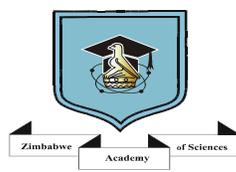


REPORT ON THE LAUNCH OF POLICY MAKERS' BOOKLET ON  
SCIENCE, WATER AND SANITATION ZIMBABWE ACADEMY OF SCIENCES

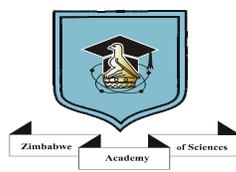
CROWNE PLAZA HOTEL, Harare

6 December 2013



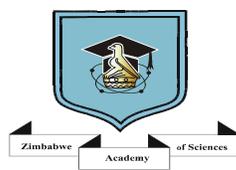
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## LIST OF ACRONYMS/ABBREVIATIONS

ZAS	Zimbabwe Academy of Sciences
NASAC	Network of African Science Academies
ASSAf	Academy of Science of South Africa
ZINWA	Zimbabwe National Water Authority
CH	City of Harare
EMA	Environmental Management Agency
SADC	Southern Africa Development Countries



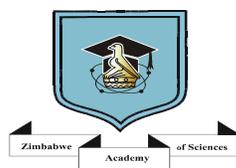
## ACKNOWLEDGEMENTS

This proceedings report was a collaborative effort involving many people. The Zimbabwe Academy of Sciences would like to acknowledge the following individuals and organizations in particular:

- All Members of Parliament and Senators who graced the occasion
- NASAC, Leopoldina and the German Federal Ministry of Education and Research (BMBF) for funding this project.
- Our partners in this project ASSAf.
- All Regional Delegates for gracing the occasion with their presence
- All the presenters, facilitators and participants for their contributions to the interesting and engaging discussions on water and sanitation
- Mrs. Shirley Tachiona for compiling the proceedings report. The secretariat that was responsible for the administrative support to this project and the successful hosting of the launch.

## WELCOME AND INTRODUCTION

The workshop was held at Crowne Plaza starting at 2pm. Prof C.Mutambirwa as the President of ZAS made welcome remarks with special mention to Ms Rose Nyingi who was representing NASAC



from Nairobi. The President acknowledged the presence of guests from Harare City council, ZINWA, EMA and Honorable members of parliament. A moment of silence was observed in respect to the late President Nelson Mandela. Apologies were made on behalf of Professor F.P Gudyanga the Vice President of ZAS and Permanent Secretary of Ministry of Mines who could not be present. Prof Mutambirwa mentioned that this was an important meeting on science, water and sanitation. It was good that all members concerned with the science, water and sanitation issues in Harare were present to deliberate for a better future.

Prof Mutambirwa gave a brief overview of ZAS. He mentioned that the Research Council played a crucial role in the establishment of Zimbabwe Academy of Sciences. ZAS membership is at 80 instead of 120 (some members have passed on but their names are kept for historical background). As far as Finances are concerned the Academy depends much on donations and subscriptions from fellows but these are not sufficient to run the office. He also mentioned that NASAC supports the work of the Academy from time to time through Capacity Building Grants. Prof Mutambirwa mentioned that there was going to be an induction dinner of new fellows in the evening. The Academy is working hard to be recognized by Government through an Act of Parliament hence the President made an appeal to the Honourable Members Present to rally behind the Academy so that the Act is approved and that Government may provide offices and set up for ZAS. Prof Mutambirwa indicated that the Academy is being housed temporarily by the University of Zimbabwe.

## **Introduction to the Water and sanitation project.**

Prof Rifka Kfir (Assaf)

ASSAf has been involved in the production of the policy makers booklet on Science, water and sanitation. Prof Rifka mentioned that the booklet was part of the various projects by ASSAf but funded by NASAC. Namibia is building an academy.

### The Aim

Policy and decision makers should be informed about water issues. ZAS took the stand in Zimbabwe to work on this. Water varies in Zimbabwe, South Africa, Botswana, not all areas get water all the way. Water is very important. To irrigate you need water, 70% of the people use ground water.

### Average Rainfall

Semi arid zone, south part of Zimbabwe. In Mauritius they have a drought. Zimbabwe and South Africa have more dams than in other countries.

### Water quality

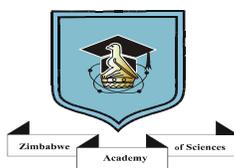
South Africa pray for more research and water. The body has been funding for 40 years and they are doing well.

Prof Mutambirwa thanked Prof Kafir for the presentation and requested everyone to take notes for questions, discussions or contributions.

