



INTERNATIONAL DAIRY FEDERATION DEMAND DRIVING FOOD SYSTEMS

CLIMATE CHANGE DRIVERS FOR DAIRY PRODUCTION

DR MARIA SANCHEZ MAINAR

9th ATF seminar

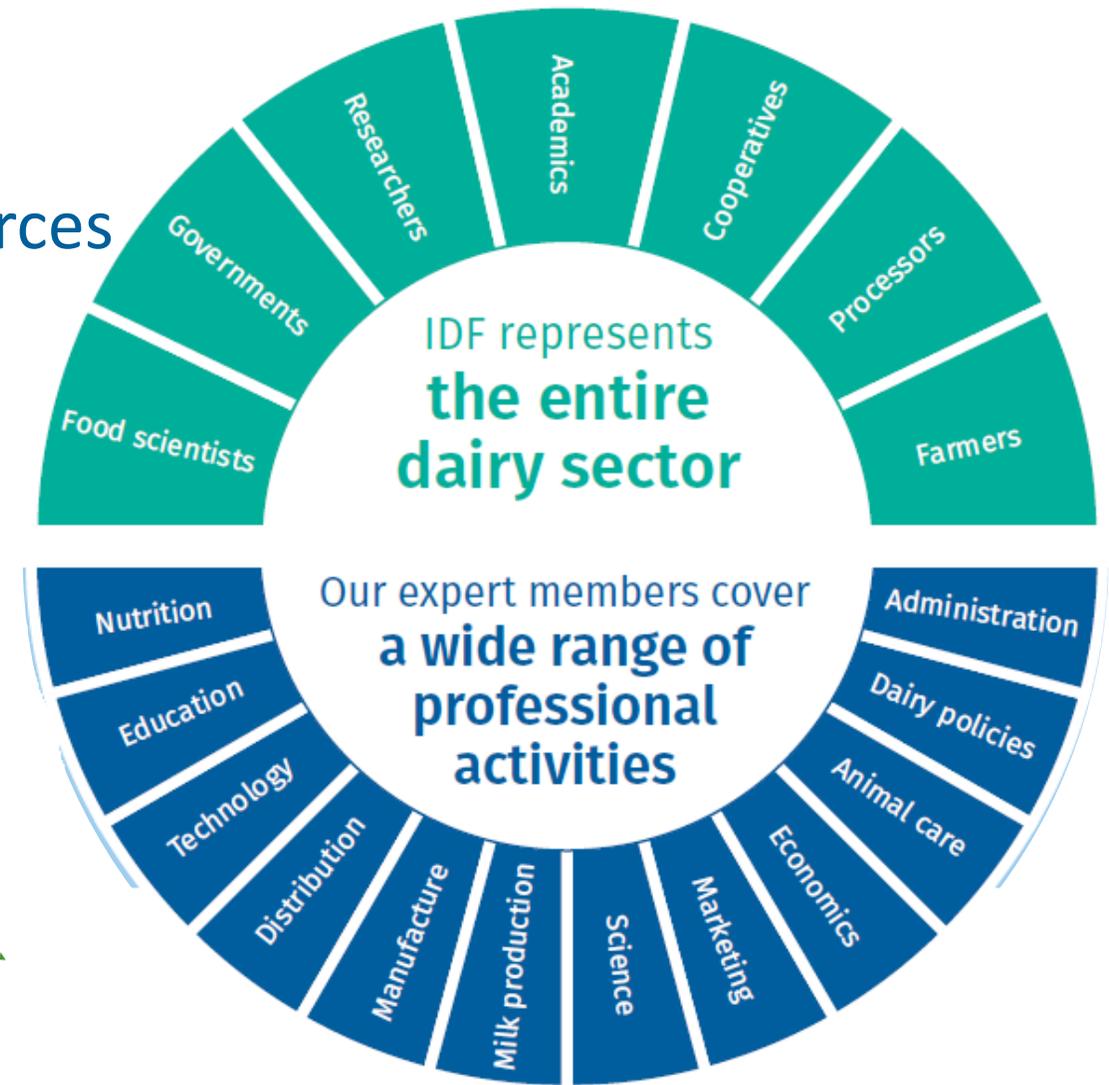
Wednesday 6th Nov. 2019 10:00h - 13:00h



THE INTERNATIONAL DAIRY FEDERATION

**GLOBAL DAIRY
EXPERTISE
SINCE 1903**

- Non-profit organization
- More than 75% of world milk production
- 1,200 experts, 17 S Committees & 5 Task Forces
- Accredited FAO, Codex, OIE, UNEP



