

# Sustainable cattle ranching in Colombia:

An opportunity to connect agricultural landscapes and protected areas



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**COLOMBIA**

Food for Thought: Sustainable Agriculture and Protected Areas  
**World Parks Congress**



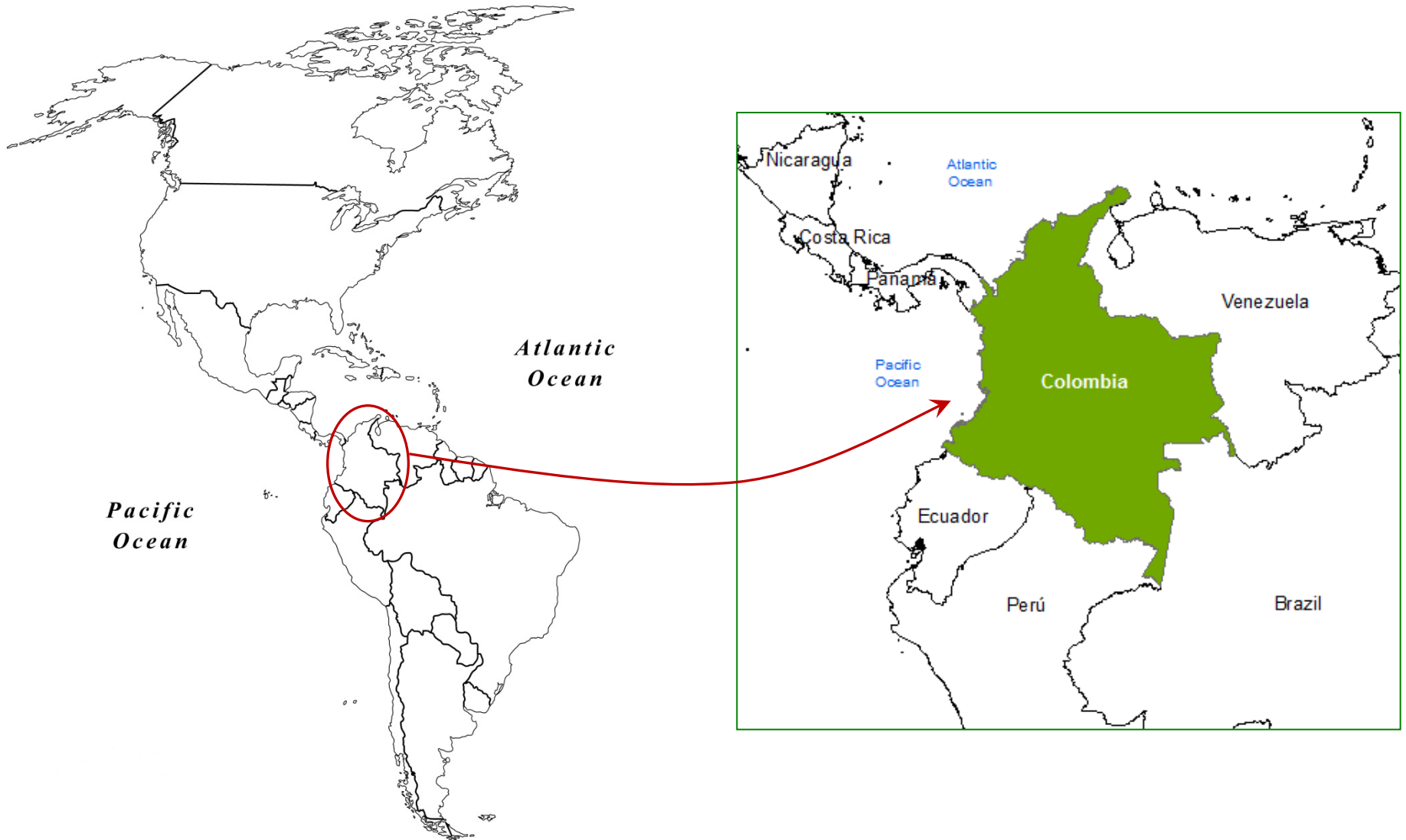
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# Context

