Cefetra

A BayWa Company

Certified Responsible Soy (CRS)

Normative Document

Table of contents

1. Definitions

Agrochemical	All synthetic or non-agricultural inputs used directly or indirectly in agricultural production, and for the maintenance of equipment and storage.
Area Mass Balance system	Supply chain model based on purchasing soy from areas in which producers are certified through a book & claim system and monitoring soy from the crusher to the purchasing company though a mass balance system.
Audit	An on-site assessment or evaluation; a verification that a client conforms to the specific standard.
Book & Claim system	System in which producers receive a certificate for a specific quantity of responsibly produced soy and traders purchase these certificates to avoid high costs for segregation.
Certification body	An organization accredited by a recognized accrediting body for its competence to audit and issue certification confirming that an organization meets the requirements of a standard.
Consignment	Volume of a shipment of product changing custody or ownership in the supply chain, composed of one or more production lots, or split from a given lot. A consignment can be comprised of merged consignments and can be split into various consignments.
Indicator	Specific requirements for the practices of producers within the areas of focus determined by Cefetra.
Greenhouse gases (GHG)	Those gases, such as water vapor, carbon dioxide, tropospheric ozone, nitrous oxide, and methane, which are transparent to solar radiation but opaque to long wave radiation.
Mass Balance system	System in which sustainability characteristics remain assigned to consignments and evidence showing compliance with these characteristics are required and need to be documented and recorded.
Principle	Areas of focus that have been determined by Cefetra as crucial topics to be addressed by producers who seek to be certified against the CRS Standard.
Producer	A person or organization that develops activities required for the cultivation of crop plants and/or management of animals.
RTRS	Round Table on Responsible Soy
Trader	Companies that buy and sell agricultural commodities.

2. Background

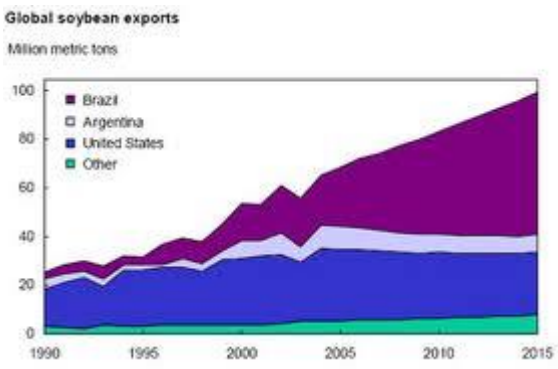
2.1 Cefetra

Founded in 1988, Cefetra has become an international supply chain manager for feed, food and fuel, annually trading approximately 19 millions of tons of agricultural commodities. Of its total volume, the largest part consists of raw materials for animal feed, purchased worldwide and sold mainly in Northern and Central Europe.

Cefetra ensures careful selection of suppliers worldwide and, consequently, has built long-lasting relationships with these producers. The company seeks to work with chain partners who – together with Cefetra – are willing to accept responsibility for creating a healthy balance between people, planet and profit, thus guaranteeing sustainable raw material flows. In conclusion, Cefetra aims to ensure that raw materials are cultivated and processed under ecologically sound and socially responsible conditions.

As well as being a member of the *Round Table on Sustainable Palm Oil*,[1] in 2007 Cefetra also became a member of the *Round Table on Responsible Soy.*[2] Through these platforms, producers, trade organizations, customers and non-governmental organizations work together to develop sustainability criteria that can be applied for the production of palm and soy products in the near future. Furthermore, Cefetra is a member of the *Task Force Sustainable Soy,*[3] a platform of companies in the soybean chain that want to contribute to the development of sustainable soy cultivation.

2.2 International soy market



Source: USDA

Increasing global population has increased the demand for food, not only from animal and vegetable origin, but for processed foods as well. China and India are major importers of oils and other byproducts of soy. Since 1999, the global soy production has increased nearly 25%.[4] This growth in demand is being satisfied with a combination of an increase in productivity in existing plantation areas together with the expansion of the area used for cultivation. Extensive cultivation of soy and expansion of agricultural frontiers may cause social and ecological disturbances such as deforestation, water contamination, soil erosion, and, in some cases, social conflicts. Therefore, it is understood that soy production must be performed in a responsible manner.

According to the USDA[5], by 2015, Brazil will be the largest exporter of soybeans in the world, followed by the USA and Argentina (see graph above).

