

# Relevance of climate services to financial institutions for making climate smart investments decisions

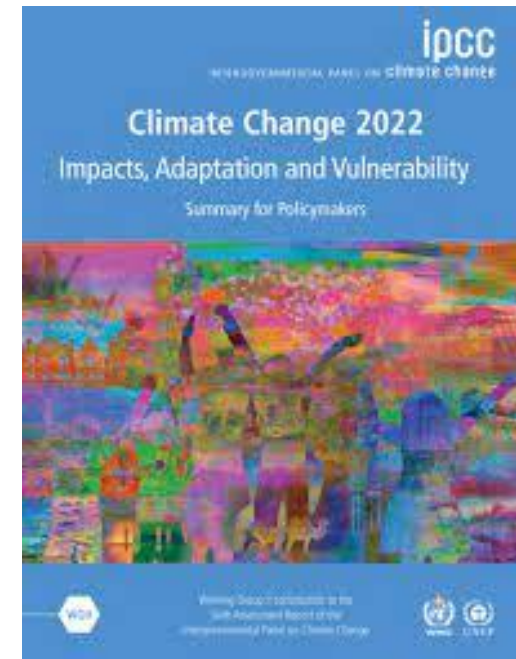
Annemarie Groot, Confidence Duku, Ponraj Arumugam (Wageningen University & Research)  
Harrie Schaap (Rabobank)

COP27, 11-11-2022

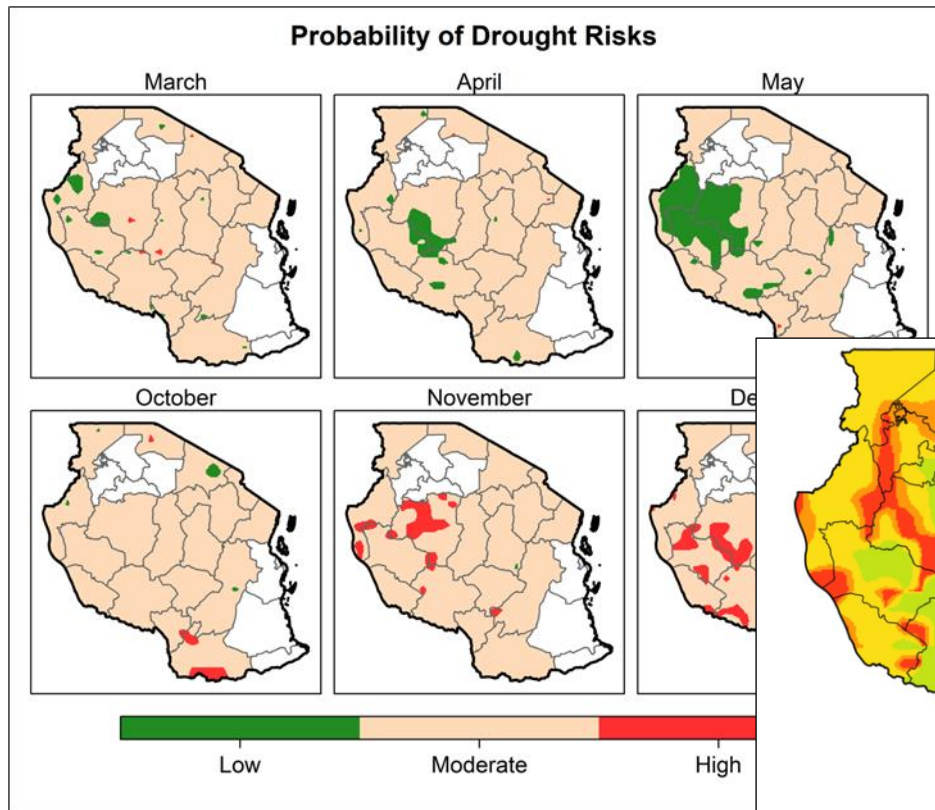
# Climate services: from data driven to support climate action

A climate service is the provision of climate information to help end-users to make climate smart decisions.

