

Module: Introduction**Page: F0. Introduction****F0.1****Please give a general description and introduction to your organization**

JBS S.A. is a food company with more than 61 years of tradition and is a global leader in the processing of animal protein. Present in more than 20 countries, the Company serves a base of more than 300,000 clients in more than 150 countries through a diverse portfolio of products and brands. Headquartered in Brazil, JBS employs around 215,000 team members throughout its production platforms and sales offices around the world. The operational structure includes beef, pork, lamb, poultry and hides/leather processing facilities, in addition to feedlots. JBS is present in five continents and has production platforms and sales offices in Brazil, United States, Australia, Canada, Italy, Argentina, Uruguay, Paraguay, Mexico, China and others, operating in the segments of beef, pork, lamb and chicken, production and commercialization of leather, Pet products, hygiene and cleanliness, metal packaging, collagen, vegetable oils, transportation and vegetables.

The company's management seeks modernization, products and raw materials quality and the construction of more and better relations with partners, customers, employees and society, the satisfaction of its shareholders and the commitment to social and environmental responsibility issues. The company's main customers are retail chains, wholesale clubs and companies in the food service industry - restaurants, hotels, food service distributors and further processors. With an annual net income of R \$ 120.5 billion, JBS is positioned as the largest animal protein company in the world.

For more information, enter on the official site (<http://www.jbs.com.br>) and the JBS Annual Sustainability Report 2014 (<http://relatorioanual.jbs.com.br>).

F0.2**Please select the stages of the value chain which best represent your organization's area of operation pertaining to forest risk commodities. If your organization is diversified or vertically integrated, please select all that apply**

Processing
Manufacturing
Retailing

F0.3

Are there any parts of your direct operations that are excluded from this disclosure?

Yes

F0.3a

Please identify the parts of your direct operations that are excluded from your disclosure

Exclusion	Description of exclusion	Potential for deforestation risk	Please explain
Source/ country/ geographical area	Operations that are not located in Brazil are not part of this disclosure due to lower deforestation risks associated to commodities.	No potential	The company's approach to prevent the use of commodities from deforested areas has a focus on Brazilian operations, which offer a higher level of risk in this issue. The country's agricultural frontier expansion to the north leads to a pressure on areas of the Amazon ecosystem to become economically exploited. In other countries where JBS have large businesses, cattle breeding is predominantly in an intensive handling culture (confinement) or the type of biome prevailing is different from forest.

F0.4

Are there any parts of your supply chain that are excluded from this disclosure?

Yes

F0.4a

Please identify the parts of your supply chain that are excluded from your disclosure

Exclusion	Description of exclusion	Potential for deforestation risk	Please explain
Source/ country/ geographical area	Operations that are not located in Brazil are not part of this disclosure due to lower deforestation risks	No potential	The company's approach to prevent the use of commodities from deforested areas has a focus on Brazilian operations, which offer a higher level of risk in this issue. The country's agricultural frontier expansion to the north leads to a pressure on areas of

Exclusion	Description of exclusion	Potential for deforestation risk	Please explain
	associated to commodities.		the Amazon ecosystem to become economically exploited. In other countries where JBS have large businesses, cattle breeding is predominantly in an intensive handling culture (confinement) or the type of biome prevailing is different from forest.

F0.5

Do you produce or use materials that contain any of the forest risk commodities? Please complete the table

Forest risk commodity	Produce/use forest risk commodity	Explanation if not disclosing but produce/use the commodity
Timber	Yes	
Palm Oil	Yes	The company has a few business units that produce hygiene and cleaning products with Palm Oil imported from Indonesia and its suppliers are part of Round Table of Sustainable Palm Oil - RSPO. This raw material is used in the soap basic dough, which is made from vegetable oils and animal fat. However, the purchased volume of palm oil is not representative within the company's operations. Additionally, in partnership with a client, JBS is starting a life cycle analysis study comparing animal fat and palm oil-based soaps.
Soy	Yes	
Cattle Products	Yes	
Other	No	

F0.6

Please confirm which commodities you will be disclosing on

Timber
Cattle Products
Soy

F0.7

Please state the start and end date of the year for which you are reporting data

Reporting year
Wed 01 Jan 2014 - Wed 31 Dec 2014

Further Information

Module: Current State

Page: F1. Context

F1.1

How does your organization use your selected commodities? Please provide details on the form and source of the commodities you use or produce

Forest risk commodity	Activity	Form of commodity	Source	Source location	% of procurement spend	Comment
Timber	Input into manufacturing process (e.g. power generation)	Sawn timber, veneer, chips Paper Bioenergy	Own concessions Smallholders Multiple contracted producers Trader/ broker/ commodity market Contracted suppliers (processors) Contracted suppliers (manufacturers)	Brazil Other: Paraguay, Uruguay, Austrália	1-5%	

Forest risk commodity	Activity	Form of commodity	Source	Source location	% of procurement spend	Comment
Cattle Products	Slaughtering	Cattle Tallow Beef By-products (e.g. glycerin, gelatin) Hides/ leather	Smallholders Multiple contracted producers Trader/ broker/ commodity market	Argentina Australia Brazil United States of America Other: Germany, Paraguay, Uruguay, Canada, Vietnam, China, México	81-90%	
Soy	Other: Feeding pork and chicken (in animal diets)	Whole soy beans Soy bean meal	Trader/ broker/ commodity market Contracted suppliers (processors) Contracted suppliers (manufacturers)	Brazil Canada Other: USA, México, Porto Rico	11-20%	JBS Foods uses soy to manufacture animal feed, which is used in farms of poultry and pork (own operations and third parties).

F1.2

Please indicate the percentage of your organization's revenue dependent on each of your selected forest risk commodities

Forest risk commodity	% of revenue dependent on commodity	Comment
Timber	31-40%	This range of percentage considers only JBS operations that are dependent of timber from areas with potential deforestation risk – in relation to JBS's global revenue.
Cattle Products	21-30%	This range of percentage considers only JBS operations that are dependent of cattle from areas with potential deforestation risk - in relation to JBS's global revenue.
Soy	11-20%	This range of percentage considers only JBS operations that are dependent of soy from areas

Forest risk commodity	% of revenue dependent on commodity	Comment
		with potential deforestation risk - in relation to JBS's global revenue.

F1.3

Has your organization experienced impacts related to forest risk commodities that have generated a substantive change in your business operations, revenue or expenditure in the past five years?

Yes

F1.3a

Please identify the impacts related to forest risk commodities that have generated a substantive change in your business operations, revenue or expenditure in the past five years

Forest risk commodity	Impact driver	Impact	Description of impact	Financial impact	Response strategy	Description of response strategy
Timber	Physical: Change in precipitation extremes and droughts	Higher operating costs Supply chain disruption Transport disruption	Longer periods without rains also can affect the operation due to the lack of biomass or higher purchase costs, as well as excessive rains and floods can impact on the transportation of essential raw material, as happened with the Madeira's River flooding.	Medium	Increased investment in new technology	JBS develops projects, which aims to reuse industrial waste as alternative fuel, for example reusing the bovine rumen content (25kg generated for each animal processed) is possible to generate thermal and steam-based energy. This change reduces the consumption of biomass and fossil fuels for the boilers and reduces GHG emissions.
Timber	Regulatory: Product regulations and standards	Higher operating costs Supply chain	JBS has established environmental criteria for biomass purchase (used as boiler fuel). If there aren't local suppliers following these criteria, the purchase will have to be made from	Medium	Engagement with suppliers Tighter supplier performance standards	JBS informs and guides its suppliers regarding its social and environmental criteria and try to diversify its supply chain. To mitigate the risk of purchasing timber from suppliers involved in deforestation,

Forest risk commodity	Impact driver	Impact	Description of impact	Financial impact	Response strategy	Description of response strategy
		disruption Transport disruption	more distant suppliers, resulting in higher transportation costs.			JBS established a Normative Instruction of Biomass Purchasing, stating that only suppliers legalized by the competent environmental authorities are able to negotiate materials with the company. Firewood, Firewood saw wood and tree log sourced from native species must be accompanied by a Forest Origin Document, issued by the Brazilian Institute of the Environment - IBAMA, agency from the governmental Environmental Ministry. The document is a mandatory license for the control of native forestry product and sub product transportation and commercialization.
Cattle Products	Physical: Change in precipitation extremes and droughts	Higher operating costs Supply chain disruption Transport disruption	Long scarce rain periods also can affect the operation because of the lack of raw material or higher purchase costs, as well as excessive rains and floods can affect the transportation of essential raw material, as happened with the Madeira's River flooding.	High	Engagement with suppliers Establishment of site-specific targets Supplier diversification	Diversification of suppliers, due to lower supply of cattle, and availability of confined animals. Production planning can be changed to units located in less favorable regions to water stress.
Cattle Products	Regulatory: Product regulations and standards	Higher operating costs Supply chain disruption Transport disruption	Because of Non-Governmental Organization Greenpeace study results, JBS has made a public commitment not to purchase cattle from ranches responsible for deforestation in the Amazon Biome region after October 2009, as well as those that use labor analogous to slavery or trespass indigenous lands or environmental protected areas delimitation. The public agreement that establishes criteria for cattle purchases from properties located in	High	Engagement with customers Engagement with public policy makers Engagement with suppliers Tighter supplier performance standards Establishment of site-specific targets	Greater engagement with customers are made to meet specific demands, for example demand for sustainable beef, which cause the new product development process and market expansion. For controlling the indirect supply chain, JBS has been acting together with Federal Public Prosecution Office (MPF) and Ministry of Agriculture (MAPA) for implementing a new mandatory procedure, which will conduct consultations on public lists of embargoed areas by IBAMA for illegal deforestation before the issuance of

Forest risk commodity	Impact driver	Impact	Description of impact	Financial impact	Response strategy	Description of response strategy
			<p>the Amazon Biome region is also known by Zero Deforestation Commitment and its requirements are under the document "Minimum criteria for industrial scale operations with cattle and beef products in the Amazon" Additionally, the lack of environmental compliance of the cattle suppliers can go against the JBS social and environmental commitment and other agreements made by the company, for instance: One resource to establish traceability by JBS is the Amazon TAC (Conduct Adjustment Term), which was signed in 2009 and renovated in 2013. This new agreement standardizes the obligations to be met by all JBS refrigeration units in the Amazon region, renewing the commitment of one of the largest processors of animal protein in the world in requiring their suppliers to comply with legal and socio-environmental criteria as a prerequisite for the purchase of animals for slaughtering.</p>		<p>Greater due diligence Increased capital expenditure New product development and/or market expansion</p>	<p>the "green" GTA (Animal Transportation Form) by MAPA. JBS informs and guides its suppliers regarding its social and environmental criteria, such as, not purchasing raw material from deforested lands or suppliers involved in slave labor. In this sense, the monitoring provided by Social and Environmental Monitoring System through geo-referenced maps is mandatory for all farms located in the Amazon Biome Region. Additionally JBS has implemented an internal audit system in 100% of cattle purchases. Every year the Environmental Monitoring System is verified by independent audit. The following programs can be highlighted as initiatives to develop and encourage a more sustainable chain of suppliers: New Field Program (Programa Novo Campo), which promotes more sustainable production techniques at husbandry farms in the Amazon region, thus contributing to the development of differentiated bonus protocols, the opening of markets for products with social and environmental attributes, as well as support for training, earnings disclosure and fundraising for ongoing efforts. Easy Map, which will give every cattle supplier of the Company that does not have a digital map of the property, the opportunity to develop one, free of charge, at any of the JBS slaughterhouse units in the Brazilian Legal Amazon region; and Legal Supplier Program, which helps JBS suppliers to regularize their CAR (Cadastro Ambiental Rural). Through this program, JBS hires specialized consultants to advise its</p>

Forest risk commodity	Impact driver	Impact	Description of impact	Financial impact	Response strategy	Description of response strategy
						suppliers on the regularization process. As the number of cattle suppliers increases, the needs for social and environmental criteria increases together, as well as, greater investment in technology and labor support increases too.
Cattle Products	Reputational: Negative media coverage		The Non-Governmental Organization Greenpeace has been studying the behavior of the production chain for cattle-raising in the Amazon region since 2007. In 2009, after a long investigation, the organization published its report "Slaughtering the Amazon", which highlighted the relationship between the processing companies and their cattle suppliers involved with forest clearance and slave labor, and the products offered for sale in the market. JBS was one of the processing companies that were on the list. In fact, it brought negative impacts for JBS' image as well as with its customers.	High	Engagement with other stakeholders Engagement with suppliers	Due to the Greenpeace study results, JBS has made a public commitment not to purchase cattle from ranches responsible for deforestation in the Amazon Biome region after October 2009, as well as those that use labor analogous to slavery or trespass indigenous lands or environmental protected areas delimitation. The public agreement that establishes criteria for cattle purchases from properties located in the Amazon Biome region is also known by Zero Deforestation Commitment and its requirements are under the document "Minimum criteria for industrial scale operations with cattle and beef products in the Amazon". To ensure compliance with this commitment, in 2010 JBS began to develop a social and environmental monitoring system for the farms that supply livestock to the company. In practice, the system creates a digital overlay of the layers of geo-referenced information: geographic coordinates and geo-referenced maps of the farms areas identified as deforested (from 2009 to the current year) published by the National Institute of Space Research (INPE) and official maps of indigenous lands and environmental conservation units. JBS's

