Inspectie Ontwikkelingssamenwerking en Beleidsevaluatie (IOB)

Evaluation of the Dutch foreign policy with respect to Latin America

Thematic study Sustainable Development

Case Study: Sustainable soy

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Abbreviations and Acronyms:

ABIOVE:	Associação Brasileira das Indústrias de Óleos Vegetais (Association of Vegetable Oil Industries)		
ANEC:	Brazilian Association of Grain Exporters		
APP:	Areas of Permanent Preservation		
APROSOJA:	Associação dos Produtores de Soja e Milho de Mato Grosso (Association of Corn and Soybean Producers of Mato Grosso)		
BuZa:	Ministerie van Buitenlandse Zaken (Ministry of Foreign Affairs)		
CAP:	Common Agricultural Policy		
CIMI:	Conselho Indigenista Missionário (Indigenous Missionary Council)		
CMO:	Common Market Organization		
CSO:	Civil society organization		
DSC:	Dutch Soy Coalition		
EC:	European Commission		
EEC:	European Economic Community		
Embrapa:	Empresa Brasileira de Pesquisa Agropecuária		
EU:	European Union		
FAO:	Food and Agriculture Organization		
FAPRI:	Food Agricultural Policy Research Agency		
FUNAI:	National Indian Foundation (Brasil)		
GMO:	Genetically modified organisms		
HCVA:	High Conservation Value areas		
ICONE:	Institute for International Trade Negotiations		
ICONE:	Institution for International Trade Negotiation		
IDH;	Initiatief Duurzame Handel (The Sustainable Trade Initiative)		
IDS:	Initiatief Duurzame Soja (Initiative for sustainable soy		
KADO:	Kaderbrief Duurzame Ontwikkeling (Framework Letter Sustainable		
	Development)		
LAC:	Latin America and the Caribbean		
LNV:	Ministerie van Landbouw, Natuur en Voedselkwaliteit (Dutch Ministry of		
	Agriculture, Nature and Food Quality)		
MFS:	Medefinancieringsstelsel (Co financing System) of the Dutch Ministry of Foreign		
	Affairs.		
NGO:	Non-governmental organization		
PNPB:	Brazilian National Biodiesel Plan (PNPB		
POLOCENTRO:	Programa de Desenvolvimento dos Cerrados (programme for agricultural development of the Cerrado)		
PRODECER:	Programa de Desenvolvimento de Cerrado (Cerrado Development)		
RED:	Renewable Energy Directive		
RNE:	Royal Netherlands Embassy		
RR:	Roundup Ready		
RTRS:	Round Table on Responsible Soy		
SMOM:	Ministry of Environment and Housing		
TFSS:	Taskforce Sustainable Soy		
UK:	United Kingdom		
USA:	United States of America		
VROM:	Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer (Ministry		
	of Housing, Spatial Planning and the Environment)		
WSSD:	World Summit for Sustainable Development		
WTO:	World Trade Organization		
WWF:	World Wildlife Fund		

List of people interviewed

In the Netherlands

Gert van der Bijl Jeroen Douglas Jan Gilhuis Freek Vossenaar Bart Vrolijk Frederik Heijink Tamara Mohr Heleen van den Homberg Jan Kees Vis

In Brazil

Fabio Trigueirinho Daniel Furlan Amaral Ricardo Ariola Silva Laura Antoniazzi Luciane Chiodi Solidaridad Solidaridad and RTRS IDH sustainable trade initiative Ministry LE&I, Dutch Embassy Argentina Dutch Embassy Brazil Ministry EL&I Both Ends, Dutch Soy Coalition IUCN Unilever

general secretary, ABIOVE economics manager, ABIOVE Aprosoja ICONE ICONE

Executive Summary

Main trade characteristics

Soy is one of the main raw materials for the global feed and food industry. Soybeans are one of the few plants that provide a complete protein and are therefore often used as a substitute for meat and dairy products. This is especially so after 2001, when due to the 'mad cow disease', the EU banned the use of animal and bone meal in livestock feed, leading to a profound change in the composition of compound feed and growing imports of vegetable alternatives to protein-rich animal meal. This gap (or opportunity) triggered a further expansion of growing soy, especially in Latin America where conditions for growing soy are very suitable. During the period 1995-2011, the world production of soybeans more than doubled to 264 million tonnes (mt). The additional supply of 139 million tonnes originated mainly in Brazil (+49.9 mt), Argentina (+37.1 mt) and the USA (+31.4 mt). The annual average growth of 7.4% in this period was mainly due to area expansion, as yield growth was hardly possible anymore (about 1% over this period). Thus, the growth in production was accompanied by a considerable increase in area cultivated with soy. The production of GM soy beans in Brazil has increased significantly and accounted for approximately 75% of its total production area of soy beans in 2010.

About 87% of the global soybean production is crushed into roughly 80% meal and 20% oil. The EU imports a relatively large amount of soy bean meal, which is used for animal feed. Currently (2010), the livestock sector in the EU remains highly dependent (80%) on soy imports from Latin America. The Netherlands accounts for over a fifth of the European soy imports (9.27 m tons), and is the largest importer of soy beans and soy bean meal within the EU. Even if the vast majority of the soy imported into the Netherlands (>75%) is exported again, this contributes to Dutch economic activity and incomes and greatly increase Dutch competitiveness. Soy imported in the Netherlands originates by 80-90% from South America (Brazil, Argentina and Paraguay). The total use of soy in the Netherlands is estimated at about 2 million tonnes (2008-2010), mainly used in the livestock industry. The expected growth rates over the next fifteen years in global consumption of soybean meal (+24%) and oil (+30%) are high but much lower than over the period 1995-2010. The increasing consumption in China will be the main driver in the coming decades.

Until 2009, the EU was number one on the global soy bean market, after which China took over. Studies suggest that by 2020 China will have taken over 70-80% of Brazil's soy exports. The proportion exported to the EU, having already declined from 64% to 30% of Brazil's soy exports over the past decade, will decline still further.

Conclusions of Dutch policy

The following conclusions can be distilled, arranged as a response to the main research questions.

1) What are the Dutch and EU policy frameworks and objectives relevant to imports of soy from the LAC region? Which concrete actions and outputs have been intended and were implemented?

- Since 2003, Dutch government policy objectives are emerging aimed at promoting sustainability in commodity value chains, reducing the contribution by the Netherlands to its international footprint and attention for non-trade issues at WTO level. These policy objectives are found within different ministries (environment, foreign affairs, agriculture). These policy objectives have been translated for the soy sector by a policy on sustainable soy since 2007.
- The policy objectives on sustainable soy include a series of broadly defined actions: support to the RTRS process, stimulating policy dialogue in LAC countries, playing a proactive role at EU and international level, enhancing a dialogue with China on the subject of sustainable soy and at WTO level removing measures that distort the trade of soy, including subsidies, tariffs and tariff escalation. No concrete targets or timelines were defined for these actions. The financial

support programme to the RTRS process does include well defined objectives for spending the allocated funds.

- Dutch LAC regional policy (or its update) does not refer to soy as a particular policy focus. Although soy is mentioned in some embassy plans, concrete policy objectives on sustainable soy have not been defined, e.g. in plans or reports of the RNE in Brazil or Argentina.
- Dutch financial support to sustainable soy (RTRS development) through public funds has been estimated at Euro 6 million over the 2004-11 period. Since 2009 the funding from the Dutch government has been largely channelled through the Schokland fund public-private partnerships and later on through the IDH initiative.
- Of the Dutch 2007 policy on sustainable soy, the first objective of supporting the RTRS process has been realised. In line with the second policy objective, the agricultural attachés in Brazil and Argentina have actively supported the implementation of the policy on sustainable soy. However, policy intentions at the EU and international level do not seem to have received any follow up. At EU level, the policy intention expressed in 2007 was to play a proactive role to enhance sustainability of soy and other agro-commodities, but no formal activities have been implemented. At WTO level, the subject of sustainable soy did not receive attention, nor has it been discussed in the context of free trade agreements with any LAC country.
- The Dutch government strategy to support the RTRS process has been in line with the policy culture to not directly intervene in production and trade issues regarding sustainability (but leave it to the sector to voluntarily develop actions), to support initiatives based on a multi-stakeholder dialogue, finance pilot projects and undertake supportive diplomatic actions.
- Several EU policy decisions and market regulatory mechanisms stimulate the use of imported soy as animal feeds. The high level of cheap soy imports can be seen as part of an EU strategy aimed at industrialized food production. NGOs would rather see that more attention is given to the use of fodder crops in the EU, as this is expected to be reduce environmental and social effects in soy producer countries.
- The decision by Dutch companies for a transition to 100% sustainable soy based on the RTRS standard by 2015 is an important milestone. It is interesting to observe that recent evaluations and progress reports from different sector ministries refer to this decision, claiming (indirectly or directly) this success as evidence that policy objectives have been met and suggesting a strong contribution and commitment by the Dutch government.
- 2) In terms of policy implementation, what has been the contribution by Dutch activities on the conditions for increased sustainability of soy production in Brazil and other LAC countries?
- 3) In terms of policy implementation, what has been the contribution by Dutch (policy and other) activities on the conditions for private sector to support the sustainable soy value chain?
- 4) What has been the progress in terms of the RTRS standard development, and what has been the contribution by the Netherlands (through different modalities)?
- With respect to Dutch influence on national legislation in Brazil relevant for sustainable soy production (Forest Code, Labour code, CSR policy), we conclude that The Netherlands has indirectly contributed to soy expansion, by its increasing demand for soy and by providing finance through financial institutions based in the Netherlands and through technical expertise (private sector).
- Although there was a Dutch embassy in Argentina, its influence on Argentine policies has been almost nil, the Argentine government being more closed to external influences. The same is true for Paraguay where there was no embassy. In both countries, several NGOs, indirectly supported by Dutch funding, may have had some influence. This is especially true in Paraguay.
- With respect to Dutch influence on RTRS development, there is no doubt that establishment of the RTRS is based on initiatives by Dutch NGOs and their partners in the LAC region, especially Brazil, which started in the 1990's. They identified frontrunners in the private sector and engaged them in the process. Once established, the RTRS moved forward as a result of the joint initiatives of its members, mainly NGOs and companies. Since 2009 there has been active support through the Schokland Fund public-private partnerships and the IDH initiative.

- The support to the RTRS process has also had important indirect effects. by raising awareness on sustainability of value chains, engendering a culture of multi-stakeholder platforms, dialogue and partnerships in Brazil. As a result, the RTRS process has stimulated the development, mainly in Brazil, of alternative sustainable soy initiatives and standards. For instance, SojaPlus has been developed by Brazilian parties who withdrew from the RTRS process. It would not have been established without the RTRS initiative.
- However, the high demands placed on the RTRS standard, especially the inclusion of a HCVA criterion, related to the predominance in the RTRS of European parties favouring these high demands, has been evaluated as a negative factor by Brazilian players, which was one of the reasons that two important players pulled out
- There is some evidence of an indirect influence on the Forest code and Labour code, of which enforcement has improved in recent years. In general, increasing scrutiny in applying forest, labour and human rights legislation can be considered as partly resulting from international pressure (governments and NGOs).
- Comparison of Brazil with Argentina and Paraguay (the two other main countries with soy imports into the EU and the Netherlands) suggests that success factors for effective support to sustainable soy include (i) the presence of a Dutch embassy with active involvement, (ii) a receptive national government and private sector stakeholders, (iii) a relatively good and effective national legislation on key sustainability issues.
- 5) How has the production and trade of soy that meets sustainability standards evolved over time? Can these changes be related to Dutch influence?
- 6) How has the incidence of unsustainable and illegal production practices of soy evolved and can any of these changes be related to Dutch influence?
- Following the shift of Dutch importers towards RTRS as the main standard for sustainable soy, the first producers were RTRS certified in 2011 and total imports in 2011 were 81,000 tonnes. For 2012, the production of RTRS-certified soy is estimated at 430,000 tonnes, of which about 300,000 tonnes is expected to be imported in the Netherlands. This is less than the set target of 500,000 tonnes. The Dutch industry target of all Dutch soy consumption RTRS certified by 2015 corresponds to 1.8 million tonnes, which is almost 3% of Brazilian production and 1% of global soy production.
- The production of the Brazilian ProTerra standard, a certification for sustainable production with a strong non-GMO position, was 4.2 million tonnes in 2011. However, it is not selected as a mainstream standard by Dutch importers, it has a 10-20% higher price and production of non-GMO soy is likely to decline. There are doubts whether it meets all the RTRS criteria. Soy produced according to the Brazilian SojaPlus initiative is not yet available on the market.
- IDH has the target of having 10-15% of EU soy import being RTRS certified by 2015 (focus on the Netherlands, Belgium, Scandinavia and the United Kingdom (UK)). This implies 4-6 million tonnes out of 40 million tonnes European total import. By 2015 the RTRS expects to be able to produce 5 million tons of RTRS certified soy.
- Argentina is number 1 in global exports of biodiesel based on soy, especially to the EU. It has 69 biodiesel plants with an installed capacity of more than 5 billion liters. In 2010, production reached 2.4 billion liters. This is stimulated by the differential tax regime. Brazilian production of biodiesel from soy oil is limited and today only sold within Brazil (2.5% of total diesel used in transport). Because of the dominance of the domestic market, Brazilian biodiesel producers are not pre-occupied with EU sustainability criteria.
- The gap analysis carried out for the soy sector in Brazil (ICONE, 2011) showed that soy producers in Brazil have great difficulty in being fully compliant with the Forest Code. The new Forest Code is expected to be better applicable. There are also indications that in Brazil law enforcement has improved in recent years.
- Deforestation rates have gone down, especially in the Amazon biome following the soy deforestation moratorium. Remaining deforestation is mainly in the Cerrado.
- The gap analysis also showed that there are still several compliance issues with labour and worker health and safety legislation. The main ones are working hours and overtime that

exceed national norms, necessary infrastructure adaptations, low rate of formalization of the health and safety program, insufficient use of personal protective equipment and awareness and lack of trainings. The trend is one of gradual improvement, especially with the larger companies involved. This is also a result of increasing adoption of CSR policies.

- In an indirect way the establishment of the RTRS standard has contributed to above trends with respect to legal compliance. Most important has been to the general level of international attention for sustainability issues.
- RTRS certification in Brazil has benefited mainly large producers, in order to certify large volumes of RTRS soy and because in Brazil only 16% of the soy production is in the hands of family producers.¹ Specific activities remain necessary in order to ensure that smallholders also benefit from RTRS certification and to avoid that equality will increase. Recent changes in Brazilian agricultural policy lay the foundation for an agricultural policy that enables disadvantaged family farms to participate in the market economy process while simultaneously safeguarding their subsistence.
- 7) What has been the relative influence of different modalities and channels, especially Dutch public policies, economic diplomacy, private sector and the CSO/NGO channel?
- With respect to different channels, this case study shows the complementary roles of civil society oganisations (NGOs) both in the north and the south, private sector actors as well as the Dutch government through its embassies, mainly by facilitating, supporting and mediating. The origin of Dutch involvement lies in the strong and historical relations between Dutch and LAC-based NGOs, and financial support to LAC-based NGOs. Joint Dutch and LAC-based NGO activities have been at the basis of developing a multi-stakeholder dialogue that evolved into the RTRS.
- The subject of sustainable soy has not received sufficient attention during Dutch economic diplomacy activities, such as trade missions to these countries.
- 8) What is the coherence between economic policy objectives and objectives of sustainable soy production, especially environmental, social and climate change criteria?
- With respect to coherence in advancing the sustainable soy agenda, there are positive results with respect to coherence between different ministries in the Netherlands.
- However, there is poor coherence and there are missed opportunities with respect to the linkages with relevant EU policies. By focusing only at the specific trade relation with the Netherlands, the positive impact on environmental and social indicators in soy producing countries will remain limited.

Main conclusions

- With respect to Dutch policy on sustainable soy, basically three policy intentions were formulated. Firstly, support was given to the RTRS process, which has been effective. We believe that, to realise this objective, the contribution by NGOs and private sector has been most significant. The Dutch role in stimulating the political dialogue in relevant LAC countries where soy is produced (the second objective) has also been positive, especially in Brazil. The third objective to play a proactive role at EU and international level has not been realized. At this level no specific activities related to sustainable soy have been carried out.
- There remains criticism on the true value of RTRS certification, not being sufficiently stringent on several criteria and not being sufficiently strongly enforced. On the other hand, some Brazilian players have the opposite opinion, stating that the RTRS is too stringent on several issues. Also, RTRS production so far remains relatively insignificant, in 2011 only 0.7% of Brazil soy production is certified and by 2015 this is expected to be almost 10%. The third reason is that China is rapidly becoming the main importer of soy from the LAC region. Thus, upscaling and outreach activities are of major importance.

¹ Solidaridad, 2012. <u>http://www.isealalliance.org/sites/default/files/Gert van Bijl presentation.pdf</u> (geraadpleegd 01/05/2013)

- In terms of impacts on social and environmental sustainability in Brazil, the indirect effects may be more important in terms of overall impacts, such as the increased awareness on sustainability of value chains, the need for improved law enforcement, the need for multi-stakeholder dialogue and sustainability initiatives. However, while in Brazil these indirect effects are important, in other countries (Argentina, Paraguay) these effects are less important, mainly because of the governance context.
- We also believe that the Netherlands has missed some important opportunities, at EU and at global level. One would have been the promotion of RTRS as the standard for certification of biofuels based on soy production from 2010 onwards. Second would have been to stimulate multi-stakeholder platforms on sustainable soy in other EU countries, based on the Dutch model. Third would be to discuss and propose alternatives for EU policies which stimulate imports of raw soy and discourage feed production in the EU countries. Small successes at EU level can have large multiplier effects.
- When considering the role of China, its market share will rise to at least 70% of Brazil soybean exports by 2020. This will involve an increase of around 5 million hectares in land planted to soy. Chinese demand for soybeans underpins a commodity market where at this moment neither certification nor price premiums to producers are sufficiently promising to minimize habitat conversion. Other strategies are necessary to green commodity markets of this type.
- In line with above comments in relation to the China-link, one may conclude that there remain major opportunities for Dutch involvement to further support the process leading towards greater positive impacts through sustainable soy. RTRS and certification is a necessary intermediary step towards 'sustained sustainability'.

1 Introduction

1.1 Background

As the largest soy importer in the European Union (EU), the Netherlands play an important role in the global soy chain. Starting in the 1990s, the Netherlands has also been a frontrunner in promoting sustainability criteria for soy. Following a multi-stakeholder initiative, the main Dutch feedstock companies decided that by 2015 only soy certified by the Round Table on Responsible Soy (RTRS) standard² will be imported and used in the Netherlands, in order to avoid negative environmental, social and economic impacts of soy production.

Soy beans are one of the few plants that provide a complete protein and are therefore often used as a substitute for meat and dairy products. About 85% of the world's soy bean yield is processed, or "crushed," annually into soy bean meal and oil. Approximately 98% of the crushed soy bean meal is further processed into animal feed. The balance is used to make soy flour and proteins. Of the oil fraction, 95% is consumed as edible oil. The rest is used for industrial products such as fatty acids, soaps and increasingly biodiesel.³ For the livestock industry in the EU, soy is by far the most important animal feed product. EU countries do not produce soy in considerable quantities. They cannot compete against the large-scale mechanized soy farming in the United States of America (USA) and, more recently, in the Latin America and Caribbean (LAC) region, especially Brazil and Argentina.⁴

Over the next decade, the Food and Agriculture Organization (FAO) expects the annual protein consumption to increase by 2% in non-OECD countries and by 1.1% in OECD countries, due to high rates of growth in meat consumption (FAO-OECD, 2011). The global consumption of soy bean oil is expected to increase by almost 30% to 54.3 million tonnes in 2025, due to demographic developments and improving purchasing power, for instance in China (FAPRI, 2011). Considering the increasing pressure on natural resources, sustainable sourcing will become an increasingly important issue for the industry.

1.2 The case study

In 2012, the Inspection and Evaluation Department of the Dutch Ministry of Foreign Affairs (BuZa) started a policy evaluation of the effects of Dutch policy in Latin America between 2004 and 2011. This evaluation contains policy studies on economic co-operation, sustainable development, economic diplomacy, and human rights. The present case study is part of the policy evaluation on sustainable development. The work included a desk study of available literature and interviews with people that have been working on promoting sustainable soy production between 2004 and 2011. The focus of this study is on soy from Brazil. There is additional information on soy from Argentina and from Paraguay, for comparison reasons. The case study has been conducted by Aidenvironment, with contributions by Mekon Ecology in the Netherlands and the Institute for International Trade Negotiations (ICONE)⁵ in Sao Paulo, Brazil.

Below, the research questions of the present case study are listed:

1) What are the Dutch and EU policy reference frameworks relevant to imports of soy from the LAC region? Which concrete actions and outputs were intended and have been implemented?

 $^{^2}$ The Round Table on Responsible Soy is a multi-stakeholder initiative that was originally launched by the WWF and the Swiss supermarket chain SWISS in 2005. Its main intention is to facilitate a global dialogue on sustainable soy production that equally takes into account environmental, social and economic aspects of the value chain.

³ <u>http://www.soyatech.com/soy_facts.htm</u>.

⁴ On soy history: <u>http://www.soyinfocenter.com/</u>HSS/production_and_trade2.php.

⁵Originally: Instituto de Estudos do Comércio e Negociações Internacionais.

- 2) In terms of policy implementation, what has been the contribution by Dutch activities on the conditions for increased sustainability of soy production in Brazil and other LAC countries?
- 3) In terms of policy implementation, what has been the contribution by Dutch (policy and other) activities on the conditions for private sector to support the sustainable soy value chain?
- 4) What has been the progress in terms of the RTRS standard development, and what has been the contribution by the Netherlands (through different modalities)?
- 5) How has the production and trade of soy that meets sustainability standards evolved over time? Can these changes be related to Dutch influence?
- 6) How has the incidence of unsustainable and illegal production practices of soy evolved and can any of these changes be related to Dutch influence?
- 7) What has been the relative influence of different modalities and channels, especially Dutch public policies, economic diplomacy, private sector and the CSO/NGO channel?
- 8) What is the coherence between economic policy objectives and objectives of sustainable soy production, especially environmental, social and climate change criteria?

