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(Un)sustainable trade in the Amazon: Exploring Dutch foreign relations with Brazil

Tobias Schmitz, Both ENDS



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Introduction

In April 2008, Brazilian President Lula da Silva and the Netherlands' premier Jan Peter Balkenende signed five Memoranda of Understanding detailing areas in which the two countries intended to increase their mutual cooperation. The areas in which they are to cooperate include harbours, transport and logistics, water management and biofuels. These agreements follow a decade of powerful growth in Dutch – Brazilian economic relations and highlight the emergence of a new world economy in which emerging markets such as Brazil, Russia, India and China are changing the patterns of worlds utilisation of natural resources.

As Brazil's foreign trade expands, the country is investing in economic infrastructure such as dams, electricity, railroads and waterways to facilitate further economic growth. At the same time, such infrastructure facilitates the further penetration of sensitive ecological areas in a country which already has the world's highest rate of deforestation. The Netherlands is a major importer of Brazilian produce and an important distribution centre for Brazilian products . This raises the question what the Netherlands can do on the demand side to arrest deforestation and biodiversity loss and work towards more sustainable forms of trade. This policy note explores the emerging trade relations between the two countries, focusing on the environmental impact of these relations, with the intention of raising key issues for debate and putting forward some proposals for action.

The emergence of Brazil as an agricultural superpower

In 2008, Brazil, which ranked second in the world in terms of the total value of soy production, overtook the United States to become the largest single producer of soy in the world. Although it would not be accurate to interpret agricultural change on the basis of a single commodity, this event is nevertheless symbolic, as soy is an increasingly important commodity on the world market.

For instance, soy is an important input for animal fodder, for which there is a rapidly growing demand as a result of amongst other things the increase in demand for meat in China. Increasing welfare levels in China have changed dietary patterns, resulting in the increase in per capita consumption of meat and the resultant growth in the demand for animal fodder. China's imports currently account for some 46% of internationally traded soy by weight. On the other hand there is an exponentially increasing demand for soy oil both on the Brazilian market and on the world market as an input for biodiesel. This, too, is symbolic in that it is indicative of increasing concerns with energy security within Brazil and in the European Union that have resulted in an effort to stimulate the use of biofuels as an alternative source of energy.

Such trade flows, of course, leave behind an ecological footprint. The land area devoted to soy production in South America grew from 18 million hectares in 1996 to 38 million hectares in 2004¹. In Brazil itself, soy currently covers 21 million hectares of agricultural land, representing 45% of its cultivated area (and ten times the arable

¹ Dutch Soy Coalition (2008): Soy. Big business, big responsibility. Amsterdam: Ruparo, pg. 21.

area of the Netherands) 2 . This area has been growing rapidly in recent years- at a growth rate of close to 10% per annum - along with the growth of agricultural land devoted to other products such as sugar cane, stock keeping, and grains. Over time, there is gradual westward and northward expansion of the agricultural frontier in Brazil, which affects biodiversity in the so called Cerrado biome (wooded savannah) but which is also severely affecting the rainforest.

Cattle production in the legal Amazon, for instance, has doubled since 1994, at the expense of forested areas. In Brazil, between 60% and 70% of deforestation can be attributed to the expansion of cattle ranching. Worldwide, 14% of all deforestation is caused by cattle ranching in the Brazilian Amazon³. This sector has a strong link to the European market, as the percentage of European processed meat imports sourced from Brazil rose from 40% to 70% between 1990 and 2001. In 2006, the EU imported 1,75 million tonnes of beef from Brazil, equivalent to 81% of Brazil's total beef exports. Most of this meat is imported through Rotterdam harbour, and since 2006, Brazilian meat exporters have been considering establishing a meat distribution centre in Rotterdam. The Netherlands itself is one of the world's three largest consumers of Brazilian beef. Clearly, the Netherlands plays a key role in facilitating the ongoing expansion of this highly destructive trade.