Forest risk commodity	Impact driver	Impact	Description of impact	Financial impact	Response strategy	Description of response strategy
						geospatial monitoring system currently analyzes an area of approximately 87 million hectares. To remain in Compliance with the responsible purchasing commitment, an independently audit on the Social and Environmental monitoring system is annually provided. According to the 2014 and 2015 independent audit results, the compliance level was 99.75% and 99.97% respectively. Moreover, to promote engagement with its suppliers JBS has created the New Field Program, which permits a strong approach on enhancing productivity through the diversification of income sources, cultures rotation, pasture reform and practicing of integrated agriculture, livestock and forestry. The Program contributes positively to the main environmental issue in the Amazon region, as it indirectly eliminates the need for more deforestation as it intensifies production in the same dimension of area. Another JBS recent initiative is called "Easy Map", a tool developed by JBS, which will give every cattle supplier of the Company that does not have a digital map of the property, the opportunity to develop one, free of charge, at any of the JBS slaughterhouse units in the Brazilian Legal Amazon region.
Soy	Physical: Change in precipitation extremes and droughts	Closure of operations Supply chain disruption	Longer periods without rains also can affect the operation because of the lack of soy or higher purchase costs, as well as excessive rains and floods can affect the transportation of essential raw material. Higher costs of soy may affect the entire poultry	High	Increased investment in new technology	JBS Foods constantly monitors meteorological maps, reports of crops changes, supply and global demand images/graphics, prices, curves and economic scenarios, identifying, monitoring and creating strategies to mitigate risks that company are exposed

Forest risk commodity	Impact driver	Impact	Description of impact	Financial impact	Response strategy	Description of response strategy
			production chain.			and reduce its possible effects on JBS operations. The Grain Purchasing Directory is responsible for this monitoring process and for developing the medium and long term strategic planning of commodities acquisition.
Soy	Regulatory: Product regulations and standards	Brand damage Higher operating costs Closure of operations Supply chain disruption	JBS has established environmental criteria for soy purchase and If there aren't local suppliers following these criteria, the purchase will have to be made from more distance suppliers generating more transportation costs.	High	Tighter supplier performance standards	JBS has a policy of only buying soy products from companies that are signatories of the Soy Moratorium.

F1.4

Please describe why you do not know if your organization experienced any impacts related to forest risk commodities that have generated a substantive change in your business operations, revenue or expenditure in the past five years

Primary reason for being unaware of impacts	Comment

Further Information

Module: Risk Assessment

F2.1

Please select the option that best describes your procedures with regard to assessing deforestation risks and opportunities

Forest risk commodity	Deforestation risk assessment procedure	Operational coverage	Comment
Timber	Integrated into a comprehensive, company-wide risk assessment process	Direct operations	<p>JBS globally manages the risk factors that may have a negative impact on its financial performance and, consequently, on its share price. One of the main risk identified by the company is the acquisition of raw material from suppliers involved in the deforestation of native forests, the invasion of protected areas, such as indigenous lands or environmental conservation units, the use of child or compulsory labor or products that might present health risks to its consumers. The Supplies Department is directly responsible for the management of the deforestation risk associated to essential commodities. Therefore, when a critical and specific case of deforestation risk is identified by the Supplies Department, it is sent to the Sustainability Committee, which is responsible for dealing with and connecting all topics related to the company's business in an overall perspective. This role includes the identification, addressing and treatment of critical issues that result in risks or business impact, monitoring and implementation of policies, strategies and specific initiatives, as well as the evaluation of proposals of investments in sustainability. As the Sustainability Committee is composed of six members from the company's top management, including the CEO and vice-president of the Board of Directors, a comprehensive analysis can be performed as part of the deforestation risk assessment procedures. Operationally, to mitigate the risk of purchasing timber from suppliers involved in deforestation, JBS established a Normative Instruction of Biomass Purchasing, stating that only suppliers legalized by the competent environmental authorities are able to negotiate materials with the company. Firewood, saw wood and tree log sourced from native species must be accompanied by a Forest Origin Document, issued by the Brazilian Institute of the Environment - IBAMA, agency from the governmental Environmental Ministry. The document is a mandatory license for the control of native forestry product and sub product transportation and commercialization. JBS Foods has also developed an own planted forest for internal supply for thermic energy generation to ensure the sustainable origin of its materials.</p>
Cattle Products	Integrated into a comprehensive, company-wide risk assessment process	Direct operations	<p>JBS globally manages risk factors that may have a negative impact on its financial performance and, consequently, on its share price. One of the main risk identified by the company is the acquisition of raw material from suppliers involved in the deforestation of native forests, the invasion of protected areas, such as indigenous lands or environmental conservation units, the use of child or compulsory labor or products that might present health risks to its consumers. The Sustainability Department is directly responsible for the management of the deforestation risk</p>

Forest risk commodity	Deforestation risk assessment procedure	Operational coverage	Comment
			<p>associated to essential commodities. When a critical case of deforestation risk is identified, it is sent to the Sustainability Committee, which is responsible for dealing with and connecting all topics related to the company's business in a global perspective. This role includes the identification, addressing and treatment of critical issues that result in risks or business impact, monitoring and implementation of policies, strategies and specific initiatives, as well as the evaluation of proposals of investments in sustainability. As it is composed of six members from the company's top management, including the CEO and vice-president of the Board of Directors, a comprehensive analysis can be performed as part of the deforestation risk assessment procedures. To mitigate the risk of deforestation associated to the purchase of cattle, JBS assumed the commitment to ensure the responsible origin of its raw materials. Therefore, it does not acquire cattle from suppliers involved in the deforestation of native forests, the invasion of public lands such as indigenous lands or environmental conservation units, rural violence and agrarian conflicts, or the use of compulsory and child labor. To ensure compliance with this commitment, in 2010 JBS began to develop a social and environmental monitoring system for the farms that supply livestock to the company, which creates a digital overlay of the layers of geo-referenced information: geographic coordinates and geo-referenced maps of the farms areas identified as deforested (from 2009 to the current year) published by the National Institute of Space Research (INPE) and official maps of indigenous lands and environmental conservation units. JBS's geospatial monitoring system currently analyzes an area of approximately 87 million hectares.</p>
Soy	Integrated into a comprehensive, company-wide risk assessment process	Direct operations	<p>JBS Foods constantly monitors meteorological maps, reports of crops changes, supply and global demand images/graphics, prices, curves and economic scenarios, identifying, monitoring and creating strategies to mitigate the risks to which the company is exposed to and reduce its possible effects on JBS operations. The Grain Purchasing Directory is responsible for this monitoring process and for developing the medium and long term strategic planning of commodities acquisition. When a critical case of risk deforestation is identified, it is sent to the Sustainability Committee, which is responsible for dealing with and connecting all topics related to the company's business in an overall perspective. This role includes the identification, addressing and treatment of critical issues that result in risks or business impact, monitoring and implementation of policies, strategies and specific initiatives, as well as the evaluation of proposals of investments in sustainability. As it is composed of six members from the company's top management, including the CEO and vice-president of the Board of Directors, a comprehensive analysis can be performed as part of the deforestation risk assessment procedures. To mitigate the risk associated to the purchase of animal feed raw material from deforested areas, JBS only purchases soybeans from suppliers that are signatories to the Soybean Moratorium to ensure that no soybeans come from illegal deforestation regions in the Amazon Biome.</p>

F2.1a

Please provide further details on your risk assessment procedures with regard to deforestation risks and opportunities

Forest risk commodity	Frequency of monitoring	To whom are results reported?	Scale of risk assessment	How far into the future are risks considered?	Please explain
Timber	Six-monthly or more frequently	Senior manager/ officer	Country level	1-3 years	The verification of the supplier's compliance to the company's environmental and social criteria occurs in every purchase process. Besides JBS established a partnership with the Brazilian NGO Instituto Centro de Vida (ICV on the New Field Program (Programa Novo Campo).The program promotes more sustainable production techniques at husbandry farms in the Amazon region to enhance productivity. It fosters the diversification of income sources through cultures rotation, pasture reform and practicing of integrated agriculture, livestock and forestry. The Program contributes positively to the main issue in the Amazon region, as it indirectly reduces the need for more deforestation. With this production model adoption, there is the possibility to purchase wood derivatives from more sustainable producers.
Cattle Products	Six-monthly or more frequently	Board or individual/ sub-set of the Board or committee appointed by the Board	Country level	>6 years	JBS has made a public social commitment not to purchase cattle from farms responsible for deforestation in the Amazon Biome region after October 2009. To ensure compliance with this commitment, in 2010 JBS began to develop a social and environmental monitoring system for the farms that supply livestock to the company. The system works in an integrated way. The first one works on a daily download of public agencies IBAMA and MTE dirty lists and a crosschecking of suppliers taxpayer numbers database against them. Suppliers that appear on the lists are automatically blocked in the Enterprise Resource Planning System (ERP) and no purchasing operations. The second process is run by a system that analyses cattle farms in the Brazilian Legal Amazon based on geographical information. It performs by daily geo monitoring through the digital overlay of georeferenced maps of cattle supplier properties and deforestation maps published by National Space Research Institute (INPE) combined with official data from National Indigenous Foundation (FUNAI) and National Conservation Units System (SNUC). To stay in comply with the responsible purchasing commitment, an independently audit on the Social and Environmental monitoring system is annually provided. According to the 2014 and 2015 independent audit results, the compliance

Forest risk commodity	Frequency of monitoring	To whom are results reported?	Scale of risk assessment	How far into the future are risks considered?	Please explain
					<p>level was 99.75% and 99.97% respectively. The Sustainability Committee meets quarterly and is responsible for the management of risks and critical issues, as well as business opportunities for the company that can generate a high negative or positive impact on JBS' operations over the short, medium and long terms. The committee's job includes the implementation of policies, strategies and specific actions, and the evaluation of sustainability investment proposals. The Committee directly monitors the results of the Social and Environmental Monitoring System including indicators of the total active suppliers on the system's registration, percentage of suppliers from the Legal Amazon, how many already have the digital map, number of eligible and blocked suppliers. In case of acquisition opportunities or opening new plants in Amazon Biome area, JBS performs an analysis of the potential suppliers of raw materials regarding their environmental compliance. This analysis allows the company to evaluate the feasibility of operating in a specific region.</p>
Soy	Six-monthly or more frequently	Senior manager/officer	Country level	1-3 years	<p>The verification of the supplier's compliance in relation to the company's environmental and social criteria occurs in every purchase process. JBS Foods has the Grains and Agricultural Feedstock Purchasing Directory that follows on climate issues that directly impact the cost of soybeans and consequently the cost of production. This Directory constantly monitors meteorological maps, reports of crops changes, supply and global demand images/graphics, prices, curves and economic scenarios, identifying, monitoring and creating strategies to mitigate the risks to which company is exposed to and reduce its possible effects on JBS operations. When soybean has a profitable price, it's made the option of buying large quantities for storage and later use. The Grains and Agricultural Feedstock Purchasing Directory is responsible for this monitoring process and for developing the medium and long term strategic planning of the commodities purchasing.</p>

F2.1b

Please identify which of the following criteria are factored into your organization's deforestation risk assessments

