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

21-24 July 2015

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

Key Government Ministries and Parastatals:
- Office of the President
- Office of the Prime Minister
- National Planning Commission
- Ministry of Agriculture, Water and Forestry
- 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)

The Private Sector:
- 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

Environmental NGOs and Specialists

General public attending the public meeting and responding to press announcements

Media: Namibia Broadcasting Corporation, newspapers, radio stations

Place Date and time Venue Attendees

Rundu 21st July, Tuesday 08h30 – 13h00 Kavango East Regional Council Hall 31

Oshakati 22nd July, Wednesday 08h30 – 13h00 Oshandira Lodge, Oshakati 20

Windhoek 24th 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
- Kavango Governor
- Kavango Regional councillors and officials,
- Rundu town councillors and officers
- Traditional Authorities
- Communal Land Board
- MAWF, MLR, RA,
- UNAM, Rundu
- Vocational Training Centre
- Farmers Associations
- NGOs
- Members of public

Oshakati
- Special Advisors to Governors of Oshana and Ohangwena
- Mayor of Oshakati Town Council
- CEO of Oshana Regional Council & Deputy Director for Planning
- Director of Oshikoto Regional Council
- CEO of Omusati Regional Council
- MAWF, AMTA, NAMPA
- Members of the public
- Media

Windhoek
- Khomas Governor
- Office of the PM
- Khomas Regional Councillors and officers
- CoW councillors and officers
- Private sector industry and businesses
- Town & regional planners, engineers, environ. cons.
- MAWF, NamWater, Roads Authority
- NGOs
- Polytechnic of Namibia
- Members of the public
- Media

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

21-24 July 2015

Programme

For the 1st Public Participation Meetings on Augmentation of Water Supply to the Central Area of Namibia and the Cuvelai

1. Welcome The Regional Governor
2. Official Study Introduction Victor Slinger, MAWF & Chris Brown
   3. Engineering Presentation Hugh Bruce, Lund Consulting Engineers CC
      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
3. Environmental Presentation Chris Brown, Sustainable Solutions Trust
   4.1 Screening of future options from an environmental & social perspective
   4.2 Questions of clarity
4. Discussion and comments Auriol Ashby, Sustainable Solutions Trust
5. Word of thanks Your Worship, the Mayor of the town.

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<tr>
<th>Topic</th>
<th>Main Issues Raised</th>
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| National Development Implications    | 1. Instead of taking water to Windhoek, move big water-demand projects and industries to the Kavango and coast, to where the water is.  
                                           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.  
                                           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). |
| Concerns of Kavango East Region       | 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.  
                                           2. The government wants the Kavango Region to produce Namibia’s food, i.e. water needs to be allocated for the Green Scheme projects  
                                           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.  
                                           4. What will be the benefits to the people of Kavango Region of taking their water? |
| Impact on the Okavango River          | 1. Climate change is predicted to reduce rainfall over Angola by 250mm by 2045 which will significantly reduce the river flow.  
                                           2. Angola is expanding its agricultural schemes in the catchment area and from the river so the flow will reduce.  
                                           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.  
                                           4. Namibia’s 7 Green Schemes need 400,000m³/day, equivalent to 47% during low flow.  
                                           5. If the maximum flow is reduced, the Delta would become saline, like Etosha. |
| Issues for the Cuvelai Region          | 1. Climate change is predicted to reduce rainfall which is likely to reduce recharge of both the saline and Ohangwena II aquifers.  
                                           2. How to reduce the 69% loss between Calueque and Oshakati?  
                                           3. Recognition of the need for water recycling and consensus it would not be a cultural problem for potable water (Oshakati meeting).  
                                           4. Local changes in flows in the Ishana are natural, not due to developments in Angola.  
                                           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. |
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### Implications for the Central Area of Namibia

1. 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.
2. Need to clean up flow into Swakoppoort Dam from industries, from overflow of Goreangab, overflow from Gammans in Windhoek and sewage works at Okahandja, and from informal settlements.
3. Expensive water-saving technologies and recycling of effluent may be more cost effective than desalination from the coast.

### Implications for the Economy / Business in the Central Area

1. When the taps run dry, it will close down the dairy industry and we will lose 700 jobs.
2. Any plans to prohibit new water-intensive industries in the Central Area, not just in City of Windhoek?
3. Impact of high water costs and price on the consumer.

### The Desalination Option Implications

1. What are some advantages and disadvantages of desalination?
2. Consider a combination of solar and wind energy with desalination;
3. Support application to the Green Climate Fund;

### Clarifications / Comments on the Engineering Pre-feasibility Study

1. Where do we get more water – from underground or surface water?
2. Why don’t we make use of the perennial Orange River?
3. What is the source of water brought from Grootfontein to Windhoek?
4. Would the water from the Okavango River be treated at source?
5. Is the Inga Dam in Congo still an option or is it only for electricity?

### Comments on the Environmental Study and Consultation Process

1. Challenge from Kavango Region, whether the meeting was to inform or to have an input on what is going to happen.
2. Criticism that information on Kavango Region’s current and future demand had not been included.
3. The next public meeting (in Kavango) should include discussions with local people/community.
4. Client was commended that it employed professional and independent teams and for a job well done.
5. Clarification on difference between the 2010 integrated resource management plans and the need for an Integrated Strategic Environmental Assessment (SEA).

### Issues recommended for further study

1. To extend the Terms of Reference (TOR) to examine desalination option in detail.
2. To include current and future water demand from the Kavango River for the Kavango regions – both urban and rural, and particularly the Green Schemes.
3. 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.
4. To consider Angola’s current economic expansion and future plans affecting water demand.
5. Consider the link from the ENWC into the system of Otjivero dam for Gobabis as a higher risk but lower liability.
6. Consider rural areas adjacent to Karibib, Omanuru and Usakos e.g. Omatjete, Okombohe, Uis, Spitskoppe, which are experiencing critical water shortages and poor water quality.
7. Consider the capacity of the ministry (MAWF) and the DWA to implement plans.
8. Construct a measuring point at Katwitwi
9. Not only consider source but also efficient use & reticulation systems.
10. Impact on the cost of water to end users.
11. Has the economic impact of not having water been considered? (Potential loss, economic impact?)