

Working Group 2

Surface and groundwater resources
monitoring/Water Use monitoring



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Getting started!

- What is the document all about?
- Is it a paper? proposal? Or what?...
- General understanding is *paper is a baseline document* that will inform the Action Plan for GMES in Africa.

Contributions on...

- **General comments about the Introduction Chapter**
 - With the thematic context (Chapter 1.1)
 - With the policy drivers and Need Analysis (Chapter 2)
- **Any gaps in the Chapters**
 - Communities and stakeholders identification (Chapter 3)
 - Mapping exercise (Chapter 4)
 - Thematic and funding programme (Chapter 5)
- **Service definition and cross-cutting issues**
 - Are other water services required
 - Are all skills mentioned
 - Is prioritisation appropriate
- **Are there other issues?**

Thematic context (sections 1.1 & 1.2)

- For bullet 1 consider incorporating the UN Water Convention (1997) which encourages cooperation between countries and conservation of wetlands. This is very key to all this work.
- Some statements in the section are scientific and, hence, references should be provided.
- There is no trace of the word “groundwater” in document. It would be assumed that water refers to a combination of both groundwater and surface water but it would be good that it is highlighted/emphasised.
- Suggest inclusion of statistics on gw and sw distribution in Africa.
- Groundwater use is on the increase in both rural and urban areas. It would be good to allude to this fact and mention that uncontrolled gw development and over-abstraction will lead to lowering of water tables and other challenges

- Transboundary aspects of gw also need to be mentioned.
- Water quality is very key and there is increasing risk of pollution
- Bullet 5: Please note that pollution is not just restricted to industrial as many other activities contribute to point source and non-point sources of pollution.
- Consider all multiple uses of i.e water for domestic, urban, industrial, agriculture, navigation, fisheries, livestock development, tourism, ecosystems, etc
- While it is acknowledged that there is under-development of water resources, the available developed freshwater water is also being wasted with high inefficiencies across use sectors.

- Groundwater should be discussed from both abstraction and recharge perspective.
- Under bullet 5 consider emerging serious concerns about location of boreholes and shallow wells in relation to proximity to septic tanks and toilets.
- Document should stress that what is required is resource assessment before development.
- Include monitoring programmes for both sw & gw and from quality and quantity perspective.
- Last sentence to include monitoring.

- Include a bullet on status of monitoring e.g. monitoring densities.
- Include bullet on lack of Space Policy in most African countries.
- Section 2.2 is not mentioning anything about needs analysis. Either change title or rewrite to improve focus.
- Consider giving more broad definition of uses as text is silent on other important water using activities such as fisheries, livestock, navigation, ...

Chapter 2 policy drivers

- UN Convention (1997) missing from the relevant drivers
- Declaration on GW at AMCOW (2/3 yrs ago) – establishment on GW Commission
- Of listed drivers check on performance against targets
- Please take note that drinking water is a right!
- Query! Were authors restricted to continent-wide analysis only or they could have explored the situation at regional levels

- Water policies for all countries should align with regional and continental policy
- Do we have available platforms to interact with e.g. Ministers before they commit themselves at higher levels (UN, Africa, etc). In principle the platforms exist but are not being taken advantage of. (CAPACITY BUILDING)
- Do we need instruments to give teeth to some agreements reached at e.g. AMCOW level?
- Fears some agreements/positions do not filter to appropriate levels (rest of society) and are kept to within implementing Ministries only.
- Water is cross-cutting hence difficult to manage at policy level. It means many policies have to agree with the water policies.
- Space policy for all countries

Need analysis

- Now using “safe” drinking water instead of “clean” used in previous section. Be consistent! Suggest stick to MDG terminology!
- Section 2.2 ... last line repeats “growing water demand” as all other uses are also contributing to growing water demand. Consider rephrasing.
- In same section also consider including socio-economic uses e.g. navigation, recreation,
- Paragraph alludes to AMCOW definition. Authors should consider exploring this in a broader context and ensuring that the section articulates needs based on thematic areas (bullets) in section 1.
- Discuss all needs sectors, as so far, this is narrowed to AMCOW definition (maybe).