[1] http://www.rspo.org/
[2] http://www.responsiblesoy.org/
[3] http://www.idhsustainabletrade.com/soja-program
[4] Inter-American Institute for Cooperation on Agriculture: http://www.iica.int/
[5] US Department of Agrilculture: www.usda.com

2.3 Development of the CRS Standard

In order to work towards ecologically sound and socially responsible soy production, Cefetra in 2008 created the Certified Responsible Soy (CRS) Standard together with Control Union Certifications (CU).[6] At the time the standard was established, a benchmark study was conducted on existing standards related to responsible soy production such as RTRS, ISCC[7], and 2BSvs.[8] However, although based on known market practices, the CRS program is unique due to the following aspects:

- **Transparency:** The CRS Standard only contains major indicators, resulting in transparency towards producers – all requirements must be met to obtain certification.
- **Inclusion:** The CRS Standard provides an opportunity for large, medium, and small scale producers to obtain certification by means of adopting an entry level approach; CRS certification can be the first step towards RTRS certification, which makes the standard a progressive program.
- **Periodicity:** The CRS Standard requires that all certified producers be audited on an annual basis.
- **Principles:** The CRS Standard covers the most important indicators to ensure ecologically sound and socially responsible soy.
- **Continuous Improvement:** The CRS Standard focuses on continuous improvement among producers.
- **Detailed audit/compliance report:** Producers certified against the CRS Standard receive a detailed report that allows them to track their developments to ensure continuous improvement, communicate their performance to clients, and obtain loans from investors by demonstrating independent acknowledgement of their good practices.

After establishing the CRS Standard in 2008, several indicators were added to the standard and some were changed. The final version consists of four main principles, each containing several indicators (see chapter 4).

In the beginning of the CRS Standard, Cefetra mainly focused on producers in Argentina and Brazil; in total, over 1.000.000 MT of soy from approximately 250 producers were certified in these two countries during this initial phase. This resulted in extensive improvements in terms of more in-depth understanding of agricultural practices among different stakeholders throughout the supply chain, increased awareness of sustainability among both producers and farm workers, improved labor conditions on the certified farms, a more positive environmental impact, and better record keeping.

[6] http://www.controlunion.com/
[7] International Sustainability & Carbon Certification: http://www.iscc-system.org/
[8] Biomass, Biofuels, Sustainability voluntary scheme: http://www.2bsvs.org/

Below are the main regions of these certified producers per country.

Argentina: (1) Up River

Brazil: (1) Mato Grosso, (2) Goiás, (3) Minas Gerais, (4) São Paulo, (5) Paraná, (6) Rio Grande do Sul

2.3.1 The Soy Moratorium

The Brazilian market posed an additional challenge in that soy planted in areas of the Amazon Biome (see map) where illegal cutting and burning of forest had taken place after 24 July 2006, cannot be certified. This was a combined decision called the Soy Moratorium[9] elaborated by the ABIOVE,[10] ANEC,[11] along with their associates, and supported by civil society institutions and the federal government (Ministry of Environment). Until 2013, all signatory companies were obliged to provide a third party report to prove that the purchased soy did not come from areas in the Amazon Biome.

Source: Brazilian Institute of Geography and Statistics (IBGE)

