

avaclim

VALUE AGROECOLOGY FOR DRYLANDS



Agroecology, a way to achieve prosperity by 2030?

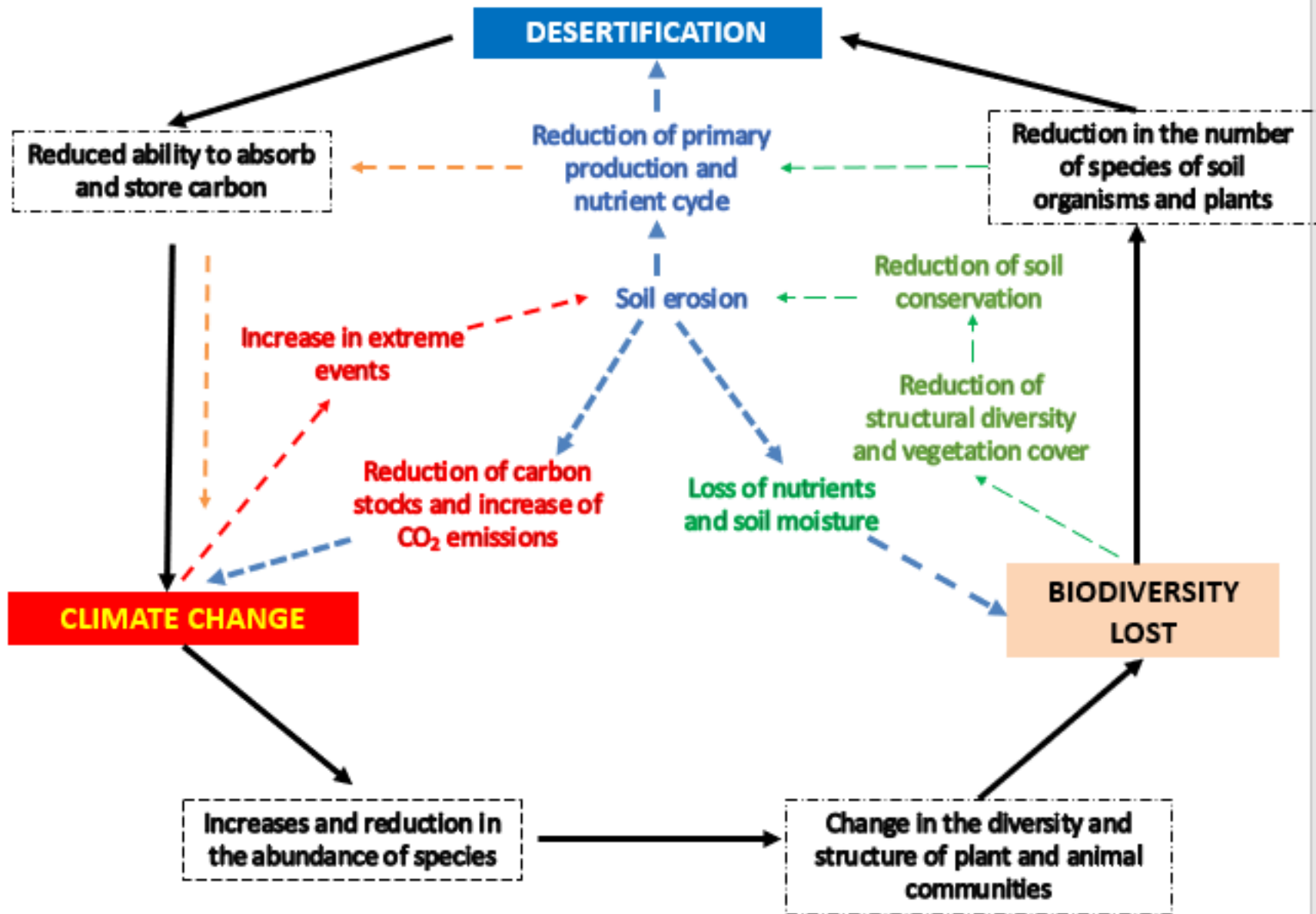
Aldrin Martin Pérez-Marin

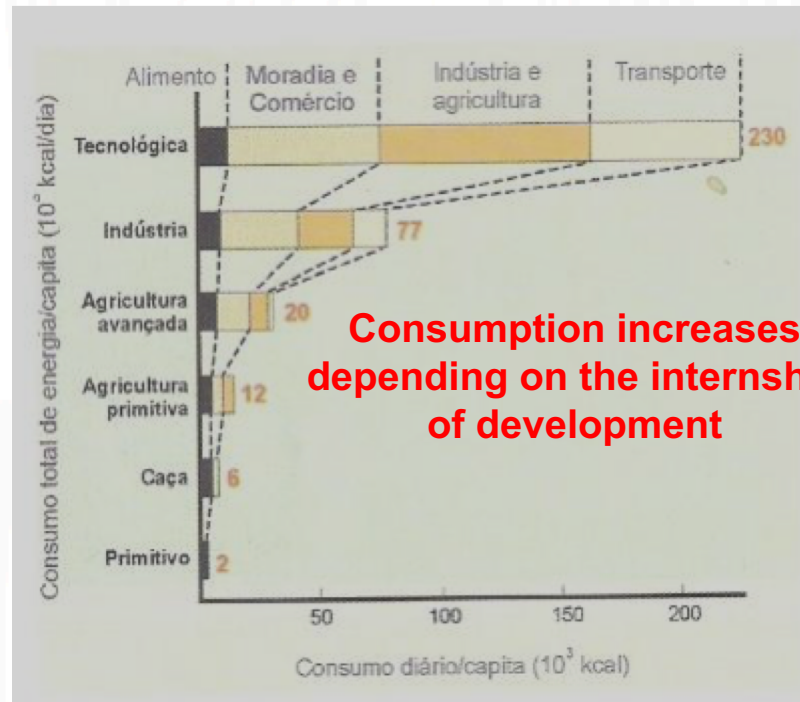
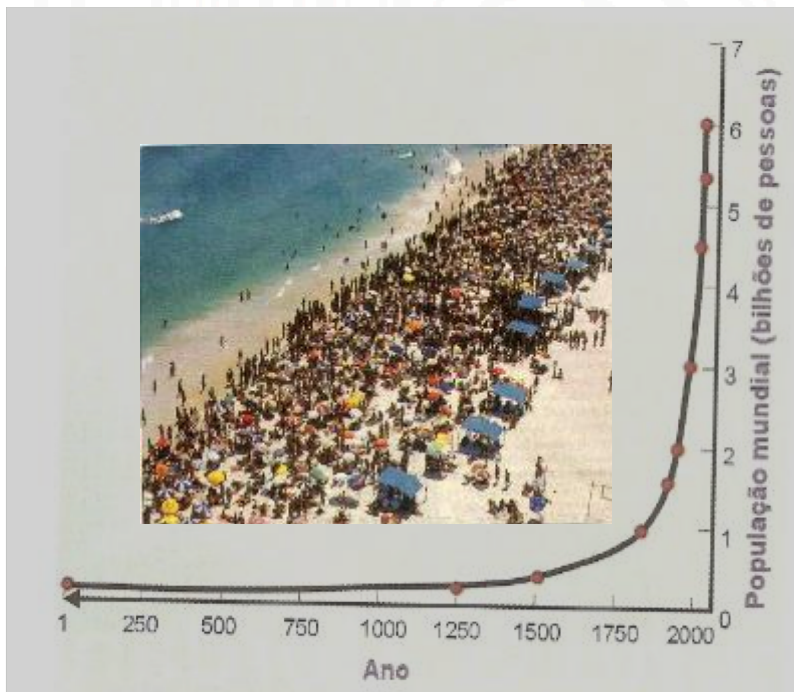
