3S Program™
(Responsible Production Verified)

Guidance setting out the requirements for farms participating in the 3S™ program, together with the traceability and verification requirements of 3S products in the supply chain.

Aug 2024

[Version 8.1] – [South America to Destination markets.]
Version in public consultation period

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Introduction

The supply chain reach and global presence of Cargill provides the opportunity to bring about an increase in on-farm sustainability practices with a fully traceable supply chain. Where Cargill sources products directly from farms, transports and processes these products, we are able to place agricultural products on the market that are certified – Responsible Production Verified- our **3S**™ product range.

This document contains the core principles and criteria which must be met by participating farms and all Cargill businesses participating in the sourcing, processing and supply of 3S products. In addition to complying with this document, the scheme will ensure compliance with all related national and state regulations in force in the regions where the farms operate.

The 3S verification scheme has been developed to support more mainstream farmers in the Cargill supply chain to grow more sustainable crops. 3S takes key sustainability criteria and splits them into musts and continuous improvement actions. Over time, participating growers are able to advance towards higher production standards which in turn helps further a thriving market for sustainably certified crops.

3S is a verification scheme with no deforestation and no conversion of native habitat, using January 2008[1] as the baseline date. This applies across the 3S program in all regions of South America. The January 2008 baseline precedes the Amazon Soy Moratorium reference date of 22 July 2008[2][3] and applies equally to all regions and countries.

The standard will be reviewed at least once every five years and at most once every three years, unless exceptions are identified, or Cargill determines otherwise. This review process will include a multistakeholder consultation to ensure diverse opinions are considered. Additionally, a public consultation period of 60 days will be provided to gather feedback.

This Version 8.1 of the 3S Standard underwent a transparent and public stakeholder consultation process from 27 august 2024 to 27 November 2024. During and after this process, the 3S Verification and Standard lead reviewed all comments received and decided on the aspects to be incorporated into this revision.

Cargill acknowledges the feedback and suggestions from all stakeholders that have supported the strengthening of the 3S Standard. Future updates will be subject to prior analysis by Cargill to determine the necessity and scope of changes.

[1] When 3S Soy began in 2010, the best option for defining a land use baseline date for habitat conversion was within the European Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 (Renewable Energy Directive). January 2008 remains the reference for the baseline date within 3S Soy. It predates the reference of the Amazon Soy Moratorium (22 July 2008) and applies to all 3S farms.

[2] The Soy Moratorium was implemented on 24th July 2006; however, when the Forest Code was approved in

[3] , the reference date was changed to 22nd July 2008. The Moratorium's governance and operation are the responsibility of the Soy Working Group (GTS), formed by the member companies of ABIOVE and ANEC, and by civil society organizations.

1. Program overview

1.1. Cargill commitment to sustainability

As a leading purchaser, processor and transporter of agricultural products in major supply chains around the world, Cargill is committed to sustainable crop production, including protection of sensitive environments, reduction of greenhouse gas emissions and promotion of responsible working conditions. Cargill's role in the agricultural supply chain comes with significant responsibility, and we are keenly aware of the need to deliver customer solutions in a safe, responsible and sustainable way. We have worked together with trusted advisors and local stakeholders to develop a *Policy on Sustainable Soy - South America Origins*, which captures our commitment to a transparent and sustainable South American agricultural supply chain.

In summary:
– Cargill will transform our supply chain to be deforestation free while protecting native vegetation;
– Cargill will promote responsible production, which benefits farmers and surrounding communities;
– Cargill respect and uphold the rights of workers, indigenous peoples and communities;
– Cargill will uphold high standards of transparency through reporting of key metrics, progress and grievances.

We work with agricultural producers at all levels of production to help them achieve commercial success while growing crops more sustainably.

We support practical efforts to establish and improve sustainable crop production. Our 3S products are intended to develop a positive program with farmers to grow more sustainably and deliver sustainable products to the market.

1.2. The 3S 5 key areas

Cargill 3S™ products are based on five key areas relating to the production (growing) and processing of soy, corn, cotton and canola. These areas have been selected to represent the key sustainability concerns related to agricultural production, in South America, namely:

1. **Sustainable land use**
2. **Good agricultural practice**
3. **Community relations and human rights**
4. **Engagement in a process of continuous improvement**
5. **Measuring greenhouse gas emissions**

Furthermore, the key aspects of 3S crops qualified farms are as follows:

1. The baseline date for land use change is January 2008. This means that crops planted areas where deforestation or conversion of highly biodiverse ecosystems has taken place after January 2008 are excluded from 3S verification. The entire land (agricultural land, pasture, forest, any other land) of a production unit, any owned, leased or rented land, is subject to verification.
   The land use analysis is based on satellite imagery undertaken each year by a third-party specialist (Ciampagna). Please see annex for examples.
2. 3S crops can only be grown by farmers who comply with national and local regulations, and undergo independent diagnostics and are assessed by the implementation partner and considered to meet the mandatory criteria set out in this document; and have a good level of infrastructure and current practices;
3. The farm activities must be assessed and considered to pose no immediate concerns regarding worker welfare or environmental risk to land, water or air;

4. 3S crops can only be grown on farm production units participating and implementing continuous improvement action plans based on individual production unit diagnostics, with farm specific improvements measured against short- or medium-term action steps;
5. 3S farmers must provide actual farm cultivation data on inputs, agronomy practices to be combined with data on transport modes and processing to measure greenhouse gas emissions.

1.3. The 3S Program Principles & Criteria

This document explains the *Principles & Criteria of 3S™* products.

i. Cargill 3S program description:

– *Farm Level requirements – at individual unit of production*:
This document provides details of the criteria to be met by the farmer growing 3S crops on an individual unit of production, with regards to the 5 core areas: Sustainable land use, Good agricultural practice, Community relations and worker welfare, Engagement in a process of continuous improvement, measuring greenhouse gas emissions (incl. the methodology followed for determining the Greenhouse Gas emissions along the entire supply chain).

– *Quality management system*:
This document explains how the 3S management system is handled and documented.

ii. Chain of custody and traceability

The chain of custody for the products entering and flowing through the supply chain is single site-level Mass Balance as defined by ISEAL Alliance Chain of Custody models and definitions, starting at the first collecting point from the farm and ending at the last processing step. It is administered by Cargill in a Mass Balance database and third-party verified to ensure the physical flow of 3S certified products is evidenced and verifiable.

Traceability refers to the ability to follow a product or its components through stages of the supply chain (e.g., production, processing, manufacturing, and distribution).

This document describes how the singe site-level mass balance chain of custody is implemented and how the traceability of all soy, corn and canola products are ensured. The 3S cotton has a specific segregated flow which is also described in this document.

iii. Verification

This document describes the methodology to be implemented by independent verification bodies appointed to verify that the farms enrolled in the program are participating fully and that the farms are being visited and assessed by the independent implementation partner. And beyond the farms, the chain of custody rules are applied at each step of the Cargill supply chain; receiving the soy, corn, cotton and canola, storing, processing and transporting.

1.4. The mass balance chain of custody

Cargill 3S soy, corn and canola products follow a traceable and third party verified single site-level Mass Balance chain of custody. This means the quantity of product sold shall be equal to, or less than, the quantity of 3S product entering the supply chain. To qualify, the 3S quantity must be physically purchased and received into Cargill's inland silo network directly from the qualified farms.