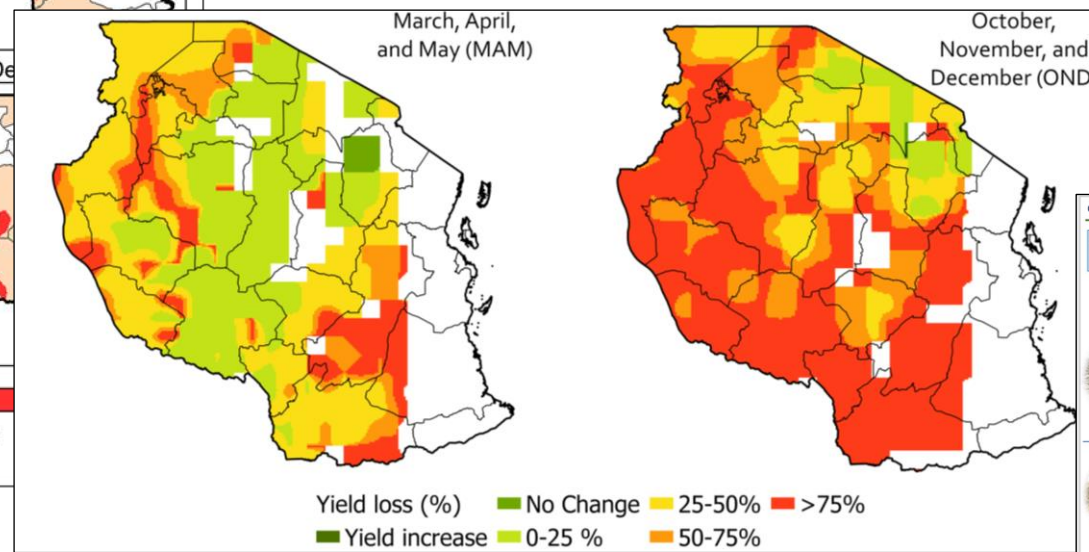
*Climate services can be important enablers of climate risk management.....and will become increasingly important as human influence on weather and climate extremes grows across all regions (Chapter 17; IPCC 2022)*



# Examples of climate services in CRAFT: potato, Tanzania



*Drought probability maps (CRAFT, 2022)*



*Climate change impact assessment on potato yield (CRAFT, 2022)*

**Climate change adaptation strategies**

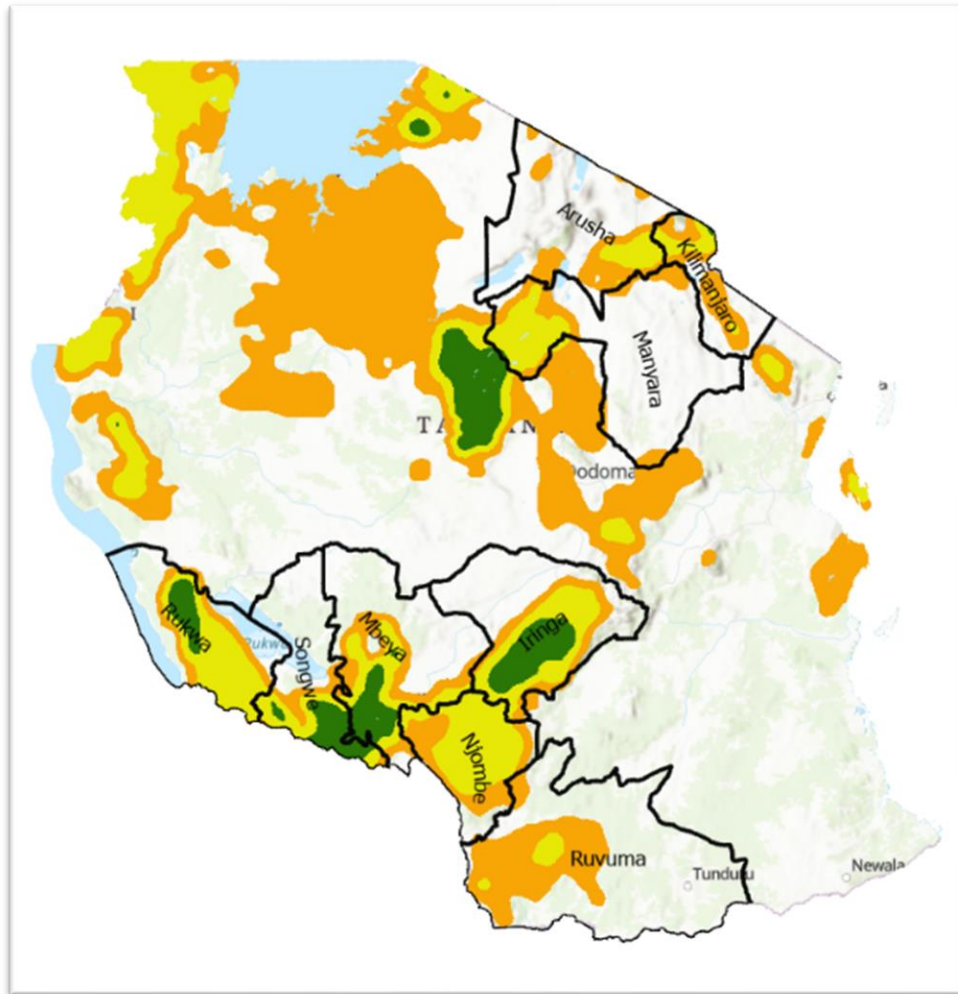
Adaptation measures are listed based on the discussion with the CRAFT team from Tanzania under the following objective: "To establish suitable adaptation strategies that will increase the adaptive capacity and resilience of the actors within the value chains." The listed adaptation measures mainly focused on the potato value chain in Tanzania.

