Setting the bar for deforestation-free soy in Europe

A benchmark to assess the suitability of voluntary standard systems

Retno Kusumaningtyas

Jan Willem van Gelder

7 June 2019, final

profundo
RESEARCH & ADVICE

About this report

This report has been commissioned by IUCN National Committee of the Netherlands (IUCN NL) to produce a benchmark for standards that are compliant with the FEFAC Soy Sourcing Guidelines. The benchmark focuses on the issue of avoiding deforestation and conversion caused by soy production in Europe and by soy production for exports to Europe.

About Profundo

With profound research and advice, Profundo aims to make a practical contribution to a sustainable world and social justice. Quality comes first, aiming at the needs of our clients. Thematically we focus on commodity chains, the financial sector and corporate social responsibility. More information on Profundo can be found at www.profundo.nl.

Authorship

This report was researched and written by Retno Kusumaningtyas with contributions of Jan Willem van Gelder. Correct citation of this document: Kusumaningtyas, R. and Van Gelder, J.W. (2019, June), *Setting the bar for deforestation-free soy in Europe; A benchmark to assess the suitability of voluntary standard systems,* Amsterdam, The Netherlands: Profundo.

Front page cover photograph: iStock ID 184612058 | DS70.

Acknowledgements

The authors would like to thank all organizations managing the Voluntary Standard Systems for providing feedback on the assessment. Various other stakeholders have contributed to this report through insightful discussions and by making constructive comments. In particular, the authors would like to thank Jinke van Dam, Heleen van den Hombergh, Marianne Hilders and Bas Tinhout for their helpful contributions.

Disclaimer

Table of contents

Summary **1**

Abbreviations **6**

Introduction **7**

Chapter 1 Methodology **9**

1.1 Standard assessment **9**

1.2 Basic provisions and extra requirements **12**

1.3 Assessment tool on deforestation-free soy production **12**

1.3.1 Avoiding deforestation 12

1.3.2 Avoiding conversion and degradation of HCV areas and other valuable natural areas 13

1.3.3 Avoiding wetland conversion 14

1.3.4 Standard's level of assurance 15

Chapter 2 Deforestation-free provisions in the FEFAC SSG compliant standards **17**

2.1 Avoiding deforestation **17**

2.2 Avoiding conversion and degradation of HCV areas and other valuable natural areas **18**

2.2.1 Presence of Basic Provisions 18

2.2.1 Presence of Extra Requirements 19

2.3 Avoiding wetland conversion **20**

2.3.1 Presence of Basic Provisions 20

2.3.2 Presence of Extra Requirements 21

2.4 Standard's level of assurance **21**

2.4.1 Presence of Basic Provisions 21

2.4.2 Presence of Extra Requirements 23

Chapter 3 Analysis and recommendations **24**

3.1 Analysis per issue **24**

3.1.1 Avoiding deforestation 24

3.1.2 Avoiding conversion and degradation of HCV areas and other valuable natural areas 25

3.1.3 Avoiding wetland conversion 25

3.1.4 Standard's level of assurance 26

3.2 Grouping of the standards ..... Fout! Bladwijzer niet gedefinieerd.

3.3 Recommendations **28**

References **30**

List of figures

Figure 1 Soy standards' Basic Provisions on avoiding deforestation 17

Figure 2 Standards' Basic Provisions on avoiding conversion and degradation of HCV areas and other valuable natural areas 19

Figure 3 Standards' Basic Provisions and Extra Requirements on "avoiding conversion and degradation of HCV areas" 19

Figure 4 Standards' Basic Provisions on avoiding wetland conversion 20

Figure 5 Standards' Basic Provisions and Extra Requirements on avoiding wetland conversion 21

Figure 6 Standards' Basic Provisions on the level of assurance 23

Figure 7 Standards' Basic Provisions and Extra Requirements on "standards' level of assurance" 23

Figure 8 Basic provisions on Deforestation-free Benchmark in FEFAC Compliant Standards 27

Figure 9 Provisions on forests, wetlands and biodiversity protection vs level of assurance of the standards 28

List of tables

Table 1 List of the policy document analysed and feedback 10

Table 2 Provisions on avoiding deforestation 12

Table 3 Provisions on avoiding conversion and degradation of HCV areas and other valuable natural areas 13

Table 4 Provisions on avoiding wetland conversion 14

Table 5 Assessment tool for standard's level of assurance 15

Summary

This report presents a benchmark for Voluntary Standard Systems (VSS) which comply with the FEFAC Soy Sourcing Guidelines. These are guidelines drafted by the European Feed Manufacturers' Federation as minimum criteria for the sourcing of soy, to avoid illegal deforestation and other sustainability risks.

The report focuses on the objective of ensuring that all soy produced and imported in Europe is deforestation-free, in line with the ambitions expressed internationally in the New York Declaration, and by the Amsterdam Declaration Partnership of 7 European countries. Furthermore, the report also includes other criteria that are relevant for biodiversity conservation and the quality of control of the VSS.

The following VSS were assessed:

- ADM Responsible Soy Standard
- Agricultura Certificada de Aapresid; Certified Sustainable Agriculture (ASC)
- Amaggi Responsible Standard
- Belgian Feed Association (BFA)
- Bunge (Pro S)
- Cargill (Triple S)
- Certified Responsible Soya (CRS)
- Coamo Responsible Soy
- Donau Soja
- Europe Soya
- FEMAS
- ISCC Plus
- ProTerra
- RTRS
- Sustainable Feed Standard (SFS)
- Sustainable Farming Assurance Programme (SFAP)[i]
- US Soy Sustainability Assurance Protocol (US SSAP)

Louis Dreyfus Company (LDC) program for Sustainable Agriculture was added to the list of FEFAC after this study had been done and is therefore not included in the assessment.

The assessment of the standards was conducted by applying an assessment tool with provisions that are relevant for four issues, which are:

- Avoiding deforestation: one provision;
- Avoiding conversion and degradation of HCV areas and other valuable natural areas: 9 major provisions and 5 minor provisions;
- Avoiding wetland conversion: 3 major provisions and 2 minor provisions; and
- Optimizing the standard's level of assurance 8 major provisions and 2 minor provisions.

[i] The assessment included both SFAP and SFAP Non-conversion Standards.

The results of the assessments for these four issues can be summarized as follows:

- On the issue of **Avoiding deforestation**, the standards show different interpretations. Ten of the standards rely on national legislation by prohibiting illegal deforestation only. Eight standards adopt a clear prohibition of deforestation that is applied for native vegetation in all countries and regions, even where the area was not designated as a forested area after a cut-off date of 2008, or in some cases May 2009. These (deforestation free) standards are BFA, CRS, Donau Soja, Europe Soya, ISCC Plus, ProTerra, RTRS and SFAP Non Conversion. These eight standards also have far reaching provisions to avoid the conversion of non-forest native vegetation. (For an indication of requirements on no conversion within the deforestation free standards, see annex 1).
- All standards show the intention to **Avoid conversion and degradation of High Conservation Value (HCV) areas and other valuable natural areas**. However, none of the standards have included all provisions listed in the assessment tool. The number of provisions that are covered varies strongly among the standards. Most provisions are included in the ISCC Plus standard.
- Seven standards have included all provisions on **Avoiding wetland conversion** listed in the assessment tool. Few standards have specific provisions that are explicitly prohibiting the conversion of wetland areas. Many of the standards are embedding this in some way in other provisions, for instance in those for the prohibition of the conversion of native vegetation.
- The **Level of assurance** varies among the standards. All standards require a third-party body for implementing audits. However, it is not always clear whether the standards employ only accredited certification bodies for the audits or not. RTRS has included most provisions on optimizing the standard's level of assurance.

An overview of the number of provisions included in the standards, grouped by the four selected issues, is presented in figure I.