3S soy, corn and canola can be physically mixed with non-certified beans but the same quantity of product needs to be transported through the physical supply chain to carry the Mass Balance quantity from one step in the supply chain to the next. Site-level Mass Balance is demonstrated with all commercial transactions traceable

from the farm and then following all transport movements throughout the entire supply chain, including export and processing.
3S cotton cannot be physically mixed with non-certified cotton due to the full traceable and segregated flow.
There are no limitations on the farmer to sell products to Cargill; therefore, many of the products end up sold to other buyers as standard non-certified without continuing to carry the 3S™ status. This whole quantity of products would have been included if 3S had adopted an Area Mass Balance chain of custody, but instead 3S is designed to provide traceability through Site-level Mass Balance. Cargill 3S program description

1.5. Technical Advisory Council

The 3S program has a council that meets annually or as needed to provide technical recommendations and advice to the team managing the program at Cargill. The council focuses on technical issues related to 3S, including cultivation standards, chain of custody, and verification requirements.

Members are selected based on their influence within the program and technical expertise. The council includes representatives from government, producers, Cargill's sustainability-related areas, and private companies from other sectors.

2.1. Farm-level requirements

Farms supplying products under the 3S™ program must meet all of the following criteria, at an individual unit of production.

Participating farmers must agree to receive an independent agronomy implementation partner onto their farm and participate in third party audits to verify their compliance, when required. The implementation partners are experts in agronomy and sustainable agricultural practices with specialist knowledge of the rules, laws and regulations that farmers are required to follow in their region. The initial diagnostic will make an assessment of all 3S farmers into their compliance with all national and specific local regulations.

The implementation partners are independent of Cargill and the farmer but are appointed and paid for by Cargill. The 3S scheme does not impose any fees or costs of participation on the farmer.

Country-specific appointed implementation partners are:
- Argentina: Aapresid, https://www.aapresid.org.ar/
- Brazil: Instituto BioSistêmico (IBS), https://www.biosistemico.org.br/en/ and Produzindo Certo, *https://www.produzindocerto.com.br/*
- Paraguay: Solidaridad, https://www.solidaridadnetwork.org/regions/south-america

Each farmer supplier participating in the 3S program can receive informational, educational and helpful materials covering good farm practices as well as worker health and safety.

2.1.1. Sustainable land use

1	**Sustainable land use**
1.2	**Land title**
1.2.1	Crops entering the 3S program must only be purchased from farmers who are able to demonstrate legal title to their land or, where this is not yet possible due to issues of State or National Government administration, able to demonstrate proactive efforts to establish legal title. In this circumstance evidence must be shown to demonstrate a formal application for title has been made and confirmation that a ruling is still awaited and had not been determined.

1.2.2	There is documented evidence of rights to use the land (e.g., ownership document, rental agreement, court order etc.).
1.2.3	Where rights have been relinquished by traditional land users, there is documented evidence that the affected communities were compensated subject to their free, prior, informed and documented consent.
1.2.4	There has been no conversion of land where there is an unresolved land use claim by traditional land users under litigation, without the agreement of both parties.
1.3	**Land conversion or deforestation**
1.3.1	3S crops cannot be produced on land with *high biodiversity value** converted after January 2008, regardless of whether the land continues to have that status.
1.3.2	3S crops cannot be produced on land that had the status of *natural highly biodiverse grassland** in or after January 2008 regardless of whether the land continues to have that status.
1.4	**Land Assessment**
1.4.1	The farming area must be assessed for its suitability as well as any impact these activities may have on the environment and community. The operation has taken steps to address risks and opportunities to support the long-term viability of the farm.
1.4.2	3S™ crops cannot be produced on land that had the status of *high carbon stock* in or after January 2008 regardless of whether the land continues to have that status.
1.4.3	3S crops cannot be produced on land that had the status of *continuously forested areas** in or after January 2008 regardless of whether the land continues to have that status.
1.4.4	3S crops cannot be produced on land that had the status of *sparsely forested areas**.

*** Definitions:**

Land with *High biodiversity value* is defined as:

1. Primary forests and other wooded land

Primary forests and other wooded land are areas covered with native tree species where there is no clearly visible indication of human activity and the ecological processes are not significantly disturbed.

Tree species are defined as native, if they grow within their natural geographical range and under climatic conditions to which they have adapted naturally and without human interference. Therefore, primary forests and other wooded land consists of tree species that have not been introduced by humans or that, nevertheless would occur nonetheless in the area (e.g., due to the climatic conditions of the region).

Clear visible indication of human activity could be, for instance, land management (i.e., wood harvesting, forest clearance, land use change), heavy fragmentation through infrastructural constructions or disturbances to the natural biodiversity (e.g., significant occurrence of non- native plant or animal species). Activities of indigenous people or other humans managing the land in a traditional way do not count as clearly visible indications of human activity if they manage the forest on a subsistence level and their influence on the forested area is minimal (e.g., the collection of wood and non-timber products, the felling of a few trees as well as small- scale forest clearance according to traditional management systems).

2. Areas designated by law or by the relevant competent authority for nature protection purposes, with the exception of APAs (Areas of Environmental Protection)

3. Areas for the protection of rare, threatened, or endangered ecosystems or species. These areas include those recognized by international agreements, such as Ramsar sites

4. Natural highly biodiverse grassland

"*Grassland*" means terrestrial ecosystems dominated by herbaceous or shrub vegetation for at least five years continuously. It includes meadows or pasture that is cropped for hay but excludes land cultivated for other crop production and cropland lying temporarily fallow. It further excludes continuously forested areas unless these are agroforestry systems, which include land-use systems where trees are managed together with crops or animal production systems in agricultural settings. The dominance of herbaceous or shrub vegetation means that their combined ground cover is larger than the canopy cover of trees.

"*Natural highly biodiverse grassland*":

a) "*Natural highly biodiverse grassland*" means grassland that:
   i. Would remain in the absence of human intervention; and
   ii. Maintains the naturals species composition and ecological characteristics and processes.

Land which is *suitable for crop production and has the status of high carbon stock* include "*Continuously forested areas*" and "*Sparsely forested areas*":

1. "*Continuously forested areas*" refers to land spanning span over more than one hectare with trees higher than five meters and a canopy cover of more than 30%, or trees able to reach those thresholds in situ. This criterion includes forests according to the respective national legal definition but excludes land that is predominantly under agricultural land use.

The canopy cover is the degree of the coverage of an area by tree crowns of a story. The coverage of a tree equals the size of its crown. The crown size can be estimated or measured. For the determination of the canopy cover of a forest as a percentage the vertical projection of all tree crowns must be used.

The status of forest areas includes all stages of development and age. Thus, it is quite possible for the canopy cover to temporarily fall below 30 % (e.g., after a tree harvest or a natural hazard, windfall, etc.). Such incidents do, however, not change the status of the area as a forested area as long as reforestation or natural succession is ensured within a justifiable time.

Forested areas are to be judged as an entity, no matter how much lies within the production area. As such, the whole area is the basis for the calculation of the threshold values of 30%. If the total area of the forested area exceeds 1 ha and is stocked with trees higher than 5 metres, the area and each part of it that lies within the production area is termed a forested area. Even if only 0.5 ha of the continuously forested area lie within the production area, these 0.5 ha must be classified as a forested area.

