Innovations in Uruguay to address issues related to livestock climate and natural resources use

Global Agenda for Sustainable Livestock

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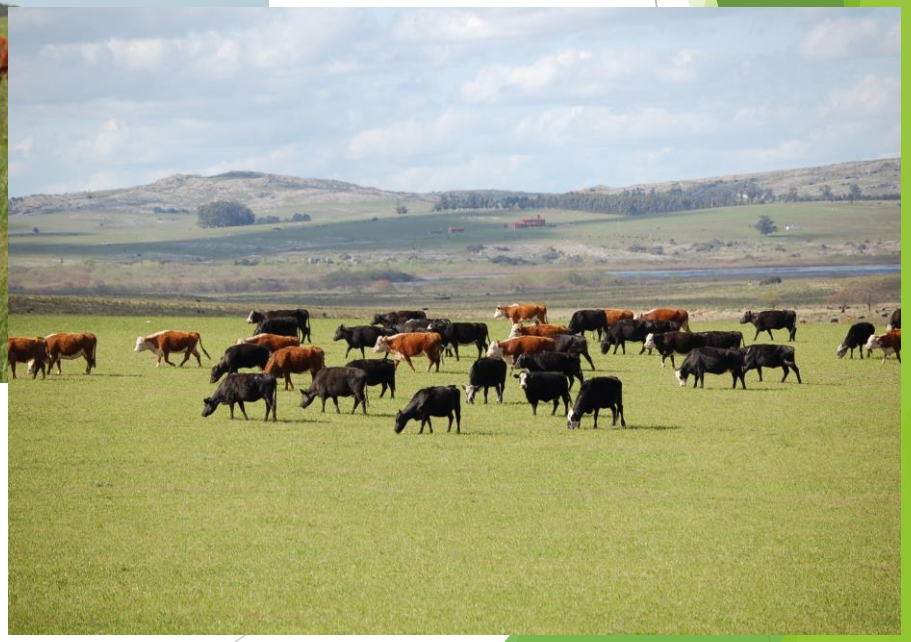
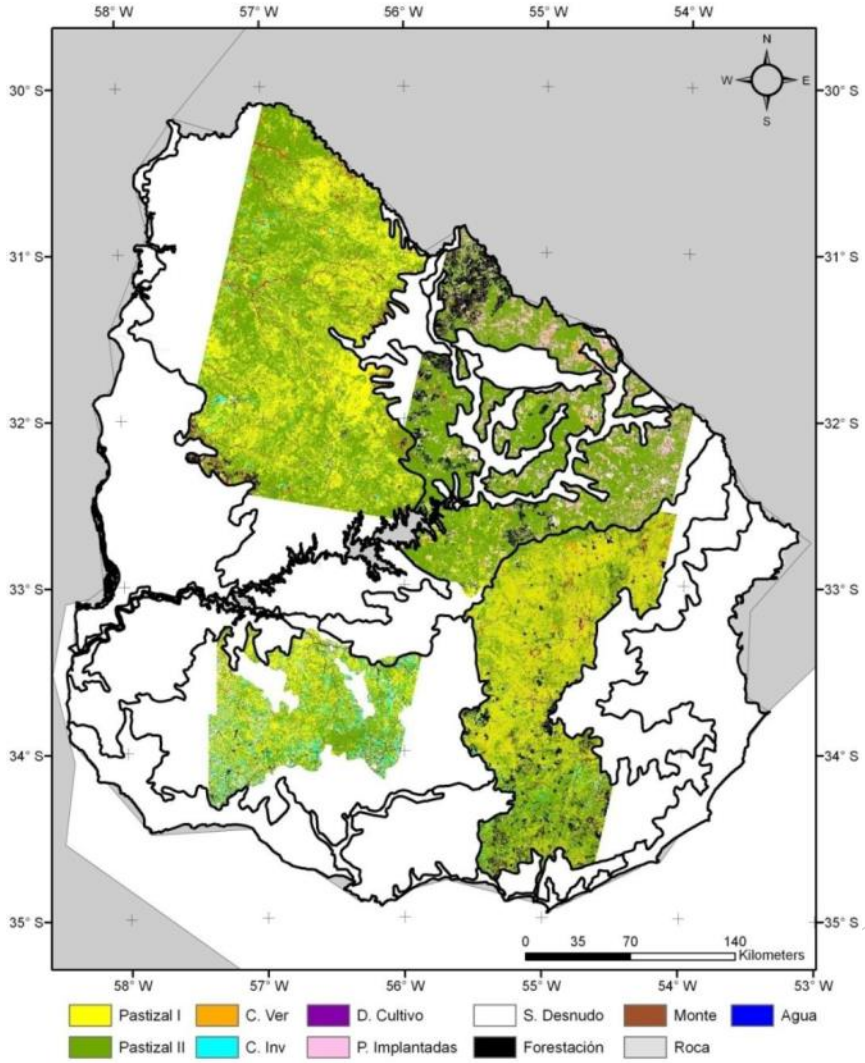
- Uruguay is a country with an economy strongly based on the livestock sector



