



Government of Costa Rica Conservation International

The Environmental Services Payment
Program: A success story of sustainable
development in Costa Rica

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Conservation International*



ECOSYSTEM SERVICES are tangible
benefits people and economies
obtain from natural ecosystems.
Even though they still are invisible
to economies and politicians .

WHY ARE THEM IMPORTANT

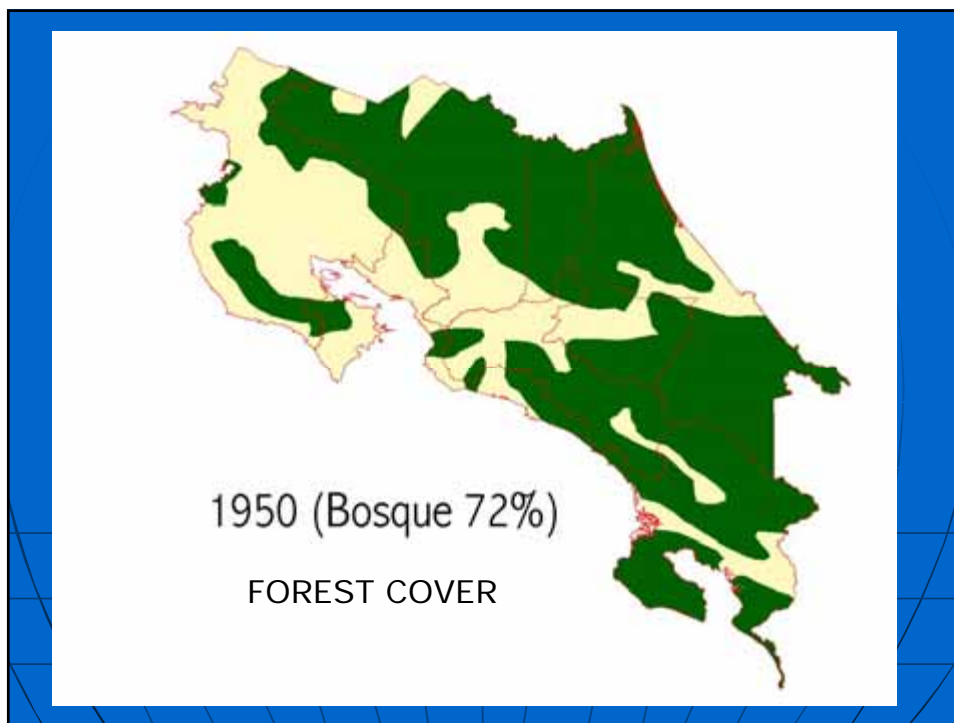
There is a growing consensus that national economies depend upon intact and resilient ecosystems: the world's natural capital is *as important* to economic development as its stock of human and manufacturing capital. Human well-being, and the survival of biodiversity, depends on keeping natural capital stocks in intact ecosystems above critical thresholds that will allow them to produce continuing flows of ecosystem services such as clean water, productive forests fisheries, and farms, stable weather, and buffers to the spread of disease

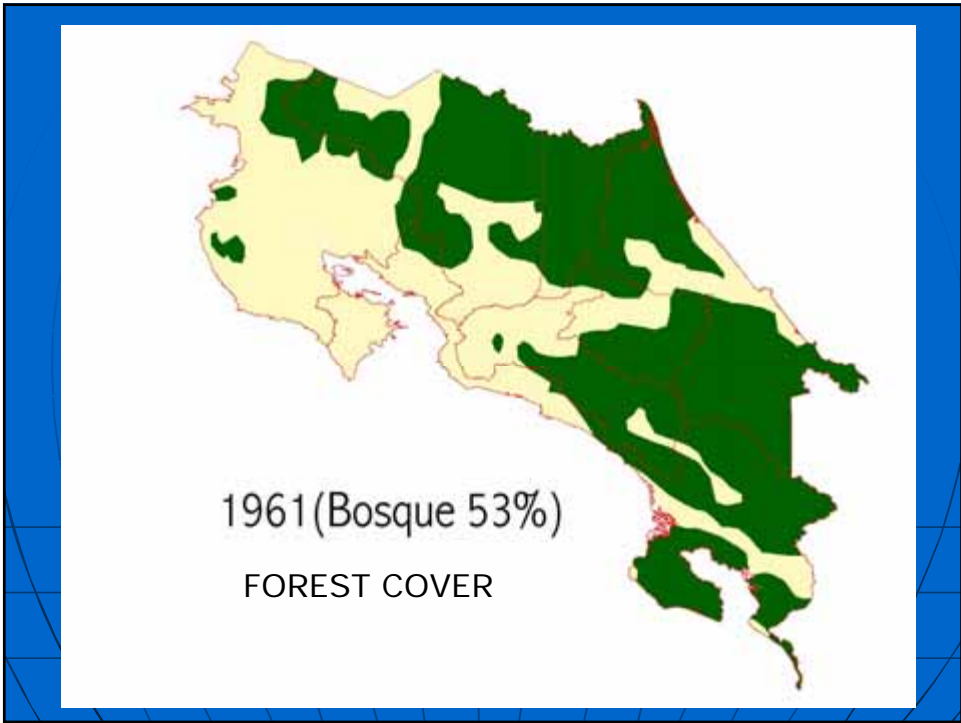
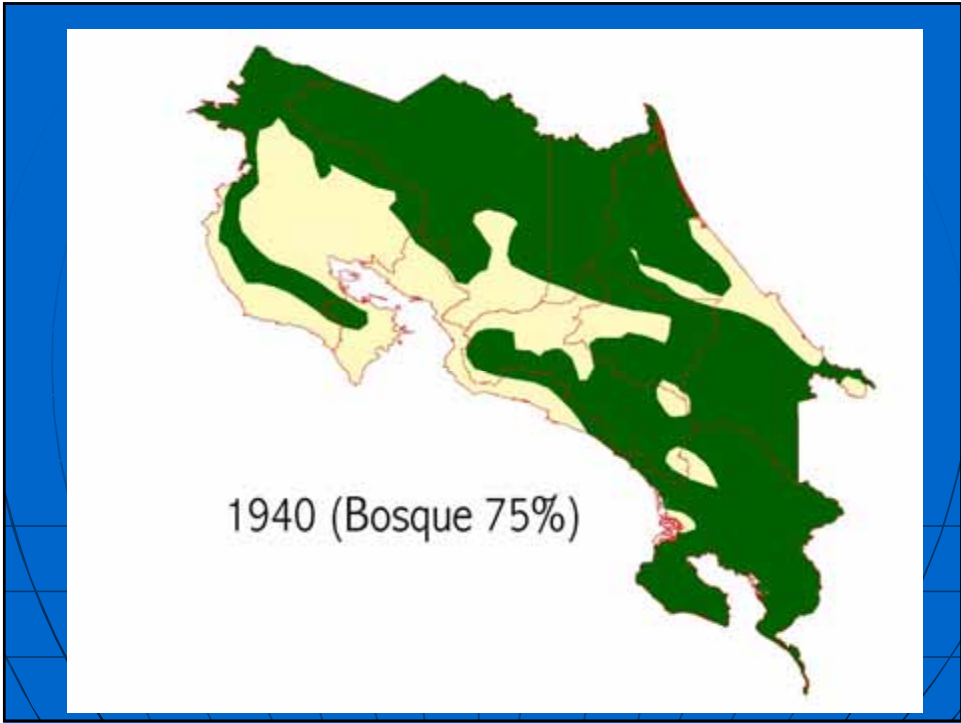
ECONOMIC VALUE

