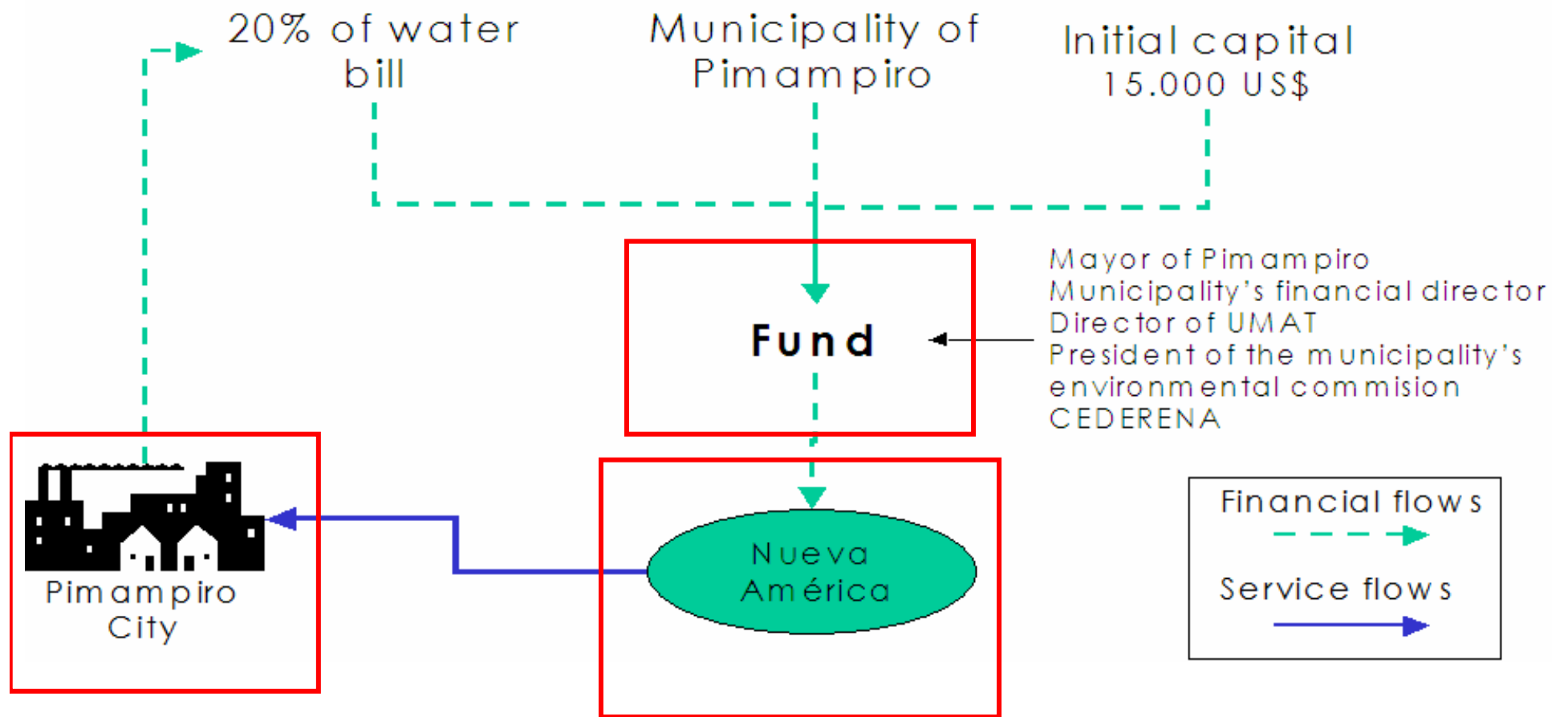


Payments for Environmental Services at the local level: Comparing two cases in Ecuador

