



Brazil Deforestation Explained

Brazil's soybean and cattle farmers have shouldered much of the blame for Amazon deforestation in recent years but a controversial decision by the Californian Air Resources Board regarding Indirect Land Use Change (ILUC) could shift some of the blame to U.S. ethanol producers. In this article we try to determine the real drivers behind the destruction of the world's largest rainforest.

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SAO PAULO, BRAZIL (DTN) – Biofuels, once the poster child for environmental protection, are fast becoming the villains of Amazon destruction.

The transformation began last year when a controversial study was published in Science magazine by environmentalist Tim Searchinger. It introduced the innocuous four-letter acronym ILUC, or Indirect Land Use Change.

According to ILUC theory, corn used for ethanol production cuts into American grain exports and thus provide a bigger market for competitors such as Brazil. This in turn leads to deforestation as Brazil expands its grain production to feed larger exports.

Last month the California Air Resources Board voted to include an ILUC penalty for biofuels when scoring greenhouse-gas emissions as part of its Low Carbon Fuel Standard.

Subsequently this month the U.S. Environmental Protection Agency included ILUC provisions in its rulemaking for the second Renewable Fuel Standard (RFS2). This despite the fact there is still no universally accepted science or economic model to accurately measure ILUC.

"This is a case of politics coming ahead of regulation and regulation coming ahead of the science," said Washington-based Joel Velasco, North America representative for the Brazilian Sugarcane Industry Association Unica. "How can you agree to consider something if you don't even know how to measure it?"

By contrast the European Union decided, at the end of last year, not to include an ILUC penalty against biofuels until the concept had been studied in greater depth.

"It is extremely difficult to calculate indirect effects," said Unica's Velasco. "There are models that try, but the margin of error is great."

As well as being extremely difficult to measure, the theory behind ILUC has not been backed up by the facts. For example, U.S. corn exports have not been impacted by ethanol production and have remained between 1.5 billion and 2.5 billion bushels for the past ten years while soybean exports reached record levels last year.

In Brazil, soybean area has actually shrunk over the past five years from 58 million acres in 2004 to 53 million acres this season, while corn acres have remained unchanged.

Furthermore Amazon deforestation has fallen for the past five years, from 10,588 square miles in 2004 to 4,620 square miles last year, according to figures from Brazil's National Institute of Space Research (INPE).

"People are trying to push a domino theory where the end pieces are just not falling," said Unica's Velasco. "The theory is based on what would or could have happened rather than on the facts."

DEFORESTATION DYNAMICS

Brazil's Agriculture minister Reinhold Stephanes recently claimed that the country could easily triple its grain and beef production without having to cut down a single tree.

Speaking at the BM&FBovespa 2009-10 Agricultural Outlook seminar earlier this month Stephanes said that Brazil's grain production could be increased by transforming inefficient pasture land into crops.

The country's beef production would not suffer as Brazil's stocking rates are currently only one fifth the level in developed countries, or just one animal per hectare (2.47 acres) compared to 5 animals per hectare in other countries.

But with so much under-utilized land still available, it seems odd that Brazil is still deforesting an area the size of Connecticut each year.

"It's not about world demand for agricultural products," said John Carter a rancher from San Antonio, Texas, who moved to the northeast of Mato Grosso 13 years ago with his Brazilian wife. "This is no man's land and it's a case of grab all you can while it's still easy."

A recent study by the Imazon research group showed that only 4 percent of the Amazon, or 50 million acres, has recognized land title. Around 32 percent has already been invaded illegally, while 43 percent is protected in the form of national parks and Indian reserves.

"There is a big financial incentive to invade public land and claim possession," said Carter. "Once trees are cleared value increases 10 fold, and this is happening on a huge scale, independent of what fuel they are using in the U.S."

The Imazon study showed that 21 percent, or a further 390 million acres, of the Amazon is unprotected public areas, prime for invasion.

"Deforestation has slowed in recent years mainly due to economic reasons," said Carter, "land values have fallen and people have less cash to clear trees."

Recent environmental studies point to cattle ranching as the principal cause of Amazon deforestation, but analysts believe this is an oversimplified view of the problem.

"Cattle farming is a natural follow on from deforestation, but it is not the main driver," said Andre Nassar, director general of ICONE, a Brazilian think tank for International Trade Negotiations. "Cattle are a low capital entrance to cleared areas and are used to claim possession of the land and mark territory."

A study carried out by the Soybean Work Group (GTS) earlier this year showed that of 630 samples of deforested areas since July 2006 only 12 had gone to soybeans and 200 to cattle. The remaining 418, or 70 percent, were unused indicating that the main reason for cutting down trees was for timber and land grabbing.

"It is all about the land and very little to do with timber," said Sven Wunder, chief economist with the Center for International Forestry Research (CIFOR), based in Belem, Para state. "Timber helps build roads and provides capital to make areas accessible for later conversion to cattle or crops, but many times this happens after the person who cleared the trees has long gone."

CONCLUSION

With U.S. ethanol producers now taking the heat for Amazon destruction, they could do well to follow the direction taken by their Brazilian counterparts.

In 2006, when Greenpeace falsely accused soybean farmers of "eating up the Amazon", long after the soy boom had ended, trading companies agreed to a self-imposed moratorium, committing not to purchase beans from newly deforested areas. With soybean area in retraction it was an easy promise to keep.

"When it becomes like a witch hunt it is better to play along with the system than to try and fight it," said Carter, "otherwise you come out looking like the bad guy."

With this in mind Carter set up his own non-profit organization called Alianca da Terra, or land alliance, back in 2004 to promote environmentally responsible land management in the Amazon.

"We were surprised at how many farmers joined up," said Carter. "They wanted to do the right thing but complex laws and a lack of incentives made that very difficult."

Alianca da Terra currently has 200 members committed to better land management on more than 5 million acres. The group seeks market-based solutions and economic incentives to slow deforestation and has already received backing from Dutch farm bank Rabobank, as well as the US-based David and Lucile Packard Foundation and the Blue Moon Fund.

"Unfortunately standing forest has no monetary value," said Unica's Velasco." Until that changes, the law of economics means more trees fall."

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