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Environment
Programme**



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

Twenty-first Meeting
Montreal, 18-20 February 1997

COUNTRY PROGRAMME: DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA

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 DPR of Korea
- Country Programme Cover Sheet
- Country Programme (Executive Summary)

KOREA COUNTRY PROGRAMME EVALUATION SHEET

National Ozone Cell, National Coordinating Committee for Environment

Status of ratification of the Vienna Convention and the Montreal Protocol

	Signature	Ratification	Entry into force
Vienna Convention (1985)		24/Jan/95	24/Apr/95
Montreal Protocol (1987)		24/Jan/95	24/Apr/95
London Amendment (1990)			
Copenhagen Amendment (1992)			

Production of controlled substances: 1,149.0 metric tonnes

Consumption of controlled substances (1995) 1,288.6 metric tonnes
1,220.1 weighted tonnes (ODP)

(tonnes)	CFC-11	CFC-12	CFC-113	CFC-114	CFC-115	TOTAL	Halon1211	Halon1301	TOTAL	CTC	MCF	TOTAL	Me-Br
ODS	225.0	520.0	100.0		2.6	847.6		1.0	1.0	340.0	100.0	440.0	
ODP	225.0	520.0	80.0		1.5	826.5		10.0	10.0	374.0	10.0	384.0	

Distribution of ODP by substance: CFC 67.7% Halon 0.8% CTC and MCF 31.5%

Distribution of ODP by sector:	Aerosol	Foam	Halon	Refrigeration	Solvent	Other
Consumption (ODP tonnes):		144.0	10.0	602.1	464.0	
Percent of total:		11.8%	0.8%	49.3%	38.0%	

Country Programme

Duration of country programme: 14 years (1996-2010)

ODS phase out target: Phase out of ODS production between 1999 and 2005. Complete phase out of MCA by end of 1998, TCA by end of 2000 and CFCs by end of 2004

Phase out priority area: Production of ODS, foam, refrigeration and solvent sectors

Cost of activities in country programme: \$10,204,000

Strategy:

The Government is committed to phase out of production and consumption of ODSs as early as possible, taking into consideration the impact to the end-users, the country's policy of industrial self-sufficiency, and compliance with the Montreal Protocol. The country will adopt measures to replace ODSs wherever substitutes are commercially available and/or after establishing facilities for producing ODS substitutes. In view of its diversified and developed ODS production industry, the Government proposes to initiate a number of projects for change over to ODS free technology. The proposed strategy is a user driven strategy and hence, plans for the production sector would essentially follow the plans for the user sectors. The strategy is also based on the assumption that drop in substitutes for refrigeration and air-conditioning equipment will be available by the year 2000.

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 1,220.5 ODP tonnes, mainly CFCs and carbon tetrachloride. Of this amount, 1,149 tonnes are locally produced and 75 tonnes, including 10 ODP tonnes of halon 1301, are imported from China and Japan.

2. The major plant producing ozone depleting chemicals is Sinhung Chemical Complex. The anhydrous hydrofluoric acid used in the production of CFCs is produced at Myonggan Chemical Plant with an annual production capacity of 2,000 tonnes. The two plants are owned and administered by the Ministry of Chemical Industry.

3. The Sinhung Chemical Complex has a chlor-alkali plant producing caustic soda and chlorine. The reaction vessel and purification facilities are of fairly rudimentary design; the reaction vessel requires to be changed once every three to four months. The installed capacity and current production for various ODSs are as follows:

Ozone depleting chemical	Capacity (metric tonnes)	Current production (metric tonnes)
CFC 11	250	200
CFC 12	1,000	700
CFC 113	500	200
Methyl chloroform	1,000	100
CTC	2,300	340 (*)
Methyl bromide	1,000	200

(*) Excluding production for use as feedstock for the production of CFCs.

4. Two manufacturing companies were identified in the country using CFCs, one producing refrigeration and air conditioning appliances and the other one producing various types of flexible and rigid foams.