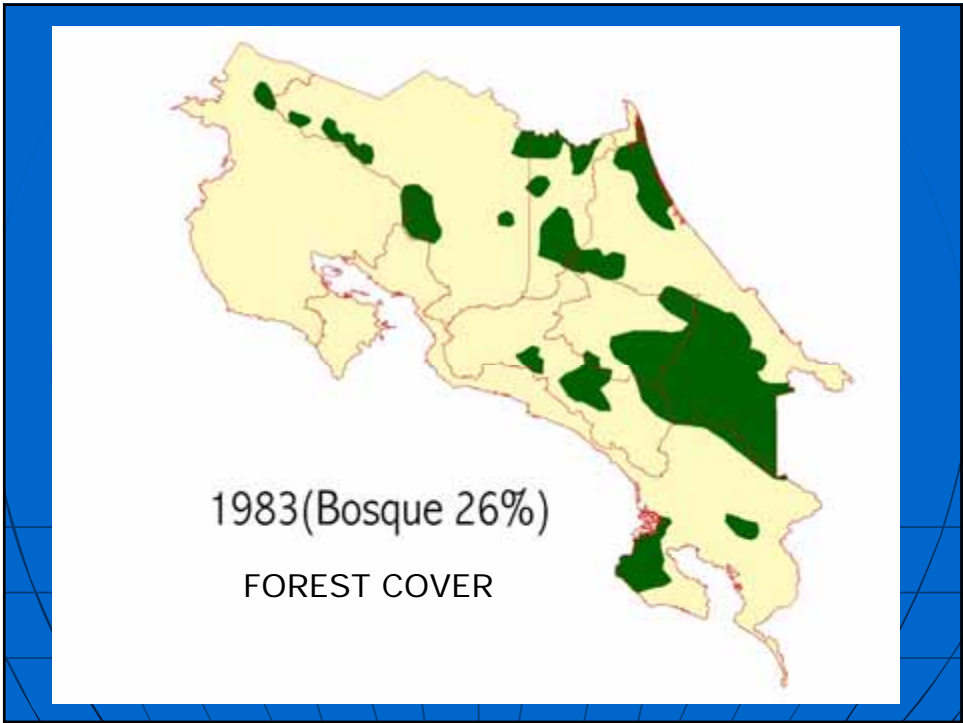
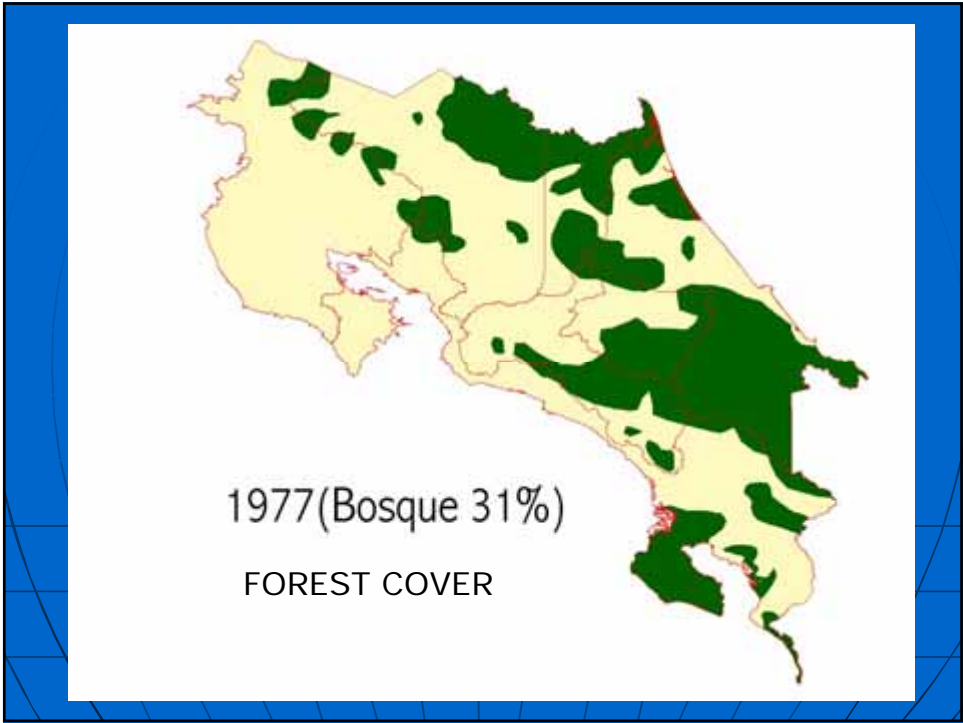
- Where economic value can be attached to the provision of these services, beneficiaries and other stakeholders can be engaged to ensure maintenance of intact ecosystems. This maintenance and value not only provides valuable economic incentives and livelihood benefits, but also provides extra resources and opportunities to engage larger sectors of the public important for conserving biodiversity

