

**JUNE 2011**

**Safeguarding the Amazon**  
**How Dutch trade and investment relations with Brazil can**  
**stimulate sustainable development in the Amazon**

This policy note synthesises the results of two studies commissioned by Both ENDS:

Verena Glass, Marcel Gomes, Antonio Biondi, Reporter Brasil (2010), Valuing the Amazon, Impacts of soy and soy export infrastructure in the Brazilian Amazon region

Brent Millikan, International Rivers, Telma Monteiro, Independent researcher (2011), Dams and Hidrovias in the Tapajos Basin of Brazilian Amazonia: Dilemmas and Challenges for Netherlands-Brazil relations

# Safeguarding the Amazon

## How Dutch trade and investment relations with Brazil can stimulate sustainable development in the Amazon

Written by Anouk Franck, Burghard Ilge and Nicholas Parrott

### Introduction



The Brazilian Amazon contains one-third of the world's tropical rain forests. With over a thousand rivers and tributaries, the Amazon is the world's largest hydrographic basin, containing 15% of all fresh water on the planet and is recognised as one of the planet's biodiversity hot spots. Despite its protected status, its value in providing ecosystem services and supporting the livelihoods of local inhabitants, the Brazilian rainforest is coming under increased pressure. Increasing worldwide demand for soy is affecting the Amazon region, with an expansion of soy production and increased planting of soy on recently deforested land. At the same time, the Brazilian government's Programme to Accelerate Growth (PAC) envisages implementing mega-infrastructure projects in the Amazon basin. Large dams, combined with industrial waterways, linked to highways, railroads and the expansion of ports, all form components of transport corridors geared towards export-oriented agricultural and extractive industries. Environmental legislation has been weakened (particularly in terms of land regularisation) and other proposals for the reduction of protected areas (in a proposal for a new forest code) are being negotiated.

The Netherlands is a key trading partner of Brazil. In 2009, it was Brazil's fourth largest export client, behind China, the US and Argentina, with grains (especially soy) being the most important product. At the same time, there are strong motivations for strengthening ties between Brazil and the Netherlands in the area of infrastructure development, particularly with regard to ports and waterways, a Dutch area of expertise.

The focus of Dutch development policy is to invest in sustainable growth as a way to promote greater self-reliance of developing economies, thereby making developing countries less dependent on development aid.<sup>1</sup> The water and food sectors, both very relevant to the problems described, are also two of the four key sectors the Dutch government has identified as key strategic sectors it will support in its development strategy.

This policy note looks at the scale of proposed waterway development projects in the Brazilian Amazon and how recent similar cases have driven huge increases in land given over to soy production, with the attendant problems of land grabbing, deforestation and loss of livelihoods. Developments in the Brazilian Amazon can be seen as a threat to a vulnerable and important ecosystem and the rights and interests of vulnerable local people who rely on its natural resources. But they can also be viewed as a challenge for the Dutch government and business sector to show the added value they can offer in terms of stimulating a viable and (environmentally and socially) sustainable development model for the Amazon region.

### **Brazil: a test-bed for sustainable development**

Brazil, a huge country (12.5 times the size of France), rich in natural resources, is one of the fastest growing 'emerging economies'. It is currently the largest economy in Latin America and the 8th largest in the world. Export growth plays an important role in its economic growth and agriculture plays a major role in this, accounting for 36% of Brazilian exports (although only 6% of Brazil's GDP). Brazil enjoyed a positive agricultural trade balance of \$55 billion in 2009.

Despite this rapid growth, the country still faces the challenges of poverty and one of the most skewed income distributions in the world. The World Bank estimates that about 50 million people in Brazil (circa 25%) live under the poverty line. These problems are particularly severe in the northern and north-western states, where poverty levels are similar to those found in poor African countries.

The country also contains one of the world's largest, most important and unique ecosystems. The Brazilian Amazon is a significant carbon sink, plays an important role in regulating climate (nationally and globally) and provides fresh water resources for the areas downstream. One fifth of the Amazon rainforest has already been destroyed by the timber industry, cattle ranching and the expansion of crops like soy.