Criteria	Timeframe	Relevance	Please explain
Changes in availability and quality of forest risk commodities	Current	Relevant, included	To manage the risk of cattle purchase from suppliers involved in native forests deforestation, protected areas invasion or child and compulsory labor use JBS established restrictive procurement procedures performed by a social and environmental monitoring system, composed of two mechanisms of analysis, which work in an integrated manner. The first verifies the existence of the farm or livestock supplier in the lists published by the Ministry of Labor and Employment (MTE) – Registry of Employers Fined for Compulsory Labor and the list of areas embargoed due to illegal deforestation published by the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA). The second mechanism of analysis uses a geographic information system (GIS) for the geo-spatial monitoring of farms supplying the company with livestock located in the Legal Amazon region, in order to identify suppliers involved in the deforestation of native forests after October 2009, the invasion of indigenous lands or environmental conservation units. If there isn't enough cattle in compliance with the company's environmental criteria near the slaughter house, there will be an increase in operational costs. It is constantly performed a monitoring of the circle radius of cattle purchasing for each plant. To make a deal feasible, the supplier farm should be at the maximum of 200 km far away from the slaughterhouse. Moving the plant for lower deforestation risk areas is also very costly.
Impact of activity on the status of ecosystems and habitats	Current	Relevant, included	JBS is committed to ensure the responsible origin of all the raw materials used in its processes, through the establishment of social and environmental criteria applied to all of its suppliers. In order to guarantee the provenance of all of the products that it offers, JBS has a close relationship with its suppliers to monitor and guide all the stages prior to the arrival of the animals at the Company's processing facilities. In addition, for the beef operation, JBS has a technological system for the social and environmental monitoring of farms to ensure that none of its suppliers is involved in the deforestation of native forests, the invasion of protected areas, such as indigenous lands or protected areas, or with the use of slave labor. Through the adoption of social and environmental criteria for raw material procurement process, JBS has a strong influence in the supply chain by creating a culture of intolerance to deforestation. As a positive result of these actions, JBS mitigates and prevents the impacts that could occur in habitats and ecosystems due Its activities.
Regulation	Current	Relevant, included	The Company's operations are increasingly subjected to strict laws and regulations, in all level of government, relating to environmental protection. The inability to meet these requirements or any other potential environmental international agreement could result in serious consequences for JBS, including criminal, civil and administrative penalties. As environmental laws become stricter in the markets in which JBS operates, the future costs required to maintain compliance with regulations may adversely affect the availability of funds for capital expenditures and even lower profits. For example, in 2009, the Bertin and its shareholders signed a Conduct Adjustment Agreement ("TAC") with the Federal Public Ministry, in Pará State, in order to curb the purchase

Criteria	Timeframe	Relevance	Please explain
			<p>of cattle from farms that are listed, by the Ministry of Labor and Employment, as having compulsory labor and appear on the list of embargoed areas, released by the Brazilian Institute of Environment and Renewable Natural Resources. In 2013, JBS signed a new TAC with the Federal Public Prosecution Office (MPF) in Acre and Mato Grosso to set standards for the facilities located in the Legal Amazon. This new TAC replaced the previously signed in both States, renewing the commitment to buy cattle from farms that comply with social, environmental and labor rules. To manage the risk of cattle purchase from suppliers involved in native forests deforestation, protected areas invasion or child and compulsory labor use, JBS assumed the commitment to ensure the responsible origin of its raw materials. The company implemented a monitoring system composed of two integrated mechanisms of analysis to monitor cattle suppliers and guarantee none purchases in disagreement with the criteria. It is expected a new environmental control instrument called Rural Environmental Registry (CAR). This electronic registration is mandatory to all rural properties and will contribute to develop a strategic database for control, monitoring and fighting deforestation in Brazil, as well as environmental and economic planning of rural properties. The registration will be mandatory from May 2016 and exposes JBS to the risk of lower purchasing capability and significant increases in logistics costs, if a substantial portion of the suppliers do not meet the deadline established by the CAR.</p>
Tariffs or price increases			
Loss of markets	Current	Relevant, included	<p>JBS assumed the commitment to ensure the responsible origin of its raw materials, not purchasing cattle from suppliers involved with native woodlands deforestation, environmental conservation units and indigenous lands invasion, rural violence and agrarian conflicts, or with the use of compulsory and child labor. The company implemented a social and environmental monitoring system, composed of two mechanisms of analysis to monitor cattle suppliers and guarantee none purchases in disagreement with the criteria. A system failure that could provoke a non-compliant purchase would have a damaging effect on the company's brand reflected in loss of revenue due to contracts termination and markets recession.</p>
Stakeholder conflicts concerning forest risk commodities	Current	Relevant, included	<p>JBS assumed the commitment to ensure the responsible origin of its raw materials, not purchasing cattle from suppliers involved with native woodlands deforestation, environmental conservation units and indigenous lands invasion, rural violence and agrarian conflicts, or with the use of compulsory and child labor. The company implemented a social and environmental monitoring system, composed of two mechanisms of analysis to monitor cattle suppliers and ensure none purchases in disagreement with the criteria. As a global leader of beef production JBS is on the spotlight of NGO's protests and media coverage, especially in a hypothetical system failure that could lead to a purchase not compliant to its commitment against deforestation. The company has improved its Monitoring System in a joint effort with the Departments of Sustainability, Cattle Sourcing and Information Technology, and with the support of a specialized consulting firm, considering the magnitude of transactions that occur on a daily</p>

Criteria	Timeframe	Relevance	Please explain
			basis, representing automated analysis of more than 70 thousand supplier farms throughout Brazil. The company also performs continuous gap analysis and daily internal audit process. This was a long path to accomplish a formal recognition that the system is effective.
Brand damage related to forest risk commodities	Current	Relevant, included	JBS assumed the commitment to ensure the responsible origin of its raw materials, not purchasing cattle from suppliers involved with native woodlands deforestation, environmental conservation units and indigenous lands invasion, rural violence and agrarian conflicts, or with the use of compulsory and child labor. The company implemented a social and environmental monitoring system, composed of two mechanisms of analysis to monitor cattle suppliers and guarantee none purchases in disagreement with the criteria. The company is exposed to reputational risks due to a potential system failure that could provoke a non-compliant purchase. As a global leader of beef production JBS is on the spotlight of NGO's protests and media coverage and any collapse of its social and environmental monitoring system would represent a large damage with other effects such as revenue and profits decrease, loss of markets and termination of contracts.
Other	Current	Relevant, included for some suppliers, facilities, or product lines	To mitigate the risk of acquiring raw materials from suppliers involved in the deforestation of native forests, the invasion of protect areas, such indigenous land or environmental conservation units and the use of child or compulsory labor, JBS has adopted a sustainability policy and established social and environmental criteria for purchasing commodities that could be from deforestation risk areas. – Establishment of social and environmental criteria - sustainability policy: After developing procurement procedures to prevent deforestation, the company is also exposed to the lack of enough raw materials in compliance with the requirements it has set.

F2.1c

Please provide any additional information about your approach to assessing deforestation risks here

F2.1d

If you have conducted a partial risk assessment, please identify any exclusions in the following table

Forest risk commodity	Exclusion	Please explain
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F2.2

Please explain why you do not have a process in place for assessing and managing deforestation risks, and whether you plan to introduce such a process in the future

Forest risk commodity	Primary reason for not having a process	Do you plan to introduce a process?	Timeframe	Comment
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Further Information

Module: Implications

Page: F3. Risks

F3.1

Have you identified any inherent risks related to producing, marketing or sourcing forest risk commodities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Please select all that apply

Forest risk commodity	Risk
Timber	Operational risks driven by changes in physical parameters Risks driven by changes in

Forest risk commodity	Risk
	regulation Reputational risks
Cattle Products	Operational risks driven by changes in physical parameters Risks driven by changes in regulation Reputational risks
Soy	Operational risks driven by changes in physical parameters Risks driven by changes in regulation Reputational risks

F3.1a

For your selected forest risk commodities, please describe any inherent operational risks in your direct operations or supply chain driven by changes in physical parameters that have the potential to generate a substantive change in business operations, revenue or expenditure

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
Timber	Availability of certified sustainable material		Timber is an essential input to the company's operations for processes of	Increased operational cost Reduction/ disruption in	1-3 years	Direct operations	Likely	Medium-high	To ensure the sustainable origin of its timber used in packaging and thermic energy

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
			combustion in boilers, heating, and packaging. Biomass for industrial boilers usually comes from by-products such as chips, briquettes, sugarcane bagasse and industrial waste or from planted forests (firewood, sawdust). In some locations, JBS has difficulties in obtaining timber from reforested areas, especially in the states of Rondonia and Acre. Lack of availability combined with future corporate policies to stop the use of timber from native forest can result in higher operational costs due to increased logistics expenses to bring raw material from distant areas.	production capacity Reduction/ disruption of supply Reduced stock price (market valuation)					generation JBS Foods has invested in an own planted forest for internal supply. To mitigate the risk of purchasing timber from suppliers involved in deforestation, JBS established a Normative Instruction of Biomass Purchasing, stating that only suppliers legalized by the competent environmental authorities are able to negotiate materials with the company. Firewood, saw wood and tree log sourced from native species must be accompanied by a Forest Origin Document, issued by the Brazilian Institute of the Environment - IBAMA, agency from the governmental Environmental Ministry. The document is a mandatory license for the control of native

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
									forestry product and sub product transportation and commercialization.
Cattle Products	Availability of certified sustainable material		To manage the risk of cattle purchase from suppliers involved in native forests deforestation, protected areas invasion or child and compulsory labor use JBS established restrictive procurement procedures performed by a social and environmental monitoring system, composed of two mechanisms of analysis, which work in an integrated manner. If there isn't enough cattle in compliance with the company's environmental and social criteria near the slaughter house, there will	Increased operational cost Reduced demand for goods/service Reduction/ disruption in production capacity Reduction/ disruption of supply Reduced stock price (market valuation)	1-3 years	Direct operations	Likely	Medium-high	One of the company's effort to ensure sustainable sourced cattle, not derived from farms involved in native forests suppression, protected areas invasion, agrarian conflicts, and compulsory/child labor use, was the development of the Social and Environmental Monitoring System, which is composed of two analysis mechanisms. The first verifies if farms are in the "Registry of Employers Fined for Compulsory Labor" published by the Ministry of Labor & Employment and in the list of embargoed areas due to illegal deforestation issued by IBAMA (Brazilian Institute of the

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
			<p>be an increase in operational costs. It's is constantly performed a monitoring of the circle radius of cattle purchasing for each plant. To make a deal feasible, the supplier farm should be at the maximum of 200 km far away from the slaughterhouse. If necessary to move plants to regions with higher availability of cattle in compliance, the company will face even higher capital expenditures.</p>						<p>Environment and Renewable Natural Resources). The other mechanism is a geographic information system (GIS) for geo-spatial monitoring of farms located in the Legal Amazon region. It creates and overlaps digital layers of the farms geographic coordinates/geo-referenced maps (provided by the ranch manager or from the Rural Environmental Registry – CAR) and deforestation satellite images or geo-referenced maps from public agencies such as INPE (National Institute of Space Research). Besides the continuous progress in its procurement procedures to block farmers not in compliance, JBS is also committed to engagement practices. In 2014,</p>

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
									<p>JBS used its communications channels, mainly the Giro do Boi Show at the Rural channel, to guide farmers on how to regularize their operations and implement the CAR. JBS also launched Easy Map, a tool developed to help cattle farmers in the Legal Amazon area to digitally map their properties. Using this tool, it is possible to easily and quickly obtain a free map of the property, detailing the farm boundaries. Another management method to foster the availability of sustainable sourced cattle is the New Field Program, which was inspired by a 2013 previous version called Integrated Low Carbon Husbandry that supported a pilot group of 14 farms. Beginning in 2015, the New Field will</p>

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
									have its scope increased to serve 300 farms in the Alta Floresta (MT) region. In addition to the program's incentive to income and productivity increase, it includes other goals, such as local economy strengthening, reduced deforestation, and natural resources preservation. JBS contributes to the development of the breeders providing access to training/guidance focused on best livestock practices, bonus protocols and preparation to social and environmental oriented consumer markets.
Soy	Change in precipitation extremes and droughts		One of the major operational risks already faced by JBS Food is the Volatility in commodity prices, such as grains,	Increased operational cost Reduction/ disruption in production capacity	1-3 years	Supply chain	Likely	Medium-high	The Company believes that it can play an important role in preventing deforestation through responsible procurement. As part

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
			<p>soy meal and corn. These fluctuation on market rates could be strongly influenced by physical changes in climate that can lead to precipitation extremes and droughts resulting in lower availability of supply and higher costs. These commodities represent the largest individual components of the company's Production costs.</p>	<p>Reduction/ disruption of supply Reduced stock price (market valuation)</p>					<p>of this effort, it only purchases soybeans from suppliers that are signatories to the Soybean Moratorium, an initiative that works to ensure no soybeans come from illegal deforestation regions in the Amazon Biome. The Grains and Agricultural Feedstock Purchasing Directory is responsible for this monitoring process and for developing the medium and long term strategic planning of commodities purchasing. It constantly monitors the meteorological maps, reports of crop changes, supply and global demand image/graphics, prices, curves and economic scenarios, identifying, monitoring and creating strategies to mitigate risks to which the company is</p>

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
									exposed and reduce its possible effects on JBS operations.