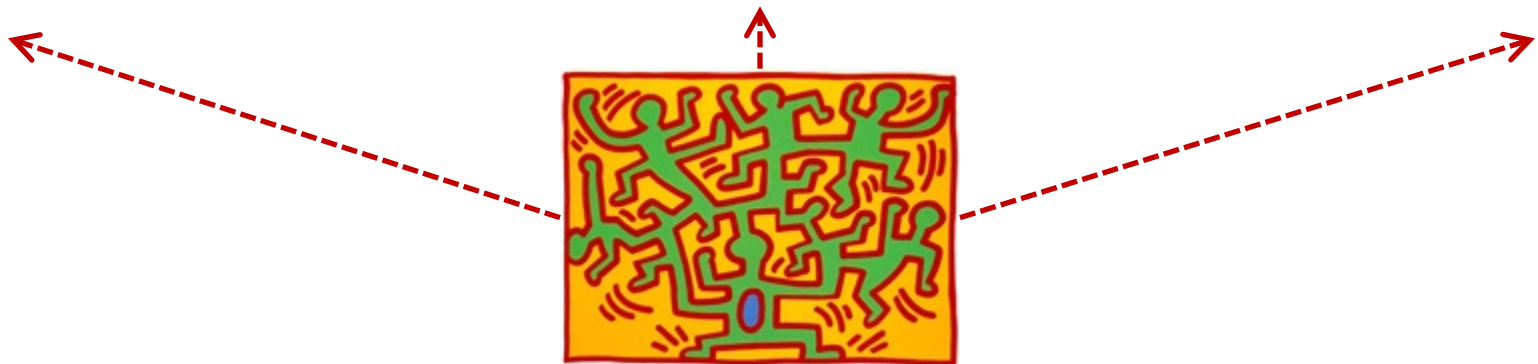
## Where is Colombia?





