### International expert workshop on the removal and mitigation of perverse, and the promotion of positive

incentive measures.

# THE CUBAN ENVIRONMENTAL POLICY. EXPERIENCES ON POSITIVE MEASURES FOR BIODIVERSITY

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### PRESENTATION PLAN

1. BACKGROUND

2. MAIN THESIS

3. EXAMPLES

### Starting point

 Biodiversity means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems

#### Few threats

- Economic Crisis.
- The consumption stimulation.
- The exaltation of the market role.
- Misunderstanding of the multisectoral character of biodiversity.
- The absence of economic information and valuation frames on the microeconomic level.
- Lack of knowledge of the links between biodiversity and economy.

#### MAIN TESIS

 The damage or the loss of biological diversity is very difficult to know or evaluate from an economic point of view. The same happens with the economic actions for its protection, specially on Developing Countries, where an adequate understanding and correlation with the economic values is absent or insufficient.

This insufficiency blocks up the economic influence on the microeconomic activities.

### Sectoral Approach

- To reach the economic influence, from the side of producers, to change their productive performance to a friendlier vision related with activities aimed at biodiversity conservation and sustainable use.
- To motivate few national ministerial bodies and organizations, for the approval and the application of any type of economic instruments.

### Sector or nucleus of environmental management targets

Forests.

Land management.

Hydrographical basins.

Coastal zone.

· Mountains.

#### Positives Measures

 Mechanism to conduct the public financial flows to reach the desired protection levels.

 Play a supportive <u>technical and</u> <u>economic back up</u> for the development of different valuations frames for biodiversity.

#### Positives measures

- The positive and impositive (tax, fee, charges) measures and the economic incentives or disincentives, are part of the Economic Instruments System (EI) of the country.
- Integrate the set of the Policy and Management Tool Box of the National Environmental Strategy.
- The utilization of the economic incentives must be based on the maximum political will of targeting financial resources to environmental protection.

### Positives Measures: barriers

- The main barrier is the absence of the economic value of environmental damages, or actives.
- Values that should be as more objective as possible, in the absence of environmental accounting.
- The absence of these economic figures related to biological diversity and related to the environmental damage are the key stones in the barriers for the implementation of other positive measures or incentives, especially at microeconomic level.

### Positives Measures in Cuba

### FEW EXAMPLES

### In Cuba positive measures are:

- Investment Plan for the Environment
- National Environmental Fund
- Tariff allowances to the import of environmental preferable technologies
- Tax for the use or exploration of natural resources and for environmental protection.
  - –Forestry Tax
  - -Havana Bay User Tax

### First general impact of these measures

The introduction, in the economic thought, of the understanding of the relevance of environmental protection, of knowing the economic values of biodiversity, and inducing the starting point of its accountability.

# Investment Plan for the Environment. (IPE)

Since 1998 up to now
 1950,9 Million CUPs
 6,5% of the total amount of the investments on the country

Since 2001

11% of the environmental investments for the most relevant hydrographic basins

### Table No.1 Investment expenditures for environmental protection.

Year	Total Country Investment	Investment for the environment	From these: for the national more relevant hydrographical basins	%	
	(a)	(b)	©	(b)/(a)	©/(b)
1999	2,544.6	102.4		4.0	0.0
2000	2,830.1	196.5		6.9	0.0
2001	2,736.7	250.7	13.7	9.2	5.5
2002	2,399.8	179.2	21.8	7.5	12.2
2003	2,469.4	233.0	36.1	9.4	15.5
2004	2,803.7	220.4	37.4	7.9	17.0
2005	3,227.1	215.8	23.8	6.7	11.0
2006	3,952.2	232.7	19.1	5.9	8.2
2007	4,684.8	278.3	24.9	5.9	8.9
2008		335,6			

## Table No 2 Investment expenditures by sector.

ENVIRONMENTAL SECTOR	2004	2005	2006	2007	2008			
Figures on Million CUPs								
Total	220,4	215,8	232,7	278,3	335,6			
Water	80,6	100,3	109,2	129,1	159,1			
Soils	18,6	20,3	20,3	14,3	16,6			
Atmosphere	40,8	15,9	9,6	21,1	22,1			
<b>Forestry Resources</b>	63,6	49,2	60,6	72,5	91,2			
Solid Waste	7	6,7	6	8,5	9			
Rest	9,8	23,3	26,9	32,8	37,7			

# National Environmental Fund (NEF).

 Created as a new economic mechanism that complements the financial influence on environment protection. The NEF is an innovative tool, taking into account, the lack of experience using decentralized financial mechanisms in Cuba, and represents an additional source to support activities related to environmental protection.