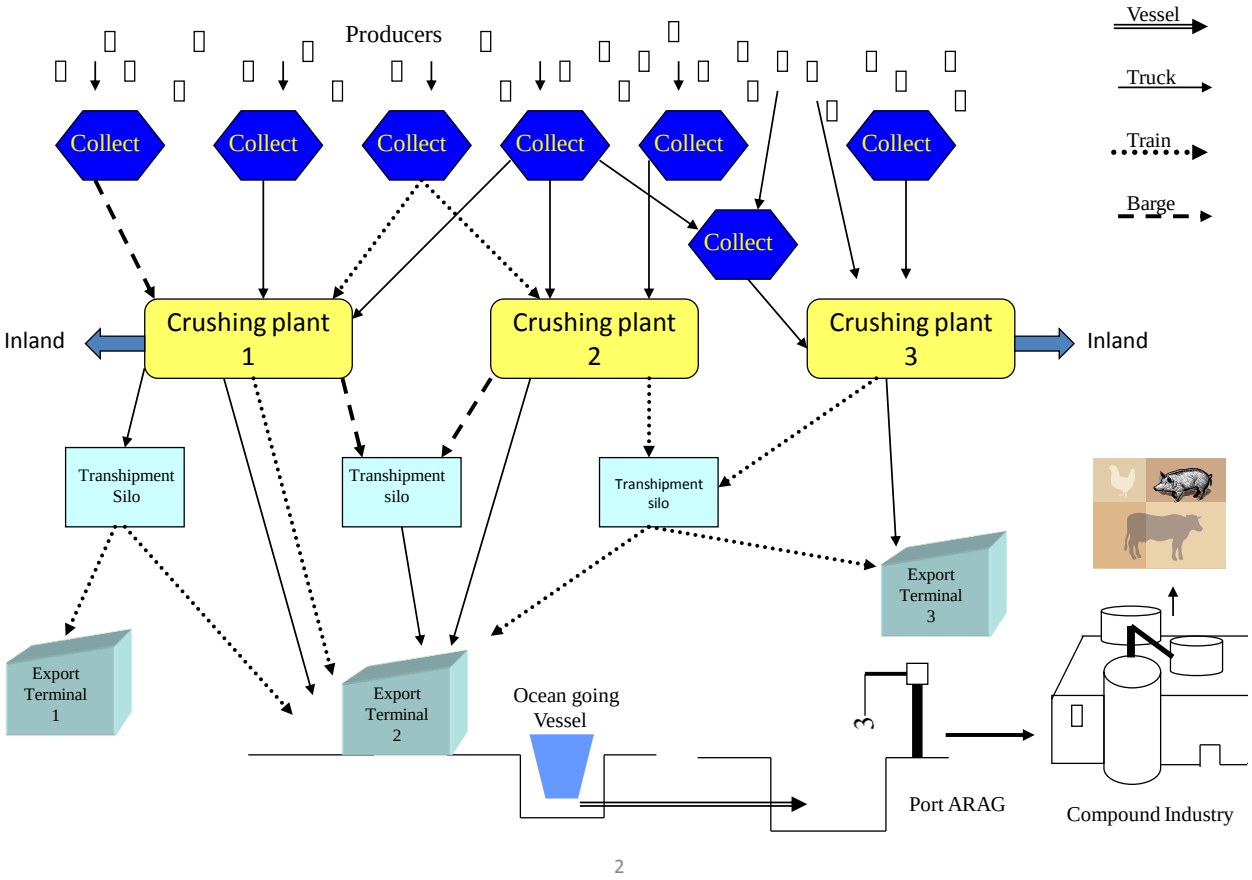
2.3.2 Supply chain model: Area Mass Balance

The choice for a suitable supply chain model depends on several factors. First of all, the costs involved with transporting certified commodities from the producer to the purchasing company, are and important factor. The more operators needed to support a certain supply chain model, the higher the costs. High costs are only acceptable when they can be absorbed, for example, in a typical niche market. However, as the CRS Standard is created for the mainstream market, the aim is to keep the costs as low as possible so that certified soy can become reality for any producer or purchasing company.

In addition to costs, feasibility of the supply chain model must always be considered. This depends mainly on the complexity of the structure of the supply chain, which, in the case of soy, is extremely complex (see figure below). As demonstrated below, the supply chain involves many different operators such as traders and collectors before the soy enters the

[9] http://www.anec.com.br/moratorium.html
[10] Associação Brasileira das Indústrias de Óleos Vegetais (translation: Brazilian Association of Vegetable Oil Industries)
[11] Associação Nacional de Exportadores de Cereais (translation: National Association of Cereal Exporters)

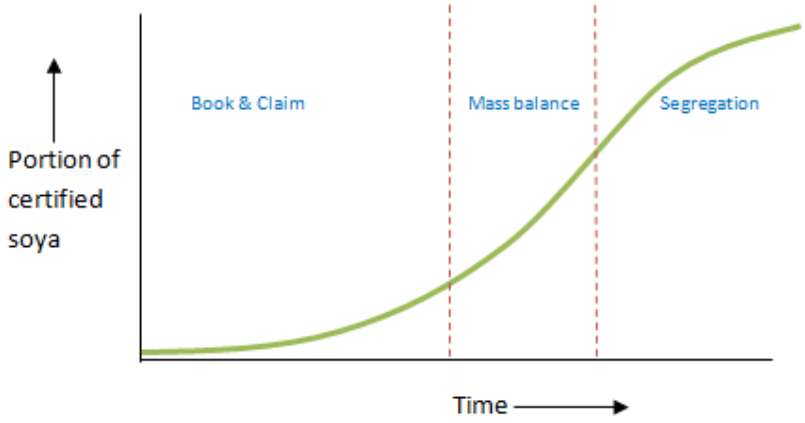
crushing plant. As these operators do not have fixed relationships with the producers due to changes in supply and demand, supply chain models that require monitoring of certified soy from the producer to the crusher plant, are very difficult to implement. In other words, if a link with the producer is required, the feasibility of the supply chain model decreases.