THE INTERNATIONAL DAIRY FEDERATION

We provide
science-based
evidence and
advice for
standard and
regulation setting



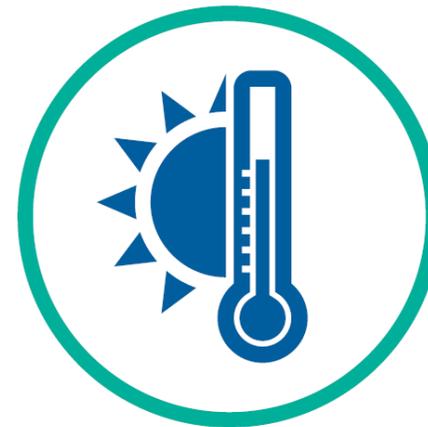
Serve as the
global voice
of dairy to
intergovernmental
organisations



Provide a forum
for the global
dairy sector to
reach consensus
on key dairy
issues



Farm
Management



Environment

ENVIRONMENTAL PERFORMANCE IS A KEY DRIVER OF THE LIVESTOCK SECTOR

A shift in demand towards **prevention and making producers responsible for the pollution they cause** has lead farmers, industry and regulators to seek limiting environmental liabilities through the improvement of environmental performance.

Search ▾ **The Guardian** International edition ▾

Farmers call for national strategy on climate change and agriculture

- IPCC report finds reduction in global heating requires transformation of food production and land management
- **Climate crisis reducing land's ability to sustain humanity, says IPCC**

Food and Agriculture Organization of the United Nations

Livestock solutions for climate change

Farming in a Risky Climate: Consumers demand a greener livestock industry

Sharon O'K @agronomy
4 Jul 2019, 8:30 a.m.

European Commission

English EN

Home > Energy, Climate change, Environment > Standards, tools and labels

Standards, tools and labels

Product labelling, environmental impact assessment and certification procedures.



ENVIRONMENT **npr**

Fighting Global Warming Requires Changes In How Cows Are Fed

March 13, 2019 · 5:01 AM ET
Heard on Morning Edition

Sustainable dairy in Europe

Safeguarding our resources

ENJOY IT'S FROM EUROPE

CAMPAIGN FINANCED WITH AID FROM THE EUROPEAN UNION

The **dairy** sector

Over the last number of decades, Europe has witnessed an **environmentally-conscious movement and a demand for sustainable transformation.**

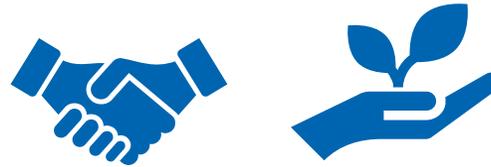
CARBON FARMING SCHEMES: WHO & WHY WE BENEFIT FROM THEM

Farmers & Industry



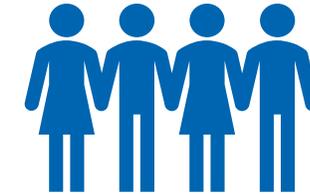
- Adhere to increasing **regulatory requirements**.
- Environment-related standards help **open world markets**.
- Essential to the **GHG markets** for cap-and-trade schemes, offsetting credits, carbon neutrality and low-carbon strategies and policies
- Get a handle on their own environmental impact and concrete actions to **improve efficiencies**.

Regulators



- They are a **solid base on which to create public policy** that meets international commitments and addresses the many challenges that climate change brings.
- Contributes to the **UN SDGs** on climate action

Consumers

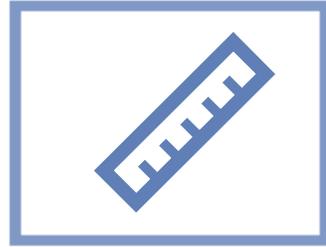


- Consumers benefit from standards when they are **used by both industry & authorities** to address climate change impacts

BOOSTING FARMERS AND PRODUCERS TO TACKLE CLIMATE CHANGE WITH CARBON FARMING SCHEMES OR STANDARDS



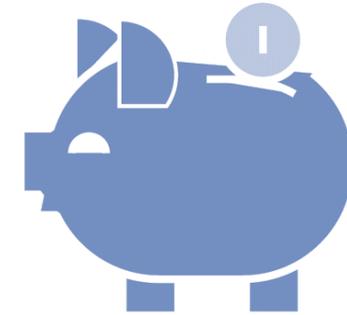
Environmental Management



Quantifying GHG emissions



Mitigation and adaptation



Financing climate change activities



Monitoring climate change



Communicating on environmental performance



Opening world markets to clean energy

and many more...