The case studies generally follow a similar evaluation framework (see annex 1). For assessment of effectiveness the following main themes are relevant for this case study. Questions 2 to 6 fit within these themes as follows.

A: Enabling Politics and Policies:

- 1. Strengthening of institutions and government policies in Brazil (and other LAC countries) to enable and enhance sustainable production of soy (question 2);
- 2. Strengthening of private sector in sustainable production of soy, both in Brazil (and other LAC countries) and the Netherlands (soy importers) (questions 3 and 4);

B: Sustainable Production and Trade:

- 3. Production and trade of soy that meet sustainability standards (question 5);
- 4. Reduced incidence of unsustainable or illegal production of soy (question 6).

2 Status soy production and trade

2.1 Soy demand and consumption

As a result of increasing meat consumption worldwide, the demand for fodder, hence soy, led to the doubling of production to nearly 210 million tons over the last 20 years. Due to increasing meat consumption and use of soy for biofuels, this trend is expected to continue in the future. In the period from 1995 to 2010, global demand for soy bean oil more than doubled to around 39 million tonnes. Much of the additional consumption occurred in China (+7.7 million tonnes). After China's boycott of Argentinean soy bean oil in April 2010, Brazil became the leading supplier to this country. Brazil (+2.8 million tonnes) and Argentina (+1.9 million tonnes) also showed an impressive growth in consumption, mainly driven by the increasing demand of the domestic biodiesel industry. Due to the expected declining EU production of soy bean oil in the next fifteen years, the demand will be increasingly met by imports (+0.9 million tonnes) (MVO 2011).

The global consumption of soy bean meal increased from 88 million tonnes in 1995 to just over 169 million tonnes in 2010, mainly consumed by China (23%), the EU (19%), the USA (16%) and Brazil (8%). The additional demand was mainly generated by China (+33.3 million tonnes) and Brazil (+8.2 million tonnes) (MVO, 2011).

EU imports of soy bean oil have grown to 2.6 million tonnes in 2010. With a share of 40%, the EU was by far the main global importer of soy bean meal (23 million tonnes) in 2010 (MVO, 2011). Imports were growing until 2005, but have recently gone down as the result of a comparatively slow expansion of meat production and a rising supply of substitute protein feeds from the biofuels industry (e.g. rapeseed meal in the EU and dried distillers grains in the USA). The EU crushing of soy beans into meal is not sufficient to meet demand in the 27 EU Member States.





Source: MVO, 2011.

Until 2009, the EU was number one on the global soy bean meal market, after which China took over (figure 1). The EU imports a relatively large amount of soy bean meal, which is used for animal feed. The Netherlands accounts for over a fifth of the European soy imports (9.27 m tons), and is the largest importer of soy beans and soy bean meal within the EU. Of the soy imported into the Netherlands, the vast majority (>75%) is exported again. Soy imported in the Netherlands originates by 80-90% from South America. The total use of soy in the Netherlands is recently estimated at almost 2 million tonnes, mainly used in the livestock industry (average over 2008-

2010). Of the livestock products (meat and eggs) produced with soy as the main feed, only about one third is consumed in the Netherlands (Hoste & Bolhuis, 2010).

The EU crushing of soy beans into meal is not sufficient to meet total EU demand. The trend is one of declining proportion of soy beans imported and crushed in the EU (including the Netherlands), and an increasing proportion of soy meal being imported. It is expected that the declining soy bean demand of EU's crushing industry will continue in the next fifteen years, resulting in a drop of the net-imports by 2 million tonnes. A different pattern is shown for Paraguay. The country strongly emerged as a supplier of soy beans to the EU (+1.9 million tonnes) in 2010, representing 59% of total soy bean exports from Paraguay.

Soy consumption in the Netherlands

In 2010, a volume of 3.4 million tonnes of soy beans was imported by the Netherlands. About 1 million tonnes (33%) was directly re-exported to other EU countries .The remaining volume was crushed into meal and oil. In 2010, about 68% and 78% respectively of the Dutch soy bean meal and soy bean oil supply (production + import) was re-exported mainly to other EU countries. However, an increasing share of the Dutch soy bean oil exports went to non-EU countries like South Africa and Iceland. An annual volume of around 1.8 million tonnes of soy products is used in the Dutch livestock industry (MVO, 2011).

In the period from 2005-2010, the Dutch imports of soy bean meal (figure 2) largely originated in Argentina and Brazil (both 48%). Dutch soy bean meal imports represented about 4% of total Brazilian soy bean production and 7% for Argentinean soy bean production in 2009. Brazil succeeded in increasing its share in these imports from 42% in 2006 to 52% in 2010, at the cost of Argentina (-9.7% to 44.1%).





2.2 Soy production in the LAC region

Global production of soy beans more than doubled in the period between 1995 and 2011 to a new record volume of 263.8 million tonnes (figure 3).

Source: MVO, 2011.



Figure 3: Global production and major origins of soy beans

The annual average growth of 7.4% in this period was mainly due to area expansion, while the annual average yield growth of about 1% in the main producing countries remained relatively low. The additional supply of 139 million tonnes originated mainly from Brazil (+49.9 million tonnes), Argentina (+37.1 million tonnes) and the USA (+31.4 million tonnes). The vigorous recovery in 2009/2010 to 259.8 million tonnes interrupted the downward trend after 2006/2007 (-11%). Last mentioned development mainly occurred due to a sharp decline of USA and Argentina's soy bean production in the seasons 2007/2008 and 2008/2009 respectively. The lower soy bean harvest in the USA was primarily the result of an area reduction by 4.8 million hectares. Damage from severe drought and reduced fertilizer use were the main causes in Argentina (MVO, 2011).

Latin America in particular has reacted to the increasing demand with an expansion of its soy production. Over the past 10 years, soy expansion in Latin America has more than doubled (from 18 million hectares in 1995 to 40 million hectares in 2005) (WWF, 2010). 44% of the 210 million tonnes is produced in Argentina, Brazil and Paraguay. This situation has remained unchanged in the period from 2004 to 2011 (Hoste, & Bolhuis, 2010). Figure 4 shows the increase in soy production from 1986 to 2011 for Brazil and Argentina, the two most important producers in the LAC region.

Figure 4: Brazil & Argentina Soy Bean Production 1986-2011



Brazil & Argentina Soy Bean Production 1986-2011

Source: http://www.soystats.com/2012/page_31.htm

Source: Product board MVO, 2011.

Soy beans are the principal GM crop worldwide. With an area of 73.3 million hectares, soy cultivation accounts for approximately 50% of the total global production area (148 million hectares) of genetically modified (GM) crops. The US (30 million hectares), Argentina (19.5 million hectares) and Brazil (17.8 million hectares) are by far the main global producers of GM soy beans. The production of soy beans in the USA (93%) and Argentina (nearly 100%) is almost entirely GM. The cultivation of GM soy beans in Brazil has increased significantly and accounted for approximately 75% of its total production area of soy beans in 2010. Céleres (2011) expects this share will grow to 82.7% in 2011. The production of soy beans in Argentina is almost entirely GM. In Brazil, the cultivation of GM soy beans has increased to 75% of its total soy area in 2010. Also the proportion of GM soy in Paraguay is strongly increasing (MVO, 2011).

In 2011, the value of Brazilian soybean exports reached US\$ 24.2 billion, representing 26% of total Brazilian agribusiness exports and 9.4% of the total Brazilian export. In the 2011 export market, Brazil was the world's second largest exporter of whole soybeans (behind only the USA) and of soy meal and soy oil (behind only Argentina). From 2000 to 2010 China replaced the EU as Brazil's main export destination for soy. Export to China from Brazil increased from 16% in 2000 to 56% in 2010. Even the most pessimistic scenario for the soy market to 2020 suggests China will be taking over 70% of Brazil's soy exports in that year, with over 80% more likely. The export to the European Union, having already declined from 64% to 30% of Brazil's soy exports over the past decade, will decline still further (IUCN, 2012).

Production characteristics in Brazil

The strong expansion of soybeans in Brazil occurred in the 70s, when its production jumped from 1.5 million tonnes (1970) to more than 15 million tons (1979). This growth was due to increased acreage (1.3 to 8.8 million hectares) and an increase in productivity (1.1 to 1.7 t/ha). Over 80% of the volume produced at the time was still concentrated in the three states of southern Brazil. Between 1970 and 1980 soybean production increase concentrated in the Cerrado Midwest states. This resulted from policies stimulating regional development and by research results of technologies suited to the specific characteristics of the Cerrado (higher temperatures and acid soils). The proportion of national soy production in the Midwest increased from 2% in 1970 to 20% in 1980 and now represents 53% of total Brazilian production (figure 5).

Figure 5: Expansion of the Agricultural Frontier in Brazil



In 2009/2010 the major soybean areas in Brazil were Mato Grosso (27%), Paraná (20%), Rio Grande do Sul (15%), Goiás (11%) and Mato Grosso do Sul (8%). In the southern states the soybean production took mainly place on small to medium-sized farms. About 90% respectively 92% of the soybean area in Rio Grande do Sul and Paraná is owned by farms smaller than 1,000 hectares. Increasing of farm size in these states is often not feasible and therefore farmers tend to focus on niche markets like organically produced soybeans and conventional soybeans (MVO 2011).

In contrast, the farms in the Central-West are mainly medium to large-sized. In the states Mato Grosso and Mato Grosso do Sul about 78% respectively 51% of the soybean area is cultivated by farms larger than 1,000 hectares (Hoste & Bolhuis, 2010). Last mentioned farms are able to implement technological innovations to achieve higher yields. This explains partly the lower yields per hectare in the southern states (MVO 2011).

In the whole of Brazil, no-till cropping systems have been adopted on around 70% of cultivated land in the country; particularly in soybean culture no-till cropping systems are widely spread (FEBRAPDP 2009). In Argentina the adoption rate is 88% in soy farming (Aapresid 2011).

New soybean varieties allowed for production to expand into additional areas of the Cerrado and the Amazon. Until the 1980s Brazilian soybean production was concentrated in the traditional farming regions in the south of the country including the states of Rio Grande do Sul, Santa Catarina, Paraná, and São Paulo. This trend resulted from the lack of soybean varieties adapted to dryer and hotter climates and associated soil types (IUCN, 2012)

2.3 Soy production in Argentina

In terms of global soy production, Argentina ranks third by producing 19.0% of world output (41.4 million tons). Over the last ten years, soy production has increased by 78% in Argentina. Argentina

is stronger in the export of soy byproducts, especially oil and meal, due to its export tax policy: the export tax is 35% on soy beans while it is 32% on soy meal and oil. In the 2009/2010 harvest, Argentina exported almost 50% more soybean meal and 66% more soy oil than Brazil. The fact that in spite of the very high export tax large quantities of soy were exported in the last decade, shows the huge profit margin that soy producers experience as a result of the high global prices of soy. Contrary to Brazil, in Argentina soy is the countries' principal export source, representing US\$ 17.3 billion in 2010, equivalent to 25.4% of total export value and foreign currency inflows. Due to its high export tax, this generates a total of \$8 billion of soybean export duties for the Argentina state. Compared to Brazil, Argentina's soybean chain is more integrated in world trade: about 87% of the total production of soybean meal and soybean oil is exported, while for Brazil this is about 50%. The high export rate of Argentinean soy means a high dependence on world market prices and demand. In the International Food and Agribusiness Management Review of 2009, it is projected that Argentina will become the world's top soybean grower by 2030, producing 29.2% of world output (Masuda & Goldsmith, 2009).

In Argentina, soy production is most established in the so-called Nucleo Zone, comprising the provinces of Córdoba, Buenos Aires, Santa Fé, Entre Rios and La Pampa, which are responsible for almost 90% of planted area. Soy production has also been increasing in expansion provinces, comprising Chaco, Salta, Santiago Del Estero and Tucuman.

Argentina is number 1 in global exports of biodiesel based on soy, especially to the EU. This is strongly stimulated by the differential tax regime, which is very high for soy exports (32-35%) but much lower for biodiesel (5% initially, but gradually increased to 12%). Argentina has 69 biodiesel plants with an installed capacity of more than 5 billion liters. In 2010, production reached 2.4 billion liters.

In terms of sustainability, soy production in Argentina has some specific characteristics:

- The production of soy in Argentina is almost entirely GM, higher than the USA, while the cultivation of GM soy in Brazil has been low but increased to 75% of its total soy area in 2010.
- Soy production in Argentina is highly mechanized. Expansion areas in the country's north are characterized by large farms (usually> 5,000 hectares).
- With the expansion of technology-intensive soy production systems, Argentina has become less food secure, as mostly land for soy was used for food production and soy yields are not used for domestic consumption.
- The last decade has been characterized as the "most rapid and dramatic transformation ever achieved in a nation's agricultural sector". Meant technologies are the no-tilling planting system and the Roundup Ready (RR) Soybean, which is a GM soy variety. A consequence of extensive RR production is the increase of pesticide requirements.
- The GM cultivation that allowed the steep increase of production expulsed many small farmers from their lands, leading to a rural exodus into urban areas.

2.4 Soy production in Paraguay

Although Paraguay is only a small country compared to Brazil and Argentina, its soy production is the 3rd largest of the LAC region. The growth has been particularly important in the last decade. Area cultivated has increased from 1.9 to 2.9 million hectares between 2004 and 2011, while soy production has increased in the same period from 3.9 to 7.1 million tones. Paraguay is the country with the largest proportion of agricultural land cultivated with soy (in 2007-8, soy occupied 60% of the total agriculturally cultivated area of the country). In 2011, 65% of national soy production was exported (as compared to 25% and 45% for Argentina and Brazil). Only 23% of the soy exported from Paraguay is processed in the country. The soy exports are mainly to UE (46%), followed by Argentina (17%), Brazil (13%), Middle East (10%) and Canada (7%). The largest importers in the EU are the Netherlands, Spain and Germany. Soy trade with EU generates \$ 100 million per year.

Soy production in Paraguay has a high foreign influence:

- Multinational agribusiness firms are mostly responsible for commercializing and exporting soy; for instance Cargill owns the country's largest soy processing plant and buys 20% of country's soybeans;
- 40% of current 600,000 soybean producers in Paraguay are Brazilian, 36% are of German and Japanese descent, only 24% are Paraguayans.⁶
- Brazilian producers control production and commercialization of soybean sector in Paraguay, technology and producers in Paraguay mostly come from Brazil (Fogel & Riquelme, 2005).

There are serious social and environmental conflicts associated with soy in Paraguay.

- Inequality: 2.6% of landowners possess 85.5% of land
- Land conflicts in areas along Paraguay's border with Brazil; the border line now completely in hands of Brazilians, occupying more than a million hectares of Paraguayan territory for livestock rearing.
- Increasing conflict between small scale farmers (rural population) and large-scale producers. Since the 1980s, almost 100,000 small farmers were evicted from their homes and fields in favor of soy fields. While more than a hundred campesino leaders have been assassinated in this time, only one of the cases was investigated with results leading to the conviction of the killer. In 2008/09 Paraguay saw 347 violations of human rights, 819 people arrested and 52 displacements of local peasants and indigenous people resisting the 'agribusiness advance' of large-scale soy production. These problems are especially pressing in the border area with Brazil, where Brazilian immigrants settle to start large-scale soy farms (NGO Repórter Brasil, 2010)Indiscriminate use of agro-chemicals, with higher rates and less control than in other LAC countries.7
- Deforestation by expansion of soy; only 13% of original forests still exists, mainly due to clearance of agriculture (soy and cattle).

⁶ Source: <u>http://news.bbc.co.uk./2/hi/business/4603729.stm</u>

⁷ A report produced by the Committee of Economic, Social, and Cultural Rights of the United Nations stated that "the expansion of the cultivation of soy has brought with it the indiscriminate use of toxic pesticides, provoking death and sickness in children and adults, contamination of water, disappearance of ecosystems, and damage to the traditional nutritional resources of the communities."

3 Netherlands and EU policy developments 2004-2011

3.1 **Relevant policy frameworks in the Netherlands**

Sustainable development policies

The international dimension of the Dutch sustainable development policy was mainly shaped by two sectoral ministries. Within the Dutch Ministry of Housing, Spatial Planning and the Environment (VROM), in 2003 the Dutch policy on sustainable development was established in the action program "Duurzame Daadkracht" (VROM, 2003). It has a national and an international pillar. The themes of the international pillar are based on the World Summit for Sustainable Development (WSSD) of 2002, including water, energy, health, agriculture and biodiversity (VROM, 2003). The Ministry of Foreign Affairs (BuZa) is responsible for the international pillar. From 2007 onwards, the theme of sustainable development was actively supported through the Millennium Goals, with sustainability, climate and energy as one of the 4 priority policy areas. Linkages were also established with the program on 'International Biodiversity' (2002-2006), of which the second program (2007-2011) involved three ministries: environment, foreign affairs and agriculture. The emphasis in this program has gradually shifted from protection to sustainable use of biodiversity, including one focus on the program on sustainable trade and the reduction of negative effects of Dutch trade on biodiversity. Equally relevant is the Dutch policy on tropical forests, laid down in the "Regeringsstandpunt Tropisch Regenwoud", executed by 5 ministries (environment, foreign affairs, agriculture, economy and infrastructure) (BuZa, 1990-1). This policy shifts from protection towards sustainable forest management and attention for the drivers of deforestation by conversion of lands for agricultural land-use.

In 2008 the government presented a concrete policy on sustainable development (KADO or 'Kaderbrief Duurzame Ontwikkeling).⁸ Four ministries are involved: agriculture, environment, foreign affairs and economic affairs. It contained three related pillars:

- 1. Six content-wise themes to focus upon
- 2. The government as a frontrunner in sustainable management
- 3. An active role in the public dialogue about sustainable development.

The six themes were the following:

- 1. Water in relation to climate adaptation
- 2. Renewable energy
- 3. Sustainable biofuels development
- 4. Carbon capture and storage
- 5. Biodiversity, food and meat
- 6. Sustainable building

In 2009 three additional themes were added:

- 7. Sustainable development and climate agreements at global level
- 8. Biodiversity
- 9. Innovation and sustainable development.

With respect to theme 7, reference is made to support for the IDH (Sustainable Trade Initiative) and the policy to support the sustainable soy initiative (see below). The attention for international CSR is referred to under themes 7 and 9.

3.2 Relevant policy developments in the Netherlands

The last decade, with respect to sustainable commodity chains, the dominant policy culture in the Netherlands, as related to their perspective on globalisation, sustainability and WTO policies, was

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to not directly intervene in production and trade issues regarding sustainability but rather leave it to the sector to voluntarily develop actions. The government can support the development of initiatives in the sector if these are based on a multi-stakeholder dialogue, may finance pilot projects and undertake supportive policy and diplomatic actions. These policy positions are also found in various government documents, e.g. responses to motions and questions. For the case of sustainable soy the policy development responds to the above general pattern, and is further elaborated below.

Dutch policy development on sustainable soy

As indicated above, the Netherlands has been the second largest importer of soy in the world. Soy is mainly used as fodder for the livestock industry. Dutch civil society organizations have been working on the subject of soy and sustainable soy from the early 1990s. They started to raise attention for the negative environmental and social impacts of soy production. The awareness resulted from the close interaction between NGOs in the Netherlands and in LAC countries, especially in Brazil and Paraguay (less so in Argentina) where an important increase of soy production took place and where important Dutch programmes financed by NGOs were located. The Dutch Soy Coalition (DSC) was established in 2004 in order to join forces and support the work of their partner organizations in soy producing countries. The most urgent issues included both environmental and social impacts, especially deforestation, biodiversity loss, human rights violations and forced labour. As a result, political attention for the issue of sustainable soy emerged in the mid 2000's under the responsibility of the Ministry of Agriculture (LNV), in collaboration mainly with the Ministry of Foreign Affairs (BuZa).

In June 2007 the Minister of LNV informed the Dutch Government on the policy initiative to support the development of more sustainable soy production.⁹ The background to this initiative is the dominant position of the Netherlands in the international trade of soy, as well as the important role of Dutch financial institutions in financing large-scale soy plantations in the LAC region. In the policy statement approval is expressed of the role played by Dutch NGOs, private sector and research institutes in raising awareness on sustainability concerns related to soy, and reference is made to the main concerns of deforestation, loss of biodiversity and social unrest. It is indicated that this policy initiative aligns with the Dutch policy to improve sustainability of international agro-commodities for food, feed and biofuels. The Dutch policy is aimed at striking a balance between social, environmental and economic sustainability objectives in international trade chains.

Several concrete policy actions are mentioned in the 2007 policy statement, as follows:

- 1. Support the RTRS initiative, by financial support and facilitation of the process, based on the fact that the RTRS is an international multi-stakeholder initiative aimed at developing a standard for production of sustainable soy.
- 2. Stimulate the political dialogue in the relevant LAC countries where soy is produced and where the Netherlands has an agricultural attaché (Brazil and Argentina).
- 3. Play a proactive role at EU and international level, for instance within the FAO, to promote measures to enhance sustainability of soy and other agro-commodities.
- 4. At WTO level remove policy measures that distort the trade of soy, including subsidies, tariffs and tariff escalation.
- 5. Support joint research (with local research institutes) and capacity building on land-use planning and other technical areas.
- 6. Reference is also made to the important and increasing role of China in this sector, and the intention to raise this subject in dialogue with Chinese partners.