Soy supply chain: from producer to purchasing company

Having said that, the stronger the link between the producer and the purchasing company, the more added value the supply chain gives to the certified commodity. After all, if the purchasing company can prove that the soy originates from the exact field that was used by the certified producer and segregated throughout the entire supply chain after production until import, the higher the added value. Therefore, added value is also considered an important factor in choosing a supply chain model.

Finally, a factor that influences all abovementioned items and therefore greatly determines the choice of a supply chain model is the volume of certified soy. The graph below demonstrates that different types of supply chain models are suitable for different stages of the development of the supply chain. In other words, building a suitable supply chain model for certified commodities is a dynamic process.



Dynamic process of development supply chain model

Commonly used supply chain models:

- **Book & Claim system:** The CRS Standard has been established based on the so-called "Book & Claim" system which allows producers to obtain certificates for a specific quantity of responsibly produced soy. The production of these materials is audited by Control Union Certifications to ensure that the producer complies with the CRS Standard. Traders can then buy these certificates from the producers. The commodities are sold in the usual way, avoiding high costs for segregation of the soy throughout the entire supply chain. By keeping the costs low, the CRS Standard encourages all producers (small, medium and large scale) to produce soy in a responsible way.
- **Mass Balance system:** This model physical links between all stages of the soy production (as opposed to the Book & Claim system), while allowing responsible soy to be physically mixed with conventional soy (as opposed to physical segregation or identity preservation approaches), as long as the sum of all consignments taken out of the mixture has the same sizes for each of the sets of sustainability characteristics that went into the mixture.[12] In other words, in a Mass Balance system, responsible soy can be physically mixed with conventional soy but their administration is kept separate to ensure that the amount of soy sold as certified is equal to the amount of certified soy that entered the supply chain.
- **Segregation:** in this model certified soya is completely segregated from conventional soy throughout the entire supply chain, from the producer until the purchasing company.

When setting up a new supply chain model, the volume is typically low and most likely increases over time. Therefore, with regards to costs, supply chain models based on full segregation of certified commodities should be avoided in the start-up phase as this is extremely expensive. Concerning the added value, the type of supply chain model provides different levels of added value depending on the volume of certified commodities. For example, the mass balance system mentioned above is similar to segregation models if a

[12] Source: Ecofys, "Analysis of the operation of the mass balance system and alternatives – Final Report (Task 1)", 30 November 2012. http://ec.europa.eu/energy/renewables/studies/doc/2013_task_1_mass_balance_and_alternatives.pdf

large portion of the total volume is certified. However, if the share of certified commodities is still small – in the start-up phase for example – the mass balance system is more similar to the book & claim system. The reason for this is the dilution that occurs at various points in the chain, which can result in a very low amount or even no actual certified commodities in a shipment. In these cases, the added value of the mass balance system is equal to that of a book & claim system, provided that the latter is based on purchasing commodities in the area where certified producers are located. When this area is taken into account, an alternative supply chain model is created that can be called "Area Mass Balance".

- **Area Mass Balance system:** As explained above, this supply chain model is a combination of the book & claim system and a mass balance system. In the area mass balance system, companies purchase soy from the region (area) where certified soy is produced through a book & claim system and the shipment of the soy is then monitored by means of a mass balance system.

The producers that are certified against the CRS Standard are located in the areas from which Cefetra purchases its soy and, based on generally accepted logistical lines, their certified soy will eventually end up in one of the crushers that supplies soy to Cefetra. Cefetra then monitors the volume of soy that is transported from these areas and shipped to the ports in Europe. This means that the mass balance can be calculated based on the input and output of certified soy.

This supply chain model provides an opportunity to link the producers with the purchasing companies, without generating costs for the chain of custody. By using the area mass balance system, Cefetra can focus on increasing the number of certified producers and the volume of certified soy, which is an effective solution for making certified soy mainstream.