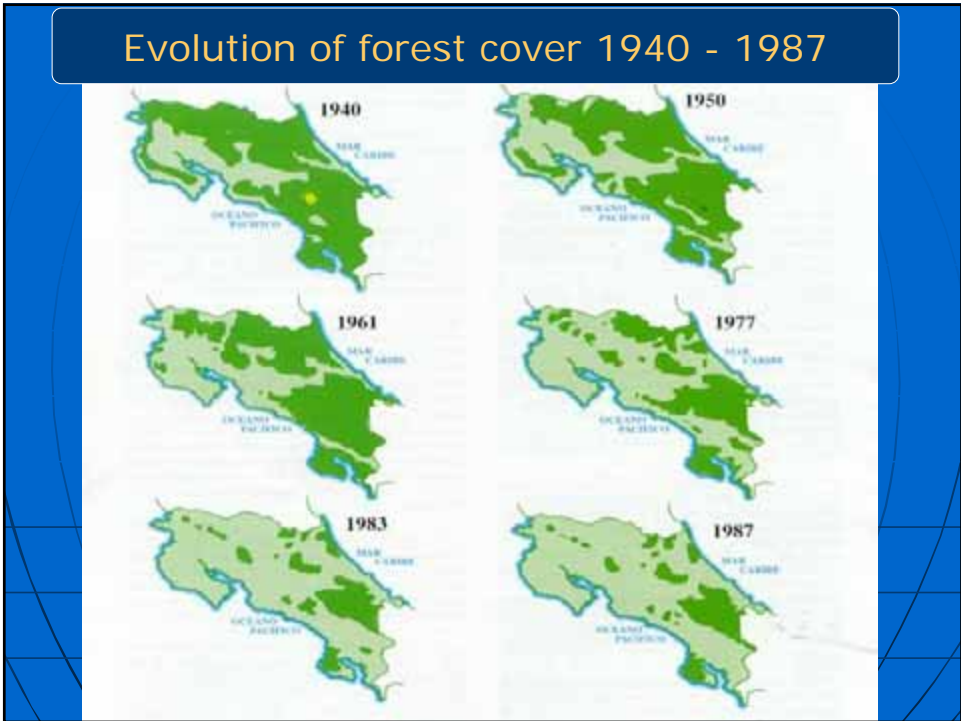
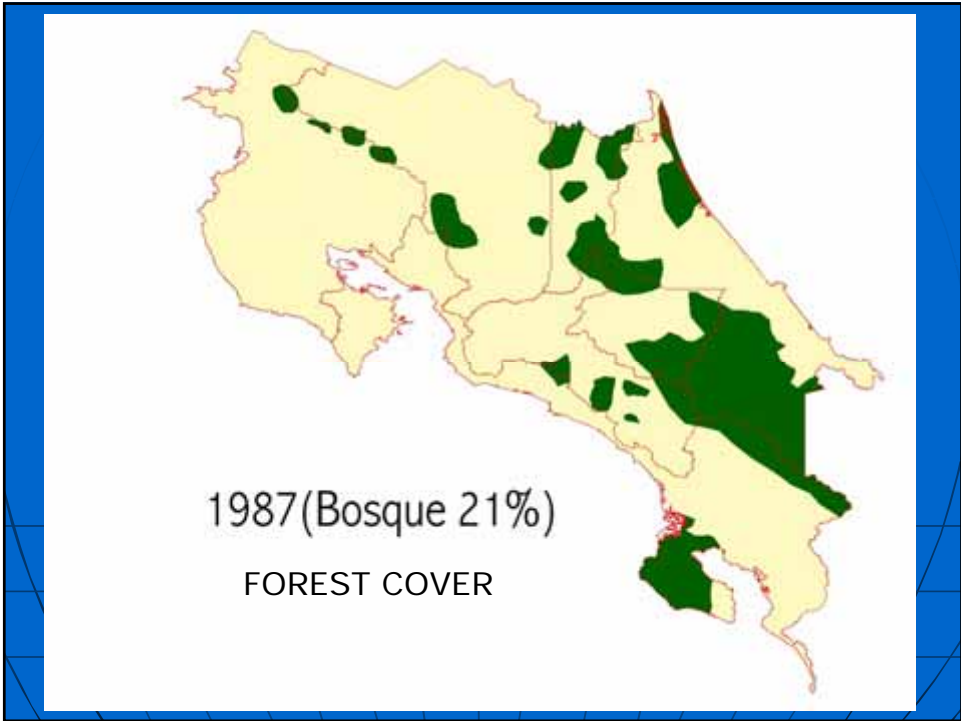
Costa Rica: a forestry-oriented country