In subsequent years there are reports by the Ministry of LNV on the progress made on this subject. In December 2008 reference is made to two research reports, with the conclusion that the outcomes support the Dutch policy of 2007 to continue its support to the international multi-stakeholder process within the RTRS in which companies also have a string say.¹⁰ In February

⁹ Brief aan de Tweede Kamer (30800 XIV, nr. 106) van 6 juni 2007

¹⁰ IZ 2008/2258, 9 december 2008. Sojateelt

2008, the Dutch parliament accepted 5 motions that were put forward by a member of parliament based on inputs by the Dutch Soy Coalition (DSC), to promote the use of soy that has been produced in a sustainable way and to avoid the use of soy produced in unsustainable ways (Kaya, 2008). In June 2009 a letter to the Dutch Government explains progress within the RTRS, with emphasis on the withdrawal of two important Brazilian partners from the RTRS process, the need for further mainstreaming and the relations between RTRS and GMO soy.¹¹ It is stated that the Ministry will continue to support sustainable soy through the RTRS process. In October 2009 the Ministry of LNV agrees on financial support to the RTRS process of Euro 682,000 in total. In 2009, there is a debate about the Dutch government's participation in the RTRS. The response by both the Ministry of LNV and BuZa is that civil society and private sector should take the lead, and that there is no place for the Dutch government to get directly involved, through legislation or price policies. This would be in conflict with WTO rules. In March 2011 another letter refers to criticism on the Dutch support to the RTRS, and again subscribes the Dutch support to the RTRS. It is indicated that other standards on sustainable soy could and would also be supported, but so far the RTRS standard is the only one there is.

Sustainable soy in Dutch LAC regional policies

With respect to the Dutch policy on the LAC region, noted in the policy document '*Verre Buren*, *Goede Vrienden*' from 2004, the themes in the area of sustainable development and environment were chosen on the basis of the WSSD agreements: management of biodiversity and watersheds, supply chain management, policies and regulations at EU level and good governance (Tweede Kamer der Staten-Generaal, 2004). Reference to sustainable commodity chains is first made in the 2008-09 update of the LAC region policy document, by reference to sustainable management and exploitation of natural resources as a crucial theme for the LAC region. Specific attention is given to biofuels, but not to soy or other commodities. Reference is made to initiatives to improve sustainability of trade chains, through sustainability standards and legality claims, through capacity building for certification and verification. No specifications are made on soy or other commodities, apart from biofuels. In the updated Dutch policy for the LAC region (April 2011), reference is made to the fact that food production, including soy, contributes to deforestation and biodiversity threats, but, no policy objectives or targets on sustainable commodities are given.

In the annual plans of the Dutch Embassy in Brazil, attention for sustainability aspects until 2009 has been mainly translated in the Dutch involvement in the PPG7.¹² The Annual Plan 2007 mentions sustainability of commodities timber, soy and biofuels (e.g. organising a round table discussion with companies and NGOs, facilitating research projects). In 2007, the embassy formally visited the state of Mato Grosso in a follow up of a Brazilian trade mission to the Netherlands to enhance their insight in the production and sustainability of the trade in soy and biofuels. In the annual plan of 2011 attention is given to agro-commodity trade chains and the existence of undesirable trade barriers.

Sustainable soy policies within different ministries

From 2009 onwards, policy objectives to enhance sustainability of agro-commodity trade chains can be found in policy documents of different ministries. In the agricultural sector, the 2009 policy document on sustainable food, by the Dutch Ministry of Agriculture, Nature and Food Quality (LNV), mentions the need for research for alternative sources of proteins for soy as livestock feed, support to the RTRS and stimulation of sustainable innovations (Nota Duurzaam Voedsel, 2009). This could be done through the platform sustainable food and subsidies for sustainable commodity initiatives, including those on soy. In the environmental sector, in the biodiversity program 2008-2011 trade and biodiversity is one of the 4 central themes. The program aims at a sustainable production process of all natural products that are used in or imported into the Netherlands (no timeline has been given). Conservation and the sustainable use of ecosystem services and

¹¹ IZ 2009/963. 12 Juni 2009. Reactie RTRS bijeenkomst.

¹² The PPG7 was developed as an initiative of the Brazilian government and society in partnership with the international community, with contributions from the Netherlands, for the implementation of a solid model for the use and protection of the natural resources of the Amazon and Atlantic forest.

biodiversity are important issues. Emphasis is put on the commodity chains of timber, palm oil, soy and peat.

Recent evaluations and progress reports from different sectoral ministries all refer to the decision taken by the private sector coalition to restrict the use of soy in the Netherlands by 2015 to RTRS certified soy. For instance, both the last progress report of the 'Platform Duurzaam Voedsel' (LNV) and the final evaluation of the Biodiversity Programme 2008-2011 refer to this decision as a major result within the past period. It is interesting to observe that the statements are such that at least a strong contribution by the Dutch government to this decision is suggested.

Conclusions

There are clear policy objectives of promoting sustainability in commodity value chains, reducing the contribution by the Netherlands to its international footprint and attention for non-trade issues at WTO level. These policy objectives have been translated to the soy sector by a formal policy on sustainable soy since 2007. This policy is implicitly applicable to the LAC region since all soy originates from this region. However, the LAC regional policy does not refer to soy as a particular policy focus.

We observe that the 2007 policy objectives include a series of actions, including on the support to the RTRS process, stimulating policy dialogue in LAC countries, playing a proactive role at EU and international level, enhancing a dialogue with China on the subject of sustainable soy and at WTO level removing measures that distort the trade of soy, including subsidies, tariffs and tariff escalation. We observe that in the various communications by the ministry of LNV on the support to sustainable soy, that the first two policy objectives have been adequately covered. The RTRS process has been (financially and otherwise) supported. The agricultural attachés in Brazil and Argentina have been formally instructed by the Ministry of LNV to support the implementation of the policy on sustainable soy. However, policy intentions at the EU and international level do not seem to have received any follow up.

3.3 Policy developments in the European Union

With regards to the overall policy framework, 'governing' the production, processing and trading of soy, most relevant are EU trade and agriculture policies. In this respect, the Dutch policy follows the EU policy. There is considerable overlap between the themes of agriculture and trade. The EU price support system, for certain agricultural commodities for instance, is part of the EU Common Agricultural Policy (CAP) and is therefore discussed in the agriculture paragraph. However, the price support is discussed and challenged within the World Trade Organization (WTO) Doha negotiations and therefore the topic would not be misplaced in the trade paragraph. In fact, the trade policy framework, of which the WTO is the watch-dog, sets the boundaries for most other policy frameworks.

Trade policy framework

The EU animal feed industry, just as the whole livestock sector, strongly depends on imported feedstuffs; particularly protein-rich feed material. Animal feed is by far the largest agricultural product group imported into the EU. Several European firms rank among the world's top feed companies, many of which are/stem from the Netherlands, such as Nutreco, Provimi, De Heus and Cehave Landbouwbelang. As a result of the 'mad cow disease', the EU banned the use of animal and bone meal in livestock feed in 2001, triggering a profound change in the composition of compound feed and growing imports of vegetable alternatives to protein-rich animal meal - mainly soy. Currently, the livestock sector in the EU is highly dependent (80%) on soy imports from Latin America, especially from high external input monocultures in Brazil and Argentina. Partly because of the availability of cheap soy, soy beans and later soy meal has developed as the main ingredient for animal feed, mainly at the expense of for example grains. According to NGOs, the high level of cheap soy imports is part of EU strategy aimed at industrialized food production, which engenders high environmental and social costs (Coordination Européenne Vía Campesina, 2012).

The relevant trade policy framework is largely that of the EU and is based on WTO regulations. A Dutch trade policy does not exist. Two agreements are specifically important: the Dillon Round agreement and the Blair House Agreement. The Dillon round took place between 1960 and 1962. For the first time, the newly created European Economic Community (EEC) took part in negotiations surrounding the General Agreement on Tariffs and Trade, more commonly known as GATT.¹³ During the negotiations, the USA, being the primary soy producing nation at that time, negotiated a bound zero import tariff on oil seeds. In exchange for this, the EEC (later the EU) was allowed to protect its dairy, meat and grains sector. The effect of the bound zero tariff has been, that the EEC has imported large volumes of relatively subsidized soy from the US and later also from nations like Brazil and Argentina.

The second trade agreement, which has had major influence on the international trade and processing of soy, is the Blair House Agreement. This 1992 agreement determined a maximum area for the subsidized production of oilseeds in Europe. The originator of the agreement between the USA and the European Commission (EC) was the ongoing dispute about European subsidies for oilseeds. The USA argued that with the subsidies, the EC basically nullified the agreed zero import tariff of the Dillon Round. In the end, the EC gave in and agreed to a maximum area for subsidized oilseeds. The result was that the USA and - although unintentionally - Brazil and Argentina safeguarded their market share of the international soy market (Richert & Haase, 2005)

There is thus a zero EU import tariff on soy beans and soy meal. However, more value added products like soy oil are subject to relatively high import tariffs. The import tariffs for Brazilian soy oil vary between 1.6% and 6.1% (Richert & Haase, 2005). Brazilian soy products are subject to a so-called preferential tariff. In general, the EU applies lower tariffs to products from developing countries (i.e. Brazil is not seen as developing country).

Product code	Product description	Tariff applied on Brazilian products
1201 12010090	Soy beans, whether or not broken - Other	0%
1208	Flours and meals of oil seeds or oleaginous fruits, other than those of mustard	
120810	- Of soy beans	0%
1507	Soy bean oil and its fractions, whether or not refined,	
	but not chemically modified	
150710	- Crude oil, whether or not degummed	
15071010	- For technical or industrial uses other than the	0%
	manufacture of foodstuffs for human consumption	
15071090	- Other	2.9%
150790	- Other	
15079010	- For technical or industrial uses other than the	1.6%
	manufacture of foodstuffs for human consumption	
15079090	- Other	6.1%

Figure 1: Tariff rates applied by the EU on soy¹⁴

Agricultural policy

Agricultural policy is primarily a European affair. The member states have little autonomy on this subject, but, of course, member states themselves decide on the European agriculture policies. Agricultural policy has long been the *raison d'être* of the EU and still, the agriculture budget approaches 50% of the total EU budget. However, attempts have been made to reduce the CAP budget that stimulated reforms.

¹³ GATT is the predecessor of the WTO.

¹⁴ The data in the table are based on EU tariff database TARIC:

http://ec.europa.eu/taxation_customs/dds/en/tarhome.htm, viewed November 2006.

CAP is a leading policy framework within the EU. The Institute for European Environmental Policy claims that "certain types of CAP payments, particularly payments per head of livestock and price support for commodities such as beef and milk, were key drivers of livestock production patterns and practices, incentivizing greater and more intensive production".

The EU does not subsidize soy in any meaningful way. However, the EU does support many other crops, which can serve as a substitute for soy, especially as a feed ingredient. Most important examples are maize and grain. This EU support is organized in the so-called Common Market Organisation (CMO). In short, the CMO is a set of rules and instruments that the EU has at its disposal to organize the market for the respective products. The CMO for cereals, including maize and grain, has been gradually reformed. Especially the price support for producers has been reduced. The gradual reduction of EU support is likely to have increased the demand for soy. This policy is in contrast to the general position of most NGOs, who would rather see that more attention is given to the possibilities to replace soy imports by fodder crops in the EU, as this is expected to be reduce environmental and social effects in soy producer countries.

The CAP is due to be reformed by 2013. After a wide-ranging public debate, the European Commission presented a Communication (2010) called "The CAP towards 2020" on 18 November 2010. It outlines options for the future CAP and launched the debate with the other institutions and stakeholders. On 12 October 2011, the Commission presented a set of legal proposals designed to make the CAP a more effective policy for a more competitive and sustainable agriculture and vibrant rural areas.

Genetically modified organisms (GMOs)

Responding to increasing consumer awareness for human food consumption products, the EU has set up one of the most stringent import regimes for GMOs worldwide. When GMOs and food products derived from GMOs are placed on the market, they must comply with labelling and traceability requirements. These requirements can be found in the European Parliament Regulations (EC) 1829/2003 and (EC) 1830/2003 that refer to the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms. Although products must be labelled, irrespective of whether the GM material can still be detected, important exemptions have been made: for example meat, milk and eggs, which come from animals fed with GM feed are not subject to labelling or traceability requirements.¹⁵ Since the European policy framework for GMOs is made up of regulations (and not directives), the Netherlands has few separate policies and regulations concerning this topic.

While the EC has already authorized a series of GM varieties used for animal feed, until now, the EU has not authorized imports for human consumption containing GM material. In the summer of 2009, approximately 200,000 tonnes of US soy shipments to the EU were blocked in European ports, because they contained small traces of genetically modified maize varieties that had not yet been approved by the EU (Fritz, 2011). In February 2011, the EU abolished its zero-tolerance policy and approved a proposal to establish a tolerance threshold. According to this proposal, future food shipments may contain up to 0.1 % genetically modified varieties that have not yet undergone safety testing in Europe. However, this policy does not apply for animal feeds.

The USA and Brazil have abandoned their so called "mirror policy" towards the EU. These countries no longer wait for the EU before approving GMOs that have passed their national safety assessments. In June 2011, the EU has approved 3 GM soy bean traits (all single events) for import, processing and food/feed application, whereas Brazil has approved 7 GM soy bean traits (including 1 stack) for cultivation. The USA has approved 6 GM soy bean traits (single events). Unlike in the EU, separate approval for "stacks" from approved single events is not required in the USA (MVO, 2011).

 $^{^{15}}$ Website European Union (http://ec.europa.eu/food/food/biotechnology/gmfood/qanda_en.htm), viewed November 2006.

4 Modalities and pathways

The Evaluation Framework of this study shows that outcomes and outputs can be achieved through the use of different modalities applied by the Dutch government (dialogue, diplomacy, financial support, facilitation) as well as various pathways through which the intended outcomes can be facilitated (multilateral, bilateral, private sector and non-governmental organisations). In this chapter we will focus upon the main policy modalities, pathways and interventions linked to the theme of sustainable soy, within the period 2004-2011. These modalities may have influenced the two main outcomes, the enabling policies in the LAC region and the proportion and volume of sustainably produced soy. The focus of the analysis is at Brazil, but a comparison will be made with Argentina and Paraguay.

Modalities and pathways strongly interact and there are different ways of structuring this chapter. We have chosen for the following main themes:

- The NGO initiative leading to the RTRS standard for certification of sustainable soy
- The government co-funded IDH program
- The involvement of the private sector
- Dutch diplomacy and political dialogue
- Activities at multilateral level (EU, FAO, WTO).

4.1 Round Table for Responsible Soy (RTRS)

1990 - early 2000s: NGOs and the Dutch Soy Coalition

The Netherlands is the second largest importer of soy in the world. Soy in the Netherlands is mainly used as fodder for the livestock industry. In the 1990s gradually the negative environmental and social impacts of soy production gradually became more known. Mainly since the mid 1990s awareness on these issues was raised as a result of the close interaction between NGOs in the Netherlands and in LAC countries, especially in Brazil and Paraguay (less so in Argentina) where an important increase of soy production took place and where important Dutch programmes financed by NGOs were located. The most urgent issues included both environmental and social impacts, especially deforestation, biodiversity loss, human rights violations and forced labour. Dutch Civil Society Organizations have been working on the subject of soy and sustainable soy from the early 1990s. They found the need to join forces in the Dutch Soy Coalition (DSC) in order to support and complement the work of their partner organizations in soy producing countries. In 2004 the Dutch Soy Coalition¹⁶ was established.

The Dutch Soy Coalition (DSC) is a joint initiative of Dutch NGO's that combined their expertise to address global problems regarding the large scale production of soy and other large-scale commodities. It aims to address the problems of soy production through three main angles: responsible soy, replacement of soy as an animal feed by other feeds, and reduction of meat consumption and biofuels based on non sustainable feedstocks. The following organisations participated: Both ENDS (secretariat), Cordaid, IUCN-NL, ICCO/KerkinActie, Milieudefensie (Friends of the Earth Netherlands), Oxfam Novib, Stichting Natuur & Milieu (the Netherlands Society for Nature and Environment), Solidaridad and WNF-Netherlands. Members of the DSC coordinate and maintain working relations with civil society organizations and farmer organisations in soy producing countries as well as other European or US organizations that are active on the soy issue. There are 10 such partner organizations in Brazil.

The DSC has been funded by the collaborating organisations mainly, but these funds largely originate indirectly from Dutch development cooperation funding (through the co-financing schemes MSFI and MSF II). The DSC has also received some direct but minor contributions through subsidy schemes (e.g. SMOM the Ministry of Environment and Housing). The DSC still

¹⁶ http://commodityplatform.org/wp/

exists and has had a major advocacy role through its joint campaigns and activities. Its main outputs are joint policy recommendations, dialogue with government and companies, awareness raising and an information portal. In 2008 5 motions were submitted to the Dutch Parliament on the Dutch policy on sustainable soy, which were accepted. In one of them (Wiegman & van Meppelen Scheppink, 2008), the Chamber requests the government for a survey of opportunities and risks of soy bean production in developing countries, and to search for European alternatives for soy beans (van Berkum & Bindraban, 2008).

In January 2004 a workshop was held in the Netherlands (and financed by the Netherlands Soy Coalition) around the theme of sustainable soy where different organisations from the LAC region participated. The Brazil organisation CEBRAC presented the case of Brazil. This conference was the first in its kind and triggered a series of follow-up activities. The objective of the conference was to initiate a dialogue between civil society organisations and companies from the soy trade and processing chain. Among the 46 participants there were 16 participants from the Dutch food industry involved in the soy value chain. It is important to note that the initiative from the start aimed at a dialogue between civil society organisations and private companies, which was new to the southern civil society organisations. It has triggered in the subsequent years a series of dialogues and meetings between civil society organisations and private companies both in the North and in the South (LAC region) (Hospes & Hadiprayatno, 2010). During this workshop it was also argued by Dutch companies that the problem of sustainable soy could not be solved in the Netherlands and an international committee had to be organised. The Dutch MFO Cordaid took up this initiative and organised the first international conference on sustainable soy in Foz de Iguacu in March 2005. More than 200 people participated, including major Brazilian players like Bunge and ABIOVE. At the occasion, criteria for sustainable soy were proposed by the Brazilian civil society initiative on sustainable soy (see section 4.1). This initiative lead to the establishment of the RTRS initiative.

In general it can be said that the joint, continuous and consistent pressure by the DSC to put on the policy agenda the subject of sustainable soy has contributed to the Dutch policy intentions on sustainable soy (as formally presented in 2007) and has contributed to set in motion a range of activities, especially dialogues between civil society organisations and private companies, to work towards a more sustainable soy value chain.

2006 -2012 Round Table on Responsible Soy

In 2006 the RTRS was officially established in Switzerland as a multi-stakeholder initiative, which aims to facilitate a global dialogue on soy production that is economically viable, socially equitable and environmentally sound. The initiating members were World Wildlife Fund (WWF), the multinational Unilever, Gruppo Maggi, Cordaid and COOP and Fetraf Sul, as a result of increasing pressure from the (international) and Dutch civil society about sustainability issues related to soy production and trade. Following its establishment the first conference was held in Paraguay in 2006. Ever since there have been annual conferences.

The number of participants gradually increased from 30 in 2008 to 107 in 2009 and 150 currently (2012). Membership now includes 32 producers, 74 industries, 18 civil society organisations and 32 observers. Geographically, there are 56 members from LAC countries, 21 from Asia, 7 from the USA and the remaining (66) from Europe. The number of members from Brazil (25), the Netherlands (23) and Argentina (22) are highest.¹⁷ The Dutch government functions as an observer.¹⁸

In 2009, the RTRS presented its first global standard for responsible production. After a year of field testing, the final version of the standard was approved in 2010. The RTRS Principles and Criteria for Responsible Soy Production were formulated after a process of intensive collaboration between civil society organizations, primary producers and industry. The final standard, as

¹⁷ For more information about the RTRS, see <u>http://www.responsiblesoy.org/</u>

¹⁸ For more information, see: <u>http://www.rijksoverheid.nl/onderwerpen/voeding/duurzame-productie</u>.

presented in 2010, consists of 5 Principles and 39 Criteria for certified soy beans that are produced in a responsible way. The RTRS aims to promote responsibility both in GM and in non-GM production. As such, RTRS is technologically neutral. The main sustainability problems occur both in GM soy production and in non-GM soy production. Consequently, the RTRS Standard allows for certification of GM and non-GM soy production. In response to the biofuel boom in the last decade and the increasing use of soy oil for biodiesel, the RTRS developed a biofuels annex, so producers can choose to certify the RTRS Production Standard plus biofuels annex. In July 2011, the EC recognized the RTRS Renewable Energy Directive (RED) scheme as a voluntary scheme with which compliance with the EU RED can be demonstrated.

There has also been criticism on the RTRS standard. First of all, the RTRS ultimately did not include all the key stakeholders involved. On the one hand, the Brazilian partner, the Brazilian producer association APROSOJA and the Association of Vegetable Oil Industries (ABIOVE) stepped out of the round table. The federation of soy producer from Mato Grosso, APROSOJA, stepped out in 2009 because of their disagreement with the proposed deforestation principle in the RTRS standard including High Conservation Value areas (HCVAs). According to APROSOJA (interview) they disagreed with the way the decision in the RTRS board without technical rationale. In addition, legal compliance with the Forest Code is already difficult and legal deforestation is possible in Brazil. A zero- deforestation policy surpasses the Brazilian Forest Code and would hamper expansion. Aprosoja accounts for 25% of Brazilian soy production. The following arguments were given by ABIOVE to step out (these generally overlap with those of Aprosoja):

- 1. *There is no competitive balance due to the absence of important players.* The RTRS has been unable to attract important players from producer countries, which are the target for global certification, which creates an imbalance. The RTRS has focused on Brazil's production. Soy producers from the United States (the world's no. 1 producer) and China (no. 4) have not participated at all. Participation by other LAC countries has not yet reached the necessary scale. On the other hand, there is a concentration of participants from the Netherlands.
- 2. Loss of representativity had a strong impact due to the absence of partners. The sector's representativity was reduced with the resignation of Aprosoja, which represents about 6,000 soy producers responsible for 8% of the world's production and major partners of Brazil's soy sector. Their withdrawal means it will be difficult to certify most of Brazil's production.
- 3. *The unbalanced voting power did not build consensus.* The voting system, without weighting the votes as a function of operating volumes, has proved to be unbalanced. This situation, where an individual rural producer's vote has the same weight as an association with several members, is unacceptable to producers represented by Aprosoja and the processor members of ABIOVE. Aprosoja decided to resign, drastically reducing the RTRS's representativity.
- 4. Trust among the parties was weakened by the change in the decision process. Trust is one of the main requirements for the success of multistakeholder initiatives. The draft of a criterion on HCVA was prepared at the last minute and imposed on the Board and on the General Meeting, without discussion and scientific criteria. There were a considerable number of abstentions in the vote for this Criterion, for reasons of internal governance.
- 5. *There is no isonomy Brazilian environmental legislation is more encompassing*. Meeting the principle of complying with laws implies compliance with different obligations, without any isonomy of responsibilities. The Brazilian environmental legislation is more encompassing than that of other producer countries. Thus, the Brazilian soy producer is disadvantaged when compared to his counterpart in the USA who does not have to maintain an environmental reserve covering 80% of his property.
- 6. *The RTRS ignored Brazilian legislation and created new obligations.* The RTRS was unable to develop a mechanism to compensate the differences in environmental legislation and, instead of using the Brazilian legislation as a model, it created new, onerous and repetitive requirements. For example, Brazil has an active policy for HCVA conservation through a set of tools (federal and state protected areas, economic ecological zoning, property registration and licensing of activities). This framework was ignored, and the Brazilian producer who wishes to certify his soybeans will have to pay for a scientific-technical opinion from a third party to submit to the RTRS a request for authorization to use any area of natural habitat.

