

## ADM Palm Oil Project in Brazil 2011–2018





# Contents

1. Foreword	05
and the second sec	
2. About ADM	07
	14.1
3. Our palm oil plantation in Brazil	11
3.1 Geographic location and infrastructure	12
3.2 Our business model and land use rights	16
3.3 Empowering our people	17
3.4 Supply chain and traceability	21
3.5 Our progress on sustainability certification	22
4. Our commitments to and practices of sustainable palm oil production	25
4.1 Protecting our environment	26
4.2 Implementing good agricultural practices	31
4.3 Enhancing our communities	39
5. Partnerships with stakeholders	44
The street of th	
Abbreviations and Acronyms	48

## Foreword

In February 2011, within the framework of support for the biodiesel policy in Brazil, ADM announced an investment to start the sustainable cultivation of palm oil in cooperation with local farmers in the Northeast of the State of Pará.

In 2012. following elaborate an socio-environmental study, we began planting in accordance with the recommendations of the Zoneamento Agro Ecológico ZAE (Agro Ecological Zoning) of African palm oil, which allows planting in areas of agricultural use that are not virgin forest. We also have taken into account the criteria of the Roundtable for Sustainable Palm Oil (RSPO).

In total, we have planted about 7,500 hectares – 5,500 of which are within ADM-managed farms, with the remaining hectares part of the smallholder program.

In 2016, we harvested the produce of the first areas planted. In each subsequent

year we have and will continue to progressively increase the volume as new areas enter production.

Six years after the start of this operation, we take great pride in the fact that our undertakings continue to adhere to ADM's Code of Conduct, which ensures we conduct business fairly and ethically at all times. We currently have almost 400 direct employees, each of whom directly benefits from his or her relationship with ADM and our commitment to achieving the right results, the right way.

In addition, our efforts in the region indirectly benefit more than 3,000 people via contributions to surrounding communities through various socio-environmental For projects. example, we have given smallholders the opportunity to access credit lines and technical training, allowing them to reach a new market and generating long-term value for both themselves and their communities.

"For ADM, our commitment to sustainable agriculture is a priority. We firmly believe in a business model in which work generates long-term wealth and preserves the environment for future generations. With our palm oil plantations, we sow opportunities and reap better quality lives."

### Marcelo Grimaldi

Director of Refined Oils and Biodiesel - ADM Brazil





## About ADM



For more than a century, the people of Archer Daniels Midland Company (NYSE: ADM) have transformed crops into products that serve the vital needs of a growing world. Today, we're one of the world's largest agricultural processors and food ingredient providers, with approximately 31,000 employees serving customers in more than 170 countries.

With a global value chain that includes approximately 500 crop procurement locations, 270 ingredient manufacturing facilities, 44 innovation centers and the world's premier crop transportation network, we connect the harvest to the home, making products for food, animal feed, industrial and energy uses.

ADM has long maintained a Code of Conduct to help our company achieve the right results, the right way. The Code establishes high standards of honesty and integrity for all ADM colleagues and business partners, and sets forth specific policies to help ensure that our company conducts business fairly and ethically at all times, everywhere we operate. The Code also offers guidance on the appropriate handling of situations in which personal and business interests have the potential to conflict.

### Our Code of Conduct is aligned with our core values

Our core values express what we expect of ourselves and each other. They guide our behavior, and serve as the foundation for our decision making. In everything we do at ADM, we embrace and embody these values:

- Have Integrity: Be honest and true.
- Show Respect: Treat everyone and everything with care and consideration.
- Achieve Excellence: Be great at what you do and keep getting better.
- Be Resourceful: Make it work the right way.
- Practice Teamwork: Succeed together.
- Take Responsibility: Own it. Do it. Don't give up.



### ADM and palm oil plantations

In general, ADM is not a producer of commodities. The exception is the project that we carried out in the State of Pará in collaboration with the Brazilian government, and around 270 small-scale farmers in the smallholder program and 14 farms managed by ADM.

We are very proud of our first experience of palm oil production. In six years, with around 7,500 hectares planted and two harvests completed, we were able to have a positive impact on the lives of approximately 3,000 people and their families.

ADM is committed to responsible and sustainable development, and through commercial organizations such as Round Table of Sustainable Palm Oil, we ensure that the palm oil in this project is cultivated and harvested responsibly.



Palm Oil plantation, Fazenda El Dorado, Pará, Brazil



## Our palm oil plantation in Brazil



### 3.1. Geographic location and infrastructure

ADM began its operations in Brazil in 1997, after buying several crush plants and grain and oilseed silos. At present, the company has more than 4,000 employees in the country.

To take advantage of the Pará region's favorable location, ADM established an association process for production that is managed by ADM and features a smallholder program.

The palm oil plantation project began in 2011 and, at present, 25 percent of production comes from the smallholder program and the remaining 75 percent is produced by ADM-managed farms.

In total, the program includes 267 smallholders and 14 farms managed by ADM, and is having a positive impact on the region in of iob creation. terms of improvement rural infrastructure, technical training, and other more.

The Agroindustrial Pole of Palm Oil Production of the Northeast of Pará covers areas in the municipalities of São Miguel do Guamá, São Domingos do Capim, Irituia, Mãe do Rio, Aurora do Pará, Santa María do Pará and Capitão Poço.



Palm oil plantation at Fazenda El Dorado, Pará, Brazil.



Forests, reserve areas and riverine areas

Within the project footprint, all forested areas have been classified and marked, including primary forests, high-, mediumand low-density forests, and forests undergoing regeneration of carbon reserves.

