



## Morocco's experience of loss and damage management and finance: The case of drought



# Ministry of Energy Transition and Sustainable Development of Morocco

## Energy Transition

Renewables major programs between 2016 and 2030  
Achieving 10100 MW of additional capacity in renewable energy (Solar 20%, Wind 20%, Hydro 10%)



## Sustainable Development

Implementing the foundations of a green and inclusive economy in Morocco by 2030, including NDC and National Adaptation Plan



# Ministry of Agriculture, Marine Fisheries, Rural Development, and Water and Forestry of Morocco

Develop and implement the government's policy in the agricultural sector



## Plan Maroc Vert 2008-2020

Based on two pillars:

- the development of a modern agriculture with high added value production meeting international standards, and
- the development of small-scale agriculture through a solidarity-based approach aimed at fighting poverty and diversifying sources of income for the most vulnerable rural populations.



## Green Generation 2020-2030

Based on two foundational principles:

- putting human element at the center of its concerns and
- ensuring the sustainability of agricultural development

# Ministry of Equipment and Water of Morocco

## The National Water Plan 2020-2050

- Improving water supply through the construction of dams, interconnection of hydraulic basins, and desalination of seawater
- Integration of all rural centers into structured systems for supplying drinking water
- Provision of the necessary water resources for the development of sustainable agriculture
- Preservation of ecosystems and the fight against pollution





# Further relevant ministries relevant to management and finance of loss and damage in Morocco

- **Ministry of Interior**
- **Ministry of Economy and Finance**
- **Ministry of Solidarity, Social Integration and Family**



Introduction

National context

National agricultural, economic, and labour market losses

National expenditures and programs for managing loss and damage

National channels for funding to cover loss and damage

Conclusion

# National Context

The increasing frequency and intensity of drought events in Morocco is largely attributed to climate change caused by human activities and their greenhouse gas emissions.

By 2050, the majority of the national territory will experience an average decrease in rainfall/precipitations of 10-20% (according to the 4th National Communication of Morocco).

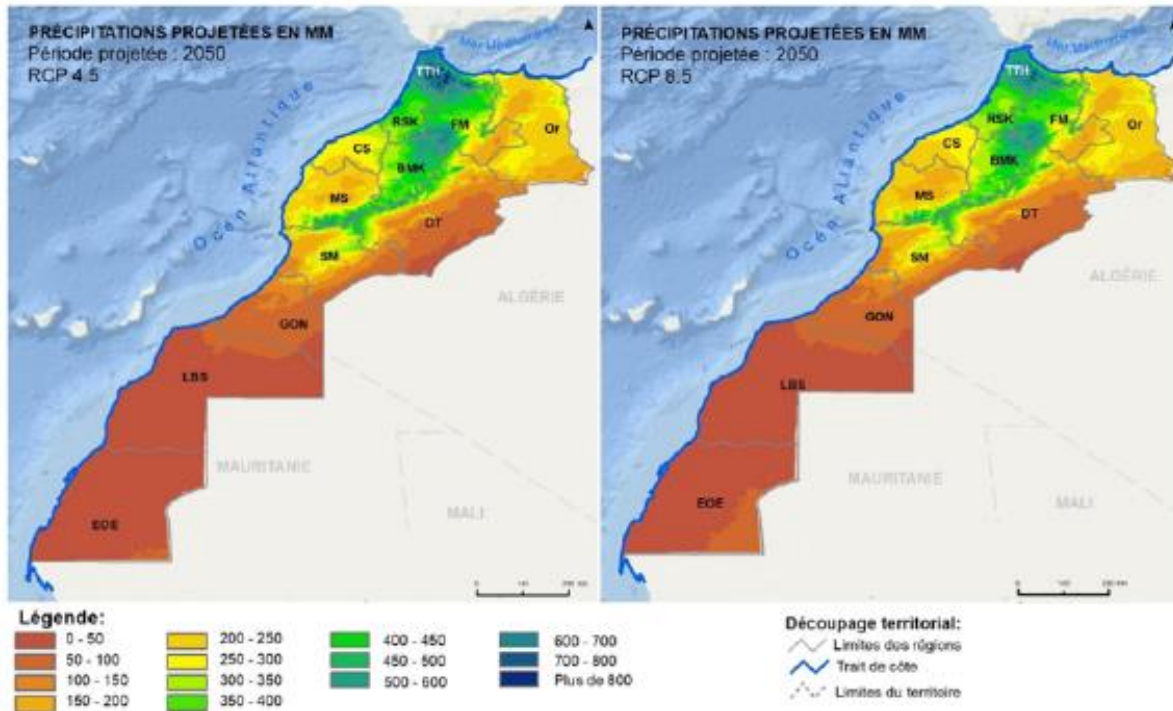


Figure 62 : Distribution géographique des précipitations projetées à l'horizon 2050 selon les scénarios RCP 4.5 et 8.5 (Ezzine H. et al., 2018).

