

## A New Global Unit Could Boost Two Kinds of Green

A report issued Apr. 9 by the United Nations Development Program proposes establishing a new global institution that would help the environment while growing the global economy.

The author of the report, Graciela Chichilnisky, director of the Program on Information and Resources and UNESCO Professor of Mathematics and Economics at Columbia, proposes an International Bank for Environmental Settlements (IBES), which would be fundamentally different from a standard financial market, such as a stock exchange.

"For the first time in history," Chichilnisky said, "human activity has reached levels at which it can alter the atmosphere of the planet and change irreversibly the complex web of species that constitutes life on Earth.

"Humans have the ability to destroy in a relatively short period of time the massive infrastructure that supports the survival of the human species."

Chichilnisky's report is an

attempt to create an institution that would redress environmental imbalances of the past.

The proposed IBES would have a much larger role than a stock market because where stock markets trade private stock, the IBES would trade public goods, such as rights to use the atmosphere, and securities based on watershed services, the Columbia economist said.

The new institution would encourage development of innovative financial instruments to obtain market value from environmental resources without destroying them.

In the report, Chichilnisky maintains that the World Bank, the International Monetary Fund and GATT all fall short of what a proposed IBES would do to help redress environmental imbalances of the past 50 years.

"The international bank proposed by Chichilnisky is both innovative and timely," said Inge Kaul, director of the Office of Development Studies.

"It is an ingenious way of addressing a very complex

issue."

The report points out that our industrial society is in the process of transforming itself into a knowledge society in which humans can achieve a new form of economic organization where the most important input of production is no longer machines, but human knowledge. "Instead of burning fossil fuels to power machines, we increasingly will be using information to power knowledge," Chichilnisky said.

She points out that information is a much cleaner fuel than coal or petroleum — one that puts humans rather than machines at the center of economic progress. Thus, Chichilnisky predicts that economic progress will be knowledge intensive rather than resource intensive.

Chichilnisky uses the following example: When transportation networks are replaced by telecommunication networks, communication takes place more efficiently and effectively without the use of fossil fuels.

She also points out that the telecommunications industry in North America already employs more people than the automobile and auto parts industries together.

The report deals most extensively with the emission of greenhouse gases, mostly derived from the burning of fossil fuels, such as coal and petroleum, to generate energy.

Chichilnisky said, however, that the same principles could be applied to all environmental assets, including biodiversity, soil and forests.

The Program on Information and Resources is a unit of the Columbia Earth Institute, a division of Columbia focused on studying global issues that transcend traditional academic and research boundaries.

Chichilnisky and other researchers at the Earth Institute are currently at work to determine the value of biological capital.

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