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Instagram: @aldrinsemiarido

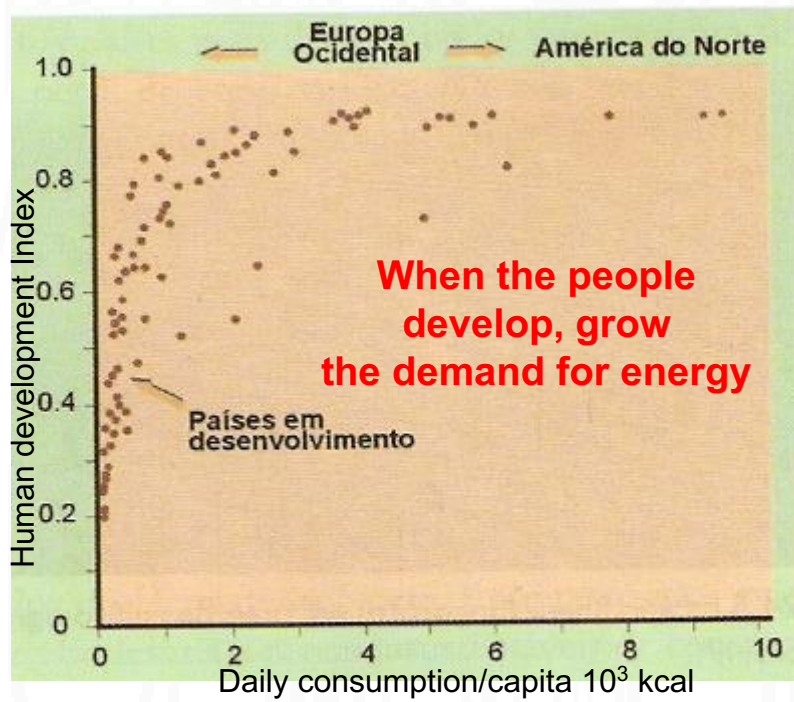
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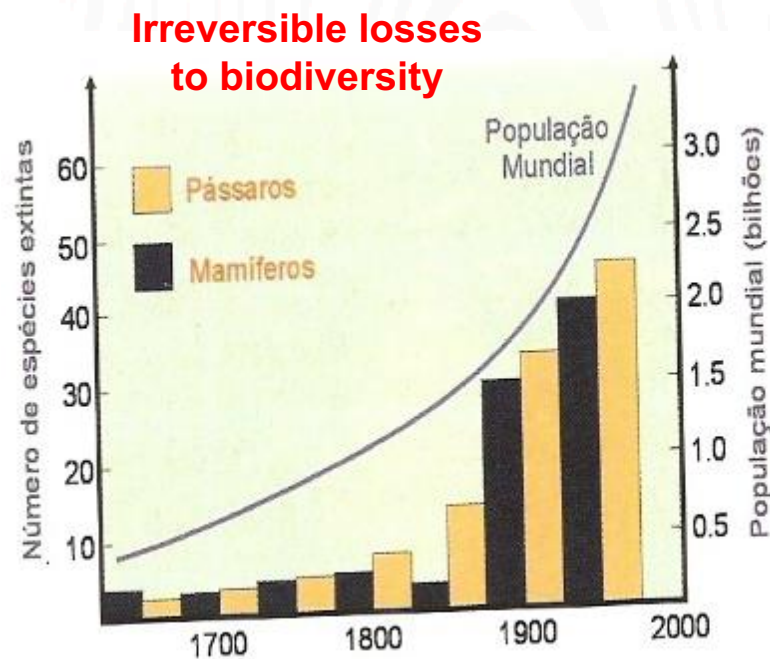