Figure I Provisions on deforestation-free soy included in the standards

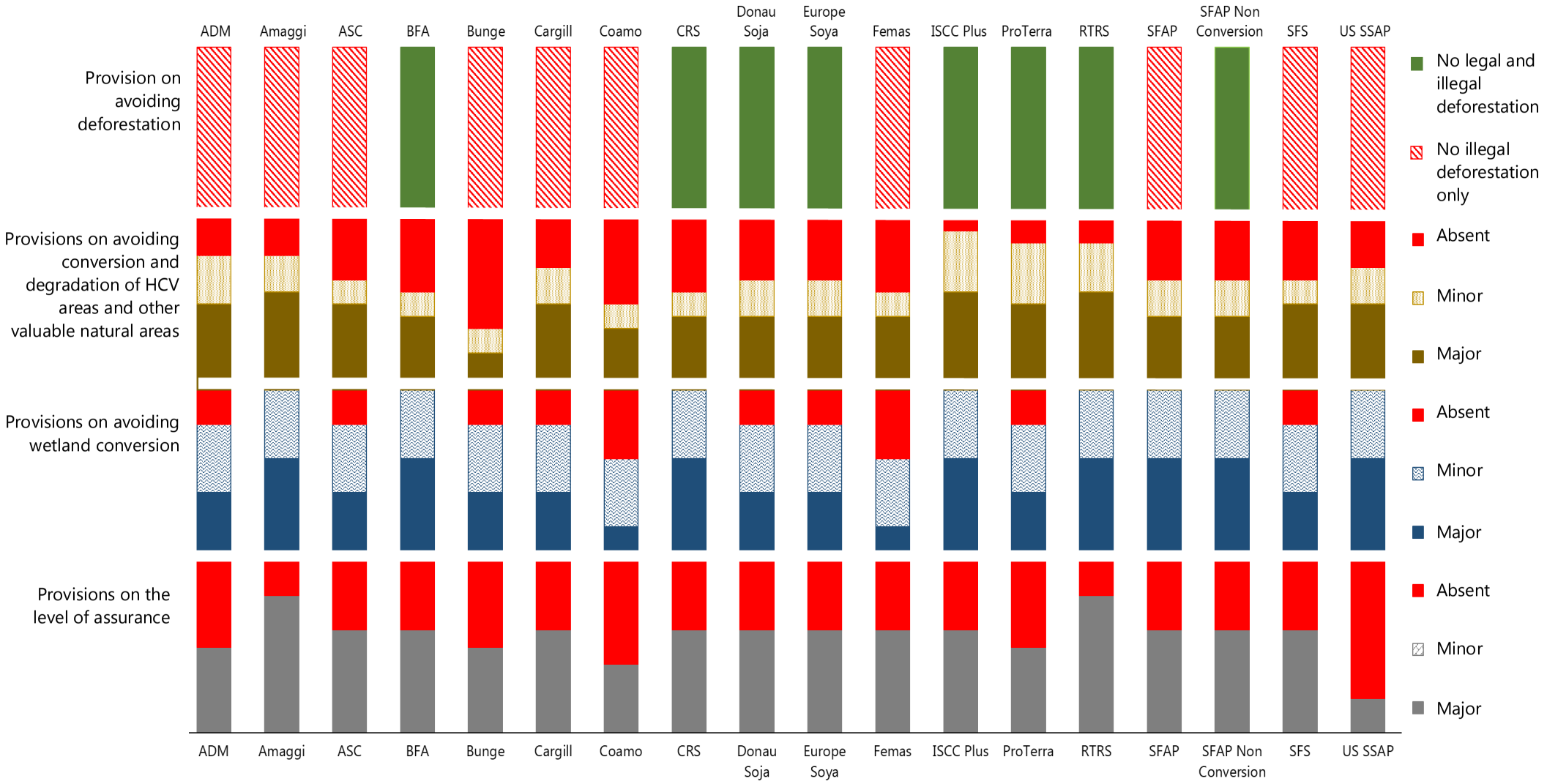
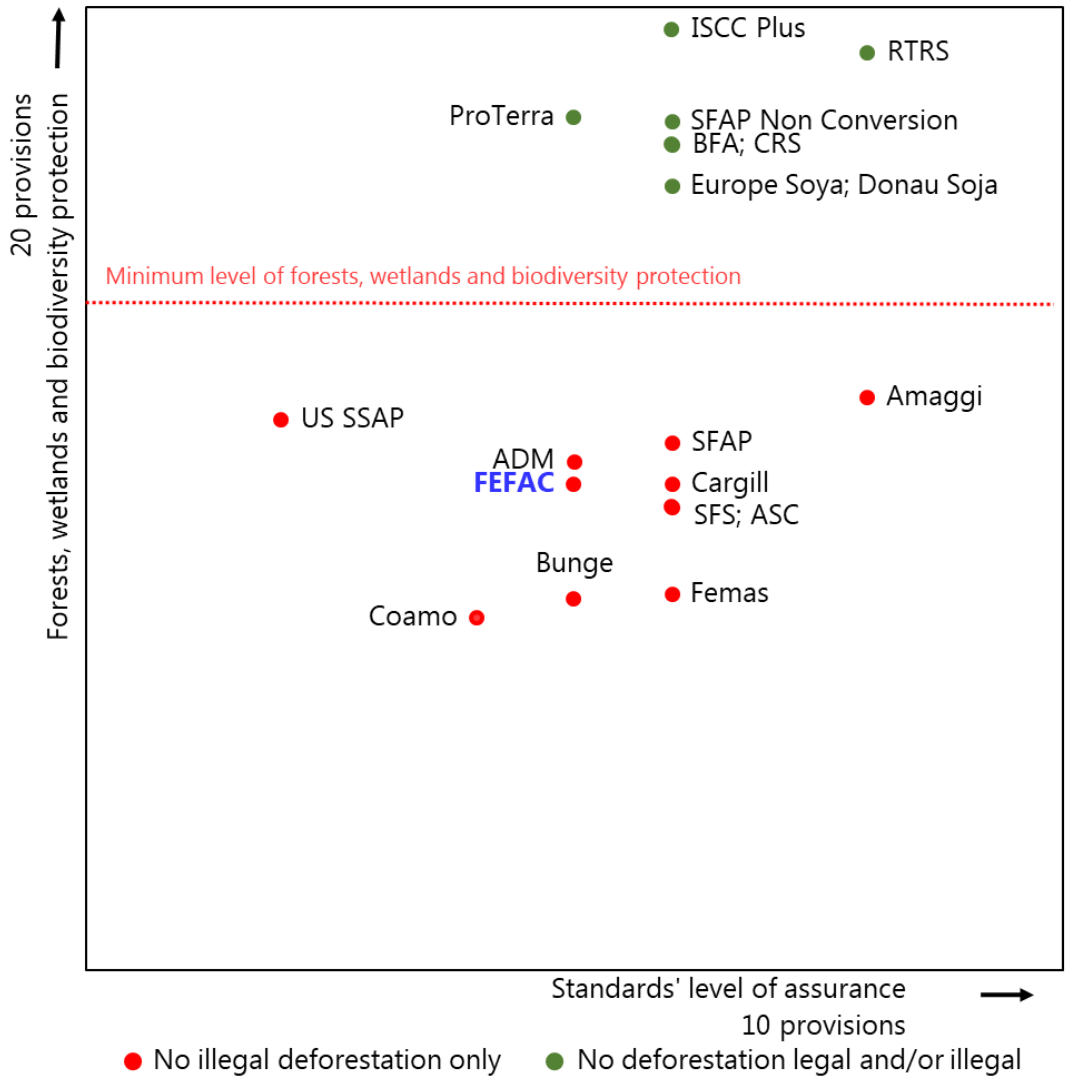


Figure II compares the standards on the number of provisions on forests, wetlands and biodiversity protection (Y-axis) and the level of assurance of each standard (X-axis). The eight standards that include a clear prohibition of deforestation that is applied to native vegetation in all countries and regions are shown above the red-dotted line. Among these eight standards, RTRS and ISCC Plus come out as top two, as they have included the largest number of provisions on forests, wetlands and biodiversity protection in combination with a relatively high level of assurance.

Figure II Provisions on forests, wetlands and biodiversity protection vs the level of assurance of the standards



Based on the assessment of the standards' provisions, it becomes evident that to improve the safeguards for deforestation-free soy consumption in European countries, clearer and more stringent provisions must be implemented. Specifically, the following recommendations are made to different groups of stakeholders:

- **To the FEFAC**: Reliance on legal compliance alone is not enough in most producing countries to avoid a considerable amount of potential deforestation and/or high biodiverse area conversion. The FEFAC Soy Sourcing Guidelines can be further strengthened by changing some of its indicators from "desired indicators" to "essential indicators". Apart from the requirements on deforestation, this is also very relevant for indicators concerning wetlands and biodiversity conservation. Furthermore, without a good level of assurance, responsible soy (covering either illegal or all deforestation) can never be guaranteed. Best-in-class standards should therefore be given preference to set forth the required level of compliance. In addition, FEFAC should require its recognized standards – as condition – to put their standard documents publicly available for transparency reasons.
- **To European governments**: In their policies and regulations, European governments should not just rely on legal compliance in producer countries if they seek to avoid deforestation. They should set a mandatory minimum bar for avoiding deforestation, which could potentially be controlled by the application of best-in-class standards, which also have a strong level of assurance.
- **To Voluntary Standard Systems:** The standards should define "deforestation-free" more stringently and unambiguously in their provisions. They should avoid using double standards but instead be transparent and raise their bar in assurance and conversion-free production. SFAP chose to create two versions of their standard, using different definitions of sustainable production, which allows producers and the market to "cherry pick" their preference depending on their situation or needs (market requirements).
- **To end-buyers and financial institutions**: End-buyers seeking to achieve deforestation-free soy should choose for best-in-class standards, combined with specific investments in farmers' good practices in deforestation risk areas. This will help the geographical spread where it counts and is a stepping stone towards jurisdictional approaches. Financial institutions should step up and help by requiring these best-in-class standards to be applied, and by facilitating green finance to protect natural resources in risk-prone producing areas.

Abbreviations

ASC	Agricultura Certificada de Aapresid; Certified Sustainable Agriculture
BFA	Belgian Feed Association
CRS	Certified Responsible Soy
EU RED	European Union Renewable Energy Directive
FEFAC	European Feed Manufactures' Federation
FEFAC SSG	FEFAC Soy Sourcing Guidelines
FEMAS	Feed Materials Assurance Scheme
GHG	Greenhouse Gas
HCS	High Carbon Stock
HCV	High Conservation Value
ISCC	International Sustainability and Carbon Certification
LDC	Louis Dreyfus Company
RTRS	Round Table on Responsible Soy
SFAP	Sustainable Feed Assurance Programme
SFS	Sustainable Feed Standard
US SSAP	The US Soy Sustainability Assurance Protocol
VSS	Voluntary Standard System

Introduction

In 2017 Europe consumed approximately 40 million tonnes of soybean equivalents, of which the EU-28 produced 2.7 million tonnes itself or 8.7 million tonnes if other European countries such as Ukraine and European part of Russia are included.[1] Around 31 million tonnes of soy is imported, mostly from Argentina, Brazil and the United States.[2] Europe is relying heavily on imports to meet soy demand for animal feed, and to a lesser extent, for biofuel. Although Europe aims to increase its own production of soy, it is unlikely it will be able to actually raise production sufficiently to meet the current demand.

Production of soy, especially in South American countries, is often associated with widespread deforestation and displacement of small farmers and indigenous people. Soy has been defined as one of the major drivers of tropical deforestation along with beef, palm oil and wood products[3]. For example, in Argentina, where since 1996, when the government authorised the introduction of genetically modified soya beans, which allowed it to be cultivated in a much wider area, the country has cleared nearly a quarter of its native forests. Much of that newly cleared land has been turned over to soybean crops[4]. In Brazil, while the 2006 Soy Moratorium has helped to halt the pace of deforestation related to soy production in the Brazilian Amazon Biome, other highly biodiverse regions such as Cerrado, continue to be converted to cropland at a rapid pace for soy, cotton, corn and other commodities.[5] With the recent Cerrado Manifesto, attention and company ambitions have been drawn to the area, which is important and promising, but the risk of further pushing soy into other frontiers such as in the Gran Chaco (Argentina, Paraguay, Bolivia), and the vulnerable fringes of the Pantanal area (Brazil) is apparent. Similarly, there still are natural resources to protect in the US and Europe. Therefore, from whatever geography, deforestation-free, conversion free and responsible sourcing is relevant.

Acknowledging their responsibility regarding deforestation, the European Feed Manufactures' Federation (FEFAC) developed Soy Sourcing Guidelines (FEFAC SSG) defining a baseline level for imported soy to the European market including no *illegal* deforestation.[6] The Consumer Goods Forum has incorporated FEFAC's approach in their own soy sourcing guidelines as a first step towards zero deforestation, but it acknowledges RTRS, ISCC Plus with voluntary add-ons 202-01 and 202-02, Pro Terra and the Sustainable Agriculture Networks' (SAN) Sustainable Agriculture Standard, as standards that best guarantee zero net deforestation.[7] IUCN NL asked Profundo to provide some further insights on the FEFAC SSG compliant standards to be able to include this knowledge into their further advice to the governments and the private sector and financial institutions on achieving deforestation-free soy. IUCN NL acknowledges that certification has an important role to play among other measures to achieve good governance, and legal compliance in producer countries is an important -yet insufficient - ingredient to achieve this goal.

Currently there are eighteen Voluntary Standards Systems (VSS) which comply with the Soy Sourcing Guidelines of the FEFAC. They are:

- ADM Responsible Soy Standard
- Agricultura Certificada de Aapresid; Certified Sustainable Agriculture (ASC)
- Amaggi Responsible Standard
- Belgian Feed Association (BFA)
- Bunge (Pro S)
- Cargill (Triple S)
- Certified Responsible Soya (CRS)
- Coamo Responsible Soy
- Donau Soja
- Europe Soya

- FEMAS
- ISCC Plus
- Louis Dreyfus Company (LDC) program for Sustainable Agriculture
- ProTerra
- RTRS
- Sustainable Feed Standard (SFS)
- Sustainable Farming Assurance Programme (SFAP)
- US Soy Sustainability Assurance Protocol (US SSAP)

The LDC standard was added after the analysis of this report was started and is not included in this research.