5. The production of refrigeration equipment is centralized at the 5th October Electronics and Automation Complex. Starting in 1991, the company reduced its production of CFC-based domestic refrigerators. Thus, CFC-12 consumption for initial charge fell from almost 4.00 tonnes in 1993 to 0.22 tonnes in 1995. The company started producing refrigerators based on ammonia refrigerant, but the attempt failed, and the country started to import CFC-based refrigerators. The enterprise is still developing the ammonia based refrigerator but will require financial assistance for production at a commercial scale.

6. Foams using CFC-11 as a blowing agent are manufactured at Pyongyang Foam Factory. In 1994, about 144 tonnes of CFC-11 were used for the production of mattresses, sports mats, cushions, foam for clothes, insulation and foam for chairs. Over the next five years, the demand for these products is expected to grow at a rate of 30 percent. The company has started to test production using various ODS alternatives such as methylene chloride, TDI, silicon surfactant, Nixal A-33 and stannous octoate; however, the current production is still based on CFC-11.

7. CFC-113 and carbon tetrachloride are extensively used in the country as solvents and cleaning agents.

8. CFCs are no longer used as propellant in the production of aerosol cans.

9. The phase out plan for the production of ozone depleting chemicals and products containing CFCs is determined by the State Planning Committee. The Government is proposing to cease total ODS consumption by end 2004, and to stop production of CFC-113 and methyl chloroform by January 1999, and CFC-11, CFC-12 and carbon tetrachloride by January 2005.

10. The Government is proposing to implement technology developed within the country for the production of ODS replacement chemicals. However, the production of some alternative substances might require purchase of technology for which assistance from the Multilateral Fund will be requested.

11. Production of halon-1211 ceased in January 1995. The country programme indicates that a project might be prepared requesting retroactive funding for closure of the producing plant. Since the Montreal Protocol entered into force for DPR of Korea in April 1995, such a project might not be eligible.

12. The incremental costs for funding phase out of ozone depleting substances, namely CFC-11, CFC-12, CFC-113 and carbon tetrachloride, would be based on the estimated incremental costs of setting up facilities for substitutes together with the costs associated with shut down as well as the benefits realized. The country programme provides a list of investment projects and technical assistance programmes in the production and end-user sectors, with an estimated cost of US \$10.2 million.

13. A project proposal related to completion of the conversion of the plant producing CFC-based commercial refrigerators is included in the Country Programme. The Government of DPR of Korea is proposing that the project be implemented in 1997.

14. The country programme also includes a project for the establishment of a National Ozone Cell within the National Coordinating Committee for Environment (institutional strengthening). The Government of DPR of Korea is requesting a total of US \$142,560 for the implementation of this project.

15. The main responsibilities of the Ozone Unit would include: monitoring the implementation of the country programme, coordinating training and public awareness programmes, and facilitating the government's data reporting obligations under the Montreal Protocol, serving as liaison with industry, stakeholders, government agencies and implementing agencies, and monitoring specific investment projects and technical assistance programmes.

RECOMMENDATIONS

1. The Fund Secretariat recommends as follows:

2. To approve the DPR of Korea 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 the DPR of Korea 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 20 February 1997 to 31 December 1997, should be submitted to the Fund Secretariat no later than 31 March 1998.

4. To approve the amount of US \$142,560 and US \$18,532 support cost for institutional strengthening to be included in UNEP's 1997 work programme.
5. To consider the eligibility of any request for retroactive funding for closure of the halon-1211 producing plant.

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PYONGYANG

HAPPY NEW YEAR

0001



조선민주주의인민공화국
환경인쇄조성위원회

DEMOCRATIC PEOPLES REPUBLIC OF KOREA
National Coordinating Committee for Environment

P.O. Box 44, Pyongyang
Phone 830 2-001723
Telex 535107/253157
Fax 830 2-014499

Pyongyang, December 19, 1986

Dear Sir

I have the honour to submit herewith the Country Programme of the Democratic People's Republic of Korea for the consideration and approval of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol.

The Democratic People's Republic of Korea adhered to the Protocol on January 24, 1985 and became a party on April 24, 1985.

It is classified as operating under Paragraph 1 of Article 5 of the Montreal Protocol.

I would like to record the appreciation of the Government of the Democratic People's Republic of Korea for the assistance extended to it through the UNDP II Ozonaction Programme for the preparation of the Country Programme which started in January 1984.