7. *There is no financial compensation to attract producers to the certification process.* There is lack of definition on mechanisms for compensation of producers who comply with all requirements and are certified. The discussions about having consumers pay a premium for certified product were blocked. It is hard to convince consumers to pay a higher price for foods produced with soybeans, like meats, margarines, crackers, etc... In addition, proposals to pay for avoiding deforestation and for environmental services to provide financial compensation to producers willing to give up their right to produce went nowhere. Therefore, it will be more difficult to persuade producers to assume new onerous commitments, with no economic counterpart.

On the other hand, some critical national and international NGOs stepped out of the initiative and/or criticized the standard as not being able to solve the social and environmental problems (GM Watch, Friends of the Earth & Corporate Observatory, 2011).

Conclusions

It has taken relatively long for the RTRS to come to an agreement about a standard to be tested. However, not all key players from the global scene have remained on board, which will make it difficult to mainstream the standard throughout the sector globally. It been observed by insiders and by others experienced in processes of enhancing sustainability of agro-commodities, that soy is a particularly difficult commodity for improving sustainability. Underlying reasons include:¹⁹

- It is an annual crop, growers can change to other crops very easily
- The use of the product is invisible
- The GMO discussion
- The very high demand leading to very high prices
- The linkages to biodiesel production
- The fact that it is produced by both smallholders and large producers
- The company culture in the livestock feed industry.

4.2 Sustainable Trade Initiative IDH

Until 2008 several NGOs, especially Solidaridad, have been actively working on the case of sustainable soy and involvement in the RTRS. From 2009 onwards the funding from the Dutch government was mainly channelled through the Schokland Fund, by public-private partnerships, and later on through the IDH. The Schokland Fund is a private-public partnership between various stakeholders and project partners. It aims to contribute to the realisation of the Millennium Development Goals 1, 7 and 8: poverty reduction, environmental sustainability and building global partnerships. The fund's goal is to provide support to small scale farmers and farm workers in the palm oil, soy and sugarcane sectors applying Better Farm Management Practices for adding value to a certifiable and sustainable supply chain. To make an effective contribution to the achievement of these goals the Schokland consortium defined two project purposes:

- At least 85,000 small scale farmers will exercise Better Farm Management Practices, and have added value to their product by supplying their certified palm oil, soybean or sugarcane to certified sustainable supply chains in an effective and efficient manner;
- In total 250,000 farmers and farm workers in larger plantations of palm oil, soybean and sugarcane will supply certifiable sustainable products and are fully aware of the benefits and opportunities of sustainable commodity production and trade.

By now, attention for sustainable commodities is mainly channelled through the governmentfunded IDH²⁰ program. For sustainable soy, the programme focuses at support to the RTRS to

¹⁹ Largely based on interview with J. Douglas, former director Solidaridad South America

²⁰ The IDH is a sustainable trade initiative that started off as Public Private Partnership facility in 2008. It is now increasingly recognized as an "agile, resourceful and knowledgeable actor in the field of global sustainable production and trade". In collaboration with BuZa, a five-year Action Plan for Sustainable Production and Trade was launched in 2011 as a joint venture with major international commodity

increase its membership and credibility with producers, companies and NGOs through an outreach program. The various activities culminated in December 2011, when a memorandum of intention was signed by a group of private sector companies, targeting a 100% compliance with RTRS criteria of soy used in the Netherlands by 2015. The Dutch feed industry has committed itself to ensure the volume they use in the Netherlands to be sustainable by 2015. This amounts to roughly 2 million tonnes. Sourcing has started in 2011 with an initial quantity of RTRS certified soy of about 80,000 tonnes.

Commissioned by IDH, in 2011 the Brazilian organisation ICONE conducted a gap analysis to identify the bottlenecks in the value chain to become RTRS certified. On the basis of these results, the program focuses on the main sourcing regions for NW Europe: Brazil, Argentina and Paraguay. To help increase the supply of certified responsible soy in Brazil and Argentina, the 'Soy Fast Track Fund' was created as an implementation and co-financing instrument. To create more incentives for soy producers, IDH is aligning itself with international and local banks and local producer organizations. Together, they work to enhance preferential access to (better) finance and agricultural services that will be improved for farmers who are legally compliant and certified. The fund is set up for 5 years and is open to finance by other donors. The target is to spend at least 5% of the budget on activities that benefit smallholders and at least 20% in important frontier expansion areas, where forest conversion is a major issue. Smallholders may differ strongly per country (e.g. in Brazil around 17% of production comes from family farmers, with an area of less than 50 to 80 ha, depending on region), whereas in India the average farm size amounts to 1-2 ha.

The IDH soy program is largely based on the pull from market players, who recognize and promote the business case for responsible soy. Their main incentive is to respond to the increasing (market) demand for certified soy (in line with public opinion). IDH aims to leverage other value drivers for producers such as legalization, access to financial services and professionalization of management information systems. The private investment (co-funding) is organized as a certain amount of co-funding per volume of used certified soy (estimated at \in 1 per 1 ton). The funds can be used for different measures: premium prices paid to producers, investments in good agricultural practices, support to certification costs of traders and producer associations to develop producer support programs.

4.3 Dutch private sector initiatives

In 2007, the Task Force Sustainable Soy was established.²¹ The Task Force is a platform of Dutch companies active in the soy chain that wish to contribute to the ecologically and socially responsible cultivation of soy. They see the RTRS as the most widely supported forum for this purpose and therefore support this initiative. The Task Force is also a proponent of the Amazon Moratorium that is being applied in order to achieve responsible land use in the Amazon biome (see chapter 4). Participants in the Task Force cover the complete soy product chain in the Netherlands, including oils and fats, processing (crushing), animal feed, meat and dairy sectors. The secretariat is shared by the Dutch company on animal feeds (Nevedi),²² the Dutch association of compound feed manufacturers, and the Product Board MVO (Corporate Social Responsibility). As observers, the trade organizations Federation of European Oil and Protein Meal Industries and European Feed Manufacturers Federation also participate in the Task Force. The Task Force supports the RTRS by co-financing RTRS outreach activities in Europe. This is done together with the Dutch Sustainable Trade Initiative (IDH-see above).

In December 2011, several Dutch companies involved in the soy sector agreed for the transition to 100% sustainable soy based on the RTRS standard by 2015. The contributing parties were Nevedi,

²² For more information, see http://www.nevedi.nl/.

companies, aiming at market transformations within the agro commodity sector, towards more responsible trading practices (Annual Report IDH 2011).

²¹ For more information, see <u>http://www.taskforcesustainablesoy.org/</u>.

FrieslandCampina, the central organisation of the meat sector, Albert Heijn, C1000, Jumbo, Lidl, Superunie, LTO Netherlands, the Product association on poultry and the Product association on oils, fats and margarine. Together, they represent the total soy consumption in the Netherlands, estimated at about 2 million tonnes. The plan is supported by IDH, WWF Netherlands, Natuur & Milieu and Solidaridad. The target is to have all 2 million tonnes certified by 2015. Financial inputs are estimated at Euro 7 million, of which 50% will be funded by IDH and the other 50% by the industries involved. The companies involved in purchasing the sustainable soy have been united in the Initiatief Duurzame Soja (IDS), which is an offspring of the Taskforce.

Outreach activities

Outreach activities are oriented at promoting the subject of sustainable soy and the work on the RTRS to other countries, to raise awareness, raise interest and get on board partners and funding agencies. Ultimately, this is critical to mainstream the RTRS standard in order to have global impact, because the total consumption of soy in the Netherlands (2 million tonnes) only represents 1% of global production. Outreach activities have always been an important component of the RTRS programme. In the period 2008-2010 the budget for outreach activities has been Euro 420,000, of which 50% was financed by IDH, 24% by Solidaridad and 25% by the Taskforce sustainable soy. Outreach activities were carried out in various countries, including China.

In November 2011, an agreement was reached with the Belgian feed industry on a transition plan toward full responsible soy sourcing in 2015 (600,000 tons per year). Dominant Scandinavian players with market impact in Sweden, Denmark, Germany and the UK aligned to develop a transition plan towards 100% responsible soy by 2015. Also the UK feed industry, by the voice of the UK Agricultural Industries Confederation, has indicated its support for the goals of the RTRS. The Confederation is working with RTRS and supply chain partners to investigate how best to accommodate RTRS requirements. The European Feed Federation is considering whether they can set a commitment as well.

4.4 Diplomacy by the Netherlands on sustainability

Supporting the dialogue on sustainable soy through a multi-stakeholder process in producer countries was part of the 2007 formal Dutch policy on sustainable soy. In line with this objective, support was provided to the cause of sustainable soy and development of an RTRS standard by the agricultural attachés in Argentina and Brazil, based on formal instructions by the Ministry of LNV. It was estimated that in the period of 2007 to 2010 the agricultural attaché in Argentina has spent 30-50% of his time on this subject. This included activities of field visits, being observer in RTRS conferences and meetings, communication with and answering of questions from the Ministry of LNV, facilitating financial demands and playing a mediating role. The latter was quite important.

As an example of the importance of this diplomatic support reference was made to a situation where the Dutch Soy Coalition presented a brochure which included reference to financial support by the Dutch Government. The fact that the Dutch government, apparently, provided support to Dutch NGOs raised serious doubts about the neutral position of the Dutch government in the debate about the RTRS and almost caused Argentinean parties to withdraw from the RTRS process. The Dutch agricultural attaché in Argentina, who was present mainly as observer, had to use his diplomatic and negotiating skills to keep the Argentinean partners on board.

In 2007, the RNE in Brazil formally visited the state of Mato Grosso as a follow up of a Brazilian trade mission to the Netherlands and discussed their insight in the production, transport and trade of soy and biofuels. In Brazil, there was much interaction between the RNE and the Brazilian government. It was stated that there is some evidence of an influence on the Forest code and Labour code, especially its implementation and enforcement, which has improved in recent years. In contrast to Brazil, there were few direct contacts between the RNE and the Argentinean government and no evidence of any influence on domestic policies.

It is indicated by NGOs involved in the RTRS process that the role of the Dutch agricultural attaché has been important for the advancement of the RTRS process. Brazilian parties also approved this role, noting that they are very sensitive to endorsement of an initiative by the government representative. Therefore, such endorsement by the Dutch embassies is acknowledged and the observer role at the RTRS and discussions with producer federations has been important.

It seems that the attention for sustainable soy was generally not integrated in Dutch economic diplomacy activities, such as trade missions to these countries. On the other hand, it was indicated that the added value of such an involvement would not be very clear as long as the RTRS standard was not developed.

Sustainable commodities, including soy, are considered an important focus by the RNE in Brasilia and the Agriculture Council. In the annual plans of the Agricultural Council, 'sustainable agrochains' is one of the main themes. Between 2004 and 2011, various Ministers visited Brazil to establish sound bilateral political relations and discuss trade matters. The last visit was in 2011 by Minister Bleker, responsible for agriculture and trade matters. During these visits, Dutch Ministers responsible for agriculture frequently express concern on the sustainability of agricultural commodities. This is based upon concerns expressed by NGOs prior to the visit, upcoming European regulation, or general public opinion.

Within the Netherlands, the RTRS is stimulated and endorsed by the government through financial support and by referring to the RTRS in Parliamentary debates and in answering Parliamentary motions, as the (only) initiative for sustainable soy.

Soy production through encroachment in forest areas inhabited by indigenous peoples, causes human rights violations specially in relation to land rights. In Brazil, the Dutch government through the RNE has regularly raised this issue within the Brazil government. For instance, during the visit of an EU delegation to Brazil in October 2012, the influence of soy production on livelihoods of indigenous peoples has been raised. The organisation FUNAI, which is part of the Brazil government and responsible for protection of the rights of indigenous peoples, is regularly invited at the EU and Dutch embassies to discuss developments. A paper is being prepared with support by the RNE, the EU delegation and the UN delegation, on Brazilian initiatuives to defend the human rights in Brazil.

The Dutch ambassador on 10 December 2009 (international human rights day), visited the Guarani-Indians and has financially supported CIMI for projects benefitting these Indians. This support has continued in 2010, 2011 and 2012.²³

4.5 Activities at EU and multilateral level

WTO: Non Trade Concerns and Free Trade Agreements

In 2009 the Dutch governments explicitly supported the use of Non-Trade-Concerns (NTCs) in Dutch and European trade policies, for example by addressing social and environmental sustainability issues within free trade agreements. Reference is made to the RTRS as a private sector initiative where non-trade concerns are being addressed.

At EU level, the Dutch intention was to play a proactive role to promote measures to enhance sustainability of soy and other agro-commodities (see chapter 2). The interviews showed that, however, at this level no formal activities have been implemented. This is confirmed by the fact that in the various Government reporting on progress with respect to sustainable trade and sustainable soy in particular, no reference is made to any activities or initiatives at EU level. There would seem to have been two relevant entry points:

²³ 21 november 2012. Betreft Beantwoording vragen van de leden Van Gerven (SP), Jan Vos (PvdA) en Schouw (D'66) over geweld in de Braziliaanse sojateelt

- The option of promoting RTRS as the standard for biofuel imports based on soy (similar to RSPO for palmoil). This would have had important benefits as the majority of existing biofuels standards focus mainly on the climate change effects and potentials for greenhouse gas emissions reduction, thus neglecting important social and environmental sustainability issues. Note that the RTRS has now also included a biodiesel module for assessment of biodiesel based in soy.
- 2. The option of adjusting the existing EU tariff structure (see section XX) which stimulates exports of raw soy, towards a tariff system that discourages exports of commodities which are produced at the expense of natural resources (deforestation link).

It can be concluded that in spite of policy statements for the Netherlands to play an important role at international and EU level, not much has been done at the international level. This is contrast to general policy objectives to mainstream sustainability in order to realise greater global impacts.

4.6 Dutch funding for sustainable soy initiatives

Dutch public funding for sustainable soy production and trade has come mainly through three channels: (1) the activities of NGOs (united in the Dutch soy coalition), (2) subsidies by sectoral ministries, and (3) the Schokland Fund and the Sustainable Trade Initiative (IDH programme).

Indirectly, most participating Dutch civil society organisations have spent funds that originated from Government subsidies. For instance, in the period of 2003-2005 Cordaid supported projects on sustainable soy with a total of Euro 1.3 million.²⁴ It is not possible to give detailed data, but roughly it could be estimated that within the period of 2004-2011 this amounts to around Euro 4 million for the different Dutch participating civil society organisations, mainly from BuZA co-financing schemes MFS1 and MFS2. The MFS programmes did not specifically include funding on sustainable soy projects but allowed for flexibility in spending. In this period, most funding seems to have been provided by Solidaridad.

Direct funding originated from the Ministry of LNV, which provided a subsidy to the RTRS of Euro 682,000 in 2009 on the following subjects: field tests on the RTRS standard, the set-up of a certification system for RTRS, an assessment methodology for High-Conservation Value Areas areas, developing a mechanism for payment for environmental services and communication and outreach activities. In addition, three times a match funding of Euro 50,000 was provided for the RTRS annual conference (2008-2010). Thus, in total Euro 830,000. There have also been some minor subsidies from the Ministry of Environment (VROM).

From 2011 onwards the bulk of the programme was taken over by IDH. Over the period of 2008 to 2011 IDH invested €566,783 in the sustainable soy program, with an additional €352,375 from private sector and other funds.²⁵ For 2012-2015 expected funding of the IDH soy fast track programme is Euro 6.58 million from public funds and an additional expected Euro 24.5 million from private sector match funding.

The contribution to the sustainable soy programme by Solidaridad alone in the period of 2008 to 2011 has been about Euro 4.5 million. Apart from that, there have been important contributions by other MFOs, such as Oxfam/Novib for lobby activities. Roughly, we thus estimate the contribution of Dutch public funds to the RTRS process over the period 2004-2011 to a total of Euro 6 million.

²⁴ IOB report 2009, Chatting and Playing chess, p26

²⁵ IDH Annual report 2011

5 Enabling policies and structures in Brazil

5.1 Policy development in Brazil

Brazil policies stimulating soy expansion

Brazil was one of the first countries in the LAC region to produce soy. The Brazilian soybean expansion starting in the 1960s was triggered by international demand as well as growing domestic demand. Domestic agricultural policies that aimed at modernization of Brazilian agriculture directly benefited soy production and exports. The main policies directly and indirectly supporting soybean expansion in Brazil are the National Agricultural Credit policy (1965). In addition, there are export subsidies as well as tax exemptions, fiscal credit and lower interest rates; fuel subsidies, and the adoption of a small devaluation exchange system. The Brazilian government exempts unprocessed and semi-processed soy from export taxes, according to the Kandi law. Subsidised credit for soy producers was made available by ministries and national banks, also for soy crushers and traders for example by the state-owned Development Bank BNDES. International financial institutions including those based in the Netherlands are directly involved. Additionally it has given to Brazilian producers new alternatives of credit from traders, processors, industry input, private banks and international financial institutions, including the Netherlands

The Government of Brazil's view on the Amazon, and also that of the first (2003-2007) and second (2007-2011) President Lula administration, is to develop it further for its inhabitants and therefore supports expansion of infrastructure and regional integration. The ambition is to establish Manaus, Porto Velho and Santarem as major commodity transport harbours. In relation to road infrastructure development, agricultural expansion, logging and commodity trade, deforestation also increased in the Amazon. The first Lula administration also appointed Marina Silva as Minister of Environment. Coming from the environment movement, hopes rose that she would implement stronger measures. Probably thanks to her support, since 2004 the federal government is tackling deforestation by strong law enforcement and monitoring using the federal police. In 2005, she opposed further development around the BR-163 that cut through the Amazon forest. However, not being able to reach her objectives, she stepped down as a Minister in 2006. The most recent policy plan is the 2008' Sustainable Amazon Plan (Plano Amazonia Sustentavel) without any clear policy targets. The plan does include the 'Green Action' plan, which promises to invest 1 billion Reais in reforestation of the degraded areas in the Amazon.

A major impact resulted from regional development programmes, mainly PRODECER programme (Programa de Desenvolvimento de Cerrado or Cerrado Development) and POLOCENTRO (Programa de Desenvolvimento dos Cerrados) which aimed at agricultural development of the Cerrado. It offered financial and technical support to encourage settlers to colonise the Cerrado. The total project cost was US\$ 563 million, of which Japan contributed more than half with US\$ 295 million and Brazil the remaining US\$ 268 million (Yamamoto, 2005). The development of soy varieties suitable to tropical climate was largely due to research investments in Embrapa-soja, the Brazilian soy research institute. The soy expansion was accompanied in the early 1990s, by a structural reform altering the Brazilian economy from import substitution towards an export oriented economy. The reforms included trade, large scale and macro-economic adjustments (EU, 2006) There have also been important infrastructural improvements, for instance investments in infrastructural development by the Avança Brazil programme, including waterways, roads and railways (van Gelder, 2005). In the 1990s there was a reduction in the government subsidies to Brazilian agriculture and a strong decrease of National Agricultural Credit, but an increase in contributions by private financial systems. This increased the participation of *tradings* in the production process of Brazilian agriculture by providing resources for producers who, in turn, provide them with proper sourcing raw material. The introduction of this innovation has significantly increased the availability of resources for the financing of the sector, since these companies have greater access to international credit markets, and have access to hedging mechanism.

Summarising, soy expansion has been actively and strongly promoted in Brazil by a combination of policies, infrastructure development, fiscal policies and technology developments. This has resulted in a shift from the initial expansion of soy in southern states of Brazil (until the mid 1970s) towards the Cerrado (starting in the 1980s). The expansion of soy went further north from the cerrado into the Legal Amazon region²⁶, triggering further deforestation. The results can be seen today. In the South the older soy farms are relatively small while in the Cerrado farms are much larger, cultivating not only soy but also other grains.

Brazil policies stimulating sustainability of soy

Forest Code

Deforestation as result of the expansion of cattle ranching and agriculture was controlled to some extent by the Brazilian Forest Code. The Brazilian Forest Code sets limits on the amount of forest that can be cleared. Originally the forest code required that 80% of each parcel within the Amazon biome must remain forested (Legal Reserves), which reduces the profitability of soy farming in the Amazon as compared to the Cerrado woodland savanna, where only 20-35% of native vegetation cover has to be retained (35% in Legal Amazon, 20% in all other Cerrado regions). In addition, Areas of Permanent Preservation (APP) are designated in vulnerable areas, such as along rivers, hilltops, and steep slopes. Enforcement of the Forest Code has been poor but has improved much the last decade, partly as a result of improvements in the ability to monitor forest cover through remote sensing. Public and private banks have also started to ask compliance with the Forest Code to give loans, which has created a situation of urgency to comply with deficits among producers.