To understand the contribution of these standards in guaranteeing a deforestation-free responsible soy supply chain as is promoted by the New York Declaration, the Amsterdam Declaration Partnership and many other pledges, this research is designed to assess the FEFAC compliant standards. Within this, the content of the existing FEFAC SSG benchmark, especially for feed, is acknowledged.

The objective of the assessment is to produce a benchmark for the FEFAC compliant standards focusing on the issue of achieving deforestation-free soy production including a number of other biodiversity criteria, particularly regarding conversion. The result of the assessment is aimed at providing input for discussion on the differences and interpretations regarding "responsible soy" in the European context.

Similar standards' assessments have been conducted by other researchers. For example, in 2018, Economics Climate Environment (Efeca) conducted an analysis of six soy standards (RTRS, ProTerra, ISCC Plus, CRS, Cargill Triple 'S' and ADM Responsible Soybean Standard) against eight questions relevant to the issues of forests and native vegetation conversion.[8] In 2013, WWF Germany also conducted an analysis of standards and certification schemes for biofuel production that complied with the EU RED requirements. The study included ISCC Plus and RTRS.[9] IUCN NL took this and nine other studies as their basis for a meta-analysis of biofuels/soy and palm oil standards (2013) and concluded that the multi stakeholder led standards such as those of the roundtables scored best in both norms and level of assurance[10].

This research includes seventeen, which is all but one, standards that are compliant to the FEFAC Guidelines, and by focusing in greater detail on issues relevant to deforestation and conversion and the level of assurance that these standards offer.

Chapter 1 of this report explains the methodology applied for the assessment of the standards, while Chapter 2 presents the results of the analysis. Chapter 3 offers a discussion of what can be learned from the analysis and offers recommendations for FEFAC and the standards. A summary of the findings of this report can be found on the first pages of this report.

Chapter 1 Methodology

The assessment of the seventeen Voluntary Standards Systems (VSS) that comply with the Soy Sourcing Guidelines of the FEFAC was conducted by benchmarking them against an assessment tool with basic provisions and extra requirements that are relevant to the objective of achieving deforestation-free soy production. The assessment tool covers four crucial issues, these are:

- **Avoiding deforestation;**
- **Avoiding conversion and degradation of HCV areas and other valuable natural areas;**
- **Avoiding wetland conversion;** and
- **Optimizing the standard's level of assurance.**

Detailed lists of provisions for each issue are provided in section 1.3.

The provisions for the issues avoid deforestation, wetland conversion and degradation of HCV areas and other valuable natural areas were selected from indicators used in the WWF Certification Assessment Tool.[11] Provisions for the standard's level of assurance were selected from indicators used in IUCN NL's report Betting on Best Quality.[12]

The assessment focuses on forest protection and biodiversity conservation. The criteria included are inevitably a selection of all criteria that could be analysed. However, every effort has been made to choose relevant criteria that can give a good representation of the standards' performance on the protection of forests, wetlands and biodiversity (HCV areas).

The standard requirements and their level of assurance is also greatly influenced by the governance and standard-setting procedures of the voluntary schemes themselves, as for example stakeholder representation in standards development. It should be noted that, given the scope of the assessment, these governance issues are not covered in this study.

Also, the assessment does not cover social issues, neither those related to the degradation of forests and biodiversity, though it is apparent that the risk for loss of biodiversity and forests can be influenced by social issues such as lack of land rights.

1.1 Standard assessment

This research assesses seventeen[ii] of the FEFAC compliant standards. In addition to the assessment of the individual standards, for an easy comparison between the standards and the Guidelines, the FEFAC Soy Sourcing Guidelines themselves have also been analysed in the similar manner.

The assessment principally used standard documents on each standard that were available for the analysis. Some of these standards were publicly available. Other standards, that do not have the standard document publicly available, sent to us their standard document after request. Only where such documents are not available, information from the ITC Standards Map is used. Detailed information on the sources used for the assessment is presented in Table 1. The initial results of the assessments were sent to each of the organizations managing the standards to get feedback and to acquire relevant policy documents that currently are not publicly available.

[ii] SFAP owns two different standards which are SFAP and SFAP Non Conversion. Both standards are FEFAC compliant. The research evaluates these standards separately.

After feedback from each of the organizations managing the standards was gathered, reviews were done to assess whether the feedback and additional documents warranted revision of the original assessments. Not all standards have provided feedback, and some have provided feedback more than once. The list of the standards that provided feedback is in Table 1.

Table 1 List of the policy document analysed and feedback

Standard	Feedback received	Source	Published on the standard website
ADM Responsible Standard	Yes	ADM Responsible Soybean Standard, Jun 27, 2018	Yes
Agricultura Certificada de Aapresid; Certified Sustainable Agriculture (ASC)	Yes	Quality Management System Protocol and Sustainable Management Practices Manual for Agriculture Sustainability Certification; Revision 3 - Version 2017	Yes
Amaggi Responsible Standard	Yes	Amaggi Responsible Standard, Certification Standards, Version 1.0 - April/2016	Yes
Belgian Feed Association (BFA)	Yes[iii]	CRS Normative Document version July 2018; CRS checklist 2016.	Yes
Bunge (Pro S)	Yes	Pro S Bunge, Updated 2015	No
Cargill (Triple S)	Yes	Cargill Sustainable sourced and supplied principle and criteria, version 6.2, January 2019.	No
Certified Responsible Soya	Yes	CRS Normative Document version July 2018; CRS checklist 2016.	
Coamo Responsible Soy	No	ITC StandardMap; accessed October 2018	No
Donau Soja	Yes	Donau Soja Standard; Version May 2018	Yes
Europe Soya	Yes	Europe Soya Standard; Version May 2018	Yes
FEMAS	Yes	ITC StandardMap; accessed October 2018	Yes
ISCC Plus	Yes	ISCC Sustainability Requirements for the Production of Biomass, ISCC System Basics 201 version 3; 2016.[iv]	Yes
ProTerra	Yes	ProTerra Standard; Version 4.0 (Dec. 16, 2018)	Yes
RTRS	Yes	RTRS Standard 2017	Yes
Sustainable Feed Standard	Yes	Sustainable Feed Standard v1.0 (October 2016)	Yes
Sustainable Farming Assurance Programme	Yes	SFAP; version 3 (December 2017)	Yes

[iii] BFA standard is exactly the same as the one of CRS. BFA purchases the credits from CRS.

[iv] ISCC Plus includes only basic requirement, voluntary module is not included in the assessment.

Standard	Feedback received	Source	Published on the standard website
Sustainable Farming Assurance Programme Non-Conversion	Yes	SFAP Non-Conversion; version 3 (November 2018)	Yes
US Soy Sustainability Assurance Protocol	Yes	US Soy Sustainability protocol (April 2018)	Yes

1.2 Basic provisions and extra requirements

The assessment tool defines two types of provisions which can be included in the standard. These are:

- **Basic Provisions**: these are considered essential requirements on a particular issue which need to be explicitly included in the standard; and
- **Extra Requirements**: for some issues (not all), the standard may include more detailed requirements related to the basic provision. These extra requirements are commonly found in combination with basic provisions on which there is or has been a measure of public discussion on how the basic provision should be implemented. Examples include the requirement to use an accredited certification body to conduct the audits, the requirement to provide evidence/record of agrochemical use and application, etc. The list of possible "Extra requirements" is extensive and not all can be included in the assessment tool. The tool therefore only mentions examples. However, if the standard has included other "Extra requirements", these will also be assessed.

The assessment applies a "Yes" or "No" marking for each Basic Provision and for each relevant Extra Requirement. A "Yes" is assigned when a standard has a provision that is relevant to the requirement criteria, and a "No" is assigned when a standard does not have provisions deemed sufficiently relevant to the required criteria.

1.3 Assessment tool on deforestation-free soy production

In total thirty **Basic Provisions** are included in the assessment tool. Twenty-one provisions were categorized as Major and ten as Minor provisions. Major provisions are provisions that are considered crucial and minor provisions are provisions that are considered relevant but less crucial to provide safeguards for a particular issue. Detailed lists of the provisions for each issue are provided in this section.

1.3.1 Avoiding deforestation

This research selected the standards' criteria to avoid any deforestation in the production of soy as a **Basic Provision.** This provision focuses on the main characteristic of the "deforestation-free" and "conversion-free" provisions applied by the standards. The assessment applies a definition of "deforestation-free" similar to the Accountability Framework Initiative (AFI) definition of "deforestation-free", which means that the concept of what "deforestation-free" entails, is not dependent on the local law in any given country.[13] The reliance on local legislation to limit the prohibition on illegal deforestation is considered insufficient to provide adequate safeguards in avoiding deforestation because laws vary greatly between different countries. Or in other words, what should be considered "deforestation-free" and "conversion free", has to be a general and internationally shared idea, irrespective of local law in any given country. Whether local or national laws are weak or strong, the meaning of "deforestation-free" should be the same as applied to all standards.

An **Extra requirement** was selected for the Basic Provision for the issue avoiding deforestation. The matrix used for the issue deforestation is presented in Table 2.

Table 2 Provisions on avoiding deforestation

Category	Basic Provisions	Selected Extra Requirements
Major	Producers are never allowed to produce soy on land that has been deforested and are not allowed to deforest land for	There is a cut-off date 2009 (or earlier) for all countries

Category	Basic Provisions	Selected Extra Requirements
	expansion.	

1.3.2 Avoiding conversion and degradation of HCV areas and other valuable natural areas

Fourteen **Basic Provisions** were selected to analyse the standards' criteria to avoid conversion and degradation of HCV areas and other valuable natural areas in the production of soy. Nine of the fourteen provisions were defined to be major provisions and five to be minor provisions. Eight Basic Provisions could have **Extra Requirements**. A list of the five selected provisions are presented in Table 3.

Table 3 Provisions on avoiding conversion and degradation of HCV areas and other valuable natural areas

Category	Basic Provisions	Selected Extra Requirements
Major	Producers are not allowed operations in or impacting legally protected areas (IUCN I-VI, UNESCO World Heritage, Ramsar Wetlands).	-
Major	Producers are not allowed to clear areas of high above-ground carbon stocks (HCS) and high conservation value area (HCVs) to expand cultivation or plantations.	• Requiring producers to identify HCS and HCV areas before expansion;
Major	If any alteration of protected areas has taken place, producers must restore these to its former state or producers should take legally approved compensating actions.[v]	• Details on the quantity, quality, timeline and permanence of the compensation.
Major	Producers are required to identify biodiversity values, on their land, potentially affected by their operations.	• Biodiversity identification in the surrounding area • Regularly monitor impacts on biodiversity and adapt management approach as necessary for improvement
Major	Producers are required to take measures to minimize and mitigate negative impacts from operations on biodiversity values in the management area.	• Measures to minimize and mitigate negative impacts from operations outside the management area. • Timebound plan for management of HCV area • Plan to protect and recover native vegetation or HCV in the management unit and the surrounding.
Major	Producers are required to provide details of the locations of	• Map of the management area

[v] The compensation actions mentioned in this provision should not be limited to land-use conversions alone, but should also consider the (unintentional) impact of soy production that may occur in the surrounding areas of a farm.

