

Climate information for adaptation response at local government level

Julia Mambo and Miriam Murambadoro
CSIR-NRE
Email JMambo@csir.co.za

The Department of Environmental Affairs (DEA) - Situational Analysis and Needs Assessment (SANAS) study seeks to understand climate change response at the sub-national level. Seeks to better understand user needs and levels of capacity in terms of climate change response at provincial levels of government. The provincial breakdown is as follows :-

- 3 out of 9 provinces have Climate Change Response Strategies (Eastern Cape; Western Cape; Gauteng)
- 3 out of 9 provinces have Climate Change Response Strategies in draft form awaiting stakeholder input (KwaZulu Natal; Northern Cape; Mpumalanga)
- 6 of the 9 provinces have their Climate change response Strategies embedded in within planning tools and or strategies (Free State; Gauteng; KwaZulu Natal; Limpopo; North West; Western Cape) (SANAS, 2015)

Introduction

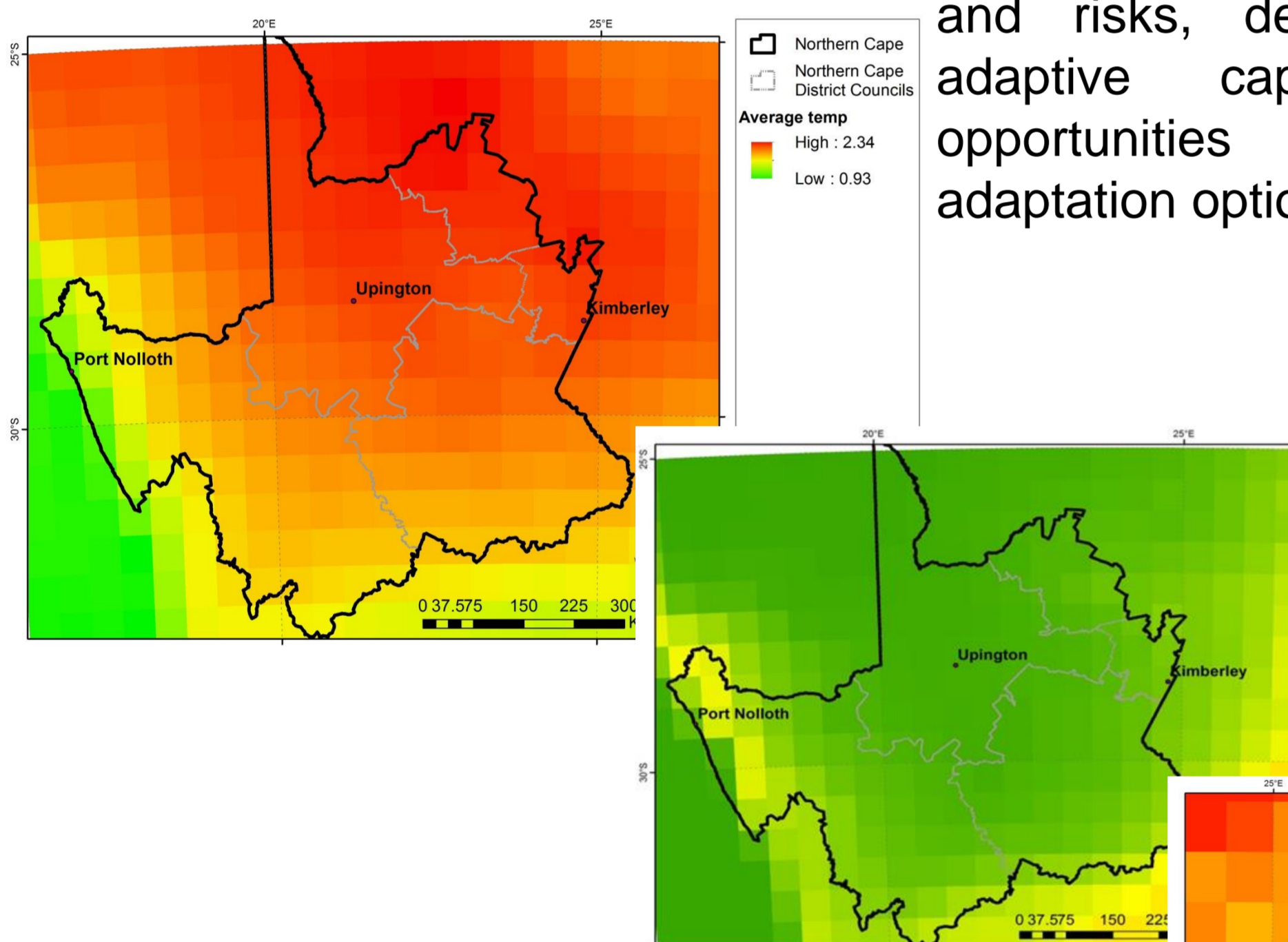
The Climate Change response policy (DEA, 2012) gives a mandate to all municipalities and other levels of government (provincial) to develop and implement Climate Change Adaptation Response Strategies. To respond to the other threats of climate change and build resilience of the natural, economic and social sectors. The availability and accessibility of appropriate information is essential for this process to be effective.