No conversion of continuously forested areas is allowed, even if this is allowed by national regulation. The provisions of this paragraph shall not apply if, at the time the raw material was obtained, the land had the same status it had in January 2008. Thus, raw material can be obtained from continuously forested areas as long as the status is not changed or compromised and all applicable constraints are followed.

2. "*Sparsely forested areas*" refers to land spanning more than one hectare with trees higher than five metres and a canopy cover of between 10% and 30%, or trees able to reach these thresholds in time.

3. High carbon stock areas refer to regions that store large amounts of carbon in their vegetation and soil. These areas primarily include wetlands, due to their efficient capacity to sequester and store carbon, these areas play a crucial role in mitigating climate change.

2.1.2. Good agricultural practice

2	Good agricultural practice
2.1	**Cultivation procedures**
2.1.1	Producers must adhere to the procedures established in the Cargill purchase-sale contract for the cultivation of merchandise. Producers are required to also adhere to the terms and conditions established in contract such as a) specification, b) price, c) volume, and d) payment from the products delivered to Cargill.
2.1.2	Cargill has robust procedures to ensure we are compliant with social and environmental restrictions (e.g., related to Slave Labor, Soy Moratorium, Green Grain Protocol and Embargoes (from federal and state agencies). Every day, our ERP system consults government lists of embargoed farms and blocks them, so they are not eligible to sell product to us. In addition, the system also consults lists of non-compliant farms based on the Amazon Soy Moratorium and the Green Grain Protocol. When a farm is blocked in our system for being on one of those lists, we also block other farms registered to the same individual or legal entity, both in the local area or in the entire country, depending on the violation involved. These affiliated farms are only unblocked once we have conducted an internal analysis to ensure that product from the violating farm is not being rerouted and sold to us through an affiliated operation.
2.2	**Food Safety**
2.2.1	A food safety and quality standard shall be in place, having a documented system/procedures and trainings.
2.3	**Compliance with national and state environmental regulations**
2.3.1	Participating farms must comply and stay updated with all applicable national legislation and state regulations related to land use, environmental and agrochemicals management.
2.4	**Origin of seeds**
2.4.1	Origin of seeds must be controlled to improve production and prevent introduction of new diseases. All purchased seed must come from known, legal, quality sources. Self-propagated seeds may be used, provided appropriate seed production norms are followed and legal requirements regarding property rights are met.
2.5	**Genetically Modified Organisms (GMO)**
2.5.1	Participating farms are required to adopt good practices, according to national legislation or orientation from seed supplier, on handling and growing GMO varieties also avoiding crosscontamination on-field.
2.6	**Agrochemicals**
2.6.1	*Approved Agrochemicals* Only agrochemicals which are approved by the relevant Agriculture, Health & Environment Ministries may be used for the cultivation of the crops; these are to be used in the form, dose and rest periods as recommended by the above bodies. The use of agrochemicals listed in the Montreal Protocol and Stockholm and Rotterdam Conventions are prohibited, with the exception of those chemicals currently being phased out in accordance with the terms of the relevant Governments ratification of those conventions. Evidence must be provided that chemical/agrochemical applications are handled, stored, collected and chemical waste disposed, in compliance with good practice.

2.6.2	*Records* There must be records of the use of agrochemicals, including: a) Details of products purchased and applied, including quantities and dates b) Identification of the area(s) where the applications were made and that there is no application of pesticides within 30 meters (or more when as such prescribed in applicable legislation) of any populated area or water body and all necessary precautions are taken to avoid people entering into recently sprayed areas.

2.6.3	*Agrochemical use* Agrochemicals shall be applied using methods that minimize harm to human health, wildlife, plant biodiversity, and water and air quality. Use of phytosanitary products follows legal requirements (or professional recommendations) in the country of origin and adequate measures to prevent resistance should be taken.
2.6.4	*Agrochemical storage and disposal* Containers must be properly stored, washed and disposed of. Waste and residual agrochemicals must be contained and disposed in an environmentally responsible way.
2.6.5	*Aerial application of agrochemicals* This must be done in such a way that it does not have an adverse impact on occupied houses, offices or other inhabited buildings (whether temporary or permanent). All aerial applications must be preceded by advance notification to residents within 1km of the planned application. There is no aerial application of pesticides in WHO Class 1a, 1b and 2 within 500 m (or more when as such prescribed in national legislation) of populated areas or water bodies.
2.6.6	Equipment Maintenance Equipment, vehicles and machinery are regularly maintained, including the calibration and servicing of plant protection product (PPP) and fertilizer application equipment.
2.7	**Fertilizers**
2.7.1	When available through national legislation, is a list of approved fertilizers which includes their specification and application methods, in accordance with specific crop needs.
2.7.2	Nutrient Management Plan Does the farm count on a nutrient management plan based on the principles of the 4Rs in the fertilizer´s application: Right source? Right rate? Right time? Right place?
2.7.3	When fertilizers and manures are stored on farm, either temporarily or permanently, they should be stored safely to minimize: - environmental loss (preventing runoff and pollution) - potential theft - human exposure where higher risk products are used (e.g., anhydrous ammonia)
2.8	**Waste and water**

2.8.1	*Storage and Disposal* There is adequate storage and disposal of fuel, batteries, tires, lubricants, sewage and other waste in accordance with applicable legislation.
2.8.2	*Crop Residues* Unless there is a legal obligation to do so, crop residues must not be burnt in the field but integrated into the soil or removed from the field if there is risk of disease and disposed of in the most suitable sustainable manner (e.g., composted or burnt as a fuel).
2.8.3	*Water* Freshwater use must be managed to ensure water sources are sustainable and water pollution is prevented, ensuring that potential risks of contamination due to runoff or discharge of any substance is mitigated Annual water extraction must not exceed long-term recharge rates, or the maximum extraction rate defined by applicable regulations, whichever provides the higher level of protection.
	Good agricultural practices are implemented to minimize diffuse and localized impacts on surface and ground water quality from chemical residues, fertilizers and erosion or other sources. Any direct evidence of localized contamination of ground or surface water is reported to and monitored in collaboration with local authorities. When irrigation is used, relevant legislation is being complied with and measures are taken to minimize water use.
2.8.4	*Soil* Soil must be actively managed to ensure its long-term health and increase of organic matter. This will include measures to avoid compaction, soil erosion, and poor drainage where this is an identified risk, as well as the maintenance of soil health. Soil testing and analysis is carried out on a periodic basis to identify changes in soil condition and nutrients. Examples of active management can include: precision farming, residue management, crop rotation, no tillage, reduced tillage, nitrogen-fixing plants, compost, cover crops, catch crops, placing wind breaks and the use of agro-forestry techniques.

2.1.3. Community relations and human rights

3	**Community relations and human rights**
3.1	**Protection of community relations**
3.1.1	A mechanism for resolving complaints and grievances is implemented and is available to any concerned parties including but not limited to local communities and traditional land users. Complaints are dealt with through Cargill's formal grievance process, details of which are available publicly on Cargill.com and in our Supplier Code of Conduct. Anyone with concerns is encouraged to contact Cargill through the Ethics Open Line. Documented evidence of complaints and grievances received is recorded and maintained.
3.1.2	In case a relevant competent authority requires the farmer to react to a complaint or grievance, the farmer will do so in a timely manner. Where appropriate our implementation partner for that country will provide support to the farmer to understand how to close the complaint. Failure to close the complaint in a timely manner may result in the farmer being removed from the 3S™ program.

