



Using our  
Strength for  
a better  
SA  
for all



*Building a Better SA for All – The Role of Women  
in Energy and Water*

## **A RESEARCHER'S PERSPECTIVE**

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*"Don't let anyone rob you of your imagination, your creativity, or your curiosity. It's your place in the world; it's your life. Go on and do all you can with it and make it the life you want to live."*



**MAE JEMISON**

Scientist

First African American woman astronaut in space

# TALKING POINTS OF PRESENTATION

- The role of women in the achievement of the UN SDGs, specifically those related to water.
- Guiding women and young girls into water careers – successes, failures and strategies/actions to grow and retain women at various professional levels.
- The gender-water-jobs nexus
- Scaling up investment at the appropriate capacity development level for women in Science, Research & Development and Innovation.
- Women and the circular economy - opportunities and preparedness.
- Practical tools, ideas and suggestions in ensuring a successful and fulfilling career



# Women & the Achievement of United Nations Sustainable Development Goals (UN SDGs)

## All 17 SDGs are Water-related

### Dedicated



### Explicitly



### Implicitly



6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations





# Women & the Achievement of United Nations Sustainable Development Goals (UN SDGs)

All 17 SDGs are Gender-related

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# Women & the Achievement of United Nations Sustainable Development Goals (UN SDGs)

- In a single day in 25 sub-Saharan African countries, women spend 16 million hours collecting water, often to the detriment of schooling or paid work, and with potential health risks from repeatedly carrying heavy burdens over long distances.
- In schools, lack of separate and functional sanitation facilities for girls can be a major reason for parents keeping them at home.
- Gender-responsive budgeting, upskilling, research and the inclusion of women in all levels of the water business leads to measures that improve easy access to safe drinking water so that women have more time to earn an income, girls are more likely to attend school, and family health and hygiene improve.



# GUIDING YOUNG GIRLS INTO STEM & WATER CAREERS



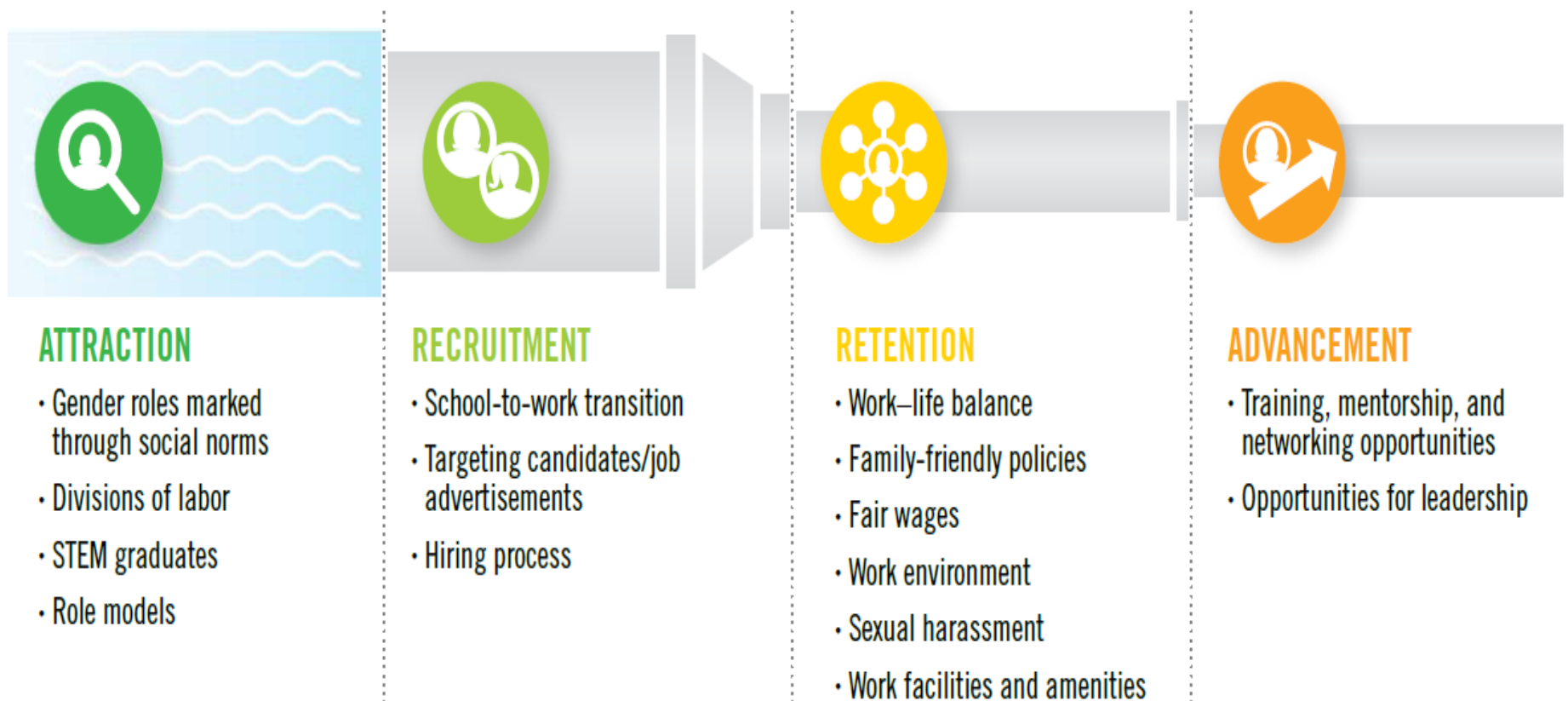
- National legislation and adequate monitoring to encourage attendance of school by girls
- The believe and support of parents and teachers that girls can thrive and excel in STEM careers – role models, self motivation
- Access to teaching material, ICT, extra curricula material that might need to be purchased
- Dealing and ending sexual harassmtent and violence caused by peers, teachers, home environment or society
- Balancing the multiple roles that girls play in their homes and society.



