Harvesting Harm: Agrofuels as a False Solution to **Climate Change and Poverty** Policy Brief on the Inter-American Development Bank Agrofuels Strategy Friends of the Earth U.S. Friends of the Earth Brazil Friends of the Earth Haiti April 2008

Executive Summary

Agrofuels have been proposed as a solution to global climate change and a potential development opportunity for Latin America and the Caribbean. The Inter-American Development Bank (IDB) is now actively pursuing agrofuels as a clean energy and development strategy. But recent research shows that agrofuels are not a climate solution, and the additional negative impacts of large-scale agrofuels production on land use, ecosystems, and environmental health are substantial. Further, any potential development benefits to the rural poor are lost when agrofuels are promoted as large scale, monoculture plantations and the fuel is directed for export.

Due in large part to government mandates for agrofuels in both the United States and Europe, the agrofuels industry has grown phenomenally in recent years. After twentyfive years of near absentia, the Inter-American Development Bank (IDB) has fervently resumed lending within the field. To date, the IDB has already approved US\$45 million in loans and technical cooperation funds, with close to US\$3 billion in private sector loan projects currently under preparation. The largest investments are supporting exportoriented infrastructure and ethanol facilities, which do nothing to support local livelihoods or sustain rural environments.

Agrofuels are not an acceptable clean energy or development alternative. Instead of addressing existing social and environmental inequities, agrofuels present new problems that exacerbate these inequities, while feeding the unsustainable hunger for more fuel in the North. Policies aimed at addressing climate change should address the problem effectively at the source, including strategies for transforming patterns of over consumption and production.

Development policies should focus on improving local economies rather than providing assistance for corporate consolidation and large-scale export led agribusiness. The same goes for sustainable energy and climate policies: decentralized and integrated energy and food production that feed local economies can effectively shorten distances and cut greenhouse gas emissions.

The Inter-American Development Bank should:

- Shift from the current trend of funding export-oriented, large-scale, private-sector projects to funding small-scale, local, closed system projects aimed at rural development and poverty alleviation and that can be integrated to food production.
- Stop financing agrofuel projects that do not demonstrate significant greenhouse gas emissions reductions over fossil fuels measured on a full life cycle basis, including direct and indirect land use change and the impacts of associated infrastructure for distribution and international trade.
- Use Sustainable Energy and Climate Change Initiative (SECCI) funds only for truly clean, renewable energy, such as wind, solar, and geothermal electricity production and end use energy efficiency. The funds should not go to agrofuels or carbon finance, and any adaptation projects funded through the SECCI should be provided as grants, not loans.

Exploding Expectations for Agrofuels

Government and industry have championed agrofuels as a viable solution to the climate crisis, while many in the development community have touted agrofuels as an opportunity for rural development. Additionally, agrofuels are seen as a replacement fuel to reduce reliance on petroleum and as a potential business opportunity. All these factors have contributed to the recent agrofuels boom.

The agrofuels industry has grown phenomenally in recent years, due in large part to government mandates for agrofuels in both the United States and Europe. In December 2007, the United States Congress passed, and President Bush signed into law, a mandatory Renewable Fuel Standard (RFS), requiring fuel providers to use at least thirtysix billion gallons of agrofuel by 2022, a nearly five-fold increase over-then current levels. This massive target established the United States as one of the single largest markets for agrofuels globally. Previously, in the 2007 State of the Union address, the Bush administration stated its intention to increase agrofuels production to similar levels by 2017.

Over the past five years, global production of agrofuels has more than doubled to in excess of 10 billion gallons. The United States has significantly ramped up domestic production to 5 billion gallons of ethanol in 2006, with production expected to top 10 billion gallons by 2009. Despite a 54 cent per gallon tariff, the United States also continues to import large quantities of ethanol, the vast majority of which comes either directly from Brazil or through Caribbean countries.