Consumption increases depending on the internship of development



When the people develop, grow the demand for energy



Irreversible losses to biodiversity

PARADIGM CHANGE

INDUSTRIAL AGRICULTURE



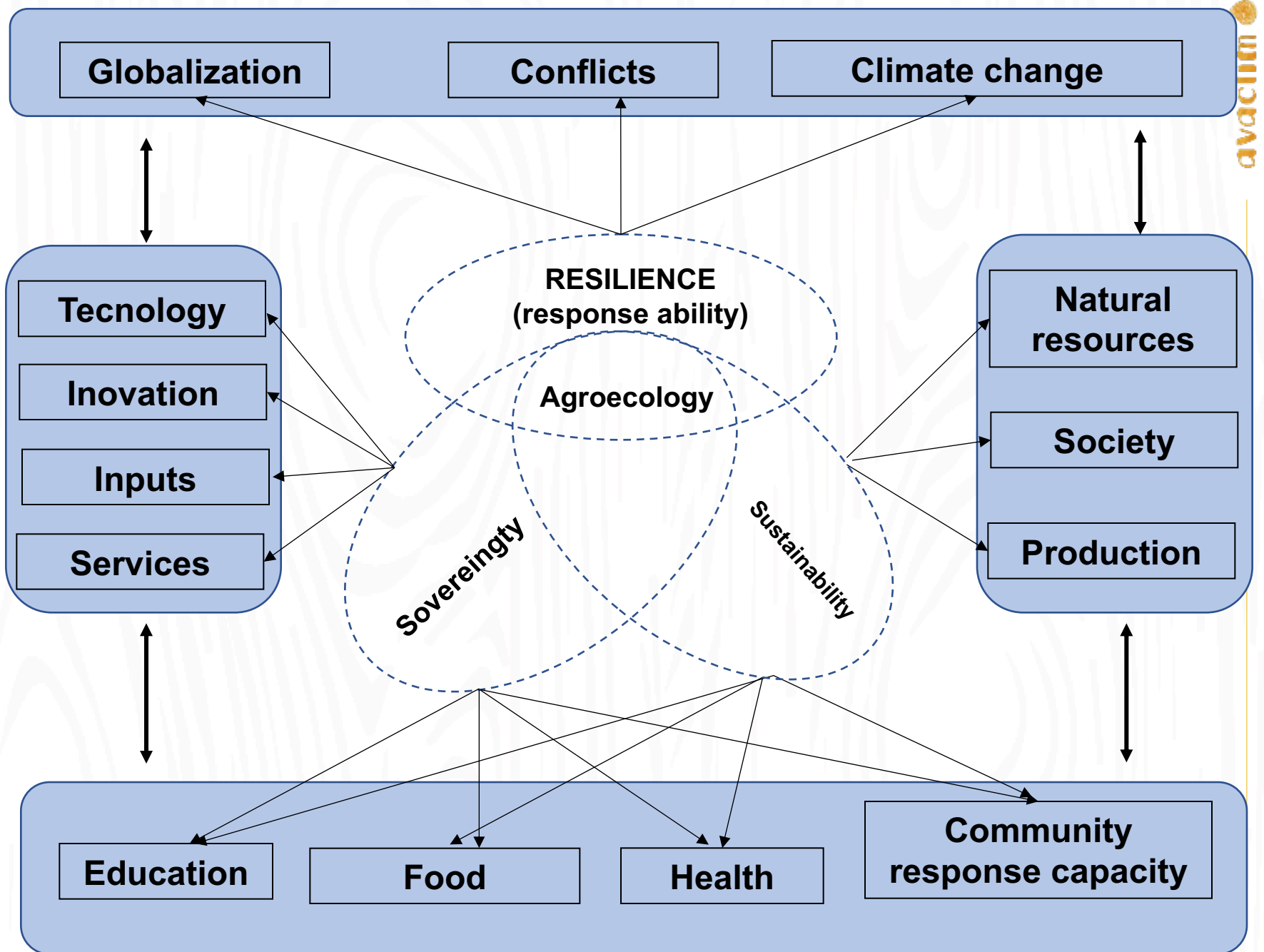
Agroecological transition

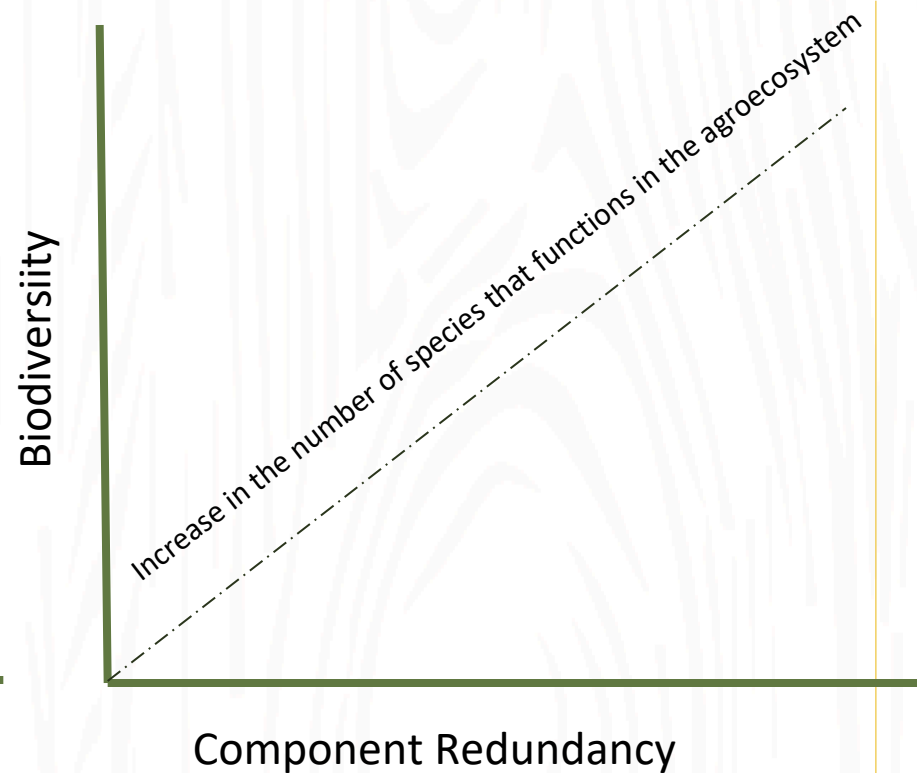
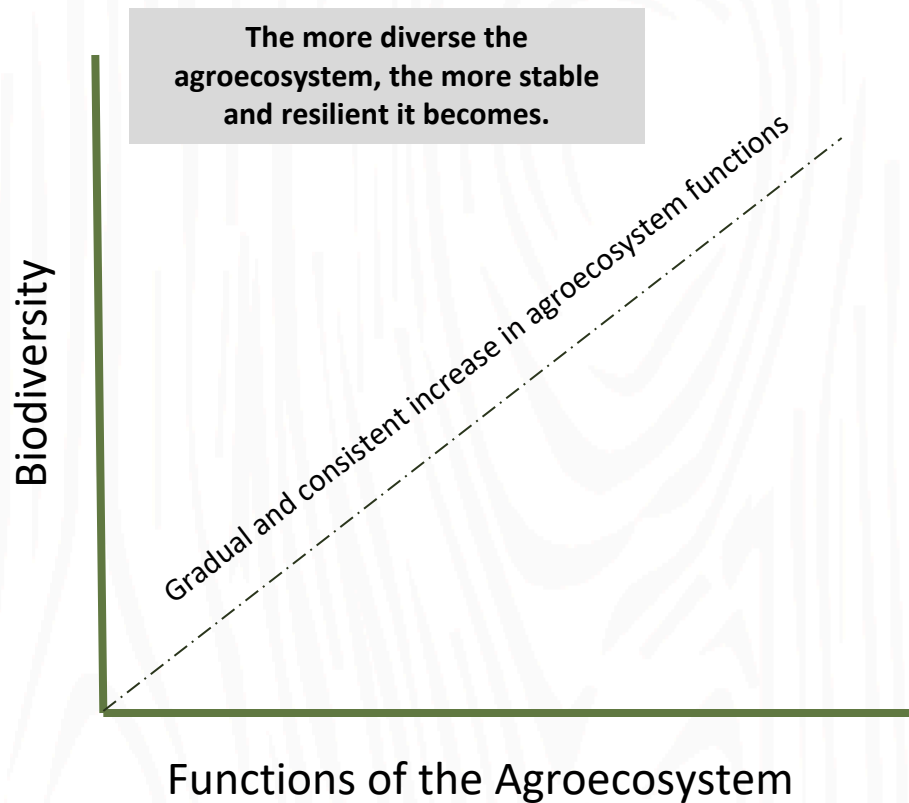