- ❖ THERE IS NO RELATIONSHIP BETWEEN PHYSICAL STRENGTH AND INTELLECTUAL ABILITIES
- ❖ INTELLIGENCE CAN EXPAND WITH EXPERIENCE AND LEARNING



# OPPORTUNITIES AND CHALLENGES IN INCREASING WOMEN'S PARTICIPATION IN THE WATER SECTOR: EMPLOYEE LIFECYCLE



Taken from the 2019 World Bank Report – Women in Water Utilities – Breaking Barriers -  
<https://www.worldbank.org/en/news/feature/2019/08/27/breaking-barriers>



# THE GENDER – WATER – JOBS NEXUS



Jobs in the water sector fall under one of three functional categories:

- i) water resources management
- ii) building, operating and maintaining water infrastructure
- iii) the provision of water-related services

➔ RDI and MANAGEMENT RUNS THROUGH THESE THREE BROAD CATEGORIES



## Challenges in the Water Sector:

- New pollutants
- Over allocation of existing water supplies
- Non-effective management of ground-and surface-water resources for domestic, agricultural, commercial, industrial, recreational and ecological uses
- SHORTAGE OF SKILLED MANPOWER



# THE GENDER – WATER – JOBS NEXUS



Addressing water-related challenges and shortage of skilled manpower consists in ensuring that enough diverse water experts and professional (both male and FEMALE) are available to inform and assist the process of meeting these challenges.

- Increasing women's participation in the water sector benefits women, the community, and the organization.
  - ❖ gender-diverse companies tend to outperform less diverse companies in terms of return on equity, greater innovation, improvement in customer satisfaction, efficiency and outputs
- Better jobs for women has wider economic and financial benefits at the national level.
  - ❖ Studies have shown that gross domestic product (GDP) increases with higher female participation in the workforce.



## Are women publishing less during the pandemic? Here's what the data say

Early analyses suggest that female academics are posting fewer preprints and starting fewer research projects than their male peers.

## How Women in Academia are Feeling the Brunt of COVID-19

**“Challenges women in academia and research face are well documented in non-pandemic times. These challenges include:**

- Male dominated institutional cultures
- Lack of female mentors
- Competing family responsibilities due to gendered domestic labour
- Implicit and subconscious biases in recruitment, *disparity in salary, recognition, and professional rewards compared to men*
- Research allocation,
- Outcome of peer review publications and number of citations



Taken from the Lancet - [https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(20\)31412-4.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(20)31412-4.pdf)

# WOMEN IN WATER RESEARCH



## DOES IT MATTER WHO DOES THE RESEARCH? – YES

Women from different backgrounds have an interest in and a passion for studying different research questions and their unique perspective may lead them to take a unique approach to investigating those problems and developing solutions.





# WRC's PERSPECTIVE ON THE ROLE OF WOMEN IN ORGANIZING FOR NEW FUTURE AND TRANSITIONING INTO A CIRCULAR ECONOMY



- Bringing to the table innovative solutions for tackling water and climate change-related challenges;
- Contributing to economic development and job creation
- Diverse water-related skills and capacity as well as reduce wide-spread institutional fragmentation
  - ❖ As the frontline users, women have a unique understanding of the frailties of systems and the societies they serve. This affords considerable scope for innovative training approaches and cultural adoption.
- Need a new set of skills to do different things or to do the same things differently (e.g. circular economy)
- Women represent a reservoir of knowledge. Data is key. Harnessing the information that these frontline water managers collectively hold is extremely powerful.