Non compliance with the Forest Code is the common situation among soy producers (and in all other sectors as well). The gap analysis carried out for the soy sector in Brazil (ICONE, 2011) has shown that in fact none of the soy producers in Brazil is fully compliant with the Forest Code in terms of the legal reserves required by law. This is due to various reasons, including legal uncertainty related to the Forest Code; loss of productive area; the high cost of regularizing the environmental liabilities of the Legal Reserve, e.g., reforestation or the cost of buying land for compensation; the slowness of the administrative and decision making processes imposed by public entities; lack of detailed information regarding technical aspects and the federal and state legislation regulations; lack of support from environmental agencies in the implementation and regularization of regulations.

The pressure for compliance has led to two pathways. Firstly, taking into account that the costs of compliance are high (Nassar and Moraes, 2011), there are initiatives to help producers to comply. Joint projects of NGOs, governments and private sector provide mapping and assessing of non-compliance areas, reforestation activities, capacity building of public agencies and farmers. Secondly, there have been efforts to change the Forest Code. The reform is now being discussed in Congress taking into account the idea that the burden of the environmental requirements was too strong to be complied with by farmers. Government should help with compliance and small farmers would need special exempts since the full compliance with the current Forest Code would take them out of production. Special considerations for those farmers who have cleared their land before the Forest Code requirements are also part of the reform principles.

A motion passed in the Lower House and after in the Senate regarding "reform" of the Forest Code, primarily to reduce the APP requirements along rivers and to allow these areas to count as part of the Legal Reserves, which is not the case at the moment (Metzger et al. 2010). This has been accepted by all political parties, however, the APP restoration requirements remains controversial. Environmental scientists and NGOs claim this would have a serious impact on environmental connectivity and water catchment (Michalski et al. 2010); a decision on the matter has yet to be taken by the Federal Assembly. Proposals to reduce the size of the Legal Reserve quota in the

²⁶ The Legal Amazon region is a Brazilian term and encompasses the Amazonian states. It should be noted that it does not mean that all land is Amazon rainforest. For example, approximately half of Mato Grosso is woodland savannah (Cerrado).

Amazon biome, and for amnesty for those who deforested illegally before July 2008, have also been made. In June 2012, President Dilma Rousseff vetoed some parts of the Bill and provided some alterations. Her position is to create different obligation (restoration of APP along rivers) according to the size of producers (i.e. the small farms in the South versus the huge plantations in the Cerrado). NGOs are not satisfied as they hoped the complete bill would be vetoed. In general, the government seems to guide agricultural expansion towards the Cerrado (soy, sugar cane) instead of the Amazon although it has not defined laws to this end. Cattle ranching expansion in the Amazon has not been tackled yet. Deforestation in the Cerrado is now higher than in the Amazon.

After the final definition of the new Forest Code, the challenge will be to implement it. The new version of the Forest Code gives more decision power to states to legislate about forest conservation and restoration requirements. And all states have to create Environmental Registry for farmers, with will be crucial to assess future compliance of obligation among farmers.

In addition to the Forest Code, the soya moratorium was launched in 2006, requiring zero deforestation. More details on the soy moratorium will be discussed in chapter 6.2.

Labour Code

The main laws that regulate rural work in Brazil are the Rural Work Law, which is law number 5.889/73 (altered by law 11.718/08), through the Decree 73.626/74 and also Article 7 of the Federal Constitution of 1988. These include rules for contracting, working hours, child and slave labour impediments, wages and overtime payment, and discrimination issues. Also, since 2005, there is the "Norma Regulamentadora 31" (NR31) of the Ministry of Labour, which establishes regulations for health and safety of rural workers, including training, provision of personal protection equipment, housing, clean water, handling hazardous substances, etc. Other regulations that apply to all workers (not only rural workers): NR7 - medical and occupational health program, which requires the promotion of employee health through periodic medical exams; and social security rights, which are regulated by the Social Security Regulation (Decree 3.048/99-RPS) and in the Organic Law of Social Security (Law 8.212/91).

Compliance issues with labour and worker health and safety legislation (identified in the RTRS gap study: ICONE, 2011) are:

- Working hours and overtime during harvest periods exceed those permitted by national laws;
- Premium payment to employees for production, but such premium is not taxed;
- Documentation and costly bureaucracy;
- Infrastructure adaptations of NR-31 (lodging, living area, bathrooms, storage of pesticides);
- Low rate of formalization of the health and safety program, although there are actions in the field already;
- Provision of Personal Protective Equipment is widespread, but there little monitoring of employee use and awareness;
- Lack of trainings on work safety, application of agrochemicals.

These challenges are generally recognized by the productive sector and initiatives are taken in order to improve labour conditions and thus address these legal compliance gaps. Companies, organizations of producers such as CNA (farmers union association) and Soja Plus, and governments at different levels are carrying out training programmes and capacity building to help farmers understand the measures and foster the implementation in fields.

Biofuels policies

Another major development influenced by Brazilian policies is the rise in biodiesel demand. In 2003, Brazil launched the Brazilian National Biodiesel Plan (PNPB in Brazilian). The plan stimulated production and demand by setting mandatory blending targets, which have risen from 2% in 2008 to 5% (B5) in 2010. Biodiesel producers want the government to raise the blending target to 20% (B20) by 2020. Besides major producers an important feature was that it stimulated the participation of family farms.

In 2011, 78% of the feedstock for biodiesel originated from soy (mainly from Mato Grosso and Mato Grosso do Sul) and from animal fat (mainly from the cattle industry). The share of soy is expected to rise to 90% (Wilkinson and Herrera, 2010). Biodiesel can come from a variety of plants with oily seeds (soy, castor, sunflower, palm oil) and thus from family farms. Under the PNPB, biodiesel producers are required to buy a percentage of their feedstock from family farms (Social Fuel Stamp), if they intend to supply to government contracts (the primary market). Companies also have to provide technical assistance and credit to family farms and can get tax exemptions. For example, the quota for family farm purchases was 10% in Mato Grosso in 2009/2010 and 15% in 2010/2011. Brazil has become the fifth largest biodiesel producer in the world but the majority of biodiesel is for the domestic market (Argentina is number 1 in global exports whereby soy oil is also the main feedstock). In 2011, Brazil produced an estimated 5.7m metric tonnes (mt) soy oil of which 2.2m mt (48%) is expected to be used for biodiesel. The company BioVerde plans to expand its production capacity and expects to sell 40% of its output to Europe, the largest biodiesel market in the world (although demand in Brazil will grow and may exceed supply). Also the giant oil company Petrobras invests in bio-ethanol and biodiesel. It is not clear to what extent the growing biodiesel market drives soy expansion. The demand for soy meal is growing fast as well and soy oil is a by-product. However, it makes the soy crop even more commercially attractive.

Agricultural policies²⁷

Since the beginning of the new millennium, the government has been working on an agricultural policy that is specifically oriented to the needs of family farms. With the founding of the *Ministry for Agricultural Development* in 2000, family farms had their interests represented at the top political level for the first time. The interests of the large, highly competitive agribusinesses remained largely unaffected and continue to be represented by the *Ministry of Agriculture*. This division of agricultural policy between two separate ministries is unique to Brazilian politics. It takes account of the fact that the Brazilian agricultural sector is characterised by widely disparate farm sizes.

The agricultural programmes introduced after Lula's election are clearly geared towards promotion of the agricultural sector, but they also link this with social and regional development. These programmes mainly involve facilitation of credit and reconstruction of a broad-scale extension service for farmers, but also hedging against price and crop risks and promotion of the sale of smallholder produce.

Purchasing guarantees and minimum prices, assumption of business risks by the taxpayers – many instruments on which the measures of the Brazilian government's new agricultural policy are based are reminiscent of the European agricultural policy of the 1980s. The consequences of that policy included burgeoning environmental impacts, surplus "butter mountains", and runaway costs. Can this be avoided in Brazil? There are some indications in the policy design that it can. For instance, the target group is clearly defined. The new programmes are aimed exclusively at family farms, thus preventing abuses by, for example, larger operations. Since 1996 and again in 2006, the law has clearly defined what a family farm is. Thanks to a regional concentration of certain programmes, the focus on family farms is further intensified. Farms outside these regions are either excluded from participation or else included under socially and regionally graduated conditions. Lastly, monetary ceiling limits ensure that the programmes only provide basic levels of insurance: guaranteed price and sales opportunities only apply to a portion of the produce. Similarly, weather- or price-related risks are only assumed up to a certain point. Hence uncontrollable cost increases are also avoided, along with habituation effects. The Brazilian government has thus laid the foundation for an innovative agricultural policy: one that enables disadvantaged family farms to participate in the market economy process while simultaneously safeguarding their subsistence. The funding instruments of the Brazilian agricultural policy partially outlined in this article boost small farm production and facilitate the market access that such a boost necessitates. Both are key to the sustained improvement of the livelihoods of rural families - including the poorest ones in northeastern Brazil.

²⁷ http://www.rural21.com/uploads/media/rural 2011 4 36-39 01.pdf (viewed 31/05/2013)

6 Sector outcomes 2004-2011

6.1 Brazilian initiatives on sustainable soy standards development

Initiatives in Brazil prior to the RTRS

In parallel with initiatives by the NGOs in the Netherlands to establish a soy platform, in 2004 in Brazil the Articulacao Soja (Soy Platform) was established under coordination of the CEBRAC Foundation (Brazilian Center of Reference and Cultural Support Foundation). This was done in partnership with the Brazilian Forum of NGOs and Social Initiatives for the Environment (FBOMS), the Cerrado Network, the Amazon Working Group (GTA) and the Federation of Workers in Family Agriculture of the South of the Country (FETRAF-SUL). The initiative was financially supported by the Dutch DOEN Foundation, as well as the Dutch MFOs Cordaid and Solidaridad. In January 2004 CEBRAC participated in a workshop held in the Netherlands (and financed by the Netherlands Soy Platform) around the theme of sustainable soy (see section 3.1).

The objective of the Soy Platform was to develop criteria for sustainable production of soy, especially in the Amazon agricultural frontier. The criteria developed were presented at the first international conference on sustainable soy to provide input for the development of global criteria. However, there was no consensus on using the criteria, especially because the proposed criteria were pushing for the inclusion of only non-GMO soy. After this, Fetraf-Sul stopped participating in the organizing committee. However, soon after, other Brazilian organizations, such as IPAM, the Brazilian Vegetable Oils Industry Association (ABIOVE) and the Mato Grosso Soy Producers Association (APROSOJA) joined the initiative. When the Round Table for responsible soy (RTRS) was officially launched (in 2006), the Soy Platform was no longer active. Since then Brazilian groups, such as Grupo Maggi and Fetraf-Sul, participated in the international RTRS conferences on sustainable soy, starting in 2006 in Paraguay.

The above initiatives and developments have benefitted from Dutch support in various indirect and indirect ways. First of all financially as most Brazilian civil society organisations were financially supported through Dutch programmes. Several NGOs maintaining a critical position against the advance of soy and its sustainability effects remain to be supported financially by Dutch NGOs. For instance, Reporter Brazil maintains annual statistics on land conflicts and the relation with soy, and is supported by Cordaid. Secondly conceptually, by adopting the Dutch negotiation and 'polder' model of dialogue and multi-stakeholder negotiation, which is quite common to round-tables developed for agro-commodities, but was new to the LAC region. Lastly, by direct financial support to the international conferences that were held.

Initiatives leading to other standards

Several standards have been developed in Brazil other than the RTRS standard, as explained below.

1. ProTerra

The ProTerra Certification is a certification for sustainable production with a strong non-GMO position. According to ProTerra 25 to 30% of Brazilian soybean production is free from GMO. Therefore there is potential for a GMO-free standard such as ProTerra. Due to its non-GMO orientation the ProTerra requires strict segregation from potential sources of contamination, full traceability and testing for non-GMO at critical control points. The standard is comparable to the RTRS and is claimed to be even stricter: it has 33 requirements that find no correspondence in the RTRS standard.²⁸ However, it can be argued that ProTerra does not follow a multi-stakeholder approach, is less transparent (e.g. a list of producers is not available, nor are its export destinations), and it was also found that the standard is less stringent with respect to phasing out dangerous pesticides.²⁹

²⁸ http://www.cert-id.eu/downloads/Comparison-of-ProTerra-Standard-V2-9-x-RTRS.aspx

²⁹ Personal comments, Sandra Mulder WWF International

ProTerra has started certification in Brazil in 2005. Since then it has expanded the amount of certified soy, from 1.5 to 4.2 million MT between 2005 and 2011. This is non-GMO soy certified by CERT ID and complying with the ProTerra sustainability standard. The totality of this volume is being exported to EU buyers interested in non-GM soy. ProTerra soy has a premium price which is substantially higher than RTRS certified soy.

EcoSocial

EcoSocial is a certification system of organic products. It is the Fairtrade Program of IBD.³⁰ The EcoSocial certification has its basis on the OIT's Conventions, internationals protocols such as Agenda 21, Milleniun Goals, aside from that, the EcoSocial also follows the SA 8000, ISO 14.000 e BS 8800. More than that, when a producer is certified, it means that he will engage in the Fair Trade. The EcoSocial has 16 soy producers certified in Brazil and 9 other countries. Volumes produced are relatively small, but exact information about volumes produced cannot be found.

Brazil: Soja Plus

After the federation of soy crushers ABIOVE and producers APROSOJA left the RTRS they started their own initiative. Soja Plus³¹ is a Brazilian program that is in development organised by ANEC, ABIOVE, ARES, (the Brazil Responsible Agribusiness Institute) and APROSOJA, the association of soy producers in Mato Grosso, with the aim to create a process for continuous improvement in soybean production and to implement and monitor best agricultural practices at soybean farmers. The program is still under development.

Soja Plus Program is undertaking capacity and training activities with soybean producers in the two main sensitive areas: compliance of the Forest Code and labour conditions issues. The general idea of the Program is to help producers improve their sustainability practices with in turn would facilitate their compliance with certification schemes. The Soja Plus program will not include certification since its organizers want to cover all soy farmers and not only those that want to be certified. Thus, it is not possible to state how much soy has been produced according to certain criteria. In 2102 in total 2,300 rural producers have been trained on best agricultural practices.

6.2 The Soy Moratorium for the Amazon biome

Aiming at reducing one major threat for deforestation, an important positive policy measure has been the Soy Moratorium for the Brazilian Amazon between Brazilian producers and NGOs, established in 2006. The Soy Moratorium came after a vigorous international campaign by Greenpeace. It has been a unique experience in which the productive sector and environmental groups aimed to reconcile economic development and socio-environmental conservation in the Amazon biome. It first involved a two-year commitment by the main players in the industry not to purchase soybeans cultivated on any land in the Amazon biome that had been illegally deforested after 2006, in other words, not to buy from farmers who had cut more than the allowed quota of forest in order to plant soy. A working group known as GTS (Working Group on Soybean) was formed, composed of commercial associations such as ABIOVE (Brazilian Association of Vegetable Oil Industries) and ANEC (Brazilian Association of Grain Exporters), companies (ADM, Amaggi, Bunge and Cargill), the Bank of Brazil, and civil society organizations such as Conservation International, Greenpeace, IPAM, TNC and WWF Brazil.

Between 2007 and 2009, the GTS promoted the monitoring of deforestation in municipalities with over 5,000 ha of planted soybean in the states of Mato Grosso, Pará and Rondônia. Planting of soybean in illegally deforested areas was identified on 12 properties, totalling 1385 ha or less than 1% of the monitored area, showing that soy was hardly responsible for deforestation in the biome during that period, as a result of this voluntary agreement. The moratorium has been extended annually with the participation of the Ministry of Environment (ABIOVE 2010), and monitoring

³⁰ IBD is the largest certifier in Latin America and the only Brazilian certifier of organic products that is accredited.

³¹ www.sojaplus.com.br/index_us.html

now uses finer resolution images, which enable identification of smaller scale clearances. The area deforested for soy in 2010 corresponded to only 0.25% of the deforestation that occurred in the Amazonian biome in the states of Mato Grosso, Pará and Rondônia, which totaled 2.49 million ha over the years 2007-2009. It should be noted however, most of Brazil's soy production is located in the Cerrado, and is therefore not included in the Soy Moratorium. Various Brazilian NGOs accept expansion of soy in the Cerrado if this means soy does not expand in the Amazon. Greenpeace Brazil, for example, has launched the campaign "Zero Deforestation" only taking into consideration Amazon forest. However, the scientific and public opinion about the negative impacts of Cerrado deforestation has been growing.

The Soy Moratorium realized its aim to disconnect soybeans with Amazon deforestation. However, although the federal government endorsed the pact, some soy producers groups are not in favour. Again, the main reason is that if Brazilian law allows deforestation in Amazon (20% of the farm, according to the Forest Code), another initiative to rule the issue is not considered useful.

The area monitored is defined by the concentration of soybean area through the pre-selection of deforested polygons by PRODES (Programa de Cálculo do Desflorestamento na Amazônica Brasileira), that estimated the annual deforestation rates in the Legal Amazon, with possible annual agricultural crops. The polygons are then preselected and overflow to confirm the occurrence of soybean.

There is no direct link between the soy moratorium and activities undertaken by the Dutch government. However, there are indirect linkages. First of all, the successful lobbying work by Greenpeace to establish the soy moratorium should be seen in the context of major attention to deforestation by soy, among others through the RTRS. Secondly, once established the soy moratorium was actively supported, for instance the The Dutch Product Board MVO welcomed the Soy Moratorium and its extension and the Task Force Sustainable Soy established in the Netherlands subscribes to the soy moratorium and this has been mentioned in a progress reporting on sustainable soy in the Dutch Parliament. Thus, it has stimulated its effective enforcement.

6.3 Case study: soy production in Argentina

In comparison to Brazil, the case of sustainable production of soy in Argentina has some significant differences.

Argentina is stronger in the export of soy byproducts, especially oil and meal, due to its export tax policy: the export tax is 35% on soy beans while it is 32% on soy meal and oil. In the 2009/2010 harvest, Argentina exported almost 50% more soybean meal and 66% more soy oil than Brazil. The fact that in spite of the very high export tax large quantities of soy were exported in the last decade, shows the huge profit margin that soy producers experience as a result of the high global prices of soy. Contrary to Brazil, in Argentina soy is the countries' principal export source, representing US\$ 17.3 billion in 2010, equivalent to 25.4% of total export value and foreign currency inflows. Due to its high export tax, this generates a total of \$8 billion of soybean export duties for the Argentina state. Compared to Brazil, Argentina's soybean chain is more integrated in world trade: about 87% of the total production of soybean meal and soybean oil is exported, while for Brazil this is about 50%. The high export rate of Argentinean soy means a high dependence on world market prices and demand. In the International Food and Agribusiness Management Review (vo. 12, issue 4) of 2009, it is projected that Argentina will become the world's top soybean grower by 2030, producing 29.2% of world output.

Argentina has strongly supported its export of biodiesel based on soy, especially to the EU, by the differential tax regime, which is very high for soy exports (32-35%) but much lower for biodiesel (5% initially, but gradually increased to 12%). Argentina has 69 biodiesel plants with an installed capacity of more than 5 billion liters.

In terms of deforestation, there are no new cases after May 2009. Deforestation is controlled by law. Only with a legal authorization, forest can be cut. This is most likely in northern regions of the country, but might prevent RTRS certification later. Generally, the GAP analysis carried out by ICONE for IDH on sustainable soy observes a lack of awareness as compliance with laws and standard criteria. No major policy initiatives are observed to stop soy expansion. This is mainly due to the original cause of the soy boom that was enhanced by the country's high indebtedness that still needs to be alleviated.

6.4 Case study: soy production in Paraguay

In comparison to Brazil, the case of sustainable production of soy in Paraguay has some significant differences.

Although Paraguay is only a small country compared to Brazil and Argentina, its soy production is the 3rd largest of the LAC region. The growth has been particularly important in the last decade. Area cultivated has increased from 1.9 to 2.9 million hectares between 2004 and 2011, while soy production has increased in the same period from 3.9 to 7.1 million tones. Paraguay is the country with the largest proportion of agricultural land cultivated with soy (in 2007-8, soy occupied 60% of the total agriculturally cultivated area of the country). In Paraguay, Brazilian producers control production and commercialization of soybean sector in Paraguay, technology and producers in Paraguay mostly come from Brazil.

In Paraguay only 13% of original forests still exists, mainly due to clearance of agriculture (soy and cattle). The Atlantic forest is the most threatened one in Paraguay. Following the Forest Conversion Moratorium, approved in 2004 by the Paraguayan congress, the deforestation rate of the Atlantic forests of eastern Paraguay dropped by 90% in 2009. However, by that time very little forest still remained to be converted. In 1945, Paraguay's BAAPA covered 8,000,000 hectares of the Eastern region; it is now reduced to some 700,000 hectares. The main cause for deforestation in the area is the exponential expansion of soybean plantations (Repórter Brasil and BASE, 2010).³²

Paraguay is notable for its low tax regime (no tax on personal income or export of soya 'golden grain'), which compounds the concentration of land. The Conformance with Forest Law programme launched in 2005 was a WWF initiative. The Conformance with Forest Law programme focused on two key aspects of Paraguay's forest law: that landowners with over 20 hectares must retain 25% of the land in forest, and that 100m on either side of water courses must be left forested. CFL can only be applied in areas where an up to date official register of land tenure is available. This condition is only met in two political departments: Itapúa and Alto Paraná (which hold 20% of Paraguay's Atlantic forests). In 2007, as part of the new Agrarian Reform, the president Fernando Lugo planned on prohibiting the cultivation of soy in certain regions of the country and dedicated certain rural areas to small scale farming only. In 2010, the president proposed an export tax of 7% (comparatively low), but this was opposed by entrepreneurs. In 2012 the government was overthrown. This revolution has a direct link with the soy business and land occupation.

