



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

NATIONAL YOUTH WATER AND SANITATION SUMMIT 2015



For a second successive year the National Department of Water and Sanitation invited Monash South Africa (MSA) to co-host the National Youth Water and Sanitation Summit. The four day summit took place at Birchwood Hotel and Conference Centre and was attended by over 900 Grade 6 to Grade 11 learners and teachers from across all nine provinces. An additional 500 learners attended on a daily basis over the four days. The theme of this year's summit was *"Youth Moving the Nation Forward"*.

Monash South Africa, through the generous support of the International Water Security Network (IWSN), took a permanent team of five Master of Philosophy (MPhil) and two PhD students, whilst several other MPhil students joined throughout the four days. We committed to supporting the National Department through the following activities:

1. content and capacity to the re-design of the Career Expo 2015.
2. deliver educational messages related to water quality, sanitation and security, through an exhibition stand.
3. host a motivational speaking session with bursary winners.
4. contribute two water security prizes to the out of school programme.
5. take notes during various sessions and compile official proceedings.

The Summit commences each year with a "Walk for Water" which is led by the Deputy Minister of Water and Sanitation Miss Pamela Tshwete. The walk involves a 2.8km route through the streets of the surrounding area carrying messages of support for "Water is Life, Sanitation is Dignity". The youth also carried messages of support for fixing leaking taps and toilets, sanitation for all, and together we can save more water.



Deputy Minister of Water and Sanitation leading the "Walk for Water"



IWSN¹ students carrying a message supporting water conservation

During the official opening of the Youth Summit the Deputy Minister acknowledged the support and commitment of the key partners who had made the summit possible. Monash South Africa was recognised together with other key partners: RandWater, Sedibeng Water, TCTA and WESSA.

As a key partner and co-host of the event, we were provided with an exhibition stand in the main exhibition hall. The team spent several days preparing interactive displays and educational messages to deliver from the exhibition stand. Given the overall theme of the summit “Youth Moving the Nation Forward”, we decided to centre our exhibition stand messages around Gandhi’s famous quote: “be the change you want to see in the world”. We linked the theme and the quote to the South African context by painting the word CHANGE in the colours of the South African flag and surrounding the quote with pictures of youth working together, and hands and feet to represent action.

¹ The International Water Security Network (www.watersecuritynetwork.org) is funded by Lloyd’s Register Foundation, a charitable foundation helping to protect life and property by supporting engineering-related education, public engagement and the application of research. For more information, see: www.lrfoundation.org.uk



Exhibition stand at National Youth Water Summit 2015

A strong WASH (Water, Sanitation and Hygiene) message was then created with eight posters again emphasising that “by changing the way we think and changing the way we act...together we can make a difference”.

To tie into the WASH theme, the team chose to also focus on water quality issues. Two interactive displays were built and displayed at the stand. The first comprised a functional wetland system built in a 5l plastic container. Contrasted to this was a degraded wetland system. Dirty water was poured into each of these wetland systems, allowed to filter through and was collected underneath in a clear plastic container. Prior to pouring the water into each wetland system, learners were asked which one they thought would produce cleaner water. Whilst the water was filtering through the system, students discussed the important role that wetlands play not only in terms of water filtration but also as providers of habitat for several species and the cultural role they play in many areas.



Wetland system displays and resulting water quality differences



Learners observing the wetland filtration systems

An artificial sand and gravel filtration system was also built and displayed at the exhibition stand. As with the wetland systems, dirty water was poured through each filter and learners were asked to guess which filter they thought would produce the cleanest water. Learners were also informed that this type of simple filtration system would be used to remove large solid and dirty particles from water, but of course would not filter out microscopic organisms such as bacteria.



Learners engaged in a discussion around water quality

CAREER EXPO 2015

One of Monash's significant contributions to the 2015 Youth Summit was the re-design of the Career Expo. During the 2014 Summit, it was observed that the Career Expo consisted of Universities and Tertiary Institutions presenting their water educational offerings and qualifications to learners. Whilst this is one approach to creating awareness of water careers, the Monash team, led by Linda Downsborough, decided to focus instead on promoting actual careers in the Water Sector and supplement this with relevant educational offerings and programmes through exhibition stands.

Drawing on past Master of Philosophy in Integrated Water Management students and two current PhD candidates, we re-designed the Career Expo. Schools in the surrounding area were invited to attend the Career Expo. It is estimated that about 400 learners attended during the two-day Career Expo.

Linda Downsborough provided a keynote address at the start of each session, setting the scene by highlighted that South Africa is currently facing a skills crisis. She indicated that this was particularly prevalent in the water sector and that in order to address this skills shortage the youth needed to take up the challenge and enter into careers in the water sector. She then spoke of her personal journey into the water sector and the career decisions she made along the way. This was an essential part of all the talks during the career expo – speakers were encouraged to tell their own personal stories of their experiences working in the water sector. The following speakers presented and represented the following career possibilities:

- Water and large infrastructure consultant - Lulu Ngomane
- Water Quality Monitoring (treatment and quality) Rand Water – Jabulani Makondo
- Political Scientist – Jan Janosch Foerster
- Water engineer/Agricultural engineer – Quinex Chiluwe
- Researcher – Machaya Chomba
- Business and Entrepreneur – Mr Lucky Lithelu



Speakers Jabulani Makondo, Quinex Chiluwe, Lucky Lithelu, Janosch Foerster and Lulu Ngomane during the Question and Answer session at the Career Expo



Learners attending the Career Expo

GALA DINNER EVENT

On the final night of the summit, the Deputy Minister of Water and Sanitation hosted a gala dinner event and the entire Monash team was invited.



