

# **Why transformation is a must in drylands**

**Some insights from IPCC SRLand & GSDR-2019**

**Prof. Jean-Pascal van Ypersele**

**Université catholique de Louvain (UCLouvain), Belgium**

**IPCC Vice-Chair from 2008 to 2015**

**Twitter: @JPvanYpersele**

**International Day of Forests 2021, official FAO celebration, online**

**19 March 2021**

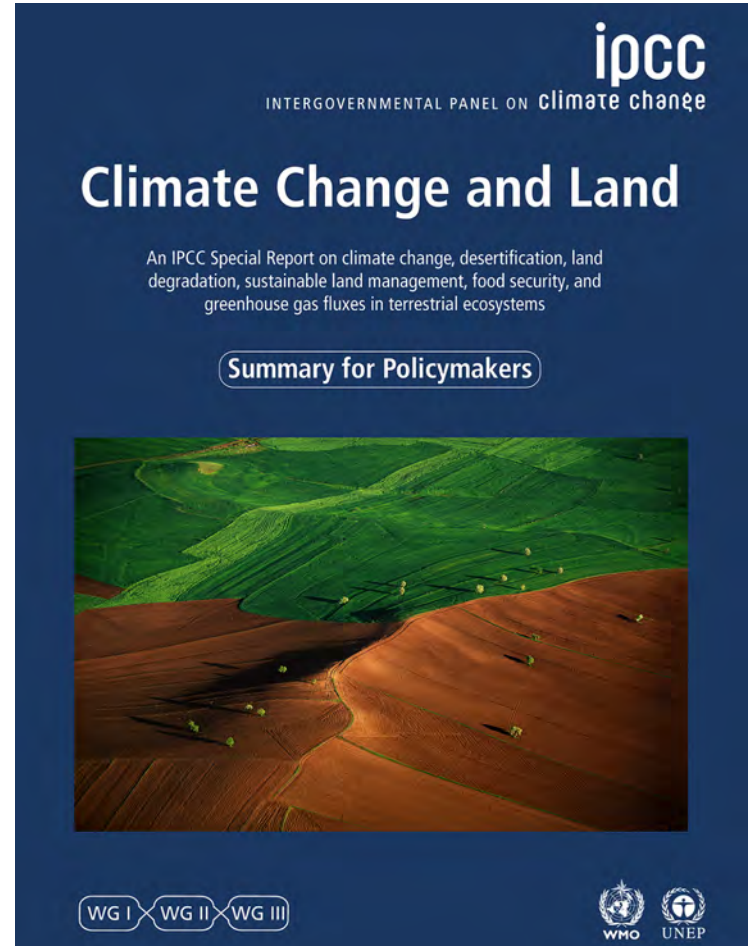
**Thanks to my son Raphaël (intern at FAO Brussels), to the Walloon government for supporting [www.plateforme-wallonne-giec.be](http://www.plateforme-wallonne-giec.be) & my team at UCLouvain**

# CLIMATE CHANGE AND LAND

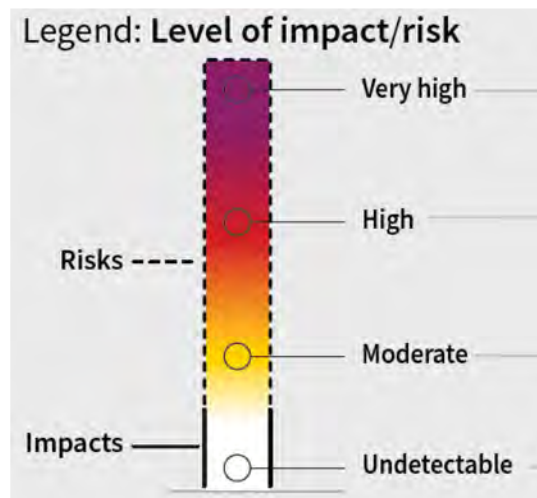
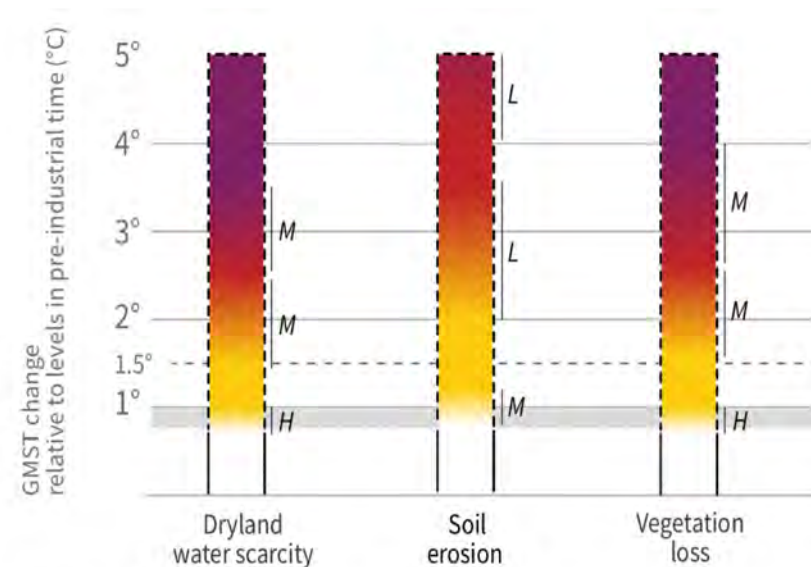
An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.