- Radical change from industrial agriculture;
- Oil-independent agricultural models;
- Agroecosystems resilient to climate change
- Agroecosystems with low environmental impact;
- Local agri-food systems

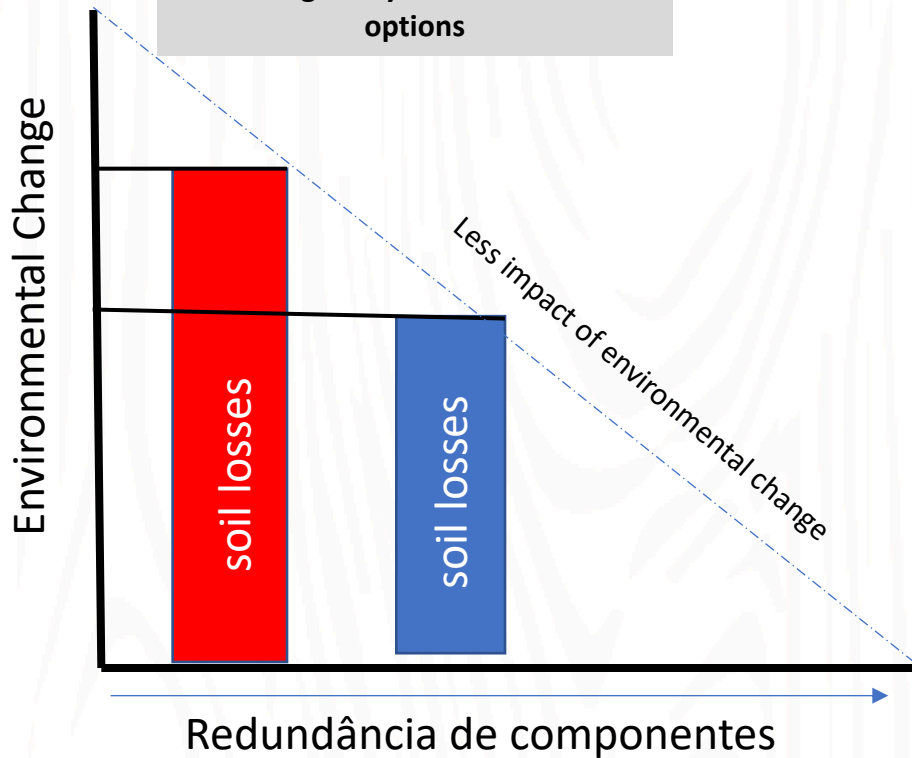
AGRICULTURE BASED AGROECOLOGY



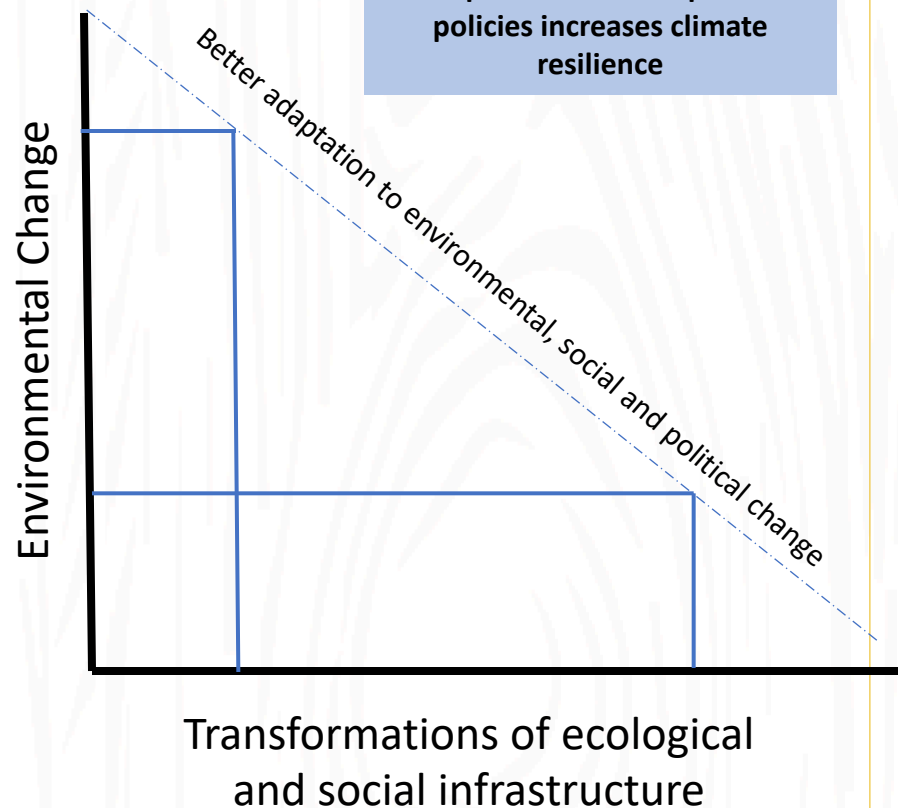




The redundancy of components allows a continuous functioning of the agroecosystem when an environmental change occurs. Diversity translates into ecological heterogeneity which increases options