Category	Basic Provisions	Selected Extra Requirements
	identified HCV areas upon request by relevant stakeholders	which shows the HCV areas or native vegetation
Major	Producers are required to protect rare and threatened species and their habitats in the management unit.	• Protection on the surrounding area outside management area
Major	Producers are required to ensure that any use of biological control agents complies with internationally recognized standards and/or protocols	
Major	Producers are required to take measures to avoid or minimize negative impacts of agrochemical use on human health and the environment	
Minor	Producers are required to use independent expertise for assessing HCVs and/or HCSs	
Minor	Producer activities must not degrade areas where forest restoration or threatened wildlife re-introduction is taking place.	
Minor	Producers are not allowed to introduce or use invasive alien species in the management unit.	
Minor	Producers are not allowed to use hazardous chemicals (as defined by WHO 1A and B and the Stockholm and Rotterdam conventions)	• Recording agrochemical use and application
Minor	Producers are required to implement integrated pest management practices that minimize the use of pesticides	• Promotion of native predators

1.3.3 Avoiding wetland conversion

Five **Basic Provisions** were selected to analyse the standards' criteria to avoid wetland conversion in the production of soy. Three of the five provisions were defined to be major provisions and two to be minor provisions. Only for one provision **Extra Requirements** are assessed.

In the assessment of the standards, there can at times be some overlap between different provisions of "avoiding conversion and degradation of HCV areas" and "avoiding wetland conversion". This will of course be reflected in the results of the assessment. A list of the five selected provisions is presented in Table 4.

Table 4 Provisions on avoiding wetland conversion

Category	Basic Provisions	Selected Extra Requirements
Major	Producers are not allowed to produce soy on drained wetland.	
Major	Producers are not allowed to expand cultivation or plantations on wetland or peat soils and/or areas of high below-ground carbon stocks.	
Major	Producers are not allowed to build an irrigation system (diversion of waterways) that creates degradation of wetland ecosystem in the surrounding and the down-stream area.	
Minor	Producers must conserve natural wetlands in undrained conditions, and operations that drain or degrade wetlands are prohibited.	

Category	Basic Provisions	Selected Extra Requirements
Minor	Producers must minimize impact on wetlands and ground water quality from chemical residues, fertilizers, erosion or other sources.	• Requirement of evidence of proper management/handling agrochemical waste

1.3.4 Standard's level of assurance

Assurance is a combination of measures that provide guarantees that selected provisions for deforestation-free soy production are complied with. As previously mentioned in the introduction of this chapter, a selection of provisions for the standard's level of assurance was chosen from indicators used in the IUCN NL report 'Betting on Best Quality' (2013). The selection was primarily based on the importance of the provisions and the given resources available for this research. The combination of selected provisions for deforestation-free and the (sufficient) level of assurance defines the robustness of the standards.

Ten **Basic Provisions** were selected to assess the level of assurance of each standard. Eight of the ten provisions were defined to be major provisions and two to be minor provisions. For two of the **Basic Provisions**, **Extra Requirements** are possible. A list of the five selected provisions are presented in Table 5

Table 5 Assessment tool for standard's level of assurance

Category	Basic Provisions	Examples of Extra Requirements
Major	Producers are certified by independent third-party certification bodies.	• Certification bodies are accredited
Major	Certificates are valid for no more than five years after which a new full certification audit is required.	
Major	Certification bodies are required to conduct annual or more frequent surveillance audits of certificate holders.	• Detailed provision on unannounced assessment
Major	Certification bodies are required to proactively consult with affected stakeholders during both certification and surveillance audits.	
Major	Certification bodies shall have an easily accessible and responsive complaints system and shall ensure that certification bodies have a complaints system in place.	
Major	Producers applying for certification are required to commit to a time-bound plan for certification of all farm units under their control.	
Major	Certificate holders are required to rectify non-compliances identified during certification and surveillance audits within a set timeframe that does not exceed one year.	
Major	Severe (major) non-compliances that are not rectified in time	

Category	Basic Provisions	Examples of Extra Requirements
	lead to suspension or termination of the certificate.	
Minor	VSS publishes the list of certified farms and the statement of conformity is publicly available on its website.	
Minor	VSS is a full member or associate member of ISEAL[vi].	

[vi] ISEAL is the global membership association of sustainability standards systems. Its mission is to strengthen the effectiveness of sustainability standards for the benefit of people and the environment.

Chapter 2 Deforestation-free provisions in the FEFAC SSG compliant standards

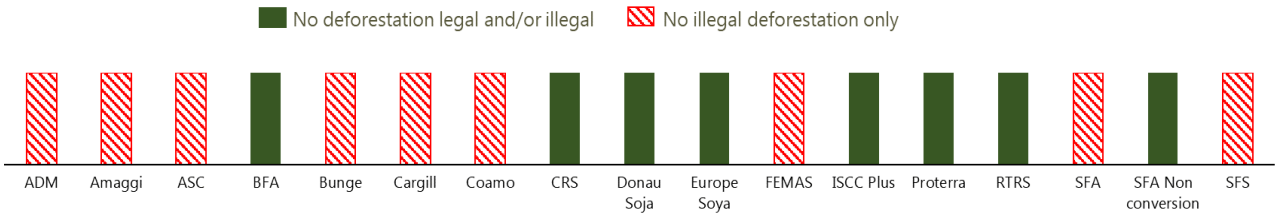
This chapter presents the results of the assessment of the standards of the Voluntary Standards Systems against the assessment tool with requirement criteria and provisions selected for this research. The provisions and requirements relevant to the four selected issues (avoiding deforestation, wetland conversion, degradation of HCV areas and other valuable natural areas and the standard's level of assurance) are discussed in the four sections of this chapter.

2.1 Avoiding deforestation

Nine of the standards have a policy that relies only on local legislation. These standards prohibit only soy that is produced on land that is "illegally" deforested. Eight of the standards provide a clear prohibition of deforestation that is applied for native vegetation in all countries and regions even where the area was not designated as a forested area. These standards commonly also state that no conversion for soy production is allowed after a cut-off date of 2008, or in some cases May 2009 (e.g. RTRS, CRS and BFA).

An overview of the results for the assessment of provisions identified, relevant to the issue "avoiding deforestation" is presented in Figure 1.

Figure 1 Soy standards' Basic Provisions on avoiding deforestation



The FEFAC SSG only require legal compliance for forest protection and land management. This also shows in the FEFAC provision to "avoid deforestation", being criteria 28: "*No soy is produced on land that is illegally deforested after a certain cut-off date mentioned in national legislation (e.g. 2008 in Brazil, 2008 in the USA, etc.)*".[14] This provision means that the term "deforestation" is determined by national law in the producer country. A recent study by IUCN NL reported that forest laws provide a certain legal protection of forests. However, the report also showed that with this FEFAC provision large areas of forests can still be legally deforested. Approximately 7 million hectares in Paraguayan Chaco, 10.5 million hectares in Argentina, and 88 (± 6 error margin) million hectares in Brazil, adding up to about 110 million hectares.[15]

For soy production in Brazil and the United States, the FEFAC Guidelines apply a cut-off date of 2008. However, this cut-off date does not apply for other countries that have not adopted a similar policy in their national law. Furthermore, despite the Soy Moratorium, Brazil lost 9.5 percent of its forest land between 2000 and 2014. The expansion of agriculture into areas with less stringent environmental regulations, or lenient law enforcement, has coincided with the turbulent political period in Brazil where a strong coalition of federal lawmakers, representing agricultural interests, has introduced a number of controversial land use policies. [16] The IUCN NL study and the loss of forest land in Brazil illustrate that it is relevant for standards to control legal compliance, but it is not to avoid widespread deforestation.

2.2 Avoiding conversion and degradation of HCV areas and other valuable natural areas

2.2.1 Presence of Basic Provisions

All the standards show the intention to protect biodiversity and High Conservation Value (HCV) areas. However, none of the standards have all provisions for the fourteen **Basic Provisions** (nine major provisions and five minor provisions) selected in this assessment. The compliance level of standards with the **Basic Provisions** for this assessment is low, compared with the other issues discussed in this benchmark. The number of provisions also varies the most among the standards compared to the provisions for other issues discussed in this benchmark.

The major provision that is often lacking in the standards is the provision for the producers to provide details on the locations of the identified HCV areas upon request by relevant stakeholders. While among the minor provisions, the requirement to use an independent expert for assessing HCV and/or HCS areas is often lacking.

ISCC Plus has the most provisions for the issue "avoiding degradation of HCV areas and other valuable natural areas", followed by ProTerra and RTRS. ISCC PLUS is only lacking provisions on requiring producers to provide details of the location of the identified HCV areas upon request of the stakeholders. RTRS does not have this provision either, nor the provision to use an independent expert for assessing HCV and/or HCS areas.

Standards with a limited number of provisions on this issue usually do not have provisions for soy producers to identify biodiversity risks in their management area potentially affected by their operations. Standards with a greater number of relevant provisions generally require soy producers to provide a map of the farm which shows native vegetation on their land.

The FEFAC Guidelines are lacking requirements on four of the **Basic Provisions** (one major and three minor) selected for this assessment. The Guidelines have the provision: "*Important on-farm biodiversity should be maintained and safeguarded through the preservation of native vegetation. There is a map of the farm which shows the native vegetation and there is a plan to protect and recover native vegetation* (Criteria 29)." However, this criterion is defined as a "desired criterion" and not an "essential criterion". This means that it is considered important, but it does **not** need to be included in the standards for responsible soy. To comply with the FEFAC Guidelines, a standard is required to meet all essential criteria and only five of the 22 desired criteria in the standard (meaning individual standards must adopt a minimum of 5 from the 22)[17].

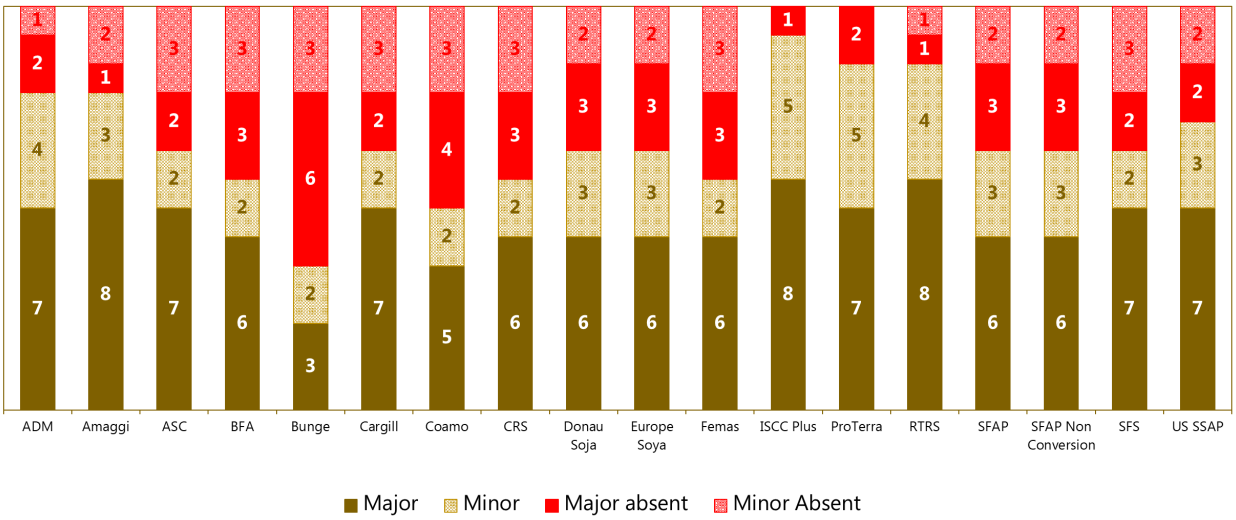
Eleven of the standards have less provisions on "avoiding degradation of HCV areas and other valuable natural areas" than FEFAC Guidelines. However, of the FEFAC's provisions that are relevant to the seven basic requirements of this assessment, five are defined as "desired criteria" and only two of them are defined as "essential criteria".