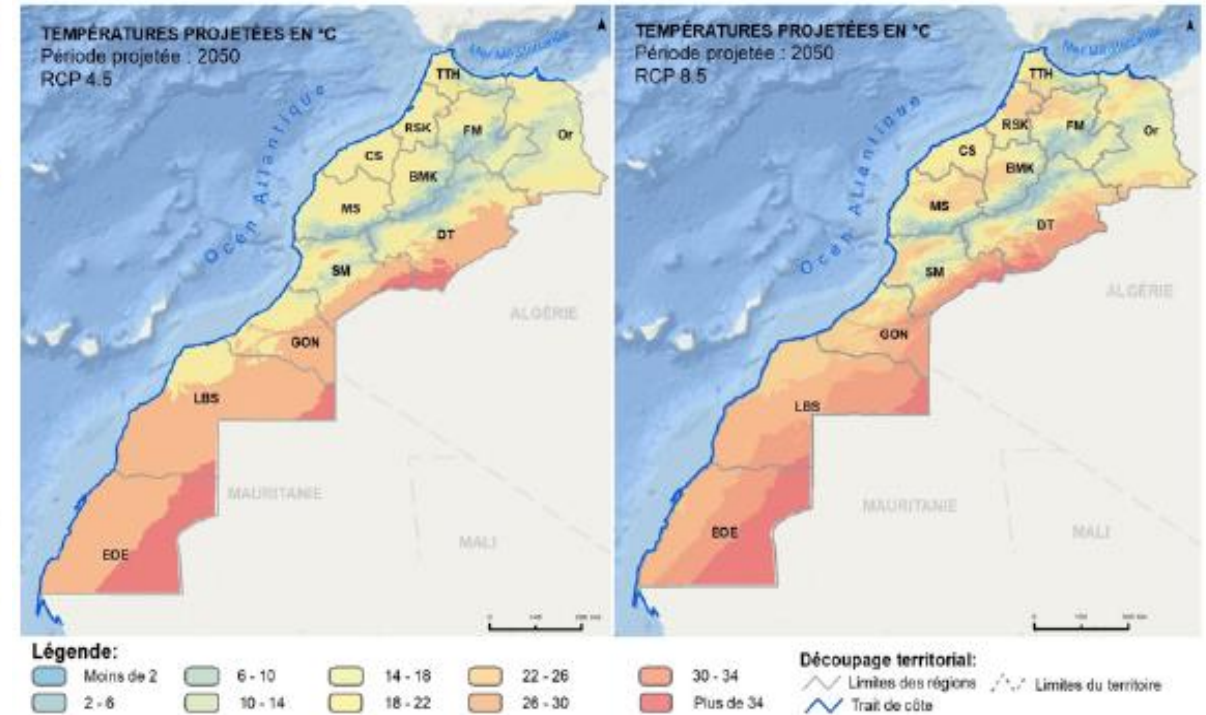


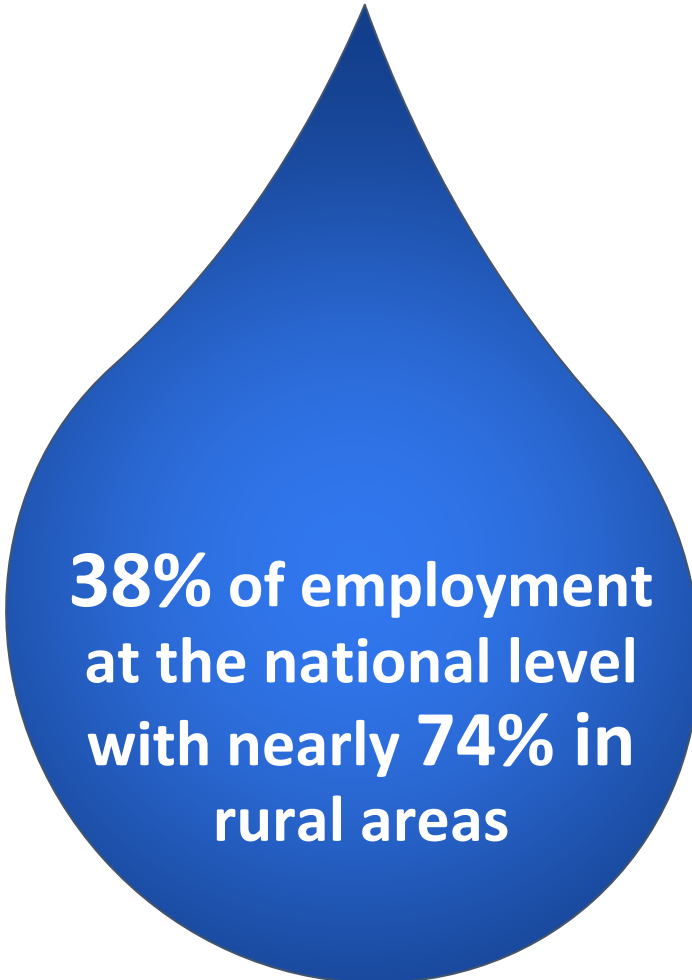
Figure 64 : Distribution géographique des températures moyennes annuelles projetées à l'horizon 2050, selon les scénarios RCP 4.5 et 8.5 (Source des données, WorldClim, 2018 ; traitement des données par GIS4DS).

# Economic and social vulnerability to agricultural losses in droughts

Agriculture is a very important sector in Morocco, economically and socially.



