

Harvard Center for International Development Researchers Call for Changes to Biofuels Incentives

Report Highlights Potential to Create Sustainable Biofuel Industry in the Developing World

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Biofuels have the potential to promote economic development, climate protection and other environmental goals, energy security, and returns to private investors. If not implemented with care, however, biofuel production can put upward pressure on food prices, increase greenhouse gas (GHG) emissions, exacerbate degradation of land, forests, water sources, and ecosystems, and jeopardize the livelihood security of individuals immediately dependent on the natural resource base. Guiding biofuel development to realize its multiple potential benefits while guarding against its multiple risks requires the application of a similarly diverse set of tailored policy interventions, together with integrated efforts to assure that those interventions work synergistically rather than at cross-purposes.

Despite pressure from biofuel critics, governments should avoid simplistic and precipitous changes in course such as rollback or moratoria on existing biofuels mandates or incentives. Instead, the report urges governments to initiate an orderly, innovation-enhancing transition towards incentives targeted on multi-dimensional goals for biofuels development. These goals should include poverty alleviation, reducing net greenhouse gas emissions, increasing use of non-food feedstocks, attaining sustainable biofuel production targets and conserving biodiversity. The report stems from a two-day workshop in May 2008 hosted by Harvard Kennedy School, in cooperation with the Ministry for the Environment, Land and Sea Protection of Italy and Venice International University. The workshop convened 25 of the world's top experts on biofuels, economic development and ecology. The purpose of the two-day session was to explore the actions needed to foster the sustainable development of biofuels investments while simultaneously mitigating the impacts on food prices and the environment.

The report, co-authored by Henry Lee, William Clark and Charan Devereaux was released by the Sustainability Science Program of Harvard's Center for International Development and the Belfer Center for Science and International Affairs.

In the last six months the focus of the biofuel debate in Europe and the United States has changed from emphasizing the potential contribution of biofuels to increase energy security and reduce greenhouse gas emissions to concern about the impact on food prices, possible increase in greenhouse gas emissions and the loss of forests and biodiversity.

If the United States and Europe want to help the world to realize the potential of a sustainable biofuel industry, they must work to establish an international market to couple supply and demand, and the incentives for investment and innovation at the largest possible scale. Biofuel

production should be centered in those regions where feedstocks can be grown most efficiently and where undesirable impacts are the smallest.

The report further warns that the potential benefits of an international market could be outweighed by the risks of damage to food and environmental systems unless adequate protective measures are simultaneously introduced. These protective measures will likely include the explicit recognition that sustainable production of biofuels cannot be expanded indefinitely. There are intrinsic limits on the productive capacity of ecosystems, constraining yields per unit of available area and the amount of area that can be dedicated to sustainable biofuels production.

The report outlines both the benefits and costs to increased biofuel use and provides a number of suggestions for governments in areas such as infrastructure development, agriculture research and development, certification protocols and standards and land use governance.

[Download the full report.](#)

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