While the former president Lugo failed to meet many of his campaign promises to the campesino sector, he did block many of the right's policies that would worsen the crisis in the countryside. For example, Lugo and his cabinet resisted the use of Monsanto's transgenic cotton seeds in Paraguay. Yet even before Lugo was elected, political alliances and victories were shaped by the question of land. Multinational agro-industrial corporations are fully entrenched in Paraguayan politics, and their fundamental enemies in this resource war have always been the Paraguayan campesino. The ban on GM cotton and other crops is expected to be raised soon after this revolution.

³² http://www.reporterbrasil.org.br/documentos/PARAGUAY_2010ENG.pdf

The Netherlands does not have an embassy in Paraguay and thus there are no bilateral relations and Dutch diplomatic influence is minimal. However, while limited in volume, there is historical and considerable support by international and Dutch NGOs (ICCO, Cordaid) to civil society organizations in Paraguay (Altervida, BASE). These NGOs have played a major role in the resistance to indiscriminate expansion of soy and have achieved some slam successes, especially with respect to resistance to GMOs, court cases against the use of pesticides and lobbying the previous government. Paraguay has been an active participant in the RTRS conferences, and the minister of agriculture was present during the first RTRS conference in 2005. Among the RTRS membership there are currently 5 from Paraguay. However, the recent political changes show that the major political and private sector forces have been more powerful. It might thus be concluded that, as compared to Brazil and to some extent Argentina, whereas civil society can play an important role in getting the subject of sustainable soy on the public and political agenda, and also achieve some (minor) successes, bilateral relations and diplomacy in trade and agricultural sector are essential in order to acquire political support and consolidate private sector participation. If not, the Paraguay experience shows that powerful political and private sector interests will simply overrun sustainability initiatives such as RTRS.

6.5 Trends in sustainable soy production volumes

The first production of soy meeting improved sustainability standards entered the Netherlands in 2008, when an estimated 133,000 tons of responsible soy was processed in Dutch food chains. This included 70,000 tons GMO-free ProTerra soy, nearly 50,000 tons other GMO-free soy and approximately 12,000 tons of organic and EcoSocial soy.

Following the shift of Dutch importers towards RTRS as the main standard for sustainable soy, the first companies were RTRS certified in May 2011. The first imports of RTRS soy took place in 2011 when total production and import of RTRS soy in the Netherlands was 81,000 tonnes. This corresponds to 45,000 ha under better management and 28,000 households benefitting (Solidaridad, 2011). For 2012, the production of RTRS-certified soy is estimated at 430,000 tonnes, of which about 300,000 tonnes is expected to be imported in the Netherlands.

In 2011, between 25 and 30 % of Brazilian soybean production is free from genetic modification and CERT ID will audit over 5 million ton of Brazilian soy production. An additional volume of Brazilian soy meal representing 2 million tons of soybeans could have been certified if EU buyers had expressed their demand early in the year.³³

The Dutch IDH has the target to have 10-15% of European import RTRS certified by 2015 (focus on the Netherlands, Belgium, Scandinavia and the United Kingdom (UK)). This implies 4- 6 million tonnes out of 40 million tonnes European total import.

Biodiesel

Biodiesel within the EU is mainly derived from non-soy feed stocks. Brazilian biodiesel from soy oil is today only sold within Brazil. To what extent it complies with the EU Renewable Energy Standard has not been researched. Because of the dominance of the domestic market, Brazilian biodiesel producers are not pre-occupied with the sustainability criteria of the EU RED. The RTRS developed its Biofuel annex to meet the requirements of the EU RED and on 19 July 2011, the EU accepted the RTRS as one of the compliant voluntary schemes.

In Brazil, in 2011, 78% of the feedstock for biodiesel originated from soy (mainly from Mato Grosso and Mato Grosso do Sul) and from animal fat (mainly from the cattle industry). The share of soy is expected to rise to 90% (Wilkinson and Herrera, 2010). Biodiesel can come from a variety of plants with oily seeds (soy, castor, sunflower, palm oil) and thus from family farms. Under the PNPB,

³³ <u>http://proterrafoundation.org/images/pdfs/Brazil-Non-GM-Certification-Volume-2011-ENG_5.pdf</u>

biodiesel producers are required to buy a percentage of their feedstock from family farms (Social Fuel Stamp), if they intend to supply to government contracts (the primary market). Companies also have to provide technical assistance and credit to family farms and can get tax exemptions. For example, the quota for family farm purchases was 10% in Mato Grosso in 2009/2010 and 15% in 2010/2011.

Brazil has become the fifth largest biodiesel producer in the world but the majority of biodiesel is for the domestic market (Argentina is number 1 in global exports whereby soy oil is also the main feedstock). Argentina has 69 biodiesel plants with an installed capacity of more than 5 billion litres. In 2010, production reached 2.4 billion litres. In 2011, Brazil produced an estimated 5.7m metric tonnes (mt) soy oil of which 2.2m mt (48%) is expected to be used for biodiesel. The company BioVerde plans to expand its production capacity and expects to sell 40% of its output to Europe, the largest biodiesel market in the world (although demand in Brazil will grow and may exceed supply). Also the giant oil company Petrobras invests in bio-ethanol and biodiesel. It is not clear to what extent the growing biodiesel market drives soy expansion. The demand for soy meal is growing fast as well and soy oil is a by-product. However, it makes the soy crop even more commercially attractive.

6.6 Trends with respect to main sustainability issues

Social impacts

Especially well documented are impacts of soy expansion and preceding deforestation on land conflicts, social impacts and deforestation, for instance in the states of Pará and Mato Grosso. The land rights of indigenous peoples, as well as principles of free and prior informed consult have not always been respected. Land is generally concentrated in the hands of few investors and farm operators. Small farmers and indigenous peoples are pushed from their lands. Pesticide-intensive cultivation of genetically modified soy endangers soils, water and human health (Food & Water Watch, 2011).

The shift from small-scale subsistence farming to large-scale commercial production will result in loss of livelihoods for some, while generating employment for others. The Cerrado areas, at least where no indigenous or peasant populations had been present any more, were opened up in the 1960s. The earliest settlers in the main soy belt in Mato Grosso were cattle ranchers and loggers. Bickel and Dros (2003), expressing the concerns of a number of NGOs, note that for the Mato Grosso area, employment levels on large mechanized soy farms are low (about 1 permanent worker per 500 hectares). Importantly however, this is more per hectare than in the low intensity cattle ranching that soy has replaced (Lima, Skutsch and de Madeiros de Costa, 2011).

According to the gap analysis carried out by ICONE for IDH, in Brazil the regions of Mato Grosso and Paraná had reduced numbers of land occupation conflicts. Likewise, research with local NGOs in Mato Grosso also revealed that conflicts with indigenous people and quilombolas - Brazilian hinterland settlements founded by people of African origin, generally descendants of fugitive slaves- over land are currently less. Nowadays, however, land conflicts have shifted to the Cerrado frontier area in the region of Maranhão, Piauí, Tocantins and West of Bahia. These conflicts over land occur with the 'gauchos' from the South entering in these regions. In these regions there are local communities living in the vicinity of agricultural properties, which are directly and indirectly, positively or negatively affected by the new regional agricultural activities.

Deforestation of Cerrado savannah and Amazon forests

As mentioned earlier, the vast majority of the clearance for soy has been undertaken in the Cerrado (woodland or forested savannah), although most savannah was cleared for cattle ranching (between 172 and 200 million ha). The Cerrado occupies around 20% of the country's land area. In a study, launched by the WWF in 2001, it is concluded that the rate of Cerrado deforestation during the period of 2002 to 2008 accounted for about 2 million hectares per year (Vitali, 2011), compared to about 1.9 million hectares of Amazon tropical forest being lost annually. The greatest

rate of loss is due to soy, cattle grazing and sugarcane. Less than 10% is under any form of protection. In 2010, Brazil presented the Action Plan to Prevent and Control Deforestation and Wildfires at Cerrado (PPC) as part of Brazil's ambitions to reduce CO2 emissions. The PPC will help Brazil reach its goal of reducing deforestation by 40% in Cerrado until 2020. It is expected that the deforestation falls to about 870,000 hectares for ten years. The plan projected for 2020 to increase the number of protected areas and the implementation of the Ecological Economic Macrozoning of Cerrado. Over the next ten years will be created protected areas equivalent to 2.5 million hectares and 5.5 million hectares of degraded pastures.

The increase of soy in strongly associated with deforestation and expansion of pasturelands. After native forests (61% of the Brazilian territory), pastureland is the second largest land use in Brazil, occupying an estimated 190 million hectares (23% of the country). The intensification of pastureland is strongly taking place in Southeast and Midwest, in the biomes of Atlantic Forest and Cerrado. Between 1995 and 2006, deforestation for pastures was 12.2 million hectares in the Amazon biome mainly because of attractive prices of commodities and the available big tracts of land with no owners. Traditionally, clearing forest in the Amazon region is the main form to have *de facto* control over land.

There is evidence of a decline in deforestation since 2006. Until 2006, there is a positive correlation between the deforestation in the Amazon biome and the size of the cattle herd. There is also a positive correlation between the expansion of soybean area, the price of soy bean and the deforestation rate in the Amazon. Since 2007, this relationship is disrupted (figure 6). Although deforestation continues, the rate has declined. The remaining deforestation (618,000 ha in 2011) is largely in the Cerrado biome as deforestation in the Amazon biome is increasingly controlled.



Figure 6. Soybean and deforestation, deforestation now mainly continues in the Cerrado

Source: INPE (2011), IBGE (2011) and ICONE (Nassar et al., 2012).

The decline in deforestation is mainly associated with government and civil society actions including effective satellite monitoring, which supports annual reporting to the Federal government and parliament, the credit restriction to rural properties with land and environmental irregularities as the properties without environmental license, the creation of protected areas (UCs – Conservation Units and indigenous areas) and the control through taxes and seizure of products of illegal origins. The civil society actions include the moratorium on buying products from illegally deforested areas, as the soybean and beef moratorium.

The contribution by the Netherlands to deforestation in Brazil due to its total soy imports has been estimated at about 500,000 ha over the period of 2001 to 2005 (IIED and Aidenvironment, 2006). It can be claimed that all soy imports must be taken into account since these are economic activities for the Netherlands. If we only take Dutch soy consumption (around 1.8 million tonnes), the estimate would need to be divided by a factor 4.

6.7 Trends with respect to enhancing sustainability

As a result of the Soybean Moratorium and the pattern of soybean expansion, it is expected that most future soybean will continue expand mainly over pasture land. Amazon deforestation is the main environmental concern in Brazil and abroad and different initiatives have been undertaken to halt it, both by governments and by civil society. Some of them have had positive effects and we can observe the significant decrease of Amazon deforestation after 2005. However, Cerrado is gaining more important in terms of deforestation and this biome is now considered the main agriculture expansion area. Soy is the main driver of agriculture expansion in Brazil together with other maize, cotton and other cash crops that area planted in the same production systems.

NGOs are less concerned with the protection of the Cerrado and rather concentrate on the rainforests of the Amazon. Here, the main threats are logging and cattle ranching (85% of the land in permanent use). Brazil has already declared large tracts of Amazon land as protected areas, sustainable use areas or indigenous territories (44%). In Pará, within the Amazon biome, despite the opening of Port Cargill at Santarém, the rate of deforestation for soy has been heavily constrained in recent years, thanks to government restrictions on forest clearance, as well as to the low suitability of most of the area for soy, and the fact that many properties do not have formal land tenure and so cannot easily access bank credit. In the transition area and in the Amazon biome, soy bean is more likely to expand to areas already cleared for cattle raising (... million ha). The most likely model would be a lease system, in which part of the holdings that are currently used as grazing land would be leased to soy cultivators for one or two seasons. This has the effect of renewing degraded pastures and increasing the productivity of cattle ranches through intensification and crop–livestock integration, a policy that is being strongly promoted by Embrapa (Landers, Weiss & Clay, 2005, see Lima, Skutsch & de Medeiros Costa, 2011.).

Soy expansion (and its replacement of cattle ranching) could mean more deforestation and more loss of biodiversity. Further expansion into undisturbed rain forest and savannah is increasingly considered undesirable. There is a preference for soy production on already cleared land for cattle ranches in the Cerrado (which can become more intensive). Massive fires and the droughts of 2005 and 2010 in the Amazon also gave rise to concern on Climate Change. Scientists from the Brazilian National Institute of Amazonian Research argue that effects of deforestation could reach a 'tipping point' (estimated at 60% forest standing with more attention to forests in the Eastern part of the basin), after which large parts of the rainforest would permanently turn into savannah. This would heavily impact the Amazon itself as well as the wider regional climate, including rainfall patterns and soil temperature in the agricultural areas to the south.

The USDA projection shows that the Chinese soybean import will continue to grow but at lower rates than in the past and reach 87 million tons in 2020/21, this is 66.2% higher as compared to 2010/11. On the other hand the UE-27 import is expected to decrease as a result of environmental restrictions imposed on its suppliers and the incentives to grow up the domestic production. Thus, the demand from the EU will stabilise while demand for China will grow. Currently, sustainability is not a concern for Chinese importers and consumers. Therefore, the RTRS has started targeting China to convince them to accept some form of sustainability. Next year the RTRS meeting will be held in China.

When considering the role of China, its market share will rise to at least 70% of Brazil soybean exports by 2020. This will involve an increase of around 5 million hectares in land planted to soy. Chinese demand for soybeans underpins a commodity market where neither certification nor price premiums to producers are sufficiently promising to minimize habitat conversion. Other strategies are necessary to green commodity markets of this type. These approaches include:³⁴

- risk management in multinationals, where deforestation is a reputational issue
- non-price premium incentives to producers (subsidized credit, access to extension services, etc.)
- improving regulatory frameworks through cheap, large-scale land-use monitoring
- intensifying production systems on land already cleared
- framing environmental issues in terms of food security
- mapping land available for agricultural expansion at minimal biodiversity cost

 $^{^{34}\,\}rm http://www.nature.org/our$ initiatives/regions/southamerica/brazil/explore/brazil-china-soybean-trade.pdf

7 Analysis of the effects of policy actions on sustainability

In the analysis of the effects of Dutch policy actions on sustainability in the forestry sector, the main subject of this case study, we will use as a guidance the evaluation questions for this case study.

7.1 Dutch and EU policy reference framework

(1) What are the Dutch and EU policy frameworks and objectives relevant to imports of soy from the LAC region? Which concrete actions and outputs have been intended and were implemented?

The Netherlands

Since 2003, Dutch government policy objectives are emerging aimed at promoting sustainability in commodity value chains, reducing the contribution by the Netherlands to its international footprint and attention for non-trade issues at WTO level. These policy objectives are found within different ministries (environment, foreign affairs, agriculture). These policy objectives have been translated to the soy sector by a formal policy on sustainable soy since 2007. This policy is implicitly applicable to the LAC region since all soy originates from this region. The policy objectives on sustainable soy include a series of actions: support to the RTRS process, stimulating policy dialogue in LAC countries, playing a proactive role at EU and international level, enhancing a dialogue with China on the subject of sustainable soy and at WTO level removing measures that distort the trade of soy, including subsidies, tariffs and tariff escalation.

However, the Dutch LAC regional policy (or its update) does not refer to soy as a particular policy focus. Although soy is mentioned in some embassy plans, we do not find any concrete policy objectives on sustainable soy in plans or reports of the RNE in Brazil or Argentina. With respect to sustainable commodity chains, the dominant policy culture in the Netherlands, as related to globalisation, sustainability and WTO policies, was to not directly intervene in production and trade issues regarding sustainability but rather leave it to the sector to voluntarily develop actions. The government can support the development of initiatives in the sector if these are based on a multi-stakeholder dialogue, may finance pilot projects and undertake supportive policy and diplomatic actions.

EU policy context

The EU animal feed industry strongly depends on imported feedstuffs, particularly protein-rich feed material. Animal feed is by far the largest agricultural product group imported into the EU. Several European firms rank among the world's top feed companies, many of which are Dutch. As a result of the 'mad cow disease', the EU banned the use of animal and bone meal in livestock feed in 2001, triggering a profound change in the composition of compound feed and growing imports of vegetable alternatives to protein-rich animal meal - mainly soy. Currently, the livestock sector in the EU is highly dependent (80%) on soy imports from Latin America, especially from high external input monocultures in Brazil and Argentina. Partly because of the availability of cheap soy, soy beans and later soy meal has developed as the main ingredient for animal feed, mainly at the expense of for example grains. The high level of cheap soy imports is part of an EU strategy that aims at industrialization and export of meat, milk and egg production, which engenders high environmental and social costs.

The relevant trade policy framework is largely that of the EU and is based on WTO regulations. A Dutch trade policy does not exist. Two agreements are important: the Dillon Round agreement and the Blair House Agreement. The Dillon round took place between 1960 and 1962. The USA, being the primary soy producing nation at that time, negotiated a bound zero import tariff on oil seeds. In exchange for this, the EU was allowed to protect its dairy, meat and grains sector. The effect of the bound zero tariff has been, that the EU has imported large volumes of relatively subsidized soy from the USA and later also from the LAC region. The Blair House Agreement in 1992 determined a maximum area for the subsidized production of oilseeds in Europe. There is thus a zero EU import tariff on soy beans and soy meal. However, more value added products like soy oil are

subject to relatively high import tariffs. The import tariffs for Brazilian soy oil vary between 1.6% and 6.1%. Brazilian soy products are subject to a so-called preferential tariff.

Agricultural policy is also primarily a European affair (Common Agricultural Policy). The tendency during the last years has been to reduce price support for producers in the EU of soy substitutes, which is likely to have increased the demand for soy. With respect to GMOs for food consumption, the EU has set up one of the most stringent import regimes. When GMOs and food products derived from GMOs are placed on the market, they must comply with labelling and traceability requirements. However, this position has been increasingly come under pressure. In 2011, the EU abolished its zero-tolerance policy and approved a proposal to establish a tolerance threshold. According to this proposal, soy for food consumption may contain up to 0.1 % genetically modified varieties that have not yet undergone safety testing in Europe. However, this policy does not apply to soy used for feed.

Within the so-called Common Market Organisation, a set of rules and instruments that the EU has at its disposal to organize the market for the respective products, the price support for producers of cereals, including maize and grain, has been reduced. The gradual reduction of EU support is likely to have increased the demand for soy. This policy is due to be reformed by 2013.

It can be concluded that several EU policy decisions and market regulatory mechanisms stimulate the use imported of soy as animal feeds. The high level of cheap soy imports is part of an EU strategy that aims at industrialization and export of meat, milk and egg production. This policy is in contrast to the general position of most NGOs, who would rather see that more attention is given to the possibilities to replace soy imports by fodder crops in the EU, as this is expected to be reduce environmental and social effects in soy producer countries.

Dutch policy implementation

In line with the policy decision to support sustainable soy, in 2007, support to the RTRS has been provided by the agricultural attachés in Argentina and Brazil. It was estimated that in the period of 2007 to 2010 the agricultural attaché in Argentina has spent around 40% of his time on this subject. This included activities of field visits, being observer in RTRS conferences and meetings, communication with and answering of questions from the Ministry of LNV and Parliamentary motions, facilitating financial demands and playing a mediating role. Between 2004 and 2011, various Ministers visited Brazil to establish sound bilateral political relations and discuss trade matters. In 2007, the embassy formally visited the state of Mato Grosso in follow up of a Brazilian trade mission to the Netherlands and discussed their insight in the production, transport and trade of soy and biofuels. In 2009, Prime Minister Balkenende visited Brazil and in his speech emphasised the need to work on sustainability, especially in relation to bio-ethanol. The last visit was in 2011 by Minister Bleker, responsible for agriculture and trade matters. During these visits, concerns on the sustainability of agricultural commodities were expressed. However, sustainability has not been a regular theme during trade missions and economic diplomacy activities. While there were many contacts with the Brazil government, there were very few contacts with the Argentinean government.

Looking at policy implementation, our analysis shows that, looking at the 2007 sustainable soy policy objectives, the first two policy objectives have been adequately covered. First, the RTRS process has been (financially and otherwise) supported. Second, the agricultural attachés in Brazil and Argentina have been formally instructed by the Ministry of LNV to support the implementation of the policy on sustainable soy. However, policy intentions at the EU and international level do not seem to have received any follow up. At EU level, the policy intention expressed in 2007 was to play a proactive role to enhance sustainability of soy and other agrocommodities, but no formal activities have been implemented. With respect to the WTO, in 2009 the Dutch government supported Non-Trade-Concerns (NTCs) in Dutch and European trade policies, for example by addressing social and environmental sustainability issues within free trade agreements, but at WTO level the subject of sustainable soy did not receive attention.

Of course the decision by Dutch companies for a transition to 100% sustainable soy based on the RTRS standard by 2015 is an important milestone. It is interesting to observe that recent evaluations and progress reports from different sector ministries refer to this decision, claiming (indirectly or directly) this success as evidence that policy objectives have been met and suggesting a strong contribution by the Dutch government.

Within Brazil and Argentina, much time has been spent and emphasis has been put on the RTRS process and on sustainability by relevant staff of the RNE. The subject was also regularly mentioned during Dutch visits to Brazil. However, it was not an important subject during trade missions.

7.2 Contribution to enabling policies and politics

Three main questions will be addressed hereunder:

- 1) In terms of policy implementation, what has been the contribution by Dutch activities on the conditions for increased sustainability of soy production in Brazil and other LAC countries?
- 2) In terms of policy implementation, what has been the contribution by Dutch (policy and other) activities on the conditions for private sector to support the sustainable soy value chain?
- *3)* What has been the progress in terms of the RTRS standard development, and what has been the contribution by the Netherlands (through different modalities)?