# The Problem

## Environmental Impacts

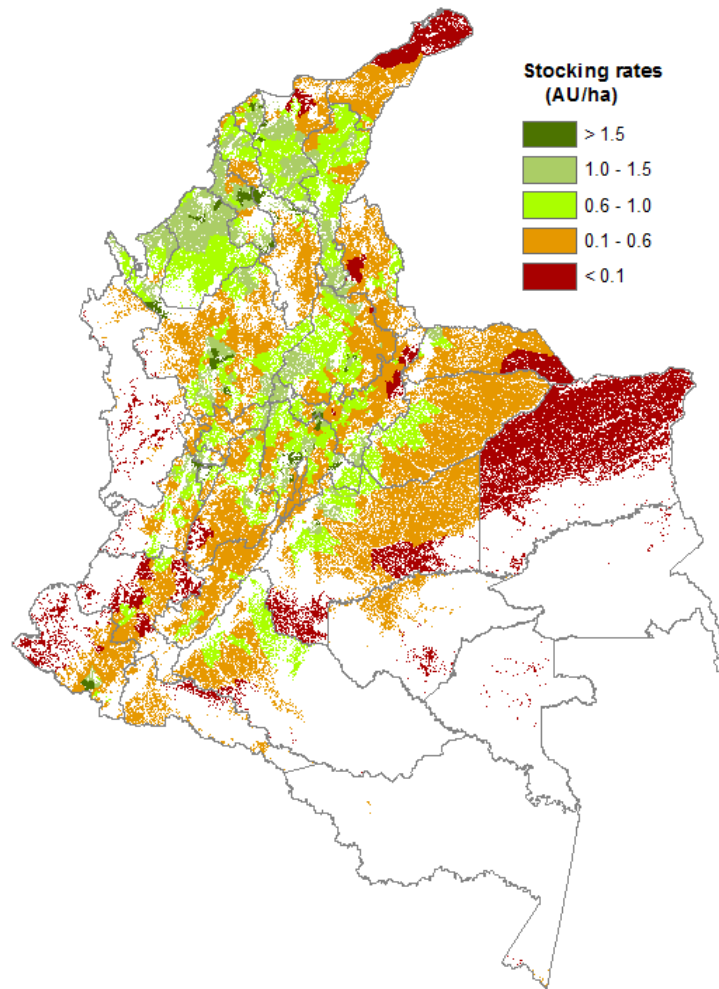


Keith Haring, 1988  
Growing IV

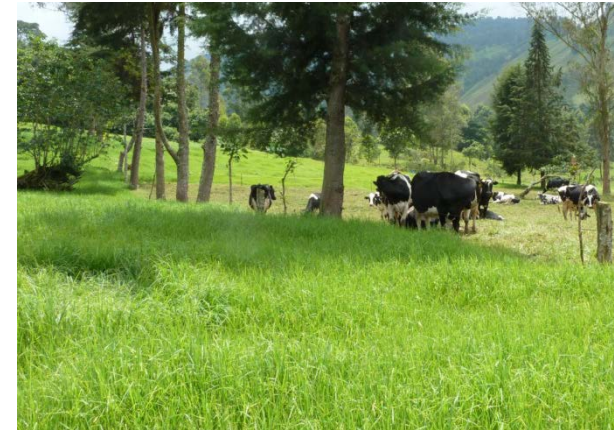
# The Problem

## Colombia: low productivity livestock sector

Productivity  
and impacts  
depend on  
the context



\* AU: Animal unit = 450 Kg





# Reconfiguration options

## The role of agri-landscapes

Sustainably managed with silvopastoral systems: *Tool for rehabilitating degraded lands*



Silvopastoral systems integrated with connectivity corridors and protected areas: *Part of a strategy for the ecological restoration of agricultural landscapes*



# At farm level

## Silvopastoral Systems





# Background

## Regional Integrated Silvopastoral Approaches to Ecosystem Management Project

**2002 – 2007**  
**Colombia, Costa Rica and Nicaragua**



# Background

## Regional Integrated Silvopastoral Approaches to Ecosystem Management Project

**Payment for  
environmental  
services**



**110 farms**

**Technical assistance to  
promote land use change**



**193 species of birds**



*Ammodramus humeralis*

**232 morpho-species of ants**





# What are we doing for scaling up?

## Mainstreaming sustainable cattle ranching project

2010 – 2017  
Colombia



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# What are we doing for scaling up?

## Mainstreaming sustainable cattle ranching project

**Payment for  
environmental  
services**



**3,000 farms**

**Climate  
change**



**Poverty  
reduction**



**Technical  
Assistance**



**Biodiversity**



**Nurseries**





# At landscape level

## Connectivity corridors

### Buffer strips

- Natural ecosystem fragments
- Scattered trees
- Intensive silvopastoral systems
- Live fences
- Wind breaks