THE DAIRY SECTOR COMMITMENT

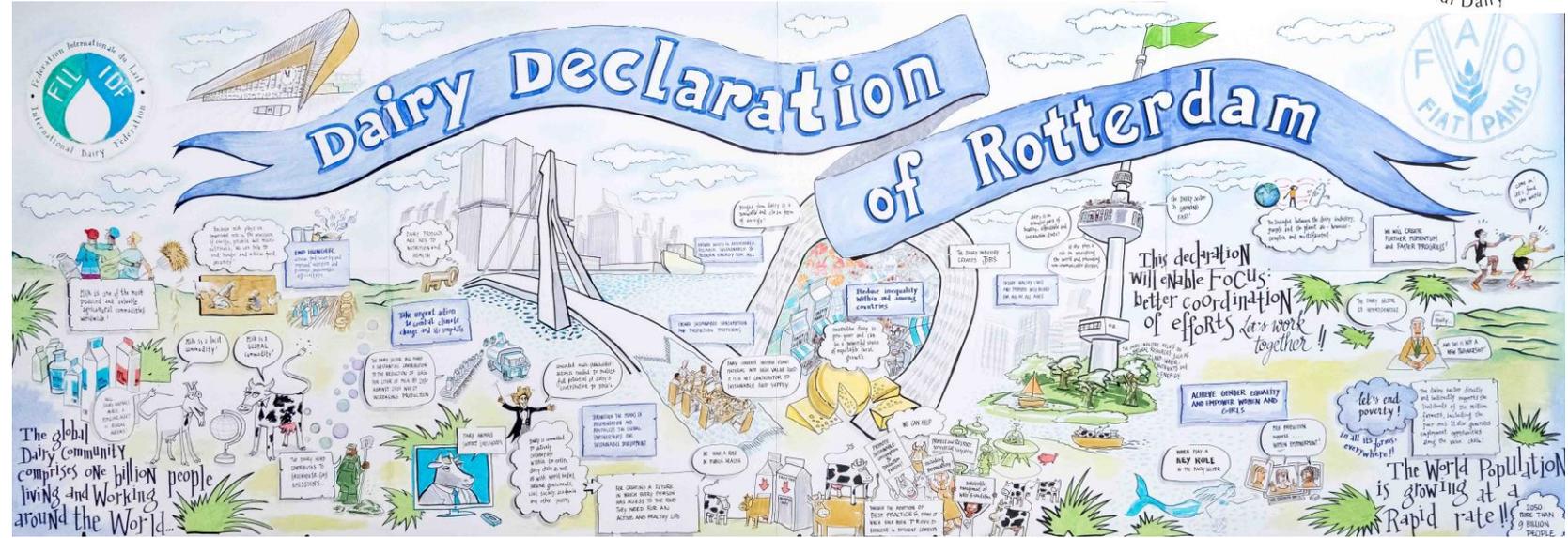


The production of milk is accountable for

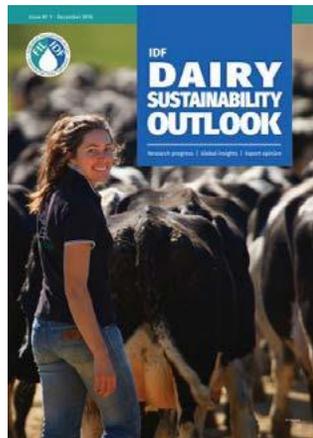
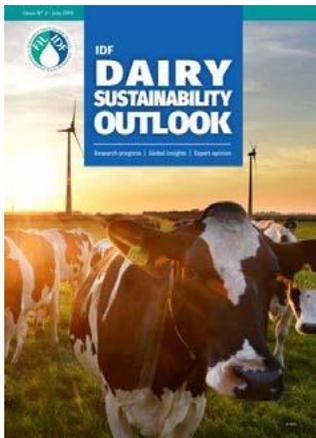
2,9 %

of GHG emissions world wide.

Livestock is accountable to **14,5 %** of GHG emissions world wide.