Four **Basic Provisions** that FEFAC and most of the standards do not have are:

- Producers are required to ensure that any use of biological control agents complies with internationally recognized standards and/or protocols;
- Producers are required to use independent expertise for assessing HCVs and/or HCSs;
- Companies activities must not degrade areas where forest restoration or threatened wildlife re-introduction is taking place;
- Producers are not allowed to introduce or use invasive alien species in the management unit.

An overview of the results for the assessment of **Basic Provisions** identified, relevant to the issue "avoiding degradation of HCV areas and other valuable natural areas" is presented in Figure 2.

Figure 2 Standards' Basic Provisions on avoiding conversion and degradation of HCV areas and other valuable natural areas



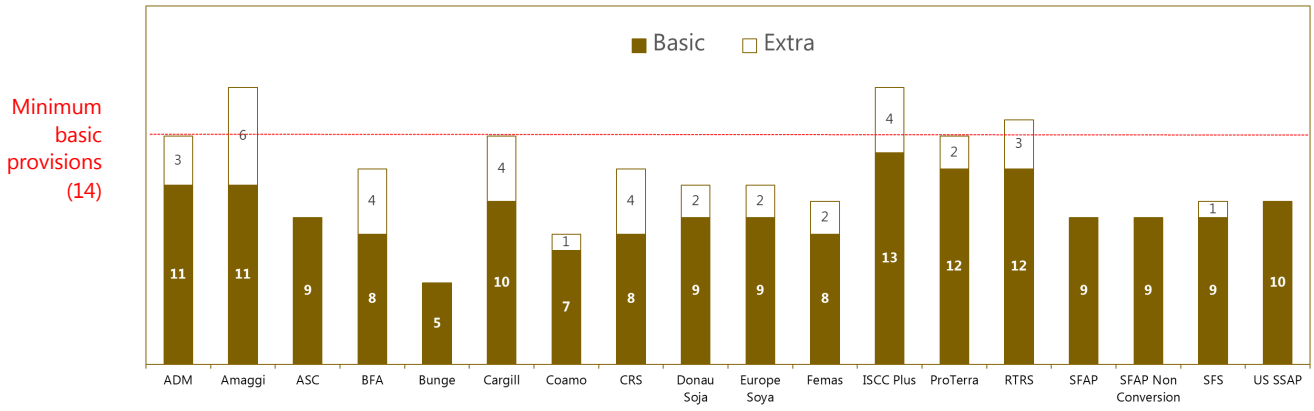
2.2.1 Presence of Extra Requirements

Extra Requirements for the issue "avoiding degradation of HCV areas" are more detailed provisions on how the relevant **Basic Provision** should be implemented.

Only few of the standards provide the eight **Extra Requirements** selected in the assessment. Amaggi Responsible Standard has incorporated most of the **Extra Requirements**, followed by BFA, CRS, Cargill and ISCC Plus. Note that standards with extra provisions on this issue have included additional requirements, although they may differ from each other on which ones.

An overview of the results for the assessment the combined **Basic Provisions** and **Extra Requirements** relevant to the issue of "avoiding degradation of HCV areas" is presented Figure 3.

Figure 3 Standards' Basic Provisions and Extra Requirements on "avoiding conversion and degradation of HCV areas"



2.3 Avoiding wetland conversion

2.3.1 Presence of Basic Provisions

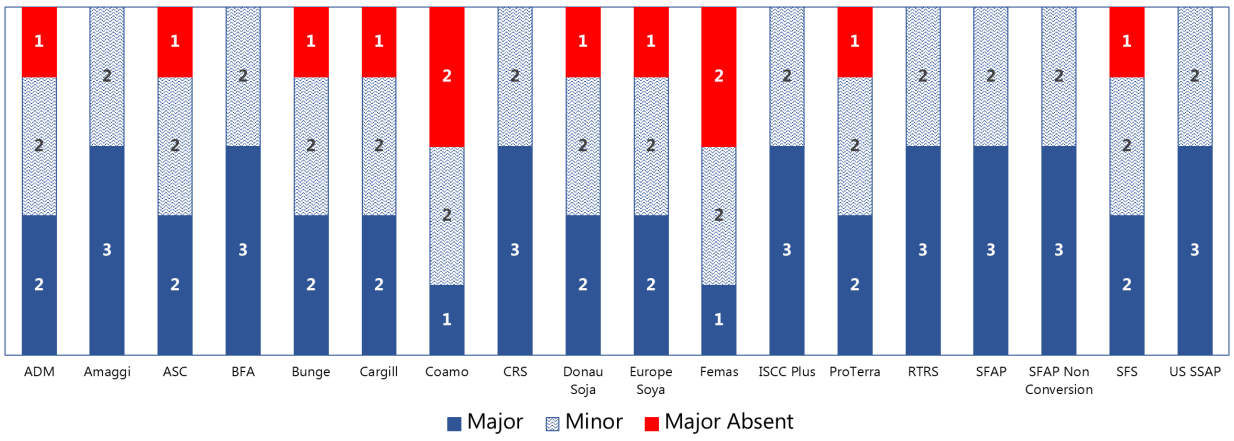
Wetland International reported in 2016 that in Argentina, Brazil, Paraguay and Bolivia, soy expansion results in wetland loss and degradation[18]. At the same time, the Pantanal region in Brazil, Paraguay and Bolivia, the world's largest area of tropical wetlands, is also reportedly starting to wither. Over the past 15 years, about 2.25 million hectares of the region, have been altered and arid soil incorporated into the fertile biomes for soy farms and cattle ranches.[19]

Though wetland protection in soy production is of great importance, the assessment found that the provisions to "avoid wetland conversion" are often lacking in the standards. Eight standards have all provisions relevant to the three major requirements and two minor requirements selected for this assessment. These standards are Amaggi Responsible Standard, BFA, CRS, ISCC Plus, RTRS, SFAP, SFAP Non-Conversion and US SSAP. Few standards have specific provisions that explicitly prohibit the conversion of wetland areas, with many of the standards embedding this in some way in other provisions, for instance in those for the prohibition of the conversion of native vegetation. The assessment considers a standard to provide full protection of wetlands when it clearly states that it requires protection of native vegetation, as well as prohibits peat conversion, draining and water ways diversion in wetland areas.

Many of the standards also fail to provide a clear provision on the prohibition of waterway diversions that create degradation of the wetland ecosystem in the surrounding and downstream areas. The standards that pay attention on this issue, usually give provisions to implement a social and environmental impact assessment before construction of new infrastructure on a farm, but such provisions are too general in their descriptions and do not give the protection that the aforementioned prohibition should provide. FEFAC Guidelines also do not have a specific provision in prohibiting waterway diversions on wetlands. Instead, the Guidelines demand (immediate requirement) that "Areas of natural vegetation around bodies of water and on steep slopes and hills and other sensitive parts of the ecosystem must be maintained or restored".

An overview of the results for the assessment of **Basic Provisions** identified, relevant to the issue "avoiding wetland conversion" is presented in Figure 4.

Figure 4 Standards' Basic Provisions on avoiding wetland conversion

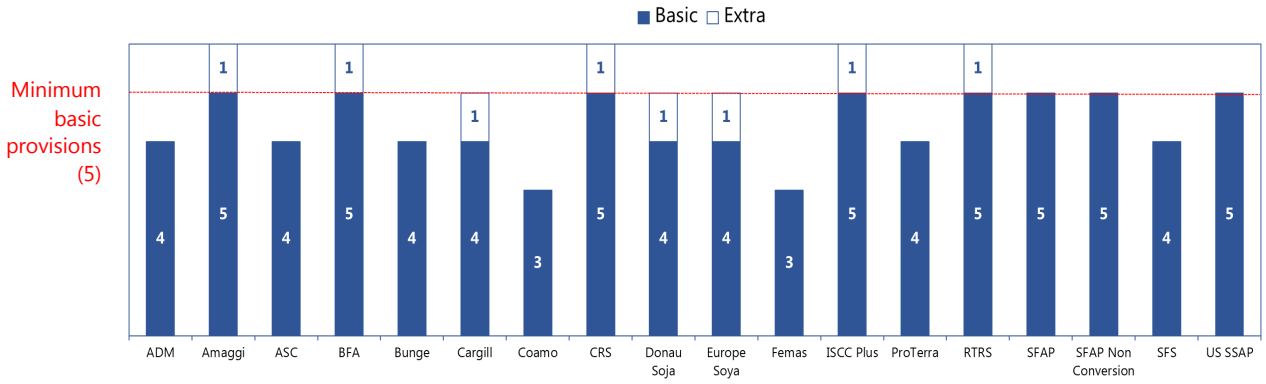


2.3.2 Presence of Extra Requirements

The assessment tool includes one **Extra Requirement**, whereby evident of proper management/handling agrochemical waste is required for **Basic Provision**: "Producers must minimize impact on wetlands and ground water quality from chemical residues, fertilizers, erosion or other sources". Eight standards –Amaggi, BFA, Cargill (Triple 'S), CSR, Donau Soja, Europe Soya, ISCC Plus, and RTRS - have this **Extra Requirement**.

An overview of the results for the assessment on the combined **Basic Provisions** and **Extra Requirements** relevant to the issue of "avoiding wetland conversion" is presented in Figure 5.

Figure 5 Standards' Basic Provisions and Extra Requirements on avoiding wetland conversion



2.4 Standard's level of assurance

2.4.1 Presence of Basic Provisions

Most of the standards certifications are valid for no more than 5 years after which a new full certification audit is required. The assessment could not verify whether Coamo Responsible Soy certifications are valid for no more than 5 years, and a new full certification audit is required every five years or less.

When looking at the requirement to conduct annual or more frequent surveillance audits of certificate holders, US SSAP applies audits to only 8 to 11 percent of soy producers that participate in the U.S. Farm Program annually. The other 89 to 92 percent of the soy producers do not get audited in a given year, and because the producers that do get audited are selected randomly, some producers may not get audited for a great number of years.

The FEFAC Guidelines do not provide provisions on the required frequency of renewal of certification by the standards or on the frequency of audits by the certification bodies. With the exception of US SSAP, all standards have, however, included a requirement where certification bodies have to conduct an annual (or more frequent) surveillance audits of certificate holders.