Agrofuels: A False Solution

Production of agrofuels from crops grown on large-scale monoculture plantations is not a solution for climate change or poverty alleviation. The direct or indirect conversion of biodiverse and carbon-rich land to large-scale agrofuels production poses a substantial new threat to the environment and in many cases actually releases more greenhouse gas emissions than fossil fuels. Moreover, funding large, export-oriented private sector ventures over small- and medium-scale enterprises aimed at rural community development will not alleviate poverty, as it brings rural displacement, unemployment of rural workers and small farmers and ultimately urban poverty.

Although previous studies suggested that moving from fossil fuels to agrofuels would decrease greenhouse gas emissions, new studies indicate that it is nearly impossible for crop-based agrofuels to result in net negative emissions and that they may in fact increase emissions significantly due to changes in land use. 1 Already, there is significant, direct greenhouse gas pollution resulting from the conversion of high carbon stock land for agrofuels production.

Increasing production of agrofuels also threatens biodiversity and imperils a great number of endemic species. In Brazil, increased acreage for soybean biodiesel and sugarcane ethanol is devastating the Cerrado, Brazil's biodiverse savanna. Soy production also jeopardizes the Brazilian Amazon, where as many as 300 tree species can be found in a single hectare and which is home to 10 percent of the world's mammals and 15 percent of the world's known land-based plant species. Water and soil quality are also threatened by expanded production of agrofuels, particularly in monoculture plantations. Soil erosion has important consequences for coastal hydrology, and nutrient runoff from excessive chemical application in sugar cultivation has also led to nutrient loading and eutrophication of freshwater and marine systems.

¹ Tim Searchinger, et al. "Use of U.S. Croplands for Biofuels Increases Greenhouse Gases Through Emissions from land-Use Change." Science 29 February 2008: Vol. 319. no. 5867, pp. 1238 - 1240; Alijosja Hooijer, Marcel Silvius, Henk Wosten and Susan Page. "Peat-CO2, Assessment of CO2 emissions from drained peatlands in SE Asia." Delft Hydraulics report Q3943, Wetlands International.

For the world's food processing companies, like ADM, Bunge and Cargill, biofuels represent an opportunity for major expansion and increased profits. Big biotech, including Syngenta, Monsanto and others, are also heavily investing in genetically engineered enzymes, crops and trees that will facilitate the transition from first to second generation biofuels. Petroleum companies' investments in biofuels allows for market expansion but does not, importantly, threaten their position as the dominant provider of transportation fuel. Not only do these large corporations see opportunities for market expansion, often in the more efficient growing regions of the Global South, they are also teaming up across sectors.

While agrofuels are said to diversify regional agricultural profiles and attract foreign private investment, the cumulative impacts of the agribusiness sector throughout Latin America and the Caribbean have caused significant harm to rural livelihoods. The IDB's promotion strategy, which favors large, export-oriented enterprises over production that stimulates local economies, will not alleviate poverty or facilitate rural development.

The Inter-American Development Bank's Agrofuels Strategy

After twenty-five years of near absentia, the Inter-American Development Bank (IDB) has fervently resumed lending within the agrofuels sector. Since 2005, the IDB has approved US\$45 million in loans and technical cooperation funds, with close to US\$3 billion in private sector loan projects currently under preparation. In an April 2007 press release, IDB President Luis Alberto Moreno called biofuels a "transformative opportunity" that could further the IDB's core mission "to bring economic opportunity and a better quality of life to the region's low-income majority." Despite repeated calls from civil society, scientists and government officials for temperance in the agrofuels sector, current project proposals make clear that the IDB is willing to ignore its own cautions against "unrealistic expectations regarding biofuels" and push Latin American and Caribbean countries to produce agrofuels to feed the voracious appetite of the Northern transportation sector.