PhD candidate Machaya Chomba, and 2015 MPhil candidates Thandiwe Mpala and Hlengiwe Dube at the Gala Dinner

At the gala dinner event the Deputy Minister of Water and Sanitation, Ms Pam Tshwete, explicitly thanked Monash South Africa for their ongoing commitment and support in co-hosting the Youth Summit event.

Between the formalities of the gala dinner event, the Deputy Minister made time to engage with her Monash guests. One of the MPhil students said: “It was humbling to me during the gala dinner as she [the honourable deputy minister] spoke so passionately, ‘where is my Monash, my good friends, they have been so supportive, stand wherever you are’ a sign of appreciation and acknowledgement of Monash leadership’s contribution in the water sector”.



“I had the wonderful blessing of meeting the Deputy Minister, who I found to be a very gentle and compassionate lady. I definitely learned a lot from her and she inspired me in terms of building my career for the near future”.

Thandiwe Mpala and Hlengiwe Dube with Ms Pam Tshwete



Musyani Siame, Hlengiwe Dube, Ms Pam Tshwete, Thandiwe Mpala, Victor Siingwa and Machaya Chomba.

AWARDS CEREMONY AND PRIZE GIVING

At this Year's Youth Summit, Monash South Africa, through the generous donation and support of the Lloyd's Register Foundation, had two prizes to award to Young Water Professionals. The overall aim of the prize was to build capacity amongst the youth in the water sector. The prizes, valued at 500 British pounds each (about R9000) were not to be awarded as cash prizes but rather as a skills development opportunity. As such the successful winners would be able to choose a capacity or skills development activity of their choice, such as conference attendance, a short course, a specialised workshop etc and the money will be used for this activity.

All learners in the Out of School Youth stream (out of school and young water professionals) were asked to write a short essay of 1000 words on either:

“How do you see yourself as a future water leader enhancing water security in South / Southern Africa”?

Or

“As a future water leader in South Africa, how do you plan to tackle issues of water security”?

The two successful recipients of the prizes were unfortunately not at the Award Ceremony to receive their prize or have a photo taken, but have been contacted via email and arrangements will be set in place once they have decided what capacity/skills building activity they would like to attend.

During the awards ceremony the Deputy Minister was presented with a prestigious United Nations Award. The Department of Water and Sanitation (DWS) and the WESSA Eco-Schools were joint winners of the UN 2015 Water for Life – Best Practices Award. The award recognises outstanding best practices in ensuring sustainable long-term management of water resources. In her closing address, the Deputy Minister praised the joint water summit as a significant milestone in the country's efforts directed at enhancing water education practices. Ms Tshwete indicated that she was pleased with the level of support given by Monash South Africa. She observed that the joint water summit was a clear demonstration of how organisational cooperation can be effectively used to ensure viable water education practices and help achieve national water and sanitation related targets.

MOTIVATIONAL SESSION WITH BURSARY WINNERS

The final session of the Summit was a special motivation session for all high school bursary winners. This year 44 learners received bursaries from the National Department of Water and Sanitation which allow them to study at an Institution of their choice. Monash was fortunate to have the opportunity to engage with these learners and undertake some fun educational activities. Professor Chad Staddon also joined this session and had the opportunity to interact with some of the learners.



The Monash team prepared a quiz which created great excitement. The quiz consisted of questions centered around water, water security but also more general questions about the summit and the National Department of Water and Sanitation. The team also designed and built a model of the 'catchment game'.

The large board game demonstrates different land use sectors and has a river channel running through the middle of the board. There are little channels leading off from the main river channel into the different land uses. On our model we chose to represent mining, residential areas, large scale agriculture, poor subsistence agriculture and the natural water resource itself. Marbles are then used to represent a finite amount of water allocated to the whole region. In the first demonstration the marbles are all released together and flow down the board landing in different land uses (via the small channels) and some remaining in the resource, by running to the end of the board.



IWSN students discussing the catchment game



Learners playing the catchment game

In the second round of the game, landuse champions are chosen to represent the different sectors and each given a ruler. The marbles are then released again but this time the landuse champions can channel the water into their landuse by using the ruler to divert them. The learners observe what happens and how this is different from just allowing the marbles to run freely down the board. A discussion was then had with the learners about equitable sharing and allocation of water. One of the MPhil students reflected: *“We really underestimated the youth’s intelligence on what they know about the current water situation and as we engaged we learned a lot from each other”*.



Mr Lucky Lithelu and Professor Chad Staddon



IWSN team: Machaya Chomba, Linda Downsborough, Musyani Siame, Victor Siingwa, Thandiwe Mpala and Hlengiwe Dube. Supported by Professor Chad Staddon and Lucky Lithelu

Looking forward to next year!