Many of the standards require the producer to proactively consult with affected stakeholders and have an easily accessible and responsive complaints system in place as promoted in the FEFAC Guidelines, " (Indicator 59; Desired) "*There are communication channels (…) that adequately enable communication between the producer and the community*". However, this study looks at the provision that requires "certification bodies" to proactively consult with affected stakeholders, and only few standards have a clear provision on that. To measure the standards' level of assurance, it is crucial for the certification body to conduct active consultation with the stakeholders during both certification and surveillance audits. Only RTRS clearly requires certification bodies to consult with affected stakeholders during the audits.

Only Amaggi Responsible Standard requires producers that are applying for certification for a management area, to also-within a time-bound commitment plan- apply for certification for all (eligible) management units under their control. This helps the scaling up and reduces the risk of soy crops from certified and non-certified management areas under the same company/ownership to be mixed within the supply chain, which particularly becomes relevant when moving towards mass balance models/ physical streams. The FEFAC Guidelines do not provide provisions on this issue.

The FEFAC Guidelines and all standards apart from US SSAP[vii], require certificate holders to rectify non-compliance identified during certification and surveillance audits within a set time frame that does not exceed one year. In addition, most of the standards also provide provisions that, where and if severe (major) non-compliances are not rectified in time, this leads to suspension or termination of the certificate. Coamo Responsible Soy, and ADM Responsible Soy do not have such provisions.

Only RTRS and ISCC publish a list of the assessments and surveillance audits of certification bodies on their website. They also publish lists of their certified farms. This provides transparency to outsiders and enables buyers to buy credits directly from farmers in specific areas. The auditing reports of these two standards are also publicly available online.[20] In addition, RTRS also publishes lists of which buyer bought RTRS-credits from which farmer.[21] This transparency can be seen as an extra positive point in a relatively non-transparent industry.[22]

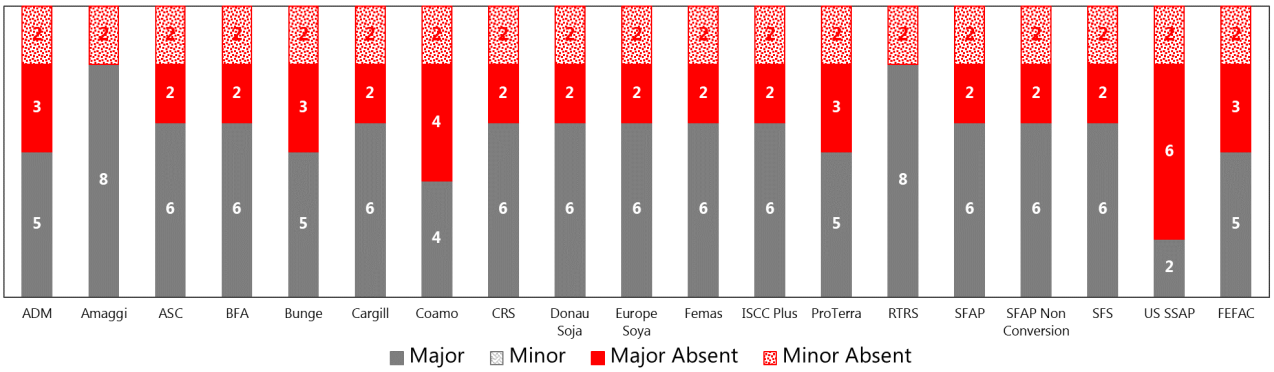
CRS (and BFA) offer buyers the opportunity to buy credits originating from specific areas through a mass balance supply chain model, which makes it possible for buyers to buy from "safe" areas or stimulate certification in particular sourcing areas, either or not risk-prone. RTRS offers buyers the possibility to buy "regional credits" from particular zones.[23]

None of the standards assessed is a member or associate member of ISEAL, although RTRS has expressed the ambition to do so. The ISEAL Alliance is a global membership association for sustainability standards. ISEAL's mission is to strengthen sustainability standards systems for the benefit of people and the environment. In other commodities such as palm oil, cocoa, coffee, tea and sugarcane, membership is already common.[24] Perhaps, a more active participation of the soy standards in an alliance such as ISEAL will benefit the standards by improving their access to information on trends and changes in the sustainability landscape, in sustainability standards and in business needs, as well as provide guidance on how they can evolve further.

An overview of the results for the assessment of Basic Provisions identified, relevant to the issue "standards' level of assurance" is presented in Figure 6.

[vii] US SSAP is not a VSS but a national standard, therefore its structure is also different.

Figure 6 Standards' Basic Provisions on the level of assurance



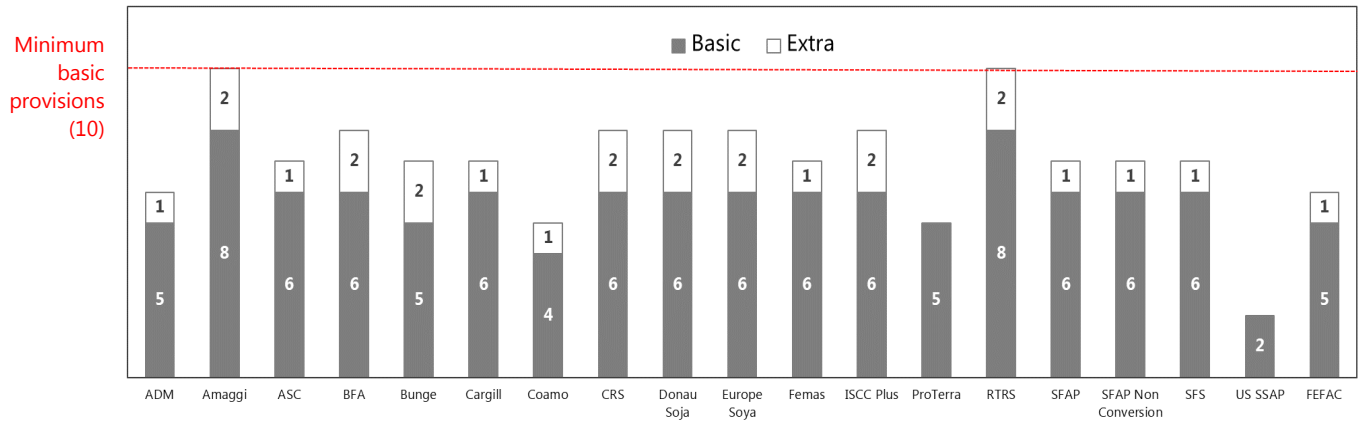
2.4.2 Presence of Extra Requirements

The assessment identified that most of the standards have one or two provisions for the **two Extra Requirements** selected on assurance, which are requirement to use an accredited certification body and the requirement to conduct unannounced audits. Only ProTerra and US SSAP do not have either of the two **Extra Requirements**.

As mentioned earlier, all standards require a third-party body for implementing audits. Most of the standards also require that only accredited certification bodies are used for the audits. Furthermore, seven standards (Amaggi Responsible Standard, CRS, BFA, Donau Soja, Europe Soya, ISCC Plus, and RTRS) have a detailed provision on conducting unannounced or surprise audits.

An overview of the results for the assessment on the combined **Basic Provisions** and **Extra Requirements** relevant to the issue of "standards' level of assurance" is presented in Figure 7.

Figure 7 Standards' Basic Provisions and Extra Requirements on "standards' level of assurance"



Chapter 3 Analysis and recommendations

In Chapter 2, an assessment of the seventeen Voluntary Standards Systems which comply with the Soy Sourcing Guidelines of the FEFAC was conducted by benchmarking them against an assessment tool with requirement criteria and provisions that are relevant to the objective of achieving zero net deforestation in soy production. The assessment tool covers four crucial issues, these are:

- **Avoiding deforestation;**
- **Avoiding conversion and degradation of HCV areas and other valuable natural areas;**
- **Avoiding wetland conversion;** and
- **Optimizing the standard's level of assurance.**

This chapter analyses the assessment results and provides recommendations. Section 3.1 provides an analysis for each issue, while section 3.2 aims to group the different standards based on the assessment. Finally, section 3.3 provides recommendations.

3.1 Analysis per issue

3.1.1 Avoiding deforestation

Standards show different interpretations of how to avoid deforestation. Ten of the standards rely on national legislation rather than providing a clear prohibition of deforestation that is applied for native vegetation in all countries and regions even where the area was not designated as a forested area. Eight standards adopt a clear prohibition of deforestation that is applied for native vegetation in all countries and regions, even where the area was not designated as a forested area after a cut-off date of 2008, or in some cases May 2009. These (deforestation free) standards are BFA, CRS, Donau Soja, Europe Soya, ISCC Plus, ProTerra, RTRS and SFAP Non Conversion. These eight standards also have far reaching provisions to avoid conversion of non-forest native vegetation. (For an indication of requirements on no conversion within the deforestation free standards, see annex 1).

The FEFAC Guidelines themselves are also not stringent enough on some issues. They only rely on national legislation in the producing country for defining what constitutes as "deforestation free" as well as defining the cut-off date for a specific percentage of the property only. By relying on national legislation, the FEFAC Guidelines may actually approve standards that are relatively ineffective in providing safeguards to address the threats to the conservation of forests, wetlands and biodiversity especially in areas where large percentages can be legally deforested and converted.

Governments in South American countries have tried to reduce deforestation and forest degradation and have tried to improve the management of forest resources generally, but with disappointing results. Only between August 2017 and July 2018, Brazil was reported to have deforested 7,900 km^2 or a 13.7% rise on the previous year and the biggest area of forest cleared since 2008.[25] Flawed policy and legislative frameworks, weak rule of law, illegal logging, corruption, ineffective forest institutions and various other governance failures have troubled forest management in the region.[26] In addition, even if full legal compliance in these countries would be achieved existing environmental laws have their limits in protecting native ecosystems. The IUCN benchmark report showed that with full legal compliance large areas of forests can still be legally deforested. Approximately 7 million hectares in Paraguayan Chaco, 10.5 million hectares in Argentina, and 88 (± 6 error margin) million hectares in Brazil, adding up to about 110 million hectares. On top of this there is little to no legal protection against the conversion of other valuable natural habitats such as natural grasslands, savannas or wetlands. Not only in Latin America, but also in case of soy from US or Europe (which is on the rise and the number of countries producing soy is growing), it is important to be keen on deforestation and conversion of natural habitats.[27]

3.1.2 Avoiding conversion and degradation of HCV areas and other valuable natural areas

All the standards show the intention to protect biodiversity and High Conservation Value (HCV) areas. However, the provisions provided by most of the standards provide inadequate safeguards for biodiversity protection on and in the surrounding of the soy farms. The FEFAC Guidelines provide a "desired indicator" to maintain "important on-farm biodiversity" through the preservation of native vegetation, which may or may not be present in the compliant standards. In addition, the Guidelines recommend the availability of a map of the farm which shows the native vegetation and a plan to protect and recover native vegetation (Criterion 29). The FEFAC Guidelines show awareness of the importance of the issue of biodiversity conservation by including this indicator in the Guidelines. However, the research shows that by making this indicator a "desired indicator" rather than an "essential indicator", only a minority of the standards included this issue in their provisions. These standards are: ISCC Plus, ProTerra and RTRS. Including the indicator as a "desired indicator" makes the measure ineffective in the protection of biodiversity on and surrounding the farms.

