MATO GROSSO - Total area 903,378.292 Km²

PARIS – MATO GROSSO

- Cuiabá
- Sorriso
- Campo Novo dos Parecis
- Querência
- Campo Verde
We have more than 55,000 members

Spread over regional centres, in 35 towns in Mato Grosso
We have more than 5.5k members

Spread over regional centres, in 35 towns in Mato Grosso

83% are small to medium size
How we work?

Assembly, Board And Comissions
We produce approximately 27% of the soybean and corn in Brazil and 27% in the world.

MT x Brazilian percentages:
- 1st Crop: 33%
- 2nd Crop: 33%

(MT) World percentage:
- 2020: +3%
17/18 Crop
Soybean Production – Brazil
35.1 m Ha - 119.3 m tonnes

Soybean Production - MT
9.5 m Ha – 32.5 m tonnes

17/18 Crop
Corn Production – Brazil
16.6 m Ha - 80.8 m tonnes

Corn Production - MT
4.6 m Ha – 27.4 m tonnes
- Two crops in the same season – soy followed by corn or cotton and pasture;
- Scale, mechanization, technology, conservation;
- No irrigation.

We produce many other grains in the same area where soy is planted.
“NAME AND PROUD”

How do we make our farming the most sustainable in the world?

Soil Conservation
Soil Protection

No-till farming with straw
Research into diverse cover crops – crop rotation, soil decompression, increase in organic matter, hay, pest control
A number of private companies, public organs and farmers are looking for the best options for cover crops - Also for nematode control
- Soil Protection
- Nematode Control
- Straw cover formation
- Increase in Organic Matter
- Nutrient cycling
- Feed for cattle
- No-till planting in straw cover
Favouring local biodiversity – populational increases (abundance of food)
Second Crop (after soy) – in the same area, at the end of the rainy season - CORN
Second Crop (after soy) – in the same area, at the end of the rainy season - COTTON
PROLONGING THE SOIL PROTECTION PERIOD

- Consortium with Brachiária spp
- Nematode control
- Straw cover formation
- Increase in level of organic matter
- Nutrient Cycling
- Feed for cattle
- No-till planting in straw cover
At corn harvesting time, there is already a cover crop growing – Brachiaria spp
Brachiaria spp, which will be used as cattle feed.
Brachiaria spp, which will be used as cattle feed. Even greater nutrient cycling and an increase in organic material in the soil.
You have seen part of this production sustainability!!!
Brachiaria spp, in the area you visited at the beginning of the year
After grazing and the first rainfall – the soil is NEVER UNCOVERED – THERE IS NO EROSION
Recuperação de pastagens degradadas

Seminário de Sensibilização e Difusão do Programa ABC
Estado de Tocantins
Palmas, 27 de abril de 2010

Lourival Vilela
APROSOJA RESEARCH CENTRE– CAMPO NOVO DO PARECIS, MT
Soybean Results
RESEARCH CENTRE- APROSOJA - CAD
2017/2018 Crop

Campos Novo do Parecis- MT
CAD PARECIS – RESEARCH results (SOYBEAN)
2017/2018 crop

Fotos tiradas em 30/01/2018
CAD PARECIS - RESEARCH results (CORN)
2017/2018 crop

Control

0.5 x DR

DR

2 x DR

4 x DR

0.5 x DR (annual)

DR (annual)

10 x DR

Fotos tiradas em 30/01/2018
APROSOJA RESEARCH CENTRE – CAMPO NOVO DO PARECIS, MT

FIELD DAYS – MORE SENSITIVE AREAS – SANDY SOILS –
“NAME AND PROUD”

Rivers and lakes with pure, crystalline water – with NO SOLID OR CHEMICAL RESIDUES
SORRISO

Grau de Conservação

Nascentes (Qtda)
1426

Ótimo/Bom/Regular (%)
95,09%

Ruím/Pessimo (%)
4,91%

Vegetação

76,9% TOTALMENTE VEGETADO
76,1% BOM
11,1% REGULAR
ÓTIMO

7,9% SEM VEGETAÇÃO
14,9% PARCIALMENTE VEGETADO
In order to WIDEN OUR PRODUCTION SUSTAINABILITY (BEYOND THE PROTECTED NATURAL AREAS)

BIOLOGICAL PEST CONTROL
Bacillus thuringiensis (for caterpillars)
Bacillus subtilis (nematodes, leaf diseases, promotes growth)
Bacillus amyloliquefaciens (seed treatment against nematodes Pratylenchus)
Bacillus pumilus (leaf diseases)
Azospirillum brasilense (grass N fixer)
Bradyrhizobium japonicum – soy nitrogen fixer

