
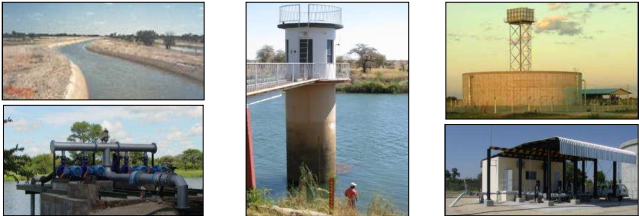
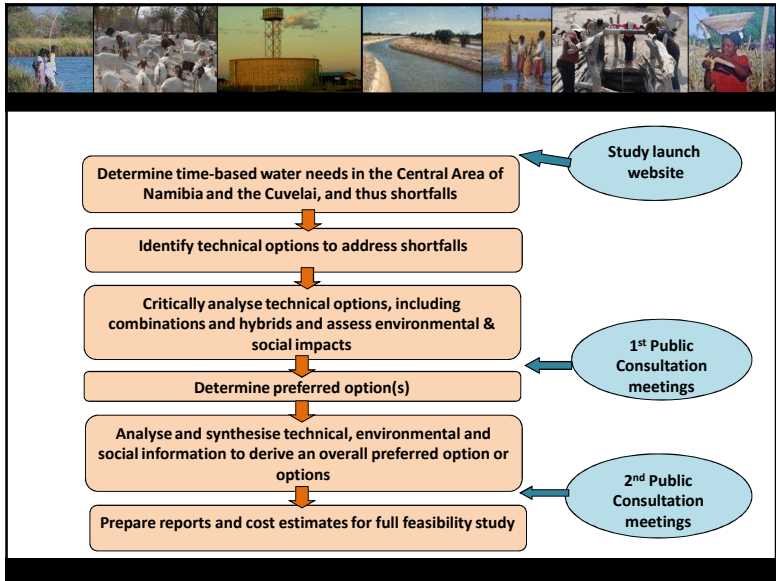



# Augmentation of Water Supply to the CAN and Cuvelai: Summary of Public Participation Meetings (Rundu, Oshakati & Windhoek), (MAWF, NAMWATER, City of Windhoek)




**A PRE-FEASIBILITY STUDY INTO:  
THE AUGMENTATION OF WATER SUPPLY TO THE CENTRAL  
AREA OF NAMIBIA AND THE CUVELAI**

**Public Consultation Meetings for phase 1**

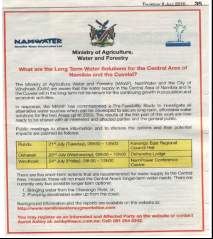
## The purpose

- to share information on the background and need for the study, in both the CAN and Cuvelai areas
- to present the results of the engineering team's findings on water supply and demand to 2050
- to explain the various options available to meet the water demand, in both the short-to-medium- and long-term
- to identify the most appropriate options from an engineering perspective, to be carried forward into phase 2 of the study for more detailed investigation
- to present the environmental and social issues associated with each option, at a strategic level
- to engage with the public on these issues, including clarification of points, filling gaps, receiving opinions, suggestions and ideas, etc.



## The process

- Interactive Website set up at beginning of project to:
  - post information, announcements, press releases
  - post reports and presentations
  - register IAPs
  - receive comments, feedback, suggestions, information, etc
- Advertisements in 3 newspapers on Thursday & Friday on week before, and two weeks before
- Press release reviewed by PSC and released by MAWF Public Relations Officer (radio, TV, press, ....)
- Direct e-mail invitations and second phase invites
- Registration of IAPs and e-mailed non-tech summary
- Follow up on all e-mails and phone calls from IAPs