In recent years the government has made great efforts to resolve these dilemmas and promote socially equitable and environmentally sustainable development. Deforestation rates in the Amazon have been significantly reduced, and are now at a twenty year low, and poverty levels have been reduced by an estimated 27% during Lula's 2003-11 presidency. Policies have also been introduced to regularise ownership claims on land and labour practices. Tripartite Round Tables (involving government, business and civil society) have been set up to try to regularise soy and biofuel production. The Soybean Moratorium created in 2006 (and which has since been extended to July 2011), is also an agreement signed between civil society organisations, the federal government and producers. It prohibits the

---

<sup>1</sup> Focusbrief Ontwikkelingssamenwerking, March 2011, Dutch Ministry of Foreign Affairs

planting of soybeans in deforested areas within the Amazon biome after 2006.<sup>2</sup> It may also impose sanctions on farmers guilty of planting soybeans on deforested land or using slave labour.<sup>3</sup>

Yet, at the same time, the Brazilian Amazon region plays a central role in the government's economic development policies and is a focus for PAC, intended to substantially develop the country's infrastructure. Plans are afoot to construct a series of hydro-electric dams (with navigation locks) to meet the country's growing energy demand (see text box 1) and massively increase the navigability of the Amazon (in order to reduce dependence on road transport). These projects will lead to the inundation of hundreds of thousands of hectares of land that sustains local (indigenous and quilombola<sup>4</sup>) populations and that is of ecological importance. Many of the dams will affect locations that - as recently as 2005-6 - were designated as conservation areas. These infrastructure projects are likely to lead to a substantial increase in soy production (despite the Soybean Moratorium) and other commercial agricultural and mineral exploitation of the Amazon biome.

### **Text box 1: Infrastructure Development in the Amazon Basin**

The plans for the Brazilian Amazon within PAC entail building a network of dams and industrial waterways, with the aim of generating 80% of the country's predicted increase in energy demand and opening stretches of rivers that are currently not navigable by large barges. The plans involve installing navigation locks on hydroelectric dams located along priority industrial waterways; upgrading major port facilities in strategic locations (such as Santarém at the mouth of the Tapajós) to provide access for ocean-going ships; building storage and loading facilities for agricultural and mining commodities; a series of secondary ports along the main stem and major tributaries of the Amazon and promoting shipyards and ship-building. The industrial waterways will be linked to highways and railroads, forming transport corridors geared towards export-oriented agricultural and mining commodities.

Two large dams are already under construction on the Madeira River, the Amazon's largest tributary and a highly contested project, the Belo Monte Dam on the Xingu River, which would constitute the world's third largest dam, is currently in the licensing stage. However, the most ambitious and controversial plans are for building 13 dams in the Tapajós river basin by 2019. As well as generating significant amounts of electricity, this series of dams would open up the Teles Pires-Tapajos waterway and establish a new corridor for barge traffic of export-oriented grains, mainly soybeans, from northern Mato Grosso. The waterway will also benefit and stimulate other extractive industries in Pará and Mato Grosso, including biofuels, livestock and mining.

---

<sup>2</sup> In the neighbouring Cerrado region (Mato Grosso state) 85,074.87 km<sup>2</sup> of native vegetation were destroyed between 2002 and 2008 and replaced by the production of soybean and sugarcane, cattle ranching and coal mining. In the 2008/2009 harvest tracking in Mato Grosso, soybean plantations were reported in ten properties with deforestation, representing a total area of about 1,384 hectares. In 2010 this number increased to 57 properties located within deforested areas, totaling 4.6 thousand hectares in various municipalities located either partially or totally within the Amazon biome.

<sup>3</sup> However two companies signed up to the Moratorium have made purchases from farmers who used slave labour in 2010 and in the federal court in Mato Grosso, farmer Eraí Maggi, considered Brazil's "Soybean King" was formally accused of the crime of using slave labour after 41 workers were liberated from one of his farms by the Ministry of Employment and Labour's Mobile Group against Slave Labour.