3. Scope

While initially focused mainly in Brazil and Argentina the CRS certification may be applied to all the soybean production areas in the world, from producers, cooperatives, associations, and any group able and willing to comply with the pre-established requirements.

Depending on the system chosen for the purchase of certified soy, the scope of the CRS Standard can apply to:

1. **Production site:** when soy is sold through the book & claim system, only the production site – the farm – needs to be certified.
2. **Supply chain from crusher to purchasing company:** when soy is sold through the area mass balance system, certification of all steps in the supply chain from the crushed to the purchasing company is required.

The process of obtaining a CRS Certification is composed of four basic steps, each dependent upon the previous one:

1. **Registration:** Farmers provide the minimum required information for review of the certification body;
2. **Compliance with criteria:** Certification body reviews the submitted information and accepts registration;
3. **Inspection:** Inspection is performed on-site to ensure compliance with the program's principles;
4. **Certification:** Once the audit is complete and the final report finalized, results are analyzed and, if all requirements are met, the certificate is issued.

During the process to obtain the CRS certification, producers must give the certification body access to all parts of the units and promises for inspection purposes. It may also be required that the farmer provide additional relevant supporting documentation.

For the first year of certification, records that go back to the sowing stage of the soy of the first harvest after registration will be requested for internal inspection. For further information and limitations, please consult the Certified Responsible Soy (CRS) Certification Protocol.

4. Certified Responsible Soy (CRS) Standard

The CSR Standard consists of four main principles within which several indicators are defined. Producers who seek certification are measured against these indicators by an independent certification body. These principles have been carefully formulated by the standard owner in order to cover those topics that are considered crucial to achieve ecologically sound and socially responsible produced soybeans. Requirements are being set to distinguish certified producers from conventional producers, however, as explained above, the aim was to create an entry-level standard to ensure that investments are limited and thus small and medium producers can obtain certification as well as large scale producers. After all, the primary goal of certification is to achieve sustainable change on the farms.

4.1 Principle 1: Compliance with the law

Producers shall understand and comply with all laws, regulations, and conventions that apply to the CRS Standard. This concerns both national and international laws related to topics such as land title or document of land use, hiring and payment of workers, the legal minimum working age, waste management, and storage and use of chemical products. In these cases, the local law shall be compared with the CRS Standard; the strictest norm shall apply. Producers shall have written procedures in place and must be able to provide records of compliance with all applicable laws.

4.2 Principle 2: Labor conditions

Producers shall take the responsibility to provide safe and fair labor conditions to all the workers involved in the production of soy. Children below 15 shall not be contracted for soy production and persons below 18 shall not perform any activities considered hazardous as these could jeopardize their physical, mental or moral well-being. Forced labor is also prohibited at the production site. Producers shall ensure that workers´ rights regarding housing, minimum wage, freedom of association, equal and fair treatment, will be respected. Finally, producers shall ensure workers´ safety by means of training all workers involved in machinery and use of chemicals, providing a safe work environment based on safety materials and guidelines.

4.3 Principle 3: Environment

Producers shall take all possible measures to limit potential negative impacts on the land used for soy production and on the biodiversity in the direct surroundings of the production site. Producers shall comply to the zero-conversion and zero-deforestation requirements, meaning that they shall not use land that is converted into farm land after July 24th 2006 within the Amazon Biome and after May 2009 for land outside the Amazon Biome. Producers shall have procedures in place to safeguard the native vegetation of the land used for soy production. Producers shall reduce emission of greenhouse gases (GHG) as much as possible and ensure efficient and responsible waste management. Pollution and soil erosion shall be prevented.

4.4 Principle 4: Good Agricultural Practices (GAP)

Producers shall implement Good Agricultural Practices (GAP), which are:

"practices that address environmental, economic and social sustainability for on-farm processes, and result in safe and quality food and non-food agricultural products"[13].

For the CRS Standard several requirements have been determined to ensure high quality soy and minimum environmental impact, under which the following:

- Proper machinery shall be used and maintained in good condition;
- Storage, management and application of fertilizers and agrochemicals is performed in accordance with the law;
- Water sources are not polluted or depleted as a consequence of soy production;
- Crop rotation shall be performed to improve soil fertility and control insects and diseases.

Ideally, the abovementioned practices shall be implemented by an engineer or qualified consultant. In the absence of such a person at the production site, the producer shall follow all official instructions provided on packaging of the chemical products used and applicable laws.

[13] Source: FAO COAG 2003 GAP paper