National policies

Brazil was one of the first countries in the LAC region to produce soy. The Brazilian soybean expansion in the 1960s was triggered by international as well as domestic demand. Several domestic policies have strongly stimulated soy production and soy expansion in the Amazon and Cerrado regions. To be mentioned are export subsidies, tax exemptions, fiscal credit and lower interest rates and fuel subsidies. The Brazilian government exempts unprocessed and semi-processed soy from export taxes, according to the Kandi law. Subsidised credit for soy producers was made available by ministries and national banks, also for soy crushers and traders for example by the state-owned Development Bank BNDES. A major stimulant resulted from regional development programmes, with financial and technical support to encourage settlers to colonise the Cerrado. There have also been important infrastructural improvements to open up the Amazon hinterlands. The various policies contributed to the shift from the initial expansion of soy in southern states of Brazil (until the mid 1970s) towards the Cerrado (starting in the 1980s) and later into the Legal Amazon region, triggering further deforestation in these regions.

For controlling the negative environmental and social effects of soy expansion and production, relevant are forestry and social legislation. In theory, deforestation in Brazil is controlled by the Forest Code. It sets limits on the amount of forest that can be cleared. However, although in theory very good, this law has been poorly enforced. Non compliance with the Forest Code is rule rather than exception. Increasing international pressure on reduction of deforestation has led to two pathways. Firstly, there are initiatives to help producers to comply, through joint projects of NGOs, governments and private sector. Secondly, there are efforts to change the Forest Code. The reform is based on the assumption that the requirements were too strong to be complied with. For instance, special considerations for farmers who have cleared their land before the Forest Code requirements are part of the reform principles. In general, NGOs are unhappy with the changes as the new Forest Code is less strict. Once the new Forest Code is adopted, the challenge of implementing it remains.

In 2006, Brazil launched the soy moratorium after an international campaign by Greenpeace. It involved a two-year commitment not to purchase soybeans cultivated on any land in the Amazon biome that had been illegally deforested after 2006. It was supported by a working group composed of commercial associations, companies and civil society organizations. The moratorium

has been extended with the participation of the Ministry of Environment and monitoring now uses finer resolution images, which enable identification of smaller scale clearances. There is general agreement that the moratorium has been effective in reducing deforestation in the Amazon region.

With respect to social issues, there are several laws that regulate labour conditions. It seems that through CSR policies and as a result of international pressure, especially on respect of human rights, child labour and forced labour, initiatives are taken in order to improve labour conditions and thus address these legal compliance gaps. There have not been any changes to Labour regulations in recent years.

Another relevant Brazilian policy is that on biodiesel. In 2003, Brazil launched the Brazilian National Biodiesel Plan, which stimulated production and demand by setting mandatory blending targets, which have risen from 2% in 2008 to 5% in 2010. In 2011, 78% of the feedstock for biodiesel originated from soy and from animal fat. It is not clear to what extent the growing biodiesel market drives soy expansion. The demand for soy meal is growing fast as well and soy oil is a by-product. However, it makes the soy crop even more commercially attractive.

With respect to Dutch influence on above national legislation aspects, following conclusions can be drawn:

- The Netherlands has indirectly contributed to soy expansion, by providing finance through financial institutions based in the Netherlands and through technical expertise (private sector);
- There is some evidence of an indirect influence on the Forest code and Labour code, of which enforcement has improved in recent years. It is unclear what has been the influence on recent changes in the Forestry code, if any. In general, increasing scrutiny in applying forest, labour and human rights legislation can be considered as partly resulting from international pressure (governments and NGOs).
- It is certain that international NGOs such as Greenpeace have had an important contribution to the creation of the Soy Moratorium, which has been relatively effective. Greenpeace most certainly has made use of information collected by Dutch NGOs and their local partners.
- Although there was a Dutch embassy in Argentina, its influence on Argentine policies has been almost nil, the Argentine government being more closed to external influences. The same is true for Paraguay where there was no embassy. In both countries, several NGOs, indirectly supported by Dutch funding, may have had some influence. This is especially true in Paraguay.

RTRS standard development

In 2006, the multi-stakeholder initiative of Round Table for Sustainable Soy (RTRS) was established. In 2010, after 4 years of negotiations and international conferences, the RTRS standard for responsible soy production was approved. The RTRS is now gradually being applied to an increasing number of producers. The RTRS promotes responsibility both in GM and in non-GM production (it is technologically neutral). It also contains a biofuels annex which in 2011 was recognised by the EC as a voluntary scheme with which compliance with the EU RED can be demonstrated. The RTRS counts 150 members (2012), including 32 producers, 74 industries, 18 NGOs and 32 observers. The number of members from Brazil (25), the Netherlands (23) and Argentina (22) are highest. The Dutch government functions as an observer. In 2009, two major important Brazilian members of the RTRS stepped out, the Brazilian producer association APROSOJA and the Association of Vegetable Oil Industries (ABIOVE). The main reasons were the absence of some important global players, the unbalanced voting power, lack of trust, disagreement on the importance given to the concept of high conservation value areas (HCVAs). Fundamental was also the criticism that the RTRS did not take the Brazilian legislation as a basic model, but rather created new, onerous and repetitive requirements. The second argument might have been avoided but would have been unacceptable to NGOs, thus breaking the coalition. On the other hand, while existing legislation in Brazil was formally good, its enforcement was poor and has only recently improved. RTRS members did actively support the soy deforestation moratorium, which was a Brazilian decision. At the same time there are local and international NGOs who do not support the RTRS standard, for two main reasons: the RTRS standard assumes

that soy production is good for the (local) economy, and secondly all negative effects such as the use of agro-chemicals and pesticides, can be mitigated by appropriate measures taken.³⁵

In 2007 Dutch companies active in the soy chain that wish to contribute to more sustainable soy formed the Task Force Sustainable Soy. In 2011, Dutch companies representing all sub-sectors using soy agreed for the transition to 100% sustainable soy based on the RTRS standard by 2015 (1.8 million tonnes RTRS certified by 2015). The initiative is supported by several NGOs. This initiative is now supported by the soy programme within the IDH programme, with a combined public and private sector match funding. For 2012-2015 expected funding of the IDH soy fast track programme is up to Euro 7 million from public funds and an additional expected Euro 24.5 million from private sector match funding.

With respect to Dutch influence on RTRS development, following conclusions can be drawn:

- There is no doubt that the establishment of the RTRS is based on initiatives by Dutch NGOs and their partners in the LAC region, especially Brazil, which started in the 1990's. They identified frontrunners in the private sector and engaged them in the process.
- The RTRS process also lead to important changes in the perception of stakeholders in Brazil, not used to multi-stakeholder platforms and partnerships. This 'change in culture' has been an important contribution, by both Dutch NGOs and private sector.
- Once established, the RTRS moved forward as a result of the joint initiatives of its members, mainly NGOs and companies. Dutch companies decided for a transition to 100% sustainable soy based on the RTRS standard by 2015. IDH plays an important role, with Solidaridad, in helping realise this target.
- The role of the Dutch government has been important as well. Some funding has been provided (in total Euro 4-5 million, mostly indirectly through NGO subsidies). However, more important has been the active role of the RNE and agricultural attaché in Brazil and Argentina, actively stimulating government and private sector actors, facilitating and participating in RTRS processes. Given the fact that the soy sector is recognised as being particularly difficult to influence, the role of the Dutch government has probably been essential (in contrast to most other agro-commodity value chains).

Alternative sustainability initiatives

In Brazil, in parallel with initiatives by the NGOs in the Netherlands to establish a soy platform, in 2004 the Articulacao Soja (Soy Platform) was established under coordination of the CEBRAC Foundation (Brazilian Center of Reference and Cultural Support Foundation) and involving several NGOs. The initiative was financially supported by Dutch NGOs and has been instrumental in the multi-stakeholder dialogue leading to the RTRS. Several NGOs monitoring sustainability in relation to soy production continue to receive important financial support from Dutch NGOs. Apart from the financial support, Dutch support has been instrumental in installing a culture of multi-stakeholder dialogue and negotiation, which was new to the Latin American context.

In addition, partly as a follow-up to the RTRS process, a series of sustainability standards have been developed. One is ProTerra, previously called the Basel criteria, a certification for sustainable production with a strong non-GMO position. The standard is comparable to the RTRS and is claimed to be even stricter: it has 33 requirements that find no correspondence in the RTRS standard.³⁶ However, ProTerra does not follow a multi-stakeholder approach, is less transparent (e.g. a list of producers is not available, nor are its export destinations), and it was also found that the standard is less stringent with respect to phasing out dangerous pesticides. Another Brazilian standard is EcoSocial, a certification system of organic products with a small niche market. SojaPlus is developed by the Brazil industry partners and developed as an alternative to RTRS by the organizations who stepped out of the RTRS (the Brazilian producer association APROSOJA and the Association of Vegetable Oil Industries ABIOVE). However, it does not yet have a standard and is so far mainly oriented at capacity and training of soybean producers in the

³⁵ http://www.lasojamata.net/es/node/289

³⁶ Argos, 2011

two main sensitive areas: compliance of the Forest Code and labour conditions issues. There would seem to be potential of merging SojaPlus training with RTRS certification.

In Argentina the Agricultura Certificada initiative was developed, including soy certification. The quality of this standard is not known.

At an international level the International Soybean Growers Alliance has developed its own handbook for sustainable soy production. It refers mainly to agricultural practices.

With respect to Dutch influence on these initiatives, following conclusions can be drawn:

- There is no doubt that the establishment of these standards has been triggered by the general initiative of developing a sustainability standard for soy, leading to the RTRS.
- There is also no doubt that the approach of developing standards through a multi-stakeholder approach has been triggered by the culture of negotiation between Dutch NGOs and private sector mainly.
- SojaPlus has been developed by Brazilian parties who withdrew from the RTRS process and would not have been established without the RTRS initiative.

Comparison with Argentina

There are some important differences between Brazil and Argentina. One is the fact that there are much less linkages between Dutch NGOs and those in Argentina, and also less trade relations. This might explain why sustainable soy partnerships started in Brazil. For instance, there are less members to the RTRS from Argentina. Secondly, Argentina has a specific economic policy, with high import and export taxes on soy beans, which does not make it a preferred partner for EU countries. Thirdly, attention on sustainable development has focused on Brazil because of its tropical Amazon forest with high biodiversity values, while Argentina has less biodiversity values. As a result, there has been less influence by Dutch players on sustainable soy development in Argentina, in terms of standard development and in terms of domestic policies. There have been some gradual improvements in terms of sustainability issues, such as a ban on deforestation. However, in the period 2007-2010 Argentina has been exporting to the EU large quantities of biodiesel based on soy production. This would have been an opportunity for the Netherlands to improve the sustainability of soy production by promoting sustainability standards at EU level.

Comparison with Paraguay

For Paraguay soy is the major source of export and foreign currency. However, the sector is much influenced by Brazilian players and other foreign companies. There are important relations between Dutch NGOs and civil society movements in Paraguay. The latter have been successful in raising awareness on sustainable soy. However, political and private sector interests in soy production are overwhelming and have been at the basis of the recent overthrow of the government. This shows that in the absence of additional political and private sector linkages the NGO channel is too weak to assure a positive development.

7.3 Contribution to production and trade

Two main questions will be addressed hereunder:

- 1) How has the production and trade of soy that meets sustainability standards evolved over time? Can these changes be related to Dutch influence?
- 2) How has the incidence of unsustainable and illegal production practices of soy evolved and can any of these changes be related to Dutch influence?

The first production of soy meeting sustainability standards entered the Netherlands in 2008, when an estimated 133,000 tons of responsible soy was processed in Dutch food chains (this included 70,000 tons GMO-free ProTerra soy, 50,000 tons other GMO-free soy and 12,000 tons of organic EcoSocial soy).

Following the shift of Dutch importers towards RTRS as the main standard for sustainable soy, the first producers were RTRS certified in 2011 and total imports in 2011 were 81,000 tonnes. This corresponds to 45,000 ha under better management and 28,000 households benefitting. For 2012, the production of RTRS-certified soy is estimated at 430,000 tonnes, of which about 300,000 tonnes is expected to be imported in the Netherlands. This is, however, less than the set target of 500,000 tonnes, which corresponds to about 0.7% of the Brazilian soy production and 0.3% of soy production in the LAC region. The Dutch industry target of all Dutch soy consumption RTRS certified by 2015 corresponds to 1.8 million tonnes, which is almost 3% of Brazilian production. Thus, this is still a limited impact.

The production of the Brazilian ProTerra standard, a certification for sustainable production with a strong non-GMO position, was 4.2 million tonnes in 2011. However, it is not selected as a mainstream standard by Dutch importers, it has a 10-20% higher price and production of non-GMO soy is likely to decline. Moreover, there are doubts whether it meets all the RTRS criteria. In 2011, between 25 and 30 % of Brazilian soybean production is free from genetic modification and CERT-ID will audit over 5 million ton of Brazilian soy production. An additional volume of Brazilian soy meal representing 2 million tons of soybeans could have been certified if EU buyers had expressed their demand early in the year.

The EcoSocial standard now has 16 soy producers certified in Brazil and 9 other countries. Volumes produced are relatively small, but exact information about volumes produced cannot be found.

IDH also has the target of having 10-15% of EU soy import being RTRS certified by 2015 (focus on the Netherlands, Belgium, Scandinavia and the United Kingdom (UK)). This implies 4-6 million tonnes out of 40 million tonnes European total import.

Argentina is number 1 in global exports of biodiesel based on soy, especially to the EU. It has 69 biodiesel plants with an installed capacity of more than 5 billion liters. In 2010, production reached 2.4 billion liters. This is very much stimulated by the differential tax regime. Brazilian biodiesel from soy oil is today only sold within Brazil. To what extent it complies with the EU Renewable Energy Standard has not been researched. Because of the dominance of the domestic market, Brazilian biodiesel producers are not pre-occupied with the sustainability criteria of the EU RED. The RTRS developed its Biofuel annex to meet the requirements of the EU RED which has by now been accepted as one of the compliant voluntary schemes. There are not yet imports of RTRS certified biodiesel.

Illegality

The main subjects causing illegality of soy production are non respect of the forest code (mainly deforestation and maintenance of forest zones) and non respect of the Labour code (mainly labour conditions and land conflicts). The gap analysis carried out for the soy sector in Brazil (2011) showed that none of the soy producers in Brazil is fully compliant with the Forest Code. Deforestation rates have gone down, especially in the Amazon biome following the soy deforestation moratorium. The Dutch contribution to deforestation through its share in soy imports has been substantial during the period of 2004-2011, estimated at around 500,000 hectare. Deforestation, however, continues in the Cerrado biome.

The gap analysis carried out for the soy sector in Brazil (2011) showed that there are still several compliance issues with labour and worker health and safety legislation. The main ones are working hours and overtime that exceed national norms, necessary infrastructure adaptations, low rate of formalization of the health and safety program, insufficient use of personal protective equipment and awareness and lack of trainings. The trend is definitely one of continuous improvement, especially with the larger companies involved. This is also a result of increasing adoption of CSR policies. With respect to land conflicts, there is a declining trend, but vigorous land conflicts remain especially in the frontier areas within the Cerrado biome. It should be noted that these improvements in Brazil are largely due to the enforcement of national laws and legislation.

With respect to Dutch influence on the above trends, following conclusions can be drawn:

- There is no doubt that the increasing volumes of RTRS certified soy are due to the establishment of the RTRS standard, to which Dutch parties have significantly contributed (see above).
- In an indirect way the establishment of the RTRS standard has also contributed to soy produced and certified by other Brazilian standards. These comply to a large extent with the RTRS sustainability criteria and are a big step forwards as compared no standards at all.
- The level of illegal exploitation is going down, due to the general level of international attention for sustainability issues.
- Although the impact in terms of the proportion of soy being produced that is certified is still quite limited, there is a consistent and promising upward trend.

7.4 Effectiveness of modalities and pathways

1) What has been the relative influence of different modalities and channels, especially Dutch public policies, economic diplomacy, private sector and the CSO/NGO channel?

The Dutch ministry of EL&I in 2007 formulated objectives of supporting the development of sustainable soy, aimed at reducing the Dutch contribution to the negative social and environmental effects in producer countries, including Brazil, Argentina and Paraguay. This was decided based on the role of the Netherlands in soy trade and evidence of sustainability problems put forward by the Dutch NGOs united in the soy coalition, by research findings and by the private sector. The roots of this influence lies with the strong and historical relations between Dutch and LAC-based NGOs, and financial support to LAC-based NGOs. Joint Dutch and LAC-based NGO activities have been at the basis of developing a multi-stakeholder dialogue that evolved into the RTRS. Dutch influence has contributed to instill a culture of multi-stakeholder dialogue between NGOs, private sector and government, which has been at the basis of the RTRS.

It can be said that the joint, continuous and consistent pressure by the NGO-based Dutch Soy Coalition to put on the policy agenda the subject of sustainable soy has contributed to the Dutch policy intentions on sustainable soy (as formally presented in 2007) and has contributed to set in motion a range of activities, especially dialogues between civil society organisations and private companies, to work towards a more sustainable soy value chain.

With respect to its support to the RTRS process, the Dutch government has been clear and consistent in its role, playing a supportive and indirect role. In doing so it has been cautious in not getting directly involved, through legislation or price policies, as this would be interpreted as influencing domestic policies and can be in conflict with WTO regulations. The support by the embassies in Brazil and Argentina (agricultural attachés) has been critical. The role can be described as mediating, promoting and facilitating, both between parties in the LAC region as well as between parties in the Netherlands, based on the principle of self-regulation by stakeholders. The Dutch government has been observer, both in tri-partite dialogue in the Netherlands as well as the RTRS conferences. Brazilian parties are sensitive to endorsement of an initiative by a government representative and therefore acknowledge that the Dutch role at the RTRS and discussions with producer federations has been important.

As an example of the importance of this diplomatic support reference was made to a situation where the Dutch Soy Coalition presented a brochure which included reference to financial support by the Dutch Government. The fact that the Dutch government, apparently, provided support to Dutch NGOs raised serious doubts about the neutral position of the Dutch government in the debate about the RTRS and almost caused Argentinean parties to withdraw from the RTRS process. The Dutch agricultural attaché in Argentina, who was present mainly as observer, had to use his diplomatic and negotiating skills to keep the Argentinean partners on board.

Dutch financial inputs were relatively small, estimated at Euro 4-5 million over the 2004-11 period. This shows that a contribution to effectiveness can be realized with minimal financial inputs.

The government co-funded IDH soy program is largely based on the pull from market players, who recognize and promote the business case for responsible soy. Their main incentive is to respond to the increasing (market) demand for certified soy (in line with public opinion). IDH is very effective in leveraging other value drivers for producers such as legalization, access to financial services and professionalization of management information systems.

With respect to diplomacy, the Dutch government through the RNE has regularly raised the subject of human rights within the Brazil government. For instance, during the visit of an EU delegation to Brazil in October 2012, the influence of soy production on livelihoods of indigenous peoples has been raised. The Dutch ambassador on 10 December 2009 (international human rights day), visited the Guarani-Indians and has financially supported CIMI for projects benefitting these Indians.

However, it seems that the attention for sustainable soy was not integrated in Dutch economic diplomacy activities, such as trade missions to these countries. On the other hand, it was indicated that the added value of such an involvement would not be very clear as long as the RTRS standard was not developed.

With respect to different channels, this case study shows the complementary role of civil society oganisations (NGOs) both in the north and the south, private sector actors as well as the role of the Dutch government through its embassies, mainly by facilitating, supporting and mediating. However, by focusing only at the specific trade relation with the Netherlands, the overall effects on environmental and social indicators will remain limited.

7.5 Coherence of policy actions to address sustainability issues

1) What is the coherence between economic policy objectives and objectives of sustainable soy production, especially environmental, social and climate change criteria?

With respect to coherence in advancing the sustainable soy agenda, there are positive results with respect to coherence between different ministries in the Netherlands. However, there is poor coherence and there are missed opportunities with respect to the linkages with relevant EU policies.

8 Conclusions

The following conclusions can be distilled, arranged as a response to the main research questions.

1) What are the Dutch and EU policy frameworks and objectives relevant to imports of soy from the LAC region? Which concrete actions and outputs have been intended and were implemented?

- Since 2003, Dutch government policy objectives are emerging aimed at promoting sustainability in commodity value chains, reducing the contribution by the Netherlands to its international footprint and attention for non-trade issues at WTO level. These policy objectives are found within different ministries (environment, foreign affairs, agriculture). These policy objectives have been translated for the soy sector by a policy on sustainable soy since 2007.
- The policy objectives on sustainable soy include a series of broadly defined actions: support to the RTRS process, stimulating policy dialogue in LAC countries, playing a proactive role at EU and international level, enhancing a dialogue with China on the subject of sustainable soy and at WTO level removing measures that distort the trade of soy, including subsidies, tariffs and tariff escalation. No concrete targets or timelines were defined for these actions. The financial support programme to the RTRS process does include well defined objectives for spending the allocated funds.
- Dutch LAC regional policy (or its update) does not refer to soy as a particular policy focus. Although soy is mentioned in some embassy plans, concrete policy objectives on sustainable soy have not been defined, e.g. in plans or reports of the RNE in Brazil or Argentina.
- Dutch financial support to sustainable soy (RTRS development) through public funds has been estimated at Euro 6 million over the 2004-11 period. Since 2009 the funding from the Dutch government has been largely channelled through the Schokland fund public-private partnerships and later on through the IDH initiative.
- Of the Dutch 2007 policy on sustainable soy, the first objective of supporting the RTRS process has been realised. In line with the second policy objective, the agricultural attachés in Brazil and Argentina have actively supported the implementation of the policy on sustainable soy. However, policy intentions at the EU and international level do not seem to have received any follow up. At EU level, the policy intention expressed in 2007 was to play a proactive role to enhance sustainability of soy and other agro-commodities, but no formal activities have been implemented. At WTO level, the subject of sustainable soy did not receive attention, nor has it been discussed in the context of free trade agreements with any LAC country.
- The Dutch government strategy to support the RTRS process has been in line with the policy culture to not directly intervene in production and trade issues regarding sustainability (but leave it to the sector to voluntarily develop actions), to support initiatives based on a multi-stakeholder dialogue, finance pilot projects and undertake supportive diplomatic actions.
- Several EU policy decisions and market regulatory mechanisms stimulate the use of imported soy as animal feeds. The high level of cheap soy imports can be seen as part of an EU strategy aimed at industrialized food production. NGOs would rather see that more attention is given to the use of fodder crops in the EU, as this is expected to be reduce environmental and social effects in soy producer countries.
- The decision by Dutch companies for a transition to 100% sustainable soy based on the RTRS standard by 2015 is an important milestone. It is interesting to observe that recent evaluations and progress reports from different sector ministries refer to this decision, claiming (indirectly or directly) this success as evidence that policy objectives have been met and suggesting a strong contribution and commitment by the Dutch government.
- 2) In terms of policy implementation, what has been the contribution by Dutch activities on the conditions for increased sustainability of soy production in Brazil and other LAC countries?
- 3) In terms of policy implementation, what has been the contribution by Dutch (policy and other) activities on the conditions for private sector to support the sustainable soy value chain?

