LTAS WORKSHOP REPORT

Adaptation scenario building for South Africa

Long Term Adaptation Scenarios (LTAS)
Interactive Workshop 2, Phase 2

Saint George Hotel, Centurion, South Africa, 12-13 March 2014

Jointly organised by the LTAS Project Management Team: Department of Environmental Affairs (DEA); South African National Biodiversity Institute (SANBI), & Gesellschaft für Internationale Zusammenarbeit (GIZ). Funded by Gesellschaft für Internationale Zusammenarbeit (GIZ)

The Long Term Adaptation Scenarios Flagship Research Programme is part of the International Climate Initiative (ICI), which is supported by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.
**Workshop summary**

The Long-Term Adaptation Flagship Research Programme (LTAS)’s second **2-day workshop** on 12-13 March used a range of participatory methods to inform the LTAS **adaptation scenario building process**. Approximately 60 participants attended the workshop in total from NGOs, local, provincial and national government and academic institutions (see Annex 1 & 2 for the workshop programme and participant list respectively).

The main objectives of the workshop included:
- Establish buy-in from stakeholders on adaptation scenario planning.
- Get consensus on what is an adaptation scenario vs adaptation strategies.
- Identify key parameters supporting the development of narratives to describe a range of plausible adaptation scenarios for South Africa in a regional context
- Outline the next steps and get ideas on how to involve the different spheres of government

Specifically, participants identified key risks and adaptation responses and integrated these into stories/narratives about South Africa’s plausible climate-global futures: warmer-wetter, warmer-drier (decarbonising world); and hotter-wetter, hotter-drier (high carbon world). The resulting adaptation stories including the following threads:
- natural resource efficiency
- climate smart design and planning for human settlements (urban, rural and coastal) and infrastructure
- capacity building, collaboration, and partnerships across all levels, sectors and organisations
- adaptive management systems including baselines, indicators of change, and feedback loops, including developing an evidence base for building climate resilience;
- climate smart agriculture
- closed loop water and waste systems
- ecosystem-based adaptation, including building ecological infrastructure

The report on South Africa’s **long term adaptation scenarios** is currently being finalised for public review scheduled for approximately mid to end of April. The insights and input obtained from the workshop are being used in conjunction with past and current biophysical and economic research and modelling results, including the costs of adaptation, to build three core adaptation scenarios for the country under wetter; drier (<3 degrees) and hotter (>3 degrees) climate futures. Please see the LTAS SANBI website for the workshop presentations as well as updates on other LTAS research progress. Please read this workshop report in conjunction with the photo documentation report (also available on the LTAS SANBI website).

*We are looking forward to receiving stakeholder comments – the LTAS team*

*(DEA, SANBI and GIZ)*
Workshop methodologies

The workshop used two key methods for hosting the participant dialogue: 1) world café and 2) break away sessions.

The **world café methodology** was used as a simple format for hosting dialogue and obtaining input on **risks and opportunities** (when relevant) of plausible climate futures for South Africa on Day 1.

This was followed by **break-away groups** (four in total – one group per global climate future) that were used to facilitate discussions around adaptation responses and ultimately develop an **adaptation response matrix**.

During the second day, the same break away groups drew on the identified risks and opportunities as well as the adaptation matrices to develop key threads and inter-linkages that would be required for the specific global-climate future. These were then integrated into **adaptation stories / narratives** for South Africa including catchy titles. Please see table 1 below for the flow of events, Annex 1 for the detailed programme and the workshop photo documentation for photos of all results generated in the discussion.
Table 1. Flow of events and examples of results from the world café and break away sessions

<table>
<thead>
<tr>
<th>DAY 1</th>
<th>DAY 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Understanding South Africa’s Climate Futures (world café)</td>
<td>b) Developing a matrix on adaptation responses (break away groups)</td>
</tr>
</tbody>
</table>

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Workshop results

Please use the photo document report in conjunction with the summaries presented below.

Warmer-Drier

RISKS
- Frequent drought and water stress
- Competition for water (urban vs. rural)
- Negative impacts on agriculture yields and food security
- Reduction in water for mining and power sectors
- Loss of biodiversity, reduced carrying capacity
- Extreme events –ive impact on health

OPPORTUNITIES
- New forms of agricultural production and export opportunities
- Specialisation in renewable energy (technology and management expertise)

ADAPTATION RESPONSES
- Regional collaboration to manage water
- New mosaic of agriculture production
- Shift from coal and gas to renewable energy
- Ecosystem and land/soil restoration
- Capacitating local gov. and communities
- Introducing effective PPP’s

ADAPTATION STORY / NARRATIVE
A climate resilient society through enhanced local governance, resource efficiency, and natural resource protection