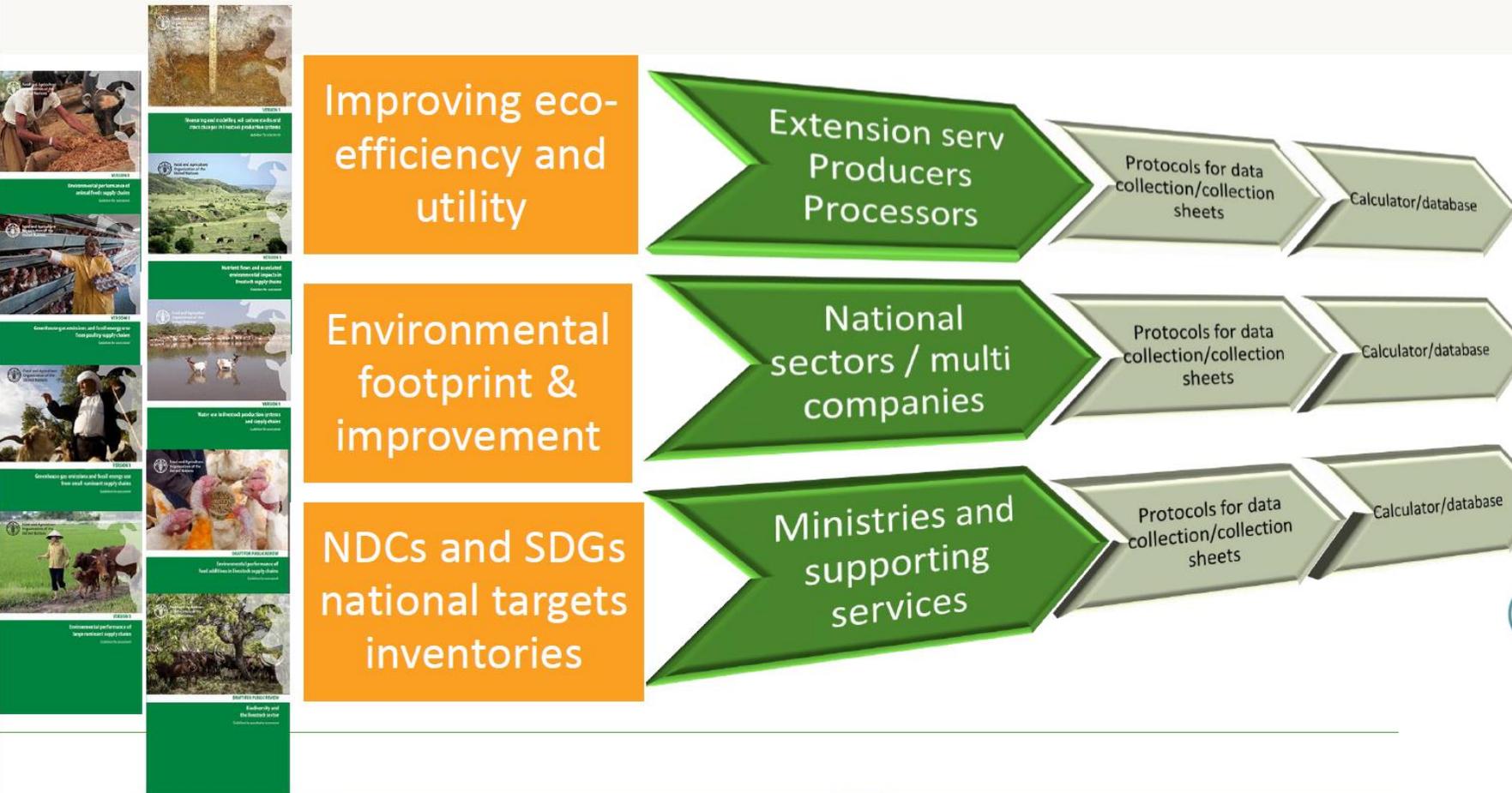
[HTTP://WWW.DAIRYDECLARATION.ORG](http://www.dairydeclaration.org)