F3.1b

For your selected forest risk commodities, please describe any inherent risks in your direct operations or supply chain driven by changes in regulation that have the potential to generate a substantive change in business operations, revenue or expenditure

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
Timber	Other: Lack of compliance to regulations	Country	The new Brazilian Forest Code demands that all rural properties of the national territory have to hold a CAR (Cadastro Ambiental Rural) until May/2016. Therefore, agricultural commodities suppliers must present its CAR, in order to demonstrate their	Increased operational cost Increased capital cost Reduced demand for goods/service Reduction/ disruption in production capacity Reduction/ disruption of supply Reduction in capital	1-3 years	Direct operations and supply chain	Likely	Medium-high	JBS is attentive to the release of new state and federal regulation and closely follows up the actual legislation. To mitigate the risk of purchasing timber from suppliers involved in deforestation, JBS established a Normative Instruction of Biomass Purchasing, stating that only suppliers legalized by the competent

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
			environmental compliance with the law. Suppliers that does not present the document (CAR) are not going to commercialize their products with JBS.	availability Reduced stock price (market valuation) Inability to do business					environmental authorities are able to negotiate materials with the company. Firewood, saw wood and tree log sourced from native species must be accompanied by a Forest Origin Document, issued by the Brazilian Institute of the Environment - IBAMA, agency from the governmental Environmental Ministry. The document is a mandatory license for the control of native forestry product and sub product transportation and commercialization. JBS Foods has also developed an own planted forest for internal supply for thermic energy generation to ensure the sustainable origin of its materials.
Cattle Products	Other: Lack of compliance to	Country	JBS is exposed to regulatory risks due to any potential failure on	Increased operational cost Reduced	1-3 years	Direct operations and supply chain	Likely	High	JBS is attentive to the release of new state and federal regulation and closely follows up

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
	regulations		the Social and Environmental system, which was developed to prevent purchases of cattle from suppliers involved with native woodlands deforestation, environmental conservation units and indigenous lands invasion, rural violence and agrarian conflicts, or with the use of compulsory and child labor. A breakage of the criteria established in the company's commitment could lead to a prosecution from the Public Ministry and consequently a judicial process opened against the company due to not complying with the Conduct Adjustment Term signed before. There are also	demand for goods/service Reduction/ disruption in production capacity Reduction/ disruption of supply Reduction in capital availability Reduced stock price (market valuation) Inability to do business					the actual legislation. To manage the risk of cattle purchase from suppliers involved in native forests deforestation, protected areas invasion or child/compulsory labor use, JBS established restrictive procurement procedures performed by a social and environmental monitoring system, composed of two mechanisms of analysis. The first verifies the existence of the farm or livestock supplier in the lists published by the Ministry of Labor and Employment (MTE) – Registry of Employers Fined for Compulsory Labor and the list of areas embargoed due to illegal deforestation published by the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA). The second

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
			<p>new requirements of new Brazilian Forest Code (2012) and Rural Environmental Registry – CAR, which JBS' suppliers must implement until May 2016. After this deadline JBS will only be allowed to deal with regularized suppliers and the company will face a limited purchase access.</p>						<p>mechanism uses a geographic information system (GIS) for the geo-spatial monitoring of cattle farms located in the Legal Amazon region, in order to identify suppliers involved in the deforestation of native forests after October 2009 and with the invasion of protected areas. Besides the continuous progress in its procurement procedures to block farmers not in compliance, JBS is also committed to engagement practices. In 2014, JBS used its communications channels, mainly the Giro do Boi Show at the Rural channel, to guide farmers on how to regularize their operations and implement the CAR through the Legal Supplier Program. JBS also launched Easy Map, a tool developed to help</p>

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
									<p>cattle farmers in the Legal Amazon area to digitally map their properties. Using this tool, it is possible to easily and quickly obtain a free map of the property, detailing the farm boundaries. Another management method to foster the availability of sustainable sourced cattle is the New Field Program, which will have its scope increased to serve 300 farms in the Alta Floresta (MT) region. In addition to the program's incentive to income and productivity increase, it includes other goals, such as local economy strengthening, reduced deforestation, and natural resources preservation. JBS contributes to the development of the breeders providing access to training/guidance focused on best livestock practices,</p>

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
									bonus protocols and preparation to social and environmental oriented consumer markets.
Soy	Other: Lack of compliance to regulations	Country	The new Brazilian Forest Code demands that all rural properties, of the national territory, have to hold a CAR (Cadastro Ambiental Rural) until May/2016. After this deadline JBS will only be allowed to deal with regularized suppliers and the company will face a limited purchase access. JBS could be forced to buy soy from other regions in case of the establishment of a new regulation that bans crops in determined areas of the country, resulting in the increase of production costs.	Increased operational cost Increased capital cost Reduced demand for goods/service Reduction/ disruption in production capacity Reduction/ disruption of supply Reduction in capital availability Reduced stock price (market valuation) Inability to do business	1-3 years	Direct operations and supply chain	Likely	High	JBS is attentive to the release of new state and federal regulation and closely follows up the actual legislation. JBS has a policy of only buying soy products from companies that are signatories of the Soy Moratorium. There is a requirement that suppliers must undertake social and environmental commitments, such as adopting the code of ethics and incorporating social and environmental principles in contracts. For every contract the supplier has to sign a commitment, expressed as contract clauses or terms & conditions, to not have practices of deforestation, illegal occupation of lands

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
			Uncertainties related to the future of the Soy Moratorium, that expires in May 2016 are also a risk to the company's operations.						and forced/slave and child labor.

F3.1c

For your selected forest risk commodities, please describe any inherent reputational risks in your direct operations or supply chain that have the potential to generate a substantive change in business operations, revenue or expenditure

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
Timber	Negative media coverage		JBS is exposed to Reputational risks in a potential situation of purchasing timber from areas with illegal deforestation of native species that could adversely affect the company's image,	Increased operational cost Reduced demand for goods/service Reduction/ disruption in production capacity Reduction/	1-3 years	Direct operations and supply chain	Likely	Medium-high	To ensure the sustainable origin of its timber used in packaging and thermic energy generation JBS Foods has invested in an own planted forest for internal supply. To mitigate the risk of purchasing timber from suppliers involved in

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
			with a large damage to its brand resulting in loss of markets, trade embargo and termination of contracts, especially in exportations to Europe and other particular markets. The side effects of these events would be a consequent revenue and profits decrease.	disruption of supply Reduction in capital availability Reduced stock price (market valuation) Inability to do business					deforestation, JBS established a Normative Instruction of Biomass Purchasing, stating that only suppliers legalized by the competent environmental authorities are able to negotiate materials with the company. Firewood, saw wood and tree log sourced from native species must be accompanied by a Forest Origin Document, issued by the Brazilian Institute of the Environment - IBAMA, agency from the governmental Environmental Ministry. The document is a mandatory license for the control of native forestry product and sub product transportation and commercialization.
Cattle Products	Negative media coverage	Global	JBS is exposed to reputational risks due to any potential failure on its Social and Environmental	Increased operational cost Reduced demand for goods/service	1-3 years	Direct operations and supply chain	Likely	High	One of the company's effort to ensure sustainable sourced cattle - free from deforested areas origination and in

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
			<p>system, which was developed to prevent purchases of cattle from suppliers involved with native woodlands deforestation, environmental conservation units and indigenous lands invasion, rural violence and agrarian conflicts, or with the use of compulsory and child labor. A potential breakage of the commitments assumed may adversely affect the company's image, with a large damage to its brand resulting in loss of markets, trade embargo and termination of contracts, especially in exportations to Europe and other particular markets. The side effects of</p>	<p>Reduction/ disruption of supply Reduction in capital availability Reduced stock price (market valuation) Inability to do business</p>					<p>compliance with its commitment of Zero Deforestation was the development of the Social and Environmental Monitoring System, which is composed of two analysis mechanisms. The first verifies if farms are in the "Registry of Employers Fined for Compulsory Labor" published by the Ministry of Labor & Employment and in the list of embargoed areas due to illegal deforestation issued by IBAMA (Brazilian Institute of the Environment and Renewable Natural Resources). The other mechanism is a geographic information system (GIS) for geo-spatial monitoring of farms located in the Legal Amazon region. It creates and overlaps digital layers of the farms geographic coordinates/geo-referenced maps</p>

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
			these events would be a consequent revenue and profits decrease.						<p>(provided by the ranch manager or from the Rural Environmental Registry – CAR) and deforestation satellite images or geo-referenced maps from public agencies such as INPE (National Institute of Space Research). To maintain compliance with the responsible purchasing commitment, an independently audit on the Social and Environmental monitoring system is annually provided. According to 2014 and 2015 independent audit results, the compliance level was 99.75% and 99.97% respectively. The company has improved its Monitoring System in a joint effort with the Departments of Sustainability, Cattle Sourcing and Information Technology, and with the support of a specialized consulting</p>

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
									<p>firm, considering the magnitude of transactions that occur on a daily basis, representing automated analysis of more than 70 thousand supplier farms throughout Brazil. The company also performs continuous gap analysis and daily internal audit process. This was a long path to accomplish a formal recognition that the system is effective considering that the company has experienced effects of brand damage resulting in loss of markets after the launch of the report "Slaughtering the Amazon", which highlighted the relationship between the processing companies and cattle suppliers involved with forest clearance and slave labor; JBS was one of the processing companies that were on the list.</p>

Forest risk commodity	Risk driver	Geographical scale	Description of risk	Potential impact	Timeframe	Direct operations/ supply chain	Likelihood	Magnitude of impact	Management methods
Soy	Negative media coverage	Global	JBS is exposed to reputational risks in a potential situation of purchasing soy from areas with illegal deforestation of native species that could adversely affect the company's image, with a large damage to its brand resulting in loss of markets, trade embargo and termination of contracts, especially in exportations to Europe and other particular markets. The side effects of these events would be a consequent revenue and profits decrease.	Increased operational cost Reduced demand for goods/service Reduction/ disruption in production capacity Reduction/ disruption of supply Reduced stock price (market valuation) Inability to do business	1-3 years	Direct operations and supply chain	Likely	High	There is a requirement that suppliers must undertake social and environmental commitments, such as adopting the code of ethics and incorporating social and environmental principles in contracts.

F3.2

If you indicated in question F3.1 that you do not consider your organization to be exposed to operational risks related to producing, marketing or sourcing any of your selected commodities, please explain why in the table below

Forest risk commodity	Primary reason for not identifying risks	Comment
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F3.3

If you indicated in question F3.1 that you do not consider your organization to be exposed to risks related to producing, marketing or sourcing any of your selected commodities driven by changes in regulation, please explain why in the table below

Forest risk commodity	Primary reason for not identifying risks	Comment
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F3.4

If you indicated in question F3.1 that you do not consider your organization to be exposed to reputational risks related to producing, marketing or sourcing any of your selected commodities, please explain why in the table below

Forest risk commodity	Primary reason for not identifying risks	Comment
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Further Information

Page: F4. Opportunities

F4.1

Have you identified any opportunities related to producing, marketing or sourcing these commodities sustainably that have the potential to benefit your organization?

Forest risk commodity	Opportunities?
Timber	Yes
Cattle Products	Yes
Soy	Yes

F4.1a

Please describe the opportunities related to producing, marketing or sourcing these commodities sustainably, and your organization's strategy to capitalize on them

Forest risk commodity	Opportunity	Scale of opportunity	Strategy to realize opportunity	Timeframe	Comment
Timber	Increased brand value	All operation	<p>JBS established a partnership with Instituto Centro de Vida (ICV) to develop the New Field Program. It has a strong approach on enhancing productivity through the diversification of income sources, cultures rotation, pasture reform and practicing of integrated agriculture, livestock and forestry. The Program contributes positively to the main environmental issue in the Amazon region, as it indirectly eliminates the need for more deforestation as it intensifies production in the same dimension of area. With the adhesion to this production model, there is the possibility to purchase cattle and biomass from the same farm that should be more conscious of environmental and social issues through guidance provided by technicians. It started with a group of 14 farms and in 2015, the Program will have its scope increased to 300 farms. In 2014, a variety of benefits were perceived by the breeders:</p> <ul style="list-style-type: none"> • Intensification of the production area and an increase in productivity (through pasture reform and management); • Reduction of about 20% in the production cycle of cattle • Increase in productivity from 4.7@ to more than 10@ per hectare per year • Improvement in the quality of the beef • Increase in income for producers. <p>Another opportunities are focused on the reduction of timber consumption, so the company can be less exposed to this commodity deforestation risk.. Packages that previously were manufactured with two pieces – the bottom and top of the box started to me made with a single piece. A result of this initiative was a reduction of 41% on the use of cardboard, what accounts for more</p>	Last 1-3 years	

Forest risk commodity	Opportunity	Scale of opportunity	Strategy to realize opportunity	Timeframe	Comment
			than 130 tonnes or 344,641 m ² of the material. The company has developed a Logistics Reverse project to recover and reuse of PBR pallets used in the transport and storage of finished product. In 2011, JBS began collecting the pallets from major wholesale chains for reuse. In 2012, the company's logistics area began to restore the recovered pallets and, in 2013, they were being reused approximately six times by the company. The next step for the project is to identify the inventories at the factories to have greater control and further increase the number of reused pallets. JBS has developed a project of energy reuse from bovine rumen contents generated in the slaughter of cattle, thereby reducing the need for biomass (firewood) to burn in industrial boilers.		
Cattle Products	Increased brand value	JBS Beef Brazil	JBS was the big winner in two categories of "Best of Sustainable Supply 2014", a global award from the McDonald's chain for suppliers who apply standout sustainability solutions as part of their production processes. The company won the "Climate Change and Energy" and "Water" categories, presenting cases that had generated major production process efficiency gains in Brazil, helping to further increase sustainability of the company's products. Additionally the New Field Program promotes more sustainable production techniques at husbandry farms in the Amazon region. It has a strong approach on enhancing productivity through the diversification of income sources, cultures rotation, pasture reform and practicing of integrated agriculture, livestock and forestry. The Program contributes positively to the main environmental issue in the Amazon region, as it indirectly eliminates the need for more deforestation as it intensifies production in the same dimension of area. It started with a group of 14 farms and in 2015, the Program will have its scope increased to 300 farms. In 2014, a variety of benefits were perceived by the breeders: <ul style="list-style-type: none"> • Intensification of the production area and an increase in productivity (through pasture reform and management); • Reduction of about 20% in the production cycle of cattle • Increase in productivity from 4.7@ to more than 10@ per hectare per year • Improvement in the quality of the beef • Increase in income for producers. 	Last 3-6 years	
Soy	Increased transparency	Access to new markets Quality and availability of raw material improvement	The Company believes that it can play an important role in preventing deforestation through responsible procurement. As part of this effort, it only purchases soybeans from suppliers that are signatories to the	Last 1-3 years	

Forest risk commodity	Opportunity	Scale of opportunity	Strategy to realize opportunity	Timeframe	Comment
		Reputation improvement Optimization of operational.	Soybean Moratorium, an initiative that works to ensure no soybeans come from illegal deforestation regions in the Amazon Biome.		