- Consider rearranging the sub-headings or, better still, remove sub-headings 2.1 and 2.2 so that text flows through.
- Influence of minimum freshwater flows in rivers in relation to salt water intrusion should be considered.
- Issue of land degradation is key as it affects water availability.
- We know what drivers are but we need to incorporate policy issues
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- (capacity building/policy) management of gw i.e. well-field development and management programme. Also maintenance of infrastructure
- Water schemes last longer but require more capital investment
- Treat water as an economic good (last bullet + policy section)
- Regulations and enforcement

Gaps in the chapters? (Chapter 3)

*Recommend “**monitoring**” comes out more clearly throughout the section.*

- International agencies
 - Water programme of the UN Atomic Agency
 - World water partnership is, in fact, GWP, International Network of Basin Organisations
- Continental
 - AfricaGEOSS
- Regional
 - GWPs, Regional Basin Commissions, ECOWAS,
- National
 - Country water partnerships, water research councils
- Donors and **cooperating partners**
 - Specify donors and not necessarily programmes that are running
 - AfDB, AUC, Islamic Development Bank
- International and local NGOs
 - CAPNET, SIWI, WWF, Action Aid, etc

Mapping exercise (Chapter 4)

- Concerned that Table 3 is restricted to EOs only and has no timeframes.
- Recommend in-situ monitoring to complement EOs and also to validate EO data sets.
- Mapping of gw aquifers – data sources
- GW is not easily handled by EOs hence need for in-situ monitoring. Concern, however, is that monitoring networks are getting less and less on the ground.
- In-situ programmes to consider e.g. SASSCAL, Atomic Energy Programme, HYCOS, National Monitoring Programmes, Africa Array, TRIGNET, Regional Basin Organisations, NSCOW, etc

Thematic and funding programme gaps (Chapter 5)

- Reference should be made to national rather than local scales
- Consider improving presentation of chapter such that there is good link with issues captured in Section 1.1
- Emphasise importance of policy and supporting legislation before institutional blockages can be considered
- Under “general”, consider additional notes on barriers to EO which includes absence of policy and legal instruments.
- Discuss the fact that number of in-situ monitoring networks is shrinking and implications.

- Collection, processing, archiving and access of collected data need improvement.
- Ease and affordability of accessing data should be discussed including backup services to run and maintain equipment and software.
- Section 5.2: Consider merging with Table 3.
- Document is not acknowledging national efforts to complement this programme. This gives negative impression at national levels as local efforts do not seem to be acknowledged.

Service definition and cross cutting issues (Chapter 6)

- Incorporate use of in-situ networks.
- Make distinction between core data sets and service provision.
- Consider including groundwater and shallow aquifer monitoring at continental scale.
- Including estimate of water quantities and quality and, hence, water balance analyses at regional levels.
- Consider including transport, tourism and regional economic commissions as key users.
- Temporal resolution is not discussed in regional and national level.

Capacity building (Chapter 6.2a)

- Generally satisfied with section
- Bullet 3.... Add sustainability of in-situ networks
- Bullet 6.... Enhance capacity of water authorities and other water-related service providers

Strategy (6.2b)

- What is critical mass required to operationalise GMES across all sectors? Define the numbers, expertise, users and distribution.
- We may need an M&E in place to define and monitor progress
- Acknowledge that in the short term, current programmes running at universities and colleges should be supported as well and not wait to long term.
- Incorporate on 2nd bullet, sustainable technical capacity through continuous training

Prioritisation (6.3)

- Also no serious concerns raised under this section.
- Under bullet 2 include supported by AMCOMET and RECs to embrace a wider base.

Organisational scheme (6.4)

- AMCOW is being given overall responsibility to oversee this project. What is their view if they are represented here?

Recommendations (7)

- Consider pilot programmes to demonstrate practical models where this can be applied successfully.
- Universities and research centres should be specifically included in the programme.
- Consult further on feasibility of implementation as e.g. AMCOW and NBI may not be working together on all aspects