I am pleased to say that the Government is committed to the implementation of actions contained in the Country Programme.

I further assure 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 request for assistance made in respect of the following actions.

Mr. Omar El-Nakiri
The Chief Officer
Secretariat of the Multilateral Fund
for the Implementation of the Montreal Protocol
1800 McGill College
27th Floor
Montreal, Canada H3A 3G5

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PYONGYANG

--- HAPPY NEW YEAR !

003

a) Institutional Strengthening.

b) Mentioned other projects being submitted according to Country
Programme and UNEP IS Cooperation Programme.

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

Yours Sincerely

Choi Su Eon *조수언*
Chairman
National Coordinating Committee
for Environment
DPR of Korea

003

HAPPY NEW YEAR !

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Country Programme Cover Sheet

Country : Democratic People's Republic of Korea

Date Received :

Lead National Agency : National Coordinating Committee for Environment (NCCE)

Lead Implementation Agency : UNEP

Period Covered by Country Program : 1996 - 2010

1. Phase Out Schedule

Substance	Current Consumption (Tonnes ODP) in 1995	Planned total consumption till phase-out (Tonnes * ODP)	Planned year of Phase-out
CFC-11	225	1348	2005
CFC-12	520	1719	2005
CFC-113	80	350	2005
CFC-115	1.5	14	-
Halon 1211	-	-	-
Halon 1301	10	10	2005
CTC	374	1760	1999
MC	10	44	1998
Total	1220.5	5245	-

* CFC 115 as contained in R-502.

2. Government Action Plan

Sector	Particulars	Timing
All	Institutional Strengthening	To begin by January 1997
RAC	Ban on imports of equipment Initiate phase out production of ODS based equipment and foam blowing agent Train of technicians on better practices, awareness and usage of substitutes, recovery and recycling and retrofitting.	Latest by January 1998 Latest by January 1999 To begin by January 1997
Foams	Initiate phase out production of CFC-11 based foams	Latest by January 1999 Redn = 10940 MT
End uses of CFC-113	Initiate phase out usage in the different end use segments	Latest by January 1999 Redn = 2130 MT
End uses of Halon	Initiate phase out usage of halons (Already been achieved)	Redn = 300 MT
End uses of CTC	Initiate phase out usage of CTC from the various end uses	Latest by January 2001 Redn = 7960 MT
End uses of methyl chloroform	Initiate phase out use of methyl chloroform from the various end uses	Latest by January 1999 Redn = 2130 MT

Note : Reduction shown is the cumulative reduction expected between 1995 and 2010.

3. Summary of Projects

Project	Sector	Starting date	Implementing Agency	Reduction in ODS (ODP tonnes)	Funds requested from MF (US \$)
Institutional Strengthening * (Establishment of Ozone Cell)	All	1997	UNEP	-	142,560

4. Project Summary

No Projects submitted with the country program - List of potential projects attached.

5. Costs

Cost of Activities and Projects in Country Programme	US \$ 1,968,560
Estimated Cost of Complete Phase out	US \$ 12,172,560
Estimated Cost effectiveness	US \$ 9.97 per kg ODP

List of Potential Projects

Project	Sector	Estimated Cost (US \$)
• Commission a production of methylene chloride at Sinhung Chemical Complex	Producer : CFC-11	700,000
• Commission production of Cyclopentane in Namhung Chemical Complex	Producer : CFC-11	100,000
• Commission a new production line for producing hydrocarbons at Bhongwa Chemical Plant	Producer : CFC-12	1000,000
• Commission a new production line for producing ethylene tri chloride at Sinhung Chemical Complex	Producer : CFC-113	1500,000
• Commission a new production line for producing Ethane Tetrachloride	Producer : CTC	1500,000
• Conversion of existing foam blowing line by new line on methylene chloride at Pyongyang foam factory	User : CFC-11	750,000
• Create a storage facility for CFC-11		50,000
• Installation of recovery and recycling equipment for CFC-11		50,000
• Phaseout production of ODS based equipment and start producing non-ODS based equipment	User : CFC-12	61,000
• Covert the existing compressor manufacturing facility		3,700,000
• Testing domestic refrigerators using CFC-12 to use hydrocarbons		100,000
• Training of technicians on better practices to use CFC-12 and safe use of alternatives		565,000
• Create storage facility for CFC-12		20,000
• Testing of refrigeration facilities using R-502 to use HC	Use : R-502	20,000
• Convert existing CFC-113 based cleaning system to (Ethylene trichloride) in Pyongyang IC factory	Use : CFC-113	78,920
• Convert CFC-113 based cleaning system to alternative (Ethylene trichloride) in production of food and medicine		907,580
• Conversion of CFC-113 based cleaning system in other applications		986,500
• Conversion of system using CTC to alternative (Ethane tetrachloride) in Hungnam Chemical Fertilizer Complex	Use : CTC	50,000
• Conversion of system using CTC to alternative (Ethane tetrachloride) in metal and machine building industries		50,000
• Produce and use chloropiriphos in soil fumigation instead of CTC		500,000
Total project costs [Estimated as 60% of the project costs for producer sector and 100% of the project costs for user sector]		10,204,000

