

Unclassified

ENV/EPOC/GSP/BIO(2005)6/FINAL



Organisation de Coopération et de Développement Economiques
Organisation for Economic Co-operation and Development

06-Sep-2005

English - Or. English

**ENVIRONMENT DIRECTORATE
ENVIRONMENT POLICY COMMITTEE**

**Working Party on Global and Structural Policies
Working Group on Economic Aspects of Biodiversity**

SOME OECD USAGE-OF-TERMS FOR BIODIVERSITY

Contact person: Philip Bagnoli: Tel. +33-1 4524 7695, E-mail: philip.bagnoli@oecd.org

JT00188897

Document complet disponible sur OLIS dans son format d'origine
Complete document available on OLIS in its original format

**ENV/EPOC/GSP/BIO(2005)6/FINAL
Unclassified**

English - Or. English

SOME OECD USAGE-OF-TERMS FOR BIODIVERSITY

At its tenth meeting, held from 7 to 11 February 2005 in Bangkok, Thailand, the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) recommended that the Conference of the Parties at its eighth meeting:

Considers development of definitions on the basis of suggestions put forward by Parties and relevant organizations before the eighth meeting of the Conference of the Parties.

In response to that recommendation, the Executive Secretary of the Convention on Biological Diversity (CBD) sent a request to the OECD (Ref.: SCBD/SEL/ML/GD/47896, see Annex II), to contribute to list of definitions that would be considered by the Conference of the Parties.

At its nineteenth meeting on 7-8 April 2005, the WGEAB considered a preliminary list of terms that have been in general usage in its publications on biodiversity. Annex I contains an updated list of those terms and provides some general-usage explanations from additional sources that were deemed consistent with the work of the WGEAB, and appropriate for consideration by the Conference of the Parties to the Convention on Biological Diversity.

In accordance with the decision taken by the WGEAB, these terms are sent to the CBD to be used to inform its deliberations concerning the development of definitions.

ANNEX I: PROPOSED LIST OF TERMS

Social welfare is referred to as the summation of the well-being of all the individuals in society. Welfare is measured ordinally, in relative terms. That is to say, welfare is not measured in monetary terms, but instead one level of welfare is compared with another level of welfare. Social welfare is improved when there is a net gain in well-being. In a biodiversity context, loss of biodiversity can only improve social welfare if the gain to society (resulting from the activity associated with the loss of biodiversity) outweighs the loss to society as a whole, including its medium and long-term effects.

Incentive measure¹: any measure implemented to achieve biodiversity outcomes that induces changes in behaviour. The term is often used interchangeably (and misleadingly) with *market incentive*. A market incentive is intended to refer to the more limited measures that directly change market prices for market participants. Incentives rely, to a large degree, on the assumption of economic rationality on the part of targeted individuals, since they change the costs or benefits of an activity and leave it to individuals to respond appropriately. *Non-market* incentives are more generally associated with measures that create a *shadow price* (i.e. implicit cost) of non-compliance. For example, a regulatory requirement is a non-market incentive when there is a penalty for non-compliance — irrespective of whether the penalty is monetary. *Economic incentives* can also be defined as including all market incentives and those non-market incentives that are imposed as monetary measures (i.e. they exclude incarceration and other such measures).

Economic incentives are used to improve market outcomes by changing relative prices to be more compatible with social preferences (e.g. internalizing an externality). In that sense, they are expected to encourage conservation or sustainable use of biological diversity by ensuring that non-marketed characteristics are nonetheless reflected in market prices.

Negative incentive measures, or disincentive measures, impose a *cost* on an activity so as to discourage its continuance. A negative incentive can be distinguished according to market-based disincentives (such as taxes or levies) and non-market-based disincentives (such as fines or other consequences). A distinguishing characteristic between a market and non-market disincentive is in how finely they can separate high-value uses from low-value ones. A market disincentive raises the price of an activity, but does not forbid it. Individuals and organisations who derive high value from that activity will continue undertaking it — albeit at a reduced level of benefits. A market disincentive, therefore, has the effect of sorting “valuable” use of a resource from “wasteful” use.

For biodiversity, disincentives would generally include measures that internalise the costs of use or damage to biological resources, in order to discourage activities that deplete biological diversity.

Positive incentive measures for biodiversity are monetary or non-monetary inducements to get individuals or organisations to change their behaviour toward an outcome that improves social welfare.

1. “Incentive measure” is often shortened to simply “incentive”. It should be understood, however, that even when it is shortened, it is still referring to a policy that has been implemented by some level of government.

Positive incentives can also be distinguished according to market-based and non-market based incentives, on the basis of whether they directly or indirectly change market prices. For example, monetary rewards that are tied to individual transactions are market-based positive incentives. On the other hand, a payment, or other favourable act that is given as a lump-sum — or irregularly — will constitute a positive incentive that is non-market based. For biodiversity, a positive incentive is generally one which pays for the provision of a biodiversity-related good or service whose loss or degradation would not be in the public interest (i.e. the positive incentive has a legitimate role in improving social welfare). Positive incentives may create markets where none previously existed, or correct for problems in markets that impact on biodiversity.