Brazil is being challenged by the current spike in world commodity prices. While prices have been rising strongly in the last few years, Brazil's agricultural sector has not been able to respond rapidly to these developments. One of the reasons for this is the high cost of transportation, related to the lack of economic infrastructure in the country. Nevertheless, Brazil has quite recently begun to manifest itself as both an agricultural and as an agroenergy superpower. Agricultural exports from Brazil have been growing at a rate of 9.4% per annum for the last ten years, and currently the country holds the fourth place in the value of agricultural exports traded on the world market, after the European Union, the United States and Canada. For the total value of exports of sugar/ethanol, chicken, beef, coffee, tobacco and orange juice it holds the first place in the world. The value of all these exports however is dwarfed by Brazilian exports of soy, which were valued at U.S. \$ 11,386 billion in 2007. The growth of land area cultivated for grains and oilseeds is the highest in the world, having grown by some 50% since 1996. ⁴

The expansion in agricultural production however has not been matched by successes in foreign trade policy. The regional trade agreements under Mercosur have not significantly improved Brazil's agricultural trade with its neighbours, nor have bilateral trade agreements emerged that are well suited to Brazil's needs. In this context, the general lowering of trade barriers through the Doha round of trade negotiations is a key priority for Brazil, and it is one of the countries that stands to gain the most from the liberalistion of world trade. In the realm of biofuels, however, changes have taken place as the EU has lowered its import tariffs on oilseeds.

A key internal bottleneck for the further expansion of Brazil's agricultural sector is the 'unbalanced' nature of its infrastructure. The overwhelming majority of its transport infrastructure is roads network, and both railroads and waterways are relatively underdeveloped. This has had two major effects. One effect is that it has

² NGO Reporter Brazil (2008): Brazil and Biofuels: Impacts of crops on land , environment and society – soy and castor bean.

³ See Greenpeace (2009): Slaughtering the Amazon. Amsterdam: Greenpeace international.

⁴ Lael Brainard and Leonardo Martinez-Diaz (2009): Brazil as an economic superpower? Understanding Brazil's Changing role in the Global Economy. Washington: Brookings institution press, pgs. 55-80.

raised the cost of agricultural exports, as most soy transport for instance is carried out by truck. The second is that it has held back agricultural development in the centre-west region in particular. Programmes such as the Programma de Aceleracao do Crescimento plan the development of some 25.000 km of railway to offset these blockages and industrial waterways in the rivers (of the Amazon and other ecosystems).

Despite our knowledge of the inevitability of climate change, the unprecedented decline of biodiversity and the importance of the world's ecosystems for our continued survival, a project complex is being planned that would extend over million square kilometres in one of the world's most biodiverse regions and encourage the expansion of trade with the inner Amazon region. The so-called Madeira complex proposes the construction of three (possiby four) dams in western Brazil on the Madeira river, the Amazon's largest tributary which drains a catchment area representing about one quarter of the Amazon basin.

The Rio Madeira Dam Complex

The Madeira River is the Amazon River's largest tributary. It originates in the eastern Andes in Peru and Bolivia, flowing in a north eastward direction for some 600 km before crossing the border into Brazil, after which it flows through the rainforest in Brazilian territory for a further 1700 km before its confluence with the Amazon river. It has enormous biological importance for the region, contributing to some 50% of the fertile silt of the Amazon river and forming a habitat for amongst other things some 750 species of fish. Despite its importance, two hydroelectric dams are being planned on the Madeira inside Brazil and a third is planned upstream along the border between Brazil and Bolivia. Possibly, a fourth dam may be constructed inside Bolivia.

One of the main purposes of this dam complex is to enable the construction of an industrial waterway extending 4200 km inland and enabling the passage of river barges from the pacific ocean to the atlantic. As the result of a series of locks to be built in conjunction with the dams, barges will be able to bypass the dams, enabling the transportation of goods such as timber, beef and soy to ports on the eastern and western coasts. Mayor critics have been made in relation to the Environmental Impact Assessments of this megaproject. Critics have pointed out that assessments have been too positief in relation to potential impacts of dams and the waterway, which will anyways disturb the coexistence between ecosystems in this basin. A key technological aspect of the project is associated with the silt load of the Madeira river. It is not clear how the project is to ensure that silt will not build up behind the dam walls, diminishing the water retention capacity of the dams, cutting off nutrient flow downstream and interfering wth the operation of the turbines. The electricity transmission lines are to extend for some 2450 km south eastward across three provinces to connect into the grid in Sao Paulo state.

