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## NEPAD Networks of Centre of Excellence in Water Sciences PHASE II

A C E W A T E R 2 p r o j e c t 2 0 1 6 - 2 0 1 9

**Human Capacity Development Component**

**NEPAD SANWATCE Draft Final Report**

**4 June 2019**



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## LIST OF ACRONYMS

AMCOST	:	African Ministers' Council on Science and Technology
AMCOW	:	African Ministers' Council on Water
AUC	:	African Union Commission
CBIs	:	Capacity Building Institutions
CoEs	:	Centres of Excellence
DWA	:	Department of Water Affairs (Botswana)
DWRD	:	Department of Water Resources Development
EWSETA	:	Energy and Water Sector Education and Training Authority
GWPSA	:	Global Water Partnership Southern Africa
HCD	:	Human Capacity Development
IWRM	:	Integrated Water Resources Management
JPTL	:	Junior Professional and Technician level
M&E	:	Monitoring & Evaluation
MOAIWD	:	Ministry of Agriculture, Irrigation and Water Development (Malawi)
NEPAD	:	New Partnership for Africa's Development
RBO	:	River Basin Organisation
RSAP	:	SADC Regional Strategic Action Plan on Integrated Water Resources Development and Management Phase IV
SADC	:	Southern African Development Community
SADC SHCDP	:	SADC Strategic Human Capacity Development Plan
SADC-WD	:	SADC - Water Division
SANWATCE	:	Southern African Network of Water Centres of Excellence
SETA	:	Sector Education and Training Authority
TVET	:	Technical and Vocational Education and Training
UNESCO-IHP	:	United Nations Educational, Scientific and Cultural Organization International Hydrological Programme
WARMA	:	Water Resources Management Authority (Zambia)



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## INTRODUCTION

### Project Background

The Human Capacity Development (HCD) Component of the ACEWater2 project implements the African Ministers Council on Water (AMCOW) declaration urging the African Union Commission and NEPAD Centres of Excellence to develop a “Human Capacity Development Programme for junior professional and technician level (JPTL) capacity challenges in the water sector” at the national level in the Centres of Excellence countries. The project is funded by the European Commission, coordinated by UNESCO-IHP and implemented by the African Network of Water Centres of Excellence. In southern Africa, the HCD component supports the preparation of national human capacity development frameworks/strategies/plans that address junior professional and technician level capacity challenges in five NEPAD Centres of Excellence (CoE) countries. These pilot countries include Botswana, Malawi, Mozambique, South Africa and Zambia. The national HCD frameworks include an implementation plan and a monitoring and evaluation (M&E) framework.

### Overview of regional and country activities

The AU/NEPAD Southern African Network of Water Centres of Excellence (AU/NEPAD SANWATCE) Secretariat supported the CoEs at national level in Botswana, Malawi, Mozambique, South Africa and Zambia by:

- Bringing together all 11 Centres of Excellence as well as regional partners to enable a shared understanding of the regional water sector human capacity development context so as to identify opportunities for linkages and synergies in order to ensure that the HCD component supports, adds value and avoids duplication of existing human capacity development initiatives in the region at the first regional consultative workshop in March 2017.
- Developing guiding documents to support the country processes that included provision of the regional SADC HCD context, draft questionnaire, interview guide and outlines for reports.
- Comprehensive reviews of Scoping Study reports, National Dialogue programmes and reports, revised Scoping Study reports, draft HCD frameworks, Validation Workshop programmes and reports, revised HCD frameworks, and final HCD implementation plans and M&E frameworks. These reviews were coupled with team lead Skype meetings to discuss and clarify on reviewer comments.
- Participation of the Secretariat in all country workshops (Dialogues and Validation) – including briefing meetings before the workshops and debriefing meetings after the workshops to reflect on the process, outcomes and immediate way forward.
- Guiding all teams to present status reports and highlights from the HCD country processes at the 2<sup>nd</sup> Regional Workshop – towards country team knowledge exchanges, as well as seeking regional stakeholder input (at the 18<sup>th</sup> WaterNet/WARFSA/GWPSA Symposium in October 2017).