3.2	**Compliance with national and state regulations on worker welfare**
3.2.1	Participating farms must comply with all national and state regulations relating to Worker Welfare, Child Labor, and working conditions that characterize Forced Labor or Slavery.
3.3	**Child Labor**
3.3.1	No children below the age of 15 shall be working on farms except: - On family farms and where this does not interfere with their educational and physical development. In such cases the workday, inclusive of school and transport time, must not exceed 10 hours and only light work is allowable.
3.4	**Young workers (aged 15-17)**
3.4.1	The work carried out by young workers aged 15-17 must not jeopardize their educational and physical development.
3.5	**Forced labor**
3.5.1	- Participating farms must not engage in or support forced labor, including bonded or indentured labor (as defined by ILO conventions 29 and 105). - Personnel must be free to leave their workplace after their hours of work have been completed and be free to terminate their employment provided that they give reasonable notice. - Spouses and children of contracted workers will not be obliged to work on the farm No part of workers' salary, benefits, property, or documents shall be retained in order to force workers to remain on the farm. No form of physical or psychological measure shall be utilized requiring workers to remain employed on the farm. No workers of any type are required to lodge their identity papers with anyone and no part of their salary, benefits or property is retained, by the owner or any 3rd party, unless permitted by law.
3.6	**Protecting worker welfare**
3.6.1	The crop production and the subsequent processing of those products must not adversely affect workers' rights
3.7	**Contracts of employment**
3.7.1	Where required by the law of the country of origin, participating farms must supply workers with a contract of employment in which key aspects of their rights are encompassed, whether directly contracted or subcontracted.
3.7.2	Where recruitment agencies are used, they ensure all workers have a legal right to work, and workers are not charged recruitment fees or any other related costs associated with labor provision, in accordance with local legislation.
3.8	**Health & safety**

3.8.1	Participating farms must meet the basic requirements of all workers to ensure they are properly trained, including first aid training and first aid supplies and medical treatment access, that health and safety hazards are minimized, and that they have access to and that they have access to breaks and shade during work shifts, safe drinking water, basic sanitary facilities, including changing and washing facilities for workers handling hazardous substances, as well as suitable safety equipment and medical care. Potentially hazardous tasks are only carried out by capable and competent adults who do not face specific health risks. - Adequate and appropriate protective equipment and clothing is provided and used in all potentially hazardous operations, such as pesticide handling and application and mechanized or manual operations.
3.8.2	Producers and their workers must demonstrate an awareness and understanding of health and safety matters. Relevant health and safety risks are identified, procedures are developed to address these risks by employers, and these are monitored. Emergency contact details available and easily accessible at the farm
3.8.3	Injured or ill workers should not continue performing any activities that are detrimental to their health and safety, as well as adopting measures to promote personal hygiene and prevent illness.
3.8.4	Where applicable, producers should take into account language and cultural barriers when it comes to worker training and communication.
3.9	**Accommodation**
3.9.1	Accommodation must be clean, safe, meet the basic needs of the workers and conform to the country's laws. Workers must have access to clean drinking and washing water close to where they work and live.

3.9.2	As a minimum, accommodation must provide the following: – Hygienic toilet facilities – Clean and safe dormitories or rooms – Adequate heat or ventilation A reasonable quantity of privacy and personal space
3.9.3	Farmers should not charge workers for the accommodation they provide. If an accommodation fee is charged, it must be at or below real market value and not interfere with the workers' ability to meet their basic needs and have a decent income.
3.10	**Wages**
3.10.1	Workers must be paid wages at least equivalent to the legal national minimum wage or the relevant industry/market standard rate, whichever is higher. Wages of all workers must be paid regularly and, as a minimum, in accordance with the country's laws. Workers must not work under bond, debt or threat and must receive wages directly from the employer. Workers must be free to leave their employment at any time with reasonable notice and without loss of payment to which they are entitled. Workers must not be required to make financial deposits with employers. Wages or income for work done must not be withheld beyond the legal and agreed payment conditions.
3.11	**Working hours**

3.11.1	Working hours must be in compliance with the country's laws or any applicable collective agreement. Excluding overtime, work hours should not exceed on a regular basis 48 hours per week. Workers must be entitled to an uninterrupted weekly rest period comprising not less than 24 hours in the course of each period of seven days. Overtime work hours must be voluntary and overtime wages must be paid at a premium, as required by the country's laws or by any applicable collective agreement. There is monitoring in place of working hours and overtime. Unless collective bargaining agreements specifically state otherwise, overtime periods should be limited and typically required only in times of peak activity (e.g., harvest). The average hours worked in any such peak period should not exceed 60 hours per week in any two-month period.
3.12	**Benefits and holidays**
3.12.1	All workers must be provided with the benefits, holidays and leave to which they are entitled by the country's laws or any applicable collective agreement
3.13	**Discrimination**
3.13.1	There must be no discrimination (distinction, exclusion, or preference) practiced that denies or impairs equal opportunity, conditions, or treatment based on race, gender, political affiliation, marital status, religion or other individual characteristics not directly relevant to the ability to undertake assigned tasks.
3.14	**Fair treatment**
3.14.1	There must be no harassment, discrimination, physical or mental punishment, or any other forms of abuse. For the avoidance of doubt, specifically: There must be no physical abuse, threat of physical abuse or physical contact with the intent to injure or intimidate. There must be no sexual abuse or harassment. There must be no verbal abuse or harassment
3.15	**Freedom of association**
3.15.1	Farmers must not interfere with their workers' right to freedom of association and workers must be free to join or form organizations and unions of their own choosing and to bargain collectively. Worker representatives must not be discriminated against and must have access to carry out their representative functions in the workplace.

2.1.4. Engaging in a process of continuous improvement

4.0	**Engagement in a process of continuous Improvement**
	Cargill does not have any direct control over supplying farms but through the implementation of the 3S™ program is able to promote and actively advance increasing sustainability. Provided the farmer is in compliance with the 3S farm-level requirements described in this document, non-conformance of any points under the continuous improvement requirements will not result in exclusion from the 3S program. However, farmers that do not actively engage in the continuous improvement action plans will be given 2 opportunities, with further support from the implementation partner to continue to engage in the program or be excluded from the 3S program. To build a more sustainable supply chain 3S™ farmers will focus on the criteria detailed below as main priorities.
4.1	**Human rights**
4.1.1	The production of soy, corn, cotton and canola and the subsequent processing of these products must not adversely affect workers' rights.
4.2	**Health & safety**
4.2.1	Producers and their workers must demonstrate an awareness and understanding of health and safety matters. Relevant health and safety risks are identified, procedures are developed to address these risks by employers, and these are monitored. Emergency contact details available and easily accessible at the farm.
4.2.2	Adequate and appropriate training and comprehensible instructions on fundamental rights at work, health and safety, and any necessary guidance or supervision are provided to all workers at least annually.
4.2.3	There is a system of warnings followed by legally-permitted sanctions for workers that do not apply safety requirements.
4.2.4	In addition to the basic health and safety criteria covered in section 2.8.7 of this document, additional areas to be considered to ensure the well-being of workers include, but are not limited to, the following: – Operating moving vehicles (e.g., tractors) or machinery with moving parts – Using sharp tools – Handling and applying agrochemicals or fertilizers – Persons under the age of 18, pregnant women, and nursing mothers must not handle or apply agrochemicals. – Carrying heavy loads – Working at heights – Working long hours that interfere with health and well-being – Working in extreme temperature – Working in areas that are dusty Working in areas including on machinery platforms that are poorly lit
4.2.5	Producers and their workers demonstrate awareness and understanding of health and safety matters. Relevant health and safety risks are identified, procedures are developed to address these risks by employers, and these are monitored.
4.3	**Biodiversity**
4.3.1	Important on-farm biodiversity should be maintained and safeguarded through the preservation of native vegetation. There must be a map of the farm which shows the native vegetation and there must be a plan to protect and recover native vegetation. 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.

