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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Thirty-fifth Meeting Montreal, 5-7 December 2001

PROJECT PROPOSALS: BURUNDI

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

Aerosol:

• Phase-out of CFC-11/12 mixture in the manufacture of insecticides UNDP by conversion to hydrocarbon propellant at Fadi S.A. (Fabrication d'insecticide et de product chimique)

Foam:

• Phasing out of CFC-11 in the manufacture of flexible slabstock UNDP foam at Exim SA by conversion to methylene chloride

PROJECT EVALUATION SHEET BURUNDI

SECTOR: Aerosol

ODS use in sector (2000):

8.75 ODP tonnes

US \$4.40/kg*

Sub-sector cost-effectiveness thresholds:

Project Title:

(a) Phase-out of CFC-11/12 mixture in the manufacture of insecticides by conversion to hydrocarbon propellant at Fadi S.A. (Fabrication d'insecticide et de product chimique)

Project Data	Filling plant	
	Fadi	
Enterprise consumption (ODP tonnes)		8.75
Project impact (ODP tonnes)		8.75
Project duration (months)		36
Initial amount requested (US \$)		162,800
Final project cost (US \$):		
Incremental capital cost (a)		119,000
Contingency cost (b)		9,900
Incremental operating cost (c)		
Total project cost (a+b+c)		128,900
Local ownership (%)		100%
Export component (%)		0%
Amount requested (US \$)		128,900
Cost effectiveness (US \$/kg.)		
Counterpart funding confirmed?		Yes
National coordinating agency	Ministry of Environment	
Implementing agency	UNDP	

Secretariat's Recommendations	
Amount recommended (US \$)	128,900
Project impact (ODP tonnes)	8.75
Cost effectiveness (US \$/kg)	
Implementing agency support cost (US \$)	16,757
Total cost to Multilateral Fund (US \$)	145,657

*Not applicable to LVC countries.

PROJECT DESCRIPTION

<u>Phase-out of CFC-11/12 mixture in the manufacture of insecticides by conversion to</u> <u>hydrocarbon propellant at Fadi S.A. (Fabrication d'insecticide et de product chimique)</u>

1. The Government of Burundi is submitting one project proposal in the aerosol sector for FADI SA, the only company producing aerosols in the country (48,600 cans/year). Implementation of this project will result in the phase-out of 8.75 ODP tonnes of CFC-11 and CFC-12 and the complete phase out of CFCs in the aerosol sector in the country.

2. Conversion to hydrocarbon technology entails construction of an open-air filling room and installation of an indexing propellant filler, a manual water bath, a gas detection system, a conveyor, a molecular sieve system for hydrocarbon and a propane storage tank.

3. Technical assistance will be provided for performance and supervision of engineering designs, installation of equipment and commissioning of the plant and training.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

4. The Secretariat pointed out that the project duration estimated at 36 months is long, taking into consideration that the HAP technology being proposed is well established and the only major piece of new equipment is the propellant filler. The Secretariat was informed that UNDP will work closely with the country, aiming to complete the project before the 36-month time frame.

5. The Secretariat also pointed out that the capacity increase associated with some pieces of equipment requested (propellant filler, conveyer and stationary gas detector) was not taken into account in the calculation of the project cost. In this regard, UNDP indicated that there would not be an increase in production capacity; for the conversion to HAP technology, the product filler and crimper in the plant will continue to be used and only the propellant filler will be changed.

6. The Secretariat and UNDP also discussed the issue raised by the technical reviewer regarding the need for a tank farm (US \$32,000), a processing pump (US \$4,000) and an emergency shut-off valve (US \$3,000), taking into consideration the very small production capacity of the plant. Subsequently, UNDP agreed to adjust the capital cost of the project to US \$128,900.

7. Operating savings were not considered in the calculation of the project cost since the plant operates as a contract filler.