In 2006, President Moreno co-founded the Inter-American Ethanol Commission (IEC) - along with former Florida Governor Jeb Bush and Roberto Rodrigues, formerly of the Brazilian Agriculture Ministry and currently President of the Superior Council of Agribusiness of the Sao Paulo State Federation of Industries - to disseminate information about ethanol, facilitate private investment in agrofuels and promote the creation of a hemispheric market in agrofuels. The IDB's lending strategy appears designed to build on the strategy of the Inter-American Ethanol Commission to promote regional trade in the agrofuel sector and to create a new international energy commodity market.

In 2007, the IDB released "A Blueprint for Green Energy in the Americas: A Strategic Analysis of Opportunities for Brazil and the Hemisphere," detailing its exportoriented investment strategy for the region. The broad investment framework outlined in the report would first assist countries in developing a domestic industry to meet blend quotas, initiate supportive policy, improve infrastructure, and introduce technologies such as flex-fuel engines - all culminating in substantial export capacity. Thus far, the bulk of the IDB's agrofuels financing, particularly in Brazil, centers around trade and logistics for export, targeting large, private sector agrofuels investments. Agrofuels are promoted as a means to diversify regional agricultural profiles and attract foreign private investment. Unfortunately, corporate consolidation in many regions has instead led to reduced job diversity, threatening local rural development.

² Inter-American Development Bank "IDB Targets \$3 billion in Private Sector Biofuels Projects." *Press* Release, April, 2, 2007.

³ Inter-American Development Bank "IDB Targets \$3 billion in Private Sector Biofuels Projects." *Press* Release, April, 2, 2007

⁴ Garten Rothkopf . A Blueprint for Green Energy in the Americas: Strategic Analysis of Opportunities for Brazil and the Hemisphere Prepared for the InterAmerican Development Bank. April 2007.

The IDB's Sustainable Energy and Climate Change Initiative (SECCI) was originally intented to invest in assistance for renewable energy, energy efficiency, climate change adaptation and development of carbon markets. However, it is now being used for agrofuel blueprints to promote the expansion of ethanol production for export. While the IDB's discourse emphasizes the importance of addressing climate change and poverty alleviation, the actual impact of the IDB's agrofuels strategy seemingly runs counter to the development of renewable and more sustainable energy.

IDB agrofuel policies, along with the InterAmerican Ethanol Commission, form the building blocks of a hemispheric partnership on ethanol, promoting the expansion of export led monocultures and associated infrastructure that are themselves part of the climate change problem. As countries in the North, including the United States, set high volumetric mandates for agrofuels under false claims of their environmental benefit, the production of agrofuels is devastating people and the environment, particularly in the South. Moreover, the IDB agrofuels strategy does not contribute to a shift in domestic policies towards a more sustainable, decentralized and renewable energy model that addresses consumption patterns rather than energy sources alone.

Brazil: Supporting Corporate Consolidation and Export-Oriented Agrofuels

With the world's most evolved ethanol industry, Brazil receives an overwhelming majority of IDB funding for agrofuels. IDB lending in the agrofuel sector is designed to promote export capacity to guarantee supply for U.S. and international markets' long term demands. While Brazilian ethanol production is growing at 10 percent a year, exports are growing at up to 50 percent a year. Already, ethanol exports are 20 percent of total production. In 2006, the United States directly imported 1.7 billion liters, or 50 percent of Brazilian ethanol exports.

IDB loans go to regions where land ownership is already highly concentrated. Investments are being made in large-scale sugar cane monoculture plantations and mills in regions with extremely poor records of compliance with local labor and environmental laws. The expansion of export-oriented agribusiness in the sugar cane regions in south central Brazil has converted vital ecosystems to plantations, devastating what were once diversified rural economies, displacing small farmers and degrading local food security.