**12-14% of GDP  
(2008-2018)**

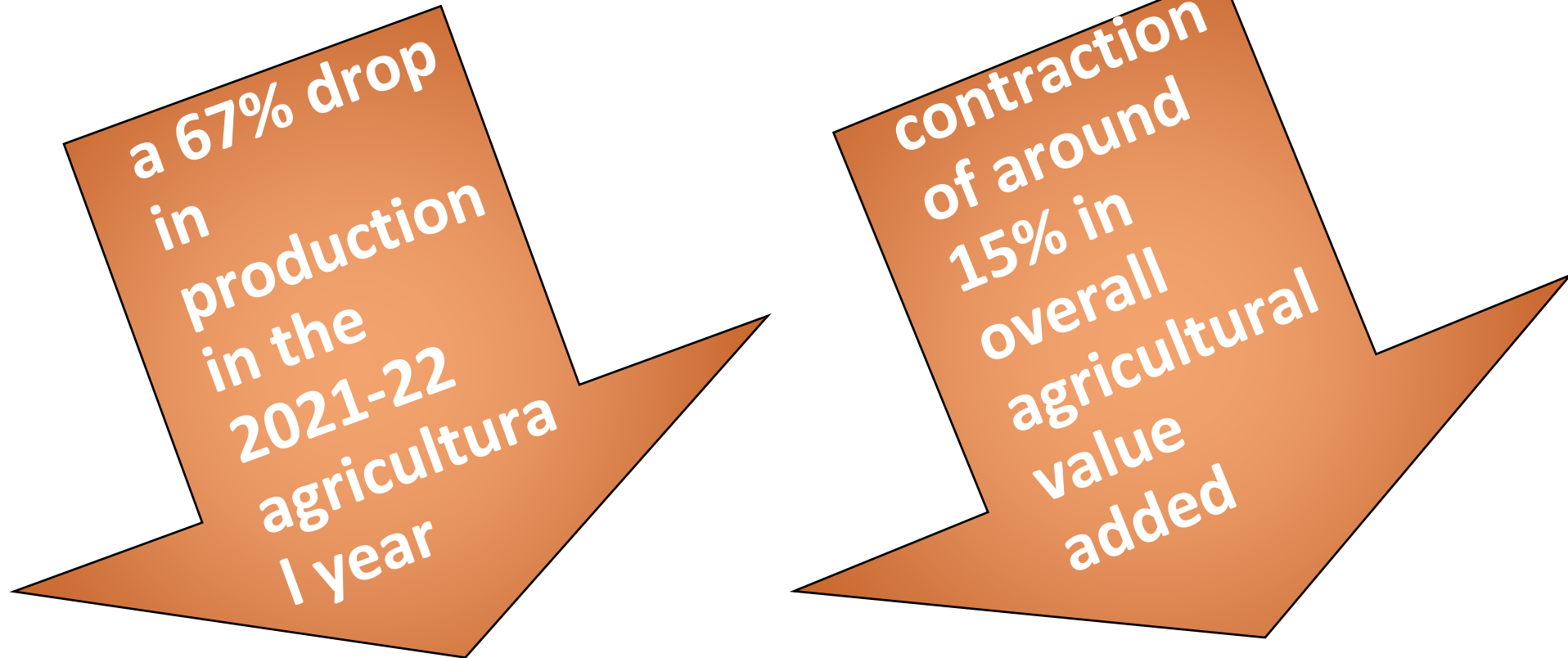


**38% of employment  
at the national level  
with nearly 74% in  
rural areas**



# Economic losses resulting from drought

Despite Morocco's agricultural strategies, cereal production