F4.2

Please explain why you do not consider there to be any opportunities for your organization associated with producing, marketing or sourcing these commodities sustainably

Forest risk commodity	Primary reason for not identifying opportunities	Comment

F4.3

Please explain why you don't know if there are any opportunities for your organization associated with producing, marketing or sourcing these commodities sustainably

Forest risk commodity	Primary reason for not knowing if there are opportunities	Comment

Further Information

Module: Measure & Monitor

Page: F5. Measurement

F5.1

Do you own or manage land used for the production of any of your selected commodities? Please complete the table

Forest risk commodity	Own and/or manage land?	Size (Hectares)	Type of control	System in place to monitor deforestation?	Recent infractions?	Comment
Timber	Own and manage land	1,000-5,000	Operational	Yes	No	JBS Foods has areas of planted forests managed in accordance with good farming practices, to supply its industrial boilers. Moreover, periodic verifications are performed in planted areas and environmental protected areas (APP – Permanent Preservation Áreas and Legal Reserves).
Cattle Products						
Soy						

F5.2

Does your organization collect production and/or consumption data for your selected commodities?

Forest risk commodity	Production and/or consumption data available?
Timber	Consumption data available, disclosing
Cattle Products	Consumption data available, disclosing
Soy	Consumption data available, disclosing

F5.2a

Please disclose your production and/or consumption data using the table below

Forest risk commodity	Production/ consumption data	Volume	Metric	Full/Partial data?	If partial data, please explain
Timber	Consumption data	14,294,715.47	Other: Giga Joule (GJ)	Full commodity production/consumption	
Cattle Products	Consumption data	8.6	Other: million heads of cattle	Full commodity production/consumption	
Soy	Consumption data	1,393,973	Other: tons of soy bran, soybean and whole grain soy	Full commodity production/consumption	

F5.3

Please explain why your organization is not disclosing production and/or consumption data for your selected commodities

Forest risk commodity	Primary reason for not disclosing production/consumption data	Comment

F5.4

Please explain why production and/or consumption data is not available for your selected commodities

Forest risk commodity	Primary reason for not having production/consumption data	Comment

Further Information

F6.1

Do you have a system in place to track and monitor the origin of raw materials for your selected commodities?

Forest risk commodity	System to track and monitor origin of raw materials?
Timber	Yes
Cattle Products	Yes
Soy	Yes

F6.1a

Please describe the system you have in place to track and monitor the origin of raw materials for your selected commodities

Forest risk commodity	System	System coverage	If partial, % of total production/consumption tracked/monitored	Please explain
Timber	<p>To track and monitoring the origin of timber materials JBS has the following systems: Forest Origin Document, which is a mandatory license for the control of native forestry product and sub product transportation and commercialization. It presents information on the origin, destiny, quantity and purpose of transportation. When biomass is sourced from native species, it must be accompanied by a Forest Origin Document. Furthermore, before conducting the registration of biomass supplier, an environmental and social analysis must be performed based on IBAMA (Brazilian Environment and Natural Resources Institute) and MTE (Ministry of Labor) public dirty lists that shows respectively, legal persons and entities with embargoed areas due to illegal deforestation/inappropriate land use and that are involved in slave labor. Normative Instruction of Biomass Purchasing, which defines criteria and responsibilities for the purchase of fuel and biomass. Establishing that JBS only acquire biomass legalized by competent environmental authorities as IBAMA and other state. According to Internal Normative Instruction, there are some mechanisms to guarantee traceability and monitoring of biomass purchases, for example: - The purchase request must be made only through ERP (Enterprise Resource Planning) System; - Before providing any goods, all suppliers must be registered in the ERP; - To request the supplier register, the unit must check its social and environmental situation in the IBAMA and MTE public dirty lists; - Only biomass registered in the ERP must be received. Thus JBS will not get biomass suppliers that use child labor, slave labor or, subcontracted workers.</p>	Full		

Forest risk commodity	System	System coverage	If partial, % of total production/consumption tracked/monitored	Please explain
Cattle Products	<p>As part of its Procurement Policy, JBS has a system for social and environmental monitoring of cattle suppliers, which is composed of two analysis processes that work in an integrated way. The first one works on a daily download of public agencies IBAMA and MTE dirty lists and a crosschecking of suppliers taxpayer numbers database against them. Suppliers that appear on the lists are automatically blocked in the Enterprise Resource Planning System (ERP) and no purchasing operations. The second process is run by a system that analyses cattle farms in the Brazilian Legal Amazon based on geographical information. It performs by daily geo monitoring through the digital overlay of georeferenced maps of cattle supplier properties and deforestation maps published by National Space Research Institute (INPE) combined with official data from National Indigenous Foundation (FUNAI) and National Conservation Units System (SNUC). To stay in compliance with the responsible purchasing commitment, an independently audit on the Social and Environmental monitoring system is annually provided, and the results are published on JBS's website, ensuring the total transparency of its actions. According to 2014 and 2015 independent audit results the compliance level was 99.75% and 99.97% respectively. Animal Transportation Form (GTA), which is the official governmental document for animal transportation in Brazil that contains information on the origin, destiny, breed, quantity, gender, age, sanitary conditions and the transportation purpose. When a supplier delivers its cattle to a beef facility, the invoice must be submitted with the GTA. Both document must be analyzed by the monitoring system and contain the same data of cattle origin. In case of any inconsistency, the operation and payment won't be concluded and the cattle will be returned, what ensures that the purchased herds are not related to deforesting practices; QR-Code System, which allows consumers to know the origin of the product consumed from the farm supplier to the processing facility. This program is called "Trust since the origin" and enables that, for example, consumers go to a supermarket, select any piece from JBS's fresh beef line and use a smartphone with access to the Internet to look up data regarding the origin of the product.,</p>	Full		
Soy	<p>JBS only purchases soy from suppliers that follows/meets the Soy Moratorium. The purchase from large suppliers that are part of the Brazilian Association of Vegetable Oils Industries (ABIOVE) and Brazilian National Association of Cereal Exporters (ANEC) guarantees that the commodity is in compliance with the criteria established in the Soy Moratorium.</p>	Full		

Please explain why you do not have a system in place to track and monitor the origin of raw materials for your selected commodities

Forest risk commodity	Primary reason for not having a system in place	Comment
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F6.3

Please provide details on the level of traceability your organization has for your selected commodities

Forest risk commodity	% of total production/ consumption traceable	Traceability system	Point to which traceable	Exclusions	Exclusion description, if applicable	Comment
Timber	100%	JBS has information of its commodities supply chain location. This information can be generated by the company's ERP (Enterprise Resource Planning System), which has the records of all suppliers including legal person/entity tax payer's numbers and location. All procurement invoices come with information of the product origin.	Region	Not applicable		
Cattle Products	100%	JBS has information of its cattle suppliers in the company's ERP (Enterprise Resource Planning System), which has the records of all suppliers including legal person/entity tax payer's numbers and location. Another traceability mechanism is the System for Social and Environmental Monitoring of Cattle Suppliers. This system uses satellite images, farms georeferenced maps, deforestation data from the National Institute for Space Research (INPE) and official public agencies dirty lists of embargoed areas and person/entities involved in slave labor to identify and block supplier farms showing any non-compliance related to deforesting or slave labor. To perform geospatial analysis of Amazon biome cattle suppliers and identify if they are using deforested lands after 2009, JBS has a database of the farms maps that are transposed to a technological system based on geographic information (GIS). The system performs daily monitoring through overlaying of farms georeferenced maps against maps of deforestation areas trends published by INPE. In addition, official maps of indigenous lands and protected areas in the Legal Amazon region are also used.	Farm	Not applicable		

Forest risk commodity	% of total production/ consumption traceable	Traceability system	Point to which traceable	Exclusions	Exclusion description, if applicable	Comment
Soy	100%	JBS has information of its commodities supply chain location. This information can be generated by the company's ERP (Enterprise Resource Planning System), which has the records of all suppliers including legal person/entity tax payer's numbers and location. All procurement invoices come with information of the product origin.	Region	Not applicable		

F6.3a

Please describe your organization's approach to establishing traceability

Timber: As for other materials and suppliers, the company works with a formal procurement process for all regions, in which all purchased materials are registered, as well as the respective suppliers' database, such as taxpayer number and location of the product's origin. Additionally the suppliers' names are checked against information from the public lists of areas embargoed by IBAMA - by illegal deforestation – and employers who used work practices that are degrading or analogous to slavery, according the Ministry of Labour (MTE).

Cattle Products: To guarantee sustainable sources for raw material used in production, JBS relies on a System for Social and Environmental Monitoring of Cattle Suppliers. The system uses satellite images, farms georeferenced maps and deforestation data from the National Space Research Institute (INPE) to identify any suppliers' farms that appear in deforested areas. It also compares suppliers' database against official public agencies dirty lists (embargoed areas and slave labor involved person/entities) to block non-compliant farms. Currently there is full traceability of cattle suppliers, as shown by the Third Party Audit on JBS' cattle purchase procedures and data, which is conducted annually. As described in the Audit Report, the engagement included the evaluation of the compliance to deforesting, slave work, indigenous and protected areas invasion criteria established in the Greenpeace Commitment. The year based 2014 audit report was also released to the company's stakeholders. According to 2014 and 2015 independent audit results the compliance level was 99.75% and 99.97% respectively. Despite this high level of compliance, the company remains committed to continuously improve performance.

JBS is involved in a partnership with the Federal Public Prosecution Office (MPF) and the Ministry of Agriculture (MAPA) for the implementation of a new mandatory procedure for the issuance of a Green Animal Transit Form (GTA) by MAPA. The proposal is to perform the verification if the farm is in the public list of areas embargoed by IBAMA previously from the issuance of the GTA. For those properties (direct and indirect cattle suppliers) in the public list of areas embargoed by IBAMA, the GTAs would not be issued, thus preventing the entry of animals from farms that have deforested in the national cattle trading market. JBS has worked in partnership with the Brazilian Beef Exporters Association (ABIEC) and with the MPF support for the development of Green GTA.

The company also has a system for identifying QR-Code on all labels of fresh beef, which allows consumers to know the origin of the product consumed - from the farm supplier of cattle to the processing facility. This program is called "Trust since the origin" and in first instance was created due to quality and sanitary requirements. More information about the System for Social and Environmental Monitoring of Cattle Suppliers and the audit report can be found at: http://www.jbs.com.br/en/media_center/press_releases/audit-confirms-jbs-commitment-reducing-amazon-deforestation.

Another resource to establish traceability by JBS is the TAC Amazon, which was signed in 2009 and renovated in 2013 by the company. This new agreement standardizes the obligations to be met by all JBS refrigeration units in the Amazon region, renewing the commitment of one of the largest processors of animal

protein in the world in requiring their suppliers to comply with legal and socio-environmental criteria as a prerequisite for the purchase of animals for slaughter. Soy: JBS is signatory of the Soy Moratorium, an initiative launched by ABIOVE (Brazilian Association of Vegetable Oil Industries) and ANEC (National Association of Cereal Exporters), operationalized by the GTS (Soy Working Group), entity formed by rural producers and national and international NGOs. By this agreement, participants commit not to purchase soy produced in land deforested after 2006, including direct and indirect soy suppliers.