Loans for Trade and Export from Brazil: Pushing Ethanol Out

The IDB is promoting the infrastructure required for large-scale, export-oriented trade in agrofuels, particularly in Brazil. One such project is the proposed US\$200 million structured and corporate finance (SCF) for Embraport of the Coimex Group in Santos Port in São Paulo, Brazil.⁵ The project supports the development, construction and operation of a fully-private greenfield container and liquid bulk (primarily ethanol) port terminal located in the largest private port terminal in Brazil, "to enhance Brazil's exports of ethanol." The project rationale also cites environmental concerns as a reason for promoting the export of ethanol, but the climate benefits of trade in ethanol are questionable and other negative environmental impacts of expansion of sugar cane ethanol production would be substantial.

⁵ InterAmerican Development Bank. "Embraport Port Project BR-L1159, Project Abstract." November 2007.

The IDB also provided Banco Indusval S.A. with guarantees of financing of US\$1 million for ethanol export projects from Brazil to England through the Trade Finance Facilitation Program (TFFP). The Trade Finance Facilitation Program was created to expand financing options for Latin American and Caribbean companies in international trade ventures. To date, the IDB has issued guarantees totalling US\$ 245million. The Banco Indusval S.A. guarantee will open the way for greater financing of agrofuel projects within this trade-focused financing instrument.

The IDB may also provide partial financing to Petrobras, the national energy company, to construct an ethanol pipeline with capacity to transport 4 billion liters of ethanol, as a key strategy to expand Brazilian ethanol export potential. Petrobras expects to invest US\$775 million. The Japan Bank for International Cooperation (JBIC) is another potential lender. The pipeline will run from the center-west state of Goias to Sao Paulo, Brazil's top sugarcane-producing state. A second pipeline will likely go from the centerwest to Paranagua Port in Parana state in the south.

Sugar Cane Ethanol Mills in Brazil: Usurping Land and Traditional Economies

The IDB is preparing financing for a number of sugar cane mills in Brazil. Two recently financed mills, Campina Verde and Ituiutaba Bioenergy of Companhia Nacional do Açucar e Álcool (CNAA)/US Holding Global Foods, ⁷ are located in Minas Gerais, where 31 mills are already installed and another 17 are planned. Large-scale monoculture sugar cane plantations have expanded to supply these mills, displacing traditional cattle raising for milk and meat production. Similarly, in the southern Goiás state (where the CNAA Itumbiara Bioenergy project is located), like in other neighboring states of São Paulo, the expansion of sugar cane plantations is causing a dynamic process of land conversion, raising land prices and reducing the diversity of rural economic activities.

With a processing capacity of 2.5 million tons a year, these industrial plant projects rely on 30,000 hectares of plantations each to be supplied with sugarcane, even with the best available processing technology. Though these mills have been granted environmental permits for industrial processes, they have not yet received permits for the development of monoculture plantations, which pose the most serious social and environmental concerns. The Campina Verde and Ituiutaba Bionergia projects are still seeking environmental permits to establish plantations in the municipalities of Itapagipe and Gurinhatã.

In the same Minas Gerais triangle region, plantations to supply ethanol facilities already dominate large stretches of land in the municipalities of Uberaba, Delta, Conceição das Alagoas, Frutal, Itapagipe, Iturama, Limeira do Oeste, Alexandrita and União de Minas. In this region, testimonies from local communities speak to some of the key problems with sugarcane monoculture plantations, including the displacement of family-based agriculture and resulting unemployment throughout the milk production chain, widespread use of pesticides, and the flow of migrant workers:8

We're getting squeezed out. There are some people who think differently, they have a connection with the land, and so they don't lease to sugar cane growers, but others can't take it and end up giving in. I'm being surrounded by sugar cane. (Interview with a small-scale farmer, Uberaba, Minas Gerais, 26/11/2006)

⁶ Inter-American Development Bank "IDB issues guarantee for Banco Indusval S.A. in first biofuel transaction under its Trade Finance Facilitation Program." Press Release, November 7, 2007. InterAmerican Development Bank. "Campina Verde Bioenergy Project BR-L1108, Project Abstract" October 2007; InterAmerican Development Bank. "Ituiutaba Bioenergy Project BR-L1107, Project Abstract." October 2007.