Appropriate riparian buffer zones also have been established,

maintained and restored to protect watercourses and wetlands, taking into account the planting of crops, the use of fertilizers and crop protection products, and harvesting.

In addition, where natural vegetation has been eliminated in the riparian areas, we have established a recovery plan with a clear schedule.



Fazenda Rio Claro. On the left is the beginning of the reserve area and on the right is the beginning of the cultivation area. The areas are limited and divided by the road.

### Area, infrastructure, roads, deposits and buildings

project headquarters are located in the municipality of Mãe do Rio and the second building is in São Domingos do Capim.

Currently, the palm oil project has two offices in the region. The



Fazenda Rio Claro. On the right is the reserve area, and on the left the production area.

### **03** Our palm oil plantation in Brazil

### Location of properties

Unit of Mãe do Rio, Pará, Brazil.

The project headquarters houses several departments associated with the ADM-managed farms, including Management, Controlling, Safety, Human Resources, Environment, and others.



Unit of São Domingos do Capim, Pará, Brazil.

The office in São Domingos do Capim is administered by the Smallholder Farming Department, which coordinates the smallholder.





### 03 Our Palm Oil plantation in Brazil

### Access map



### 3.2 Our business model and land use rights

To guarantee the right to use the land, the ADM palm oil plantation project implemented two forms of production, a smallholder program and ADM-managed farms.

### Smallholder program

Next to ADM managed plantations, the smallholder program which features 267 family farmers with whom we have signed an association contract with exclusive purchase of their production have planted 2,000 hectares of palm oil.

The association includes three entities: ADM, the Banco da Amazônia (BASA) that finances the project, and the farmer.

During the first four years of the contract, farmers were assisted by the bank through a crop implementation schedule. As farmers developed their activities, the bank released financial resources.

ADM has its own technical team composed of 17 agronomists and agricultural technicians who are exclusively dedicated to providing technical assistance to the farmers.

### ADM-managed farms

In total, there are 14 farms managed by ADM. ADM signs a partnership contract with land owners that states ADM is solely responsible for managing the farm, including the entire process of palm oil production and any related logistical elements. The term of each partnership is 25 years.

ADM signs a partnership contract with land owners that states ADM is solely responsible for managing the farm, including the entire process of palm oil production and any related logistical elements. The term of each partnership is 25 years.

Approximately 5,500 hectares of the managed land are planted with the remaining landmaintained as a native vegetation reserve in compliance with the Brazilian Forest Code.

All of the properties are governed by Brazilian environmental law and for ADM, regulatory compliance is a necessary condition to formalize the association agreement.

FARM	MUNICIPALITY	CONTRACTED AREA (HA)	PLANTED AREA (HA)	YEAR OF PLANTATION
Agricultura Familiar	São Domingos do Capim e Irituia	1102,00	1102,00	2012
Agricultura Familiar	São Domingos do Capim, Irituia, Capitão Poço e Mãe do Rio	927,90	927,90	2013
Fazenda Abadía	São Miguel do Guamá	119,00	107,00	2014
Fazenda Abaré	Santa Maria do Pará/	174,00	153,00	2014
Fazenda Águia	São Miguel do Guamá	317,56	294,00	2014
Fazenda Alegria I	Capitão Poço	134,37	201,97	2014
Fazenda Alegria II	Capitão Poço	497,37	388,03	2014
Fazenda Arauai	Irituia	600,00	335,00	2012
Fazenda Ariramba	Capitão Poço	1972,00	1771,00	2013/2014
Fazenda Diamantina	São Miguel do Guamá	181,00	163,00	2014
Fazenda Eldorado I	São Miguel do Guamá	326,00	286,81	2013
Fazenda Eldorado II	São Miguel do Guamá	25,00	21,99	2013
Fazenda Eldorado III	São Miguel do Guamá	49,00	43,10	2013
Fazenda Irituia	Irituia	200,00	147,00	2012
Fazenda Paraíso do Noi	São Domingos do Capim	540,00	464,00	2013
Fazenda Quara	São Domingos do Capim	137,00	137,53	2014
Fazenda Rio Claro	Santa Maria do Pará	148,00	131,63	2013
Fazenda Santa Bárbara II	Irituia	600,00	405,44	2012
Fazenda São José	Irituia	165,00	165,00	2012
Fazenda São Pedro	Santa Maria do Para	120,00	108,00	2014
Total			7357,40	

### Location of farms and planted areas.

### 3.3 Empowering our people

### **Respect of labour rights**

Whether permanent or temporary, there are 374 collaborators linked to the palm oil plantation project; 4 percent of whom are women.

All of our employees are covered by Brazilian regulations on labor and social security. In addition, all personnel strictly comply with the ADM Code of Conduct, which protects the integrity of employees, customers, business partners, shareholders and the communities in which the company operates.



Gymnastics on Labour Day at the unit of Mãe do Rio, Pará, Brazil.

All field work locations have rural living areas with structures of developed for the welfare workers, so they can eat, rest or replenish water in covered areas, and be protected from the sun or rain while conducting field activities.

The seats and structures of the rural living areas are made of steel sheets to facilitate ease of cleaning and each includes restroom facilities. The water tanks have capacities of 300 liters and can be adapted for drinking water and solar lighting systems.

In 2018, for the second consecutive year, ADM was ranked among the "50 Most Loved Companies in Brazil," and the most loved company in the agribusiness segment.

Prepared by Love Mondays - the Brazilian for largest platform evaluating companies by collaborators the \_ rankings counted responses from officials of 115,000 companies with over 500 employees worldwide, and 107,000 spontaneous evaluations completed online between January and November of 2017. The most valued items, according to officials, were: Culture of the Company, Quality of Life, and Salary and Benefits.