Positive incentives for biodiversity can be distinguished from subsidies in that a subsidy requires a financial contribution to the beneficiary; whereas a positive incentive may not necessarily take the form of a financial contribution to the beneficiary. A subsidy may also convey an economic rent to the recipient; whereas a positive incentive is just sufficient to correct for a market failure. A positive incentive can also be distinguished from an “environmental cross-compliance” measure, since the positive incentive is being used solely for correctly for market failure — it does not form part of a payment for unrelated goods or services.

Perverse (adverse) incentive measures are measures that *inadvertently* cause damage to biodiversity — they were put in place for other policy objectives, but have unforeseen consequences for biodiversity. They are distinguished from *externalities* since a perverse incentive is the result of an explicit policy action, whereas an externality results from a failure of the market to internalize costs imposed on others in a market transaction. Perverse incentives are the result of a government intervention failure, in the sense that the original justification for the policy failed to account for all subsequent repercussions.

A perverse incentive can also be distinguished from an “environmental cross-compliance” measure since the latter is an environmental condition placed on an already existing payment.

Indirect incentive measures are measures that target activities that are once-removed from a policy objective. The relationship between the activity and the policy objective occurs through a chain of events that lead to a beneficial impact on policy objective. For example, when targeting biodiversity conservation, measures that create markets for non-timber forest products are indirect incentives for biodiversity since they promote the maintenance of forested areas in natural states. Indirect incentives can be distinguished from conditional payments (such as those made to farmers by some governments), which have direct links to multiple targets, such as biodiversity.

Government intervention failures are government interventions that do not correct market failures or distort price signals and markets, to the detriment of public welfare. For example, a government intervention failure may harm biodiversity without an adequate off-setting gain in other areas. This is stronger than the notion that a policy has been implemented in a manner that could be improved upon (i.e. is economically inefficient). Intervention failure is closely related to integration failure. If the policy were developed in a fully integrated manner, intervention failures would not occur in the first instance.

Integration failure involves a lack of capacity or an institutional structure that fails to take full account of the effects of a sectoral policy on other important public-policy goals (e.g. the effects of transport policy on biodiversity).

Market failure refers to the failure of the interplay of market forces to secure an environmentally correct (i.e. reflecting a society’s wish) level of biodiversity conservation, due to market prices not fully reflecting the value of biodiversity to society. Sources of market failure are found in some inherent characteristics of goods and services often associated with biodiversity, such as: (1) public good

(non-excludability, non-rivalry, or both); (2) externality in the production or use of the good or service; (3) imperfect information on the part of market participants regarding market conditions; and (4) non-competitive behaviour such as market control (e.g. monopolistic) by sellers or buyers.

Externalities include the costs or benefits which result from an activity, but which accrue to others who are not undertaking the activity, and where no mechanism is operating to impute these costs or benefits to the original actors. The existence of externalities is closely linked to the absence of markets for the goods in question. For biodiversity, an example can be seen in one person's desire to cut down trees in a biodiversity-rich forest without accounting for the impact that would have on others: the negative impact on others is *external* to the market transaction of selling the logs.

Regulations are legal measures that restrict, prohibit, require, monitor or enforce certain activities or methods for implementation of laws or other policy directives. While the measures may eventually have an impact on market prices, their intention in the first instance is not generally to change market prices.

Standards are norms established by a standard-setting body, which may be public or private. Such norms may relate to a product, a production method, a process, a testing method, or an ambient condition. In national laws, standards may have legal force. In international trade law, however, the term "standard" is reserved for voluntary instruments, not to be confused with a (technical) regulation, compliance with which is by definition mandatory.

Subsidy is a financial contribution by a government, or government-directed entity, that confers a benefit. The definition used by the World Trade Organization (WTO) includes government revenue that is otherwise due is foregone or not collected (e.g. a fiscal incentive such as a tax credits), but would not in most circumstances include the value of non-internalised externalities. The WTO definition also includes income or price supports. Implicit in the definition of a subsidy is the notion that a subsidy is an economic instrument purposefully used by a government to achieve an objective or objectives. Subsidies can be general or specific, and the beneficiary can be a producer, consumer or some other market actor. Subsidy is distinguished from positive incentive in that a subsidy may go beyond correcting for a market failure (e.g. compensating for the provision of a public good) and convey a rent to the recipient.

Support or support measure are sometimes used synonymously with subsidy or as part of the definition of subsidy, but increasingly used as a collective term to refer to measures (such as subsidies as defined by the WTO) conferred to producers or consumers through non-subsidy measures. A support measure can be broadly thought of as a government (or government-directed body's) action that confers a benefit. Support measures are government-directed, often market-distorting, interventions which decrease the cost of producing a specific good or service; or increase the price which may be charged for that good or service. This can include, for example, transfers via elevated prices resulting from import tariffs or other border-protection measures. As with the term subsidy, implicit in the notion of a support measure is that it is an economic instrument purposefully used by government to achieve an objective or objectives. It is also distinguished from a positive incentive, although it may encompass a non-financial measure that compensates for the provision of a public goods or service. It also excludes non-internalised externalities.