⁸ Wendell Ficher Teixeira Assis, Marcos Cristiano Zucarelli & Lúcia Schild Ortiz. *Depolluting Doubts:* Territorial Impacts of the Expansion of Energy Monocultures in Brazil. February, 2007.

When the people from the plant use poison to kill the growth that comes up in the cane crop, it spreads and kills all our pasture, when we didn't have much to begin with. We lose a lot come milking time. Then there's the insects that come from the plantations and attack our vegetable plots and fruit trees. Before, we didn't use poison, but now if we don't attack with force, no plants grow at all. (Interview with a small-scale farmer, Iturama, Minas Gerais, 28/11/2006)

The people from around here don't cut cane because it's really cruel work. So people come from elsewhere to do this kind of work. In fact, it's mostly migrant workers who cut cane. In the end, it's the locals who are left without jobs. (Interview with local trader, Iturama, Minas Gerais, 28/11/2006)

The people here form a chain. The milk I produce here goes to the community cooperative, creating jobs there. Then it goes to the city and creates other jobs there. That's without counting those farmers who use tractors to plough the land. and when they break down, that also creates jobs. If we lease our land to sugar cane producers and stop producing milk, everything down the chain stops, because the factory doesn't create these sorts of jobs. (Interview with a smallscale farmer in Uberaba, Mato Grosso do Sul, 26/11/2006)

Additional sugarcane to ethanol projects in the region will only add to the cumulative impacts described above and will further threaten the establishment of a more diverse and sustainable system of agriculture and local economies.

Moema Debt Restructuring: Underestimating Environmental Impacts

One of the largest IDB agrofuel projects in Brazil is a debt restructuring operation for Moema, the nation's seventh largest sugarcane processor, completed in October 2007. The IDB approved a US\$120 million private sector loan to Usina Moema Acúcar e Alcohol Ltda., a major sugar, ethanol and bio-energy producer based in the state of São Paulo, in July 2007. However, the environmental screening for the Moema project failed to address key environmental concerns with the project.

Moema has experienced rapid growth, quadrupling net income from April 2004 to November 2006. Moema processes 4.8 million tons of sugarcane annually, yielding 320,000 tons of sugar and 200 million liters of ethanol. The total plantation area covers approximately 80,000 hectares. Four new mills are being built, all expected to go online between 2007 and 2010. Two of the plants, Frutal and Guariroba, have a combined crushing capacity of 4.5 million tons of sugar cane, and a third, Ouroeste, has a crushing capacity of 2 million tons. The debt restructuring will potentially allow a near tripling of output by 2010.

According to the IDB's Environment and Safeguards Compliance Policy, prescreening is required to determine how a project will be classified according to its environmental and social impact (A, B, or C). Negative effects that are "direct, indirect, regional or cumulative in nature" will be assessed. 9 Despite its magnitude, the Moema project is considered Category C under IDB environmental guidelines, meaning the IDB believes negligible environmental impacts will occur. Among environmental effects cited are changes to natural drainages, increased erosion, increased airborne particulate matter, the disruption of "day-to-day life of the local population," and potential hazards inherent in mill construction, such as worker injuries. 10 Concerns about pesticide and fertilizer use associated with expanding production were also cited. Given the substantial scale of the project and additional infrastructure necessary for expansion, the Moema project should have been classified at least as Category B.

⁹ InterAmerican Development Bank. "Environment and Safeguards Compliance Policy," Section B.3., March 2006

 $^{^{10}}$ InterAmerican Development Bank. "Moema Debt Restructuring BR-L1113, Environmental and Social Management Report." May 2007.