Half of the territory is covered with high biodiversity Pampa´s rangelands



Uruguay´s Beef Sector

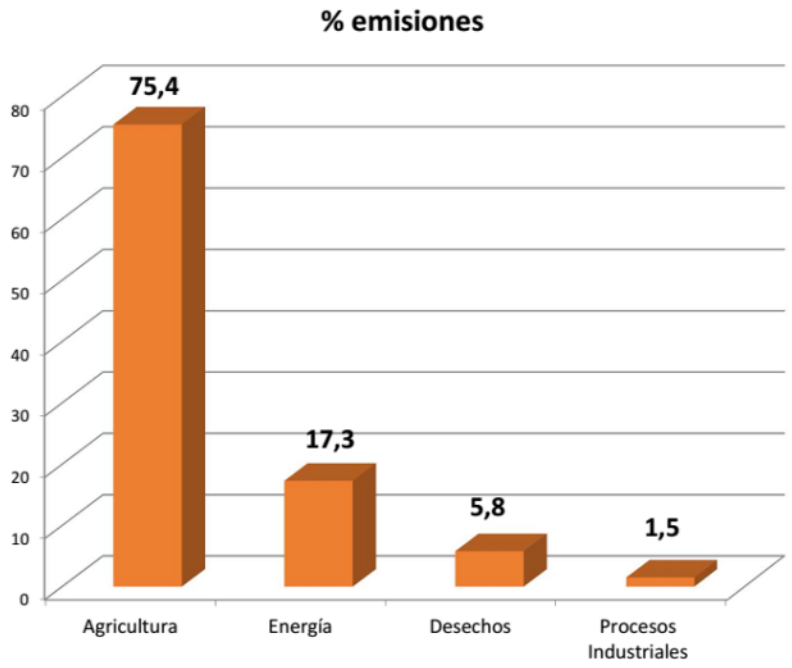
Mandatory individual traceability system