Further Information

Module: Response

Page: F7. Governance and strategy

F7.1

Please indicate where the highest level of direct responsibility for deforestation risk lies within your organization and detail the frequency and nature of engagement on the issue

Highest level of responsibility	Name/position of individual or name of committee	Frequency of briefing	Nature of engagement
Board or individual/sub-set of the Board or committee appointed by the Board	- Board of Directors; - Sustainability Committee;	Bi-annually	JBS has five multidisciplinary non statutory committees working with the company's management in order to support the Board of Directors and make the company's processes more robust. One of these committees is the Sustainability Committee, responsible for dealing with and connecting all topics related to the company's business in a global perspective. This role include the identification, addressing and treatment of critical issues that result in risks or business impact; monitoring and implementation of policies, strategies and specific initiatives; and evaluation of proposals of investments in sustainability. It is composed by six members from the company's top management, including the CEO and vice-president of the Board of Directors : -President: João Carlos Ferraz -Membros: Wesley Mendonça Batista; Francisco de Assis e Silva; Miguel Gularte; Gilberto Tomazoni; Renato Mauro de Menezes Costa. Among the responsibilities of the Sustainability Committee, there is the monitoring of the results of the procurement system. The Board of Directors is composed by the following members from the company's top management: -Chairman of the Board: Joesley Mendonça Batista; -Vice Chairman of the Board: Wesley Mendonça Batista; -Board Member: José Batista Sobrinho, Humberto Junqueira de Farias, João Carlos Ferraz, and Marcio Percival Alves Pinto. -Independent Board Member: Carlos

Highest level of responsibility	Name/position of individual or name of committee	Frequency of briefing	Nature of engagement
			Alberto Caser; and Tarek Mohamed Noshy Nasr Mohamed Farahat.

F7.2

Have you evaluated how the availability or quality of forest risk commodities could affect your organization's growth strategy?

Yes, evaluated over the next 5 years

F7.2a

Please explain how you evaluated the effects of the availability or quality of forest risk commodities on the success (viability, constraints) of your organization's growth strategy

The Quality Beacon is a virtual tool for monitoring the quality of the raw materials provided by suppliers. This tool is made available to cattle suppliers with an individual login and password that allows them to access the tool through the company's website. It aims to strengthen the relationship and provide transparency, and the result of the Quality Beacon is a simple feedback report about the quality of the raw materials provided, and the parameters to be met. In Brazil, 100% of the animals processed are classified based on their gender, maturity, weight and fat content. Using these parameters, JBS has built a template linking each beef carcass profile to the colors green, yellow and red, corresponding to a quality spotlight.

This feedback aims to stimulate better controls over the quality of the raw material produced by suppliers, orienting the producer so that they can aim for ongoing improvements, thereby improving the quality of the products offered by JBS to its clients.

For social and environmental criteria JBS has a detailed historical for approved and blocked suppliers, for each location (industrial unit).

This data allows JBS to monitor feedstock quality and social/environmental risk assigned, as well as to estimate future projection for determined country areas.

F7.3

Please explain why you have not evaluated how the availability or quality of forest risk commodities could affect the success (viability, constraints) of your organization's growth strategy

Primary reason for not evaluating potential impact on growth strategy	Comment
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Further Information

Page: F8. Policies

F8.1

Do you have a company policy that recognizes the role of deforestation in climate change mitigation?

Policy	Comment
Other: Mechanisms and actions	The following mechanisms are not considered policies, otherwise, they are important actions from JBS to reduce deforestation in climate change mitigation: JBS has made a public social commitment not to purchase cattle from ranches responsible for deforestation in the Amazon Biome region after October 2009, as well as those that use labour analogous to slavery or that trespass indigenous lands or environmental conservation areas limits. The public agreement that establishes criteria for cattle purchases from properties located in the Amazon Biome region is entitled "Minimum Criteria for Industrial-Scale Operations with Cattle and Beef Products in the Amazon Biome" and it is available for public consulting at http://www.jbsglobal.com/media_center/press_releases/audit-confirms-jbs-commitment-reducing-amazon-deforestation . To ensure its raw materials are sourced from responsible suppliers, JBS has developed a structured system for social and environmental monitoring of cattle suppliers. The monitoring system is comprised of two analysis procedures, which work together. The first involves geospatial monitoring of the suppliers' properties in the Legal Amazon area that performs the digital overlay of georeferenced maps of cattle suppliers' farms to official data of deforestation in Brazil and indigenous land and environmental conservation areas maps. The second performs the intersection of the registration data of the Company's cattle suppliers with the information from the public lists of areas embargoed by IBAMA - by illegal deforestation - and employers who used work practices that are degrading or analogous to slavery, according to the Ministry of Labour (MTE), covering the entire Brazilian territory. The monitoring provided by this system is more comprehensive than the other one established by the public agreement.

F8.2

Has your organization made a commitment to reduce or remove deforestation and forest degradation from your direct operations and/or supply chain?

Yes

F8.2a

Please identify which of the following criteria are specifically stated in your organization's commitment to reduce or remove deforestation and forest degradation from your direct operations and/or supply chain

Criteria	Commodity coverage	Operational coverage	% of total production/ consumption covered by commitment	Commitment timeframe	Please explain
Zero deforestation and forest degradation Avoidance of land area under conservation Other: • IBAMA (Brazilian Environment and Natural Resources Institute); Slave labour; Invasion of indigenous lands; and Soy Moratorium	Cattle Products Soy	Supply chain	100%	2014	<ul style="list-style-type: none"> • Actually, the company has achieved its commitment to not purchase cattle from farms involved in deforestation before 2014. In 2009, JBS has made a public commitment to society to not purchase cattle from ranches responsible for deforestation of the Amazon Biome region after October 2009. One of the terms was that on a deadline of six month after the signature, the company had to prove in a traceable, verifiable and reportable manner, that none transactions with cattle farms who deforested the Amazon biome after the reference date had been made. To ensure compliance with this everlasting commitment, in 2010 JBS began to develop a social and environmental monitoring system for the farms that supply livestock to the company. JBS's social and environmental monitoring system for cattle suppliers is composed of two mechanisms of analysis, which work in an integrated manner. The first verifies the existence of the farm or livestock supplier in the lists published by the Ministry of Labour and Employment (MTE) – Registry of Employers Fined for Compulsory Labour and the list of areas embargoed due to illegal deforestation published by the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA). The second mechanism of analysis uses a geographic information system (GIS) for the geo-spatial monitoring of farms supplying the company with livestock located in the Legal Amazon region, in order to identify suppliers involved in the deforestation of native forests after October 2009, the invasion of indigenous lands or environmental conservation units. To guarantee compliance with

Criteria	Commodity coverage	Operational coverage	% of total production/consumption covered by commitment	Commitment timeframe	Please explain
					the commitment, the Social and Environmental Monitoring System for livestock supplier farms is independently audited on an annual basis, and the results are published on JBS's website, ensuring the total transparency of its actions. The company has improved its Monitoring System in a joint effort with the Departments of Sustainability, Cattle Sourcing and Information Technology, and with the support of a specialized consulting firm, considering the magnitude of transactions that occur on a daily basis, representing automated analysis of more than 60 thousand supplier farms throughout Brazil. JBS only purchases soy from suppliers that follows/meets the Soy Moratorium.

F8.3

Please explain why your organization has not made a commitment to reduce or remove deforestation and forest degradation from your direct operations and/or supply chain, and whether you plan to do this in the future

Primary reason for not having made a commitment	Do you plan to introduce a commitment?	Comment

F8.4

Do you have commodity specific sustainability policies?

Forest risk commodity	Commodity specific sustainability policies?	Criteria	Cut-off date, if applicable	Please explain
Timber	No	Zero deforestation and forest degradation Avoidance of land area under conservation Other: IBAMA (Brazilian Environment and Natural Resources Institute); Slave labour; Invasion of indigenous lands.	2014	The company has a Normative Instruction of Biomass Purchasing stating that only suppliers legalized by the competent environmental authorities are able to negotiate materials with JBS. Moreover, before conducting the registration of biomass supplier, an environmental and social analysis must be performed based on IBAMA (Brazilian Environment and Natural Resources Institute) and MTE (Ministry of Labour) public dirty lists that shows respectively, legal persons and entities with embargoed areas due to illegal deforestation/inappropriate land use and that are involved in slave labour.
Cattle Products	No	Zero deforestation and forest degradation Avoidance of land area under conservation Other: IBAMA (Brazilian Environment and Natural Resources Institute); Slave labour; Invasion of indigenous lands.	2009	Social and environmental criteria have been established for cattle purchase. Thus, the JBS has made a public social commitment not to purchase cattle from ranches responsible for deforestation in the Amazon Biome region after October 2009, as well as those that use labour analogous to slavery or that trespass indigenous lands or environmental conservation areas limits. The public agreement that establishes criteria for cattle purchases from properties located in the Amazon Biome region is entitled "Minimum Criteria for Industrial-Scale Operations with Cattle and Beef Products in the Amazon Biome" and it is available for public consulting at http://www.jbsglobal.com/media_center/press_releases/audit-confirms-jbs-commitment-reducing-amazon-deforestation
Soy	No	Zero deforestation and forest degradation Avoidance of land area under conservation Other: IBAMA	2006	JBS only purchases soy from suppliers that follows/meets the Soy Moratorium. The purchase from large suppliers that are part of the Brazilian Association of Vegetable Oils Industries (ABIOVE) and Brazilian National Association of Cereal Exporters (ANEC) guarantees that the commodity is in compliance with the criteria established in the Soy Moratorium. This criterion ensure that no soybeans come from illegal deforestation regions in the Amazon Biome.

Forest risk commodity	Commodity specific sustainability policies?	Criteria	Cut-off date, if applicable	Please explain
		(Brazilian Environment and Natural Resources Institute); Slave labour; Invasion of indigenous lands.		

Further Information

Page: F9. Standards and targets

F9.1

Do you have any environmental standards for the production of raw materials for your selected commodities, other than third party certification schemes?

Forest risk commodity	Production standards in place?	Please describe your production standards	Comment
Timber	Yes	The company has a Normative Instruction of Biomass Purchasing stating that only suppliers legalized by the competent environmental authorities are able to negotiate materials with JBS. Moreover, before conducting the registration of biomass supplier, an environmental and social analysis must be performed based on IBAMA (Brazilian Environment and Natural Resources Institute) and MTE (Ministry of Labour) public dirty lists that shows respectively, legal persons and entities with embargoed areas due to illegal deforestation/inappropriate land use and that are involved in slave labour. All environmental management of the biomass purchasing process is a responsibility of the environmental department of each operational unit. This includes management of the requirements Native Forest Consumer Registration and Forest Origin Document or other specific state requirement. JBS is one of the largest consumers of paper/cardboard in Brazil, as it uses the material to produce the packaging for its products. 100% of the	

Forest risk commodity	Production standards in place?	Please describe your production standards	Comment
		paper/cardboard acquired has FSC certification, which is part of the selection criteria for suppliers of this material.	
Cattle Products	Yes	According to JBS sustainability pillar of responsible purchase, Cattle suppliers included on the dirty lists published by the Ministry of Labour and IBAMA, and those whose land overlaps deforested areas, indigenous land or protected areas will be suspended by the company procurement system until they have remedied this situation. JBS Standards of cattle purchasing are expressed in the document "Minimum Criteria for Industrial – Scale Operations with Cattle and Beef Products in the Amazon Biome", which states that the company must not acquire cattle from areas with illegal deforestation, cleared after 2009 in the Amazon Biome and located within protected areas. To make sure that suppliers are complying with these standards, there is a System for Social and Environmental Monitoring of Cattle Suppliers that works on geospatial analysis based on satellite images, farms georeferenced maps and deforestation data from the National Space Research Institute for -INPE. To ensure compliance with the company's commitments, the Cattle Suppliers Social and Environmental Monitoring System is annually audited by an independent party. The cattle purchase verification occurs in a reasonable basis, enabling that the auditors obtain sufficient and appropriate evidence showing if the company has met the set social and environmental criteria. According to 2014 and 2015 independent audit results, the compliance level was 99.75% and 99.97% respectively. Along the supply chain JBS supports projects such as the New Field Program, which promotes sustainable practices to increase the productivity of farms in the Amazon region in order to develop a new operating model that preserves natural resources and that brings financial benefits to the ranchers in the region. Beginning in 2015, the Program will have its scope increased to serve 300 farms in the Alta Floresta (MT) region. Note that in addition to the ongoing encouragement of increases in income and productivity, this includes other objectives, such as the strengthening of the local economy, reduced deforestation, and the recovery and preservation of natural resources. JBS has been contributing to the development of differentiated bonus protocols, the opening of markets for products with social and environmental attributes, as well as support for training, earnings disclosure and fundraising for ongoing efforts.	
Soy	Yes	The company only purchases soy from suppliers that signed the Soy Moratorium	

F9.2

Does your organization enforce any procurement standards that impact your sourcing of forest risk commodities?