- ✓ According to the land-use capacity 2/3 of the national territory should be forest covered.
- ✓ By the end of the 70's some research studies showed national forestry reality (Silvander-1977 y Pérez y Protti-1978)
- ✓ The annual rate of deforestation was of 55.000 Ha/year
- ✓ Less than 1/3 of the national territory was the remaining forest (31,1 %)
- ✓ Historically, Costa Rica has been generating financial mechanisms for the forestry sector
- ✓ In 1979 the first forestry incentive was established
- ✓ In 1979 the First National Forest Development Plan was developed









1995-1998 New legal and institutional framework for sustainable development policy

- 1995 General Environmental Law enacted
- 1996 New Forestry Law
- 1998 Biodiversity Law

- > Sustainable development becomes a national goal by Law (Art. 50 National Constitution and Environmental law)
- > Creation of the National System of Protected Areas to enhance integrated management of natural resources.
- > **Abolition of the change of use of forested lands**
- > FONAFIFO legally consolidated
- > The Forest National Office was created as a dialogue mechanism among the private and public forest stakeholders
- > **Transformation of incentives into Environmental Services Payment as the main financial mechanism to promote forest protection and sustainable use**
- > **Creation of a funding source for ESP (tax on fuels)**



Environmental Services Payment Program: Legal framework

The Forestry Law states

“ Forests, forest plantations and other ecosystems provide essential services to the people and economic activities, at the local, national and global levels”.

Protection of water resources for different uses

Mitigation of greenhouse effect gases and carbon fixation

Protection of biodiversity

Landscape/scenic beauty

Payment for environmental services is the mechanism implemented to pay the owners of land by the above mentioned services provided to the society

WHAT IS PES ?

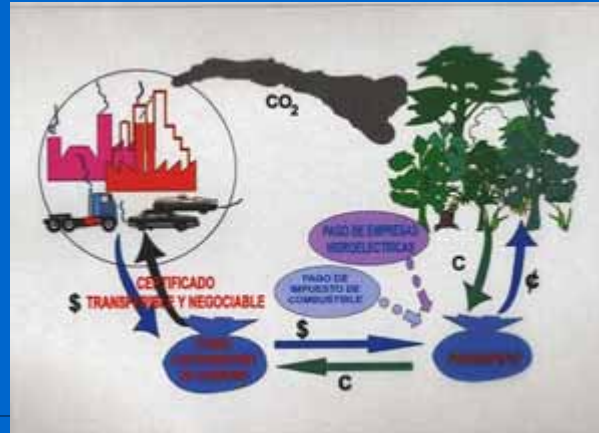
- The PES is a financial instrument that fully recognize ecological services between providers and users. So, we can say its a private transaction between them, were the Government is in the middle setting policies, rules, procedures, institutional administration and the political will to internalize them.

- THE ECONOMIC VALUE OF THE DIFERENT ENVIROMENTAL SERVICES IN A COSTA RICAN OLD GROWTH FOREST IS:

- FROM \$150 TO \$300 PER HECT. PER YEAR

■ Tropical Science Center, 1996

RATIONALE OF THE ESPP



6

Ecomarket Project goals/targets

- Payments for contracted projects (+200.000 Has)
- Increase volume of existing contracts in 100.000 Has
- Increase by 30% participation of women in ESP
- Increase by 100% participation of indigenous peoples
- Strengthen FONAFIFO and SINAC institutional capacities

Ecomarkets project

- Need to increase forest conservation and forest cover recovering by enhancing the development of private markets for environmental services provided by forests such as biodiversity protection, greenhouse emissions reduction and water resources protection.

Source of funding	\$ US
BIRF 4557-CR	32,630,000
GEF 23681-CR	8,000,000
PJN 50508	302,250
Government	8,500,000
TOTAL	49,432,250

Economic Benefit of National Parks to the Local Economy- 2002

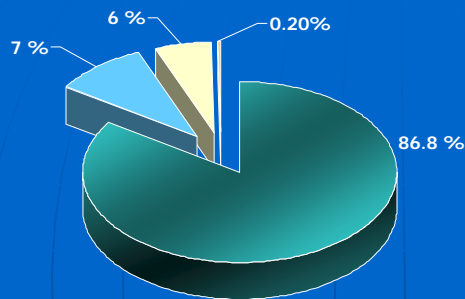
Total: \$834,600.000

- Tourism (87,48%):
- Hydroenergy (10,45%):
- Conservation Funds (1,10%)
- Others (0,97%):

National Parks Contribution to the GNP 2002

	%
National Parks	5,5
Agriculture	7,7

463.000 Has covered by ESP during 1997 – 2004

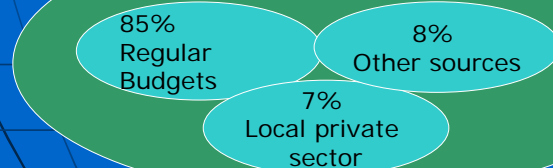


□ Protection □ Forest management ■ Reforestation ■ Private Reforestation

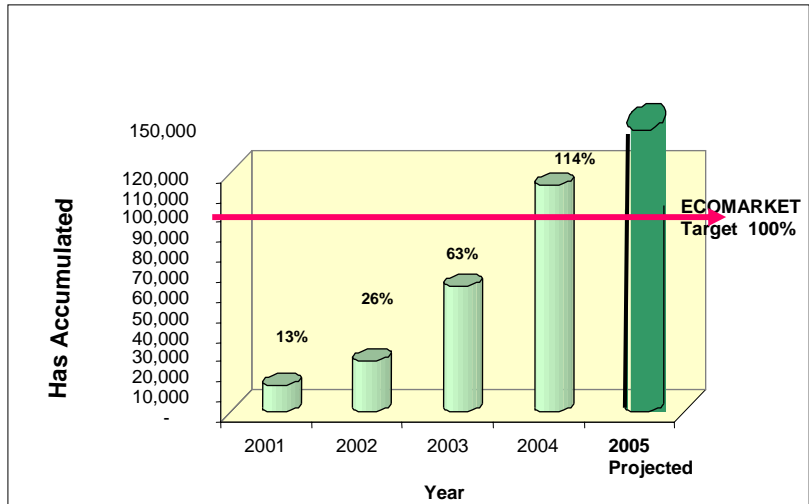
"As scientific understanding of ecological services improves, new financial opportunities emerge"