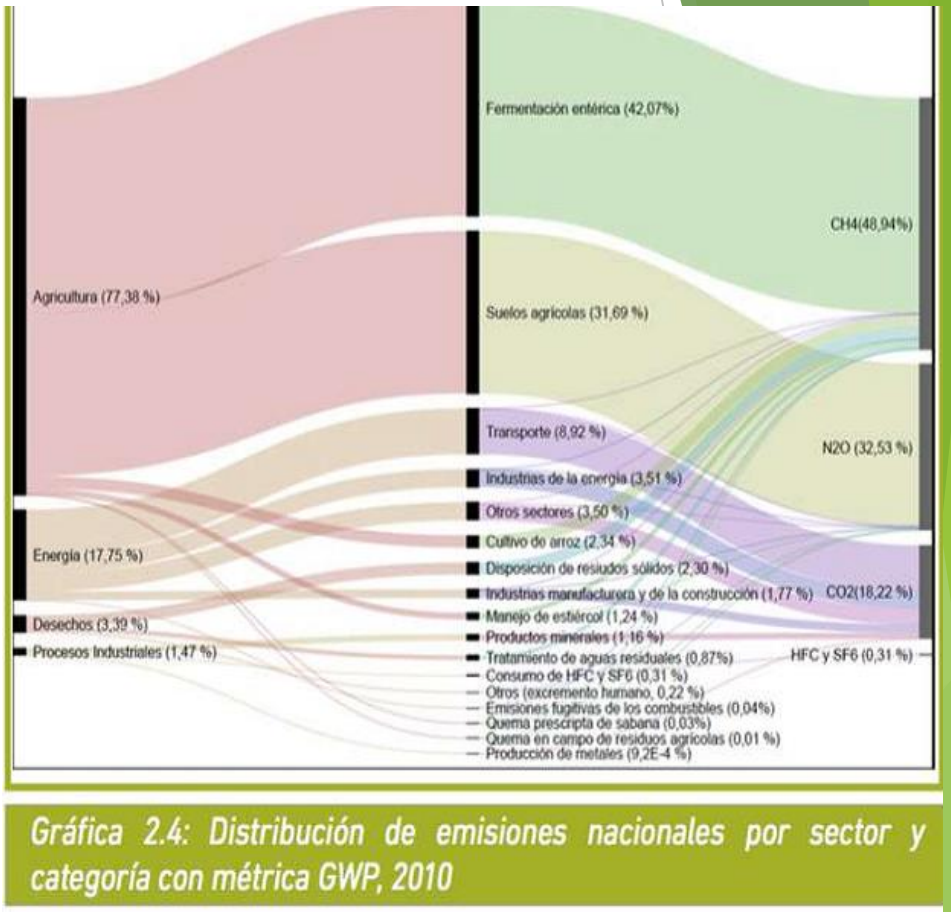
From farm to export product

Growth promoters are prohibited by law

Zero deforestation

Importance of GHG emissions of livestock in Uruguay





Gráfica 2.4: Distribución de emisiones nacionales por sector y categoría con métrica GWP, 2010

- Key sector in NDCs, NAMAs and NAP

Policies have set simultaneous targets to be achieved

1. More food and fibers.

2. Less environmental footprint.

3. Mitigation and adaptation of/to CC.

A new paradigm to guide the transformational change of livestock in Uruguay:

in search of higher social and environmental value added

Approach: co-benefits (What?) & Co-innovation (How?)