Forest risk commodity	Procurement standards in place?	Monitor compliance?	Impact on sourcing activities	Comment
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Forest risk commodity	Procurement standards in place?	Monitor compliance?	Impact on sourcing activities	Comment
Timber	Yes	Yes	Factored into supplier selection process	An important requirement from JBS to its suppliers is the Forest Origin Document, which is a mandatory license for the control of native forestry product and sub product transportation and commercialization. It presents information on the origin, destiny, quantity and purpose of transportation. When biomass is sourced from native species, it must be accompanied by a Forest Origin Document. Furthermore, before conducting the registration of biomass supplier, an environmental and social analysis must be performed based on IBAMA and Ministry of Labor (MTE) public dirty lists that shows respectively, legal persons and entities with embargoed areas due to illegal deforestation/inappropriate land use and that are involved in slave labor.
Cattle Products	Yes	Yes	Factored into supplier selection process Impact on supplier engagement strategy	JBS has made a public and social commitment to not purchase cattle from ranches responsible for deforestation inside the Amazon Biome region after October 2009, as well as those that use labor analogous to slavery or that are located in indigenous lands or environmental conservation areas. The public agreement that establishes criteria for cattle purchases from properties located in the Amazon Biome region is entitled “Minimum Criteria for Industrial-Scale Operations with Cattle and Beef Products in the Amazon Biome” To be in compliance with the commitment, JBS has developed a monitoring system, which is comprised of two analysis procedures. The first one involves a geospatial monitoring that performs the digital overlay of georeferenced cattle farms maps across official data of deforestation, including protected areas maps, such environmental conservation units and indigenous lands. The second performs the intersection of the registration data of the Company's cattle suppliers with the information from the public lists of areas embargoed by IBAMA - by illegal deforestation – and employers who used work practices that are degrading or analogous to slavery, according the Ministry of labour (MTE). An Independent audit is annually provided on the system basis and the results are published on JBS’s website, ensuring the total transparency of its actions. According to 2014 and 2015 independent audit results the compliance level was 99.75% and 99.97% respectively. In addition, JBS has at least one pair of geographic coordinates of the supplier properties with which the company negotiated in 2014. It is important to mention that the Company has made every effort to increase the number of suppliers that have digital maps of their properties. A highlight of these efforts is the Company’s recent initiative called “Easy Map”, a tool developed by JBS, which will give every cattle supplier of the Company that does not have a digital map of the property, the opportunity to develop one, free of charge, at any of the JBS slaughterhouse units in the Brazilian Legal Amazon region. Another effort from JBS is the Legal Supplier Program, which helps JBS suppliers to regularize their CAR (Cadastro Ambiental Rural). Through this program JBS hires specialized consultants to advise its suppliers on the regularization process.

Forest risk commodity	Procurement standards in place?	Monitor compliance?	Impact on sourcing activities	Comment
Soy	Yes	Yes	Factored into supplier selection process	JBS only purchases soy from suppliers that are signatories of the Soybean Moratorium, an initiative that works to ensure that no soybeans come from illegal deforestation regions in the Amazon Biome.

F9.3

Are you involved in any multi-partnership or stakeholder initiatives relating to the sustainability of these commodities? Please describe your role

Forest risk commodity	Involved in initiatives?	Initiatives	Please explain
Timber	Yes	Other: Best of sustainable suppliers – Mc Donald's; KFC	JBS has identified and developed projects that aim to minimize environmental impacts and thus offer more sustainable products to its customers and consumers. Examples of these projects are cases awarded, as the "Best of Sustainable Supply 2014 - Mc Donald's". JBS was the big winner in two categories of "Best of Sustainable Supply 2014", a global award from the McDonald's chain for suppliers who apply standout sustainability solutions as part of their production processes. The company won the "Climate Change and Energy" category, presenting a case study of bovine rumen content reused as fuel in industrial boilers . This is a type of waste that is generated by cattle processing units and with its use for energy generation, the demand for timber and fossil fuels will decrease, with positive impacts on both deforestation and greenhouse gas emissions reduction. This initiative generated major production process efficiency gains in Brazil, helping to further increase sustainability of the company's products . Additionally JBS Foods reuses the poultry fat waste separated by its wastewater treatment process to generate energy. By burning this waste in boilers, it substitutes the use of timber and fossil fuels, reducing the risk of acquiring deforestation risk commodities, cutting down the consumption of natural resources and declining the disposal of the fat as

Forest risk commodity	Involved in initiatives?	Initiatives	Please explain
			waste, while also reducing by 98% its greenhouse gas emissions associated with steam generation. For this initiative, the Company received the International Sustainability Award from the U.S. restaurant chain KFC, which recognizes its suppliers around the world that have implemented innovative sustainability projects.
Cattle Products	Yes	Leather Working Group (LWG) Global Roundtable for Sustainable Beef (GRSB) Brazilian Roundtable on Sustainable Livestock (GTPS) Other: IBAMA Working Group; Brazilian Roundtable on Sustainable Livestock (BRSL); ANUGA Fair Public Ministry of Pará GHG Protocol Agriculture Contance; JBS' purchase process audit - Audit processes to evaluate public commitments to responsible cattle purchases in the Amazon biome (Greenpeace).	JBS has founded and holds the presidency of the Global Roundtable for Sustainable Beef (GRSB), a multi-stakeholder initiative that seeks to facilitate global dialogue on sustainable beef production. It is also a member of the Steering Committee of the Working Group on Sustainable Beef (GTPS) and of the Leather Working Group executive committee, which aims to spread sustainability and environmental practices throughout the leather industry. JBS works through ABIEC - Brazilian Beef Exporters Association, the sector of grains (ABIOVE) in the IBAMA Working Group (Brazilian Institute of the Environment) to improve the public list of illegal deforestation and embargoed areas. A project in partnership with the Brazilian Beef Exporters Association (ABIEC), the Ministry of Agriculture (MAPA) and with the Public Prosecution Office aims to implement a new mandatory procedure for the issuance of a Green Animal Transit Form (GTA) by MAPA. The proposal is to perform the verification if the farm is in the public list of areas embargoed by IBAMA previously from the issuance of the GTA. For those properties (direct and indirect cattle suppliers) in the public list of areas embargoed by IBAMA, the GTAs would not be issued, thus preventing the entry of animals from farms that have deforested in the national cattle trading market. The company participates in initiatives for reporting GHG emissions data and information on climate change management strategy, such as the GHG Protocol Brazil, CDP Climate Change, and the Carbon Efficient Index (ICO2) of BM&FBOVESPA. Besides JBS has participated in the Scope 3 Technical Working Group of the Brazilian GHG Protocol Program, and in the Working Group of the Agriculture GHG Protocol. JBS's participation in the CDP is not restricted only to the Climate Change module, but also comprises the Forests, Water and Supply Chain modules, presenting information about its exposure to deforestation risks, sustainable corporate water management and action plans related to climate change. In 2014 JBS was voted the company that has made the biggest advance to reduce deforestation. This is the conclusion from a report called "Supply chains

Forest risk commodity	Involved in initiatives?	Initiatives	Please explain
			without deforestation: From commitment to action", produced by the CDP.
Soy	Yes	Other: Working Group IBAMA	JBS works together with IBAMA (Brazilian Institute of the Environment), and ABIOVE (Brazilian Association of Vegetable Oil Industries) to improve IBAMA's public list of illegal deforestation and embargoed areas. The GT-IBAMA (IBAMA Working Group) was created, in order to propose solutions to operational improvements related to IBAMA's public list of areas embargoed areas. This partnership of the productive sector and IBAMA technicians has led to continuous improvement of the embargoed areas list as a query tool for companies that establish environmental criteria for their suppliers.

F9.4

Do you specify any third party certification schemes for your selected commodities? Please indicate the percentage of total production and/or consumption currently certified

Forest Risk Commodity	Specify certification schemes?	% of total production/ consumption certified	Certification break down	Please explain
Timber	FSC	100%	FSC Chain of Custody	JBS purchase cardboard (used in packaging) and paper in general (office use) only from certified suppliers by FSC (Forest Stewardship Council) in the form Chain of Custody. . The use of cardboard in JBS operations is significant, since the products are stored and sold in secondary packaging made of it. JBS purchase pallets PBR (Brazilian pallet pattern) and certified by ABRAS (Brazilian Association of Supermarkets). The pallets must also use heat thermal phyto sanitary treatment.
Cattle Products	Leather Working Group (LWG)		Leather Working Group (LWG) Silver standard Leather Working Group (LWG) Gold	Cattle Products: With the completion of the audit process by the Leather Working Group in December 2014 JBS received international recognition for 8 Brazilian units, six gold medals and two silver, all with "A" rating on traceability. With these new awards, the company totals 18 units certified by the Leather Working Group – 15 of which have gold medals and three of which have silver medals – the largest number

Forest Risk Commodity	Specify certification schemes?	% of total production/ consumption certified	Certification break down	Please explain
			standard	of units certified by a single company anywhere in the world, all of them with a "A" rating on traceability. The production of these 18 certified units represent 90% of the JBS leather Production.
Soy	Other: Soy Moratorium		RTRS Chain of Custody RTRS Standard for Responsible Soy Production	The company only purchases soy from suppliers that signed the Soy Moratorium.

F9.5

Do you have any quantified targets for third party certified materials in your direct operations and/or supply chains?

Forest risk commodity	Quantified targets for third party certification?	Certification scheme breakdown	Baseline year	Target year	Coverage	% of materials third party certified in target year	Comment
Timber	FSC	FSC Chain of Custody	2014	2014	Supply chain	100%	JBS is one of the largest consumers of paper/cardboard in Brazil, as it uses the material to produce the packaging for its products. 100% of the paper/cardboard acquired has IFC FSC certification, which is part of the selection criteria for suppliers of this material.
Cattle Products	Leather Working Group (LWG)	Leather Working Group (LWG) Gold standard	2013	2014	Direct operations	61-70%	18 JBS Couros units have been certified by the Leather Working Group, 15 obtaining gold medals and 3 receiving silver medals, all with A grade for traceability, demonstrating an international recognition over the efficiency of the companies' environmental processes and control of the raw materials used.

Forest risk commodity	Quantified targets for third party certification?	Certification scheme breakdown	Baseline year	Target year	Coverage	% of materials third party certified in target year	Comment
Soy	Other: Soy Moratorium	Other: Soy Moratorium	2013	2014	Supply chain	100%	The company only purchases soy from suppliers that signed the Soy Moratorium

F9.6

Do you have any quantified targets for sustainable production and/or procurement, other than third party certification?

Forest risk commodity	Quantified targets for sustainable production/ procurement?	Type of target	Baseline year	Target year	Coverage	% of materials to meet requirements in target year	Comment
Timber	Yes	Sustainable procurement	2013	2014	Supply chain	100%	
Cattle Products	Yes	Sustainable production	2013	2014	Direct operations	100%	
Soy	Yes	Sustainable production	2013	2014	Supply chain	100%	

Further Information

Page: F10. Engagement

F10.1

Have you identified sufficient sources of sustainable materials to meet your operational needs? Please explain what you are doing to ensure security/continuity of supply

Forest risk commodity	Current demand	Future demand	Actions to ensure security/ continuity of supply	Please explain
Timber	Yes	Yes	Supplier improvement plans to increase capacity of supply Engaging in capacity building activities in the value chain	JBS Foods has developed an own planted forest for internal supply to ensure the sustainable origin of its materials. Regarding its supply chain, JBS the established a partnership with the Brazilian NGO Instituto Centro de Vida (ICV on the New Field Program (Programa Novo Campo).The program promotes more sustainable production techniques at husbandry farms in the Amazon region to enhance productivity. It fosters the diversification of income sources through cultures rotation, pasture reform and practicing of integrated agriculture, livestock and forestry. The Program contributes positively to the main issue in the Amazon region, as it indirectly reduces the need for more deforestation. With this production model adoption, there is the possibility to purchase wood derivatives from more sustainable producers. Currently, JBS has developed initiatives aiming to generate energy by reusing waste from industrial process as alternative fuels, what decreases the commodity risks for the company. For instance: As a waste generated from the pig slaughter industrial process, the pig hair is extracted from the pig skin - approximately 400 tons per year, which had previously been sent to landfills – is reused to generate thermal and steam-based energy; and Reusing the bovine rumen content (25kg generated for each animal processed) is possible to generate thermal and steam-based energy. This change reduces the consumption of biomass and fossil fuels for the boilers and reduces GHG emissions. Additionally, JBS's Research & Development area developed an improvement project to change the design of some of the packaging, which became a single piece (it had previously been two pieces – the bottom and top of the box), thereby reducing the use of cardboard raw materials used in the manufacturing process by 41% in 2014. JBS is one of the largest consumers of paper/cardboard in Brazil, as it uses the material to produce the packaging for its products. Although, 100% of the paper/cardboard acquired has FSC certification, which is part of the selection cri-teria for suppliers of this material. In 2013, JBS has implemented a recovery project of wooden pallets used for transportation. Before this project, pallets were used only once and disposed after cargo transport. Through the reverse logistic practice, currently is possible to reuse the same pallets on average for 4 times.
Cattle Products	Yes	Yes	Supplier improvement plans to increase capacity of supply Engaging in capacity building activities in the value chain	One of the highlights in 2014 was the partnership established under the New Field Program which aims to increase productivity of husbandry farms in the Amazon region and fosters the adoption of more sustainable techniques through cultures rotation, pasture reform and practicing of integrated agriculture, livestock and forestry. It contributes positively to the main issue in the Amazon region, indirectly reducing the need for more deforestation. Some of the results achieved were: • Intensification of the production area and an increase in productivity (through pasture reform and management); • Reduction in the production cycle from 44 to 36 months for male animals and