*Payment for land uses sufficiently compatible with conservation*

### Core strip

- Natural ecosystem fragments
- Forest restoration

*Only farmers that commit to strict conservation receive payment*



# Rehabilitation of cattle ranching landscapes must:

3. Facilitate the release of fragile, marginal and strategic areas for ecological restoration.

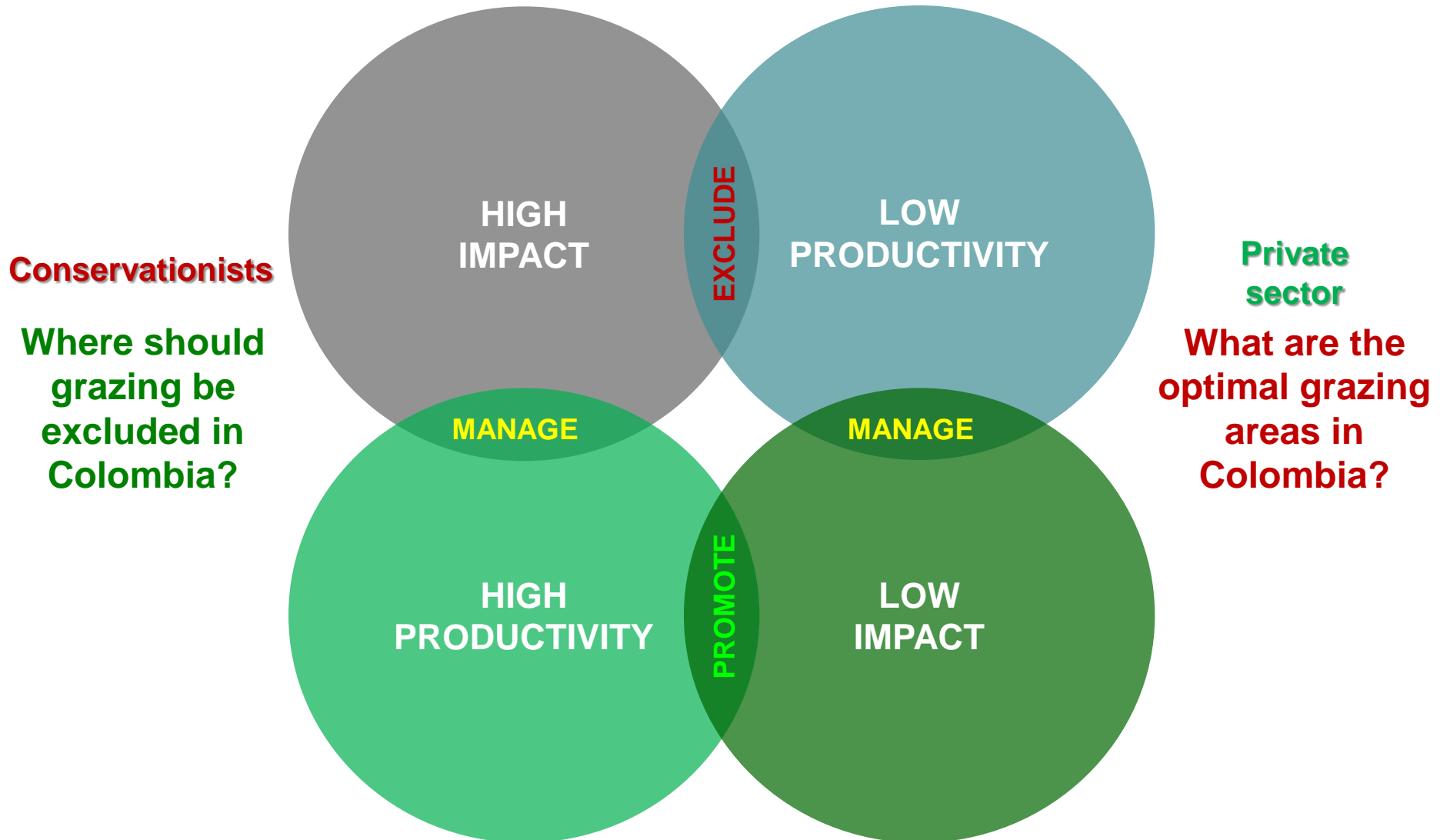
1. Increase productivity and profitability of the production system