Climate risks/impacts	Adaptation measures	Implications/impacts under CRAFT
Drought	Off-season irrigation production and Drought and disease tolerant varieties	Water management through various irrigation approaches and access to weather information to schedule irrigation and planting. Piloting innovative irrigation technologies and enhanced seed multiplication techniques through the CDS approach.
Hailstorms	Weather and index-based crop insurance schemes	Engaging contract farming with large and medium-scale industries, and farming organizations. Piloting weather/index-based insurance schemes.
Increase in temperature & Pest and diseases	Use of disease tolerant varieties, application of certified pesticides, and Adopting of proper cropping cycle.	Promote access to improved varieties through the establishment of FFS training. Facilitating access to certified pesticides and weather information.
Soil degradation	Improved farming practices	Establishment of FFS/Demo plots with an effective application of farming input such as fertilizers and chemicals

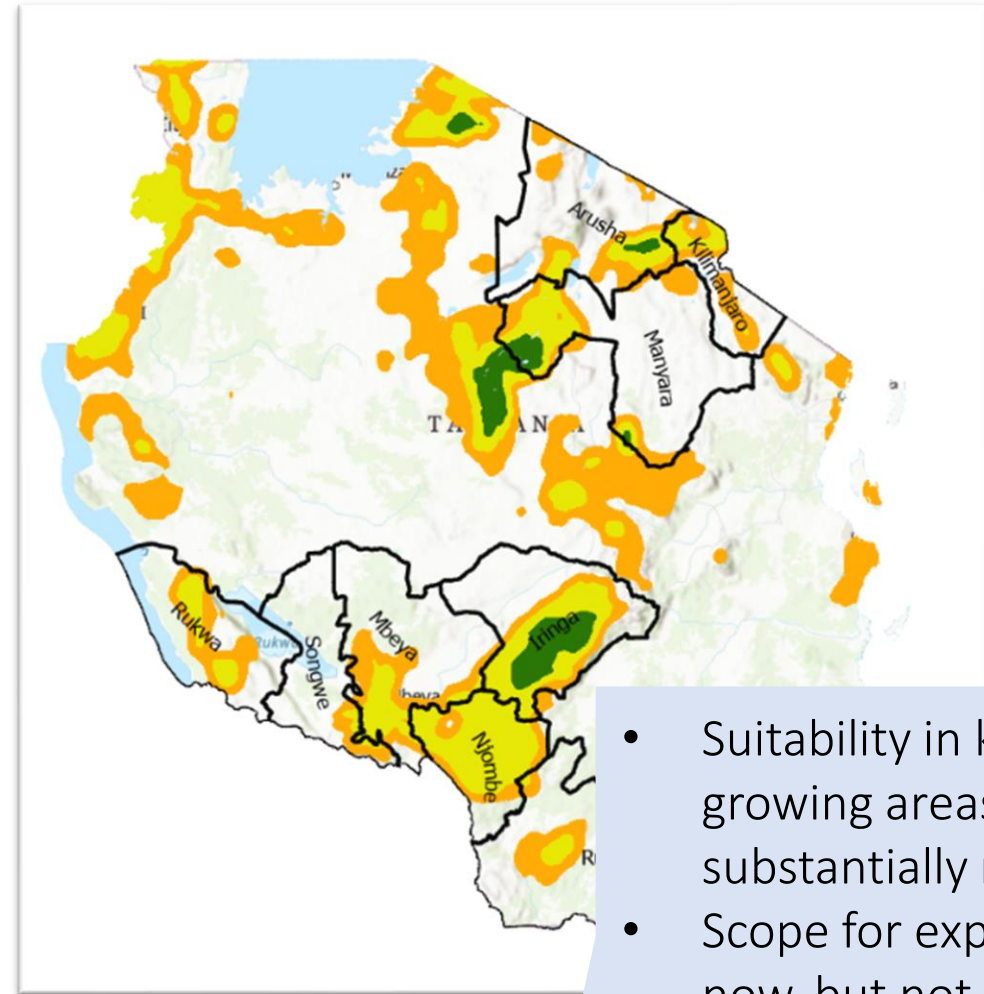
*Climate adaptation assessment (CRAFT, 2022)*