Note : The above total does not include costs of upgradation of service facilities which is estimated to be about US \$ 1000,000

EXECUTIVE SUMMARY

The Democratic People's Republic of Korea (DPR of Korea) is located in the eastern corner of Asia. It has a land area of a little over 222,000 sq. km. and a population estimated at 21 million. The country has a centrally planned socialist economy and built on the principle of self reliance. Accordingly, most of the industry sectors are fairly well developed including those sectors producing and using Ozone depleting substances.

Based on the per capita consumption, the country qualifies as a developing country under Article 5 of the Montreal Protocol to which the country acceded in 1995.

In order to comply with the provisions of the Protocol, the Government of DPR of Korea, as a first step, has formulated a Country Programme with the assistance of UNEP. This Country Programme provides data on consumption and usage of ODSs in DPR of Korea and expresses the commitment of the Government to phase out use of ODSs in terms of a defined strategy, actions by Government and Industry and projects which would require assistance from the Multilateral Fund.

DPR of Korea produces and imports ODSs for domestic consumption. CFC-11, CFC-12, CFC-113, CTC and methyl chloroform are produced in the country. These substances are mainly produced at Sinhung Chemical Complex. Some quantities of CFC-11 and CFC-12 are also imported. R-502 and Halon-1301 are completely imported by DPR of Korea. DPR of Korea also produces anhydrous Hydrofluoric acid which is used in the production of CFCs. The total imports and domestic production of the controlled substances in the year 1995 is 66 MT and 1225 MT respectively. There are about five importers engaged in the imports of the controlled substances.

Table 1 shows the consumption of ODSs in DPR of Korea based on the domestic production and imports.

Table 1
Consumption of ODSs in 1995

(in MT)						
Substance	Production	Imports	Exports	Consump- -tion	ODP	ODP Tons
Annex A Group I						
CFC-11	185	40	0	225	1	225
CFC-12	500	20	0	520	1	520
CFC-113	100	0	0	100	0.8	80
CFC-115*	0	2.56	0	2.56	0.6	1.5
Sub total	785	62.6	0	847.6		826.5
Annex A Group II						
Halon 1211	0	0	0	0	3	0
Halon 1301	0	1	0	1	10	10
Sub total	0	1	0	1		10
Annex B Group II						
CTC	340	0	0	340	1.1	374
Sub total	340	0	0	340	1.1	374
Annex B Group III						
Methyl Chloroform	100	0	0	100	0.1	10
Sub total	100	0	0	100	0.1	10
TOTAL	1225	66	0	1391		1220.5

* CFC-115 as contained in R-502.

Source: Survey report

The ODS consumption as estimated by end use is given in Table 2 which is presented below.

Table 2
Consumption of ODS by end use

End use	ODS	Consumption (MT)
Refrigeration and air conditioning sector	CFC-11	50.18
	CFC-12	446.33
	R-502	7.06
Foam blowing applications	CFC-11	144
Fire fighting	Halon-1201	0.0
	Halon-1301	1.0
Solvents and cleaning	CFC-113	100.0
	CTC	250.0
Chemical Industry	CTC	90
	Methyl chloroform	100

Note : All figures for the year 1995.