An adaptive society by 2050 built on:
- Doing more with less - resource efficiency in manufacturing and the effective redesign of urban spaces
- Collaborative regional approach to water and energy management
- Building local capacity - Enhanced local governance and capacitated communities responding to
- Water Lite and distributed renewable energy, especially in rural areas
A strong focus on systemic interventions:
- Integrated soft ecological services and sensitive delivered hard infrastructure
- New measures of wealth (beyond GDP)
- Shift to tertiary service led economy

Warmer-Wetter

RISKS
- Flooding, water logging
- Soil erosion & siltation of dams
- Increase in AIS & woody biomass (carrying capacity)
- NE Limpopo & informal settlements
- Mining (open cast – exacerbated erosion)
- Energy restraints (implications for coal)

OPPORTUNITIES
- Water security (supply & harvesting)
- Regeneration of rural areas
- Agriculture, Forestry, renewable energy & trade
- Job creation: landcare/rehabilitation/restoration

ADAPTATION RESPONSES
- Smart design & planning
- Decentralisation of services to rural areas
- Investment – roads, water harvesting & storage
- CSA & small scale sustainable farming
- Resource conservation and restoration
- Climate advisories & flood warnings
- Micro-renewable energy

ADAPTATION STORY / NARRATIVE
Warmer, Wetter, Wiser

- Immediate no regret actions were prioritised: 1) invested in knowledge accumulation, management and dissemination, 2) developed adaptive management and learning tools and frameworks; 3) invested in risk management and reduction.
- Initiated incremental steps/actions for “slow burn” adaptation issues.
- Included responding to signals to harness future potential opportunities (e.g. increased water availability) by implementing resource conservation, developing a green economy and decentralising and improving services to harness agricultural, forestry and energy opportunities in rural areas.
- Technological tools and advances used to invest in infrastructure (e.g. broadband) and rural development (enabling environment).
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**LTAS phase 2 public review**

Please see table 1 for a proposed full list of products that will be available from LTAS phase 2 for public comment. There will be a total of seven technical reports; including one main report describing the South Africa’s long term adaptation scenarios (see technical report number 7 in the table below). All reports, including a excel comment workbook, will be sent to all participants that attended workshop 1 and 2 of the LTAS phase 2 process using the timelines as expressed in the table below.

Table 2. LTAS Phase 2 products and commenting timeline

<table>
<thead>
<tr>
<th>Report title</th>
<th>Timeframe for comment</th>
<th>Editing, layout and printing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate Change Implications for the Southern African Development Community (SADC)</td>
<td>7-14/04/2014</td>
<td>&gt;30/04/14</td>
</tr>
<tr>
<td>Climate Information and Early Warning Systems for Supporting the Disaster Risk Reduction and Management in South Africa under Future Climates.</td>
<td>7-14/04/2014</td>
<td>&gt;30/04/14</td>
</tr>
<tr>
<td>Climate Change Implications for the Disaster Risk Reduction and Management Sector.</td>
<td>17-29/04/2014</td>
<td>&gt;30/04/14</td>
</tr>
<tr>
<td>Climate Change Implications for the Urban, Rural and Coastal Human Settlements in South Africa</td>
<td>7-14/04/2014</td>
<td>&gt;30/04/14</td>
</tr>
<tr>
<td>Climate Change Adaptation and Food Security in South Africa – towards an integrated economic analysis</td>
<td>27/04-06/05/2014</td>
<td>&gt;30/04/14</td>
</tr>
<tr>
<td>The Economics of Adaptation to Future Climates in South Africa (2030 and 2050) – An integrated biophysical and economic analysis of development and adaptation scenarios under future climates</td>
<td>16-22/04/2014</td>
<td>&gt;30/04/14</td>
</tr>
<tr>
<td>South Africa’s Long-Term Adaptation Scenarios</td>
<td>16-22/04/2014</td>
<td>&gt;30/04/14</td>
</tr>
</tbody>
</table>

*please note one week will be made available for receiving stakeholder comments and inputs.*
# ANNEX 1: workshop programme

## Long Term Adaptation Scenarios Flagship Research Programme (LTAS)
**2-day Adaptation Scenario Development Workshop**
- **Date:** 12-13 March 2014
- **Venue:** Saint Georges, Centurion