Forest risk commodity	Current demand	Future demand	Actions to ensure security/ continuity of supply	Please explain
				from 34 to 26 months for females • Increase in productivity from 4.7@ to more than 10@ per hectare per year • Improvement in the quality of the beef • Increase in income for producers Additionally, to ensure security and continuity of supply, JBS has made a public and social commitment to not purchase cattle from ranches responsible for deforestation in the Amazon Biome region after October 2009 as well as those that use labor analogous to slavery or that trespasses limits of indigenous lands or environmental conservation areas. To be in compliance with the commitment, JBS has developed a monitoring system, which is comprised of two analysis procedures. The first involves geospatial monitoring and the second performs the intersection of the registration data of the cattle suppliers with the information from the public lists of areas embargoed by IBAMA - by illegal deforestation – and employers who used work practices that are degrading or analogous to slavery, according the Ministry of labour (MTE). Moreover, one of JBS's recent initiative is called “Easy Map”, which will give every cattle supplier of the Company that does not have a digital map of the property, the opportunity to develop one, free of charge, at any of the JBS slaughterhouse units in the Brazilian Legal Amazon region. Another effort from JBS is the Legal Supplier Program, which helps JBS suppliers to regularize their CAR (Cadastro Ambiental Rural). Through this program JBS hires specialized consultants to advise its suppliers on the regularization process.
Soy	Yes	Yes	Other: Soy Moratorium	100% of soy purchases comes from Soy Moratorium Signatories suppliers

F10.2

Are you working with smallholders to encourage and support sustainable forest management practices?

Forest risk commodity	Working with smallholders?	Please explain
Timber	Working with smallholders	Regarding its supply chain, JBS has made significant environmental progress. One of the highlights in 2014 was the partnership established under the New Field Program, which is coordinated by Brazilian NGO Instituto Centro de Vida (ICV). The program promotes more sustainable production techniques at husbandry farms in the Amazon region proposing a crop-livestock-forest integration, as alternative source of income. In this sense one of the program's objectives is to promote the diversification of income sources, through the planting of trees with commercial value in the legal reserve areas.

Forest risk commodity	Working with smallholders?	Please explain
Cattle Products	Working with smallholders	The New Field program had its scope increased to serve 300 farms in the Alta Floresta (MT) region. In addition to the ongoing encouragement of increases in income and productivity, this includes other objectives, such as the strengthening of the local economy, reduced deforestation, and the recovery and preservation of natural resources. JBS has been contributing to the development of differentiated bonus protocols, the opening of markets for products with social and environmental attributes, as well as support for training, earnings disclosure and fundraising for ongoing efforts. The participating breeders have access to a series of opportunities, such as: <ul style="list-style-type: none"> • Preparation and privileged positioning for access to markets that value social and environmental attributes connected to production • Updated guidance and technical information and training courses focused on best livestock practices In addition, the Program contributed positively to the main environmental issue in the Amazon region, as it indirectly eliminates the need for more deforestation by intensifying production in the same area. In general, the program promotes more sustainable production techniques at husbandry farms in the Amazon region, such as: <ul style="list-style-type: none"> • Intensification of the production area and an increase in productivity (through pasture reform and management); • Nutritional supplementation of the animals to ensure weight gain; • Installation of drinking stations in the grazing areas; • Diversification of income sources, through the planting of trees with commercial value in the legal reserve areas; In 2014, a variety of benefits were perceived by the breeders who took part in the project. These included: <ul style="list-style-type: none"> • Reduction in the production cycle from 44 to 36 months for male animals and from 34 to 26 months for females • Increase in productivity from 4.7@ to more than 10@ per hectare per year • Improvement in the quality of the beef • Increase in income for producers
Soy	Working with smallholders	JBS Foods has a dedicated technical team to monitor over 7,000 poultry and pork producers, providing technical assistance for responsible production and guidance regarding management Good Practices. In 2014, the company performed more than 250,000 technical visits to poultry and hogs producers, which include orientations to increase productivity using fewer resources. So on, JBS seeks to produce animal feed with a better nutritional balance so that the producer can gain efficiency with less soy use, what decreases the commodity risks for the company.

F10.3

Are you working with your direct suppliers to support and improve their capacity to supply sustainable materials?

Forest risk commodity	Working with direct suppliers?	Supplier engagement strategy	Comment
Timber	Yes	Other: Customer engagemnet	To assist in the transportation of its products, JBS uses – on average – 70 thousand pallet units per month, which ends up generating an environmental impact due to the waste produced and the demand for certified

Forest risk commodity	Working with direct suppliers?	Supplier engagement strategy	Comment
			wood. To decrease the environmental impact of its operation, JBS created a reverse logistics project for PBR Pallets, which are produced in Brazil. In 2011, JBS began collecting the pallets from major wholesale chains, bringing them to its units and reusing them. In 2012, the company's logistics department began to restore the recovered pallets and, in 2013, they were being reused approximately six times by the company. The next step for the project is to identify the inventories at the factories to have greater control and further increase the number of reutilized pallets.
Cattle Products	Yes	Developing or distributing supply chain mapping tool Workshops and training Contractual agreements Joint projects	JBS has several initiatives to develop and encourage a more sustainable chain of suppliers. In this sense, the highlight programs are: 1) New Field Program (Programa Novo Campo) , which promotes more sustainable production techniques at husbandry farms in the Amazon region, such as: • Intensification of the production area and an increase in productivity (through pasture reform and management); • Nutritional supplementation of the animals to ensure weight gain; • Installation of drinking stations in the grazing areas; • Diversification of income sources, through the planting of trees with commercial value in the legal reserve areas; In 2014, a variety of benefits were perceived by the breeders who took part in the project. These included: • Reduction in the production cycle from 44 to 36 months for male animals and from 34 to 26 months for females • Increase in productivity from 4.7@ to more than 10@ per hectare per year • Improvement in the quality of the beef • Increase in income for producers 2) To ensure security and continuity of supply, JBS has made a public and social commitment to not purchase cattle from ranches responsible for deforestation inside the Amazon Biome region after October 2009 as well as those that use labor analogous to slavery or that are located in indigenous lands or environmental conservation areas. To maintain compliance with the commitment, JBS has developed a monitoring system, which is comprised of two analysis procedures. The first involves geospatial monitoring and the second performs the intersection of the registration data of the cattle suppliers with the information from the public lists of areas embargoed by IBAMA - by illegal deforestation – and employers who used work practices that are degrading or analogous to slavery, according the Ministry of labour (MTE); 3) One of JBS's recent initiative is called "Easy Map", which will give every cattle supplier of the Company that does not have a digital map of the property, the opportunity to develop one, free of charge, at any of the JBS slaughterhouse units in the Brazilian Legal Amazon region; and 4) Another effort from JBS is the Legal Supplier Program, which helps JBS suppliers to regularize their CAR (Cadastro Ambiental Rural). Through this program JBS hires specialized consultants to advise its suppliers on the regularization process.
Soy	Yes	Other: Contractual agreements	JBS produces and distributes animal feed to its integrated poultry and pork producers. Therefore, the company ensures that the soy used for animal feed of is not associated with deforestation, considering that JBS only buys soy products from the Soy Moratorium signatory companies, so on guaranteeing that the animals' feed has a sustainable origin.

Are you working beyond the first tier of your supply chain to manage and mitigate risk?

Forest risk commodity	Work beyond first tier of supply chain?	Please explain
Timber		
Cattle Products	Yes	The New Field Program (Programa Novo Campo) aims to spread sustainable productive practices in the bovine livestock in Mato Grosso State north region and predicts beyond other goals to develop an indirect supplier monitoring system to ensure the sustainable origin of the animals produced in participating properties.
Soy		

F10.5

Do you engage in activities that could either directly or indirectly influence the market for sustainable forest risk commodities?

Activity	Please explain
<p>Increasing demand for sustainable materials Increasing awareness of sustainable materials Raising awareness of the issue of deforestation</p>	<p>JBS is committed to ensure the responsible origin of all the raw materials used in its processes, through the establishment of social and environmental criteria applied to all of its suppliers. In order to guarantee the provenance of all of the products that it offers, JBS has a close relationship with its suppliers to monitor and guide all the stages prior to the arrival of the animals at the Company's processing facilities. In addition, for the beef operation, JBS has a technological system for the social and environmental monitoring of farms to ensure that none of its suppliers is involved in the deforestation of native forests, the invasion of protected areas, such as indigenous lands or environmental conservation units, or the use of slave labour. Along the supply chain, the Company supports projects such as the New Field Program, which promotes sustainable practices to increase the productivity of farms in the Amazon region in order to develop a new operating model that preserves natural resources and that brings financial benefits to the ranchers in the region. JBS has been contributing to the development of differentiated bonus protocols, the opening of markets for products with social and environmental attributes, as well as support for training, earnings disclosure and fundraising for ongoing efforts. The participating breeders have access to a series of opportunities, such as: • Preparation and privileged positioning for access to markets that value social and environmental attributes connected to production • Updated guidance and technical information and training courses focused on best livestock practices In addition, the Program contributed positively to the main environmental issue in the Amazon region, as it indirectly eliminates the need for more deforestation by intensifying production in the same area. Another direct contribution is the conservation of riparian forests by installing drinking stations in the pastures to prevent animals from accessing permanent preservation areas. The animals are able to access water without degrading the areas surrounding rivers, springs and lakes.</p>

Further Information**Module: Challenges****Page: F11. Barriers and challenges**

F11.1**Please describe any key barriers or challenges to achieving deforestation free direct operations and supply chains**

In general, it is possible to see efforts that JBS has been making to ensure sustainable origin of its products and a supply chain free of deforestation and other social and environmental requirements, through its Social and Environmental Monitoring System of Suppliers.

However, we believe that government agencies cooperation in the periodic provision of farms` information regarding land and environmental compliance in the country is a key factor in struggling deforestation practices of the supply chain. The results of the Zero Deforestation initiative are closely linked to the availability of data, since this information needs to be in an operational form, up-to-date and sufficient for companies to carry out their supply chain management.

After the approval of Brazilian Forest Code new version, in 2012, and the regulation of the Rural Environmental Registry - CAR (2014) it is expected in the coming years a large movement of environmental regulation in the country, which should result in a consolidation of environmental legislation and a massive movement for the reforestation of degraded areas, which should facilitate companies` mechanisms to obtain information from their supply chain.

Other very important issue that probably will be discussed along the environmental regularization of rural properties, is the adoption of best agricultural practices, aiming to increase productivity and reach a production model more responsible.

Regarding to the commitments made by JBS such zero deforestation and agreements with Federal Public Prosecution Office (MPF), is important and required that other companies also make these commitments, ensuring that whole cattle supply chain stay in compliance with social and environmental criteria established.

To achieve the control regarding indirect cattle supply, it is necessary an evolving discussion with government agencies to develop public mechanisms or platforms with sufficient and accessible information, which allows the animal traceability.

F11.2**Please describe any measures that would improve your organization's ability to manage deforestation risk**

With new Brazilian Forest Code approval and Rural Environmental Registry (CAR - georeferenced map of rural property that contains its geographical boundaries and definition of land uses - productive area and preservation) regulation, will be created a rich database of farms in Brazil. With the availability of this information, companies can have a better management of supply chains monitoring in the country, particularly for soybeans and cattle.

For controlling the indirect supply chain, JBS has been acting together with Federal Public Prosecution Office (MPF) and Ministry of Agriculture (MAPA) for implementing a new mandatory procedure, which will conduct consultations on public lists of embargoed areas by IBAMA for illegal deforestation before the issuance of the “green” GTA (Animal Transportation Form) by MAPA. The procedure aims to block cattle suppliers - direct and indirect - that are on the IBAMA public list of embargoed areas, since that they won’t be able to have the GTA that is essential for transportation and trading of cattle. This measure will avoid the commercialization of animal provided from deforested areas in the national cattle market. In this sense, JBS has been working in partnership with Brazilian Beef Exporters Association (ABIEC) and receiving support of MPF for the “Green GTA” development.

Further Information

Module: Sign Off

Page: F12. Sign off

F12.1

Please provide the following information for the person that has signed off (approved) your CDP forests response

Name	Job title	Corresponding job category
Marcio Nappo	Sustainability Director	Director on board

Further Information

CDP 2015 Forests 2015 Information Request