If the Madeira project continues to go ahead, therefore, it will open access to the inner Amazon, exposing it to exploitation by a wide variety of actors and facilitated by the influential trade route into Europe that is facilitated by the port of Rotterdam. Trade of goods produced and transported from the Amazon under these conditions can only be sustainable when the just safeguards are in place.

Sustainability in Dutch economic policy

Dutch economic policy currently finds itself at a crossroads. On the one hand there is a high level of Dutch public consciousness about the unsustainable nature of current production and consumption patterns. Awareness of the great risks associated with climate change for the Netherlands, for instance, is fairly widespread. This consciousness has translated itself into political demands for change, to which political parties have been mildly responsive. On the other hand, despite public projections of the Dutch economy as a centre of innovation and progress, we remain firmly chained to the fossil fuel economy of the 19th century. Similarly, economic thinking in the Netherlands still reaches back to 19th century theories of goods and services that neither consider the (non-monetary) value of the natural resources that are utilised, nor the negative utility or economic effects of the long period during which goods exist as wastes. There is, in other words, an urgent need for economic innovation and knowledge development that breaks with long held traditions.

In May 2008, the Dutch Ministers for Spatial Planning and the Environment and for Development Cooperation issued a joint letter to parliament outlining the approach of Cabinet in the field of sustainable development⁵. The policy outlined the growing risks posed by climate change, energy insecurity, declining world food stocks, declining supplies of natural resources for the economic and geopolitical position of the Netherlands. Two key pillars of this emerging strategy on sustainability are economic innovation and the quality of the environment. Aspects of their interrelatedness are the increasing use of energy and space as well as ongoing and growing contributions to climate change and biodiversity loss. Sustainable economic policy needs to address all of these issues within the context of both domestic and international economic policy. In terms of economic opportunities, Cabinet has decided that the focus of sustainable development is to be on those areas in which the country already excels. It should focus on a small number of ambitious long term goals which can function as icons of sustainability, it should support market leaders and government initiatives.

Some examples of this 'market leadership' have emerged in the interim period in the form of the marketing of carbon capture and storage, Dutch knowledge on delta and harbour management, and the application of sustainability criteria for the import of biomass. As examples of sustainable economic development, unfortunately, all three of these are highly controversial. Carbon capture and storage has not been field tested and still takes the fossil fuel economy as its starting point. Delta management and harbour management incorrectly focus resources on managing the lower section of rivers in an era in which climate change and unprecedented land use changes upstream have destabilised river systems all over the world. Lastly, the development of sustainability criteria for the import of biomass, while a positive development in itself, takes current levels of energy consumption as a given and assumes that biofuels can be a mass produced and renewable (carbon neutral) source of energy. None of these examples, therefore, can be seen to function as icons of sustainability or market leadership that make a clean break with the economic models of the past.

The de facto course of Dutch economic development, as seen in the case of the Madeira river and the expansion of Dutch trade relations with Brazil, is being made

⁵ VROM (2008): Brief aan de Tweede Kamer inzake kabinetsaanpak duurzame ontwikkeling, GM/BREM2008050615. Den Haag: VROM. Ministry of Spatial Planning an dthe Environment / Letter to Parliament on Cabinet approach to Sustainable Development.

dependent on the further penetration of highly sensitive ecological areas such as the Amazon rainforest and the Cerrado biome for the expansion of monocultures. This penetration is assisted by both the application of Dutch harbour and transport technology in Brazil and by amongst other things the continued stimulation of intensive stockkeeping in the Netherlands which is both acidifying Dutch soils and contributing to the growth of methane emissions. Brazil and the Netherlands have agreed to work together on themes such as ports and port planning, dredging of access channels and waterways, and inland shipping and waterways. They have agreed to work together to establish a world market for biofuels and biofuel related technologies. They have agreed to explore investments, including joint ventures, in the areas of bioeneergy production to strengthen technological, industrial and trade integration. Neither the Memorandum of Understanding on Ports, Maritime Transport and Logistics or that on Bioenergy Cooperation including Biofuels contain references to harmonisation of the policies with climate change commitments or biodiversity commitments. This with the exception of one oblique reference to the possibility of carbon credit trading in the context of biofuel development where bioenergy is generated.