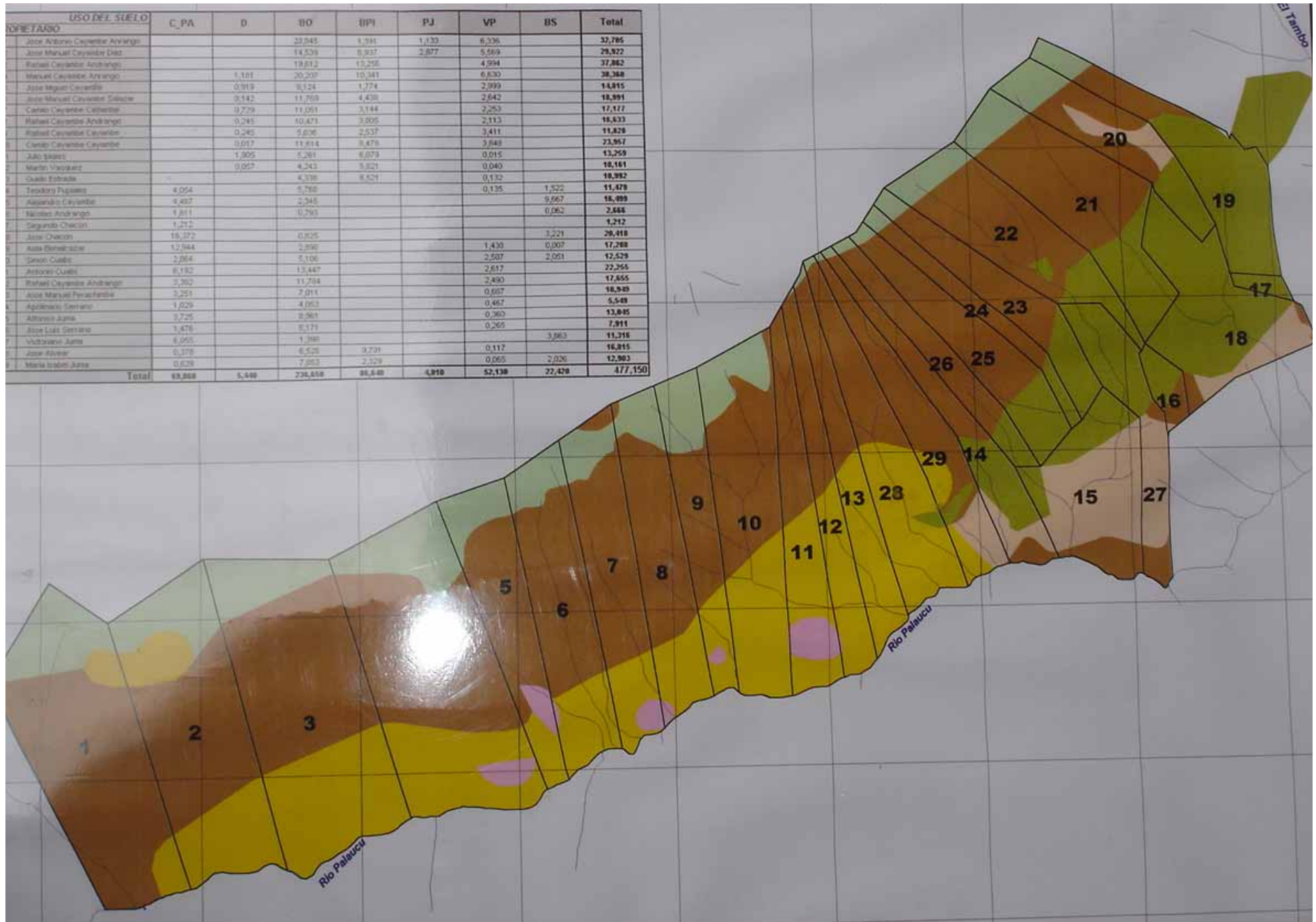
Montserrat Albán
Sven Wunder

Presented in the ZEF-CIFOR workshop
Titisee, Germany, June 15-18, 2005





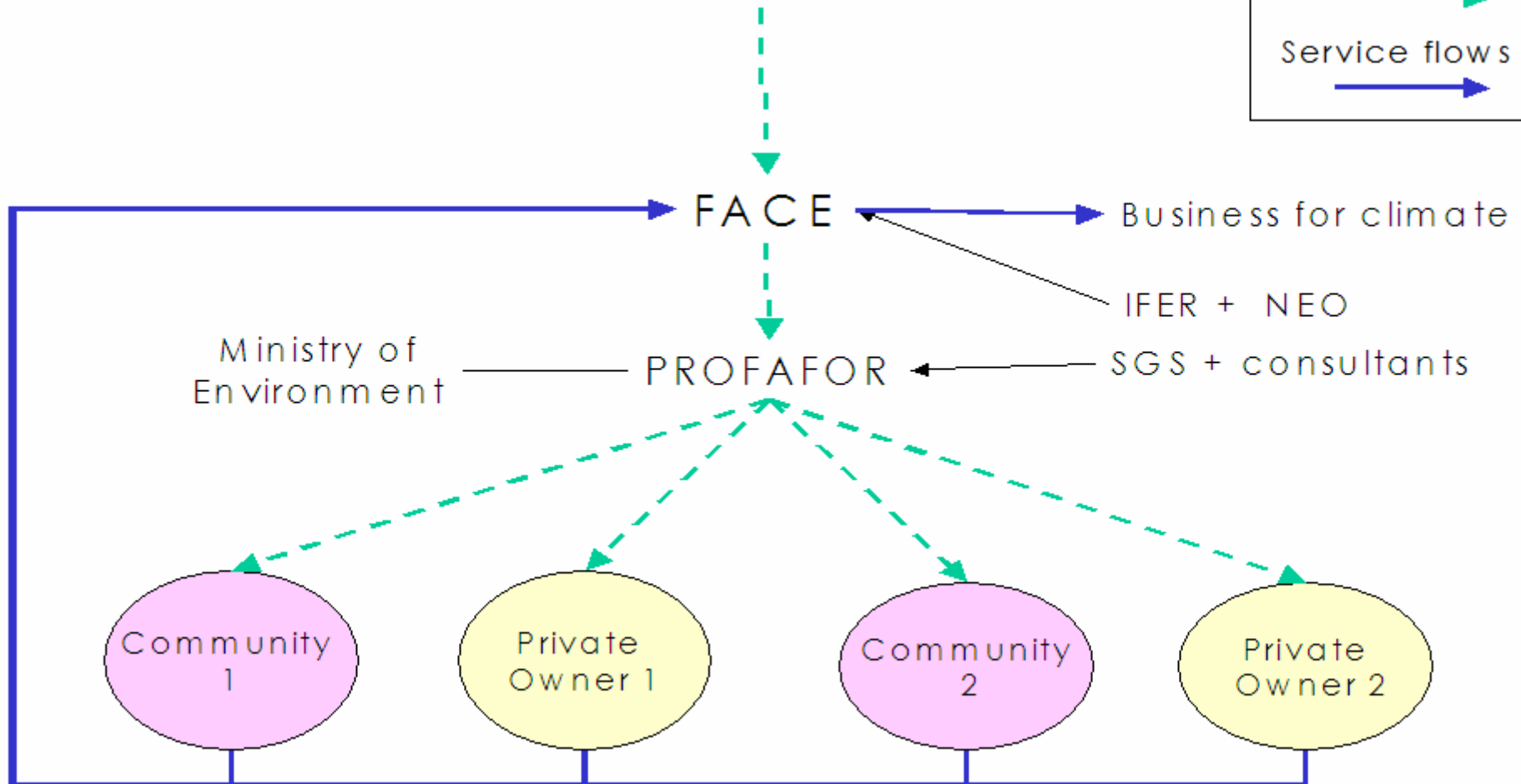
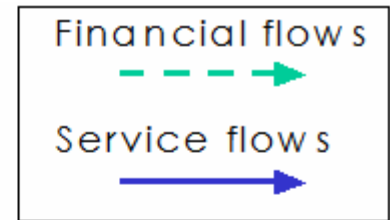
USO DEL SUELO								
PROPIETARIO	C_PA	D	BO	BPI	PJ	VP	BS	Total
Jose Antonio Cayambe Anzures			23,045	1,391	1,133	6,336		32,705
Jose Manuel Cayambe Diaz			14,539	8,937	2,877	5,569		29,922
Rafael Cayambe Anzures			19,612	12,256		4,994		37,862
Manuel Cayambe Anzures		1,101	20,207	10,341		6,630		38,368
Jose Miguel Cayambe		0,919	8,124	1,774		2,999		14,815
