Engendering economic valuation of forests

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Summary

This paper discusses the fairly recent trend of economic valuation of the environment, which has now been widely adopted as a development approach even by mainstream development agencies such as United Nations Development Programme (UNDP), Food and Agriculture Organisation (FAO), Canadian International Development Agency (CIDA), German Technical Cooperation (GTZ), Norwegian Agency for Development Cooperation (NORAD), Swedish International Development Agency (SIDA), Danish Agency for Development Assistance (DANIDA), Department for International Development–Overseas Development Administration (DFID-ODA), Asian Development Bank (ADB), and World Bank (WB).

This particular approach has made previously unvalued environmental resources, and particularly those taken to be 'free goods', visible, whereas previously they were not taken into consideration in national accounting. The paper argues that, although agencies now promote environmental accounting, nevertheless economic accounting continues to be blind to gender concerns. Economic valuation of the environment is viewed as a gender neutral undertaking and the field is slow to understand gender as an analytical framework.

The paper takes a look at the main tools for economic evaluation and at ways in which they can be made more gender sensitive by introducing gender analysis to environmental economics. The paper begins by discussing total economic value (TEV), a basic organising concept in economic valuation of environmental resources. TEV is comprised of a use value (UV) and non-use value (NUV), and use values are then divided into direct use value (DUV),

indirect use value (IUV), and option value (OV). Plus the TEV will be a combination of all of these. DUV directly contributes to production or consumption: timber, non-timber forest products (NTFPs), recreation, ecotourism, medicinal plants, education, plant genetics, and habitat. IUVs are the 'unseens'- nutrient cycles, soil protection, water cycles, oxygen recycling, etc, and option values are what natural resources could possibly be used for in the future, such as bequest value which relates to preservation for future use. Non-use value is the aesthetic and cultural things intrinsic to natural resources. In brief, that is the new perspective.

The paper goes on to give a brief on standard gender analysis and its tools as a means of overcoming biases that are strongly anti-female. A brief description of the Harvard analytical framework is given. The brief then follows the sequence of the paper itself in touching on the different economic values assigned to the environment and looking at ways to engender these.

How is gender brought into economic valuation? The text looks at the Harvard Framework, and in particular at gender division of labour and access and control over resources and benefits. Basically this leads in research to the construction of an activity profile as a simple matrix of productive, reproductive, and community work (paid and unpaid) by whom it is carried out, and the implications of the division of labour – is the status quo maintained, for example, or is it challenged? Access and Control Profiles look at resources and who owns what? who uses it? and who decides? Women for example often have access, but do not decide how something is used because they do not own it.

The text continues to discuss direct use values and the standard techniques of economic valuation for tropical forests. Some detail is gone into, but only to come to the conclusion that there is no recognition in valuation techniques of gender division of labour. Fuel collection for example merely values the wood collected, not taking into account the labour of the women collecting. It is clear that were a household to pay for fuelwood collection, a rather higher value would be derived. It is argued that timber alone is valued, rather than other forest products, because commercial exploitation of timber is a male occupation, and it is women who collect other-non-valued forest products. Yet, it is pointed out that other forest products must have some value because otherwise why would so many forests become nature reserves?

The text then examines the problems inherent in assigning economic value to forests. The concerns discussed are women's unpaid labour and how compensation for environmental services could work against the desired outcome, e.g. if women were paid to reduce fuelwood collection, this may well have no impact on preserving forest resources if women have no control on how household money is spent. Many of these arguments are well documented in the literature.

1. Gendered Accounting

   If trees are more valued for fuel, fodder, and food than for timber, they will provide more benefit to women. But if women's access to the trees is restricted, and their labour in collecting firewood given no value, trees may be sold off for firewood, while women continue collecting fuelwood for subsistence needs. On the other hand, if women have control over how many trees are planted and used for fuel, their location, and use, then a valuation of the trees for fuelwood would give an accurate representation of their worth to women. Questions of who owns, uses, and controls the trees thus become as important as determining their economic value.

2. Barter -Exchange

   In primarily non-market economies the 'barter-exchange' approach is used. Bolivian forest communities calculate the economic value of wild fruits and fuelwood in terms of salt, a market commodity whose price is well-established. There might be important valuation differences between men and women and these have to be taken into consideration.

3. Gender Analysis of Resource Valuation

   In households in the developing world, research has shown that women accord a greater value to improved water services more than men do. Similar results can be found in women's valuation of environmental problems like the severe air pollution caused by indoor cooking (Subba 1999), polluted drinking water, and deforestation. This means that economic values of services or degradation change when women's perspectives are taken into account.

A discussion of contingent valuation studies is presented and the difficulties of carrying out market research, with all its accompanying value systems, in non-market economies are broached. Among the difficulties cited are mistrust of government and the seasonality of resource use, among the potentials is cited use of such approaches in participatory rural appraisal (PAR). The box below gives different ways of approaching contingent valuation.

In addition to economic values of environmental resources there are also recreational and cultural values. In non-market economies time for travel and distance are often not taken into account because travel is by foot. Yet, in market economies, costs of travel and methods of transport can be aggregated to give a total economic value for a natural resource used for recreation. Other examples of this are the value of clean air and the scenery which are brought into housing prices in market economies, yet given no value in non-market economies.

The paper also discusses indirect use values such as watershed protection and erosion control provided by forests calculated against fertiliser costs to replace lost nutrients, decline in crop yields, and labour costs incurred in the transport of soil back to its original plot. The paper suggests that environmental service valuation is seen as gender neutral, and this results in services of particular importance to women remaining hidden, such as services supporting certain plant species, fuelwood, and other non-timber forest products. This is often because women place importance on resources that meet family needs and men place importance on those which are of commercial value.

Conclusion

The discussion concludes by covering option values and, in this area in particular, it is deemed that gender analysis is lacking. The authors' conclusion is that

'from a gender perspective, there are clear problems, both theoretical and methodological, with all the valuation techniques described. As a basic premise, the idea that forest and livelihood can be reduced to monetary values is in itself alienating and in some ways self-destructive. If all tropical forest resources – including their aesthetic and cultural dimensions – are looked upon as commodities, valued on the bank scale, weighted by money, then all forests have the potential to be bought and sold to those with abundant capital. All of nature becomes a market commodity. Since forest-dependent communities, usually on the subsistence margins of the market place, seldom have the economic power to purchase the forest resources upon which they depend for survival, it might be in their best interests not to allow the valuation, and hence commoditisation, of forest resources. Clearly, engendering economic valuation of forest resources is a key concern here.'