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Stakeholders – Invited to meetings via e-mail
Project Steering Committee – MAWF, NamWater and City of Windhoek
Khomas, Kavango, Oshana, Omusati, Ohangwena and Oshikoto Regional Councils
Local Authorities, Traditional Authorities, Communal Land Boards
<b>Key Government Ministries and Parastatals:</b>
Office of the President
Office of the Prime Minister
National Planning Commission
Ministry of Agriculture, Water and Forestry
Poverty Eradication and Social Welfare
Ministry of Lands and Rehabilitation (MLR)
Ministry of Urban and Rural Development
Ministry of Public Enterprises
Ministry of Works and Transport
Ministry of Industrialization, Trade and SME Development
Ministry of Environment and Tourism
Ministry of Mines and Energy
Ministry of Fisheries and Marine Resources
Ministry of Information, Technology and Communication
Ministry of Higher Education, Training and Innovation
NamWater
NamPower
Roads Authority (RA)
TransNamib
Bank of Namibia
Polytechnic of Namibia (PoN)
University of Namibia (UNAM)

Stakeholders – Invited to meetings via e-mail
<b>The Private Sector:</b>
Chamber of Mines of Namibia
National Chamber of Commerce and Industry
Engineering Council of Namibia
Namibian Institute of Town and Regional Planners
Walvis Bay Corridor Group
Environmental Assessment Practitioners Association of Namibia
Construction Industries Federation of Namibia
Mining Companies in the Central Area of Namibia
<b>Environmental NGOs and Specialists</b>
<b>General public attending the public meeting and responding to press announcements</b>
<b>Media: Namibia Broadcasting Corporation, newspapers, radio stations</b>



Place	Date and time	Venue	Attendees
Rundu	21 <sup>st</sup> July, Tuesday 08h30 – 13h00	Kavango East Regional Council Hall	31
Oshakati	22 <sup>nd</sup> July, Wednesday 08h30 – 13h00	Oshandira Lodge, Oshakati	20
Windhoek	24 <sup>th</sup> July, Friday 08h30 – 13h00	NamPower Conference Centre	70

- Full report on website
- Full list of attendees in Appendices of report
- PSC participants: V Slinger (MAWF), NP du Plessis (NamWater), HI Peters (CoW)
- Engineering team: H Bruce & B van der Merwe
- Environmental / Social team: C Brown, A Ashby
- Others joined the Windhoek meeting



Rundu	Oshakati	Windhoek
<ul style="list-style-type: none"> <li>• Kavango Governor</li> <li>• Kavango Regional councillors and officials,</li> <li>• Rundu town councillors and officers</li> <li>• Traditional Authorities</li> <li>• Communal Land Board</li> <li>• MAWF, MLR, RA,</li> <li>• UNAM, Rundu Vocational Training Centre</li> <li>• Farmers Associations</li> <li>• NGOs</li> <li>• Members of public</li> </ul>	<ul style="list-style-type: none"> <li>• Special Advisors to Governors of Oshana and Ohangwena</li> <li>• Mayor of Oshakati Town Council</li> <li>• CEO of Oshana Regional Council &amp; Deputy Director for Planning</li> <li>• Director of Oshikoto Regional Council</li> <li>• CEO of Omusati Regional Council</li> <li>• MAWF, AMTA, NAMPA</li> <li>• Members of the public</li> <li>• Media</li> </ul>	<ul style="list-style-type: none"> <li>• Khomas Governor</li> <li>• Office of the PM</li> <li>• Khomas Regional Councillors and officers</li> <li>• CoW councillors and officers</li> <li>• Private sector industry and businesses</li> <li>• Town &amp; regional planners, engineers, environ. cons.</li> <li>• MAWF, NamWater, Roads Authority</li> <li>• NGOs</li> <li>• Polytechnic of Namibia</li> <li>• Members of the public</li> <li>• Media</li> </ul>

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<b>PROGRAMME</b>	
for the	
<b>1<sup>ST</sup> PUBLIC PARTICIPATION MEETINGS</b>	
on	
<b>AUGMENTATION OF WATER SUPPLY TO THE CENTRAL AREA OF NAMIBIA AND THE CUVELAI</b>	
1. Welcome	The Regional Governor
2. Official Study Introduction	Victor Slinger, MAWF & Chris Brown
3. Engineering presentation	Hugh Bruce, <i>Lund Consulting Engineers CC</i>
3.1 Water demand to 2050 (CAN & Cuvelai)	
3.2 Current water sources and their potential	
3.3 Future options to meet supply	
3.4 Questions of clarity	
4. Environmental presentation	Chris Brown, <i>Sustainable Solutions Trust</i>
4.1 Screening of future options from an environmental & social perspective	
4.2 Questions of clarity	
5. Discussion and comments	Auriol Ashby, <i>Sustainable Solutions Trust</i>
6. Word of thanks	Your Worship, the Mayor of the town.