3.1.3 Avoiding wetland conversion

The issue of wetland conversion has not yet gotten the attention needed to make sure that no more wetlands are degraded because of soy production. Many of the standards do not have a specific policy that is designed to protect wetlands. Commonly, the standards have embedded this in some way in other provisions, for instance in those for the prohibition of the conversion of native vegetation around bodies of water. Covering this element under HCV, further HCS or Ramsar implies that they recognize the need for the protection of wetlands. However, such provisions will not cover all types of wetlands. Wetland types, such as peatlands, can extend over many kilometres without there being any bodies of water present. Having a provision prohibiting the conversion of native vegetation around bodies of water is therefore ineffective in protecting (all types of) wetlands, covering riparian vegetation only.

Most standards do not have direct provisions for "no wetland conversion" comparable to those for no deforestation. The FEFAC Guidelines includes Criterion 30: "Areas of natural vegetation around bodies of water and on steep slopes and hills and other sensitive parts of the ecosystem must be maintained or restored". However, this provision is currently not defined as an essential criterion, but only as a desired criterion.

The threat of soy production to wetlands is very clear. For example, in Córdoba, Argentina, almost half of wetlands in the province were lost due to drainage and conversion to soy farms. Biodiversity loss in wetlands has been reported in southern Córdoba and it is possible that the same process is happening in other regions of soybean production.[28] Conservation of wetlands is essential to efforts to regulate the global climate. The loss of wetlands was estimated to produce 20-25 per cent of global methane emissions. Despite this, wetlands remain dangerously undervalued by policy and decision-makers in national plans.[29] Stringent provisions that clearly prohibit drainage or water way diversions from wetlands is necessary to make sure that EU consumption of soy will not cause further wetlands loss in the producing countries.

3.1.4 Standard's level of assurance

The FEFAC Guidelines provide limited indicators relevant to the standards' level of assurance. The assessment showed also that the level of assurance varies greatly among the different standards. By not setting clear and more detailed accepted levels of assurance for FEFAC compliant standards, the concern is that it will be impossible to guarantee the robustness and overall level of assurance for all FEFAC compliant standards, including on legal compliance. This is especially true in countries where enforcement and monitoring mechanisms are weak. The presence of weaker assurance systems under the FEFAC standards, increases the risk of soy being produced under the FEFAC flag not actually being farmed in a legal and responsible way.

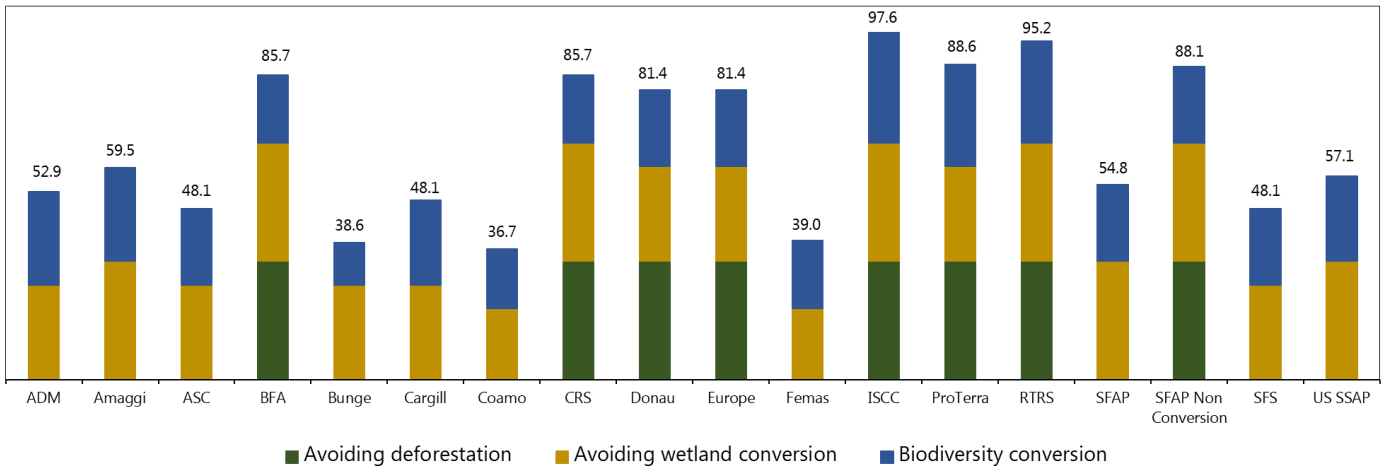
3.2 Overall findings

Without taking into consideration the level of assurance, the overall assessment shows that ISCC Plus has the most provisions for the selected forest and biodiversity issues followed by RTRS and ProTerra. The research identified that for the issues relevant to forests, wetlands and biodiversity conservation, most of the standards offer good provisions that go beyond the requirements of the FEFAC Soy Sourcing Guidelines.

Among the standards, Coamo, Bunge (Pro S), and FEMAS have the fewest provisions in the overall assessment, with Coamo being the standard with the least relevant provisions. Please note also, that Coamo is the only standard that did not provide feedback during the assessment process of this research.

An overview of the overall results on the inclusion of basic provisions on this benchmark of FEFAC Compliant standards is presented in Figure 8. It should be noted that for better comparison, in this figure the three issues (forests, wetlands and biodiversity conservation) are weighed equally, and presented as a percentage of the maximum number of basic provisions. In addition, Extra Requirements are not shown in this figure.

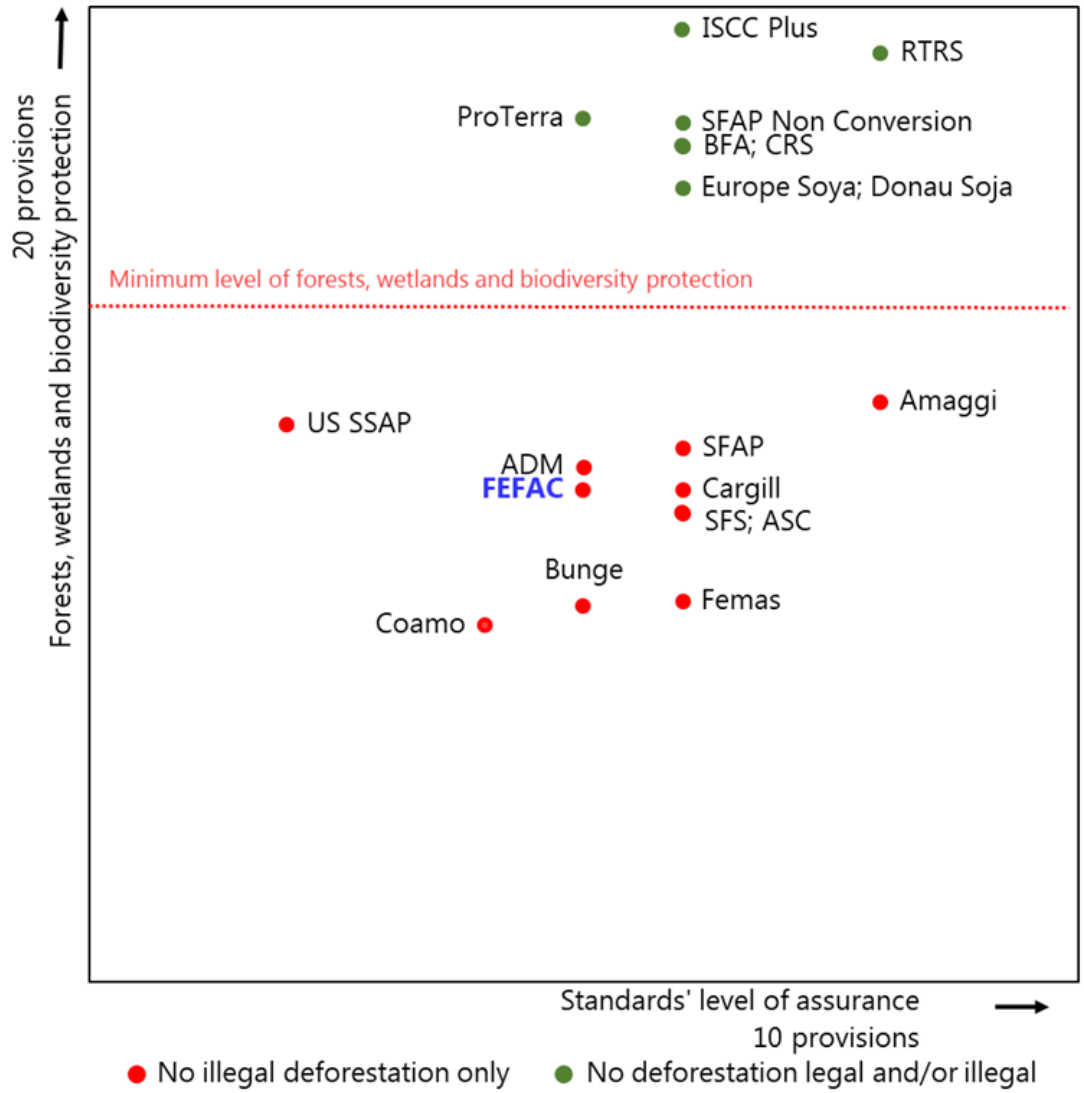
Figure 8 Basic provisions on Deforestation-free Benchmark in FEFAC Compliant Standards



The standards with more provisions for the issues relevant to forests, wetlands and biodiversity conservation do not necessarily also have comprehensive provisions to guarantee the standards' level of assurance. For example, ProTerra has relatively comprehensive provisions relevant to forests, wetlands and biodiversity conservation, however, as previously pointed out, the standard has only five out of ten basic provisions for the "standards' level of assurance". Meanwhile, Amaggi Responsible Standard has relatively few provisions relevant to forests, wetlands and biodiversity conservation, but has a relatively high number of basic provisions (eight out of the selected ten;) relevant to the "standards' level of assurance".

The standards that have a greater number of provisions on forests, wetlands and biodiversity conservation as well as on the level of assurance are ISCC Plus and RTRS. ISCC has the most comprehensive provisions relevant to forests, wetlands and biodiversity conservation, while RTRS is one of the two the standards with the most comprehensive provisions relevant to standards' level of assurance based on this assessment. RTRS and AMAGGI are the standards with most comprehensive provisions relevant to standards' level of assurance based on this assessment. The FEFAC Soy Sourcing Guidelines themselves fall within the group that have a relatively low number of provisions on forests, wetlands and biodiversity conservation as well as on the level of assurance. Figure 9 provides an overview of the presence of deforestation-free indicators combined with the level of assurance of each standard as well as the FEFAC Guidelines.

Figure 9 Provisions on forests, wetlands and biodiversity protection vs level of assurance of the standards



3.3 Recommendations

Based on the assessment of the standards' provisions, it becomes evident that to improve the safeguards for deforestation-free soy consumption in European countries, clearer and more stringent provisions have to be implemented. Specifically, the following recommendations are made to different groups of stakeholders:

- **To the FEFAC**: Reliance on legal compliance alone is not enough in most producers' countries to avoid a considerable amount of potential deforestation and/or high biodiverse area conversion. The FEFAC Soy Sourcing Guidelines can be further strengthened by changing some of its indicators from "desired indicators" to "essential indicators". Apart from the requirements on deforestation, this is also very relevant for indicators concerning wetlands and biodiversity conservation. Furthermore, without a good level of assurance, responsible soy (covering either illegal or all deforestation) can never be guaranteed. Best-in-class standards should therefore be given preference to set forth the required level of compliance. In addition, FEFAC should require its recognized standards – as condition – to put their standard documents publicly available for transparency reasons.