Co-benefits

Productivity

Económic

Social

Welfare

Biodiversity

Soil fertility

Ecosystem services

Co-innovation

Farmer <-> Adviser <-> Institutions

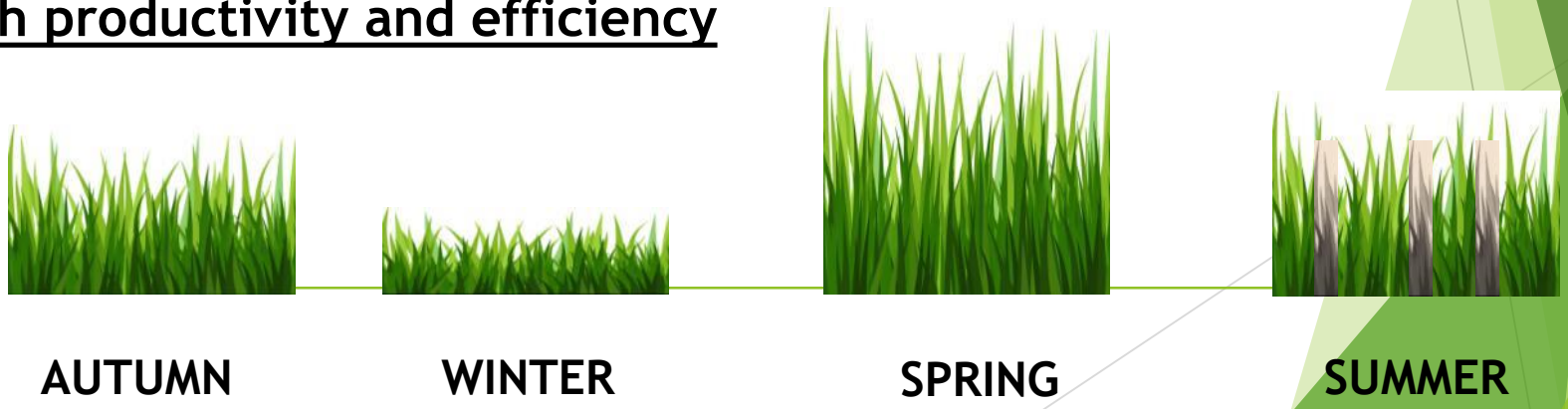
Learning <-> Planning

Systemic vision of the farm and the value chain

Innovations in grazing management: "Working with more grass"

Baseline: overgrazing, low NPP and low forage supply; low productivity and low efficiency

Alternative: high leaf area and high NPP, high forage supply; high productivity and efficiency

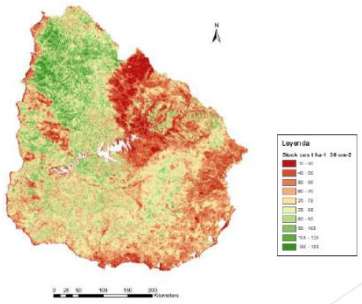


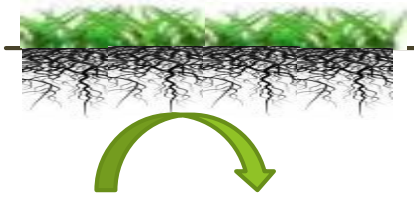
Innovations in herd management to increase efficiency and productivity

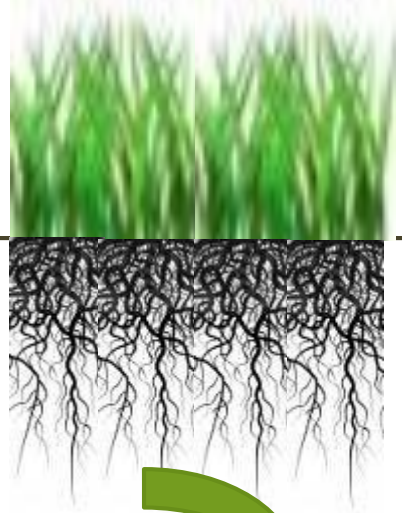
- Improve body condition of cows at birth
- Temporary and early weaning
- Flushing
- Reduce age of heifers at first mating
- Increase weaning rate
- Decrease slaughter age

C sequestration in soils and biomass can play a key role in sustainability and climate action

The challenge of transparent and sound monitoring. GHG inventories are a key piece.







Less SOC

+ C
y +N

Rebuilding SOC

Uruguay´s NDC: first developing country to set mitigation targets in terms of emissions intensity in the beef sector (per kg beef)

	2030 vs. 1990 inconditional	2030 vs 1990 with MOI
CH_4	33% less	46% less
N_2O	31% less	41% less

Finally, co-innovation should let us

- Use animals better for what they are good for.
- Make better use the one third of terrestrial surface covered with grasslands.
- Increase recycling of residues/by products of cropping and other activities contributing to a circular bioeconomy.
- Recognize the multiple values of nature contributions to people via animal husbandry (meat & ecosystem services): environmental value added.
- Minimize trade-offs.
- Innovation requires re-design production systems based on socio-ecological principles

¡Thank you!