3 Incorporating the Environment in Development Planning

Charles Pearson
JOHNS HOPKINS UNIVERSITY
Maynard Hufschmidt
EAST-WEST CENTER, HONOLULU

It is now widely acknowledged that sustained economic growth in both industrial and developing countries requires the preservation of the productive capacity of natural systems and the environment. However, both conventional economic development activities and the conditions of poverty itself frequently increase stress on natural systems, and degrade the environment. Thus, maintenance of environmental quality is not automatic, but requires deliberate measures. Compounding the dilemma facing planners is a scarcity or ignorance of suitable techniques and approaches for molding environmental considerations into economic development.

The Environmental and Policy Institute of the East-West Center (EAPI) is conducting a major multinational programme on assessment and economic valuation techniques for incorporating environmental considerations in development planning. The two major activities of the programme focus on (a) identifying and quantifying major changes in natural systems as a consequence of development and (b) valuing these effects and associated effects on human health and welfare in monetary terms in so far as possible. This paper describes and evaluates the work done in the second area: economic valuation of the natural systems and environmental quality effects of economic development.¹

The premise of the paper, and indeed of the EAPI programme, is that there exists an urgent need to widen and improve the use of such techniques and approaches as are now available. The great task of development, the fragile nature of many environmental resources,
and the increasing stress on these resources, require that, whatever their shortcomings, techniques for environmental assessment and valuation be made a part of development planning as rapidly as possible.

Section 1 of the paper discusses some underlying issues relating environment and development. Section 2 describes the relevant EAPI activities. Section 3 examines in greater detail the economic valuation approaches suggested by the project, while the final section briefly discusses future EAPI activities.

1 BASIC ISSUES

1.1 Environment versus Development?

Systematic incorporation of environmental considerations in development planning still receives more rhetorical than actual support in many developing countries (Carpenter, 1981). One reason is that early discussion of the relation between environment and economic development was clouded by misperceptions that still have not been fully dispelled. An extreme initial view was that (a) environmental degradation was principally a problem of rich countries (the so-called ‘effluents of affluence’), (b) remaining environmental problems in poor countries reflected a lack of development (the so-called ‘pollution of poverty’), (c) there was an unfavourable trade-off between economic growth and maintenance of environmental quality, (d) poor countries could not afford to divert resources to environmental protection, and (e) in a political interpretation, industrial countries might use the environment as a ploy to keep the Third World as ‘hewers of wood and drawers of water’.

Although this extreme view is seldom heard today, a kernel of truth in several of the propositions has slowed extension of planning to account explicitly for environmental aspects. At the risk of labouring the obvious, it should be made clear that sustained development without regard for the environment is not possible. There are two principal reasons. First, economic production in major sectors in developing countries – agriculture, forestry, fisheries – requires maintaining the productive capacity of the natural systems on which these sectors rest. The very scarcity of productive resources in poor countries implies that they have a high value. It is therefore rational on conventional economic grounds to expend