- **To European governments**: In their policies and regulations, European governments should not just rely on legal compliance in producer countries if they seek to avoid deforestation. They should set a mandatory minimum bar for avoiding deforestation and conversion, which could potentially be controlled by the application of best-in-class standards, which also have a strong level of assurance.
- **To Voluntary Standard Systems:** The standards should define "deforestation-free" more stringently and unambiguously in their provisions. They should avoid using double standards but instead be transparent and raise their bar in assurance and conversion-free production. SFAP chose to create two versions of their standard, using different definitions of sustainable production, which allows producers and the market to "cherry pick" their preference depending on their situation or needs (market requirements).
- **To end-buyers and financial institutions**: End-buyers seeking to achieve deforestation-free and conversion-free soy should choose for best-in-class standards, combined with specific investments in farmers' good practices in deforestation and conversion risk areas. This will help the geographical spread where it counts and is a stepping stone towards jurisdictional approaches. Financial institutions should step up and help by requiring these best-in-class standards to be applied, and by facilitating green finance to protect natural resources in risk-prone producing areas.

References

1 IDH and IUCN NL (2019), "European Soy Monitor; insights on the European supply chain and the use of responsible and deforestation-free soy in 2017". Initiative for Sustainable Trade, Utrecht, and IUCN NL, Amsterdam.

2 Resource trade.earth (n.d.), "Soya bean, oil cake and other solid residue; exporter: all country; importer: Europe; year: 2017", online: https://resourcetrade.earth/data?year=2017&importer=eur&category=625&units=weight, viewed in February 2019.

3 Goñi, U. (2018, October 26), "Soy destruction in Argentina leads straight to our dinner plates", *The Guardian*, online: https://www.theguardian.com/environment/2018/oct/26/soy-destruction-deforestation-in-argentina-leads-straight-to-our-dinner-plates, viewed in February 2019.

4 Goñi, U. (2018, October 26), "Soy destruction in Argentina leads straight to our dinner plates", *The Guardian*, online: https://www.theguardian.com/environment/2018/oct/26/soy-destruction-deforestation-in-argentina-leads-straight-to-our-dinner-plates, viewed in February 2019.

5 CRR (2017, December), "Deforestation in Brazilian Soy Supply Chain: Market Access Risk from a Growing Share of Sourcing Commitments", online: https://www.profundo.nl/download/crr171222, viewed in February 2019.

6 FEFAC (2016, June), *FEFAC Guidelines for Sustainable Soy Sourcing,* online: https://www.fefac.eu/file.pdf?FileID=65744, viewed in February 2019

7 The Consumer Goods Forum (n.d.), *The Sustainable Soy Sourcing Guidelines; Second Edition*, online: https://www.theconsumergoodsforum.com/wp-content/uploads/2017/10/201605-CGF-Sustainable-Soy-Sourcing-Guidelines-Second-Edition.pdf, viewed in February 2019.

8 Efeca (2018), *UK RT on Sustainable soya: Certification standards briefing; Report on outputs*, Economics, Climate, Environment (Efeca), Dorchester, the United Kingdom.

9 WWF Germany (2013), *Searching for sustainability; Comparative Analysis of Certification Schemes for Biomass used for the Production of Biofuels,* WWF Germany, Dusseldorf, Germany.

10 Van Dam, Van den Hombergh, and Hilders, M., (2019). *An analysis of existing laws in the main soy producing countries in Latin America,* IUCN NL, Amsterdam, The Netherlands, online: https://www.iucn.nl/files/groene_economie/an_analysis_of_existing_laws_on_forest_protection_la.pdf, viewed in February 2019.

11 WWF (2015), *WWF Certification Assessment Tool (CAT),* online: http://d2ouvy59p0dg6k.cloudfront.net/downloads/ffinal_wwf_certification_assessment_tool_2015.pdf, viewed in February 2019.

12 IUCN NL (2013), *Betting on Best Quality*, online: https://cmsdata.iucn.org/downloads/betting_on_best_quality.pdf, viewed in February 2019

13 Accountability Framework (2018, July), *Operational Guidance on How to Apply the Definitions Related to Deforestation and Conversion*, Accountability Framework. pp. 3-4.

14 FEFAC (2016, June), *FEFAC Guidelines for Sustainable Soy Sourcing,* online: https://www.fefac.eu/file.pdf?FileID=65744, viewed in February 2019.

15 Van Dam, Van den Hombergh, and Hilders, M., (2019). *An analysis of existing laws in the main soy producing countries in Latin America,* IUCN NL, Amsterdam, The Netherlands, online: https://www.iucn.nl/files/groene_economie/an_analysis_of_existing_laws_on_forest_protection_la.pdf, viewed in February 2019.

16 *Estadao* (2017, December 18), "Brasil perdeu 9,5% das florestas entre 2000 e 2014", online: https://sustentabilidade.estadao.com.br/noticias/geral,brasil-perdeu-9-5-das-florestas-entre-2000-e-20144683, viewed in February 2019.

17 FEFAC/ITC (2015, November 10), *Guidance document Benchmark FEFAC Soy Sourcing Guidelines*, online: http://www.standardsmap.org/Guidance%20document%20151116%20-%20FEFAC.pdf, viewed in November 2018.

18 Wetlands International (2016, January 5), "Soy and wetlands", online: https://www.wetlands.org/casestudy/soy-and-wetlands/, viewed in February 2019.

19 Londoño, E. (2017, December 23), "Brazil Wavers on Environment, and Earth's Largest Wetland Starts to Wither", *The New York Times,* online: https://www.nytimes.com/2017/12/23/world/americas/brazil-pantanal-wetlands-michel-temer.html, viewed in February 2019.

20 ISCC (n.d.), "All certificates", online: https://www.iscc-system.org/certificates/all-certificates/, viewed in April 2019.

RTRS (n.d.), "Certified volume and producers", online: http://www.responsiblesoy.org/mercado/volumenes-y-productores-certificados/?lang=en, viewed in April 2019.

21 RTRS (n.d.), "Physical soy buyers", online: http://www.responsiblesoy.org/mercado/compradores-de-soja/?lang=en, viewed in April 2019.

22 IDH and IUCN NL (2019), "European Soy Monitor; insights on the European supply chain and the use of responsible and deforestation-free soy in 2017". Initiative for Sustainable Trade, Utrecht, and IUCN NL, Amsterdam.

23 CRS (2019, April 1), Information in an email as part of feedback from the standard.

24 ISEAL Alliance (2019, January), "Reaching far and wide", ISEAL Alliance, London, United Kingdom.

25 Phillips, D. (2018, November 28), "Brazil records worst annual deforestation for a decade", *The Guardian*, online: https://www.theguardian.com/environment/2018/nov/24/brazil-records-worst-annual-deforestation-for-a-decade, viewed in February 2019.

26 Hermosilla, A.C. (2011, January 27). "People, Governance and Forests—The Stumbling Blocks in Forest Governance Reform in Latin America", *Forests Journal*, 2011; 2, pp. 168-199; doi:10.3390/f2010168

27 IDH and IUCN NL (2019), "European Soy Monitor; insights on the European supply chain and the use of responsible and deforestation-free soy in 2017". Initiative for Sustainable Trade, Utrecht, and IUCN NL, Amsterdam.

28 Herrera, et al. (2013), *Biofuels in Argentina; Impacts of soybean production on wetlands and water,* Wetland International Argentina; ISBN: 978-987-24710-8-8.

29 Ramsar (2018, September 27), "Wetlands – world's most valuable ecosystem – disappearing three times faster than forests, warns new report", online: https://www.ramsar.org/news/wetlands-worlds-most-valuable-ecosystem-disappearing-three-times-faster-than-forests-warns-new, viewed in February 2019.

Annex 1

Indications of the requirements on no conversion within the eight deforestation free standards

VSS	The standard provision on "deforestation free"
ProTerra	4.1.1CORE - For certification under this Standard, areas of native vegetation cannot have been cleared or converted into agricultural areas, or used for industrial or other commercial purposes, after 2008, in particular the following: • Primary Forests (for instance, rainforests); • Riparian Vegetation; • Wetlands; • Swamps; • Floodplains; • Steep slopes; • High above-ground carbon stocks, and • Other as defined by the High Conservation Values Resource Network (HCV 1 to 6).
ISCC Plus	ISCC _202 Sustainability Requirements: No Status change after January 2008 on: Primary forest, other wooded land and continuous forest. On sparsely forested land conversion is allowed only when GHG saving is fulfilled. Natural grassland: conversion of HCV natural grassland is not allowed, but conversion of non highly biodiverse natural grassland is allowed only when GHG saving is fulfilled. Conversion of wetland, peatland and nature protection areas is not allowed.
RTRS	4.4.1 The following areas have not been cleared on converted from May 2009 onward: - Area included in category 1 of the RTRS maps - on the area where RTRS maps are not available: a. native forest b. riparian vegetation c. natural wetlands, d. steep slopes e. area for native conservation and/or cultural and social protection
SFAP non conversion	3.2 (*3) No conversion of high-value areas between 2009 and 2016. After 2016 no conversion of natural lands at all. 3.2.1 In case SFAP certified farmers have brought new agricultural lands in production before 1 January 2009, the lands have been cleared/converted in line with national legislation and biodiversity protection treaties. 3.2.2 The following areas have not been cleared, converted and/or bought by farmers certified under the SFAP protocol to use for agricultural production from 1 January 2009 - 1 June 2016: a) Native forests b) Riparian vegetation c) Natural wetlands d) Steep slopes 3.2.3 After 1 January 2016, no agricultural expansion can take place on any of the following lands: a) Native forests b) Riparian vegetation c) Natural wetlands d) Grasslands e) Savannahs

VSS	The standard provision on “deforestation free”
	f) Priaries g) Cerrado h) Steep slopes i) Woodlands *(3) The 3.2 Non-Conversion criteria are in line with the latest general accepted Non-Conversion Criteria based on multi stakeholder processes/consensus.
BFA	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 with 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.
CRS	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 with 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.
Europe Soya	No new agricultural land shall be developed for Donau Soja soya production if this would result in the loss of nature reserves, forests or moors. Donau Soja soya bean farmers shall therefore undertake in writing to only use land (for the cultivation of Donau Soja soya) that was dedicated to agricultural use no later than 1 January 2008.
Donau Soja	No new agricultural land shall be developed for Europe Soya soya production if this would result in the loss of nature reserves, forests or moors. Europe Soya bean farmers shall therefore undertake in writing to only use land (for the cultivation of Europe Soya soya) that was dedicated to agricultural use no later than 1 January 2008.

profundo

RESEARCH & ADVICE

Radarweg 505
1043 NZ Amsterdam
The Netherlands
+31-20-8208320
profundo@profundo.nl
www.profundo.nl