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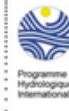
The table below presents a general overview of project implementation.

**Table 1: Overview of project implementation**

Activity	Agreed timelines	Actual date & reason for deviation
1. Contracting	end March 2017	Contracting finalised end August 2017 <u>Reason for delay:</u> Contract drafting finalisation as well as CoE host institution bureaucracy in signing off
2. Scoping study (identify needs)	<ul style="list-style-type: none"> <li>Draft scoping study reports - 15 June 2017</li> <li>Feedback and finalisation by 30 June 2017</li> </ul>	Scoping study reports received between end June and end August 2017 Revised and returned to CoEs within 1 week of submission <u>Reason for delay:</u> Delayed start of activity due, in part, to delay in finalisation of contracting (finalisation of tasks and budget availability, CoE host institution bureaucracy) and underestimated time needed to engage with the necessary stakeholders in the process. Engagement of and buy-in from mandated institutions for the water sector and human capacity development are critical to meaningfully and sustainably place the HCD country process in the national context.
3. National dialogues (define priorities, implementation framework and M&E framework)	All to be conducted by 31 July	August – mid-September 2017 <u>Reason for delay:</u> delayed scoping report finalisation and availability of key stakeholders.
4. Draft national HCD framework (includes the implementation and M&E Frameworks)	<ul style="list-style-type: none"> <li>Draft submission - 31 Aug 2017</li> <li>Feedback to national - 15 September</li> </ul>	January – April 2018 <u>Reason for delay:</u> knock on effect of the delayed start of the country processes coupled with busyness of CoEs personnel working on the project (academic commitments and end of year slow down)
5. National validation workshop	All to be conducted by 15 October 2017	January – April 2018
6. Regional feedback meeting	18 <sup>th</sup> WaterNet/WARFSA/ GWP-SA Symposium	Completed as planned. A special session on the HCD component was held on 25 October 2017 during the 18 <sup>th</sup> WaterNet/WARFSA/ GWP-SA Symposium held in Swakopmund, Namibia from 25-27 October.
7. Final national HCD framework	<ul style="list-style-type: none"> <li>First draft 20 Nov</li> <li>Feedback by 30</li> </ul>	1 <sup>st</sup> final draft received April 2018 and currently conducting a second review of outstanding frameworks (waiting of final framework after second reviews of Mozambique and South



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	November 2017 • Final national HCD framework by 10 Dec. 2017	Africa frameworks) Final drafts: expected before end of September 2018 <b><i>This report presents accompanies the submission of final reports/plans/frameworks from Botswana, Malawi Mozambique, south Africa and Zambia.</i></b>
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## Report structure

This report provide a summary of the first phase of ACEWater2 HCD Component, highlighting key outcomes from the national processes aimed at developing HCD programmes that respond to junior professional and technician level capacity challenges in five pilot SADC Member States. The report is structured as follows:

- i. Section 1 introduces the project and presents a summary of project implementation
- ii. Section 2 highlights significant outcomes in the country processes
- iii. Section 4 concludes with a statement on the relevance of the first phase of the ACEWater2 HCD Component in the SADC region, within the SADC priority framework

## COUNTRY PROCESSES AND OUTCOMES

National consultation meetings – dialogue and validation workshops - were conducted in the timelines presented in the time below

**Table 2: Summary of country stakeholder engagements**

Country	Dialogue dates	Validation workshop dates
Botswana	13 September 2017	12 April 2018
Malawi	28 July 2017	02 February 2018
Mozambique	25 August 2017	Beira - 14 March 2018 Maputo – 16 March 2018
South Africa	21 September 2017	22 February 2018
Zambia	23 August 2017	28 February 2018

### Key findings - common gaps, needs and priorities in human capacity development

Most of the countries noted the following issues:

- National policy and legislative frameworks in the 5 countries acknowledge the importance of human capacity development in the water sector. In Malawi and Zambia for instance, legislation (Water Resources Act of 2013 and Water Resources Acts of 2011 respectively) state that funding for HCD in the water sector is to be financed from water abstraction levies through relevant water authorities. Yet, this is currently not in effect as relevant institutions to implement said provision have either not been formed as yet or are not fully functional. Overall, the challenges lie in the implementation of the policy or strategy as well as the lack of clearly defined focus on JPTL in water sector
- National HCD initiatives – HCD capacity analyses - previously undertaken in the countries were not necessarily demand-responsive. Courses were developed and undertaken as part of donor-led/driven activities and not always in response to sector needs. As such, results and outcomes have, generally, not institutionalised and therefore not sustained.
- There is inadequate connectedness and collaboration between many key institutions. In particular capacity building institutions (CBIs) and government as well as the CBIs and industry (including the water boards/utilities and private sector)
- Most tertiary institutions often only offer academic programmes that do not address the skills required by industry. Thus, university graduates were felt to not possess requisite technical skills to accompany academic qualifications hence not job-ready
- While a host of Technical and Vocational Education and Training (TVET) institutions exist, programmes offered there do not adequately cater for the skills needed in the water sector

- There were non-existent or inadequate internship and mentorship initiatives for students to ensure job-ready personnel at graduation.

Most prioritised actions, as such, are aimed at addressing the above needs. The following were common recommendations in the countries:

- To address implementation issues in HCD in the water sector
- To ensure that JPTL targeted programmes are emphasised
- To recognise experienced skilled personnel despite not having formal qualifications (recognition of prior learning)
- To attend to the gaps and weaknesses in water related programmes at capacity building institutions especially at TVET institutions
- To foster greater collaboration between CBIs, as well as formalised collaboration among CBIs, government and industry – especially water utilities and private sector - to ensure that HCD initiatives respond to the needs of the sector and development context of the country. Such collaborative arrangements include placement of students and recent graduates for internship and apprenticeship at relevant institutions
- The ministry responsible for water as the sector lead needs to own, drive and be the champion of the HCD efforts in the water sector
- The HCD initiative at the national level must be housed in the lead ministry with linkages to other government ministries such as labour and education. This will ensure that the HCD initiatives are within government policy and strategic frameworks as well as being responsive to the real pressing needs
- Challenges and gaps in existing curricula of CBIs (including TVET institutions) require targeted institutional strengthening (or revival) of CBIs and the courses they offer
- Countries acknowledged the importance of developing relevant, stakeholder informed HCD frameworks/plans to target specific donors and national budgeting processes in order to implement priority HCD initiatives

Country specific outputs and outcomes are presented in Table 3 below

**Table 3: Summary of country specific outputs and or outcomes from national processes**

COUNTRY	SIGNIFICANT ACHIEVEMENT AND/OR OUTCOME
<b>BOTSWANA</b>	<p>The Department of Water Affairs (DWA) supports the placement of HCD process and output in the National Human Resource Development (HRD) strategy (<i>Realising our potentials</i>). The DWA will lead the formal engagements with the sector committee for Mining, Minerals, Energy and Water Resources (MMEWR) that is responsible for the water sector human capacity development.</p> <p>For the University of Botswana, the national process was of strategic benefits for the University of Botswana and helped in strengthening the position of the University as a water CoE in the area of water resources management and development.</p> <p>The national report and framework accompanies this report. <b>(Annex 1)</b></p>



