

## F - 02

Rapid degradation of forests due to direct exploitation conversion into other land users is a major problem faced by the world. Conservation values of forests have not been identified, quantified or valued resulting in under-investment in conservation. Total economic value (TEV) provides a comprehensive framework for valuing complex environmental assets such as tropical rain forests. TEV comprises of several component parts, mainly use values and non-use values. Both use and non-use values can reside in the host nation or globally (all nations other than the host nation).

The concept of TEV is important when a decision has to be taken regarding land use options of a tropical rain forest. The development option could go ahead only if the development benefits are higher than the benefits of conservation (that is TEV) and costs

of development. The objective of this paper is to discuss some practical problems of using TEV approach in determining conservation benefits of tropical rain forests.

TEV of the Sinharaja Forest Reserve was estimated using several environmental economic methods, mainly the contingent valuation method. The TEV (net present value) Was Rs 3.8 billion. However, local values only accounted for 0.5% of the total value which demonstrates the importance of often unrecognized global values.

The under solved issues of TEV could be discussed from t=ethical, biological and economic stand points. First, although the TEV concept includes several types of values, they are not completely distinct. They are interrelated from a biological point of view and adding them up will result in double counting. From an economic point of view, there are obvious trade-offs among different values and only the compatible values should be added together. The estimation of TEV needs the use of various techniques and the final value will retain the inherent problems of those techniques. From an ethical point of view, TEV is only able to capture anthropocentric values and it does not stand for intrinsic values.

There are several other values of forests that cannot be given monetary value due to lack of appropriate methods. In addition, the values of future generations are not taken explicitly into account in estimating TEV. Due to above shortcomings, the use of total economic value in decisions regarding rain forests needs further consideration.