## **Official Opening and launch of the policy maker's booklet**

Professor C Chetsanga

Prof Chetsanga did an official opening and thanked ZAS for using this forum to discuss issues of water and sanitation. Academy of South Africa in the booklet and the authors came up on how science academies can help in their home countries with key challenges relating to water. The booklet has advice on 6 SADC countries, Mauritius, Mozambique, South Africa, Namibia, Botswana and Zimbabwe. The booklet has advice on the whole region. All countries can make use of the booklet in issues pertaining to water management. Science academies in the different countries are urged to build partnership in the water sector as well as policy makers.



There is need to establish partnerships for example with the Ministry of Environment. Water sanitation measures, lacks services of water management facilitation and lack sound knowledge and supply in sanitary conditions. The issue of water is not quantity but quality. There should be provision of water under sanitation. Regionally there has been low water rainfall. There should be acquisition of water handling infrastructure, dams, and water tanks and so on. These infrastructures need to be looked after well.

A number of communities in the southern Africa region lack infrastructural provisions of water management and conservation. They need the services of a water management facilitator, in order to benefit from the improved access to water and sanitation. They lack the sound knowledge and competence in sustaining water supply under sanitary conditions. A country needs to ensure that there is a long-term sustainable supply of clean water. It is critical to ensure that there is always a provision and maintenance of a sufficient water supply and sanitation systems.

### Climate change

Zimbabwe faces drought from time to time and it negatively impacts on food security. three years ago in Zimbabwe there was an outbreak of cholera because the water was not checked thoroughly for quality assurance and this is very important. In his concluding remarks he highlighted that there be provisions for ensuring that the data and information on water supplies are spread widely. This would include making sure that the delivery of water services in any community is accompanied by appropriate sanitation provisions.

the official opening and launch of the policymakers' booklet was done by Prof C.C Chetsanga. The booklet was also presented to the Portfolio Committee on Water. He thanked ASSAF for launch of the programme water and sanitation.

## **Overview of NASAC and perspective towards the Water and Sanitation issue in Africa.**

Rose Nyingi(NASAC)

An overview of NASAC was given outlining the following:

- NASAC's background,
- the water programme,
- key activities,
- Challenges and opportunities.

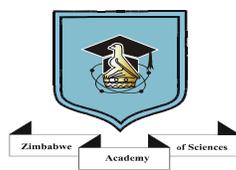
To date NASAC has a membership of nineteen countries – Benin and Togo joined recently at the ACN assembly. She indicated that Rwanda is currently in negotiations to have an academy. NASAC was founded in December 2001 with the mandate to “provide authoritative Science advice for policy formulation for development in Africa.

NASAC'S main objectives include:

- Strengthening existing Academies
- Voice of science in Africa
- Independent platform for credible advice
- Facilitate establishment of Science Academies.

## **Water, availability, quality and source management.**

Professor C Magadza



Prof Magadza gave his thoughts on the subject. He showed pictures of dams in Matabeleland, Nyakuni spillway, Gwenara, zhowe dam.

Rivers have become sand banks, rains have shrunked. Manyame is now a seasonal river but it is not flowing. There is sewage flowing on the increase.

Problems

Sludge. Lake Chivero used to spill mid January but not anymore. What is causing all these problems?

Cleveland dam- cleans because of the wetland around it. Ema gazetted the wetlands as protected areas. There are two questions, How to restore Chivero? Should it remain polluted or spend money and revamp.

## State of Water and Sanitation and challenges faced in Zimbabwe

ZINWA- Mr Manzira

Mr Manzira spoke on towns and that the growth in growth points is about 30%.

There was an outbreak of cholera in Zimbabwe. Infrastructure was there, but not enough finances. A typical small water treatment plant was put in place in 2008.

Current status: residential – construction is being done before any utility is done. Developers do not wait for proper procedures.

Quality of water/challenges

There is running away from mechanisms. Equipment has resulted with makeshift. Future plans have to be put in place for clean water.

## Discussions and Recommendations

Engineer Chisango

Most issues have been discussed by Prof Magadza. The mandate is to provide and supply clean water.

Mike Tumbare

City of Harare or ZINWA must come up with strategy for service delivery. A change in top management can change a whole lot of things because people are doing nothing.

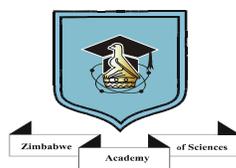
People concentrate on Lake Chivero than Manyame. If waste cannot be managed it means we are taking Lake Chivero as a septic tank. Harare citizens are supplying bottled water; people are buying bottled water or deliveries. Mabvuku build dams and assist in supplying clean water which City of Harare is failing to do.

Honourable A Ndhlovu

She thanked ZAS and ASSAF.