<sup>4</sup> Quilombolas are the descendants of escaped slaves

In bringing the programme forward, the government claims significant environmental benefits such as reducing pressure on the already overcrowded and dangerous highways in the region and generating CO<sub>2</sub> emission-free electricity. Moreover they claim to have plans to employ techniques used in offshore oil platforms to construct the dams without building roads, with the workers being helicoptered in and out of dam sites, and the construction areas regenerated after the dams are completed.

While it is possible to calculate (some of) the direct environmental impacts, the indirect and cumulative ones are more difficult to quantify. In direct terms, one set of seven dams planned by Eletronorte along the Tapajós and Jamanxim Rivers in Pará will flood 302,179 hectares<sup>5</sup>, 93,073 hectares of which will be located within conservation units<sup>6</sup> and a further 18,700 hectares that are designated as Mundurucu Indigenous Lands. Much of the population of this area is dependent on a wide range of natural resource based activities (fishing, Non-Timber Forest Products, etc.) and this project will clearly have a direct impact upon their livelihoods. The likely clearance and deforestation of land for agriculture and mineral extraction projects (there are valuable reserves of gold, iron ore and bauxite in the region) is likely to further magnify these impacts. While the extent of these secondary and cumulative impacts is very difficult to estimate, the case study of the recently constructed harbour in Santarem (see text box 2) illustrates how these can greatly exceed the original impact.

*Source: International Rivers (2011)*

Experience (see text box 2) shows that infrastructure projects shift the frontier of the Brazilian Amazon, opening up new areas for exploitation and leading to a wave of land grabbing and deforestation and the loss of livelihoods for local communities. This is particularly a threat in view of the recent weakening of environmental and land registration legislation<sup>7</sup>, the problems that the tripartite Round Tables are experiencing in implementing meaningful reforms (with many key players withdrawing from the platforms), the higher levels of subsidy that the government offers commercial export-oriented farmers (compared to peasant farmers who are a more interesting target group in terms of generating local employment and income and improving food security<sup>8</sup>) and the weak local governance structures, which are often dominated by powerful agro-industrial interests.

Text box 2 shows the effect that a harbour that was illegally constructed by Cargill has had on the ecology and economy of the surrounding area. It demonstrates the knock-on (secondary and cumulative) effects that can follow from infrastructure development and the weak local governance in place to control such developments.

---

<sup>5</sup> A little over twice the size of the Dutch Province of Utrecht

<sup>6</sup> Including the Amazonia and Juruena National Parks, the Altamira, Itaituba, Itaituba II and Jamanxim National Forests, the Tapajós Environmental Protected Area (APA)

<sup>7</sup> Brazilian law on land regularisation was loosened in June 2009 which granted ownership titles in the “Legal Amazon” – including on illegally occupied public land - to properties of up to 1.5 thousand hectares occupied prior to December 1st, 2004. The Legal Amazon is an area that encompasses nine Brazilian states (Acre, Amapá, Amazonas, Maranhão, Mato Grosso, Pará, Rondonia, Roraima and Tocantins), which make up the Amazon Basin. In total these states cover about 5.2 million km<sup>2</sup>, almost 61% of Brazil’s total territory.

<sup>8</sup> According to a 2010 study by Via Campesina (“Sustainable Peasant and Family Farm Agriculture can feed the world”) peasants and family farmers hold just 24.3% of farm land, though they make up 84.4% of all farms and gainfully employ three times as many people as does agribusiness.

## **Text box 2: Lessons learnt from the development of Cargill port**

Cargill, a multinational company, started to build a grain port in Santarém (Pará) in 2000. This new facility illustrates two key tendencies in the pattern of infrastructure development in the Amazon region: first of all, the lack of robust and transparent planning procedures and secondly, the ability of such developments to facilitate and generate the opening of new frontiers for commercial agricultural and mineral exploitation.