Health and safety programs.

The ADM Code of Conduct on Occupational Health and Safety states the following:

"We must all contribute to maintaining a safe and healthy workplace for our colleagues and This means, visitors. in part. committing to Zero. We believe that it is possible to achieve Zero. We strive to achieve zero injuries and zero incidents in our workplace.

"In the pursuit of our goal of zero, must follow all laws and we regulations designed to prevent occupational hazards and promote a. safe and healthy working environment. We are all invited to contribute to this effort by sharing our ideas and concerns, making safety observations, providing comments to colleagues about safe conduct, taking useful suggestions safe on board. to stav and collaborating in the development of safe practices."

By calculating environmental and safety risks, ADM established its Environmental and Safety Risk Prevention Program (ESRPP), within which is framed the resolutions of the Regulatory Standard - NR-9 of Ordinance 3214/78 of the Ministry of State Labor and Employment (MLE), as

The risk agents are presented for each sector and position of the organization in accordance with the completed field survey and also with the information presented by the company. The work environment was measured using a qualitative evaluation, measurements of risk agents, and by determining whether control measures already were adopted or should be developed to minimize the exposure of workers to situations of risk.

ADM also employs the ESRPP to promote safety at work through:

• The prevention of accidents and the control of occupational hazards.

• Observing the protection of the work environment and the preservation of good working conditions and workers' health.

Our palm oil plantation project also follows the guidelines of the American safety certification (OSHA). Each year, ADM carries out a Global Safety Week in its facilities, during which presentations and awareness-raising activities are held, emphasizing the importance of performing tasks safely and requiring each employee to renew his or her commitment to safety.

Prior to any field activity, a five-minute meeting called the Daily Dialogue of Safety (DDS) is held to refresh and reinforce the importance of carrying out safety measures on a day-to-day basis.

#### **Training Results Overview**

Below is an overview of the number of people who took part in the training since the implementation of the ERSPP, as well as the number of completed training hours.

These figures reflect the entire local staff of ADM and all sub-contractors participating in the safety training during annual meetings and receiving follow-up training throughout the year.

Year	2015	2016	2017
<b>People trained</b>	974	1.880	987
Training hours	5.641	13.288	4.961



#### Personal Protection Equipment (PPE)

Each worker receives his or her Personal Protection Equipment (PPE) on the first day of employment with ADM. The PPE varies according to the activity assigned to each individual and the associated risk.

If the PPE is damaged, it is immediately replaced, and all

equipment is retired and replaced on a regular basis to account for normal wear and tear as tasks are performed.

In addition, each smallholder also completes safety courses and receives appropriate PPE.



Dialogue of Safety (DDS) before beginning the work day at Fazenda Arimbara, Pará, Brazil

### 3.4. Supply chain and traceability

One hundred percent of production, whether it be via ADM or that of third parties, is traceable all the way back to the farm of origin.

Products from ADM-managed farms feature an identification code by lot. Containers with fresh fruits bunches (FFB) are taken from each property, and the plot where the product comes from is identified. With regards to the smallholder program, ADM sends a truck to take the FFB to a collection point, where the product is weighed and then taken to the oil mill. At the time of weighing, the amount that corresponds to each producer is registered. The payments have a previously marked date.

The palm oil processing is carried out at a local third-party oil mill.



### 3.5 Our progress on sustainability certification

ADM has been a member of the Roundtable of Sustainable Palm Oil (RSPO) since 2007.

We comply with the guidelines and processes established by this association, as well as with local environmental agencies' guidelines for palm oil plantations in Brazil.

We believe that the State of Pará has enormous potential for the diffusion of these principles in both a sustainable and profitable way.

The palm oil plantations began in 2012. In 2013, the environmental consultants Orbis Exceller presented their final results of the Socio and Environmental Impact Study (SEIA) of the implementation of the Agroindustrial Pole of Palm Oil Production in ADM's northeastern area of Pará. The study considered two key steps:

• Step One evaluated High Conservation Value (HCV) areas, and the existence of free, prior and informed consent and recommendations for the area's preparation phase. This step was carried out for ADM's new plantations in 2013. • **Step Two** consisted of an evaluation of any socio-environmental impacts due to the implementation of the Agroindustrial Pole of Palm Oil Production.

In December 2014, we published an executive summary of the report, highlighting the final results of the evaluation and the HCV of the project's palm oil production.

We also conducted a Land Use Change Analysis (LUCA) study in which we initiated the Compensation and Remediation procedure. In 2017, ADM received the approval of the RSPO for this latest study, and we are currently in the preparation phase of the Compensation and Remediation Plan for both the smallholder program and ADM-managed farms.











## Our commitments to and practices of sustainable palm oil production



### 4.1 Protecting our environment

For ADM, caring for the environment is an essential part of our strategic vision to maintain a long-term, sustainable business.

We work closely with the stakeholders in our palm oil supply chains in relation to education, awareness, and environmental preservation.

For our palm oil project, ADM is building a supply chain that assumes the following commitments and actions to ensure sustainability:

• Traceable.

• Protect forests.

• No development in High Carbon Stock areas (HCS) and High Conservation Value areas (HCV).

• No use of fire or burning.

• New developments in peatlands are not accepted.

•No exploitation of people and local communities.

• Prior and informed consent given by indigenous communities must be obtained before any development.

• No operation in areas protected by law as national reserves, biological reserves, wetlands and indigenous communities. • Recognize a landscape approach for conservation and protection of biodiversity. z

• Hunting or fishing is prohibited in our plantations.