Topic	Main Issues Raised
<b>Actions Required: Engaging Leadership</b>	<ol style="list-style-type: none"> <li>1. Leaders at all meetings recommended to urgently brief the Cabinet or National Assembly on the urgency of the situation;</li> <li>2. City of Windhoek has the plans in place but not the budget to act and N\$1.5billion is required now to reduce the risk to Windhoek becoming dry; that would badly affect Windhoek's contribution from just a few key water-reliant industries that generate over N\$25 million a day for the national economy.</li> </ol>
<b>Actions Required: Raising Awareness</b>	<ol style="list-style-type: none"> <li>1. Urgently need visible and loud awareness campaigns to save water now.</li> <li>2. Need accurate media reporting.</li> </ol>
<b>International concerns</b>	<ol style="list-style-type: none"> <li>1. Have consultations engaged with Angola and Botswana?</li> <li>2. What is the status of the agreement with Angola in terms of their water use?</li> <li>3. What if Angola decides to pull out of the current agreement?</li> <li>4. Will there be an agreement with these riparian States for water abstraction of the Kavango River?</li> <li>5. Need to ensure water quality and quantity received from Angola is acceptable.</li> <li>6. Need to have a second access point to the Kunene River, should access to Calueque ever be denied.</li> </ol>

Topic	Main Issues Raised
<b>National Development Implications</b>	<ol style="list-style-type: none"> <li>1. Instead of taking water to Windhoek, move big water-demand projects and industries to the Kavango and coast, to where the water is.</li> <li>2. Consider incentives to move population to the coastal areas where desalinated water will not be pumped great distances or heights. This has huge implications on all Local Authorities affected.</li> <li>3. Should we accept current water use patterns? Irrigation at Hardap and Green Schemes in Kavango and Etunda consumes a huge amount of water and creates less economic value than the jobs needing that water in urban areas (about N\$25 million/day from a few key water-reliant industries in Central Area).</li> </ol>
<b>Concerns of Kavango East Region</b>	<ol style="list-style-type: none"> <li>1. The Kavango Region is the poorest region and needs water to develop irrigation and for livestock. The people of Kavango are poorly developed from a water perspective.</li> <li>2. The government wants the Kavango Region to produce Namibia's food, i.e. water needs to be allocated for the Green Scheme projects</li> <li>3. The water needs of Kavango Region should be met before water is pumped away. Cannot take water from the region when areas in Kavango away from the Kavango River do not have good potable water.</li> <li>4. What will be the benefits to the people of Kavango Region of taking their water?</li> </ol>

Topic	Main Issues Raised
<b>Impact on the Okavango River</b>	<ol style="list-style-type: none"> <li>1. Climate change is predicted to reduce rainfall over Angola by 250mm by 2045 which will significantly reduce the river flow.</li> <li>2. Angola is expanding its agricultural schemes in the catchment area and from the river so the flow will reduce.</li> <li>3. Many people depend on fish and the river for their livelihoods. Cannot enable people in Windhoek and Oshakati to survive at the expense of others in the river basin.</li> <li>4. Namibia's 7 Green Schemes need 400,000m<sup>3</sup>/day, equivalent to 47% during low flow.</li> <li>5. If the maximum flow is reduced, the Delta would become saline, like Etosha.</li> </ol>
<b>Issues for the Cuvelai Region</b>	<ol style="list-style-type: none"> <li>1. Climate change is predicted to reduce rainfall which is likely to reduce recharge of both the saline and Ohangwena II aquifers.</li> <li>2. How to reduce the 69% loss between Calueque and Oshakati?</li> <li>3. Recognition of the need for water recycling and consensus it would not be a cultural problem for potable water (Oshakati meeting).</li> <li>4. Local changes in flows in the iishana are natural, not due to developments in Angola.</li> <li>5. Need more technical information on the recharge rates of the Ohangwena II Aquifer, then decide whether to extract sustainably or to mine it and deplete it.</li> </ol>