### *Fragile Governance and Authorisation Procedures*

For more than ten years the construction and operation of this port facility have been the subject of litigation and counter litigation. It was constructed over the only urban beach available for leisure use by local residents. The company used an irregular resource to obtain an illegal license from the former State Department of Science, Technology and the Environment. Federal Prosecutors immediately filed a lawsuit due to the lack of an environmental impact study (EIA-RIMA). According to prosecutors, a provisional order was issued in 2000, cancelling the license for the port and forcing the company to conduct the EIA-RIMA. Cargill have appealed against this order seven times, losing all their appeals over seven years. However under a loophole in Brazilian law they were able to continue construction and operation while these appeals were being heard. In 2009 Cargill eventually produced its first version of the EIA-RIMA, which was rejected by the State Environmental Department (SEMA) for failing to provide the information demanded by the reference (scoping) document. SEMA had stipulated that the report should include secondary and cumulative impacts to include municipalities where land use changes would occur as a result of the port being built and the road network being improved to serve the port. In March 2010, Cargill presented a second version of this document containing the required information. These findings were challenged at a public hearing and the federal prosecutors subsequently started an investigation of charges that the study contained false data. State and federal prosecutors stated that they “strongly suspect that information contained in the (impact) studies is not accurate” and that a new public hearing would be needed on the subject. This has led to a police investigation, while SEMA still have to make a final evaluation of the EIA-RIMA. Any tampering of the data would lead to a revocation of the license to operate the port in Santarém. Such a decision would be welcomed by local CSOs, who through the Amazon Defence Front – a consortium of social organisations, researchers and church groups in Santarém – are advocating the permanent closure and removal of the grain port on the grounds that “the multinational company has violated Brazilian legislation that demands an Environmental Impact Study before any construction work of that magnitude is started”.

### *Secondary and cumulative effects*

Such concerns are not merely about legal formalities. In the first two years of the port's operation, soybean production in the state of Pará increased by twenty fold from approximately 700 hectares to in excess of 15,000 hectares. By the 2009-10 season, soybean plantations in the Pará region had reached almost 87,000 hectares, an increase of more than one hundred fold since the port opened. This has had further knock-on effects, with the expansion of the commercial agricultural frontier increasing sedimentation within the Tapajós basin, in addition to other social and environmental problems. The expansion of soy production has aggravated land disputes in the region and led to increased pressure on the state not to demarcate indigenous and quilombola territories or create forest parks and reserves. At the same time, those people displaced from their land have been driven further into the forest to carve out new niches to make their livelihoods.

*Source: Reporter Brazil (2010)*

## **The links between the Brazilian and Dutch economies**

The Netherlands is a key trading partner of Brazil, and in 2009 was the world's second largest importer of Brazilian agricultural commodities (after China), with grains and soybeans being the largest group. Brazil is equally a highly significant market for the Netherlands. In 2008 it imported an estimated US\$ 1.4 billion worth of products including aviation fuel, medicines and medical equipment, chemicals and machinery.

Amazonian ports play a key role in the Brazilian – European soy trade. Between January and September 2010, more than 50% of the soybeans shipped to Europe left from three ports (Itaqui, Itacoatiara and Santarém) that serve the Amazonian region. Rotterdam is Europe's largest port of entry for Brazilian commodities, which are often destined for other EU countries. Soybeans, biofuels (especially sugarcane ethanol) and minerals all flow through the port, which is seeking to position itself as Europe's most sustainable port.

Both countries have good reasons for wanting to strengthen these ties. Brazil is seeking to overcome an excessive reliance on highway transportation and develop its inland waterways. It recognises the Netherlands' expertise and experience in developing and managing inland waterways and port facilities and wishes to emulate its success as a regional trade hub. The Dutch interest lies not only in stimulating an export market for water and infrastructure related products and services, but also in securing the import of highly demanded raw materials, such as soy and biofuels, from the Brazilian Amazon.