The social and environmental fragility of Pará in Brazil -- due to low levels of human development and infrastructure, environmental damage caused by agricultural activity, and the ecological of the importance center of endemism in Belém - means that any economic activity must have a socially responsible environmental framework.

#### **Commitment to No Deforestation**

This policy applies to all palm oil supply chains in which ADM operates, from suppliers as direct as the very source (plantation regions and small producers) to any other company in which ADM owns a stake.

### No development in High Carbon Stock (HCS) forests

Our pact classifies primary forests, as well as high-, medium-, and low-density and regenerating forests, as HCS forests. Cleared or open land, existing plantations, scrubland and other land designated for agricultural production can be used.

## **O4** Our commitments and practices to sustainable palm oil production

### No development in High Conservation Value (HCV) areas

We commit ourselves to preserving HCV areas. ADM recognizes that, in some cases, non-forested areas – particularly those in important cultural or historic areas – may also be considered as HCV areas. These areas are accounted for within this policy.

#### No burning

We operate a policy of no burning as described in RSPO Principles and Criteria section 5.5. Within this framework, we do not accept the use of fire as a means of clearing land for palm oil cultivation.

### No acceptance of new developments in peatlands, regardless of depth.

ADM does not accept new peatland developments for palm oil production. We remain committed to supporting Section 4.3 of the RSPO Principles and Criteria and the standards it establishes as best practices for existing peatland plantations. Monitoring of deforestation in ADM's palm oil project

Regarding ADM-managed farms, we verify the field, the opening of areas, and periodically map the properties to monitor compliance with the provisions of the Brazilian Forest Code, and our commitment to non-deforestation and the RSPO.

With relation to smallholders, in 2015 we implemented training in conjunction with the National Service of Rural Apprenticeship (SENAR), where we worked on environmental conservation, non-deforestation, occupational safety, use of agricultural inputs, and financial management of rural property.

### Implementation and reports

We periodically publish action plans and provide ongoing updates of our progress. To learn more about our Sustainability Progress Tracker <u>click here.</u> To learn more about our No Deforestation Commitment, <u>click</u> <u>here.</u>

## **O4** Our commitments to and practices of sustainable palm oil production

Landscape approach in ADM's palm oil project.

ADM recognizes that a landscape approach is fundamental towards ensuring sustainable agriculture and development. local In order to support social and economic development combined with the conservation of local biodiversity, ADM reached agreement with Brazilian NGO SPVS to better understand how to manage ecosystems socio-economic and issues at a landscape level, and to support the integration of social, economic and environmental objectives.

The project, entitled "Salvaging knowledge of Amazonian biodiversity," is developed in partnership with the NGO SPVS. Producers receive guidance on environmental legislation, ecological restoration, and ecosystem services that generate benefits for the of agricultural production their properties.

The region covers highly biologically diverse ecosystems of the Amazon, such as forests and rivers, which are considered very important for the conservation of biodiversity – and also for the social and economic development of municipalities. These areas are very threatened due to the illegal deforestation process that has occurred in the past for the purposes of logging and disorganized agricultural expansion.

In this context, the project aims to improve the management of biodiversity in rural properties, based on the evaluation of traditional knowledge of farmers on the management of fauna and flora species of the Amazon Rainforest, in choosing the best practices in terms of sustainability and viability for this region.

One of initiative's primary goals is that the participating farmers are orientated towards managing biodiversity in their properties, passing on this knowledge to other producers in the region so that they can enrich their own knowledge and skills, thus increasing the care given to flora and native fauna and the generation of ecosystem services.

In addition, the project aims to contribute to other ADM objectives in the region, such as compliance with the environmental legislation of smallholders obtaining RSPO certification, and contribution to the organization bv farmers in agricultural associations or cooperatives. This program began implementation in 2018.

## **Our commitments to and practices of sustainable palm oil production**

Commitment to the conservation and protection of species.

action, including termination of employment.

ADM has zero tolerance of hunting, deliberate harm, possession, and caused death of rare and endangered species within its plantations.

We operate the palm oil plantation in an Amazon biome where there is a rich and immensely varied ecosystem. We recognize the importance of protecting and conserving the habitats of rare and endangered species as part of our commitment to the sustainable production of palm oil.

ADM protects threatened species accordance with Brazilian in legislation and the International Union for Conservation of Nature (IUCN) Red List of Threatened Species. Threatened species and habitats identified within our granted production areas and the surrounding landscape areas during assessment are classified HCV for their as areas conservation.

In 2018, we launched a focused effort to educate our employees, local communities, and other stakeholders on the importance of conserving rare and endangered species. Any violations of this policy may result in disciplinary HCV and HCS areas in ADM's palm oil project

All HCV and HCS areas are legal reserves within the property, and have been protected – or are in the process of being regenerated – from the beginning of the project. ADM developed environmental training materials in HCV and HCS areas, and education in biodiversity.

### Commitment to no hunting and sustainable hunting of species

We are committed to conserving biodiversity and environmental services, while respecting the basic needs of communities.

We are committed to prohibiting hunting and poaching of wildlife from within our plantations, including rare, threatened and endangered species.

We allow hunting that is sustainable for local communities for subsistence purposes and that does not cause the population decline of local species, unless the species are already rare. threatened or in danger of extinction.

## **Our commitments to and practices of sustainable palm oil production**

### Commitment not to operate in protected areas

ADM does not produce palm oil or any crops in protected areas such as national parks, biological reserves, peat bogs, wetlands or anywhere that is considered an HVC area.

Prior to the implementation of any production activity, ADM conducted an evaluation of HCV areas, identifying and protecting those areas as appropriate.