Net social benefit is the value accruing to a community as a whole as a result of a given activity when *all* costs (i.e. including external costs) and benefits have been accounted for. It is strongly related to the definition given above of social welfare; that is, its main use is for comparative analysis. The term "net" explicitly accounts for the possibility that there may be tradeoffs between community objectives, but that the gains justify the final outcome.

Public goods are goods whose: (1) use by one person does not alter the availability of the good for others (i.e. they are *non-rival*); or, (2) access cannot be easily impeded (i.e. they are *non-excludable*). Such

goods cannot be provided in markets at the level that a community would want because *private* incentives are at odds with social objectives. That is, since an individual can easily access or re-purchase the goods, its price in the market will be too low. For biodiversity, this means that some biodiversity-related goods and services will go to low-value uses, and thus their resources are prone to being degraded.

Easements and **covenants** for biodiversity are contractual agreements between private land users or owners on the one hand, and public or non-governmental organisations on the other, which commit the former to undertake specified conservation or sustainable use practices on the land. These agreements are voluntary and often accompanied by some financial compensation. In some countries, such easements are subject to preferable tax treatment for the owner.

Environmental Cross-Compliance is the requirement that farmers fulfill certain environmental conditions in order to receive agricultural support payments. If farmers fail to comply, they face the reduction, or complete withdrawal, of such support. Environmental cross-compliance does not necessarily justify the original payment, but may reduce the social welfare loss that it causes.

Tradable or transferable permits or rights are rights or allowances to undertake a certain restricted activity — such as the emission of pollutants, land development, harvesting of a particular species, etc. — which can then be traded between interested parties through a market.

Use rights are property rights over certain aspects of a natural resource for private uses (e.g. hunting), which do *not* include the right to sell the resource (e.g. the hunting range) or to damage the surrounding ecosystem (e.g. the game's habitat). They may be linked to certain conditions or *covenants* ensuring the sustainability of use.

Ecosystem services, include all those functions of an eco-system which provide direct value to the well-being of humans, through maintenance of a healthy environment.

Property rights involve exclusive authority to determine how (and by whom) a particular resource will be used. A property right may be seen as a bundle of separate and distinct rights over a particular good — including at least the right of personal use, the right to demand compensation as a prerequisite for its use by others, and the right to transfer any or all of these rights to others (either permanently by sale or temporarily through some form of contractual arrangement). Property rights may be exercised by governments through their designated officials (public ownership or public property), as well as by private individuals and other sorts of non-governmental organisations (private property).

Rent is the amount of any payment to the owner of a factor of production (land, labour or capital) that exceeds the minimum payment that would have been necessary to motivate that owner not to transfer it to some other use or user.

ANNEX II

Ref.: SCBD/SEL/ML/GD/47896, 18 March 2005

Dear Madam/Sir,

NOTIFICATION

Decision VII/18: Incentive measures: Definitions

The purpose of this notification is, further to notifications 2004-051 of 11 June 2004 and 2004-077 of 23 September 2004, to invite relevant international organizations to contribute to the work on incentive measures pursuant to decision VII/18 of the Conference of the Parties with regard to the development of definitions.

In paragraph 3 of decision VII/18, the Conference of the Parties requested “the Subsidiary Body on Scientific, Technical and Technological Advice at its tenth meeting, as a matter of priority, to further refine and consider, with a view to recommending adoption by the Conference of the Parties, the proposals for the application of ways and means to remove or mitigate perverse incentives, giving adequate time for a substantive and conclusive review of the proposals.”

At its tenth meeting, held from 7 to 11 February 2005 in Bangkok, Thailand, the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) further considered the draft proposals and recommended that the Conference of the Parties at its eighth meeting:

- (a) Considers the draft proposals included in the annex to the present recommendation with a view to finalizing them, in conjunction with the outcomes of the consideration of positive incentives by the Subsidiary Body on Scientific, Technical and Technological Advice at its eleventh meeting;
- (b) Considers development of definitions on the basis of suggestions put forward by Parties and relevant organizations before the eighth meeting of the Conference of the Parties.”

In light of the above, relevant international organizations are invited to convey to the Secretariat their suggestions on the development of definitions. The Secretariat will compile these suggestions and make them available to the eighth meeting of the Conference of the Parties for its consideration. Organizations are requested to send their suggestions at their earliest convenience but **no later than 15 August 2005**.

I thank you in advance for your cooperation in this matter and for your continued support to the work of the Convention.

Yours sincerely

Hamdallah Zedan
Executive Secretary

cc: Relevant International Organizations