Water Security at Local Government Level
What do People Think it Means in eThekwini?

By

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Outline

• Setting the scene
• Water security: What do People Think it Means?
• To end
Setting the Scene: eThekwini

- Category A municipality (Local Government Municipal Structures Act [No. 117 of 1998])
  - High population density.
  - Intense movement of people, goods, and services.
  - Extensive socio-economic development.
  - Multiple business district and industrial areas

- Sub-tropical climate
  - Summer temperatures low to mid-thirties
  - Between 55% to 75% humidity
  - Winter temperature seldom below 10°C
  - Relatively high rainfall – 1 000 mm per annum – Remember 10 October 2017!
    - SA average is around 480 mm per annum

- Demographics
  - 2 297 sq. km
  - 3 555 868 people (2012 stats)
  - Urban and peri-urban
  - 70% peri-urban
Setting the Scene: eThekwini
Water Security: What do People Think?

• UN Water agency’s definition of water security.

• Our research project on water security
  - Water security starts and ends with the individual.
  - Sekhukhune and eThekwini
  - Interview stakeholders in industry, government, mining, agriculture and communities.

• Most view it as the availability and quality of water.

• A more nuanced picture is in the offing.

• Mine in Sekhukhune using bottled water.

• Maintenance of water infrastructure.
Water Security: What do People Think?

- Water security costs money.
- Water security impacts human health.
- The link between fresh water and the marine environment.
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<th>Typology group</th>
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<th>Groups</th>
<th>Positive aspects</th>
<th>Negative aspects</th>
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<tr>
<td>Helping municipalities to help themselves</td>
<td>Working together we can secure our water future</td>
<td>Diverse - from national government to local community and NGO</td>
<td>People should get involved in securing their own water, for example report leaks</td>
<td>I'm so frustrated - I don't get why municipalities can't do this without help</td>
</tr>
<tr>
<td>Supply and demand</td>
<td>Aligning supply and demand with infrastructure and realigning equitable share is a complex issue</td>
<td>Scientists from national government, academia and research organisations</td>
<td>Perhaps we could build more dams to supply more people</td>
<td>We will never be able to supply everyone with enough water</td>
</tr>
<tr>
<td>Water security begins and ends with water quality</td>
<td>Water quality is the key to a sustainable water secure future</td>
<td>Scientists from government, NGO’s academia</td>
<td>Good water quality will ensure healthy people, environments and livelihoods for now and in the future</td>
<td>Surely mines can't use good quality water</td>
</tr>
<tr>
<td>More for some (forever?)</td>
<td>A water supply hierarchy has negative implications for achieving equity</td>
<td>Mostly national government and academic level</td>
<td>A water supply hierarchy supports a stable economy and appeases influential water users in the economy</td>
<td>It is naive to speak of equity in terms of water supply because while this strongly underpins political rhetoric, it is not being actively pursued in the current South African context.</td>
</tr>
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<td>No water security, no food no jobs</td>
<td>Water security is a critical prerequisite for livelihood security</td>
<td>Local level</td>
<td>Water security is an enabler for livelihood security (including food security, better opportunities for people and job security)</td>
<td>An overemphasis on the economic benefits of water security may overshadow ethical implications</td>
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<td>Our water our responsibility</td>
<td>People across all levels of society need to take responsibility for their communal water resources</td>
<td>Local level</td>
<td>Taking responsibility and building agency to look after communal water resources</td>
<td>A strong emphasis on the imperative for people to take responsibility for their communal water resources can be interpreted as &quot;letting municipalities off the hook&quot;.</td>
</tr>
<tr>
<td>Operation infrastructure</td>
<td>Water security depends on infrastructure planning, implementation and maintenance</td>
<td>Mostly communal and municipal</td>
<td>Building and maintaining water infrastructure can improve water security and create jobs.</td>
<td>Holding this exclusive view can create a false sense of water security since it might create a belief that you can 'build' a society out of water insecurity.</td>
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<td>The future is now</td>
<td>Water security can be improved through good foresight and planning, but there is a dilemma in that government is not good at this.</td>
<td>Local, national and geographically wide areas linked to climatic conditions.</td>
<td>The capabilities of foresight and planning can enable better water security.</td>
<td>Rationalist foresight and planning are not the only ways of planning for the future.</td>
</tr>
<tr>
<td>Water is life</td>
<td>Water security can be improved through good and collaborative water resources management and intuitively linking water resources and livelihoods</td>
<td>Academia, local communities, individuals, companies, irrigation boards, and local governments linked through water as a life-giving water resources</td>
<td>Collaboration between civil society and local governments to improve water security.</td>
<td>More authoritarian and blame shifting local governments in the current political climate</td>
</tr>
<tr>
<td>Ignorance and criminality</td>
<td>We are not water secure because people (not us) vandalise infrastructure</td>
<td>Mostly local level</td>
<td>People should get involved in securing their own water</td>
<td>&quot;I&quot; am not responsible for the current situation. Government needs to do more</td>
</tr>
<tr>
<td>Water management as usual must fall</td>
<td>We are not water secure because we are stuck in a rut - business as usual.</td>
<td>Locally situated but they think nationally</td>
<td>Changes needed in how things are done - introduction of new ideas</td>
<td>Theory dominates - idealistic and out of touch with reality on the ground.</td>
</tr>
</tbody>
</table>
Policy Summary of Water Security Typology

Agency in terms of actions and decisions
- Helping municipalities to help themselves
- Our water our responsibility
- The future is now
- Ignorance and criminality
- Water management as usual must fall

Balance between numbers
- Supply and demand
- Water security begins and ends with water quality
- More for some forever

Performance as catalyst
- No water security, no food, no jobs
- Operation infrastructure
- Water is life

The future is now

Water is life

Supply and demand

No water security, no food, no jobs
**Policy Relevance of Water Security Typology**

*Ignorance and criminality:* This kind of definition can come from a number of perceptions, specifically about *who is responsible.* For example, people do not communicate, and the municipality does not listen in any case; people in less affluent areas are more likely to vandalise the infrastructure; the municipality does not have the capacity or drive to keep the infrastructure maintained—and so it goes on. Holding these perceptions can have *negative* and *positive* implications. It might be very difficult to work with people who are quite negative in their view of the current situation, and they might blame a host of ‘others’ for the situation. Nevertheless, at the same time they often advocate for people doing things for themselves, which is a positive foundation to build on.

**Policy Views and Expressions based on this typology**

- Expect water infrastructure theft and vandalism in *less affluent areas.*
- People, and *not* the poor, commit water infrastructure theft and vandalism.
- People (citizens) can also help maintain water infrastructure.
- Communicate constantly and take *normative structures* into account.
  - *Everybody* is capable of water infrastructure theft and vandalism—not only the poor.
  - *Stereotyping,* as a normative structure (causal mechanism), should, therefore, be avoided.
To End

• What people think about water security *matters*.
• Water security is not an abstract concept defined by international organisations or scientists, like UN Water.
• Water security is NOT about quantity, quality, availability, reliable supply, water borne diseases…
• Water security is about individuals, and their environment—lived experience.
• Water security begins and ends with the individual.
• Water should be defined by individuals and not by scientists only—ownership.
• Scientists can miss the point—research in collaboration with communities can be a rich and rewarding experience.
• Local governments face many challenges regarding water security.
• The challenges can extent beyond fresh water security to include the marine environment.
Thank you for listening

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