### Commitment to carrying out Social and Environmental Impact Assessments (SEIA)

ADM published a summary of its Social and Environmental Impact Assessment report in December 2014. This report presents the executive summary of the results of the HCV evaluation as part of the project in the north of Pará, Brazil. The study is available <u>here</u>.

The study consisted of four steps:

• **Step 1:** Evaluation of HCV areas, confirmation of the existence of free, prior and informed consent and the provision for advice on the preparation of the plantation area.

• **Step 2**: Assessment of the social and environmental impacts of the

project at a local and landscape scale, which also included the assessment of the HCV areas on a landscape scale.

• Step 3: Analysis of the areas of new plantations that were carried out in 2014, including the evaluation of the HCV areas and the confirmation of the existence of free, prior and informed consent, and the provision of advice on the preparation of plantation areas.

• Step 4: Mapping of smallholding areas, new consultations for the evaluation of HCV areas and the calculation of HCV areas in smallholdings.

With the results of the evaluation of social and environmental impact, we outlined and implemented our action plan.

### Accredited personnel made HCV and SEIA's studies

HCV areas are managed in accordance with the procedures and guidelines recommended in the evaluation of high conservation value areas. An accredited advisor recognized by the HCV Network completed the studies and assessments.

## **O4** Our commitments to and practices of sustainable palm oil production

### 4.2 Implementing Good Agricultural Practices (GAPs)

ADM carries out a series of actions to implement GAPs in palm oil cultivation. GAPs are taken into account when considering climate, plantation management, crowning, recreation, pruning, fertilization, plant health, harvesting and quality control.

#### Soil conservation and management

Soils are essential for life as they provide the means for growth of plants, are the habitat of many insects and other organisms, and act as a filtration system for surface water, carbon storage and the maintenance of atmospheric gases. As such, soil is a vital part of agriculture.

Healthy soils are essential for the healthy growth of plants, human nutrition, and ecosystem services such as water filtration, and support for a landscape making it more resistant to the impact of droughts, floods or fires.

ADM is committed to the conservation of soil in palm oil plantations. The company established a sustainable management plan to guarantee the implementation of good agricultural practices that protect the soil and improve its fertility. The plan's measures included the prevention of soil erosion; keeping and improving the right balance of soil nutrients, pH value, structure and biodiversity; prevention of soil salinization; and reduction of the risk of soil compaction.

All of our soils are covered with native vegetation or legumes to prevent soil erosion. To be specific, we use Pueraria phaseoloides, a forage native from the Amazon Region that covers the soil and fixes nitrogen from the air, contributing to the reduction of the use of nitrogen fertilizers and minimizing soil erosion.

Soil analysis is completed periodically to determine any missing nutrients and fertilizers that need to be applied in order to avoid soil depletion. Fertilizers are used only when soil analysis determines that there are missing nutrients that must be covered.

The prohibition against burning soil applies to both ADM-managed farms smallholders. ADM-managed and farms are advised by agricultural technicians and supervised by agronomists; in the case of smallholders, the advice comes from a team of agronomists who share recommendations soil on management with monthly visits.

## **Our commitments to and practices of sustainable palm oil production**

#### Measures to minimize the use of fertilizers

Fertilizers are used in accordance with nutritional requirements, creating a balance between the use and disuse of the periodical application, following professional recommendations.

We minimize the risk of soil contamination during fertilizer application by registering climatic conditions (wind speed and direction, temperature, etc.).

The fertilizer application machinery is calibrated and allows for precise application. We conduct regular inspections to ensure the machinery is well-maintained, and perform periodic checks to confirm precision during the application of fertilizer.

In addition, we do not use sewage sludge or other organic matter, and we keep fertilizer application records up to date.

### Efforts to reduce Greenhouse Gases emissions (GHG)

ADM takes steps to reduce greenhouse gas emissions in agriculture, via more efficient management of carbon and nitrogen flows in palm oil plantations managed by the company and smallholders. We know that agricultural ecosystems contain vital carbon reserves, predominantly in the organic matter of the soil. We implement agricultural practices that promote carbon capture by either improving its storage, or by reducing the loss of stored carbon caused by the reduction of bare fallow land, avoiding excessive use of fertilizers, and managing tillage and waste.

We also strive to conserve energy and fuel use in our procedures. We set goals to reduce fuel use in our undertakings and actively track our progress. In addition to ensuring machinery maintenance is kept up to date, we conduct energy assessments throughout the plantation to identify fuel-saving opportunities.

#### **Fire prevention measures**

All of the company's facilities are properly marked in terms of fire risk, notices are posted in all areas where fires could occur, and our fire alert system includes a detailed procedure to follow in the case of fire.

As a preventative measure, we clean the boundaries of plots where the fire hazard risk is greater.

## **O4** Our commitments to and practices of sustainable palm oil production

We also maintain a good relationship with members of the community so they know they must notify us in advance if they are going to burn any area near our operations, allowing us the opportunity to first consult our forecasts.

When a fire occurs, ADM is notified by local residents and neighbors, or officials who live near the farms. Upon notification, a member of the ADM team visits the site to confirm the incident and evaluate which equipment to is needed to address the situation (fire brigade, tractor, tanker, etc.). We have a team trained in firefighting and fully equipped fire brigades, with tanks and manually operated water systems. Every detail of the incident is documented in an Occurrence Bulletin, which is presented to the Secretary of the Environment of the municipality and to the farm owner.

Our smallholders receive recommendations on the advisability of not using fire within their property (even for other crops), and they are trained in fire prevention.