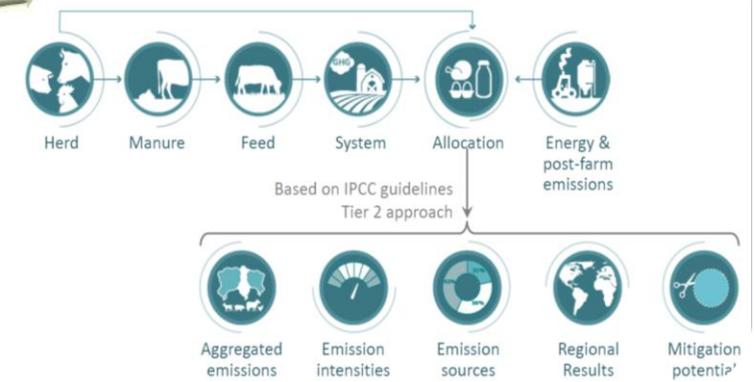
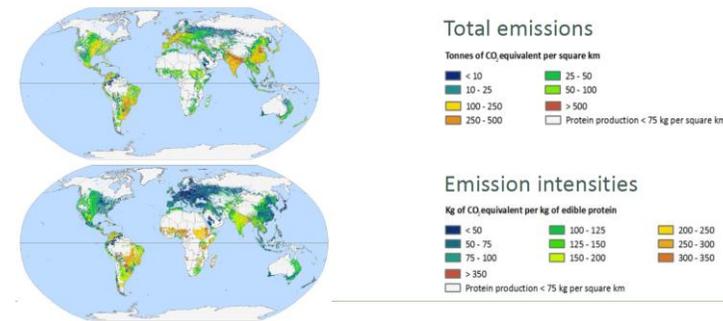
- | | | | |
|-------------|---------|--------------|-------------|
| China | UK | Lithuania | Australia |
| Israel | Belgium | Cyprus | New Zealand |
| Denmark | Japan | South Africa | Germany |
| France | Korea | Italy | FEPAL |
| Zimbabwe | Chile | ESADA | Canada |
| Poland | US | Argentina | Ireland |
| Netherlands | India | Norway | Finland |

THE DAIRY SECTOR COMMITMENT

Implementation: FAO LEAP guidelines into Global Livestock Environment Assessment Model



Total emissions and emission intensities

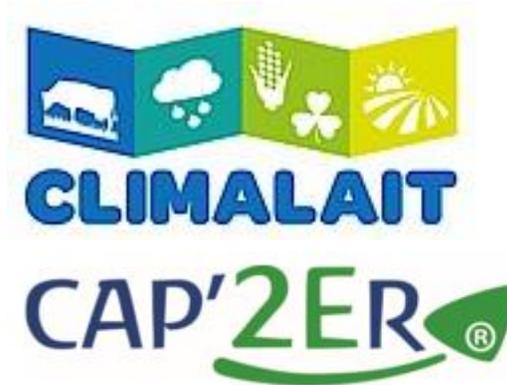
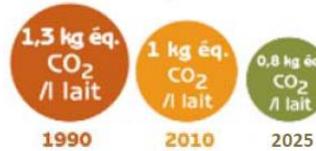
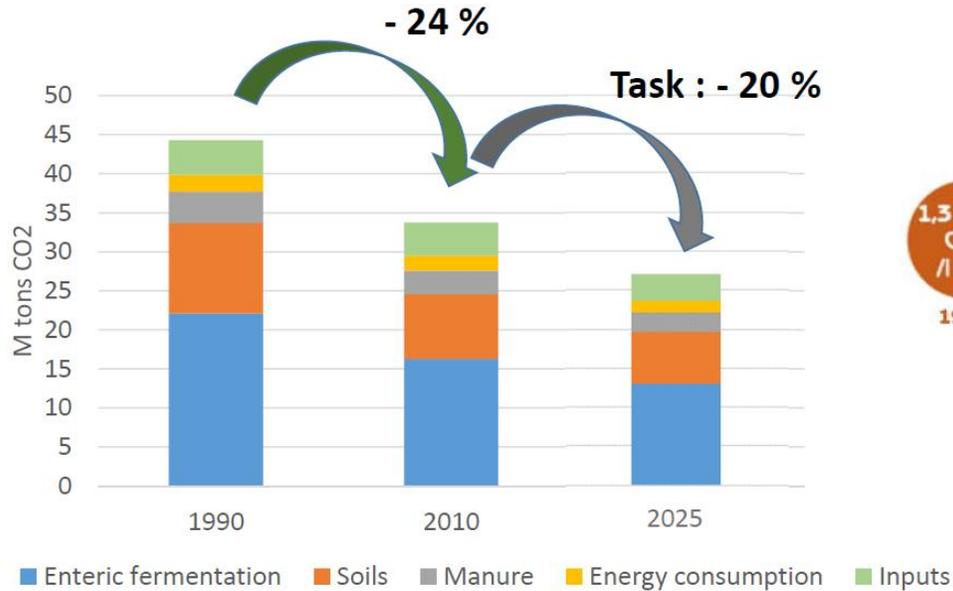