### Detailed Programme

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>09h00-10h00</td>
<td>Arrival and Registration</td>
<td>Ms Lindiwe Ratlhagane <em>(DEA)</em></td>
</tr>
<tr>
<td>10h00-10h15</td>
<td>Welcoming note</td>
<td>Mr Shonisani Munzhedzi <em>(DEA)</em></td>
</tr>
<tr>
<td>10h15-10h30</td>
<td>Workshop objectives, workshop approach and overview of structure for the two days</td>
<td>Ms Ilka Stein</td>
</tr>
<tr>
<td>10h30-11h15</td>
<td>Presentation</td>
<td>Dr Guy Pegram <em>(Pegasys)</em></td>
</tr>
<tr>
<td>11h15-11h30</td>
<td>Break and tea/coffee</td>
<td>Ms Ilka Stein</td>
</tr>
<tr>
<td>11h30-12h15</td>
<td>Status of sector adaptation planning (5 minute brief presentations for each sector)</td>
<td></td>
</tr>
<tr>
<td>12h15-12h30</td>
<td>Understanding South Africa’s Climate-Global Futures</td>
<td>Dr Guy Pegram <em>(Pegasys)</em></td>
</tr>
</tbody>
</table>

### Status of sector adaptation planning

- **Department of Water Affairs (DWA)**: Dr Mangi Mgquba
- **Department of Agriculture, Forestry and Fisheries (DAFF)**: Mr Matiga Motsepe
- **Department of Health (DOH)**: Mrs Aneliswa Cele
- **National Disaster Management Centre (NDMC)**:  
- **Department of Environmental Affairs (DEA)**: Mr Vhalinavho Khavagali
- **Department of Rural Development and Land Reform (DRDLR)**: Mr Enoch Mhlan
g
- **Questions of clarifications**: Ms Ilka Stein

### Understanding South Africa’s Climate-Global Futures

- **Presentation**: Dr Guy Pegram *(Pegasys)*
- **Break away session 1 (World Café approach):**
  - warmer-drier and warmer-wetter

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### Development-Adaptation Responses for SA’s Climate-Global Futures

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14h30-15h15</td>
<td>Plenary feedback presentations on climate-global future descriptions</td>
<td>Ms Ilka Stein</td>
</tr>
<tr>
<td>15h15-15h30</td>
<td>Presentation: Development-adaptation responses, including adaptation typologies (scales, sectors/themes and types, including information on specific and systemic types)</td>
<td>Dr Guy Pegram (Pegasys)</td>
</tr>
<tr>
<td>15h30-16h30</td>
<td>Break away session 2 (break away groups)</td>
<td>Ms Ilka Stein</td>
</tr>
<tr>
<td>16h30-17h30</td>
<td>Plenary feedback presentations on development-adaptation responses for SA’s climate-global futures</td>
<td>Ms Ilka Stein</td>
</tr>
<tr>
<td>17h30</td>
<td>Closure for day 1</td>
<td>Ms Ilka Stein</td>
</tr>
</tbody>
</table>

### DAY 2: Thursday, 13 March

**Welcome and outlook for day 2**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>09h00-09h10</td>
<td>Welcome and outlook for day 2</td>
<td>Ms Ilka Stein</td>
</tr>
<tr>
<td>09h10-09h30</td>
<td>DEA perspectives</td>
<td>DDG Judy Beaumont/Peter Lukey</td>
</tr>
<tr>
<td>09h30-10h15</td>
<td>Presentation: Framing adaptation responses based on sectoral and cross sectoral parameters to build adaptation scenarios (narratives)</td>
<td>Dr Guy Pegram (Pegasys)</td>
</tr>
<tr>
<td>10h15-12h30</td>
<td>Break away session 3 (break away groups): Development-Adaptation Scenarios</td>
<td>Ms Ilka Stein</td>
</tr>
<tr>
<td>12h30-13h45</td>
<td>Lunch</td>
<td></td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13h45-15h30</td>
<td>Plenary feedback presentations on development-adaptation scenarios.</td>
<td>Ms Ilka Stein</td>
</tr>
<tr>
<td>15h30-15h45</td>
<td>Coffee/tea break</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>The way forward and timelines</strong></td>
<td></td>
</tr>
<tr>
<td>15h30-15h45</td>
<td>Presentation: Finalising adaptation scenarios</td>
<td>Dr Guy Pegram (<em>Pegasys</em>)</td>
</tr>
<tr>
<td>16h00-16h50</td>
<td>Looking ahead – products and messaging of LTAS adaptation scenarios; engagement with current sector planning and further mainstreaming across sectors.</td>
<td>Ms Ilka Stein</td>
</tr>
<tr>
<td>16h50-17h00</td>
<td>Closure of the workshop</td>
<td>Mr Shonisani Munzhedzi (<em>DEA</em>), Mr Sibonelo Mbanjwa (<em>DEA</em>) and Prof Guy Midgley (<em>SANBI</em>)</td>
</tr>
</tbody>
</table>
Annex 2: Participant list

To be updated in due course.....