In April 2008 Lula, the (then) Brazilian president and Balkenende the (then) Dutch Prime Minister signed five Memoranda of Understanding delineating key sectors of cooperation between the two countries. One of these concerned waterway infrastructure. In August 2010, a jointly sponsored seminar on "Inland Navigation - Technical Cooperation between Brazil and Holland" was held in Brasilia. This was attended by a number of key ministers and civil servants from both countries. The seminar addressed a number of issues relating to public policy, technology and planning methods. The Brazilians are keen to tap into Dutch experience with transportation logistics that have contributed to its ascendance as a major commercial centre in Europe and the Dutch are keen to sell this know-how.<sup>9</sup>

## **Potential conflicts with policy commitments**

The Netherlands gives a high priority to ensuring that its international economic policies and diplomatic engagements are aligned with its environmental, social and development policies. The country is also a signatory to a range of international agreements which lock it into social and environmental commitments. While by no means comprehensive, the Dutch government's engagement with such a large and potentially disruptive infrastructure project in such a sensitive region should be policy-proofed against at least the following international agreements.

The Millennium Development Goals #7 which contains the following two targets, (1) *to integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources* and (2) *to reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss.*

---

<sup>9</sup> International Rivers (2011), pp. 33-34



The Rio Declaration on Environment and Development (1992) in which principle 4 states: *in order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it*. Principle 8 further stipulates that *"States should reduce and eliminate unsustainable patterns of production (and) consumption"*.

The United Nations Framework Convention on Climate Change (UNFCCC) under which (in Article 4.1d) the Dutch have committed to *"Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems"*

Article 7c of the Convention on Biological Diversity (CBD), which explicitly requires signatories to *"identify processes and categories of activities which have or are likely to have significant adverse impacts on the conservation and sustainable use of biological diversity, and monitor their effects through sampling and other techniques"*. Articles 8e and 10a require Contracting Parties to respectively

*"Promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas"* and *"integrate consideration of the conservation and sustainable use of biological resources into national decision-making"*.

In addition there are further questions relating to the protection of social rights. There is evidence to suggest<sup>10</sup> that in some cases soybeans are produced under conditions that amount to slave labour as defined under and prohibited by the ILO's Forced Labour Convention (No. 29) from 1930 and the United Nations International Covenant on Civil and Political Rights.

Another important criterion for consideration when engaged in infrastructure development in the Amazon region is the ILO's Indigenous and Tribal Peoples Convention (No. 169). This convention is also relevant since the planned infrastructure development will take place in an area which will affect indigenous people.

All and all this suggests that the Dutch government should be aware of the potential dangers of being directly or indirectly involved in supporting economic development in the Brazilian Amazon and should assist its business sector to do the same. This does not mean that the Amazon region should become a no-go area for Dutch engagement, but it does require a high degree of sensitivity and implies taking on additional responsibilities to ensure the prevention of harmful effects.

---

<sup>10</sup> Bhavna Sharma , Contemporary forms of slavery in Brazil, Anti-Slavery International 2006

## The role of Both ENDS

At this moment, civil society organisations in Brazil are concerned about economic development putting pressure on socially and environmentally sound development, specifically in the Amazon region. Both ENDS and its partner organisations in Brazil have therefore been following the intensification of diplomatic support for economic relations between the Netherlands and Brazil and argue that this economic engagement should be balanced by more intensive cooperation in the area of social and environmental policies and regulations.

## Policy recommendations

In view of the challenges described in this policy note, we make the following recommendations.

### **For the Dutch government:**

Since the Dutch government intends to engage with the Brazilian government and appears to be seeking changes in Brazil's laws and regulations that will be in the interest of Dutch companies who want to do business in Brazil<sup>11</sup>, they should show similar resolve in strengthening the monitoring and implementation of existing social and environmental laws and regulations in Brazil.

The Dutch government should at least match its increased "economic diplomacy" by intensified "social and environmental diplomacy" for the Brazilian Amazon.

The Dutch government should explore how it can address Brazilian capacity constraints related to the monitoring and enforcement of social and environmental protection and active civil society involvement in these processes.