# Potato suitability in a changing climate in Tanzania

Suitability under baseline climate



Suitability under RCP8.5 in 2041 - 2070

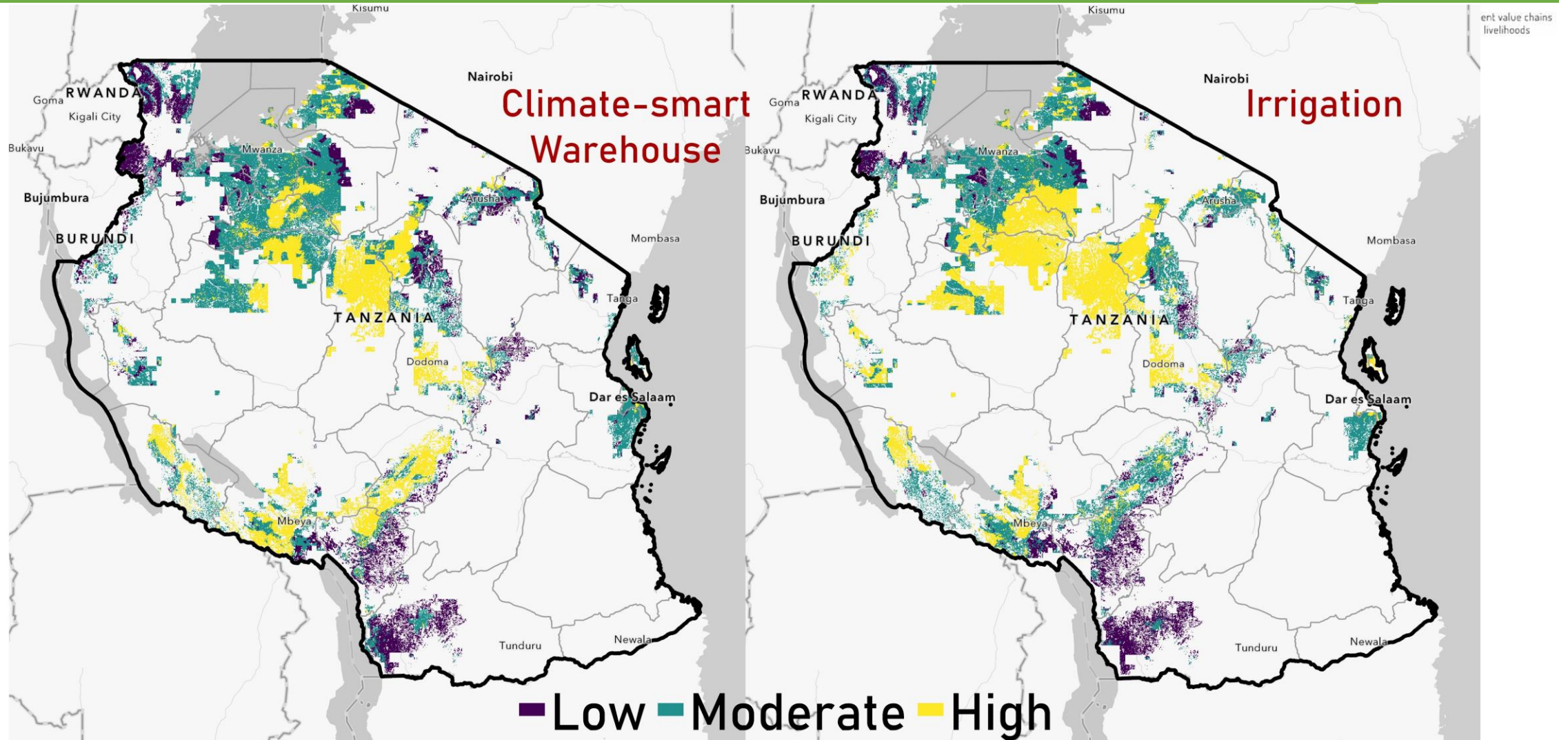


Suitability

- Low
- Medium
- High

- Suitability in key potato growing areas will be substantially reduced
- Scope for expansion now, but not in the future

# Current adaptation potential in CRAFT: potato, Tanzania



Adaptation potential maps