Jose Manuel Cayambe Salazar		2,142	11,769	4,438		2,642		18,991
Carlos Cayambe Collares		0,729	11,091	3,144		2,253		17,117
Rafael Cayambe Anzures		0,245	10,471	3,005		2,113		16,833
Rafael Cayambe Cayambe		0,245	5,636	2,537		3,411		11,829
Carlos Cayambe Cayambe		0,017	11,814	8,478		3,848		23,957
Jairo Suarez		1,805	5,261	8,079		0,015		13,259
Martin Vazquez		0,057	4,243	3,821		0,040		10,161
Guillermo Estrada			4,336	8,521		0,132		10,987
Tendron Pujales	4,054		5,766			0,135	1,522	11,477
Alfonso Cayambe	4,407		2,345				9,667	16,419
Nicolás Andragón	1,811		3,793				0,062	2,666
Segundo Chacon	1,212							1,212
Jose Chacon	16,372		0,825				3,221	20,418
Asa Benavidez	12,944		2,890			1,430	0,007	17,271
Simon Cuabí	2,864		5,106			2,507	2,051	12,528
Antonio Cuabí	8,182		13,447			2,617		24,246
Rafael Cayambe Anzures	3,353		11,784			2,490		17,627
Jose Manuel Perachamba	3,251		7,011			0,607		10,869
Agustino Serrano	1,029		4,053			0,467		5,549
Afonso Juna	3,725		9,961			0,360		14,046
Jose Luis Serrano	1,476		6,171			0,265		7,912
Victoriano Juna	6,055		1,388				3,863	11,306
Jose Alvarez	0,378		6,525	3,791		0,117		10,811
Maria Isabel Juna	0,829		7,853	2,529		0,065	2,026	12,903
Total	69,868	5,440	228,858	86,640	4,910	52,138	22,429	477,150







