



Strengthening partnerships and local policies for sustainable management of dry regions

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Contexte

The land and its natural resources (earth, water, plants and wildlife) provide food, water, firewood, medicinal plants and other ecosystem services. The soils regulate the carbon cycle and other biophysical processes. The land provides its populations with security, status and social identity. However, across the planet, land degradation affected 100 million hectares (twice the surface area of Greenland) every year between 2015 and 2019. If this trend continues, 1.5 billion hectares of land will need to be restored by 2030 in order to reach neutrality in terms of land degradation. Conducive to poverty and famine, this situation particularly impacts the 1.5 billion people living in the arid, semi-arid and dry sub-humid areas that cover 40% of the planet's land mass.

Our vision

The international community has fixed the goal of achieving land degradation neutrality by 2030 (SDG 15.3). To reach this target requires:

- Coherent long-term cross-sector policies to implement solutions to the economic and societal obstacles encountered by actors on the ground;
- 2. A research programme designed, produced and implemented jointly with and by academic and non-academic actors, with the aim of removing the obstacles to primary productivity which has to increase alongside the efficient, sustainable use of natural resources;
- 3. Initiatives that take a regional approach in order to deploy the right solution in the right place at the right time.

To meet these conditions, we suggest rolling out a coordinated intervention strategy, as follows:

1. Coherent, long-term cross-sector policies

Environmental and technical conditions and their evolutions play a vital part in agricultural production. However, the agricultural sector and all stakeholders involved act according to the nation's political orientations which are in turn affected by the regional and international context. Many administrations intervene in the field of agriculture and livestock farming, whether they are the ministries for this sector or those in charge of the environment, health or the economy. Other stakeholders also play a part, including scientific research bodies, non-governmental organisations and other associations. This means farmers can find themselves faced with political injunctions that change regularly, are inappropriate for a given context and sometimes even conflicting. In addition, while land degradation can happen very quickly, initiatives to restore and rehabilitate soils rely on complex processes that can be difficult to control and take much longer to implement.

Supporting agriculture therefore requires long-term public policies accompanied by coherent, properly organised technical and financial aid.

OUR RECOMMANDATIONS

- Strengthen the long-term commitment of all stakeholders
- Co-build a shared vision and joint ambition
- Coordinate and plan public policies
- Between administrations (agriculture and livestock farming, land ownership, social, economic and environmental sectors)
- Between local authorities (regional, departmental and municipal)
- Avoid repetition by comparing national climate change adaptation plans (PANA), national biodiversity strategies and action plans (NBSAP), land degradation neutrality (LDN) programmes and the Sendai Framework for Disaster Risk Reduction
- Gather information with regard to interdependencies between Sustainable Development Goals, especially synergies and trade-offs between food and nutrition security (SDG 2) and land degradation (SDG 15)
- Create a single coordinating body to represent all State services in these actions

2. Research designed, produced and implemented jointly with and by academic and non-academic actors

Primary productivity determines a multitude of ecosystem services that are essential to the well-being of populations. Increasing the primary productivity of ecosystems and agrosystems in arid, semiarid and dry sub-humid regions is a major challenge that has to be met through research. Increased productivity means more plant biomass in forests, savannahs and cultivated lands which in turn means higher food production, greater biodiversity and more carbon captured in the soils. However, the technology choices faced by farmers, breeders, foresters and environmental managers must take into consideration the social and economic reality of their situations. The expertise of local stakeholders helps them implement tried-andtested measures that fit the context.

It is therefore vital that research focuses on local particularities and is driven by local knowledge and expertise conducive to the emergence of effective solutions to address climate change and social transformations.

OUR RECOMMANDATIONS

- Provide long-term support and funding for science, technology and innovation by endorsing:
- Interdisciplinary research bringing together social and human sciences, soil and climate sciences, agronomic sciences, ecological sciences, digital sciences, and artificial intelligence
- Participatory cross-disciplinary research bringing together farmers and their organisations, associations or NGOs that provide advice or support to agriculture
- Innovative research combining academic and local knowledge, enabling the co-creation of solutions for a more efficient and sustainable use of natural resources.

3. Initiatives that take a regional approach in order to deploy the right solution in the right place at the right time

With governments realising the global nature of environmental, climatic and demographic issues, and decisions being taken within international negotiation forums (Rio Conventions, United Nations, etc.), a general framework is emerging for public policies on climate change adaptation and mitigation and with regard to the fight against biodiversity loss and land degradation. However, it is at local level that measures in favour of economic and social development and preservation of the environment converge. This is why the operational decisions must be decided at local level and implicating all stakeholders. The agricultural sector reveals a vast diversity of contexts and living conditions for households and farming businesses. We must, therefore, be able to put forward policies that are adapted to each situation and cater for the most vulnerable cases. Analyses and solutions must emerge from a collaborative effort, discussions and a completely transparent distribution of the results.

Last but not least, building a shared vision and working together means adapting our messages, making them understandable and translating them into local languages.

OUR RECOMMANDATIONS

- Establish a common vocabulary so that all players can co-construct a joint vision of the state of soil and land health
- Define together appropriate indicators that are easily measurable, in order to plan and take action at the right place, at the right level and at the right moment
- Develop open platforms for discussion, consultation and construction to allow all actors (academic and non-academic, public and private, young and old, women and men) to exchange knowledge. These third places will offer solutions adapted to the regions and coordinated, long-term initiatives taking into account the diversity of the players involved
- Develop appropriate means that allow the players in all their diversity to share knowledge, understand one another and communicate efficiently. In terms of the language employed, this requires effort in order to develop a deep understanding of the visions and representations of the world specific to each language, each culture and each scientific discipline.

The opinions expressed in this document are those of the authors and do not necessarily reflect those of all these institutions.