2. Enhance the generation of environmental goods and services.



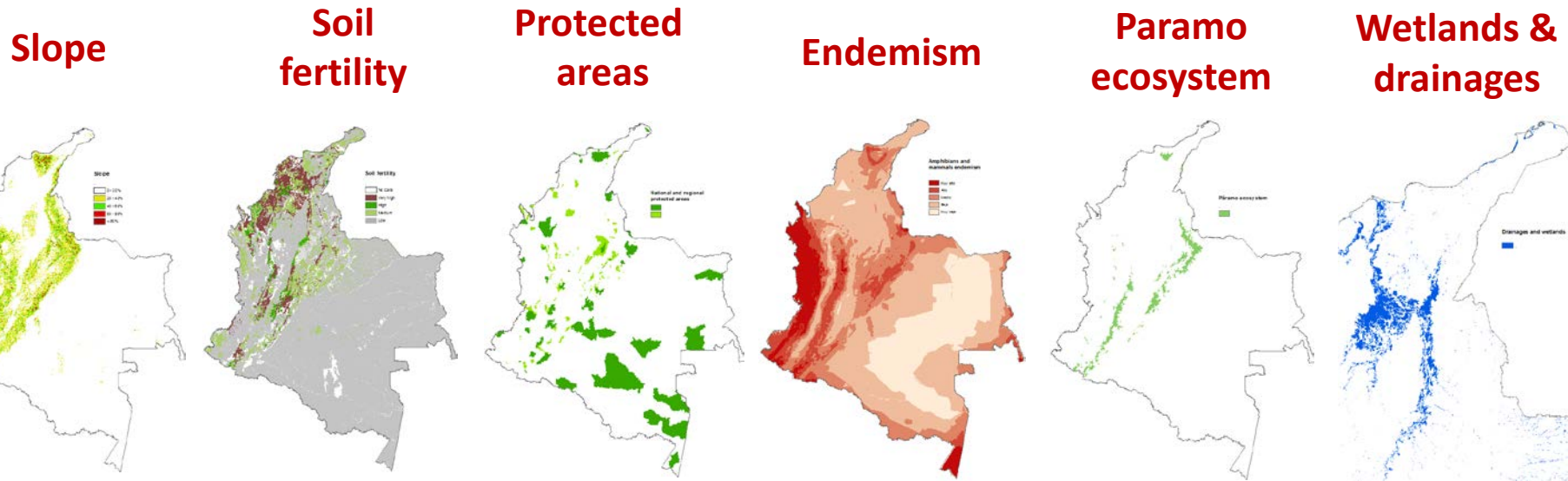
# At national level

## Planning proposal



# At national level

## Scenarios and their biophysical exclusion criteria



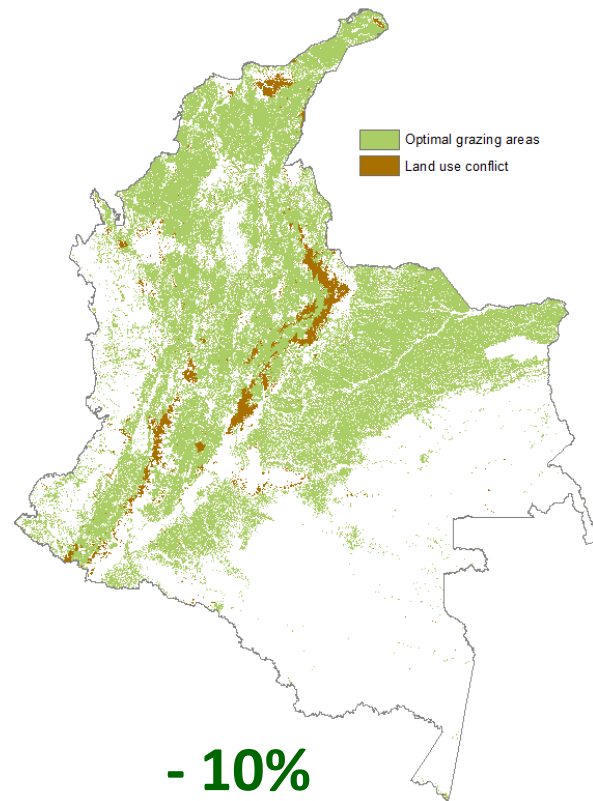
	Scenario 1 Minimum	Scenario 2 Moderate	Scenario 3 Maximum
Slope	> 80%	> 60%	> 40 %
Soil fertility	-	Very high	High and very high
Amphibians and mammals endemism	-	Very high	High and very high
National protected areas exclusion	Total	Total	Total
Regional protected areas exclusion	Partial	Partial	Total
Drainages and wetlands exclusion	Total	Total	Total
Páramo ecosystems exclusion	Total	Total	Total



