

DEFORESTATION, DEVELOPMENT AND
SUSTAINING HUMAN POPULATIONS IN AMAZONIA: Part I: Land Use

Objective

Assess the prospects of land use choices in Amazonia.

Course description

The first lecture in a series of three includes controversies on human carrying capacity in Amazonia, ecological-economic zoning (now underway), and prospects for sustainable forest management. Divergent views on Amazonia's potential for different forms of development imply radically different policy choices. However, fundamental errors can be identified in the assumptions behind a number of existing estimates of land use potential. Erroneous visions of potential can be dangerous in inducing unwise development initiatives and in allowing authorities to avoid facing problems that they believe can be solved by tapping a mythical Amazonian conucopia.

DEFORESTATION, DEVELOPMENT AND
SUSTAINING HUMAN POPULATIONS IN AMAZONIA: Part II: Megaprojects

Objectives

Draw lessons for development planning from the experience
Amazonian megaprojects.

Course description

The second lecture in the series examines large development projects such as hydroelectric dams (including Balbina and Tucuruí), highways (such as the BR-364 in Rondônia) and mines (such as Carajás). These projects often defy rationality in financial terms, and are even less attractive if social and environmental concerns are considered. They are important both for their influence on vast areas in Amazonia and for the lessons they provide for attempts to guide future development initiatives into less destructive activities. The impacts of the projects must be understood, as well the process by which the projects come to be despite environmental regulations designed to maintain impacts within acceptable limits.

DEFORESTATION, DEVELOPMENT AND
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Services

Objective

Understand the impacts of deforestation (and conversely the value of avoiding these impacts), and the potential and challenges of translating the forest's environmental services into a basis for sustainable development in Amazonia.

Course description

The third lecture in the series evaluates three classes of environmental services of Amazonian forests: maintaining biodiversity, avoiding global warming and maintaining the water cycle. These services potentially have value far greater than the sale of traditional commodities from the region. Converting environmental services into monetary flows that can support a population of forest guardians requires crossing a series of hurdles. Reliable quantification of the magnitude of the service being offered is a first necessity. How to convert the environmental services of the forest into an income stream, and how to convert this stream into a foundation for sustainable development in rural Amazonia is a great challenge. Effort should be focused on tapping environmental services as a long-term strategy for maintaining both the forest and the population. In addition to progressing toward long-term goals, immediate measures are needed to support the population and to avoid further loss of forest.