facilitate understanding the identifying regions where adaptation measures could potentially be used or could provide potential benefits based on the resources and the factors in the specific location.



# CRAFT

Climate resilient value chains  
for improved livelihoods

Towards climate smart  
investments

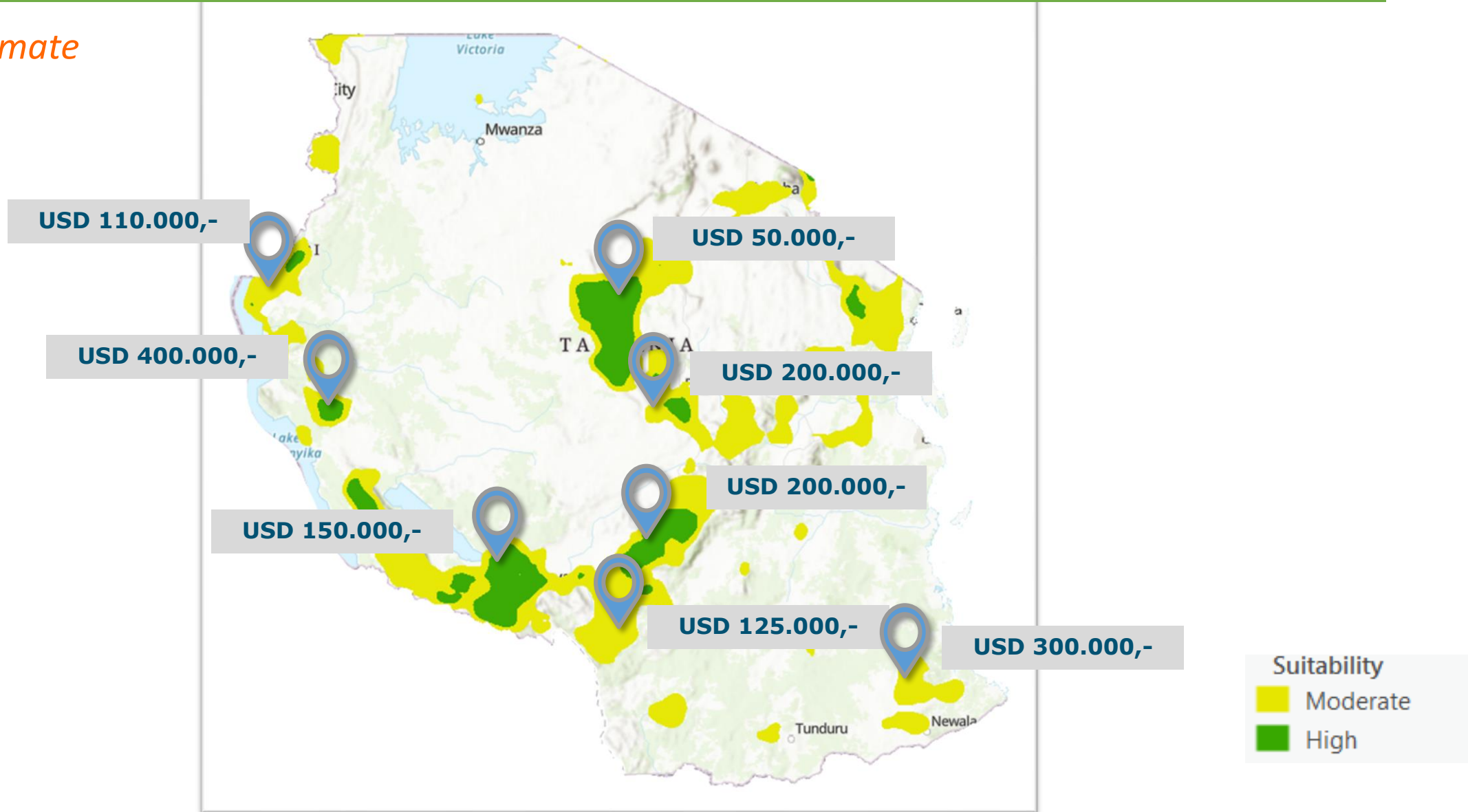
Linking suitability maps,  
financial data and  
adaptation potential