NATIONAL PROGRAMMES: EUROPE

FRANCE: National Programme - Low Carbon Dairy Farm



GHG emissions from dairy herd in France



- **Adaptation of Dairy Farms to Climate Change**

Impacts of Climate Change on forage and milk production
 Technical solutions to adapting dairy systems

- **Tackling Climate Change**

Contribution of dairy to GHG emissions & carbon seq
 Carbon audits in farms
 Technical solutions for reducing milk carbon footprint

NATIONAL PROGRAMMES: SOUTH AMERICA



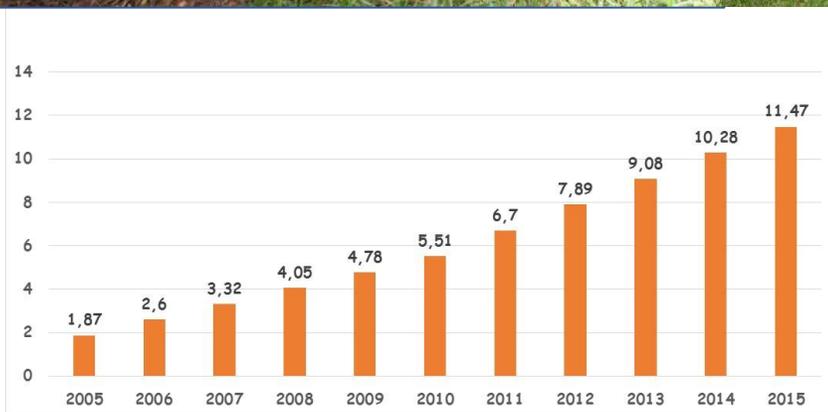
BRAZIL: National Programme – Carbon Neutral Milk

Sustainable Intensification for Tropical Regions

INTEGRATED CROP LIVESTOCK FORESTRY SYSTEMS (ICLFS) IN BRAZIL

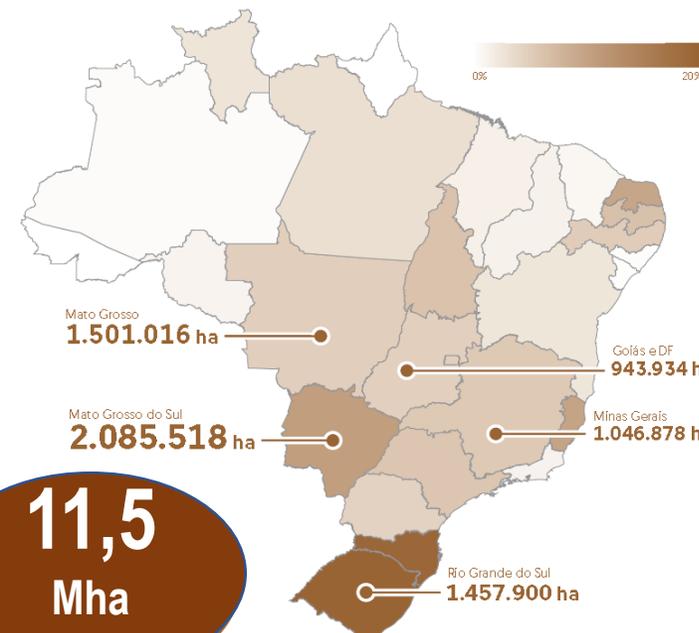


Foto: V. Porfírio-da-Silva.



10 years

Leite Carbono Neutro



11,5 Mha (2015)

NATIONAL PROGRAMMES: NORTH AMERICA

UNITED STATES: National Programme - US Dairy Stewardship Commitment

Cropland



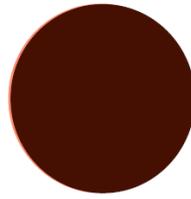
90% less
in 2007

Water



65% less
in 2007

Carbon



63% less
in 2007
Compared to 1944

“U.S. dairy farms have the lowest average GHG intensity of milk production globally”

A voluntary, stakeholder-aligned, and unified U.S. platform

FARM Environmental Stewardship (<http://bit.ly/2pRA3Uc>)

Collection and dissemination of information on GHG emissions and energy use

Continuous Improvement Reference Manual (<http://bit.ly/2sKnCiX>)

Practical, science-based ideas for reducing GHG emissions



Capper JL, Cady RA, Bauman D. The environmental impact of dairy production: 1944 compared with 2007. *J Anim Sci.* 2009;97(6):2160-2167.

Thank you