The unconstrained demand is estimated to reach 1860 MT by 2000 and 3665 MT by the year 2010.

The Government of DPR of Korea is committed to phaseout of ODSs under Annex A and Annex B of the Montreal Protocol in accordance with time frame under the Protocol. The phase out strategy would cause minimum hardship to the common people, be consistent with the country's policy of industrial self-sufficiency and also ensure compliance with the Protocol limits on consumption.

The Action Plan below gives the steps to be taken by the Government to achieve phase out. As it is a centrally planned Economy, the actions for phasing out end use and production would have to be taken by the Government.

The phase out plans for the user sector is given in the table below.

Substance	Particulars	Timing
All	Institutional Strengthening	To begin by January 1997
RAC	Ban on import of equipment	Latest by January 1998
	Phaseout production of ODS based equipment and foam blowing agent	Latest by January 1999
	Training of technicians on better practices, awareness and usage of substitutes and recovery and recycling	To begin by January 1997
Foams	Phaseout production of CFC-11 based foams	Latest by January 1999
End uses of Halons	Phase out usage of Halons (Already been achieved)	
End uses of CTC	Phaseout usage of CTC from the various end uses	Latest by January 2001
End uses of methyl chloroform	Phase out use of methyl chloroform from the various end uses	Latest by January 1999

In addition to the above, it is also assumed that drop in substitutes would be available by 2000 and they would be adopted progressively for recharging the existing population of equipment in the refrigeration and air conditioning sector which come for servicing except CFC-11 based centrifugal chillers. In case of CFC-11 based centrifugal chillers, progressive retrofit of the existing equipment is assumed from the year 2003 to 2010.

Since the strategy is a user driven strategy, the phase out of production of each substance would be linked with the phase out of end use of each substance. In addition, it may not be economical to produce these substances when the consumption falls below a certain volume. Further, the production of substances like CTC would depend upon the production of CFC-11 and CFC-12. Considering the above factors, the phase out actions envisaged for the producer sector is presented below.

Substance	Particulars	Alternatives considered	Timing
CFC-11	Phase out production of CFC-11 Establish a bank of CFC-11 of 30 MT	Cyclopentane Methylene chloride	Latest by January 2005
CFC-12	Phase out production of CFC-12 Establish a bank of CFC-12 of 5 MT	Hydrocarbon Ammonia	Latest by January 2005
CFC-113	Phase out production of CFC-113	Ethylene tri chloride	Latest by January 1999
R-502	Ban import of R-502	Hydrocarbon	Latest by January 2001
Halons	Phase out production of Halons		Already achieved
CTC	Phase out production of CTC	Ethane tetrachloride	Latest by January 2005
Methyl chloroform	Phase out production of methyl chloroform	Appropriate substitute	Latest by January 1999

Based on the above actions and projects, the country expects to achieve significant phase out by the year 2005.

The total cost to the country which includes the project costs for the enterprises, the costs to the government and the costs to the ultimate end user is presented in the table below.

Particulars	US \$ million
Project costs	10.2
Costs to the Government	2.0
Costs to the ultimate end user	142.0
Total costs	154.2

The Government plans to manage and monitor the implementation of phase out through the National Ozone Cell which will be created under the Institutional Strengthening Project.

Project Proposal for Institutional Strengthening

Project Title	Establishment of National Ozone Cell for the implementation of Montreal Protocol in DPR of Korea
Sectors covered	All
ODS consumption	NA
Project Duration	3 years
Project Impact	Establish institutional machinery for a successful implementation of the phase out activities, and facilities / encourage institutional participation in the implementation process
Assistance requested from MF	US \$ 142,560
Implementing Agency	UNEP
National Coordinating Agency	National Coordinating Committee for Environment

Project Summary

The National Coordinating Committee for environment has been overseeing the tasks of CP preparation in DPR of Korea. The work has been handled by persons who already have defined roles and responsibilities within the current functions of the Ministry of Foreign Affairs.

Once work on implementing the Country Programme begins there would be need for dedicated team to oversee this activity. This project is concerned with the establishment of such a team to be called the National Ozone Cell which will work under the guidance of NCCE. The cell, though located within the NCCE, will be staffed by persons with appropriate background and experience.