IN NOTE 9 PRO  
LAD CAMERA

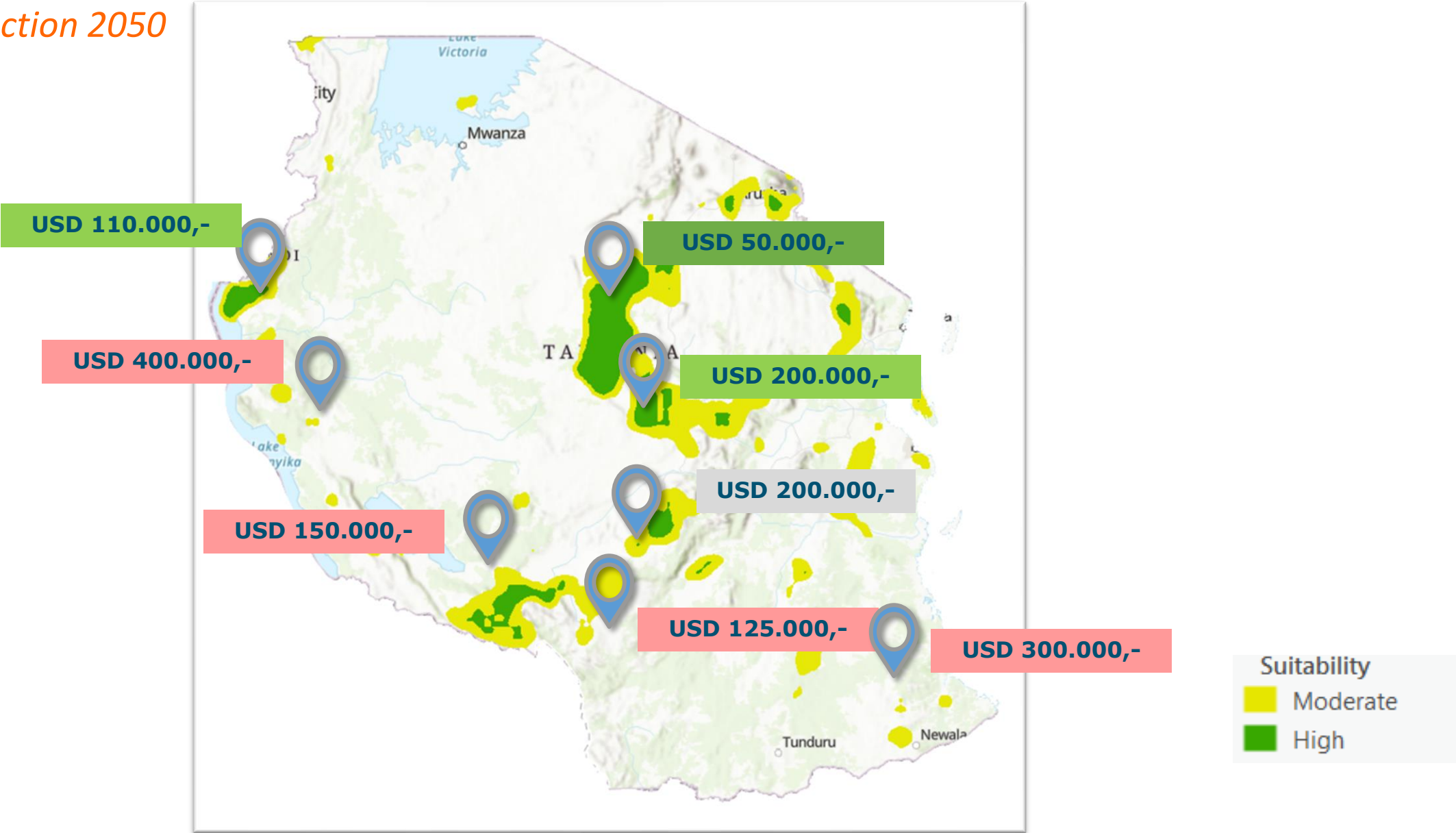
# Climate Risk- Data Analysis: potato suitability Tanzania