The Economist 04-05

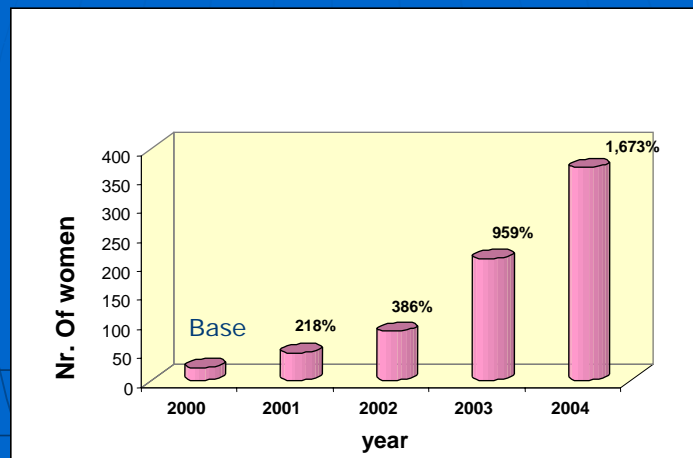
A growing partnership in action



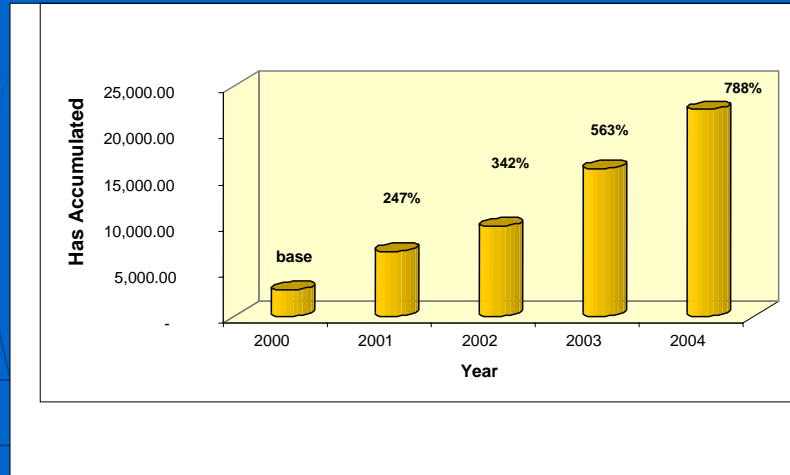
New Has protected by ESP



Participation of women



Participation of indigenous peoples



REFERENCIAS

**THE ECOLOGY COST OF WATER
ADJUSTED IN THE WATER RIGHTS
DECREE: AUGUST 24th 2005**



PRESIDENT'S EXECUTIVE ORDER 035-MINAE (Minister of Environment)

All Public Institutions who use public water rights for a public service, will financially recognize the ecological cost of water.

Value of Water Concessions

Decreto 26635-MINAE - Enero 1998



Sector	Canon (colones por metro cúbico anual)			
	Superficial		Subterráneo	
Doméstico	0.5177	\$ 0.0010354	0.7187	\$ 0.0014374
Poblacional	0.0088	\$ 0.0000176	0.0109	\$ 0.0000218
Hidroeléctrico (fuerza hidráulica)	0.0001	\$ 0.0000002	NA	\$
Industrial	0.0252	\$ 0.0000504	0.1928	\$ 0.0003856
Riego	0.0169	\$ 0.0000338	0.1304	\$ 0.0002608
Otros usos	0.0075	\$ 0.000015	0.3224	\$ 0.0006448
Promedio	0.0007	\$ 0.0000014	0.1128	\$ 0.0002256

Adjusted value

(1) Uso	(2) Canon (colones por metro cúbico anual)			
	Agua Superficial		Agua Subterránea	
Consumo Humano	1.46	\$ 0.00292	1.63	\$ 0.00326
Industrial	2.64	\$ 0.00528	3.25	\$ 0.0065
Comercial	2.64	\$ 0.00528	3.25	\$ 0.0065
Agroindustrial	1.90	\$ 0.0038	2.47	\$ 0.00494
Turismo	2.64	\$ 0.00528	3.25	\$ 0.0065
Agropecuaria	1.29	\$ 0.00258	1.40	\$ 0.0028
Acuicultura	0.12	\$ 0.00024	0.16	\$ 0.00032
Fuerza Hidráulica	0.12	\$ 0.00024	-	
PROMEDIO	1.60	\$ 0.0032	2.2014	\$ 0.



Needs to invest: in monitoring
and control for water rights and
illegal uses



Need to invest: in
watershed management

*Need to invest: in restauration and good uses of land
for water conservation*



**Opportunities for biodiversity conservation in
agricultural landscapes in Central America:
lessons from the FRAGMENT project**



on-farm tree cover for biodiversity conservation?