Unfortunately, therefore, much needs yet to be done to stimulate innovative economic development in sustainable direction. Below we set out a number of policy recommendations related to this thematic area.

The role of Both ENDS

Both ENDS is a network organisation which aims, amongst other things, to facilitate 'southern' input into 'northern' debates on sustainable development. It does so in the Netherlands, at the level of the European Union and at the level of multilateral agencies from the perspective that the poor are by definition those with insufficient access to natural resources and that it is these voices that need to be hear if we are to strive adequately towards ecological sustainability and social justice.

In the field of infrastructure Both ENDS and its partners monitor the social and environmental impacts of large infrastructure projects in an effort to ensure adherence of these projects to principles of international law and to ensure representation of the voices of vulnerable communities whose livelihoods are affected by such projects. Both ENDS and its partners have formed a global alliance that monitors large scale infrastructure developments and takes action to ensure that the voice of civil society is heard with regard to developments that are taking place in its name

Recommendations

- Commence the process of reformulating Dutch foreign economic policy in terms of environmental economics, looking at the entire life cycle of products from resources to wastes rather than just the period that goods exist as products on the market;
- Stimulate green and fair trade between Brazil and the Netherlands by promoting the development of sustainable infrastructure for transport. Infrastructure should be planned in a transparent, participatory way, and constructed without affecting social and environmental structures of vulnerable ecosystems;
- Take European leadership in stimulating the growth of trade in goods and services that are efficient not just in price terms but also in terms of the

- environmental efficiency of production and level of impact as a waste;
- Support civil society organisations in Brazil in their efforts to track and trace unsustainably produced beef, soy and other key products;
- Categorise Brazilian products such as meat distributed through Dutch ports according to their carbon footprint, impact on biodiversity and impact on human rights;
- Apply and responsable sustainable production criteria for imported soy;
- Take measures to reduce the economic dependence of the Dutch farming sector on imported soy;
- Work together with civil society groups in the Netherlands and Europe to stimulate initatives on sustainable economic development.

References

NGO Reporter Brazil (2008): Brazil and Biofuels: Impacts of crops on land, environment and society – soy and castor bean;

Dutch Soy Coalition (2008): Soy. Big business, big responsibility. Amsterdam: Ruparo;

Greenpeace (2009): Slaughtering the Amazon. Amsterdam: Greenpeace International;

Lael Brainard and Leonardo Martinez-Diaz (2009): Brazil as an economic superpower? Understanding Brazil's Changing role in the Global Economy. Washington: Brookings institution press, pgs. 55-80;

Ministry of Foreign Affairs (2008): Memorandum of Understanding between the government of the kingdom of Netherlands and the government of the federative republic of Brazil on the programme for cooperation with emerging markets. The Hague: Ministry of Foreign Affairs;

Ministry of Foreign Affairs (2008): Memorandum of Understanding between the government of the kingdom of the Netherlands and the government of the federative republic of Brazil on Bioenergy cooperation including biofuels. The Hague: Ministry of Foreign Affairs;

Ministry of Foreign Affairs (2008): Memorandum of Understanding between the government of the kingdom of the Netherlands and the government of the federative republic of Brazil on the programme 'Partners for Water' for the period 2008-2009. The Hague: Ministry of Foreign Affairs;

Ministry of Foreign Affairs (2008): Memorandum of Understanding between the government of the kingdom of the Netherlands and the government of the federative republic of Brazil on cooperation in the field of Ports, Maritime Transport and Infrastructure. The Hague: Ministry of Foreign Affairs;

Silveira, Mariana. The South American Hidrovia Parana - Paraguay. Environment vs Trade? 1V) Environmental concerns. http://www.chasque.net/rmartine/hidrovia/Envxtrad.html#environment

VROM (2008): Brief aan de Tweede Kamer inzake kabinetsaanpak duurzame ontwikkeling, DGM/BREM2008050615. Den Haag: VROM.