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<b>Implications for the Central Area of Namibia</b>	<ol style="list-style-type: none"> <li>How will the shortfall be addressed if there is no in-flow into the dams next rainy season? Will still need water restrictions for several years to come.</li> <li>Need to clean up flow into Swakopoort Dam from industries, from overflow of Goreangab, overflow from Gammans in Windhoek and sewage works at Okahandja, and from informal settlements.</li> <li>Expensive water-saving technologies and recycling of effluent may be more cost effective than desalination from the coast.</li> </ol>
<b>Implications for the Economy / Business in the Central Area</b>	<ol style="list-style-type: none"> <li>When the taps run dry, it will close down the dairy industry and we will lose 700 jobs.</li> <li>Any plans to prohibit new water-intensive industries in the Central Area, not just in City of Windhoek?</li> <li>Impact of high water costs and price on the consumer.</li> </ol>
<b>The Desalination Option Implications</b>	<ol style="list-style-type: none"> <li>What are some advantages and disadvantages of desalination?</li> <li>Consider a combination of solar and wind energy with desalination;</li> <li>Support application to the Green Climate Fund;</li> </ol>

<b>Clarifications / Comments on the Engineering Pre-feasibility Study</b>	<ol style="list-style-type: none"> <li>Where do we get more water – from underground or surface water?</li> <li>Why don't we make use of the perennial Orange River?</li> <li>What is the source of water brought from Grootfontein to Windhoek?</li> <li>Would the water from the Okavango River be treated at source?</li> <li>Is the Inga Dam in Congo still an option or is it only for electricity?</li> </ol>
<b>Comments on the Environmental Study and Consultation Process</b>	<ol style="list-style-type: none"> <li>Challenge from Kavango Region, whether the meeting was to inform or to have an input on what is going to happen.</li> <li>Criticism that information on Kavango Region's current and future demand had not been included.</li> <li>The next public meeting (in Kavango) should include discussions with local people/community.</li> <li>Client was commended that it employed professional and independent teams and for a job well done.</li> <li>Clarification on difference between the 2010 integrated resource management plans and the need for an Integrated Strategic Environmental Assessment (SEA).</li> </ol>

<b>Issues recommended for further study</b>	<ol style="list-style-type: none"> <li>To extend the Terms of Reference (TOR) to examine desalination option in detail.</li> <li>To include current and future water demand from the Kavango River for the Kavango regions – both urban and rural, and particularly the Green Schemes.</li> <li>Strong recommendation from the Kavango Region stakeholders to conduct a detailed study on current and future water demand and potential impacts, particularly socio-economic, including tourism, of taking water from the Kavango River.</li> <li>To consider Angola's current economic expansion and future plans affecting water demand.</li> <li>Consider the link from the ENWC into the system of Otjivero dam for Gobabis as a higher risk but lower liability.</li> <li>Consider rural areas adjacent to Karibib, Omaruru and Usakos e.g. Omatjete, Okombahe, Uis, Spitskoppe, which are experiencing critical water shortages and poor water quality.</li> <li>Consider the capacity of the ministry (MAWF) and the DWA to implement plans.</li> <li>Construct a measuring point at Katwitwi</li> <li>Not only consider source but also efficient use &amp; reticulation systems.</li> <li>Impact on the cost of water to end users.</li> <li>Has the economic impact of not having water been considered? (Potential loss, → economic impact?)</li> <li>Should develop Strategic National Integrated Resource Plans that combine water &amp; electricity.</li> </ol>
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