The debt restructuring allows Moema to vastly expand operations, meaning the scale of the project is larger than the project description suggests. While the project itself does not infringe on previously untouched ecosystems, future encroachment on these lands is likely and was not accounted for in the project's assessment. The IDB itself also admits in its impact statements that growth in managerial and leadership capacity cannot not yet match Moema's rapid expansion. The firm lacks a centralized environmental unit. No uniform protocol exists to assure guidelines are met. Multiple personnel are responsible for monitoring Moema's environmental impacts; however, each reports to a different supervisor. Remaining compliance issues are deferred to the law department and outside consultants. 11 The infrastructure to accommodate the expansion must be in place at the outset to avoid negative environmental impacts from the project.

Environmental screening of the Moema project and others like it must take into account the environmental impacts both of the project itself and the potential expansion of agrofuel production that the project enables. An honest assessment of such agrofuels projects would show much more substantial environmental impacts than those suggested by their classification under the Bank's environmental policy screening procedures.

Central America and the Caribbean: Promoting a Flawed Model for Export to the **United States**

Central American and Caribbean countries receive special attention from the IDB for agrofuels development because they enjoy duty-free trade access to U.S. markets. For instance, several countries - including El Salvador, Jamaica, Costa Rica, and Trinidad and Tobago - have reprocessed large quantities of Brazilian ethanol for export to the United States under preferential trade access agreements like the Caribbean Basin Economic Recovery Act and the Dominican Republic - Central American Free Trade Agreement (DR-CAFTA).

According to the IDB's "Blueprint for Green Energy," Costa Rica, El Salvador, and Guatemala are "considered the best equipped for expansion in biofuels production," while Honduras, the Dominican Republic, Nicaragua and Panama exhibit "potential." Haiti, where the UN prescribed agrofuels as a developmental booster, is also considered to show promise.

The IDB's Latin American Capital Finance (LACFIN) Regional Sugar and Biofuels Facility Program¹³ will provide loans to enhance export capacity for the countries in the region, with the initial focus on Mexico, Colombia, Brazil, Dominican Republic and Panama. The total program size is expected to be US\$500 million and targets private sector involvement. This funding structure is designed to reproduce the Brazilian model of export-oriented monoculture plantations. This model risks reproducing the direct and deleterious impact on family farming and local food security that has already occurred in Brazil.

El Salvador is another country targeted by the IDB for agrofuels expansion. El Salvador's agrofuels industry currently revolves around dehydrating hydrous ethanol from Brazil. Multinational corporations have already moved to take advantage of the U.S. market. For example, Cargill, Brazilian juggernaut Crystalsev and other Salvadorian entities jointly funded a US\$8 million dehydration plant in 2006.

¹¹ InterAmerican Development Bank. "Moema Debt Restructuring BR-L1113, Environmental and Social Management Report." Sec. 5.11., May 2007.

Garten Rothkopf. A Blueprint for Green Energy in the Americas: Strategic Analysis of Opportunities for Brazil and the Hemisphere Prepared for the InterAmerican Development Bank. April 2007.

InterAmerican Development Bank. "LACFIN Regional Sugar & Biofuels Facility RG-L1019, Project Abstract." February 2008.

In 2007, the IDB approved a sugarcane ethanol plant pre-feasibility study in El Salvador. The country is viewed positively due to its place as the Central American leader in sugarcane yields and its favorable trade status with the United States under CAFTA. As ethanol export quotas for El Salvador to the United States are expected to increase, so is the earning potential.

But, as in Brazil, the money is not particularly needed by the ethanol industry, and the potential negative impacts of promoting expansion could be substantial. The Salvadorian sugar industry, as in most countries, is highly concentrated. There is no guarantee that its expansion will actually increase jobs. Additionally, the greenhouse gas emissions of expanded trade and production of ethanol have not been assessed.

