ASSESSMENT OF POLLUTION STATUS AND VULNERABILITY OF WATER SUPPLY AQUIFERS OF AFRICAN CITIES:

Impacts and Lessons

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UNEP UNESCO AMCOW UWC ADB
Evaluation of 11 Country UNEP/UNESCO project

- A critical review of the project as a whole
- MOST IMPORTANTLY:
  - Assessment of the impact the project has made and finding lessons learnt to improve future projects
- Assessment of:
  - Early warning
  - Policy
  - Public awareness
  - Capacity building
  - Knowledge transfer
  - Networking
  - Scientific credibility

*Albert Einstein:*

*Not everything that can be counted counts, and not every thing that counts can be counted*
Early warning

- Bulletins
- Largest impact on technical decision makers/managers
- Some excellent results in different countries, e.g. Senegal where early warning bulletin resulted in provision of sanitation to 6000 units, closure of boreholes in John Laing, Lusaka
- Protection zones
Policy

- Meaningful contributions to influencing policy at national, regional and local level in all countries.
- Implementation is often the greatest issue.
- Time/budget result in more success at city level.
- Many countries show that national or regional stakeholders have taken cognisance of the results and implications.
- In some cases (e.g., Benin and Cote D’Ivoire) impact at national policy level has been made.
- With additional effort and time, findings should form the basis for formulating/improving policy and groundwater protection measures.
Capacity building

- The capacity created by this project continues to be one of the greatest impacts.
- Project teams seen as centres of expertise (confirmed in countries visited)
- Many students have benefited directly from the project
- Secondary impacts to parties collaborating with research teams
## Students

<table>
<thead>
<tr>
<th>Country</th>
<th>Senegal</th>
<th>Mali</th>
<th>Niger</th>
<th>Burkina Faso</th>
<th>Ghana</th>
<th>Ivory Coast</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD, UG, Eng, Tech</td>
<td>1 PD, 4 UG</td>
<td>3 Eng, Tech, 2 Tech</td>
<td>1 PD (1F), 1 Eng</td>
<td>1 M, 1 PD (1F)</td>
<td>3 PD, Tech (1F)</td>
<td>2 PD, 3 M, (1 F)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Benin</th>
<th>South Africa</th>
<th>Kenya</th>
<th>Ethiopia</th>
<th>Zambia</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD, M, Eng</td>
<td>1 PD</td>
<td>1 PD</td>
<td>1PD</td>
<td>1 M, 3 PD/2 Tech</td>
<td>2 UG, 1 PD</td>
</tr>
</tbody>
</table>

At least 35 students involved across the continent
Knowledge transfer

- Technical Bulletins
- Workshops
- Print Media
- Radio/Television
- Committees/Cabinet
- Website
- Innovative approaches
Knowledge dissemination

- The dissemination at a technical level was highly effective.
- Technical level personnel benefited.
- Lessons were more difficult to pass on to the general public and non-technical or political decision makers.
- Some of this may be related to the time span and budgetary constraints of the project.
- Also related to packaging of message.
Networking

- A truly continental network of groundwater researchers working on similar problems
- Highlighted the similarities throughout the continent in nature of the problem
- Several collaborative efforts arising from this. Some country teams collaborate on new issues eg Benin/Ivory Coast and Ethiopia/Kenya
- Regional Database
Scientific Impact

- African groundwater issues are often not accurately reported in “global assessments”
- Very little information on African groundwater quality is in the public domain
- Project has helped to fill this gap
- Edited, peer-reviewed book first step
- Gives researchers opportunity to publish and be recognized
- Researchers, donors, governments and agencies will now have reference to status quo, the problems, the expertise which exists and researchers/research groups
How did the participants rate the impacts?

1 = Excellent

5 = Poor

Self-Evaluation Wheel: Impacts
LESSON : To successfully transfer the message to policy makers and the public:

- The message needs to be correctly packaged
- The message needs to be repeated
- The message needs to be repeated

"PLEASE FEEL FREE TO INTERRUPT IF YOU HAVE A QUESTION."


Some challenges to maximizing the impact from lessons learned

- Time
- Implementation of existing policy/law
- Capacity in water management
- Repackaging of results
- Monitoring
- Political changes/priorities
- Link to other projects and sanitation programs
From the experience in this project, the approach suggested by the participants.

Regulators

Effective GW Protection

Technical Aspects

Public
Thank you for your time!

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