Rural Research and Development Funding, required for classification, valuation and regulation of multiple uses of resources, goods and services can achieve the statistical data by means of a model process as used in the valuation of forests

The United Nations General Assembly Doc A/CONF.151/PC/27 SECTION IV, 1991 (pages 17–20) followed by the Montreal Process of 1994 in France offers a model process for statistical measurement and valuation of sustainability of ecology, the inter-relationships of organisms (includes humans) and their environment.

In the Montreal Process definitions are given of indicators and criteria (see below*****). Statistical analysis of their measurements can establish the probability without doubt of their valuations for acceptance to International Standards. Money is used simply, as a medium of exchange or trade, and as a measure of value.

By means of the measured values of the elements or factors, the significance of their valuation either for conservation, for use or replacement can be determined. Classification of categories of values can be described. The options of the **Opportunity values** for having them are higher than the values of losing them to something else (like the valuation of the clean air we breathe is the price users need to pay, for keeping the air clean). **Foregone values** are those lost to something else. **Replacement values** replace earlier values (including those for no longer having them or having been there before).

The goal of sustainability is to have a living sustainable environment.

The requirements are valuation and acceptable regulation, as follows -

(1) A METHOD FOR VALUATION: Assessment of values requires classification of multiple uses of resources, goods and services into –

1. Productive values and
2. Non-productive values, which are valued by the productive options foregone.

These multiple values are classified further into –

1. Direct uses or services and
2. The indirect options.

The classification can be put into a table with examples as follows –

1. PRODUCTIVE VALUES		2. NON-PRODUCTIVE VALUES	
1.1 DIRECT USES	1.2 INDIRECT USES	2.1 DIRECT USES	2.2 INDIRECT USES
EXAMPLES			
Commercial	Protective	Conservation for others	Ecosystem for its own sake

That is, a perception of valuation is the appreciation of the worth and or merit of the estimate of the value of a matter, classifies values into use and non-use values, direct and indirect values. Money is used as a measure of direct consumption values (commercial, industrial and indigenous consumption). Non-consumption direct values (visual resources, recreation, research and education) and indirect values (environmental habitat services and protection) are expressed monetarily by how they are valued by a community.

*****DEFINITIONS

Criterion: A category of conditions or processes by which sustainable management may be assessed.

A criterion is characterised by a set of related indicators, which are monitored periodically to assess change.

Indicator: A measure (measurement) of an aspect of the criterion.

A quantitative or qualitative variable, which can be measured or described and which, when observed periodically demonstrates trends.

The Montreal Process can be used for measuring factors, which influence sustainability.

A factor is one of the elements that contribute to bringing about any given result.

(2) THE METHOD FOR REGULATION: Refer THE MONTREAL PROCESS of 1994.

A METHOD FOR REGULATION described by Daly (1991) is noted here-

Prescription of core principles of a strategy for sustained living of forests

Daly (1991) offers some policy guidelines for sustainability at the project level:

For ‘renewable resources—

… Harvesting rates do not exceed regeneration rates

… Waste emissions do not exceed renewable assimilative capacity of the local environment:

For non-renewable resources, a renewable substitute would retain productivity at the same rate of depletion of the non-renewable resource before it is exhausted

Steady-states of populations and of economics (Daly 1986, 1991) require valuation of the benefits and uses of the resources (UN General Assembly Doc A/CONF.151/PC/27, p17–20 1V Economic Value of Forests, 1991; The Montreal Process of 1994; Santiago Declaration of 1995). Limits to values are identified and defined by a set of measurable indicators and criteria—that is, through systematic classification and measurement of these standards (as direct values and as indirect opportune or replacement values in which money is simply a medium of trade or exchange and the measure of value. Scientific operations research can create the desirable regulatory mechanisms to establish a conventional range for freedom of operations between the allowable limits of maxima and minima that will improve the existing strategies for sustainability of sustained living of life in harmony with the environment.

The strategy is measurable through regular updating of strategic plan description and prescription with courage, integrity and innovation for both operations research and creative management. Documentation, promulgation of facts and monitoring rates of change of effects of factors, of interactions and of alternatives provide a whole range of information for constant and continual adjustment to change. State boundaries in Australia are obstacles to the solution of problems. Organization or reorganization, with creation of centralised policies and of decentralised operations to achieve satisfactory performance of outcomes with change, require adequate monitoring and feedback information data on the regulatory mechanisms provided in operations research.

Policies created by decision-makers and specialists require strategic plans for their management by the local authorities. [Owen W Loneragan, owlono123@eftel.net.au]

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(1986). Population: Toward a new economic model, *Bulletin of the Atomic Scientists,* p 42–44, April.