BIological Pest Control on Farm
DIRECT FARMER PARTICIPATION

PEST MONITORING

IDENTIFYING NATURAL ENEMIES

CONTINUOUS LEARNING
Soy Nitrogen Fixing through symbiosis with *Bradyrhizobium japonicum*

To produce 1 ton of soy, 80 kg N is required

More than 240 kg of N/ha (avoiding need for chemical fertilizers)

With each soybean crop, 539 kg of corn production is added due to N accumulation in the soil

http://www.iac.sp.gov.br/noticiasdetalhes.php?id=754
Internet images showing low oxygen concentration zones in the Gulf of Mexico due to high nutrient levels washed from the region’s croplands in the summer.
Cultive Sua Liberdade de Escolha

WWW.SOJALIVRE.COM.BR
PARTNERSHIPS WITH PUBLIC AND PRIVATE RESEARCH COMPANIES (CONVENTIONAL - GMO FREE VARIETIES)
OCUPAÇÃO E USO DAS TERRAS NO BRASIL (02/2017)

“NAME AND PROUD”

Areas destinadas para conservação de vegetação nativa em propriedades rurais:
- Vegetação nativa em terras indigenas: 13,8%
- Vegetação nativa em terras devolvidas e não cadastradas: 18,9%
- Vegetação nativa em terras indigenas: 13,1%
- Plantadas e não cadastradas: 1,2%
- Florestas plantadas: 1,2%
- Lavouras: 7,8%
- Pastagens nativas: 8,0%
- Pastagens plantadas: 13,2%

Farming Use
Uso Agropecuário

Cultivated pasture
Native pasture
Cropland
Planted forests
Infrastructure and others

Native vegetation on unclaimed and non-registered land
Native vegetation on Indigenous land
Areas destined for Protected and Preserved Vegetation
Areas destined for Protected and Preserved Vegetation

Fontes: SFB; SICAR, EMBRAPA; IBGE; MMA; FUNAI; Dnit; ANA; MPOG.
CATTLE FARMING ON NATIVE PASTURES IN THE PANTANAL
Agronomy, Use, and Occupation USA

Farming Use Uso Agropecuário

- Pasture 29.0%
- Cropland 17.4%
- Native vegetation on non-farming land 8.7%
- Indigenous land 5.8%
- Cities, infrastructure, and others 5.8%
- Conservation Units 2.3%
- Unidades de Conservação 8.9%

Areas destined for Protected and Preserved Vegetation

Outros (5.8%) Others (5.8%)

Fonte: USDA, Economic Research Service using data from the Major Land Use data.

Aprosoja Norte Oriental
TOTAIS PROTEGIDOS E PRESERVADOS ÁREAS NO BRASIL
(EQUIVALENTE À SUPERFÍCIE DE 28 PAÍSES DA EUROPA)

"NAME AND PROUD"
For additional information and data, go to Croplands.org
Land use

“NAME AND PROUD”

- 10.4% Agriculture
- 24.5% Pasture
- 0.3% Other Uses

- 33.9% Area preserved by farmers
- 16.6% Indian Reservations
- 11.8% Non registered Areas at CAR
- 2.5% Conservation units
- 3.0% Native Pastures

Source: EMBRAPA, 2017
Brazil: Production of 119.5 milhões tonnes in 2018.

The Brazilian soybean farmers are highly efficient: the average soy yield is 3.4 tonnes/Ha

Growing using a no-till system with multiple crops: integrating crops and livestock; or soy + corn + grass for cattle one year and then cotton

Brazilian soybean: 38% protein.

USA 2017 (dry conditions), an average of 34% protein, the same amount as 2008 and the lowest quality since 1986.
Aprosoja visits farms to advise farmers on how to comply with environmental and labor law requirements.

CONTRIBUTED TO GOVERNANCE OF FARMING ACTIVITIES

CONTRIBUTED TO CONSERVATION OF NATURAL RESOURCES

CONtributes to the well-being of workers, farmers and local communities.
CODE OF CONDUCT OF SOYBEAN PLUS

BASE CONCEITUAL - II

CONSTITUIÇÃO FEDERAL

LEI DO TRABALHO RURAL - Lei 5889/73

CLT - CONSOLIDAÇÃO DAS LEIS DO TRABALHO

NR 31 - NORMA REGULAMENTADORA DE SEGURANÇA DO TRABALHO, SAÚDE OCUPACIONAL E MEIO AMBIENTE DO TRABALHO RURAL

CÓDIGO PENAL - CRIMES CONTRA A ORGANIZAÇÃO DO TRABALHO

AUDITORIAS DE CAMPO - METODOLOGIA

- AUDITORIAS DE CAMPO E RH
- LISTA DE VERIFICAÇÃO (CHECK LIST)
- VERIFICAÇÃO FÍSICA
- VERIFICAÇÃO DOCUMENTAL
- ENTREVISTAS - GESTORES E COLABORADORES
- ELABORAÇÃO DO PLANO DE CORREÇÃO DAS NÃO-CONFORMIDADES