2014		2015		2016		2017		
Farm	Number of	Affected area	Number of incendies	Affected area	Number of incendies	Affected area	Number of incendies	Affected area
	incendies	(ha)		(ha)		(ha)		(ha)
Fazenda Eldorado		_	1	105,71	1	1,66		
Fazenda Santa Bárbara II	1	3					1	20
Fazenda São José	1	10						
Fazenda Diamantina							1	65
Fazenda Quara			2	11			1	20
Fazenda Paraíso do Nói							1	2
Fazenda São Pedro			1	38,99				
TOTAL	2	13	3	155,7	1	1,66	4	107

### Number of fire incidences and area affected in the plantations

## **Our commitments to and practices of sustainable palm oil production**

#### Water protection and management

Protecting water resources is a priority for all of our agricultural activities. As part of our commitment to environmental stewardship, ADM implements several measures to conserve water as a vital resource.

The areas of natural vegetation around springs and watercourses are maintained or restored where necessary, and ADM monitors the status of each of them.

Appropriate riverine buffer zones have been established, maintained and restored to protect watercourses and wetlands, taking into account the planting of crops, the use of fertilizers and plant protection products, and harvesting. Where natural vegetation has been eliminated in riverine areas, we have established a recovery plan with a clear schedule.

In the surrounding communities, ADM respects existing water rights, including both formal and informal agreements, and those of local communities.

The application of GAPs reduces water consumption, and maintains or improves its quality. GAPs implemented are with respect to the reduction of unsustainable water the use, extraction of unsustainable water sources, and the minimization of diffused and localized contamination of chemical residues, fertilizers, eroded soil or other sources in groundwater and surface water.



Water course, Fazenda Paraiso de Noi, Pará, Brazil

## **Our commitments to and practices of sustainable palm oil production**

Water for human consumption	Water for agricultural use
• We guarantee its cleanliness and	• In accordance with our GAPs
availability to everyone who works	recommendations, all water used
on farms.	for irrigation, cleaning equipment
• We only use water that complies	and machinery, and application of
with quality regulations of	plant protection products or
Brazilian legislation.	fertilizers is free of contaminants
• All water sources are identified	and hazardous materials.
and documented.	
• To avoid contamination, we use	
safe drinking water tanks,	
guarantee that domestic animals	
do not have access to the water	
source, and that fertilizers and	
agrochemicals are not applied	
nearby.	

### Water quality monitoring

Since 2013, an external laboratory has monitored the quality of the water used for human consumption directly at the source, and of the watercourses on the various farms. In total, water samples are collected from 27 different locations.

## **O4** Our commitments to and practices of sustainable palm oil production

### Plant protection products

### Implement Integrated Pest Management (IPM) practices

The use of IPM helps minimize risks related to safety and quality, and therefore improves the integrity of raw materials.

An agronomist manages the implementation of all IPM practices, which include both chemical methods and biological control, such as monthly plant-protection monitoring visits, manual surgeries of plants with anomalies, and the capture of broach beetles using traps with pheromones.

As a tool for the biological control of pests, traps installed on the boundaries of the plots with pieces of sugar cane are used to attract insects and keep them away from palm oil plantations. These insects are collected and analyzed to avoid their possible proliferation. All actions are registered in the monthly plant-protection report.

### Restrictions on plant protection products

The chemicals listed in the Stockholm Convention on Persistent Organic Pollutants will not be used on any land owned and leased from the plantation.

Use of chemicals in plant protection products listed in WHO 1a and 1b, as well as in Annex III of the Rotterdam Convention, and list of the UNEP Prior the Informed Consent (PIC) are subject to interdiction.

The use of paraquat is prohibited on the plantation and its use is not recommended for ADM-managed farms and smallholders' plantations.

All plant protection products used are registered and authorized as appropriate by the corresponding governmental organization in Brazil. Local restrictions on the use of plant protection products are listed below.
### Herbicides currently used in ADM plantation

Name	Usage
Glyphosate	Systemic and non-selective herbicide to control Brachiaria decumbens and Brachiaria plantaginea
Sulfentrazone	Pre-emergent herbicide with systemic and residual action used to control <i>Richardia brasiliensis</i> , <i>Cyperus</i> <i>rotundus</i> and <i>Solanum americanum</i> .
DIURON	Selective systemic herbicide used to control Alternanthera ficoidea, Richardia brasiliensis and Solanum americanum.
2,4-D- (dimethylamine / dimethylammonium)	Systemic and selective herbicide used to control Amaranthus deflexus, Portulaca olerace and Sida rhombifolia

#### Application of plant-protection products

ADM guarantees that personnel working with plant-protection products receive adequate and documented training.

All applications of plant protection products are carried out in accordance with the instructions of an agronomist. All requirements for the products are closely followed including protective clothing, handling. storage, maximum etc. In addition, all quantity, personnel adhere to instructions on the products' labels regulating intervals for application to crops, and all use is duly documented.

When plant protection products are used near populated areas or bodies of water, we maintain adequate distances in accordance with legal recommendations and good agricultural practices.

During the application of the plant protection products, climatic conditions (such as wind speed, wind direction, temperature, etc.) are examined and considered to minimize risks of contamination.

We also ensure maintenance of all machinery, so that application equipment is ready and calibrated for use when needed.

### Handling and disposal of plant protection products

All plant protection products are measured and mixed in appropriate facilities. We also employ systems to ensure the mixture of leftover applications or tank washes do not contaminate groundwater.

Under no circumstances are empty containers of plant protection products reused. Empty product containers are cleaned after use, and all disposals are made in accordance with Brazilian legislation.