<p><b>MALAWI</b></p>	<p>The Department of Water Resources (DoWR) in the Ministry of Agriculture, Irrigation and Water Development, Ministry of Education, capacity building institutions and water boards demonstrated ownership of the process of formulating the HCD strategic framework. Given the confirmed urgent need of HCD for junior professional and technicians, stakeholders will most likely invest further energy into leveraging resources to implement the framework in the short and long term. The national report and framework accompanies this report. <b>(Annex2)</b></p>
<p><b>MOZAMBIQUE</b></p>	<p>The national process in Mozambique resulted in the development of a Capacity Building Strategy for Junior Professional and Technician Personnel in the Water Sector led by the Ministry of Science and Technology, Higher Education and Technical Training. The Strategy will have to go through cabinet processes for approval before being effected in the country. The national report and strategy accompanies this report. <b>(Annex 3)</b></p>
<p><b>SOUTH AFRICA</b></p>	<p>The national process provided room for a discussion on the effectiveness of existing HCD initiatives in the country. The process highlighted the existence of numerous HCD efforts by various stakeholders that include national government, water utilities, CBI, sector education and training authorities (SETAS). Yet, a gap exists with the monitoring, evaluation and reporting of HCD programmes. Thus, the thrust of the HCD component focuses on the need to develop a monitoring, evaluation and reporting framework. The process of developing the monitoring, evaluation and reporting framework for South Africa is to be led by the Department of Water and Sanitation as well as the Energy and Water Sector Education and Training Authority (EWSETA). The national report accompanies this report. <b>(Annex 4)</b></p>
<p><b>ZAMBIA</b></p>	<p>The focus of national process responded directly to the human capacity development needs to implement legislative and policy frameworks for the Ministry of Water Development, Sanitation and Environmental Protection, in particular the Water Resources Management Authority (WARMA) and the new Department of Water Resources Development (DWRD). The HCD component, therefore, makes a contribution towards the formulation of a national plan on recognition of prior learning as well as occupation qualifications and technical skills training for the water sector. The national report and HCD framework accompanies this report. <b>(Annex 5)</b></p>

Overall, the process of developing the human capacity development programmes confirmed the need for concerted effort to address junior profession and technician level capacity challenges for sustainability of water as a resource and water supply and sanitation services provision. Developing such a programme requires engagement and support of both tertiary and TVET institutions, national water and education institutions including water utilities and the private sector. The stakeholder dialogues led to the development of HCD frameworks or conversations that are meaningful, well placed in the regional and national institutional and policy framework and most importantly identified priority actions to address real human capacity challenges of the

water sector. Validation works generated sufficient ownership of the frameworks. With further minimal support, components of HCD frameworks/plans can be implemented to demonstrate action and results. In addition, the HCD frameworks/plans can be used to leverage additional resources (both internally through the national budget and the private sector as well as through bilateral funding) for implementation of the priorities in short and long term. Thus, these stakeholders developed programmes not only address the national HCD needs and resultant prioritised actions but are also most likely to be taken forward and continue within national processes.

## CONCLUSION

### Regional context and gaps – regional value addition (HCD in SADC water sector)

The first progress report for the HCD component, submitted end June 2017, discussed SADC water sector priority frameworks including key guiding strategies, plans and institutions engaged in HCD in the water sector. To recall, human capacity development (HCD) is prioritised in the current SADC RSAP IV and contained as therein as the SADC Strategic Human Capacity Development Plan (SHCDP). The Vision of the SHCDP is:

*To produce by year 2020 world class SADC water Sector professionals and technicians who will efficiently and competently plan, develop, implement, operate and maintain the national, river basin and regional water infrastructure in a visibly efficient and coordinated manner to the satisfaction of all stakeholders.*

The SHCDP process revealed a number of noteworthy HCD issues. Those of particular relevance in the context of this ACEWater2 HCD initiative include:

- The SADC water sector needs to produce more water technicians and acknowledged that training offered in the region was pegged at too high a level for certificate and diploma level trainees. The trainee target group for existing water sector capacity development programmes remain primarily middle level managers
- A question was raised regarding the relevance of capacity development offered for junior professionals and whether those middle level managers trained mentored junior professionals
- There was a need for more hands on practical level training and skills development

Thus, at the regional level, SADC, confirms the AMCOW declaration on the need for a human capacity development programmes for junior professionals and technicians in the water sector. In addition, the five country processes highlight the inadequacy of existing HCD initiatives in meeting the needs of both junior professional and technician level personnel. To contextualise, probably the greatest response to the needs raised in the SADC SHCDP was the development of the Professional Training Courses Implementation Plan for the SADC Water Sector (2016-2020), led by WaterNet. Of the 15 prioritised topics (see first progress report for the complete list), in 2017, WaterNet and partners in the region started implementation through support from SADC and its international cooperating partners (ICPs). In the contractual agreement a total of 21 professional short courses will be undertaken until 2020. Ten regional courses (covering 6 topics – international water law including groundwater articles, negotiation skills, notifications and consultations and gender mainstreaming tools) have been successfully implemented. Two