Structural, agroecological, social transformations in combination with the strengthening of mechanisms of community reciprocity, originated by the implementation of public policies increases climate resilience

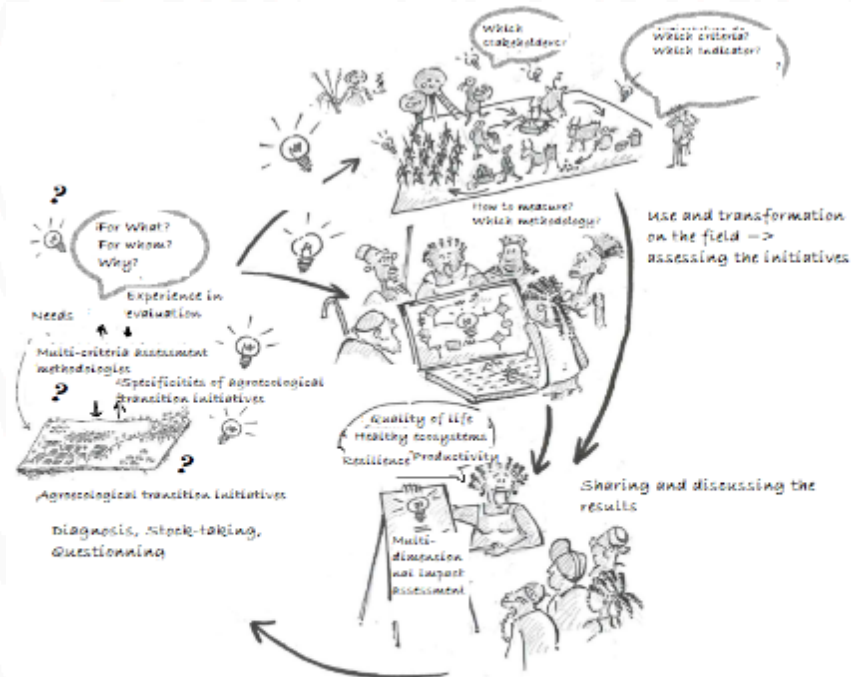




MITIGATION AND ADAPTATION TO
CLIMATE CHANGE AND DESERTIFICATION

What evidence can we illustrate?

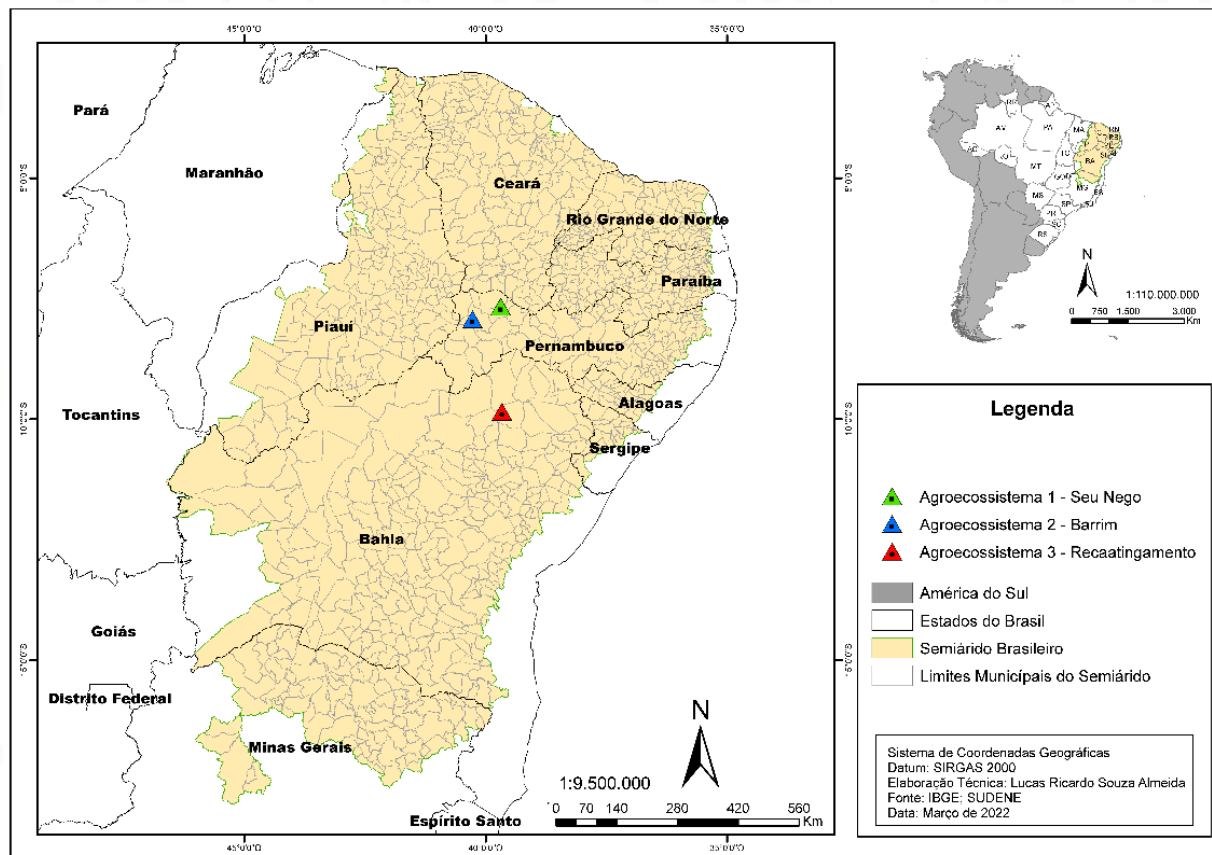
CARI (France)
IRD (France)
Both ENDS (The
Netherlands)
EMG (South Africa)