Pest monitoring

### 4.3 Enhancing our communities

ADM is committed to numerous social compacts and agreements designed to protect communities and improve the quality of life for residents, including:

#### **Respect for Human Rights**

In accordance with our Human Rights Policy, we require the following commitments from the stakeholders in the ADM supply chain:

• Comply with all applicable laws and regulations.

• Never use child labor or forced labor, or work in conditions of servitude.

• Do not charge fees to job applicants in exchange for work. Do not use labor intermediaries that collect fees and keep a deposit guarantee, ID documents or other personal belongings without the consent of the workers as a condition of employment.

• Have appropriate measures to guarantee employment eligibility.

• Maintain procedural systems designed to keep workers safe and protect them from occupational hazards, harassment and abuse.

• No discrimination in decisions related to employment.

• Compensate workers when applicable according to local laws

and regulations, including those related to age, minimum wage and number of hours worked; and provide working conditions that comply with applicable laws and industry standards.

• Respect the rights of workers – including contracted, temporary and migrant workers – to have freedom of association and the right to collective negotiation.

• Facilitate the inclusion of smallholders into the supply chain.

• Respect the rights of land tenure and the rights of indigenous and local communities to grant or deny their free, prior and informed consent to land operations in which they have legal or customary rights.

•Work in collaboration with stakeholders in order to improve labor, environmental and safety conditions in agricultural supply chains.

This policy applies to all palm oil supply chains in which ADM operates, from suppliers as direct as the very source (plantation regions and small producers) to any other company in which ADM owns a stake. To learn more about ADM's Human Rights Policy, <u>click</u> <u>here.</u>

Respect indigenous groups and local communities

ADM respects indigenous groups and local communities, based on the United Nations Declaration on the Rights of Indigenous Peoples of September 13, 2017, which recognizes among its key elements that "indigenous peoples are equal all other to peoples, while recognizing the right of all peoples to be different. to consider

themselves different, and to be respected as such".

#### Ensure food security for local communities

We promote food security in local communities by means of product diversification. Our technical staff support the production of small-scale producers, and product diversification is the mainstay of technical assistance.

#### Experiences in productive diversification for smallholders

In addition to contributing to the diversification of the ADM portfolio of products in Brazil, the palm oil plantation program aims to provide families with a complementary source of long-term income, as palm oil is a perennial plant.

Aside from palm oil, smallholders produce cassava, black pepper, and fruits as their main income crops. Other crops that they extract from their mountains include fruits of the Amazon like açai, cocoa, passion fruit, Brazilian nuts, and urucum. Farm animals such as pigs and poultry are also raised for family consumption.

The company supplies the materials to the farmers, trains them on sustainable farming practices, puts technical equipment at their disposal, and guarantees the purchase of the entirety of the production by families that are part of the project.

ADM, with the collaboration of Ecodendê and Emater-Pará, selected and registered each producer with prior consent, and acted as an intermediary with Fetagri (Federation of Workers in Agriculture in the State of Pará) and with BASA (Bank of the Amazon), which granted families credit lines with Pronaf Ecodendê.

The integration with ADM, through the Agreement of Technical Cooperation with Ecodendê, allowed BASA to advance the program with the advancement of funds in the municipalities of São Domingo do Capim, Mãe de Rio and São Miguel do Guamá.

### Respect conventions of the International Labor Organization (ILO)

We respect the conventions of the International Labor Organization, expressly related to Freedom of Association (No. 87); the Right to Organize and Collective Bargaining (No. 98); Forced Labor (No. 29 and No. 105); Minimum Age (No. 138); Worst Forms of Child Labor (No. 182): Equality Remuneration (No. 100) and Discrimination (No. 111).

#### **Conflict resolution process**

The company maintains a policy of developing supply chains that observe strict compliance with the Commitment to No Deforestation and the Human Rights Policy established by ADM. All conflicts that may occur within ADM-managed farms, smallholder operations and neighbor communities are settled in accordance with ADM Complaints and Resolutions protocol.

The process starts with a phone all, personal visit to our local office, or by sending email to an responsibility@adm.com, with the following information: Full name of (optional), name the organization, address, phone or email, and a detailed description of the problem and relevant evidence.

The response time will depend on the workflow of the sector. More details about ADM's Grievance and Resolutions Protocol can be found by <u>clicking here.</u>



Action in Community Palheta.

#### Building bonds with our communities

ADM actively embeds itself with residents near plantations, sharing knowledge that generates opportunities to improve their quality of life.

These periodic activities include talks led by doctors and nursing technicians on family health and the main ailments that affect women, such as breast cancer, as well as discussions led by ADM Human Resources professionals on "the family and its importance in the relationship of smallholders and business."

In the framework of the ADM Open Doors program, area students in their seventh to ninth years of school visit the palm oil plantations where they learn about the cultivation and characteristics of palm oil, among other topics. After the practical lesson, the ADM teams visit the schools to carry out dynamic exercises and group discussions.

#### **ADM Cares program**

ADM Cares is the company's corporate social investment that aligns ADM's program corporate giving with our business strategies and sustainability objectives. Through the program, ADM works to sustain and strengthen our commitment to communities where our colleagues work, live and operate by directing funding to initiatives and organizations that are driving meaningful social, economic and environmental progress worldwide.



Escola Municipal de Capitão Poço

# Partnership with stakeholders

05



### Socio-environmental protocol of the State of Pará, Brazil

As a member of the Brazilian Association of Palm Producers (Abrapalma)<sup>1</sup>, ADM adheres to the Protocol of Socio-environmental Intentions of Palm Oil.