CÓDIGO DE CONDUTA

BASE CONCEITUAL - I

DECLARAÇÃO DOS DIREITOS E PRINCÍPIOS FUNDAMENTAIS NO TRABALHO DA CBT

- ABOLIÇÃO EFETIVA DO TRABALHO INFANTIL (CONVENÇÕES 138 E 182)
- ELIMINAÇÃO DE TODAS AS FORMAS DE TRABALHO FORÇADO OU OBRIGATÓRIO (CONVENÇÕES 29 E 105)
- LIBERDADE DE ASSOCIAÇÃO E DE ORGANIZAÇÃO SINDICAL E RECONHECIMENTO EFETIVO DO DIREITO DE NEGOCIAÇÃO COLETIVA (CONVENÇÕES 87 E 98)
- ELIMINAÇÃO DA DISCRIMINAÇÃO EM MATÉRIA DE EMPREGO E OCUPAÇÃO (CONVENÇÕES 100 E 111)
THE FOREST CODE

1934 – The First Forest Code.

1965 – Decree bringing it into law, 4771/1965.

Art. 12. All rural property shall maintain an area with native vegetation cover, as a Legal Reserve, without prejudice to the application of the rules on Permanent Preservation Areas, observing the following minimum percentages in relation to the area of the property, except in cases provided for in art. 68 of this Law:

I - located in the Legal Amazon:
   a) 80% (eighty percent), in the property situated in a forest area
   b) 35% (thirty five percent), in the property located in a closed area;
   c) 20% (twenty percent), in the property situated in an area of general fields;

II - located in other regions of the country:
   20% (twenty percent).
SOJA PLUS LINES OF ACTION

I. Quality of Life
II. Best Practices
III. Financial Viability
IV. Product Quality
V. Social Responsibility

*All actions are free for farmers*
The mission is to promote and foster continuous improvement.

The program uses a sustainability trio (economic, social and environmental).

It helps overcome the lack of rural extension in Brazil, supporting and guiding the farmer.

It focuses on all parts of the productive chain (production, transformation, commercialization and conservation).

Coordinated actions among agents of the productive chain, public sector and society.
1. Identify challenges and opportunities
2. Promote actions to support and foster farmers
3. Monitor performance
4. Acknowledge progress
Topics:

- Health and safety;
- Labour contracts;
- Risk assessment;
- Adapting rural buildings;
- Environmental and labour laws and norms.

THE SOJA PLUS COURSE
SOJA PLUS
TECHNICAL ASSISTANCE IN MT
THE SOJA PLUS PROGRAMME PROGRESSION

2011
- Awareness Raising Workshops

2012
- Preparing Management Tools and Automation of Data Collection

2013
- Workshop for Information Exchange at a National Level

2014
- Signing the MOU with Europe

2015
- Start of Field Assistance - SOJA Plus

2016
- Expansion of Programme to National Level

2017
- Expansion of Programmes to an International Level, Signing of the Memorandum with China

2018
- IDH Pilot Project
**BOARD TARGETS – 2018/2020**

- Number of *Soja Plus* properties: **2000**
- *Soja Plus* courses held (a year): minimum **35**
- Number of participating **farmers** (on the course): minimum **15**
- Number of **properties** participating in each course: minimum **10**
- *Soja Plus* properties/ per year: minimum **350**
- **Minimum target for each field supervisor**: 3 courses/30 properties/year **(minimum)**
SOJA PLUS - PROGRESS

SENAR course: Quality of Working Life

**Objective:** Train producers in health and safety management - Duration: 16 hours

7 anos = 1,198 participating properties

<table>
<thead>
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<th>Year</th>
<th>2011 Course</th>
<th>2011 Participants</th>
<th>2015 Course</th>
<th>2015 Participants</th>
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<tr>
<td>2014</td>
<td>18 courses</td>
<td>263 participants</td>
<td>33 courses</td>
<td>501 participants</td>
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<tr>
<td>2015</td>
<td>197 courses held</td>
<td>2689 participants trained</td>
<td></td>
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</tbody>
</table>
Owner of the Dois Filhos ("Two Sons") farm
Come and Visit Mato Grosso

The most sustainable state on the planet!

Salto Belo - Campo Novo do Parecis/MT

Thank you! Antonio Galvan President

www.aprosoja.com.br