## Current Climate



# Climate Risk- Data Analysis: potato suitability Tanzania

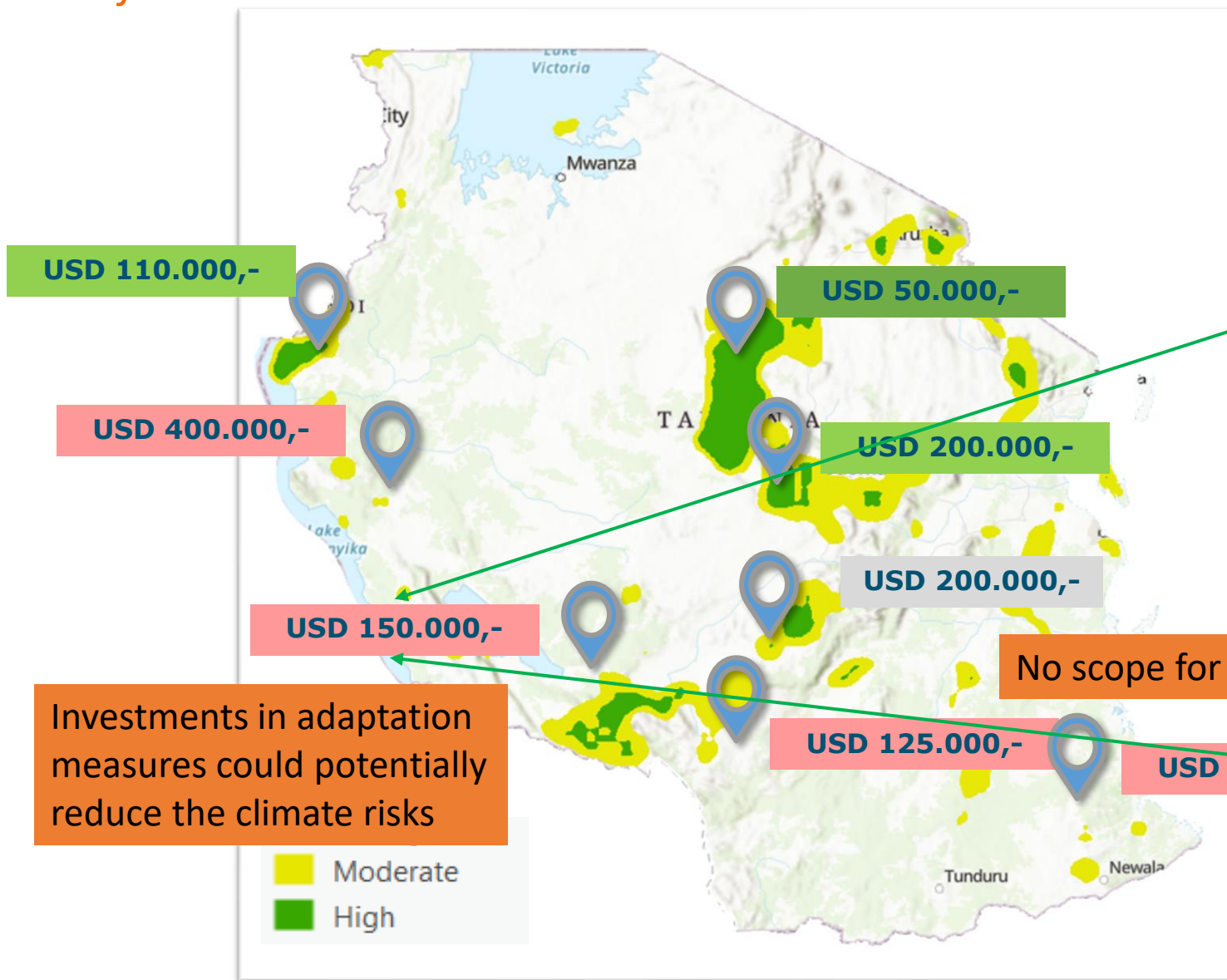
Climate Projection 2050





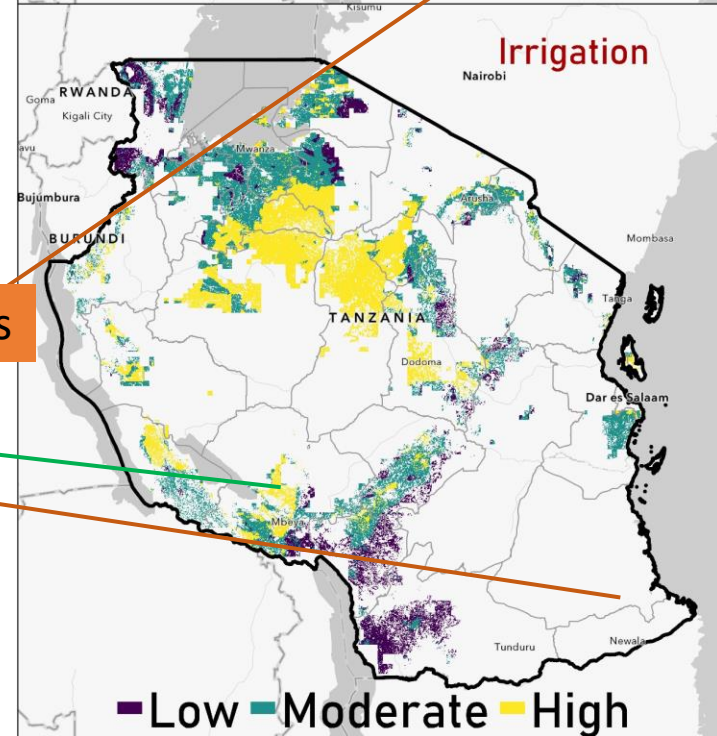
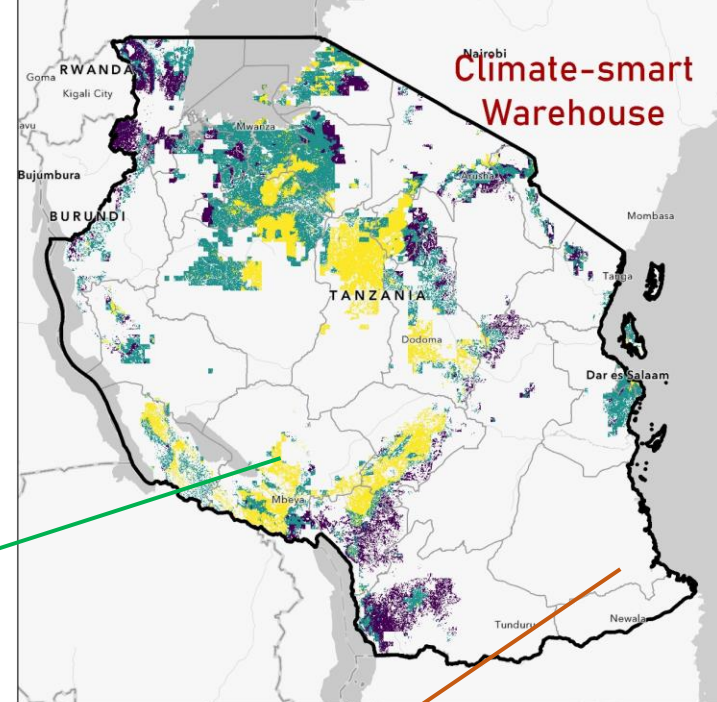
# Climate Risk- Data Analysis: potato suitability Tanzania

Climate Projection 2050



Investments in adaptation measures could potentially reduce the climate risks

No scope for investments



## Conclusion: to trigger financial institutions in making climate smart investments....



Make use of climate information because it shows:

- Potential impact (risks) of climate change on the bank's portfolio
  - Which adaptation measures banks could invest in and in which region to mitigate climate risks
- Financial support to climate smart and bankable agri-business cases (Starlight) will facilitate the uptake and scaling of climate adaptation strategies by smallholder farmers