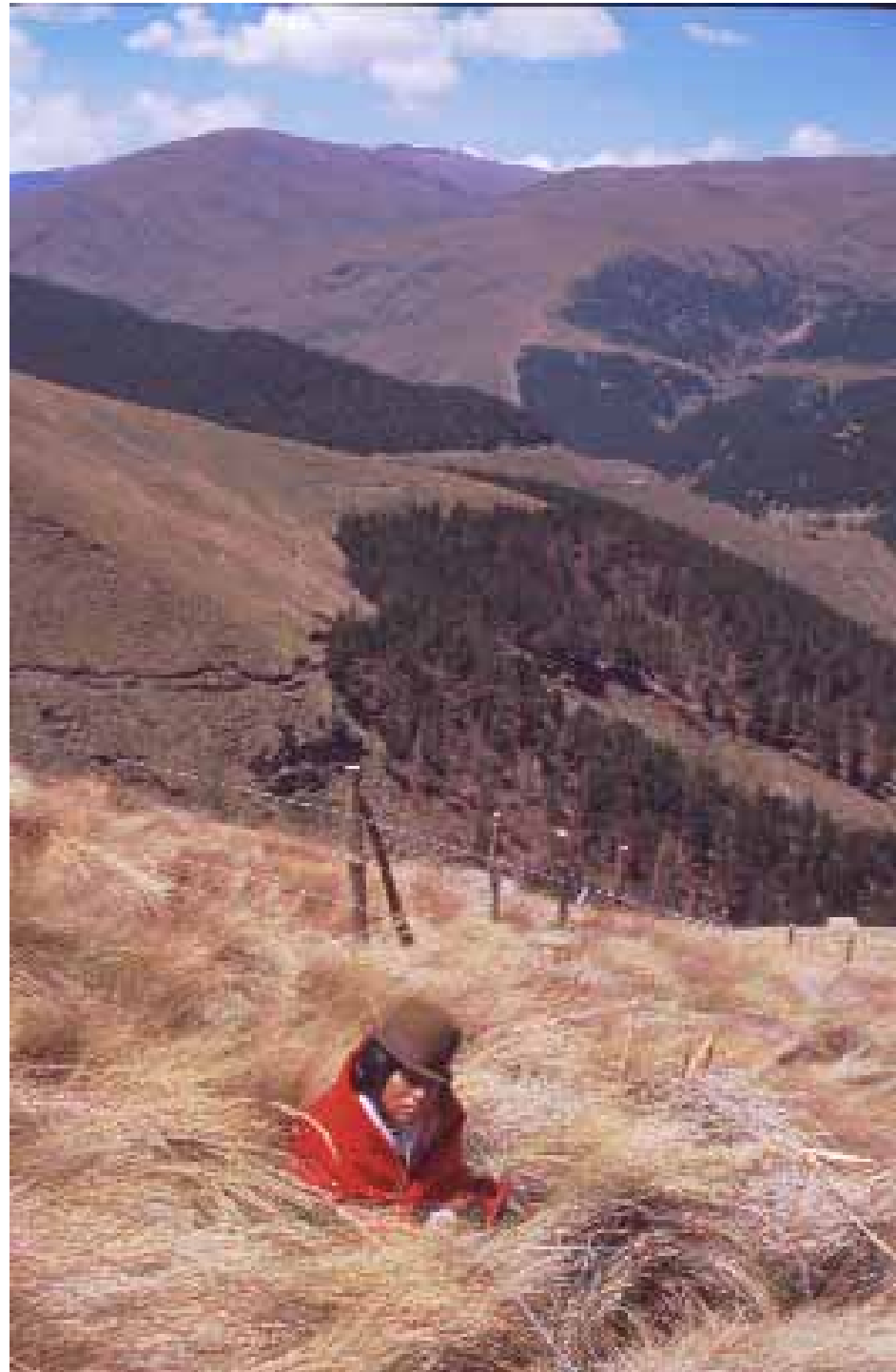
DUTCH ELECTRICITY GENERATING BOARD











Services

- Pimampiro
 - Expectation of buyers: keeping water quality and quantity
 - Not scientifically proven, but probable (partially cloud forest)
- Profafor
 - Carbon sequestration (70% pre-Kyoto)

Permanence

- Pimampiro
 - The service (protection of the water source)
 - Land use
 - Finance sustainability
 - Partial change in community patterns (10 families in ecotourism and commerce of medicinal plants)
- Profafor
 - Increase in the contracts years (from 25 to 99)
 - Uncertainty of Profafor to monitor all the period
 - Conditionality (payments in the 3rd year, and wood products)
 - Social and economic trends (population pressure, prices, heritage)

Leakage

- Pimampiro
 - People moving towards areas already transformed
 - Sources of income from NA (construction and agriculture activities in lowlands)
 - The displacements do not affect the service (Protection of source of drinking water)
- Profafor
 - Not considered an important factor
 - Limitations in managing livestock (maintains the methane emissions and forces the families to assume extra costs to access grassland)

Monitoring and baseline

- Pimampiro
 - One visit per three months (three contracts evaluated)
 - Limitations of Municipality to monitor the system
 - Reduction in the probability of each contract to be monitored
- Profafor
 - Once a year in each contract
 - Formulation of recommendations: limitations with cattle grazing
 - Certification by SGS

Sanctions

- Pimampiro
 - Implemented by the fund
 - Taking out secondary products: suspension of one month
 - Selective felling without permission: three months
 - Clear-cutting: permanent exclusion from the programme
 - Legal procedure
- Profafor
 - Elimination of the contracts if on purpose violation can be proven and reimbursement of the initial payment
 - Mortgage of private landowners
 - De facto restrictions of implementation