4.3.2	*Water* There must be monitoring, appropriate to scale, to demonstrate that practices to protect water quality are effective.
4.3.3	*Soil* There must be monitoring, appropriate to scale, to demonstrate that practices to protect soil quality and prevent soil erosion are effective.
4.4	**Integrated Pest Management (IPM)**
	Wherever practical, the methods, techniques and training on IPM must be implemented to reduce the application of pesticides. These include, but are not necessarily restricted to: – Crop rotation – Destruction of crop residues – Establishing the economic thresholds for application of pesticides – The use of attractant and repellent plants and pheromone traps – The promotion of native predators and parasites that will control pest species – The scouting and monitoring for pests and diseases – The consideration of the presence of natural predators of crop pests when establishing whether chemical application is necessary The use of low-toxicity and precisely targeted chemicals, wherever possible
4.5	**Waste**
	Measures must be taken to reduce, reuse or recycle waste as much as possible.
4.6	Energy Use
	Participating farms are required to identify available sources of renewable energy, and prioritize it´s usage.

2.1.5. Measuring Greenhouse Gas (GHG) emissions

5.0	**Measuring Greenhouse Gas (GHG) Emissions**
5.1	**GHG emissions of cultivation**
	A record of inputs and practices should be maintained at farm level.
5.2	**GHG emissions for transport**
	Cargill will collect data regarding transportation legs, including: – km transported by truck – km transported by barge – km transported by ocean bulk carrier
5.3	**GHG emissions for processing**
	GHG emissions in processing are calculated based on certified methodologies, using energetic allocations between processed products. This is using an energetic allocation between the processed products. If customers of 3S™ require an economic allocation this can be completed on request.

GHG Calculation Methodology

Greenhouse Gas emissions from production to distribution are calculated by summing the emissions from the extraction or cultivation of raw materials, processing, and transport.

2.2. Quality Management System

Management of the 3S™ program will be integrated into the existing Cargill Quality Management Systems of participating businesses.

2.2.1. The 3S Implementation Manager

There must be a nominated person responsible for 3S matters (the '3S Manager'). The 3S Manager may be known by another title and also have other duties and responsibilities. The 3S Manager must have appropriate authority to carry out the function effectively.

2.2.2. Documented System

Each Cargill business participating in the 3S program must produce and implement its own set of operating procedures that incorporate the requirements of the *3S Principles and Criteria* applicable at the level of the supply chain where they operate.

Procedures must be updated to reflect any changes in the *3S Principles and Criteria* relevant to the participating company, as these occur.

2.2.3. Record Keeping

All records required by the *3S Principles and Criteria* must be kept for a minimum of five years, unless longer periods are required by legislation.

Storage facilities for records must prevent any deterioration or damage under normal storage conditions.

Records must be sorted and filed in such a way that information is complete and easily retrievable. Records must be legible and detailed to support financial analysis, review of profit and loss, in order to secure economic sustainability.

2.2.4. Sustainability Declaration

Sustainability Declarations are essential documents that must be provided to customers purchasing 3S products. These documents serve as a means of control and sales record, as well as providing verification of the sustainable practices and traceability adopted throughout the production process.

They include crucial information for product traceability, such as the date, Cargill unit details, vessel, volume, and product type. These declarations ensure transparency and accountability. This statement must be prepared by the sustainability team.

3. Chain of Custody

Cargill businesses operating under the 3S™ program must meet all of the following criteria.

3.1. Mass Balance (Soy, Corn and Canola)

The units in the chain of custody must control the certified volumes of soy, canola, or corn through mass balance. An organization must implement at least one of these modules, in addition to the other Custody Requirements for the Chain of Custody. Multiple modules can be implemented simultaneously.

3.1.1. Site Level Mass Balance

Physical Mass Balance, which allows them to maintain separate accounting systems, through which they ensure that the delivered volumes of 3S-certified soy or derived products correspond to the volumes of 3S-certified soy or derived products entering their unit.3S procedures must be followed by each Cargill-operated site (both owned and rented) involved in the 3S program on a Mass Balance basis as illustrated in Figure 1 below.

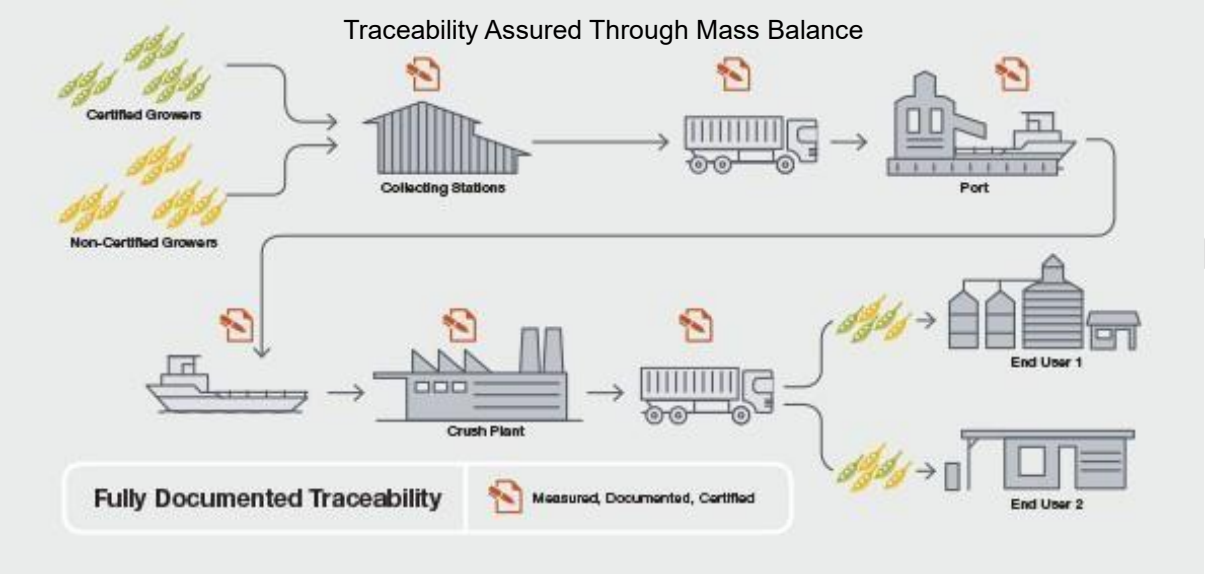

Figure 1. Mass Balance Model for the 3S program for soy, corn and canola

3.1.2. Country Mass Balance (Soy, Corn and Canola)

The units of Chain of Custody of Cargill can also apply the National Mass Balance Module for Chain of Custody which allows them to centralize accounting of 3S product over a number of physical production sites in one single accounting system (inputs and outputs of 3S data from different certified physical sites).