remains vulnerable to drought and water stress, as shown by:



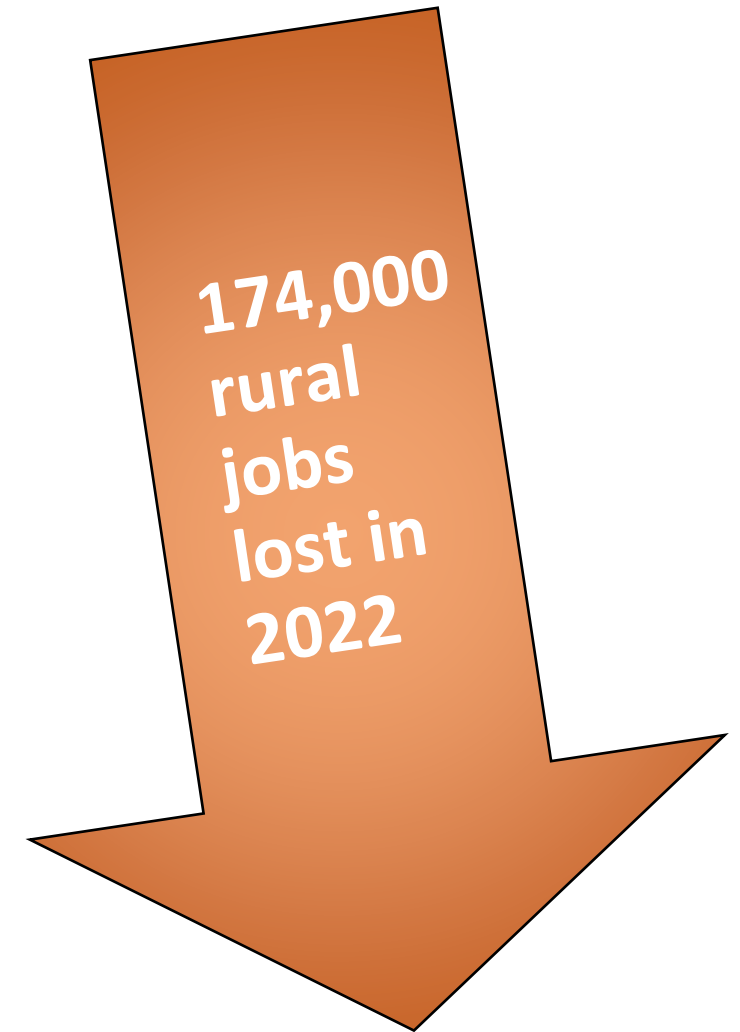
as well as increased dependence on imported cereals

(Ministry of Agriculture, Maritime Fisheries, Rural Development and Water and Forests, 2022).