Additionality

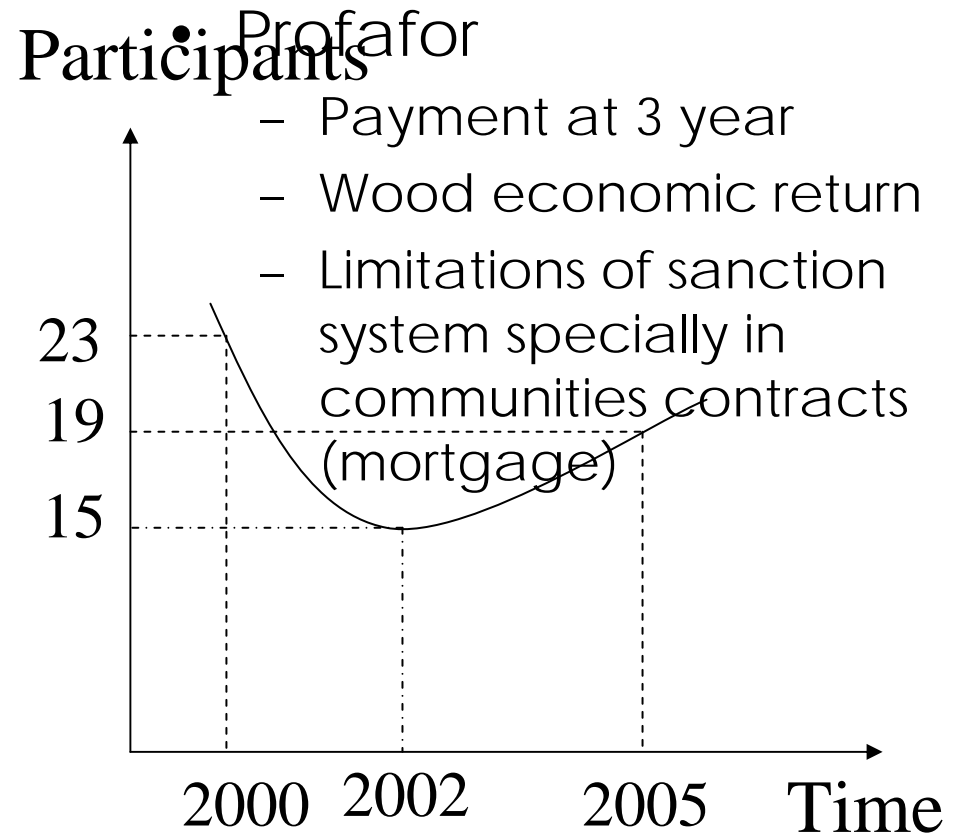
-



er the
exotic
paramo
use
city of

Conditionality

- Pimampiro
 - Quarterly payments
 - Monitoring and sanction system



Start-up costs

	Pimampiro US\$	Profafor US\$
Project design	31.000	3.568.000
Line base	5.000	2000.000
Sellers search		323.200
Training workshops to the sellers	1.800	10.000
Total	37.800	4.101.200
Cost per hectare	76,2	183,9

Runing Costs (2002)

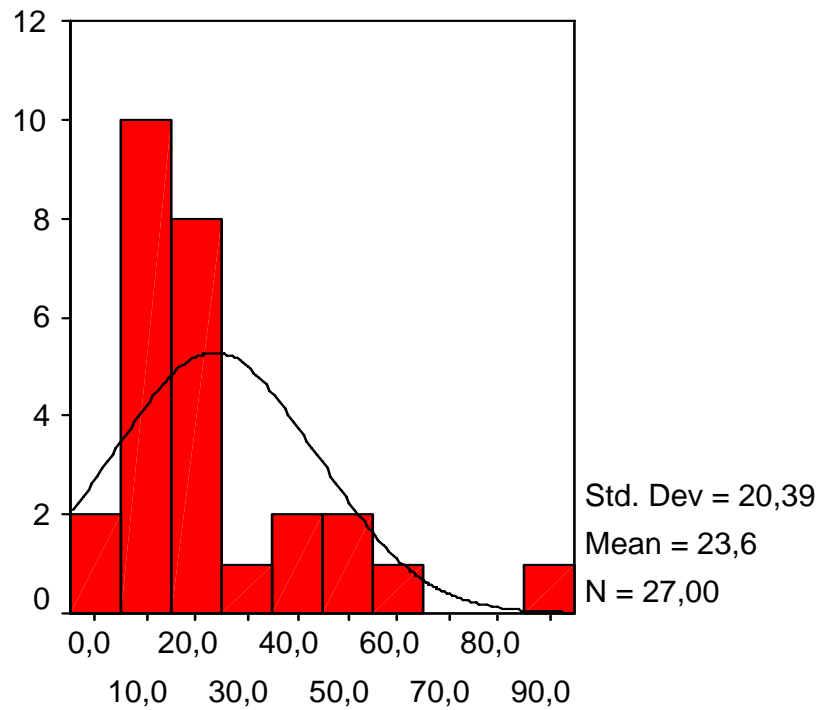
	Pimampiro US\$	Profafor US\$
Management	1.800	21.600
Payments	4.271	107.279
Monitoring	4.800	15.000
Certification		40.000
Total	10.871	183.879