This type of mass balance is to be used where an organization operates with storage capacity, silos, crushing facilities, storage sites, etc. within a given country. This model can open up more trading opportunities in hard-to-reach regions.

3.2. Segregated Flow (Cotton)

The 3S cotton must be carried on the chain of custody in a segregated flow, enabling a full traceability of each bale produced on the 3S farms.

3.3. Assignment of data

Each physical batch of product within the 3S Mass Balance system will only be assigned 3S characteristics that represent the actual product from which it is drawn. For instance, soybeans, corn and canola must have the actual processing plant production yield applied to be applied to the co-products where a production plant has a processing yield of 19% oil and 73% mean, 1000MT of soybeans creates 190MT Oil and 730MT the balance is a combination of soy hulls, dust and crop residues.

3.4. Mass Balance boundaries

The physical boundary for the 3S Mass Balance system shall be each individual site, in a single geographical location, with precise boundaries within which a product can be mixed. All facilities included in the same Mass Balance site should be physically connected, in that product can move within the site facilities without the need for transportation.

The time boundary for the 3S mass balance system is 12 months. The reason for selecting a 12- month period for balancing is that soy, corn and canola are annual crops (i.e., it is harvested once per year then marketed by the producers throughout the following year). The imposition of a mass-balance time period of less than one year would discriminate against certified producers and discourage them from signing up to this sustainability program. To reduce the administrative burden on the supply chain, and to encourage farmer engagement in the program, all products within 3S will operate on a mass balance time period of 12 months.

Positive credit balances of certified material may only be carried forward to the next balancing period against physical stock. The credits are valid for 36 months after the purchase.

3.5. Traceability

3.5.1. Traceability of incoming soy, corn and canola

Participating Cargill businesses must be able to demonstrate traceability for all soy, corn and canola received at any Cargill-operated site or Cargill-contracted ship or train, whether or not it is destined for the 3S™ program. This will require the ability to produce a traceability trail for each delivery, back to the point in the supply chain where the previous mass balance occurred and/or the 3S status of the crops can be verified.

Although an individual Cargill-operated site need not hold all relevant traceability records, they must be capable of accessing such records if required to do so.

To ensure traceability of incoming soy, corn and canola, the Cargill business must:

i. Record the names and addresses of the supplying farmers of incoming product;
ii. Record the type of product (e.g., soy beans, high protein soy, crude soy oil, corn, etc.);
iii. Record the quantity of incoming product;
iv. Record the total amount of product at intake and the total amount coming from certified suppliers;
v. Identify the transport means and unique identification reference of the transport that carried the 3S products.

3.5.2. Traceability of incoming cotton

Participating Cargill businesses must be able to demonstrate traceability for all cotton received at any Cargilloperated site or Cargill-contracted ship or train, whether it is destined for the 3S program. This will require the ability to produce a traceability trail for each 3S bale delivered, back to the farm of origin, also carrying the production system information.

To ensure traceability of incoming cotton, the producers must ensure:

i. Records of all operations taken in the 3S farms and plots; ii.
Harvest records of each plot, ensuring full traceability; iii.
Records of transportation and sales of 3S bales.

3.5.3. Traceability of outgoing soy, corn and canola

Participating Cargill businesses must be able to demonstrate traceability for all soy, corn and canola products supplied and that the Mass Balance Model has been adhered to at each site in the participating supply chain(s).

To ensure traceability of outgoing products, the Cargill business must:

i. Record the type of product supplied (e.g., soy beans, soy bean meal, crude soy oil);
ii. Record the quantity supplied and, where appropriate, the number of the batch or lot supplied;
iii. Record the name and address of the customer;
iv. Record whether it is within the certified or non-certified stream;
v. Identify the transport means and unique identification reference of the transport for all feed soy, corn and canola dispatched.

3.5.4. Traceability of outgoing cotton

Participating Cargill businesses must be able to demonstrate full traceability for all the 3S cotton bales supplied. Full traceability means that for each bale produced Cargill businesses should carry the information from farm and plot origin.

To ensure traceability of outgoing products, the Cargill business must:

i. Record the type of product supplied;
ii. Record the quantity supplied, the number of the batch or lot supplied;
iii. Record the name and address of the customer;
iv. Record whether it is within the certified or non-certified stream;
v. Identify the transport means and unique identification reference of the transport.

3.5.5. Traceability at Cargill processing sites

The Mass Balance Model for the 3S soy, corn and canola products must be adhered to Cargill processing sites participating in the 3S program. This will require the ability to produce a traceability trail for each consignment of soy, corn and canola products showing the period in which they were produced and the consignment(s) of raw materials from which they were produced.

For certified product, traceability must continue through any storage location, ships, vehicles, port(s), to the point at which responsibility for the product is passed to the purchaser.

Although an individual Cargill processing site need not hold all relevant traceability records, it must be capable of accessing such records if required to do so.

3.5.6. Process conversion factors (soy, corn and canola)

All records for calculating the conversion factors for certified soy, corn and canola processed into product fractions (e.g., meal, oil, lecithin, soy proteins, etc.) must be supported by actual processing data or a standard factor supported by actual processing data.

3.5.7. Identification of 3S and Non-3S products

To calculate the Mass Balance of participating businesses accurately, all products must be recorded as they enter and leave the site, regardless of whether they are within the certified or non-certified streams. This applies only for soy, corn and canola, where a Mass Balance control is required.

For 3S cotton, records should be taken in order to identify the certified and non-certified lots.

Where at any step in the supply chain compliance with 3S™ requirements cannot be verified, all affected product must be allocated to the non-certified stream and sold as such.

3.5.8. 3S supplier approval

Cargill businesses must develop and document procedures for ensuring that suppliers of agricultural products participating in the 3S program comply with the *3S Principles and Criteria*, such that:

i. All Cargill businesses add the 3S requirements into their documented management system;
ii. Each farmer participating in the 3S program complies with farm-level requirements set out in the 3S Principles and Criteria.

The performance of farmer suppliers will be reviewed each crop year to determine their continued suitability to participate in the 3S program.

3.5.9. Sales contracts and records

All sales contracts relating to 3S products must clearly state that the products to which they relate are 3S.

The product type, quantity and delivery period will be stated in all contracts. 3S Mass Balance requirements must be met at the time of delivery.

3.5.10. Non-Conforming Products

If at any time product is found not to conform to the 3S Principles and Criteria on farm, as described in the farm-level and chain of custody requirement described in this document, it must be considered non-3S, non-certified product.

3.5.11. Trainings

Appropriate training shall be provided by the organization for personnel carrying out the tasks critical to the effective implementation of the supply chain verification standard requirements. Training shall be specific and relevant to the task(s) performed. Training records shall be maintained.

4. Verification (Chain of Custody)

Cargill businesses participating in the 3S™ program must be independently audited and independently certified.

In the case of business units registered outside the main country of operation, usually for documentation purposes, an individual audit will not be necessary. These units can be included in the chain of custody certificate of the operator. During the audit of the main unit, it will be essential to assess the transparency and integrity of financial records, as well as inspect contracts and agreements to ensure that the trader operates for the benefit of the audited unit.

4.1. Verification Principles

As compliance with the five 3S Principles can only be fully achieved at the final point in the supply chain, where all five requirements come together in a finished agricultural product supplied by Cargill to its customer, verification will be on a supply chain basis (e.g., a Cargill crushing plant in a specific location will be certified for supply of product travelling along a defined supply chain, or supply chains, via defined ports and from defined origins).