India
Brazil
Senegal
Ethiopia
Morocco
South Africa
Burkina Faso

Multi-criteria evaluation of initiatives in
agroecological transition

BRAZILIAN SEMI-ARID REGION



>1.2million
km²

13% the size of
Brazil

24 million
population

Rural
38%

Urban
62%



Very high climate variability

- ✓ **Regional variability:** Annual average precipitation ranges from 300 to 1000 mm in different localities of the region.
- ✓ **Annual variability:** On average 60% of total annual rainfall occurs in one month and 30% in one day
- ✓ **Droughts:** Severe droughts have occurred every 10 or 15 years
- ✓ **For the future:** Most of the estimated scenarios show reductions in rainfall and increased variability



Our reality



Rainy season

Climate



Dry season



Natural Cycle of Caatinga



COMPONENT 2 - METHODOLOGY

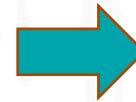
Framing of the assessment

Step 1 Characterisation of the initiative



- Description and operating diagram
- Actors involved
- History

Step 2 Characterisation of the nature and level of agroecological transition of the initiative



- Common understanding of what is meant by « agro-ecology »
- Level of agro-ecological transition

Step 3 Cross-analysis of development conditions



- Constraints and levers to development (at all three scales)

Step 4 Objective assessment of the individual and collective effects of the initiative

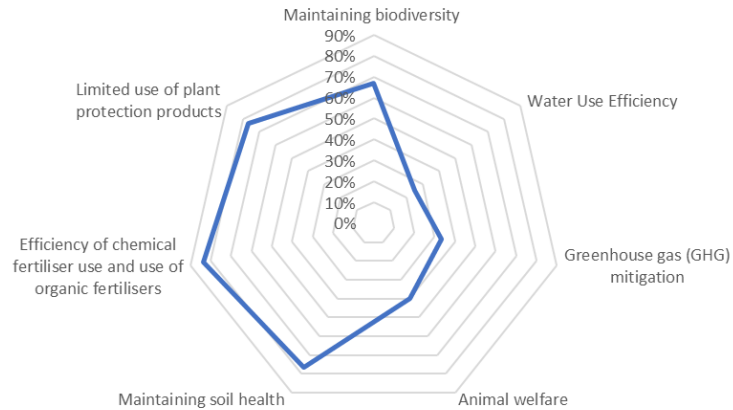


- Quantifying and objectifying the multidimensional effects of the initiative
- The evaluation focuses on 4 dimensions

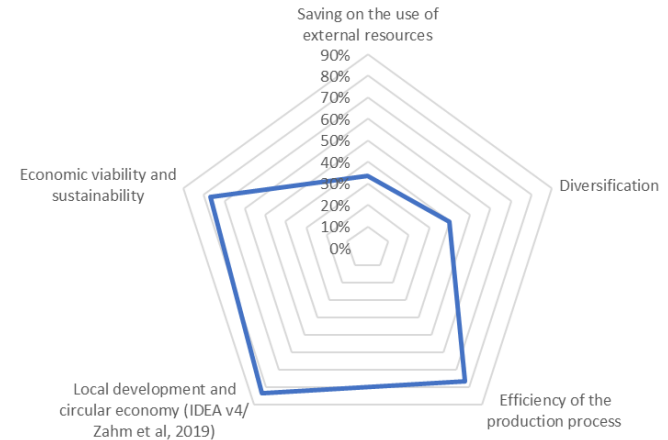
Multi-criteria and multi-actor
impact assessment