Participant selection

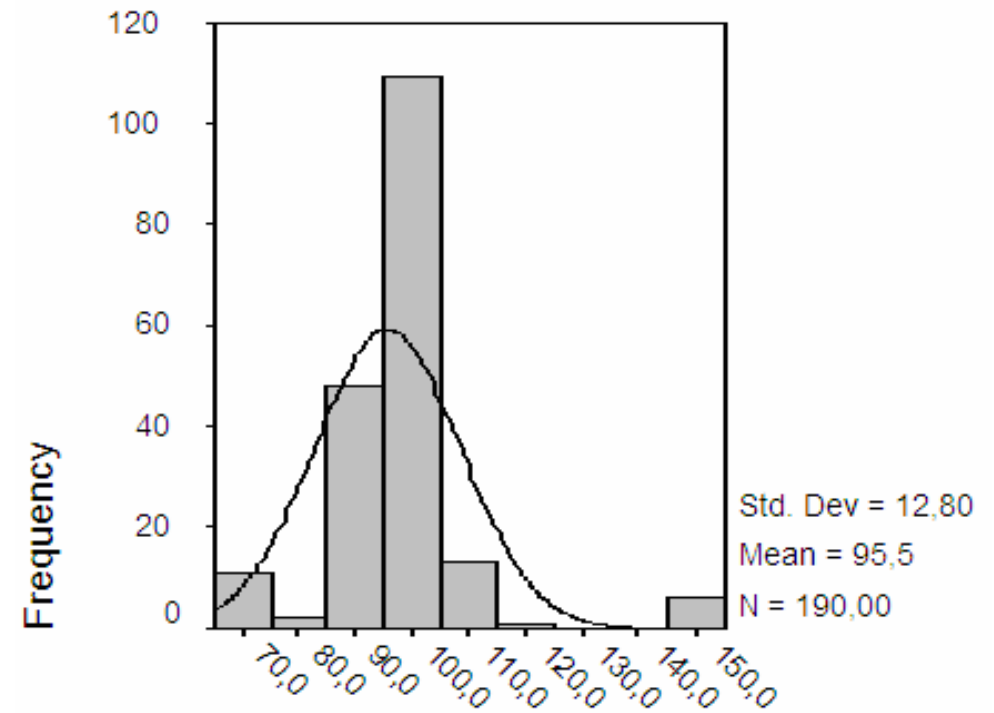
- Pimampiro
 - Proximity to the water intake
 - There is no payments on the right side of the watershed
 - No other approach has been considered to favor participation
- Profafor
 - Biophysical characteristics (slope, soil, altitude)
 - >50 ha
 - Areas of geographic concentration

Extension of contracts

- Pimampiro



- Profafor



Disadvantaged groups

- Pimampiro
 - 31% of family expenses
- Profafor
 - 50% of family expenses in the 3 year
 - 4-328% in the thinning year
 - 24-1285% at the end of the forest cycle

Next steps

- Pimampiro
 - Challenges of the Fund
 - Renegotiation of the contracts. Possible increment in payments
 - Implement a trust fund
 - Improve water bill collection system
 - Legalize the financial support of the Municipality
 - UMAT participate in financial proposals
 - CEDERENA replicating experience in small municipalities
- Profafor
 - Decrease management costs
 - Stop new negotiations
 - Negotiate new proposal with EU

Pimampiro gana premio por proteger los bosques

IMBABURA Los campesinos de las zonas altas cuidan las fuentes de agua los páramos aledaños. 'Ciudad Verde, Ciudad Viva' constituyó el galardón.

RESUMEN BUENA

Los habitantes de Pimampiro-Las milpas el agua cristalina. El déficit que suporta el cultivo, ubicado al norte de Imbabura, cambió la mentalidad de sus habitantes. "El agua llega a cuenta gotas—cuatro litros en la mañana y cuatro en la tarde—, comenta el alcalde de Pimampiro, Iván Farfán.

Es por ello que la mayoría de los usuarios del sistema de agua potable vio con buenos ojos la Ordenanza municipal. Esta resalta en reconocer económicamente a los campesinos de las zonas altas, que protegen los bosques y páramos, que garantizan la vida de las fuentes de agua.

El esquema del proyecto, que nació en enero del 2011, con-

Un estímulo

Las áreas forestales intervenidas ganan más dinero. Los valores que se pagan es por hectárea:

Tipo de tierra	monto USD
Páramo no intervenido	\$1,00
Páramo intervenido	0,50
Bosque primario	1,00
B. primario intervenido	0,50
Bosque secundario viejo	0,75
B. secundario joven	0,50
Área agrícola	0,00
Área ganadera	0,00

Foto: Carlos Pineda

la descentralización del manejo en materia ambiental.

Para, sobre todo, aviva la efectividad del Proyecto de Servicios Ambientales, cuyo mayor valor, quizá, consistió en el descubrimiento que hicieron



Conclusions

- The initiatives contribute to the conservation and regeneration of forests.
- The PES does not consider the service additionality.
- They consider only one service and do not incorporate all the users.
- Developed in places with lesser dependence on intensive land use.
- The systems still need enforcement.

Conclusions

- Pimampiro is a scheme motivated by third parties on the contrary Profafor not.
- None of the cases has additional objectives.
- Pimampiro is clearly a conditional system; in Profafor that principle is not that clear.