# Job losses and labour market losses resulting from drought

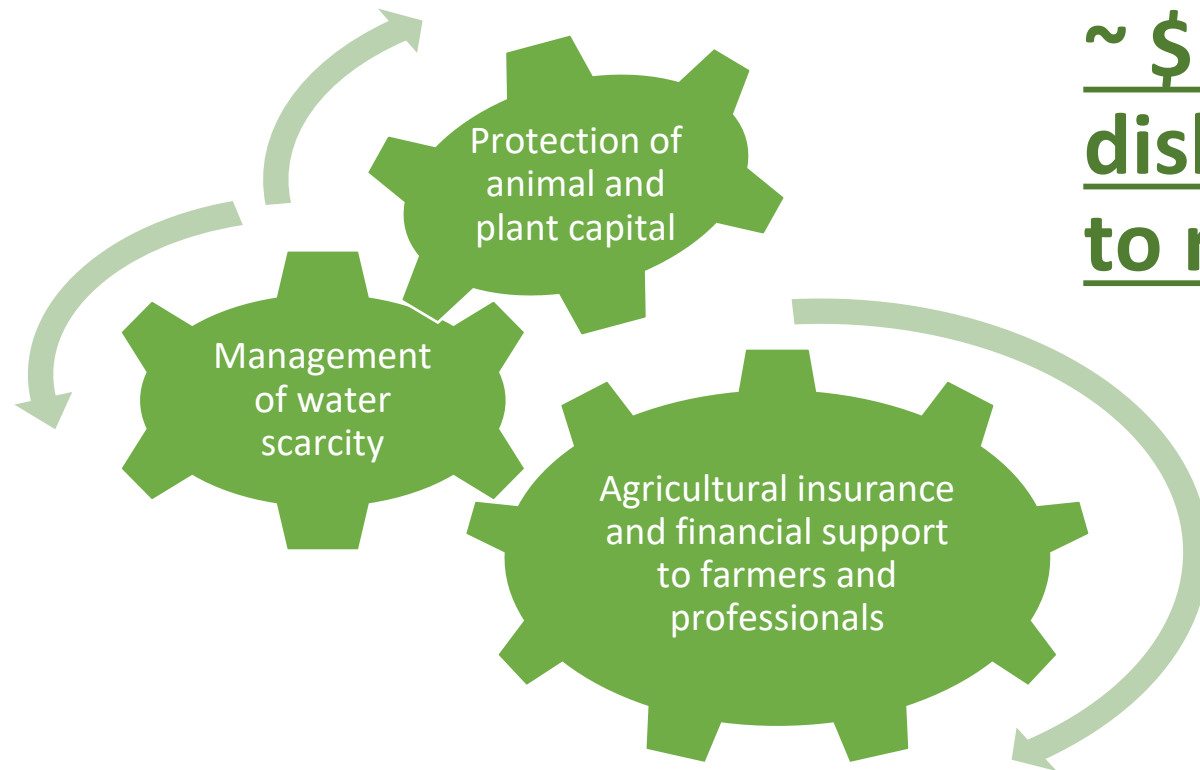
Droughts severely impact agricultural production and employment, as seen in the 1994-1995 drought in Morocco which caused a significant 80% decrease in production, resulting in a loss of 60% of working days and a decrease in rural employment (IRES, 2014).

According to the World Bank, lack of rainfall is once again causing job losses in rural areas. According to data from the High Commission on Planning (Haut Commissariat au Plan, HCP), 174,000 jobs were lost in rural areas in 2022, coinciding with the worst drought in 40 years.



# Recent policies and expenditures by Morocco to manage losses and damages from drought

In response to the worst drought in 40 years, the Ministry of Agriculture launched the PRIDP with a budget of 10 billion dirhams (1 billion USD) to mitigate the effects on the 2021-22 agricultural season. This program aims to provide support to farmers and breeders, and address the impact of the rain delay on different sectors of the agricultural industry. It focuses on three areas:



~ \$1 bn USD in public funds  
disbursed by the government  
to respond to loss and damage



# Potential national channels for international funding to address loss and damage

The current channels used by the Moroccan government to cope with losses and damages from the 2021-22 drought suggest various possible channels for international finance:

## Social protection systems

Development and resourcing of national social protection systems, in the face of increasing risks posed by climate change

## Emergency funds

Public funds established by the state to individuals, businesses or organisations in response to unexpected events or circumstances that require immediate financial assistance or humanitarian aid.

## Catastrophe risk insurance

Covering financial losses resulting from disasters (such as drought, floods, forest fires, etc), which public finance can subsidize

# Conclusion

- Morocco welcomes the creation of a loss and damage fund at COP27 in light of the drought-related loss and damages to its agricultural yields, financial value, labour market and livelihoods.
- The UNFCCC loss and damage fund represents an opportunity to support and enhance existing national financing measures already established to cope with loss and damage.
- Further work is needed to study, support, and enhance existing national financing schemes based on domestic public resources in developing countries.