of the topics were undertaken in 3 languages separately (English, French and Portuguese). Three additional topics will be addressed from June - December 2018 (water demand management, financing water infrastructure and monitoring and communicating river status). Whilst the courses are demand responsive (and within the overall SADC priority framework, the target beneficiaries do not include junior professional and technician level personnel but rather senior professionals, middle and senior level managers. In addition, WaterNet serves to also support SADC RBOs mandated on international transboundary water management. There are a number of expectations and assumptions – two are noted here:

- i. That technician level training is undertaken nationally, not regionally.
- ii. That senior and middle managers/professional will return to their countries and institutions and customise the WaterNet short courses to the specific country contexts and offer them there.

Yet, interpretation of the above, coupled with the findings of the 5 national HCD processes under this ACEWater2 project, demonstrate that junior professional and technician level targeted HCD initiatives are currently not being undertaken comprehensively nor organised in a coordinated manner across the region. While, some project specific initiatives offer some capacity development but again – these do not necessarily target junior professionals and technician level personnel.

The value add of the ACEWater2 HCD Component to HCD efforts in the SADC region is clear. The piloting has highlighted and/or reemphasised gaps in content/thematic areas. More importantly national processes identified challenges in the country HCD systems for junior professions and technicians and collectively formulated solutions. In summary these were:

- Inadequate implementation of existing policies, strategies and plans;
- Ad hoc HCD projects not necessarily aligned with broader national priority framework for HCD, thus, generally not responding to the needs of the industry;
- Inadequate coordination and resourcing of water sector JPTL HCD initiatives;
- The need to strengthen and/or establish relevant CBIs, in particulate TVET institutions; and
- Inadequate partnerships between CBIs, government, national HCD units and industry (including water utilities and private companies), which must support practical aspects of training and ensure HCD efforts are demand responsive.

### **Recommendations and way forward**

At the national and project level, each country has indicated what their priority piloting activities might be based on time frame, urgency and feasibility. Countries have also considered their pilot activities strategically with regards to seeking further support and leveraging national budget and external funds to continue supporting their national JPTL HCD processes. Countries are continuously promoting piloting priorities that further instil excitement and ownership through some aspects of the strategy being implemented. At the regional level; a gap in HCD for JPTL personnel has been confirmed. Yet, planned initiatives to address this gap are not very clear. Some key lessons learned from implementation of this first phase include

- **Appreciate the context** - HCD programmes must reflect regional and national realities and should be informed by appropriate institutional frameworks, sector and national development aspirations
- **HCD programmes have to add value** - repeatedly having to ask: what is the value proposition of the HCD programme to the national water sector?
- Understand the **water value chain and the skills required** for sustainable water resources management and water and sanitation service delivery
- **Let process define and inform subsequent stages** of the programme which is key to ownership, uptake, replication and sustainability of HCD programmes

There are a couple of significant matters that need urgent attention:

- i. The findings, gaps and value addition of the 5 country HCD processes need to be shared, presented and discussed with SADC Water division, WaterNet and GWPSA
- ii. The regional partners – including AU SANWATCE - should discuss and agree on sharing the approach and the results of the HCD process with the other SADC Member States and explore how best that can be done (for example at the symposium, WRTC, the WaterNet Management Board and GWPSA Board meetings and or other platforms)
- iii. The short term question is how can the other 10 (soon to be 11) SADC member states replicate the process to assess their challenges, gaps and come up with priority actions (as Botswana, Malawi, Mozambique RSA and Zambia have had the advantage of doing)?
- iv. The longer term matter for discussion is about how the regional partners (SADC, RBOs, WaterNet, SANWATCE, GWPSA and others can discuss a plan of action and support SADC Member States in addressing their JPTL HCD needs, beyond the narrow confines of one project. Regional partners need to urgently strengthen their collaboration, resourcing and coordination towards equipping JPTL with the essential capacity required.