Furthermore, the potential impacts of expanding monoculture plantations in Central American and Caribbean countries must be included in the assessments of the potential of agrofuels. In the Caribbean, land is very limited, and agrofuels production could take away from crop land. Policies promoting expansion of crop production for agrofuels could quickly result in food insecurity. For example, in Haiti, national crop production represents approximately 48 percent of available food, and investments in agrofuels risk increasing reliance on imported food products. Investments in Central America and the Caribbean must focus on the social, cultural, environmental and economic interests of local people rather than on funding large corporations for the export of agrofuels.

Colombia: Exacerbating Violent Land Grabs

The IDB has approved US\$2,436 million in technical cooperation loans (with US\$1 million in country counterpart financing) to assist the government of Colombia in developing a strategic plan for agrofuels development. Regionally, Colombia has the most developed agrofuel sector outside of Brazil. According to the Colombia palm workers union, Fedepalma, Colombia became the largest palm oil producer in the Americas and the fourth worldwide, after Indonesia, Malaysia, and Nigeria, in 2001. Palm oil agroindustrial projects continue to be a priority for the current government. They are being pushed primarily in regions such as the Colombian Pacific, the eastern plains, and the Caribbean coast, where the soil and climate conditions are optimal for the crop. The goal is to reach a million hectares within the next few years.

By swapping subsistence farm culture for an agro-industrial complex. Colombia hopes to attract foreign capital and secure its place as a global biodiesel player. According to the IDB's "Blueprint for Green Energy," the palm oil industry holds solid export potential for Colombia. However, the rapid expansion of Colombia's palm oil production is creating both environmental harm and human rights abuses. Already, the land area devoted to palm oil plantations in Colombia has nearly doubled from 145,027 hectares in 1998 to 275,317 hectares in 2005, causing large scale deforestation and an increase in global warming pollution. The entire Andean region, including Colombia, is a vast reservoir of biodiversity and cultural distinctiveness. The Chocó region (an area of 75,000 km² on the Colombian Pacific coast) contains the greatest concentration of biodiversity in the world with regard to the number of species per hectare and is at great risk from the expansion of palm oil plantations.

Despite claims from the IDB that palm oil development will decrease the production of illicit crops, civil society organizations have denounced these plantations as a way of diverting money to drug traffickers and as a mechanism for paramilitaries to forcefully remove populations to acquire important resource-rich areas. Reports of forced and sometimes violent displacement linked to the expansion of palm oil plantations suggest serious human rights violations and illegal land acquisition. International NGOs in Colombia have documented 113 murders in the Curvaradó and Jiguamiandó Rivers in the region of Choco at the hands of paramilitaries working with palm oil companies. These paramilitaries are then awarded these lands, which legally belong to African-Colombian communities.

In many cases, agribusiness willingly and knowingly supports such methods of land acquisition. The Uraba Union of Palm Oil Growers (Urapalma) corporation currently holds 2,723 hectares of African palm on land which the state legally awarded to the displaced Afro-Colombian communities. Palm oil plantations in Jiguamiando and Curvarado, both Pacific coast provinces, are glaring examples of this violent and illegal strategy. The Instituto Colombiano de Desarrollo Rural (National Rural Development Institute, INCODER) confirmed in a March 2005 report that more than 3,800 hectares, or 93 per cent of the land that the companies planted with palm trees, belonged to displaced Afro-Colombian communities. ¹⁴ INCODER further concluded that between 2001 and 2004 a group of private investors took advantage of forced displacement to develop a massive purchasing scheme to establish palm oil plantations.

Land tenure is of critical concern in Colombia; with nearly 3 million internally displaced peoples already, it is totally inappropriate to incentivize the further expansion of the palm oil industry. Given violent, ongoing conflict and Colombia's tremendous biodiversity, it is inappropriate for the IDB to provide further incentives for the development of the palm oil-based biodiesel sector. While the IDB does make some mention of the role small producers can play in Colombia, land tenure reform must be a primary priority for any agriculture focused lending.