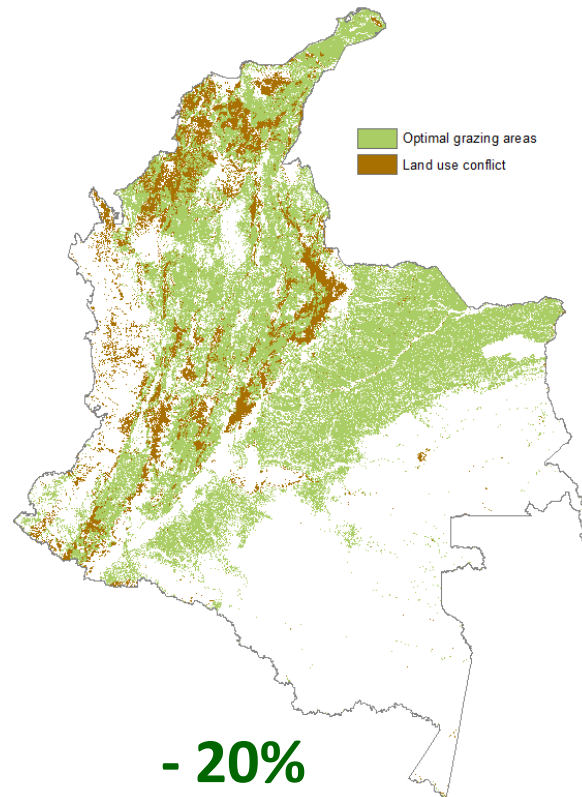
# Multi-criteria analysis

## Optimal grazing areas

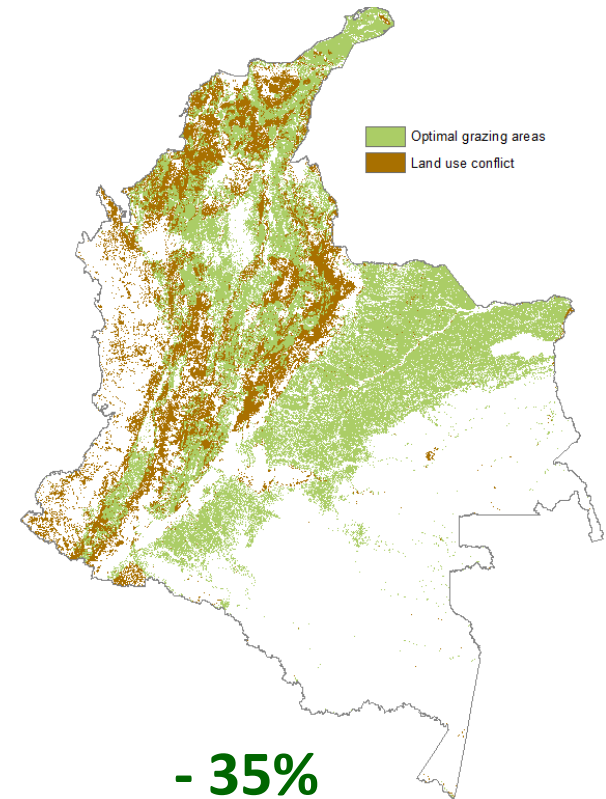
**Scenario 1**



**Scenario 2**



**Scenario 3**



**The cattle ranching sector aims to reduce 10 million hectares (Fedegan)**

# Conclusions

- ❑ Cattle ranching: an opportunity for conservation
- ❑ Social-ecological systems
- ❑ Agro-ecosystems and Ecosystem services
- ❑ Land sparing, wildlife friendly farming, sustainable intensification
- ❑ Balance between conservation and production
- ❑ Increase yields to reduce the requirement for farmland
- ❑ Dialogue in scenarios construction of public and private policies



**¡THANK YOU!**



***Visit Colombia***  
***The only risk is wanting to stay...***