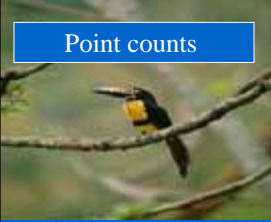








Organisms studied

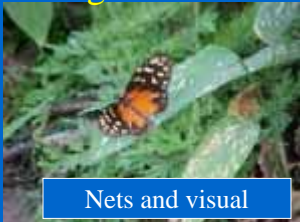
Point counts







Mist nets




Nets and visual

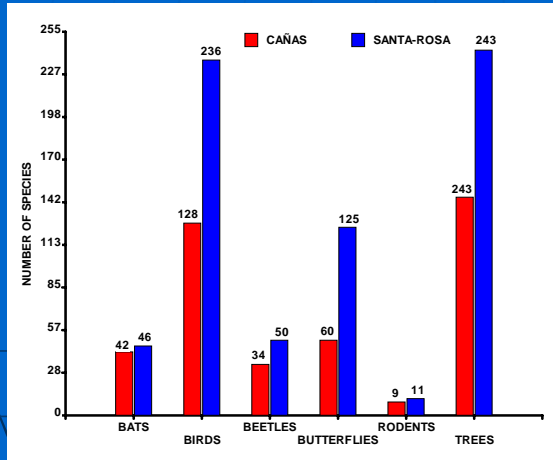


Pitfall traps

Data collected





The Cañas agricultural landscape contained:

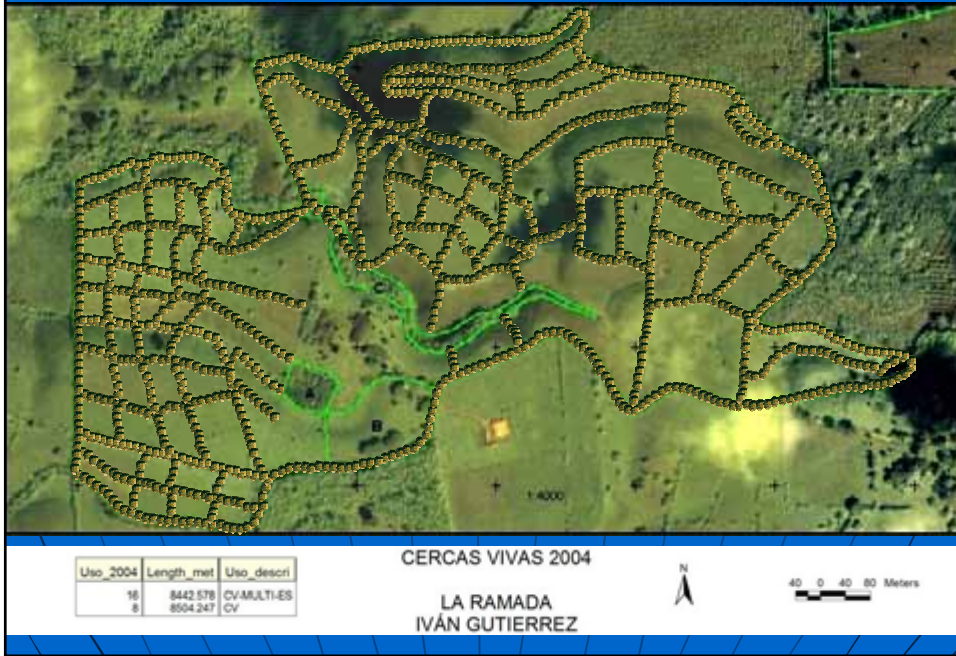
- 91% of the bat species
- 68% of bird spp
- 68% of beetle species
- 48% of butterfly species
- 82% of rodent species
- 60% of the tree species registered in the Santa Rosa National Park

Index by land uses and its potential for carbon sequestration and conservation of biodiversity

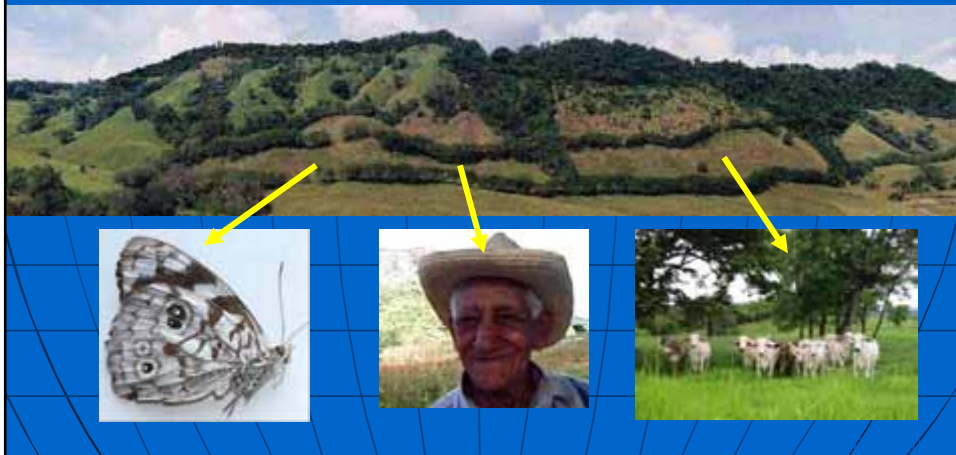
#	Land use	Index Carbon	Index Biodiversity	Total index
2	Degraded pasture	0	0	0
3	Native pasture without trees	0,1	0,1	0,2
8	Live fences	0,3	0,3	0,6
11	Fodder bank	0,3	0,5	0,8
14	Native pasture high tree density*	0,5	0,5	1,0
20	improve pasture high tree density*	0,6	0,7	1,3
23	Young secondary vegetation	0,6	0,8	1,4
24	Riparian forest	0,8	0,7	1,5
27	Secondary forest	0,9	1,0	1,9
28	Primary forest	1,0	1,0	2,0

* > 30 tree ha⁻¹

“La Ramada” Farm - Iván Gutierrez



Our goal = to convert degraded pastoral landscapes to silvopastoral systems with a diverse tree component that can potentially benefit both farm production and biodiversity conservation