RECOMMENDATION

8. 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	Support Cost	Implementing
		Funding (US\$)	(US\$)	Agency
(a)	Phase-out of CFC-11/12 mixture in the manufacture of	128,900	16,757	UNDP
	insecticides by conversion to hydrocarbon propellant at Fadi			
	S.A. (Fabrication d'insecticide et de product chimique)			

PROJECT EVALUATION SHEET BURUNDI

SECTOR:	Foam	ODS use in sector (2000):	21.5 ODP tonnes

Sub-sector cost-effectiveness thresholds: Flexible

US \$6.23/kg

Project Titles:

(a) Phasing out of CFC-11 in the manufacture of flexible slabstock foam at Exim SA by conversion to methylene chloride

Project Data	Flexible slabstock	
	Exim	
Enterprise consumption (ODP tonnes)		26.30
Project impact (ODP tonnes)		26.30
Project duration (months)		36
Initial amount requested (US \$)		110,162
Final project cost (US \$):		
Incremental capital cost (a)		73,000
Contingency cost (b)		7,300
Incremental operating cost (c)		-2,038
Total project cost (a+b+c)		78,262
Local ownership (%)		100%
Export component (%)		0%
Amount requested (US \$)		78,262
Cost effectiveness (US \$/kg.)		2.98
Counterpart funding confirmed?		Yes
National coordinating agency	Ministry of Environment	
Implementing agency	UNDP	

Secretariat's Recommendations	
Amount recommended (US \$)	78,262
Project impact (ODP tonnes)	26.30
Cost effectiveness (US \$/kg)	2.98
Implementing agency support cost (US \$)	10,174
Total cost to Multilateral Fund (US \$)	88,436

PROJECT DESCRIPTION

Sector background

- Latest available total ODS consumption (2000)	54.00 ODP tonnes
- Baseline consumption of Annex A Group I substances (CFCs)	59.00 ODP tonnes
- Consumption of Annex A Group I substances for the year 2000	53.80 ODP tonnes
- Baseline consumption of CFCs in foam sector	Note reported
- Consumption of CFCs in foam sector in 2000	21.50 ODP tonnes
- Funds approved for investment projects in foam sector as of end of July 2001	0
- Quantity of CFC to be phased out in investment projects in foam sector as of end of July 2001	Not applicable
- Quantity of CFC phased out from approved investment projects in the foam sector as of end of July 2001 (including CFC phased out in projects not vet reported as completed)	Not applicable
- Quantity of CFCs in approved ongoing investment projects in the foam sector as of end of July 2001	0
- Quantity of CFCs remaining to be phased out in the foam sector as of end of July 2001	21.50 ODP tonnes
- Quantity of CFCs to be phased out in investment projects being submitted to the 35 th ExCom (December 2001).	26.30 ODP tonnes
- Quantity of CFCs remaining to be phased out in the foam sector by the end of 2001	-4.80 ODP tonnes

Flexible Slabstock Foam

Exim S.A.

9. Exim S.A. is reported to be the sole foam producing company using CFC-11 in Burundi, since the other company, COGETRAF which was also using CFC-11 has stopped due to financial difficulties. Thus the completion of Exim project will result in elimination of CFC consumption in the foam sector, since, as reported by UNDP, the evolving trend in flexible slabstock foam production, the sole CFC-11 foam consuming sector in Burundi, is a move to substitution with methylene chloride.

10. Exim S.A. consumed 26.3 tonnes CFC-11 in 2000 in the production of slabstock foam for mattresses and furniture using Hennecke BFM 100 boxfoam machine. The total incremental capital cost of conversion amounts to US \$102,000 including US \$73,000 for equipment (methylene chloride storage tank, methylene chloride metering system, softening additive storage and metering system, machine enclosure and ventilation, methylene chloride detectors), US \$9,000 for trials, and US \$20,000 for technology transfer and training. Incremental operating savings of US \$2,038 are realized.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

11. The Fund Secretariat and UNDP concluded discussion of the project and agreed on a project budget of US \$78,262.

RECOMMENDATIONS

12. The Fund Secretariat recommends the Exim S.A. project for blanket approval with the level of funding and associated support cost as indicated below.

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Phasing out of CFC-11 in the manufacture of flexible slabstock	78,262	10,174	UNDP
	foam at Exim SA by conversion to methylene chloride			
