

Grass Garp	Fuquene Lake	Dredging
Machine Harvesting	The second secon	Trawling
Proposed Major Projects 1. Water Resources and Use Management	Outline of Project Components	Investment Cost and Beneficiaries
1) Irrigation	 Improvement of irrigation facilities. Introduction of optimum operation of Hato Dam. 	 Beneficial area: 6,971 ha 15.040.0 million Col\$ (7.84 million US)
2) Drainage	Clearance of Suarez River Channel	 15,049.0 million Col\$ (7.84 million US Beneficial area: 170 ha around the Lake
3) Municipal Water Supply	Introduction of optimum operation of Fuquene Lake Improvement of Water Supply System of Chuquinquira	Beneficial population: 45,500
	of the second sec	 780.1million Col\$ (0.41 million US\$)
2. Wastewater Treatment 1) Sewerage	Improvement of 14 sewerage treatment plants in 13 municipalities.	• Service population: 95,000
2) Industry	• Improvement of slaughterhouse and factory wastewater treatment plants.	 7,561.0 million Col\$ (3.94 million US\$ Beneficiaries : 2 Slaughterhouses and 42 Factories 231.0 million Col\$ (0.12 million US\$)
3. Aquatic Plants Control		• 231.0 million Col\$ (0.12 million US\$)
1) Dredging of the Lake	 Dredging of lakebed in front zone of Bulrush to stop expansion of Bulrush toward the lake center. 	• 17,196.1 million Col\$ (8.96 million US
2) Harvesting/Removal and Composting of Aquatic Plants	 Harvesting of Brazilian Elodea and removal of Water Hyacinth. Composting of Elodea and Water Hyacinth. 	• 11,688.2 million Col\$ (6.09 million US
3) Grass Carp	 Marketing of compost in the metropolitan area of Bogota. Release of grass carp fingerlings. Installation of fish barrier. 	• 2,054.0 million Col\$ (1.07 million US\$
4. Monitoring System	- installation of fish barfler.	
1) Meteorological and Hydrological Monitoring	• Installation of a new gauging station.	 3.6million Col\$ (1,900 US\$)
2) Water Quality	Improvement of water quality monitoring system.Improvement of laboratory.	• 1,419.4 million Col\$ (0.74 million US\$
3) Aquatic Plant Control of the Lake	 Survey of aquatic plants area. Survey of fauna and flora species. Survey of Bulrush frontline and bed level in the dredged lake zone. Measurement of growth and consumption rates of grass carp. 	
4) Geographic Information System (GIS)	 Application of GIS for Fuquene Lake basin management. 	
5. Promotion of Environmental Education	 Implementation of an education program for 4 objective levels: (1) Schools; (2) Farmers and Users of the Water District; 	 65.7 million Col\$ (0.03 million US\$)

OUTLINE OF THE PROPOSED PROJECT