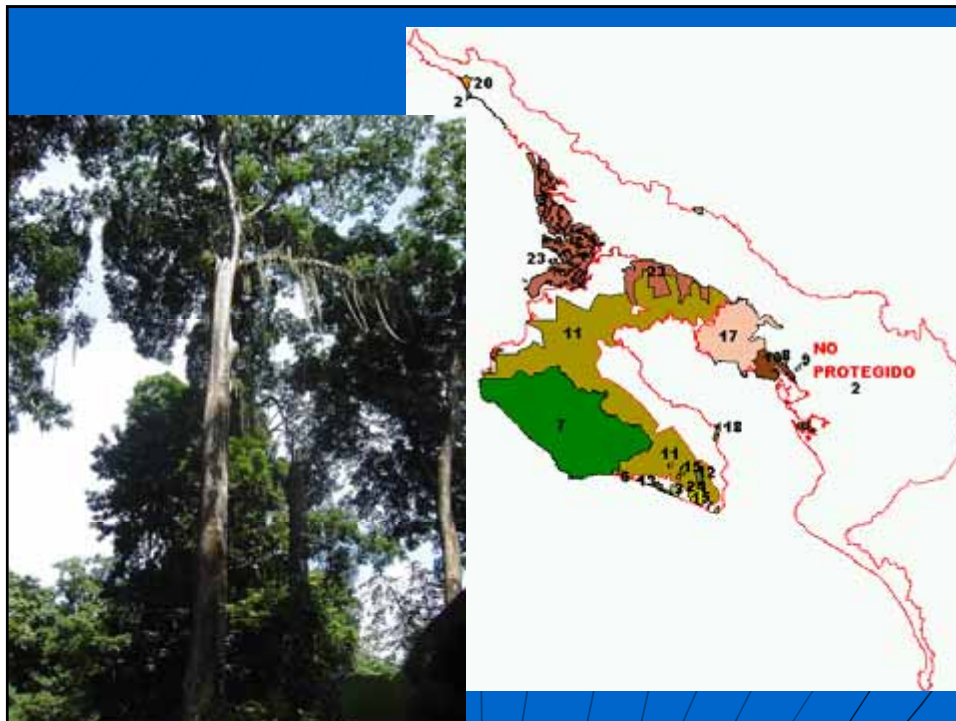
ESP Project Investments

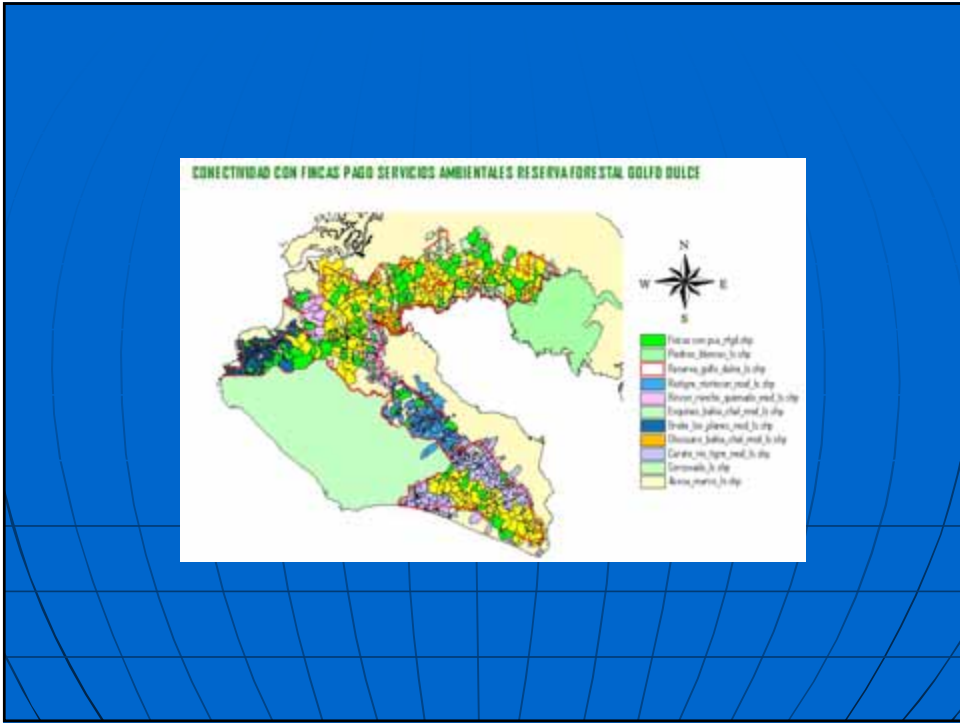


ESP Projects Investments



(Ecosystem approach)





Need for Scaling Up and Mainstreaming
Environmental Services Payment Program
in Costa Rica

The second generation of
Environmental Services Payment

The ESPP have resulted in significant local, national and global benefits including:

- (i) income generation to the rural poor
- (ii) improvement of watersheds
- (iii) contribution to carbon sequestration
- (iv) conservation of biodiversity
- (v) Other indirect benefits such as improved public health and infrastructure, increased demand for technical assistance for ESSP implementation