Formalized by the government of Pará in September 2014, the Protocol seeks to unite interested citizens with private initiatives in search of joint actions towards the sustainable development of the productive chain of palm oil Specifically, plantations. the Protocol focuses on sustainable growth in eligible areas; that is, areas already deforested and suitable for planting.

The document was signed by representatives of the Secretariats of Agriculture, Economic Development and Incentive for Production and the Environment of the State of Pará, the Land Institute of Pará, the Green Municipalities Program, the Federation of Agriculture and Livestock for Pará FAEPA<sup>2</sup>, the National Rural Apprenticeship Service EMATER, the Bank of the Amazon, the Bank of the State of Pará, the National Rural

Apprenticeship Service and the Brazilian Association of Palm Producers Abrapalma.

### SENAR<sup>3</sup> – National Service for Rural Learning.

In partnership with SENAR, ADM offered courses to train more than 250 smallholders in 18 months.

The contents of the courses were divided into five different 40-hour modules. which included an introduction to safety awareness in the workplace, environmentally friendly practices and legislation, integrated control of pests and best practices, basic rural economics. and community partnerships.

The central objective of this effort is to provide producers with basic knowledge of how to produce palm oil sustainably, which is the first step towards obtaining certified products and, in turn, providing an educational foundation so communities can develop.

<sup>1</sup>Associação Brasileira de Produtores de Óleo de Palma <sup>2</sup>Federaçao da Agricultura do Estado do Pará <sup>3</sup>Serviço Nacional de Aprendizagem Rural Our goals for this initiative include:

• Short-term: Train smallholders to produce in a sustainable way with higher yields per area and a focus on keeping accident rates as close to zero as possible.

• Medium-term: Help smallholders produce the desired amount of palm oil to run the mill; produce RSPO-certified products with higher margins; maintain the Social Seal of Biodiesel; give small-scale owners a higher income; and have evidence to show of the positive impacts of palm oil when it is produced in the correct way.

• Long-term: Achieve continuous palm oil production during the entirety of its cultivation life on the plantations (about 25 years); own a profitable portion of the palm oil market in Brazil; and, fundamentally, for families to be motivated about developing more prosperous communities.

### **The Forest Trust**

Between November 28 and December 2, 2016, The Forest Trust (TFT) visited the smallholders area of the palm oil project.

The visit was part of the project's ongoing process of social and

environmental improvements, which reaffirm ADM's Commitment to No-Deforestation.

The objective of the field visit was to carry out a socio-environmental analysis of the main problems and challenges facing small-scale farmers. After the visit, TFT made a report with recommendations aimed at improving social initiatives and environmental projects, some of which have already been implemented, while others are in process.

### Solidaridad

The NGO Solidaridad has developed a tool called "Rural Horizon," which supports continuous improvements in the agricultural sector. This tool allows self-evaluation by producers regarding their social, environmental and productive practices, taking RSPO certification criteria into account.

In October 2015, 253 smallholders performed self-evaluations using Rural Horizons. The report's major findings identified the practices that needed to be improved in order to align the process towards RSPO certification. These challenges were incorporated into the technical assistance program carried out by ADM.

### Sociedade de Pesquisa em Vida Selvagem e Educação Ambiental (SPVS)

ADM reached an agreement with the Brazilian NGO SPVS to understand how the management of ecosystems and socio-economic issues at landscape-scale support the progress of social, economic and environmental objectives.

The project, designed to help small-scale farmers, links agriculture, traditional knowledge and biodiversity as the foundation for sustainability in rural areas of the eastern Amazon.

The areas of focus for this project are the municipalities of São Domingos do Capim, Mãe do Rio, and Irituia in the northeast of the State of Pará. These municipalities cover a total area of 3,535 km2 (approximately 873,650 acres), and encompass Amazonic ecosystems, forests, and rivers of great biodiversity.

The ecosystems in this area are very important for the conservation of biodiversity, and local social and economic development, but at the same time, are in great danger due to the level of deforestation that has occurred following years of logging and disorganized agricultural expansion in the region.

In total, these municipalities make up the main region for the supply of palm oil for ADM, located near the city of Belem. The palm oil from purchased these smallholders generates credits for the Brazilian "Seal of Social Fuel" program run by the Special Secretariat of the Federal Government of Family Farming and Agrarian Development, which is of strategic importance for the ADM biodiesel business in the country.

### Abbreviations and Acronyms



# Abbreviations and Acronyms

Abrapalma: Associação Brasileira de Produtores de Óleo de Palma		
ADM: Archer Daniels Midland Company		
BASA: Banco da Amazônia		
DDS: Daily Dialogue of Safety		
EMATER-Pará: Empresa de Assistência Técnica e Extensão Rural do		
Estado do Pará		
ESRPP: Environmental and Safety Risk Prevention Program		
FETAGRI: Federação dos Trabalhadores na Agricultura		
FFB: Fresh Fruit Bunches		
FPIC: Free, prior and informed consent		
GAP: Good Agricultural Practices		
HCS: High Carbon Stock		
HCV: High Conservation Value		
ILO: International Labour Organization		
IPM: Integrated Pest Management		
IUCN: International Union for Conservation of Nature		
LUCA: Land Use Change Analysis		
MLE: Ministry of State Labour and Employment		
OSHA: American Safety and Health certification		
PPE: Personal Protection Equipment		
RSPO: Roundtable for Sustainable Palm Oil		
SEIA: Social and Environmental Impact Assessment		
SENAR: Serviço Nacional de Aprendizagem Rural		
SPVS: Sociedade de Pesquisa em Vida Selvagem e Educação Ambienta		
TFT: The Forest Trust		
WHO: World Health Organization		

49