4.1.1. Defining the scope of verification

The scope of the audit will be determined by looking back up the supply chain(s) towards the origin of the products from the Cargill business intending to market 3S certified product.

In discussion with the Cargill business, it will be determined which products it is intended to sell as 3S certified and from this the Verification Body shall dictate which origins will need to be compliant.

Using risk analysis principles and taking into consideration what can be verified at which level of the supply chain, the Verification Body will decide which aspects of the supply chain must be included in the audit.

The details of individual supply chains will change with circumstances but typically it is envisaged that an audit will include:

i. The Cargill processing plants intending to produce 3S certified products;
ii. Any external stores (including import facilities) where 3S stream beans have been held (in the country where the processing plant is located);
iii. Checking consistency of shipments information;

iv. The export facility/facilities through which the beans were exported at origin;
v. The office(s) responsible for control of the 3S program in the country of origin;
vi. Validation that controls are effective at all stores by assessing a sample of country elevators through which the 3S stream beans have passed;
vii. Any barge terminals or railway terminals through which 3S stream beans have passed;
viii. Validation that controls are effective on all farms, by assessing a sample of farms participating in the 3S program.

4.1.2. Verification body

Cargill must appoint an independent Verification Body to certify Cargill businesses against the requirements of the *3S Principles and Criteria*.

The selected Verification Body shall not have any connection or vested interest in the day-to-day operation of Cargill businesses participating in the 3S program.

The appointed Certifier must undertake audits of the full 3S certified supply chain to ensure compliance with the *3S Principles and Criteria*.

The appointed Verification Body must be accredited under ISO Guide 65:1996, ISO 17021:2006, ISO 17065:2013 or another standard acceptable under UK Accreditation Service.

4.2. Audit program

The audit program must operate under the rules of ISO 19011:2002 or another standard acceptable under UK Accreditation Service.

4.2.1. Audit frequency

Audits of each 3S™ supply chain must be undertaken on a minimum twelve-monthly basis to confirm continued compliance with 3S requirements. Audits must be synchronized to crop years.

In exceptional circumstances it is possible to extend the verification frequency by up to 4 months (e.g., in the event of a global pandemic).

4.2.2. Audit components

Although a supply chain audit will be undertaken each year, the components of the audit shall be determined annually on the basis described in the scope of verification above.

4.2.3. Auditor qualifications

Auditors appointed to undertake 3S audits must be suitably qualified as assessors and have experience relevant to the supply chain being audited.

4.2.4. Non-conformances

Any non-conformances identified during audits must be notified to the 3S Manager responsible for the business concerned.

4.2.5. Corrective actions

The 3S Manager must respond to any non-conformances raised by the submission of corrective actions. A corrective action plan must be submitted to the Verification Body within 30 days of the audit. This should detail

the actions which will be taken to rectify any non-conformance raised. Full supporting evidence must be received within 60 days of the audit. Corrective actions will be reviewed by the Verification Body and decisions made on whether the actions taken are satisfactory to rectify the non-conformance. Further action and documentary evidence may be requested following review. The 3S Manager will be informed when the corrective actions have been approved.

4.3. Audit procedure

Once appointed, the independent Verification Body will dictate the audit schedule in line with the requirements of the *3S Principles and Criteria*.

4.3.1. Assessor selection

Assessors shall be selected, trained and appointed by the independent Verification Body. As with all verification, at no point will Cargill be involved in selecting the assessor.

4.3.2. Audit scope

Assigned assessors will contact the Cargill business to be audited and arrange with them the dates and schedule for the audit.

As 3S™ audits will consider entire Cargill supply chains, audits will assess all Cargill businesses participating in those supply chains where more than one business is involved, (e.g., trans-Atlantic shipment of product to Europe from South America).

A verification, by sampling system, of the farms must be carried out in order to assess the conformity with the 3S requirements at the field level.

4.3.3. Audit schedule

The assigned assessor will dictate the audit schedule but the participating Cargill business units will be responsible for arranging the logistics, such as internal flights and road transport, to meet the schedule.

4.3.4. Assessment

The assigned assessor will audit against the current version of the 3S Principles and Criteria, using the 3S Checklist relevant to the supply chain being assessed. All relevant aspects of the 3S Principles and Criteria will apply to any Cargill supply chain being assessed but the 3S Checklist will contain guidance to assist the assessor in interpreting requirements for the specific geography, commodity and supply chain being audited.

4.3.5. Appeals/Complaints

The 3S program has a mechanism for receiving appeals and complaints related to the development to the program and verification and verification process. Appeals and complaints should be addressed to: fale_conosco@cargill.com.

4.4. Certificates of Compliance

3S certificates have a three-year validity, though are subject to a satisfactory annual audit being completed and any non-conformances which have been raised being satisfactorily corrected and corrective actions submitted to confirm this.

If non-conformances are not corrected within the permitted timescale Cargill will be informed and the 3S certificate will be suspended.

If full corrective action is not received within 30 days of suspension the certificate will be withdrawn. In exceptional circumstances a plan of action and additional time may be agreed between Cargill and the Verification Body. Certificates remain the property of the Verification Body and may be withdrawn in the event of continued non-compliances.

5. Farm Level Verification

Field-level verifications will be conducted by independent implementing partners with no relationship to Cargill's supply chain that could put impartiality at risk.
Verifications shall be conducted, during on field visits, using the 3S program requirements checklist.
A first visit is carried out in order to assess each farm compliance level regarding the 3S requirements. Based on this assessment, the producers are supported to develop an individualized action plan, addressing the improvements they should implement. Periodic visits are then carried out, the frequency of visits varies according to the region of implementation, in order to support the implementation of the action plan and monitor the maintenance of compliance.
Farmers also receive, through the periodic visits, support for addressing crop quality, agronomic questions, IPM and other good agricultural practices.

5.1. Verification Scope on the field

Verification is carried out individually on all participants or nominees for the program. A complete diagnosis of the program will now be conducted every three years to ensure a comprehensive assessment of all relevant factors. Annual activities will include image analysis to monitor changes and progress, verification of restrictive lists to maintain compliance, and a 100% mandatory partial diagnosis to address specific areas of concern. Additionally, the progress of action plans will be closely monitored each year.

5.2. Certificates of Compliance

3S certificates for producers have a two-year validity, though are subject to a satisfactory annual audit being completed and any non-conformances which have been raised being satisfactorily corrected and corrective actions submitted to confirm this.

If non-conformances are not corrected within the permitted timescale Cargill will be informed and the 3S certificate will be suspended.

If full corrective action is not received, the suspension of the certificate will be enforced. In exceptional circumstances, a plan of action and additional time may be agreed upon between Cargill, the producer, and the field implementer.

6. References

The 3S™ Program uses the best credible definitions that are available at time of review and references the below cited publications:

Production standards:
RTRS Standard for Responsible Soy Production Version 3.1 01 June 2017
https://responsiblesoy.org/documentos/rtrs-standard-for-responsible-soy-production-v31?lang=en

Land use:
ISCC 202 Sustainability Requirements Version 3 https://www.iscc-system.org/wp-content/uploads/2017/02/ISCC_202_Sustainability_Requirements_3.0.pdf

Chain of custody:
ISEAL Alliance – ISEAL Chain of Custody Models Guidance September 2016 https://www.isealalliance.org/sites/default/files/resource/201711/ISEAL_Chain_of_Custody_Models_Guidance_September_2016.pdf

Annex – Examples of land use satellite analysis

The images below show the land use satellite analysis undertaken by Ciampagna on an annual basis. The farm shown in Argentina has not met the land use criteria for January 2008 as described in the Sustainable Land Use section and is permanently excluded from the 3S™ program. The examples of Paraguay and Brazil are both meeting the 3S criteria. It is interesting to note the different farm areas, which are typical of the farm production units in each country.

