Ozone Office.
3. The country programme also identified several investment projects in the refrigeration, foam, halon and solvent sectors to be implemented between 1997 and 1999 with an estimated cost of US \$16.94 million.

RECOMMENDATIONS

1. The Fund Secretariat recommends as follows:
2. To approve the Pakistan Country Programme. Approval of the Country Programme does not denote approval of the projects identified therein or their funding levels.
3. To request the Government of Pakistan 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 18 October 1996 to 31 December 1997, should be submitted to the Fund Secretariat no later than 31 March 1998.

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Government of Pakistan
Ministry of Environment, Urban Affairs,
Forestry and Wildlife

Islamabad, July 25, 1996.



TRANSMITTAL LETTER

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 honour to submit herewith the Country Programme of Pakistan for the consideration and approval of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol.

The Pakistan adhered to the Protocol on 19th November, 1992 and became a Party on 18th December, 1992. It is classified as operating under Paragraph 1 of Article 5 of the Montreal Protocol.

I would like to place on record the appreciation of the Government of Pakistan for the assistance extended to it through the UNEP IE OzoneAction programme for the preparation of the Country Programme which started in April, 1995. I am pleased to say that the Government is committed to the implementation of actions contained in the Country Programme.

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

I hope that the Executive Committee will approve the Country Programme of Pakistan.

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

Yours sincerely

M. Ajmal 25/7/96

(Muhammad Ajmal)
Director (Industries & Ozone)

Country Programme Cover Sheet

Country	Pakistan
Lead National Agency	Ministry of Environment, Urban Affairs, Forestry and Wildlife
Lead Implementation Agency	UNEP
Period Covered	1996-2010

1. Phase Out Schedule

Substances	Current Consumption (tonnes ODP in 1995)	Planned Total Consumption till Phase Out (tonnes ODP)	Planned Year of Phase Out
CFC-11	695	1,468	2010
CFC-12	1,191	8,290	2010
CFC-113	2.4	5	2010
CFC-115	1.8	4	2010
Halon-1211	21	195	2010
CTC	614.9	3,734	2010
MCF	12.8	697	2010
Total	2,538.9	14,393	

HCFC-22 has been included in the Country Programme for information purposes only. A phase out schedule for HCFC-22 will be covered in the subsequent revision of the Country Programme.

2. Government Action Plan

Item	Action 1996-2000	2001-2005	2006-2010
Country Programme	Complete elaboration and commence to implement	Reassess and adjust, then continue	Reassess, continue and complete
Legal System	Establish legal system for ODS management and implement	Improve related regulations and system, and continue	Continue
Bans	Ban on new enterprises producing refrigerators, air conditioning equipment, and foam material using ODS Ban on import of products using or containing ODS (special cases in halon extinguishers excluded)	Ban on creating or enlarging cleaning lines using ODS Ban on uncontrolled release of ODS during servicing	Ban on import of ODS or products using or containing ODS
Investment control	Ban on investment in building new plants using ODS. Strict control of investments in new, enlarged, or technically reformed	Continue	Continue

	enterprises consuming ODS		
Financial incentives	Reduction of import tariffs on equipment and materials required for implementation of ODS phase out projects.	Continue	Continue
Taxation	Feasibility study on related tariff and tax policies, practice inclined tax policies on ODS	Inclined policies on the sale of ODS and their substitutes, ODS products and their substitutes	Continue
Awareness, education and technical information exchange	Carry out awareness and education on ozone layer protection through public media, such as newspapers, broadcasting, and TV programs, so as to upgrade the environmental awareness of the public Communicate key points of national ozone policy to the public Issue special bulletins on the harmful effects of ozone layer depletion	Continue awareness and education, hold technical workshops and public meetings Announce new policies in advance of their introduction Inform consumers about the premature obsolescence of refrigerators and refrigerant and air conditioning equipment based on ODS	Continue
Exclusive sales and quotas of ODS	Investigate thoroughly ODS consumption status and their input channels, monitor and control ODS sales networks, and establish exclusive ODS sales systems	Define consumption quotas to users, control the quotas and supplies according to the quotas	Continue
Recycle/recovery of ODS	Establish networks and sites for recycle/recovery and operate them	Continue activity from the previous period Establish networks and sites for halon recovery and storage, recover halons in fire extinguishing devices in non-essential cases and use them in the essential devices	Continue activity from the previous period
Monitoring	Develop a monitoring system for ODS imports within the general administration of Customs Define and divide responsibilities for supervision and management of technical substitution projects among environmental protection agencies and various sectors and industries, and commence monitoring activities Determine the phase out plan, start a reward and punishment strategy Report regularly on the progress of ODS phase out	Continue activity from the previous period	Continue activity from the previous period