Vulnerability assessment approach was used to facilitate knowledge transfer, build capacity, identify vulnerabilities and risks, determine the level of adaptive capacity, and identify opportunities to adapt, prioritise adaptation options.

Projected changes in temperature, rainfall, very hot days, heat wave days and other climate variables were used to develop the vulnerability profiles as well as to inform the development of the development of adaptation strategies for the provinces and metropolitan areas.

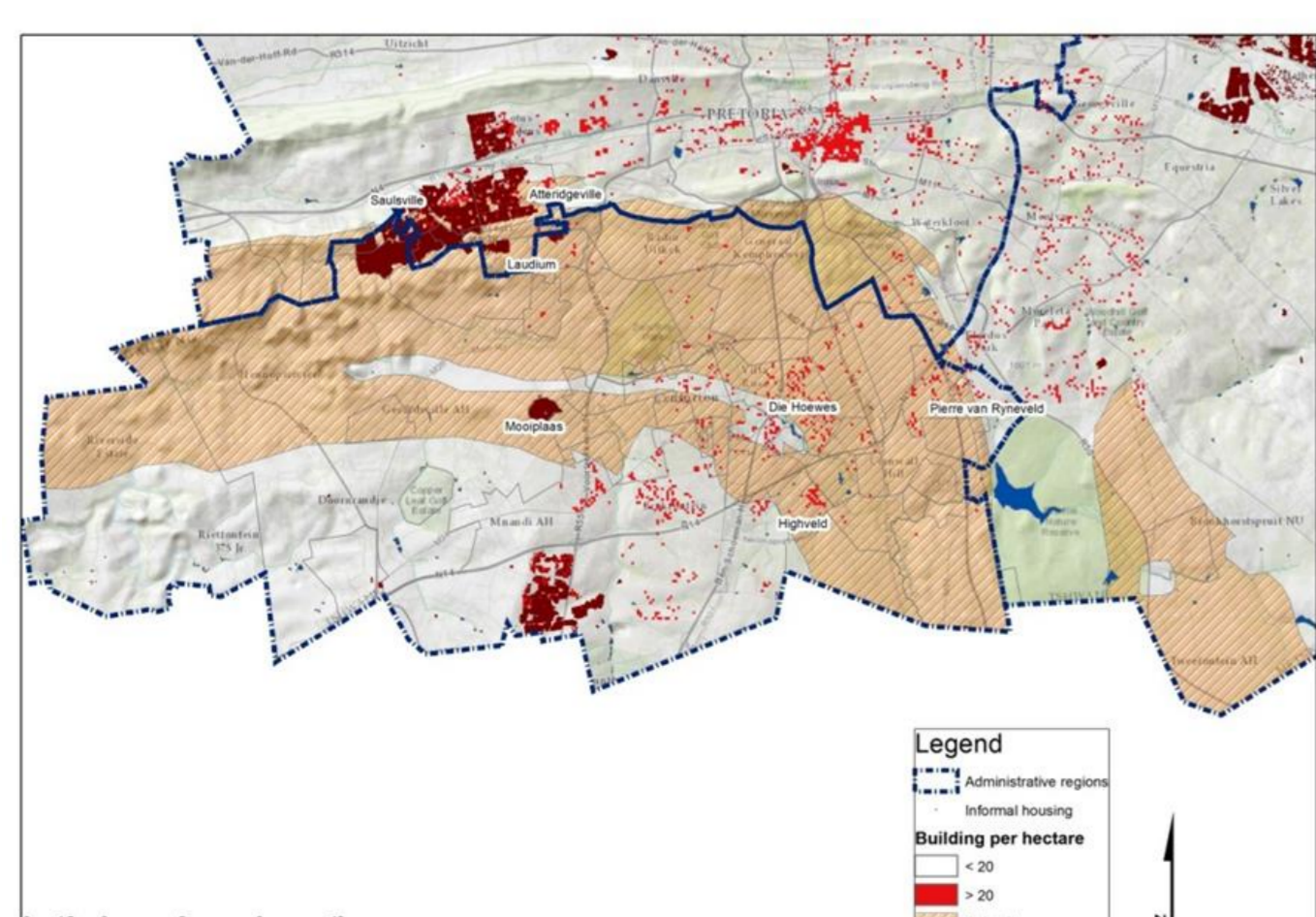
Local Government Officials feedback was collected at the end of the project and highlighted the following:-