- It is a constitutional right to have clean water in Zimbabwe and all SADC countries and it is an obligation to provide clean water. As parliamentarians we thank ZAS for bringing this issue. As Zimbabwe we are affected by climate change. She suggested that there is need to hold a national science and technology workshop to discuss such issues with policy makers and all stakeholders involved. The Honourable mentioned that the office of the attorney is going to be asked to speed the bill of ZAS so that treasury can support this good cause. She also indicated the need for mentoring young scientists in this country for continuity. She was worried a bit about the very few women within ZAS. The Honourable MP promised to meet Minister Olivia Muchena so as to discuss how ZAS can be accommodated and thanked UZ for accommodating ZAS. She thanked all the partners and stakeholders that were present in the workshop for a job well done.

Engineer Chisango



Change management – transforming to a commercial utility. World Bank is assisting to come up with a better structure and efficiency. They are time constraints but if it's done it will be a better option for clean water.

Prof Magadza

They follow high crest because of health reasons. These areas are free of diseases. It is not that Zimbabwe is drawing its water downstream but Israel has 160m<sup>3</sup> to 6/copta by recycling. We are recycling 50% and its sewage water but must be clean. Mutare has water upstream from Pungwe, Masvingo is downstream and other areas.

Prof KFIR

In South Africa you build up or down but the quality will be contributed by people up and down, but it has to be managed and cleaned. The SA government started an initiative, the green/blue awards, sewage work and plans. If you get a high rating 40% sewerage pass the test but the situation is almost the same. Everybody knows what is going on. Now there is an award which is a positive approach.

Webster Gumindoga

Capture of upstream- issue of water.

In terms of runoff it's a plus if we are dealing with water quality. There is less infiltration and more water getting in the dam. Public awareness is required on the role and purpose of wetlands. Policy Makers need to be educated in conserving wetlands.

Engineer Chisango (in response to Dr Tumbare)

PPS – in water sector we have been trying to bring in pps but has failed on government on tariff setting. It's not a private sector willing to come in and hand it over when they have finished after 20/25 years issue comes on tariff policy. Harare having its entire source downstream will be an advantage. Future development on supplies of Harare in upstream of the city it will help coming from Mazowe not Manyame. It will help improve quality of water. Treating of sewage so that all is clean.

Prof Gwanzura

Sewage flow coming from Manyame to Beitbridge, is there a law at City of Harare to stop this?

Prof Magadza

Does everyone have to come and stay in Harare? There is a whole lot of people leaving in Harare and the set up cannot withhold this population. It was political in the setting up of Mutare and Chitungwiza cities. Industry was supposed to move and provide employment but it was not possible due to lack of revenue. How do you move employment into satellite or communal areas?

Engineer Chisango

The problems facing Harare are the same in Chitungwiza. Transformation we are looking at a utility in Harare and has to be looked at an integrated way like the introduction of prepaid billing.

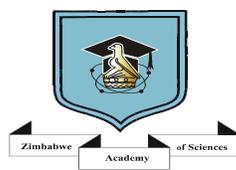
Chris Magadza

Policy makers have had all from us. Honourable Ndlovu has recognised the problems on board and the support required to ZAS. What has been discussed can be adopted by the policy makers to save the city, water and sanitation. How is the situation in Zambia?

Dr Lewanika- Zambia

The situation in Zambia is no different. People building houses with no utilities, we are in the same boat.

## Closing Remarks and Announcements



Prof Gwanzura gave the vote of thanks on behalf of ZAS; he thanked the speakers and acknowledged the chairperson and the administrator for organising the workshop. He mentioned the following in his remarks;

- Zambia who is in the almost same situation as Zimbabwe but Kafue River is down and upstream, Kafue seems to be good.
- Meetings of this nature are very critical, these must be maintained and papers of this nature distributed for dissemination of information.
- Prof Magadza presented a lot of publication on water in Zimbabwe, evidence that it can be disseminated
- ZAS has a challenge to see if this information can be disseminated
- Honourable Ndlovu volunteered to look for funds for ZAS
- all presentations were enriching, Prof Magadza brought up issues that other people are scared to bring up
- He mentioned that City of Harare has a big challenge ahead of them
- He thanked NASAC, Leopoldina and the German Federal Ministry of Education and Research (BMBF) for the funds that made the launch a success
- Engineer Farai, City of Harare, ZINWA and more information shared on consultation and thanks for sharing information
- Think and reflect – solutions are there the opposite is Prepaid is not a solution.

## CONCLUSION

The workshop emphasised the importance and urgency of addressing water issues in Zimbabwe and provided policymakers with key issues to consider for future planning. It also provided the ZAS Secretariat with experience in coordinating events and provided the Academy members with an opportunity to interact with policymakers. The launch will also be followed by further dissemination of the key messages and of the booklet