Project Description

The Ozone Cell will be headed by a Chief Secretary who will be assisted by one Secretary and a translator. The cell will fall under the overall supervision of NCCE.

The National Ozone Unit will, inter-alia, undertake the following activities.

1. Provide information on the Montreal Protocol, phase out schedules, regulations and general information to enable DPR of Korea to achieve its goals as outlined in the Country Programme.
2. Conduct research as necessary to provide the public with information on new developments under the Montreal Protocol as well as alternatives to ODS substances.
3. Monitor the implementation of the Country Programme.
4. Submit Annual reports on the ODS consumption to the Ozone Secretariat of UNEP, as per the requirements of the Article 7 of the Montreal Protocol.
5. Submit Annual reports on progress of implementation of Country Programme to the Multilateral Fund Secretariat, as per decision of the 10th meeting of the Executive Committee of the Multilateral Fund;
6. Submit Institutional Strengthening project related reports to UNEP IE, as per the requirements of the Institutional Strengthening project document.
7. Liaise with industry, stakeholders, Ministers and government agencies as necessary.
8. Develop public and sector education programmes in conjunction with the NCCE
9. Conduct surveys as require to access information on the imports of ODS and alternatives in DPR of Korea as also the viability of retrofits in the commercial and industrial refrigeration sector.
10. Coordinate projects for setting up banks for CFC-11, CFC-12 and R-502.
11. Assist with the implementation and monitoring of specific projects to be implemented under the Country Programme and prepare reports as required to the implementing/funding agencies.

The budget for manpower and other infrastructure exclusive to the Ozone Unit is presented in the Exhibit along side.

Project timeframe

Technically, the project would extend till complete phase out is achieved in DPR of Korea however it is assumed that the core activities will take place over the next 3 years.

Project Budget

Period for 3 years from 1997 to 1999.

1.	Personnel,	month,	year,	for 3 years
	Ozone focal point	600.-	7,200.-	21,600
	Secretary	500.-	6,000.-	18,000
	Sub total			39,600

2.	Equipment, requested in 1997, to be installed.	
	Microcomputer IBM 486.DX with laser printer and mouse	3,500
	Software	1,000
	Fax, 1,5,00 + Installation cost, 1,200	2,000
	Photocopier one unit, for documents and information	3,000
	Typewriter with word processor, one unit	500
	Subtotal	10,000

3.	Meeting, seminars and workshops	
[a]	Internal meeting for initiating awareness in government/ other departments and for purpose of monitoring	
	No of Participants: (average) 16 persons	
	5 days for one meeting	
	Perdiem expenses (hotel)	
	US \$. 55. * 10 persons * 5 Days * 2 times * 3 years	16,500
	Others	3,000
[b]	Awareness related activities and project initiation	
	for 3 years, one time for 5 days :	
	No. of Participants: (average) 50 persons	
	Perdiem expenses (hotel)	30,000
	Subtotal	49,500

Note : These are required for training the trainers, dissemination of information on the non-ODS technologies etc.

4.	Data collection	
	Mission for local survey (2 man * 2 months * 1 year)	6,600
	Perdiem Travel	1,200
	Communication US \$ 500.- per year * 3 years	1,500
	Subtotal	9,300

5.	Office running expenses (for 3 years)	
	Cost of translation	10,800
	Paper	1,500
	Mail	400
	Telex, Fax	6,000
	Toner for copier	1,000
	Others	1,500
	Subtotal	21,200

6.	Contingency	12,960
	Subtotal	12,960

FUNDS REQUESTED FROM MULTILATERAL FUND

1.	Personnel, for 3 years	39,600
2.	Equipment, requested in 1997	10,000
3.	Meeting, seminars and workshops	49,500
4.	Data collection	9,300
5.	Office running expenses	21,200
6.	Contingency for 3 years	12,600
	Total	142,560

GOVERNMENT BUDGET

No.	Particulars	Won	US \$
1.	Office room, 100 square meters, per year		
	for 3 years,	27,000	13,500.-
2.	Furniture for office room,	15,000	7,500.-
3.	Public awareness, for 3 years	300,000	150,000.-
	Contingency	180,000	90,000.-
	Total	522,000	261,000.-