# National Environmental Fund (NEF).

 Working since 2000 year, targeting the projects preferably to solve environmental problems at the local level, on a project base approach and community impact

#### Sources for the NEF

- Annually Government assignments.
- Incomes provided by the environmental authorities driven from the licensing and permit system.
- Donatives.
- Gathering Campaigns in support for the environment.
- Other charges or incomes driven form environment exploitation activities.

### Targets of the NEF resources

- Environmental projects that exceed the scope of some institution, those that have a multisectoral and communitarian character.
- Environmental projects that exceed the economic capacity of some institution, and focused on an important environmental target.
- Co-financing other economic activities in a region.
- Studies or services relevant to the Fund targets.
- Advertising, promotion and education for environmental campaigns.

### Funding

2002-2008:

5 Calls for presentation of projects to apply for the Fund,

305 projects approved (around 35 % of the projects presented), and mobilization of a total of 21, 3 Million CUPs.

### **Targets**

- Reforestation
- Soil recovering
- Sustainable agriculture
- In-situ and ex-situ conservation of species
- Fight against contamination
- Energy saving
- Use of biomass.

An important target of the NEF projects is **Environmental Education and Awareness.** 

### Forestry Tax.

- Is an impositive measure that charges logging and push to a more rational use of the wood, and to use forests in a more sustainable way.
- The tax is a source of the Forestry Fund, that provides the financial flows to the process of reforestation in the country.

### Forestry Tax.

- The Forestry Tax depends on the kind and amount of wood that will be extracted from the plantation.
- Charges over the exploitation of non timber forest products, as seeds, ligneous, and others goods, obtained from Forestry.

### Table No 3 Dynamics of the national territory covered by forests in Cuba.

Period		Covered surface by forests (thousand ha)		Coverage of forests index* %		Deforestation (- ) Reforestation (+) (ha/per year)
		Beginning in year	Ending in year	Beginning in year	Ending in year	
1959	1974	1472	1691	13,4	15,4	(+) 14 600
1974	1983	1691	1907	15,4	17,4	(+) 24 000
1983	1998	1907	2334	17,4	21,2	(+) 28 467
1998	2007	2334	2778	21,2	25,3	(+) 49 333

<sup>\*</sup>Coverage of wood index: % that represent the total covered by woods area against the total country surface (10 988 619 ha).

 The relationship between collected resources through the Tax and the canalized ones by the Fund is another demonstration of the political will in the application of positives measures, for the Forestry in that case. The total yearly collected by the Tax resources is around 6 million CUPs. The Forestry Fund canalize yearly around 80 million CUPs.

### What we found?

• Positive.

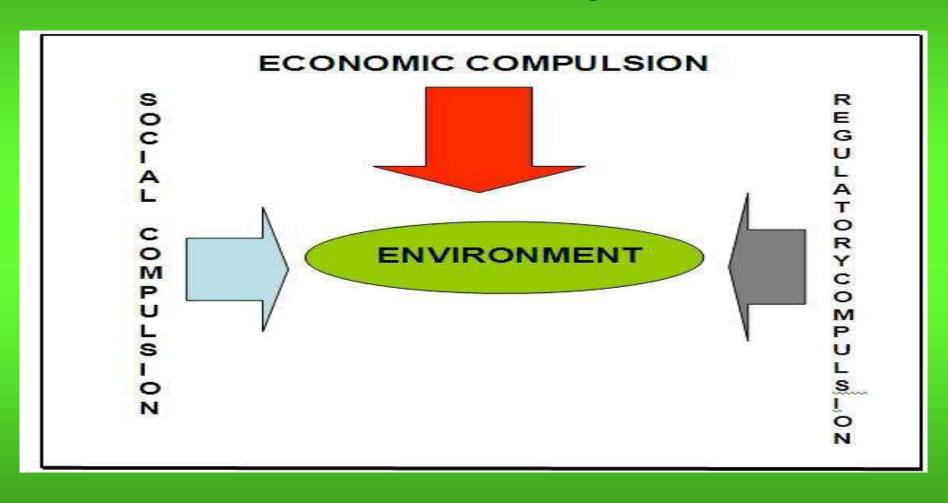
· Barriers.

• Challenges.

#### **Positive**

- The environmental policy implement a set of economic instruments, including few positive measures for the environment and for biological diversity, without hyperbolizing the role of market tools in this field.
- The use these instruments as a system in a whole package of non economic policy tools.

### Graphic No 3. Multifactorial Approach of environmental management



### Barriers

- The Cuban economy does not give an enough recognition, in his economic relations to the economic value of biodiversity and of the environment.
- Does not recognize sufficiently the economic side of the environmental goods and services provided by ecosystems.

### Challenges

- The introduction, in the economic channels of decision making and in the frame of economic management, the recognition of the value of biological diversity and the value of environmental goods and services.
- The introduction in the curricula of universities of those concepts that include biodiversity and environment as an economic resource, that should be accountable and manageable.