

Relationship of ecosystem services valuation, protection and distribution with the polluter pays principle and the provider gets principle

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Point of attention

- 1. Conceptual and Legal Frameworks of ecosystem services , the polluter pays principle and the provider gets principle.**
- 2. Relationship of ecosystem services valuation, distribution and protection with the polluter pays principle.**
- 3. Relationship of ecosystem services valuation, distribution and protection with the provider gets principle**
- 4. Suggestions.**

1. Conceptual Framework - the polluter pays principle

Best known definition

- **Principle 16** of the Rio Declaration on Environment and Development :
- *“National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment”.*

1. Conceptual Framework - the provider gets principle

- *The **provider gets principle** is orientated more to the **supply side** of **rural public goods** than the demand side. (Blochliger,1994).*
- *“Human action may result in **increased environmental quality**. In relation to that the **provider gets principle** has been formulated”. (Arild Vatn, Synne Movik and David N. Barton, 2011).*
- *The principle is good for **identifying ecological targets** and to **calculate** the minimum necessary **payment** needed to **achieve these targets**.” (Hanley,1998)*

1. Conceptual Framework - the provider gets principle

- *Payment for ecosystem services* aims to elicit payment from the beneficiaries of ecosystem services and channels these people who supply such services (what could be called the **provider gets principle**). (Technical discussion on International Payment for Ecosystem Services, UNEP 2006)

1. Legal Framework

Decisions V/6 and VII/11 CBD on Ecosystem Approach (2000,2002)

- **Principle 4** : “ *Recognizing potential gains from management , there is a need to **understand and manage the ecosystem in an economic context.*** ”

Rationale of Principle 4 “...*Alignment of incentives allows those **who control the resource to benefit and ensure that those who generate environmental costs will pay***”.

- **Principle 5 (ES)** : “*Conservation of ecosystem structure and functioning , in order to maintain **ecosystem services** , should be a **priority target** of the **ecosystem approach***”.

1. Legal Framework

Plan of Implementation -2002

- Preamble, Para 19.b (PPP)
- **Para 24(ES)** : “*Human activities are having an increasing impact on the Integrity of ecosystems that provide essential resources and **services** for human well -being and economic activities*”
- **Para 30.d** : “*Encourage the application by **2010 of the ecosystem approach**, noting the Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem and **decision V/6** of the Conference of Parties to the Convention on Biological Diversity*”

1. Legal Framework

Decision X/2 on Strategic Plan of CBD-2010

- Para 10.d (reflected PGP) : “*Effort to ensure the continued **provision of ecosystem services** and to ensure access to these services , especially for the poor who directly depend on them.*”

Millennium Ecosystem Assessment -2005

- Tax, Tradable Permits (reflected PPP)
- Subsidies, Direct provision of ecosystem services (reflected PGP)

The Economics of Ecosystem and Biodiversity -2010

- 5 Solutions to better stewardship natural capital :
 - Addressing losses and pricing (PPP)
 - Rewarding benefits payment and markets ,
 - Adding value through protected areas (Payment for Ecosystem Services/reflected PGP)
 - ...

2. Relationship of ecosystem services valuation, distribution and protection with the polluter pays principle.

- **A. Valuing ecosystem services with the polluter pays principle**
- **B. Distribution of ecosystem services with the polluter pays principle**
- **C. Protecting ecosystem services with the polluter pays principle**

A. Valuing ecosystem services with the polluter pays principle

Conversion of a damaged environmental resource to an economic value (cost of pollution) and apply it to the polluter.