Conclusion

As the above case studies of Brazil, Central America, and Colombia demonstrate, export-oriented, large-scale agrofuel production is not a development strategy that the Inter-American Development Bank should pursue. The IDB should not cave in to U.S. and European demand for agrofuels but should instead focus its lending efforts on bolstering local economies.

As shown in the case of Brazil, IDB loans promote the expansion of exportoriented agribusiness. Often, the loans go to regions where land ownership is already highly concentrated. Investments are being made in regions where large-scale sugar cane monoculture plantations and mills have demonstrated poor compliance with local labor and environmental laws. This export-oriented, corporate investment does not assist rural economies but does degrade local food security.

Agrofuels will not provide a solution to climate change. Rather, large-scale. monoculture production of agrofuels are likely to promote deforestation, which will increase greenhouse gas pollution, and threaten water and soil quality. Any IDBsupported agrofuel project must demonstrate significant greenhouse gas emissions reductions over fossil fuels measured on a full life cycle basis, including direct and indirect land use and the impacts associated with infra-structure for trade and distribution..

The IDB's Sustainable Energy and Climate Change Initiative (SECCI) and a green energy-lending program are important lending priorities. However, agrofuels should not be considered sustainable energy sources if they have substantial environmental and social impacts associated with the export led model of large sacale monocultures or do not meet strict greenhouse gas criteria.

Additionally, as shown by the Moema example, the IDB is failing to adequately implement its own recently adopted environmental safeguards policies by not realistically screening the agrofuel projects it is financing.

¹⁴ Internal Displacement Monitoring Center. *African palm plantations and forced displacement.* November 2007. Accessed April 1, 2008. http://www.internal-displacement.org/idmc/website/countries.nsf/(httpEnvelopes)/1241449BE4F4B82CC1257387003CC EE7?OpenDocument

Repeating this export-oriented monoculture agrofuels model in Central America and Colombia will not provide promised environmental or development benefits. For lending to be effective, it must support small-scale, local, closed system projects aimed at rural development and poverty alleviation. Focusing on localized operations would pay financial and environmental dividends. For example, the IDB-funded alternative fuel markets project in Tocantins, Brazil supports two small cooperatives to make fuel from sweet potatoes. With assistance from Ecologica Institute (EI), a Brazilian NGO specializing in development projects, the project is designed to provide local growers with the opportunity to earn better wages, help the impoverished region by diversifying crops, teach reforestation and sustainable farming methods, and provide policy assistance. 15 The replication of this type of project would be preferable to the replication of a flawed largescale, export-oriented model.

The Inter-American Development Bank should:

- Shift from the current trend of funding export-oriented, large-scale, private-sector projects to funding small-scale, local, closed system projects aimed at rural development and poverty alleviation and that can be integrated to food production.
- Stop financing agrofuel projects that do not demonstrate significant greenhouse gas emissions reductions over fossil fuels measured on a full life cycle basis, including direct and indirect land use change and the impacts of associated infrastructure for distribution and international trade.
- Use Sustainable Energy and Climate Change Initiative (SECCI) funds only for truly clean, renewable energy, such as wind, solar, and geothermal electricity production and end use energy efficiency. The funds should not go to agrofuels or carbon finance, and any adaptation projects funded through the SECCI should be provided as grants, not loans.
- Take a more comprehensive approach to addressing climate change and reducing greenhouse gas emissions in strategy development, including screening all projects for greenhouse gas emissions and emphasizing land use, public transportation planning and energy efficiency
- Use a more stringent approach in determining and defining the negative "direct. indirect, regional or cumulative" effects of a project as stated by the IDB's environmental policy, paying particular attention to plans for project expansion.
- Take a more a "case by case" approach to financing energy projects, recognizing that each region is unique. Extra resources must be granted to address needs not only at the national level, but also in rural and urban sub-regions.

¹⁵ InterAmerican Development Bank. "Support for Alternative Market Opportunities in Rural Areas in Tocantins BR-M1028, Donors Memorandum" July 2006.