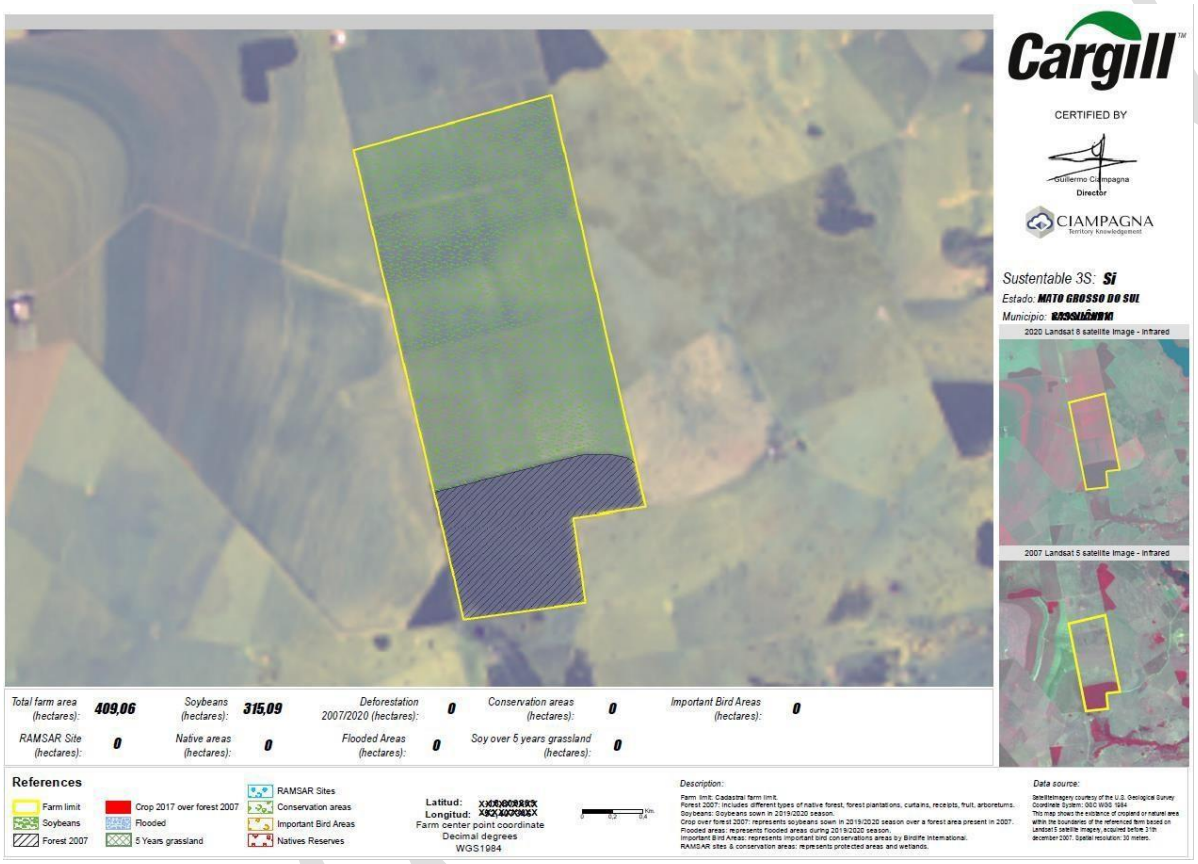

Figure 2. Example of a farm land use analysis in Brazil that can qualify for 3S

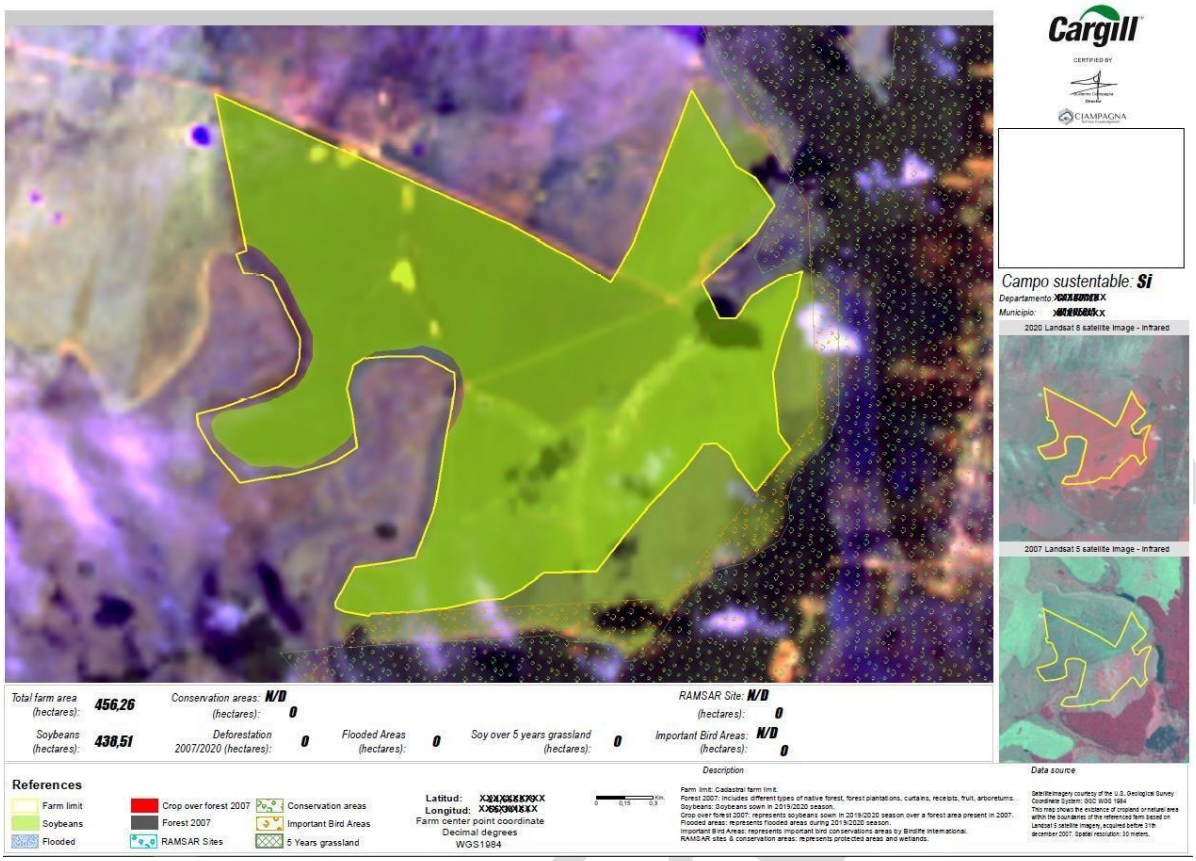

Figure 3. Example of a farm land use analysis in Paraguay that can qualify for 3S

Figure 4. Example of a farm land use analysis in Argentina that cannot qualify for 3S