COMPONENT 2 - METHODOLOGY

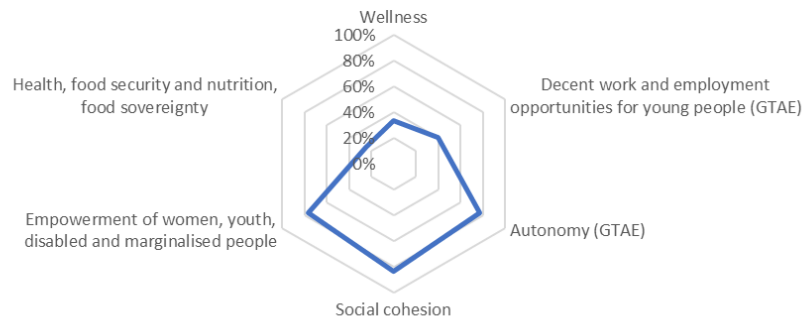
Agrosystem health



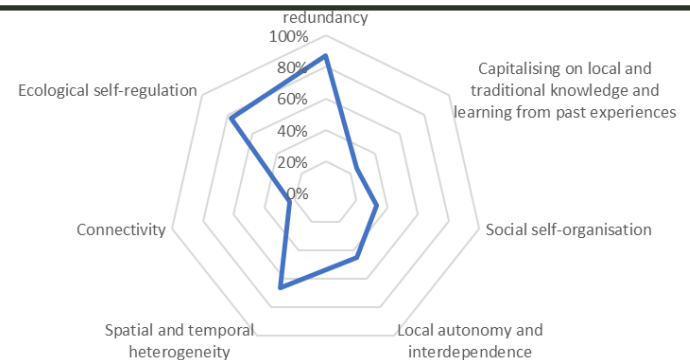
Technical-economic performance



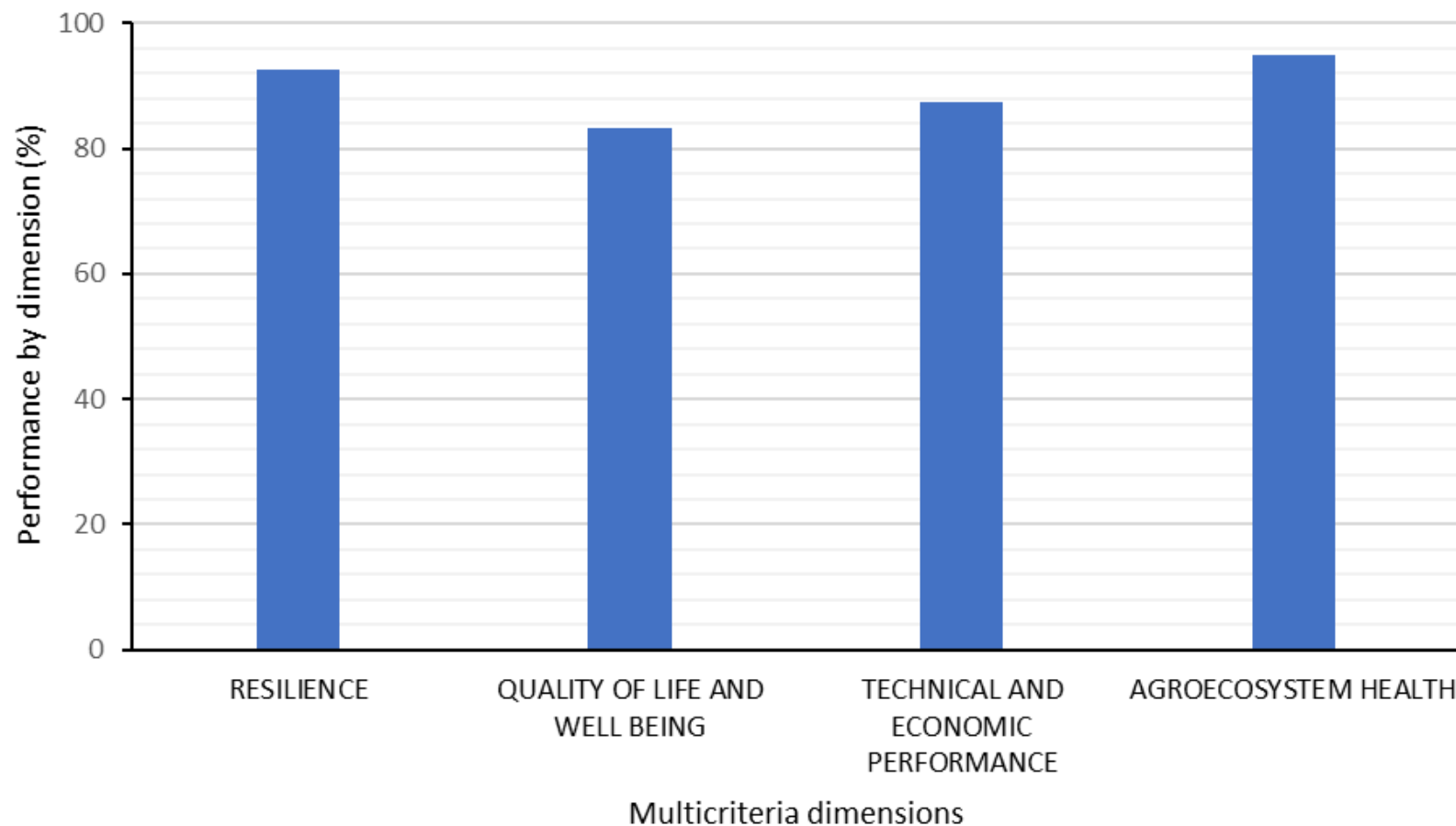
Well being and quality of life



Resilience



Preliminary findings : agreocology improves different dimensions of production systems



Obrigado
Gracias
Thank You !
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