REPORT COVER IMAGE:

Agricultural landscape between Ankara and Hattusha, Anatolia, Turkey (40°00' N – 33°35' E)  
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# Risk increases with every fraction of a degree



**Purple:** Very high probability of severe impacts/risks and the presence of significant irreversibility or the persistence of climate-related hazards, combined with limited ability to adapt due to the nature of the hazard or impacts/risks.

**Red:** Significant and widespread impacts/risks.

**Yellow:** Impacts/risks are detectable and attributable to climate change with at least medium confidence.

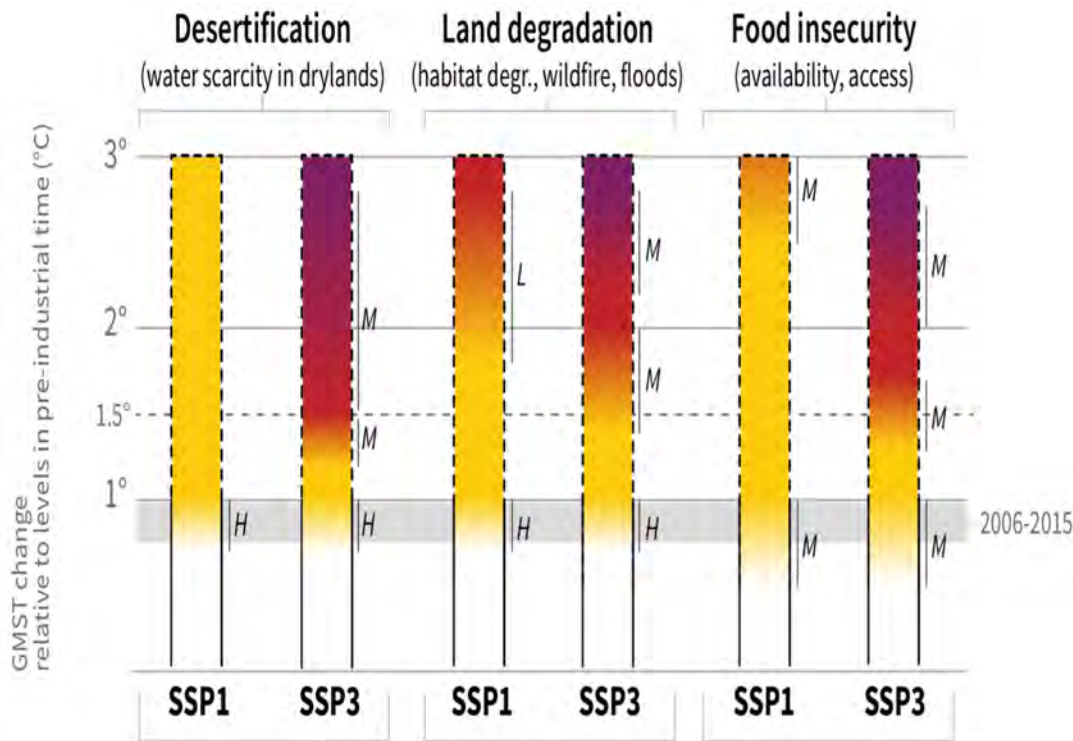
**White:** Impacts/risks are undetectable.

Source: IPCC SRLand (2019)

## Systems at risk:

Food	_____	_____	_____
Livelihoods	●_____	●_____	●_____
Value of land	●_____	●_____	●_____
Human health	●_____	●_____	●_____
Ecosystem health	●_____	●_____	●_____
Infrastructure	●_____	_____	_____

# The level of risk posed by climate change depends both on the level of warming and on how population, consumption, production, technological development, and land management patterns evolve



**SSP1: focused on sustainability:**  
low population growth, high income & reduced inequalities, low-GHG food production, effective land use regulation

**SSP3: opposite trends, low adaptive capacity**

**SSP= Shared Socio-economic Pathway**

Source: IPCC SRLand (2019)

# IPCC SRLand: Good news: there are many co-benefits

- **Near-term action to address climate change adaptation and mitigation, desertification, land degradation and food security can bring social, ecological, economic and development co-benefits**
- **Investments in land restoration can result in global benefits and in drylands can have benefit-cost ratios of between three and six in terms of the estimated economic value of restored ecosystem services. Many sustainable land management technologies and practices are profitable within three to ten years**

# IPCC SRLand: dietary choices matter

- Long version:

**« Balanced diets, featuring plant-based foods, such as those based on coarse grains, legumes, fruits and vegetables, nuts and seeds, and animal-sourced food produced in resilient, sustainable and low-GHG emission systems, present major opportunities for adaptation and mitigation while generating significant co-benefits in terms of human health. »**

# IPCC SRLand: Involving local stakeholders is important

- Long version:

**« The effectiveness of decision-making and governance is enhanced by the involvement of local stakeholders (particularly those most vulnerable to climate change including indigenous peoples and local communities, women, and the poor and marginalised) in the selection, evaluation, implementation and monitoring of policy instruments for land-based climate change adaptation and mitigation »**

# The Future is Now – Science for achieving sustainable development

**#GSDR2019: Global Sustainable  
Development Report 2019**

[sustainabledevelopment.un.org/gsdr2019](https://sustainabledevelopment.un.org/gsdr2019)



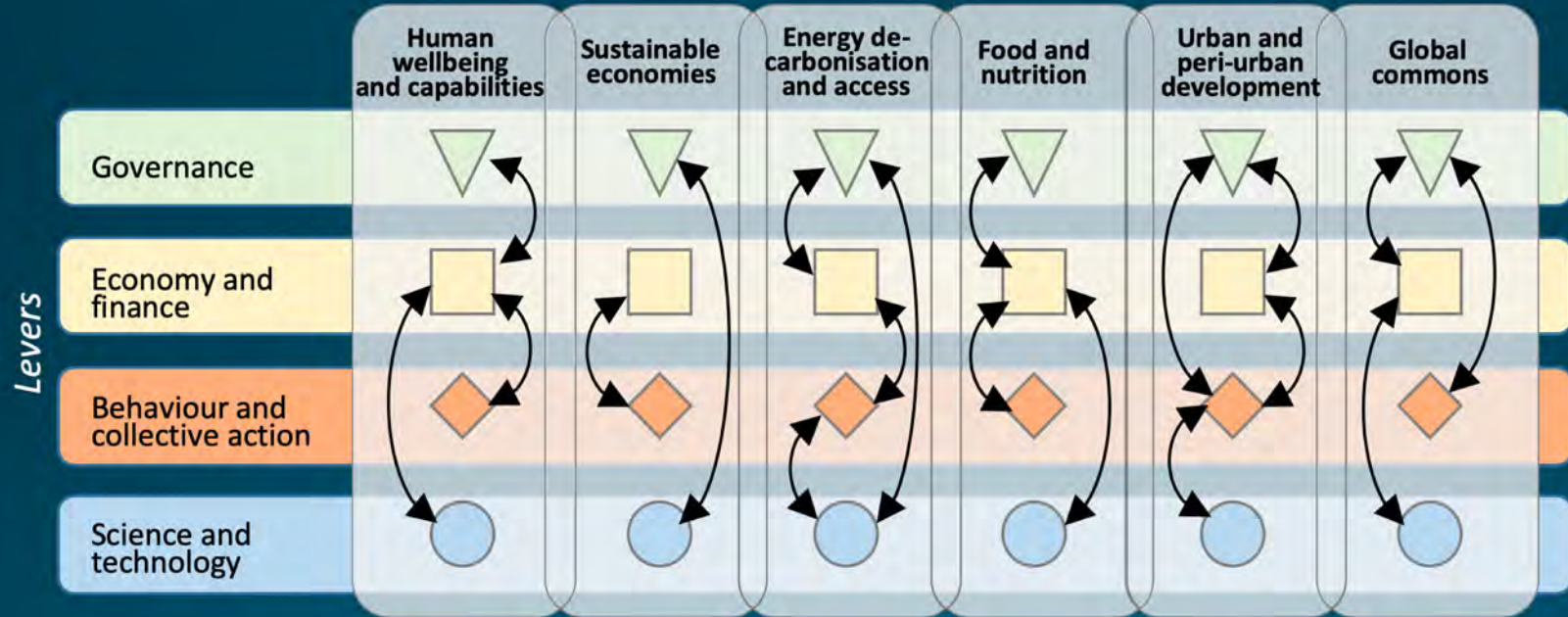


# **Some key messages from GSDR-2019 about transformation**

- The GSDR-2019 identifies 6 key entry points for successful transformation towards the 2030 Agenda, and 4 levers that are critical to maximising impact in different parts of the world**
- True transformation is possible only when the levers are deployed together in an integrated and intentional manner**

# GSDR 2019: Levers and entry points for transformation

## Entry points for transformation



*Innovative pathways to transformation represent context-specific configurations of levers to achieve transformation in each area*

# To go further :



- [www.climate.be/vanyp](http://www.climate.be/vanyp) : my slides (under « conferences »)
- [www.ipcc.ch](http://www.ipcc.ch) : IPCC
- <https://sustainabledevelopment.un.org/gsdr2019> GSDR 2019
- [www.plateforme-wallonne-giec.be](http://www.plateforme-wallonne-giec.be) : IPCC-related in French, Newsletter
- **Twitter: @JPvanYpersele**