Decision VII/11 CBD on Ecosystem Approach (Implementation guideline of principle 4)

- **Apply** appropriate practical **economic valuation methodologies** for **ecosystem goods and services (direct, indirect and intrinsic values)** .
- **Incorporate** social and **economic values of ecosystem goods and services** into **national accounts, policy, planning, education and resource management decisions.**

A. Valuing ecosystem services with the polluter pays principle

Millennium Ecosystem Assessment

- **Tax** : “*Taxes are charged for each unit of **appropriated ecosystem service..**”*
- **Tradable permits** : “ *if the amount of permits correspond to **economically efficient level of resource use or pollution**, then the equilibrium price of the permit will indicate the shadow price of the ecological service...”*

The Economics of Ecosystem and Biodiversity

- PPP is associated with the **full recovery cost principle** to make the right person pay ,to fully internalize environmental cost , to reflect the **true prices of ecosystem services.**

B. Distribution of ecosystem services with the polluter pays principle

Social Principle

- Distribution of cost and benefits between polluters and non polluters (Sadeleer, 2002)

Decision VII/11 CBD on Ecosystem Approach (Implementation guideline of principle 4)

- Equitable sharing of cost and benefits.

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- **Taxes** have a **distributional implications**

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- **Social impact** of environmental harm can be addressed by applying the **PPP** and the associated **full recovery cost principle**.

C. Protecting ecosystem services with the polluter pays principle

Sustainable use of environmental resource.

Decision VII/11 CBD on Ecosystem Approach (Implementation guideline of principle 4)

- Promotion of **biodiversity conservation** and **sustainable use** by means of alignment of economic **incentives**.

Environmental **Taxes** /Environmental friendly **behavior**. (reflected PPP)

Millennium Ecosystem Assessment

- Pigovian tax may involve **delivery of selected ecosystem services**

The economics of ecosystem and biodiversity

- The polluter pays principle with the full recovery cost principle can address **biodiversity loss**

3. Relationship of ecosystem services valuation , distribution and protection with the provider gets principle

A. Valuing ecosystem services with the provider gets principle

B. Distribution of ecosystem services with the provider gets principle

C. Protecting ecosystem services with the provider gets principle

A. Valuing ecosystem services with the provider gets principle

Calculation of payment needed to achieve well-defined ecological targets.

Millennium Ecosystem Assessment

- **Subsidies** : “the introduction of taxes and subsidies modify the relative of **prices of products** with which **the appropriation** or the **use of ecosystem services** or the emission of pollutant are **associate**”
- **Direct provisions of ecosystem services** : “The determination of an appropriate **amount of ecosystem services** should established by interveners”

The Economics of Ecosystem and Biodiversity

- Payment **in cash** or in **kind benefits**. (Pagiola , Engel, Wunder , 2009).
- The **value** of **ecosystem services** is also **considered** in PES.

B. Distribution of ecosystem services with the provider gets principle

From the **supplier** to the **buyer**, from the **buyer** to the **provider** of **ecosystem services**.

Decision X/2 on Strategic Plan of CBD

- **Access of ecosystem services** to the **poor** who directly depend on them.

Millennium Ecosystem Assessment

- **Interveners** should ensure **distribution** to the **resource** to the entitled **community** (**strong polycing** and **penalty** and **cohesion** in **community** members).

The Economics of Ecosystem and Biodiversity

- Payment for ecosystem services can address **distributional aspect** if well designed and implemented (**property right**, **balanced power local and non local users**, **active civil society**, **legal and juridicial system**, **stable funding**, **strong policies for maintaining public nature of goods**)
- Potential to provide significant **additional income** to local stewards of nature) .

C. Protecting ecosystem services with the provider gets principle

- **Sustainable actions** in order to **increase environmental quality**.

- **Decision X/2 on Strategic Plan of CBD**

- **Maintenance and restoration of ecosystems** generally provide cost-

effective ways to address **climate change**. Therefore, although climate change

is an additional major threat to biodiversity, addressing this threat opens up a

number of **opportunities** for **biodiversity conservation** and **sustainable**


use.

4. Suggestions

- **A stable value of ecosystem services**

 **Integration of a stable value of ecosystem services in economic instruments, compliance of consumption and appropriation of ecosystem services. (Control loss and increasing of ecosystem services)**

- **A controlled ecosystem services distribution scheme**

 **Strong policy /penalty (property, use of public ecosystem services and distribution of benefits) and institution (judicial, participation, compliance)**

4. Suggestions

- **A mixed goals for protecting ecosystem services**

 **Incentives for reducing ecosystem service damaged/ for increasing of environmental quality.**

Thank you very much for your attention .

Your suggestions and questions are welcomed.