3. Projects in Progress (approved and funded)

Sector	Date	Name of Project	Estimated Cost (US\$)	Annual ODP (MT)
All	1995-98	Institutional strengthening	259,000	NA
Foam	July 1995	Conversion of CFC-11 to methylene chloride for flexible slabstock system and to all-water blown system in the manufacture of moulded polyurethane foam (Master Foam Industries, Karachi)	1,402,284	205.50

	July 1995	Conversion of CFC-11 to all water-blown and HCFC-22 as blowing agent in the manufacture of moulded and rigid PUF (Razi Sons, Karachi).	507,660	60.00
Refrigeration	Nov. 1995	Conversion of CFC-12 to HFC-134a and CFC-11 to cyclopentane in a domestic refrigeration plant (Riaz Electric, Lahore).	822,987	35.00
	Nov. 1995	Conversion of CFC-12 to HFC-134a and CFC-11 to cyclopentane in a domestic refrigeration plant (Pak Elektron Ltd., Lahore).	1,210,195	50.25
	Oct. 1996	Conversion of CFC-12 to HFC-134a and CFC-11 to non-ODS in a domestic refrigeration plant (Domestic Appliances Ltd., Karachi).	515,300	21.80

4. Projects Under Preparation (to be submitted in the future)

<i>Sector</i>	<i>Duration</i>	<i>Name of Project</i>	<i>Estimated Cost US\$</i>	<i>Annual ODP (MT)</i>
Refrigeration	1997-98	Conversion of CFC-12 to HFC-134a and CFC-11 to non-ODS in a domestic refrigeration plant (Cool Industries, Lahore).	5,018,000	210.00
	1997-98	Conversion of CFC-12 to HFC-134a and CFC-11 to non-ODS in a domestic refrigeration plant (Dawiance (Pvt.) Ltd., Karachi).	2,945,000	123.25
	1997-99	Conversion of CFC-12 to HFC-134a and CFC-11 to non-ODS in a domestic refrigeration plant (Saleem Sons, Lahore).	794,000	33.25
	1997-99	Conversion of CFC-12 to HFC-134a and CFC-11 to non-ODS in a domestic refrigeration plant (Philips Electrical Co., Karachi).	581,000	24.30
	1997-99	Conversion of CFC-12 to HFC-134a and CFC-11 to non-ODS in a domestic refrigeration plant (Ice Age Industries, Okara).	627,000	26.25
	1997-99	Conversion of CFC-12 to HFC-134a in commercial refrigeration system in railway coaches (Pakistan Railways, Lahore).	458,000	19.17
	1998-99	Conversion of CFC-12 to HFC-134a and CFC-11 to non-ODS in a domestic refrigeration plant (Singer Electrical Industries, Karachi).	639,000	26.75
	1998-99	Conversion of CFC-12 to HFC-134a and CFC-11 to non-ODS in a domestic refrigeration plant (Shahab Industries Ltd., Karachi).	161,000	6.75
	1998-99	Conversion of CFC-12 to HFC-134a and CFC-11 to non-ODS in a domestic refrigeration plant (Mohd. Ibrahim & Co. Ltd., Karachi).	161,000	6.75
	1998-99	Conversion of CFC-11 to non-ODS in commercial refrigeration system in lorries (KoldKraft (Pvt.) Ltd., Lahore).	48,000	2.00
	1998-99	Fifteen Workshops and seminars in all major cities of Pakistan to train the technicians in the service sector in practices that lead to reduction in wastage of CFC-12.	160,000	NA
	1997	Study HCFC-22 consumption, develop phase out programme and projects, and include in the Country Programme	10,000	NA
	1999	Feasibility study for the recovery and recycling of CFC refrigerants for investigating the feasibility of recovering CFCs from refrigerators, deep freezers, and mobile air-conditioning units. It will provide strategies for recycling CFCs and reducing CFC consumption through training of service and maintenance technicians	60,000	NA