- the complexity of the scientific data on climate change projections and on climate variability,
- the format in which the data is presented.
- the need to provide technical support for those who want to use and understand the data
- Lack of capacity both human and financial since climate change was/is regarded as a non-funded mandate
- Lack of technical capacity in local / provincial government



Some Important Questions that need answered at provincial level

- How will the climate change in the next one year, five years or ten years going forward and how does this affect my work?
- How severe will the impacts of the extreme events be on my municipality – can this be quantified in terms of dollars and cents
- What areas in my jurisdiction should be a priority for adaptation intervention response
- How do I plan for it, budget for it, action it
- What are the financial implications of adaptation versus non-adaption for a municipality with limited budget and other key priorities
- If I do not have internet – how do I access this data, how much does it cost, where do I begin
- If I need assistance using the data or understanding where can I get it
- Whose duty is it in the government department to action it
- Where will the money come from.
- When will the changes occur and how bad will they be?

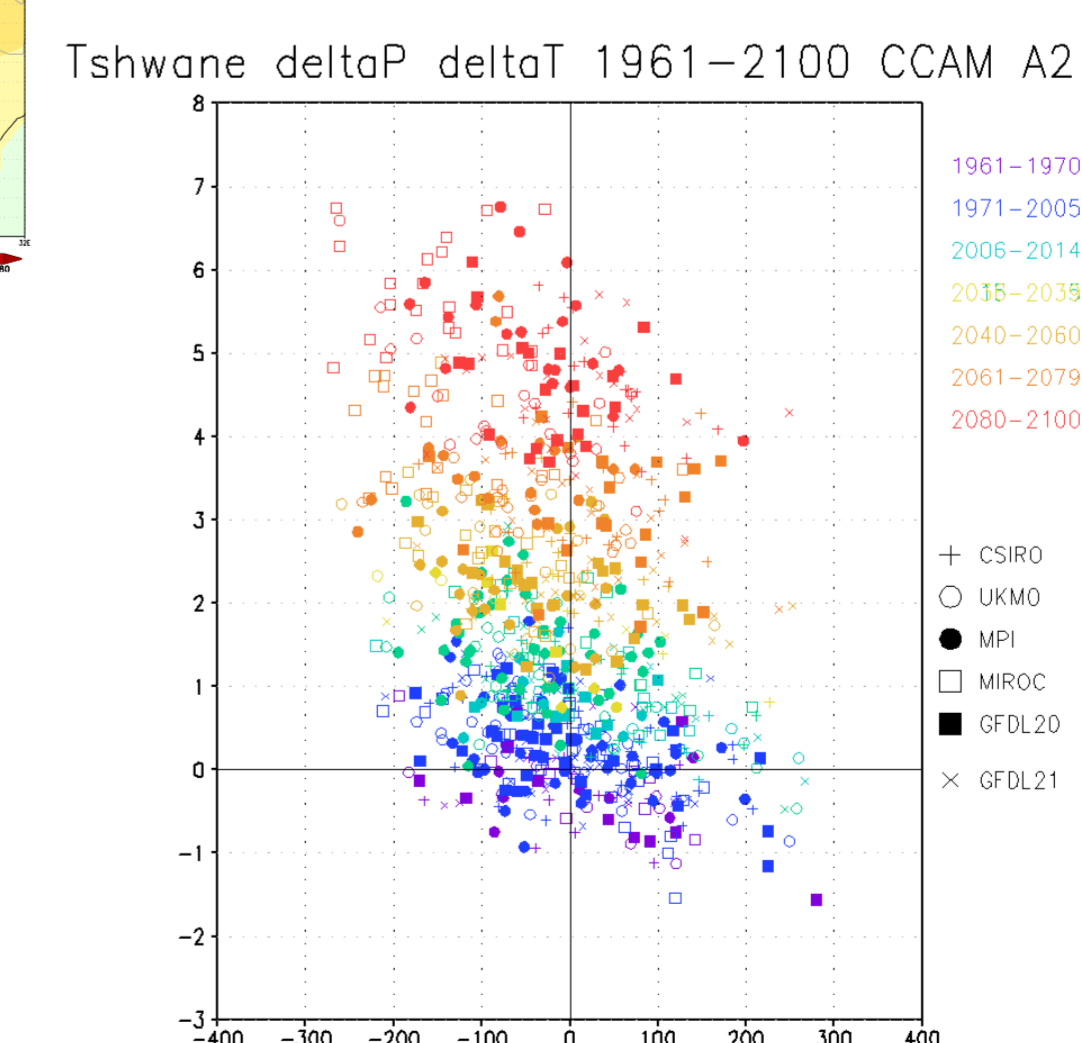
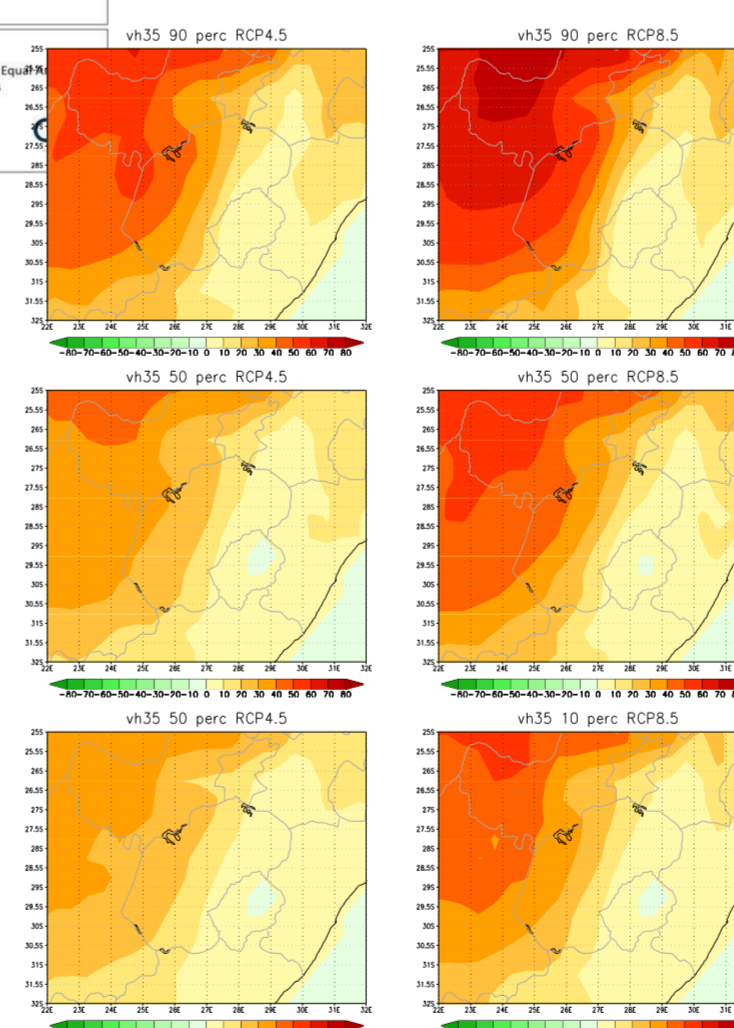


Climate Data Challenges Experienced by Local Government

- Scale – most climate projection data is not appropriate for local level use even when it has been down-scaled
- Data Interpretation is often lacking or if it is available it is at a level too complicated for local government officials to use
- What does the data mean for my local village, municipality or province – official asked **SO WHAT?**
- Since every province is different – how to put this into the context of the municipality or province
- Access to the data – not all offices have fast internet access or other means to access the data when it is needed.

Recommendations

- Simplification of the various climate data products – can be in form of narratives or case studies to put it into context and to understanding how to use it.
- Training of local government officials on adaptive capacity will enable use of climate data products
- Stakeholder engagement in the whole process is essential to develop a good relationship and understanding of the data, the process and the implementation.
- Improved coordination between the different department – this will assist in and integrated approach for implementation
- Need to further investigate the secondary impacts of hazards such as sink holes



Sectors Assessed for vulnerability

- Agriculture
- Biodiversity
- Forestry
- Human Settlements
- Human health
- Water