- 4) What has been the progress in terms of the RTRS standard development, and what has been the contribution by the Netherlands (through different modalities)?
- With respect to Dutch influence on national legislation in Brazil relevant for sustainable soy production (Forest Code, Labour code, CSR policy), we conclude that The Netherlands has indirectly contributed to soy expansion, by its increasing demand for soy and by providing finance through financial institutions based in the Netherlands and through technical expertise (private sector).
- Although there was a Dutch embassy in Argentina, its influence on Argentine policies has been almost nil, the Argentine government being more closed to external influences. The same is true for Paraguay where there was no embassy. In both countries, several NGOs, indirectly supported by Dutch funding, may have had some influence. This is especially true in Paraguay.
- With respect to Dutch influence on RTRS development, there is no doubt that establishment of the RTRS is based on initiatives by Dutch NGOs and their partners in the LAC region, especially Brazil, which started in the 1990's. They identified frontrunners in the private sector and engaged them in the process. Once established, the RTRS moved forward as a result of the joint initiatives of its members, mainly NGOs and companies. Since 2009 there has been active support through the Schokland Fund public-private partnerships and the IDH initiative.
- The support to the RTRS process has also had important indirect effects. by raising awareness on sustainability of value chains, engendering a culture of multi-stakeholder platforms, dialogue and partnerships in Brazil. As a result, the RTRS process has stimulated the development, mainly in Brazil, of alternative sustainable soy initiatives and standards. For instance, SojaPlus has been developed by Brazilian parties who withdrew from the RTRS process. It would not have been established without the RTRS initiative.
- However, the high demands placed on the RTRS standard, especially the inclusion of a HCVA criterion, related to the predominance in the RTRS of European parties favouring these high demands, has been evaluated as a negative factor by Brazilian players, which was one of the reasons that two important players pulled out
- There is some evidence of an indirect influence on the Forest code and Labour code, of which enforcement has improved in recent years. In general, increasing scrutiny in applying forest, labour and human rights legislation can be considered as partly resulting from international pressure (governments and NGOs).
- Comparison of Brazil with Argentina and Paraguay (the two other main countries with soy imports into the EU and the Netherlands) suggests that success factors for effective support to sustainable soy include (i) the presence of a Dutch embassy with active involvement, (ii) a receptive national government and private sector stakeholders, (iii) a relatively good and effective national legislation on key sustainability issues.
- 5) How has the production and trade of soy that meets sustainability standards evolved over time? Can these changes be related to Dutch influence?
- 6) How has the incidence of unsustainable and illegal production practices of soy evolved and can any of these changes be related to Dutch influence?
- Following the shift of Dutch importers towards RTRS as the main standard for sustainable soy, the first producers were RTRS certified in 2011 and total imports in 2011 were 81,000 tonnes. For 2012, the production of RTRS-certified soy is estimated at 430,000 tonnes, of which about 300,000 tonnes is expected to be imported in the Netherlands. This is less than the set target of 500,000 tonnes. The Dutch industry target of all Dutch soy consumption RTRS certified by 2015 corresponds to 1.8 million tonnes, which is almost 3% of Brazilian production and 1% of global soy production.
- The production of the Brazilian ProTerra standard, a certification for sustainable production with a strong non-GMO position, was 4.2 million tonnes in 2011. However, it is not selected as a mainstream standard by Dutch importers, it has a 10-20% higher price and production of non-GMO soy is likely to decline. There are doubts whether it meets all the RTRS criteria. Soy produced according to the Brazilian SojaPlus initiative is not yet available on the market.

- IDH has the target of having 10-15% of EU soy import being RTRS certified by 2015 (focus on the Netherlands, Belgium, Scandinavia and the United Kingdom (UK)). This implies 4-6 million tonnes out of 40 million tonnes European total import. By 2015 the RTRS expects to be able to produce 5 million tons of RTRS certified soy.
- Argentina is number 1 in global exports of biodiesel based on soy, especially to the EU. It has 69 biodiesel plants with an installed capacity of more than 5 billion liters. In 2010, production reached 2.4 billion liters. This is stimulated by the differential tax regime. Brazilian production of biodiesel from soy oil is limited and today only sold within Brazil (2.5% of total diesel used in transport). Because of the dominance of the domestic market, Brazilian biodiesel producers are not pre-occupied with EU sustainability criteria.
- The gap analysis carried out for the soy sector in Brazil (ICONE, 2011) showed that soy producers in Brazil have great difficulty in being fully compliant with the Forest Code. The new Forest Code is expected to be better applicable. There are also indications that in Brazil law enforcement has improved in recent years.
- Deforestation rates have gone down, especially in the Amazon biome following the soy deforestation moratorium. Remaining deforestation is mainly in the Cerrado.
- The gap analysis also showed that there are still several compliance issues with labour and worker health and safety legislation. The main ones are working hours and overtime that exceed national norms, necessary infrastructure adaptations, low rate of formalization of the health and safety program, insufficient use of personal protective equipment and awareness and lack of trainings. The trend is one of gradual improvement, especially with the larger companies involved. This is also a result of increasing adoption of CSR policies.
- In an indirect way the establishment of the RTRS standard has contributed to above trends with respect to legal compliance. Most important has been to the general level of international attention for sustainability issues.
- RTRS certification in Brazil has benefited mainly large producers, in order to certify large volumes of RTRS soy and because in Brazil only 16% of the soy production is in the hands of family producers.³⁷ Specific activities remain necessary in order to ensure that smallholders also benefit from RTRS certification and to avoid that equality will increase. Recent changes in Brazilian agricultural policy lay the foundation for an agricultural policy that enables disadvantaged family farms to participate in the market economy process while simultaneously safeguarding their subsistence.
- 7) What has been the relative influence of different modalities and channels, especially Dutch public policies, economic diplomacy, private sector and the CSO/NGO channel?
- With respect to different channels, this case study shows the complementary roles of civil society oganisations (NGOs) both in the north and the south, private sector actors as well as the Dutch government through its embassies, mainly by facilitating, supporting and mediating. The origin of Dutch involvement lies in the strong and historical relations between Dutch and LAC-based NGOs, and financial support to LAC-based NGOs. Joint Dutch and LAC-based NGO activities have been at the basis of developing a multi-stakeholder dialogue that evolved into the RTRS.
- The subject of sustainable soy has not received sufficient attention during Dutch economic diplomacy activities, such as trade missions to these countries.
- 8) What is the coherence between economic policy objectives and objectives of sustainable soy production, especially environmental, social and climate change criteria?
- With respect to coherence in advancing the sustainable soy agenda, there are positive results with respect to coherence between different ministries in the Netherlands.

³⁷ Solidaridad, 2012. <u>http://www.isealalliance.org/sites/default/files/Gert van Bijl presentation.pdf</u> (geraadpleegd 01/05/2013)

• However, there is poor coherence and there are missed opportunities with respect to the linkages with relevant EU policies. By focusing only at the specific trade relation with the Netherlands, the positive impact on environmental and social indicators in soy producing countries will remain limited.

Main conclusions

- With respect to Dutch policy on sustainable soy, basically three policy intentions were formulated. Firstly, support was given to the RTRS process, which has been effective. We believe that, to realise this objective, the contribution by NGOs and private sector has been most significant. The Dutch role in stimulating the political dialogue in relevant LAC countries where soy is produced (the second objective) has also been positive, especially in Brazil. The third objective to play a proactive role at EU and international level has not been realized. At this level no specific activities related to sustainable soy have been carried out.
- There remains criticism on the true value of RTRS certification, not being sufficiently stringent on several criteria and not being sufficiently strongly enforced. On the other hand, some Brazilian players have the opposite opinion, stating that the RTRS is too stringent on several issues. Also, RTRS production so far remains relatively insignificant, in 2011 only 0.7% of Brazil soy production is certified and by 2015 this is expected to be almost 10%. The third reason is that China is rapidly becoming the main importer of soy from the LAC region. Thus, upscaling and outreach activities are of major importance.
- In terms of impacts on social and environmental sustainability in Brazil, the indirect effects may be more important in terms of overall impacts, such as the increased awareness on sustainability of value chains, the need for improved law enforcement, the need for multi-stakeholder dialogue and sustainability initiatives. However, while in Brazil these indirect effects are important, in other countries (Argentina, Paraguay) these effects are less important, mainly because of the governance context.
- We also believe that the Netherlands has missed some important opportunities, at EU and at global level. One would have been the promotion of RTRS as the standard for certification of biofuels based on soy production from 2010 onwards. Second would have been to stimulate multi-stakeholder platforms on sustainable soy in other EU countries, based on the Dutch model. Third would be to discuss and propose alternatives for EU policies which stimulate imports of raw soy and discourage feed production in the EU countries. Small successes at EU level can have large multiplier effects.
- When considering the role of China, its market share will rise to at least 70% of Brazil soybean exports by 2020. This will involve an increase of around 5 million hectares in land planted to soy. Chinese demand for soybeans underpins a commodity market where at this moment neither certification nor price premiums to producers are sufficiently promising to minimize habitat conversion. Other strategies are necessary to green commodity markets of this type.
- In line with above comments in relation to the China-link, one may conclude that there remain major opportunities for Dutch involvement to further support the process leading towards greater positive impacts through sustainable soy. RTRS and certification is a necessary intermediary step towards 'sustained sustainability'.

REFERENCES

- Asociación Argentina de Productores en Siembre Directa (Aapresid) (2011). *Survey about the cropped area Under no till in 2010*. Retrieved from http://www.aapresid.org.ar/english/notillage.asp.
- van Berkum, S. & Bindraban, P. S. (eds.) (2008). *Towards sustainable soy. An assessment of* opportunities and risks for soybean production based on a case study in Brazil. LEI, Wageningen.Retrieved from http://edepot.wur.nl/30334.
- Bickel, U. & Dros, J. M. (2003). *The Impacts of Soybean Cultivation on Brazilian Ecosystems*. Three case studies. WWF, the global conservation organization. Retrieved from: http://assets.panda.org/downloads/impactsofsoybean.pdf.
- Céleres (2011, August). *Biotechnology Report*. Retrieved from http://www.celeres.com.br/1/english/RelBiotecBrasil_1102_Eng.pdf.
- Coordination Européenne Vía Campesina. *International responsibility of CAP: joint statement* (2012, March). Retrieved from http://www.eurovia.org/IMG/article_PDF_article_a569.pdf.
- European Commission (2010, November). *The CAP towards 2020: Meeting the food, natural Resources and territorial challenges of the future.* Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM(2010) 672 final. Retrieved from
- European Commission, 2006. Country Strategy Paper Brazil 2001-2006, available at EU website (http://ec.europa.eu/comm/external_relations/brazil/csp/index.htm), viewed November 2006.
- European Parliament (2003, September). Regulation (EC) No 1829/2003 of the European Parliament and the Council on genetically modified food and feed. *Official Journal of the European Union*, L 268/2.
- European Parliament (2003, September). Regulation (EC) No. 1830/2003 of the European Parliament and of the Council concerning the traceability and labeling of genetically modified organisms and the traceability f food and feed products produced form genetically modified organisms and amending Directive 2001/18/EC. Official *Journal of the European Union*, 268/24.
- Federação Brasileira De Plantio Direto Na Palha (FEBRAPDP) (2009). *Development of the area under no-tillage in Brazil*. Retrieved from http://www.febrapdp.org.br.
- Fogel, R. B., & Riquelme, M. A. (2005). Enclave sojero: merma de soberania y pobreza.*Centro de Estudios Rurales Interdisciplinarios* .
- Food Agricultural Policy Research Agency (FAPRI) (2011). World Agricultrual Outlook. Retrieved from http://www.fapri.iastate.edu/outlook/2011/
- Food & Water Watch and Food & Water Europe (2011). The Perils of the Global Soy Trade. Economic, Environmental and Social Impacts. Retrieved from http://www.foodandwaterwatch.org/.
- Fritz, T. (2011). *Globalizing Hunger. Food Security and the EU's Common Agricultural Policy*. Retrieved from http://www.tni.org/sites/www.tni.org/files/download/CAPpaper draft_0.pdf.

- Gelder, JW van 2005. The Netherlands and the Brazilian Soy Production Chain. Profundo, Amsterdam
- GMWatch, Friends of the Earth & Corporate Observatory (2011). *Certified responsible?* Critical Assessment of the Round Table on Responsible Soy. Retrieved from http://www.toxicsoy.org/toxicsoy/RTRS_files/RTRS%20backgrounder%20v2.pdf.
- Goldsmith, P. (2008). *Soybean Production and Processing in Brazil*. Instituto Brasileiro de Geografia e Estatística (IBGE). Retrieved from https://netfiles.uiuc.edu/pgoldsmi/www/book_chapters/Soybean%20Production%20and %20Processing%20in%20Brazil.pdf.
- Hospes O and Hadiprayatno I (2010). Governing food security. Law, politics and the right to food. Wageningen Academic Publishers, the Netherlands.
- Hoste, R. & Bolhuis, J. (2010). *Rapport soja verbruik in Nederland*. LEI-rapport 2010-059, onderdeel van Wageningen UR, den Haag.
- Institution for International Trade Negociations (ICONE). 2011. Strategic Gap Analysis for Responsible Soy Production. Retrieved from http://www.iconebrasil.org.br/pt/.
- IOB (2007). *Chatting and Playing chess with Policymakers. Influencing Policy via the Dutch Co Financing Program.* Ministry of Foreign Affairs, Report, the Netherlands.
- IUCN. (2012). An overview of the Brazil-China soybean trade and its strategic implications for conservation. International Union for Conservation of Nature (IUCN).
- Kaya, K. (2008). *De aangenomen 'soja-moties'*. Retrieved from http://snm.nl/pdf/1000_20080212_sojamoties.pdf.
- Landers, J. N., Weiss, J. & Clay, J. (2005). A new solution for old problems in Brazil: crop-livestock Rotation with zero tillage as a sustainable land management tool. *Sociedade e Natureza* Special Issue:661- 673.
- Lima, M., Skutsch, M. & de Madeiros Costa, G. (2011). Deforestation and the social impacts of soy For biodiesel: perspective of farmers in the south Brazilian Amazon. *Ecology and Society*, 16(4), 4.
- Masuda, T., & Goldsmith, P. D. (2009). World Soybean Production: Area Harvested, Yield, and Long-Term Projections. *International Food and Agribusiness Management Review*, 12 (4).
- Metzger, J. P., Lewinsohn, T. M.; Joly, C. A.; Verdade, L. M.; Martinelli, L. A. & Rodrigues, R. R.(2010). Brazilian law: full speed in reverse? *Science* 329(5989):276-277.
- Michalski, F., Norris, D. & Peres, C. A. (2010) No return from biodiversity loss. Letters. *Science* 329(5997):1282.
- Ministerie van Buitenlandse Zaken (BuZa) (1990-1991). *Regeringsstandpunt Tropisch Regenwoud*. Samenvatting. Tweede Kamer (21 517, nrs. 2-3). Retrieved from http://www.rijksoverheid.nl/documenten-enpublicaties/rapporten/2010/12/14/regeringsstandpunt-tropisch-regenwoud.html.
- Minister van Economische Zaken, Minister van Onderwijs; Cultuur en Wetenschappen; Staatssecretaris van Verkeer en Waterstaat; Staatssecretaris van Defensie (2011). Biodiversiteit werkt: voor natuur, voor mensen, voor altijd Beleidsprogramma biodiversiteit 2008-2011. Bijlage.

- Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer (VROM) (2003). *Duurzame Daadkracht*. Actieprogramma duurzame ontwikkeling. Nationale deel. Retrieved from http://www.energie.nl/beleid/milieu3179.pdf.
- Ministerie van Landbouw, Natuurbeheer en Viserij (LNV) (2003, January). *International Policy Program Biodiversity of the Netherlands, 2002-2006*. Rerieved from http://en.biodiversiteit.nl/nederlandse-overheid-biodiversiteit/biodiversiteitsbeleid-1994-2007/internationaal-beleidsprogramma-biodiversiteit/.
- Ministry of Agriculture, Nature and Food Quality (2009). *Biodiversity Policy Program of the Netherlands 2008-2011.* The Hague, the Netherlands.
- Ministerie van Landbouw, Natuur en Voedselkwaliteit (LNV) (2009, June). *Policy Agenda for Sustainable Food Systems* (VD 09. 991/JDL). Den Haag, the Netherlands.
- Ministerie van Landbouw, Natuur en Voedselkwaliteit (LNV) (2009). *Nota Duurzaam Voedsel. Naar en duurzame consumptie en productie van onsvoedsel.* Den Haag, the Netherlands.
- Ministerie van Landbouw, Natur en Voedselkwaliteit (LNV) (October). *Beleidsagenda Duurzame Voedselsystem*. Directie Voedsel, dier en consument.
- Nota Duurzaam Voedsel (2009). Ministerie van Landbouw, Natuur en Voedselkwaliteit
- NGO Repórter Brasil. (2010). Socio-environmental impacts of soybean in Paraguay 2010.
- OECD/FAO (2011). *OECD/FAO Agricultural Outlook 2011-2020*. OECD Publishing and FAO. Retrieved from http://www.oecd.org/site/oecdfaoagriculturaloutlook/.
- Piauí, C. (August 26th, 2010). The miracle of the cerrado. Brazil has revolutionized its own farms. Can it do the same for others? The Economist. Retrieved from: http://www.economist.com/node/16886442.
- MVO (2011). Fact sheet Soy. Product Board. Rijswijk, the Netherlands.
- Nassar, A. M.; Moraes, L. C. S. O que aconteceria com a geração de renda e a arrecadação tributária se os déficits de APPs e RL fossem restaurados em área produtiva? Available at: http://www.redeagro.org.br/images/stories/o-que-aconteceria-com-a-geracao-de-renda-e-aarredacao-tributaria.pdf
- Richert, W. & Haase, M. (2005). *License to Operate*? Een analyse van mogelijkheden voor nieuw overheidsbeleid ten behoeve van de verduurzaming van de sectoren, soja en palmolie. AIDEnvironment, Amsterdam.

Solidaridad. (2011). Annual report.

- Tweede Kamer der Staaten-Generaal (2003, November). *Verre Buren, Goede Vrienden*. Ontwikkelingssamenwerking aan de Tweede Kamer (29 234/29 200 V, nr. 17) doen wij u toekomen de Latijns-Amerika Notitie. Retrieved from https://zoek.officielebekendmakingen.nl/kst-29653-1.html.
- Vitali, I. (2011). WWF. *Soya and the Cerrado: Brazil's forgotten jewel*. Retrieved from http://assets.wwf.org.uk/downloads/soya_and_the_cerrado.pdf.
- VROM. (2003, augustus). Duurzame Daadkracht. Actie programma duurzame ontwikkeling.

Retrieved juli 25, 2011, from www.wo-men.nl: www.wo-men.nl/.../2010.07.05-Actieprogramma-Duurzame-Ontwikkeling

Wiegman & van Meppelen Scheppink (2008). Dutch Lower Chamber, resolution c. s. (nr. 174).

Wilkinson, J. & Herrera. S. (2010). Biofuels in Brazil: debates and impacts. *Journal of Peasant Studies* 37(4), 749-768.

World Wildlife Fund (WWF) (2010). *Facts about soy production and the Basel Criteria*. Factsheet, Retrieved from factsheet_soy__eng.pdf.

Yamamoto, Nami 2005. Politics of Food and Legitimisation of Japan's Official Development Assistance: A Case Study of Securing a 'Food Base' in the Brazilian Cerrados, Institute of Social studies, The Hague

Websites consulted (footnotes)

http://news.bbc.co.uk./2/hi/business/4603729.stm (consulted December 2012)

http://ec.europa.eu/taxation_customs/dds/en/tarhome.htm, (consulted November 2006).

 $http://ec.europa.eu/food/food/biotechnology/gmfood/qanda_en.htm, (consulted November 2006).$

http://commodityplatform.org/wp/(consulted December 2012)

http://www.responsiblesoy.org/(consulted December 2012)

http://www.rijksoverheid.nl/onderwerpen/voeding/duurzame-productie(consulted December 2012)

http://www.responsiblesoy.org/(consulted December 2012)

http://www.rijksoverheid.nl/onderwerpen/voeding/duurzame-productie (consulted December 2012)

http://www.cert-id.eu/downloads/Comparison-of-ProTerra-Standard-V2-9-x-RTRS.aspx (consulted December 2012)

www.sojaplus.com.br/index_us.html (consulted December 2012)

http://www.reporterbrasil.org.br/documentos/PARAGUAY_2010ENG.pdf (consulted December 2012)

http://proterrafoundation.org/images/pdfs/Brazil-Non-GM-Certification-Volume-2011-ENG_5.pdf (consulted December 2012)

http://www.nature.org/ourinitiatives/regions/southamerica/brazil/explore/brazil-china-soybean-trade.pdf (consulted December 2012)

http://www.soyatech.com/soy_facts.htm. (consulted December 2012)

http://www.soyinfocenter.com/HSS/production_and_trade2.php. (consulted December 2012)

http://www.soystats.com/2012/page_31.htm (consulted December 2012)

http://www.rural21.com/uploads/media/rural 2011 4 36-39 01.pdf (viewed 31/05/2013)