Key objectives - of the proposed project

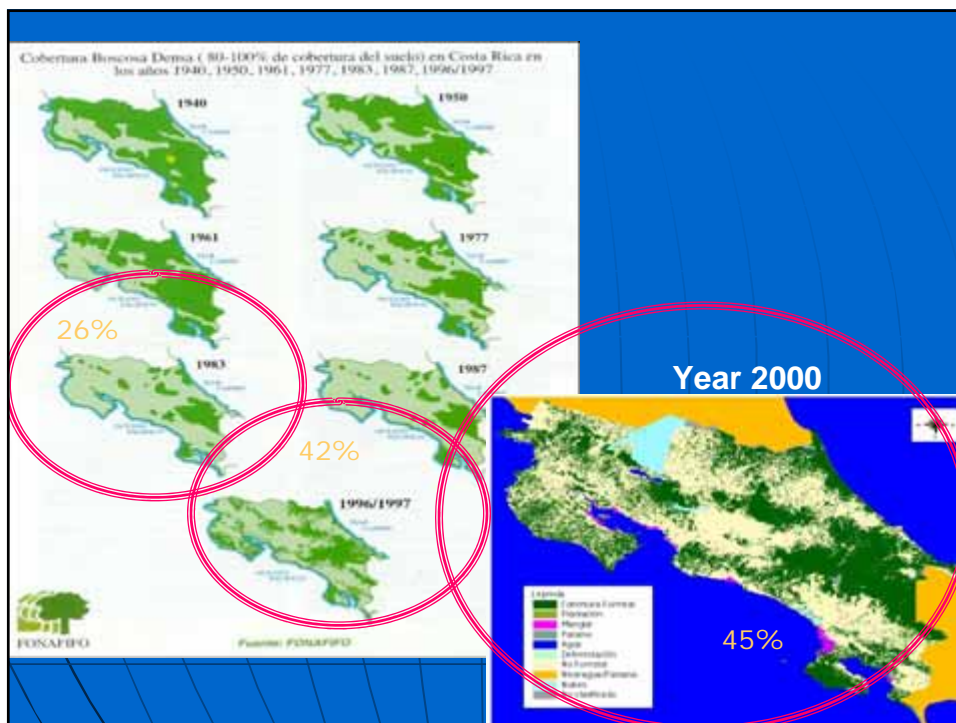
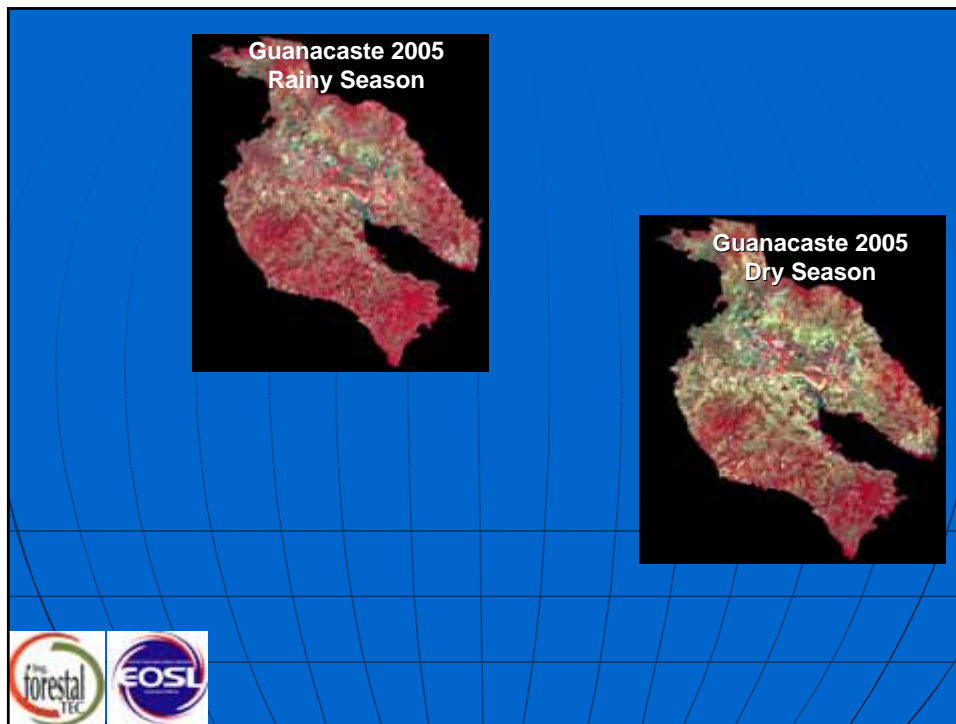
- Fulfillment of the Millennium Development Goals (High level Political commitment)
- Increase the range of sources of funding for ESP activities aimed at local and global services (PARTNERSHIPS)
- Extend the scope of ESP activities to include degraded and fragile lands, water protection related forests and improve the efficiency of current activities
- Increase the contribution of ESP activities to poverty reduction
- Contribute to the international policy dialogue by promoting new financial mechanisms for sustainable development

The project will target ESP activities to areas of high density or incidence of poverty, and will study new ways to reduce poverty in rural areas

“If governments invest seriously in green data acquisition and Coordination, they will no longer be flying blind” The Economist

Evolution of forest cover 1940 - 1987





MY RECIPE

1-PES IS A PRODUCT OF A NATIONAL POLICY .

The identification of economic instruments to promote the fulfillment of objectives of environmental, social or economic cut (sustainable development) must correspond to a policy of state that among other things must guarantee the sustainability of such in the long term. Consequently PES must be clearly tie to the global planning of the countries, where sectorial interests must conciliate.

2-SUPPORTED BY A LEGAL FRAMEWORK

Without a regulatory framework of rights, obligations and responsibilities PES won't deliver proper results (ex: every user must pay)

3- FINANCIAL INSTRUMENT MUST BE POLITICALLY VIABLE

- PES is a product of the accumulation of experiences of policy and institutional capacity.
- The conciliation of interests from the early stages of the design of the model is a central element to guarantee the later political viability of the PES.

4- BUILD INSTITUTIONAL CAPACITY A MUST !

The PES require of good governance and strong institutional capacity for the processes of valuation, administration and payment. The nonexistence of these capacities is perhaps commonest of the problems .