### **On waterway development:**

- 1) Bilateral cooperation on waterway development should be based on innovative approaches to planning, including strategic environmental assessments that address the ***cumulative and synergistic impacts*** between waterways, hydro-projects and commodity production and the related conflicts over territorial rights and natural resources used by traditional populations. A key issue should be the articulation of waterway plans with other instruments for spatial planning (river basin management plans<sup>12</sup>, land use zoning, protected areas, etc.).
- 2) Such assessments should adopt **participatory methods** that involve local populations. Moreover, planning processes around waterways should ensure due attention to the rights of indigenous peoples, including the right to free, prior and informed consent to infrastructure projects that will impact upon their territories and livelihoods.
- 3) Bilateral initiatives related to the development of inland waterways and trade should be **fully compatible with national laws and international agreements** on critical issues such as biodiversity, climate change and human rights.

---

<sup>11</sup> <http://www.agentschapnl.nl/sites/default/files/bijlagen/FAQ%20202g@there.doc>

<sup>12</sup> The existing Netherlands-Brazil MOU on cooperation over water-management issues could provide a source of support here.

- 4) Build in thorough **options assessments** when advising and supporting infrastructure development in Brazil. Engineering activities (such as river dredging) related to waterway and associated developments, should not merely reproduce practices from other regions, but should be specifically tailored to the characteristics of Amazonian ecosystems and their populations.

**On commodity imports:**

Many Dutch companies trading in agricultural products and minerals have Corporate Social Responsibility agendas. These should cover both their domestic and overseas activities and direct and indirect impacts. Dutch companies can do much to influence the behaviour and policies of agricultural producers (especially those of soybeans), with regard to land rights, deforestation, environmental management and labour practices. Such companies should set a minimum standard of requiring all their suppliers (farmers, processors, etc.) to be in possession of (and able to provide copies of) the necessary documentation showing their compliance with Brazilian law in terms of land tenure, environmental licences and labour rights. They should also check that their suppliers comply with the instruments developed under the Soybean Moratorium, which includes verifying that soybeans do not come from properties included in IBAMA's<sup>13</sup> List of Embargoed Areas and the Ministry of Work and Employment's<sup>14</sup> "Dirty List" of Slave labour.

---

<sup>13</sup> IBAMA stands for the Brazilian Institute of Environment and Renewable Natural Resources

<sup>14</sup> Ministerio do Trabalho e Emprego (MTE)

## References

DeFries, R.S., e.a. (2010), *Nature Geoscience* 3, pp. 178 – 181, Deforestation driven by urban population growth and agricultural trade in the twenty-first century, <http://www.nature.com/ngeo/journal/v3/n3/abs/ngeo756.html>

Del Carmen Vera-Diaz, M., e.a. (2009), *Global Development and Environment Institute* May 2009 WORKING PAPER NO. 09-05. The Environmental Impacts of Soybean Expansion and Infrastructure Development in Brazil's Amazon Basin, [ase.tufts.edu/gdae/Pubs/wp/09-05TransportAmazon.pdf](http://ase.tufts.edu/gdae/Pubs/wp/09-05TransportAmazon.pdf)

The Economist, 23 September 2010, "Less smoke, less ire - Brazil, long the world's deforester-in-chief, is mending its ways - A special report on forests" [http://www.economist.com/node/17062681?story\\_id=17062681&CFID=160102867&CFTOKEN=46299254](http://www.economist.com/node/17062681?story_id=17062681&CFID=160102867&CFTOKEN=46299254)

Greenpeace (2009), *Slaughtering the Amazon*, <http://www.greenpeace.org/international/en/publications/reports/slaughtering-the-amazon/>

Kamphuis, B.M., e.a. (2011), *Dutch trade and biodiversity; Biodiversity and socio-economic impacts of Dutch trade in soya, palm oil and timber*, LEI, Rapport 2011-013, <http://www.lei.wur.nl/NL/publicaties+en+producten/LEIpublicaties/?id=1209>

Netherlands Centre for Indigenous Peoples (2010), *Impacts of the Dutch Economy on Indigenous Peoples – The import of soy from Brazil and palm oil and tropical timber from Indonesia and Malaysia*



This publication has been produced with the assistance of the European Union. The contents of this publication is the sole responsibility of Both ENDS and can in no way be taken to reflect the views of the European Union.