# SCALING UP INVESTMENT IN WOMEN - WHAT DOES WRC OFFER WOMEN RESEARCHERS



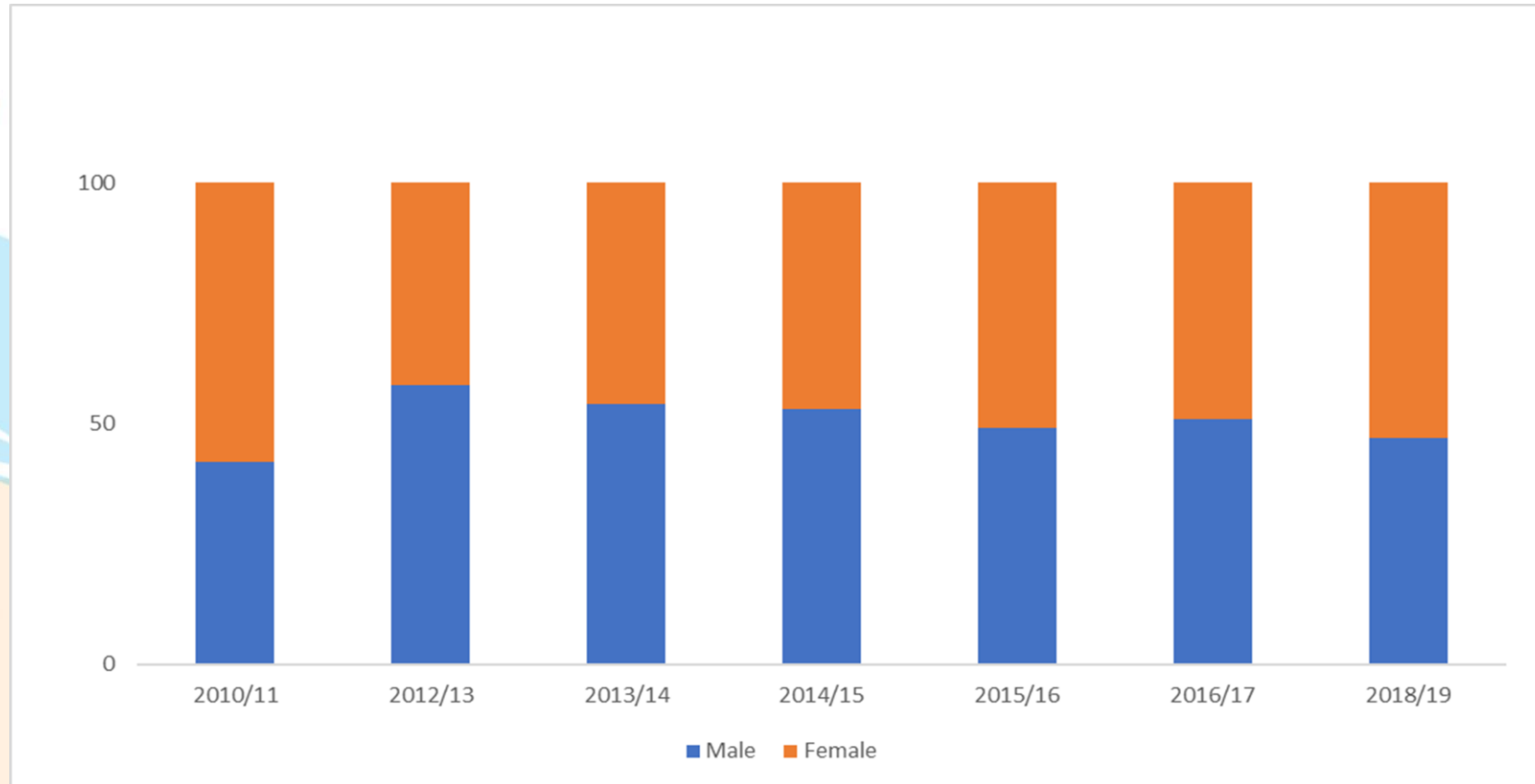
- Flexibility in funding budget and makeup of the team (project leader) – human capacity development is encouraged – especially for women at postgraduate level
- Opportunity to diversify and build new skills by researching multidisciplinary topics in the water field.
- A pool of women who have taken part in WRC projects who could be available for various roles, i.e. research team members, supervisors, mentors, focus groups etc.
- Opportunities to network and present research work in various WRC and partner platforms i.e. WRC dialogues, symposium, workshops, working groups, technical committees.



# SCALING UP INVESTMENT IN WOMEN - WHAT DOES WRC OFFER WOMEN RESEARCHERS



## % OF FEMALE AND MALE STUDENTS FUNDED IN WATER RESEARCH COMMISSION PROJECTS



# PRACTICAL TOOLS, IDEAS AND SUGGESTIONS IN ENSURING A SUCCESSFUL AND FULFILLING CAREER



- If possible, work for a “truly equal opportunity employer”
  - are there childcare facilities, is there flexi time, is there generally institutional support for an appropriate work life balance?
- Take advantage of development opportunities offered to staff
  - Apply for scholarships, internships, internal training etc
- Build the mental capacity and resilience not to be derailed and discouraged by negative conversations on “tokenism”, “women’s empowerment”, “hired because of your gender”
- Yourself - set career goals and think through how these might be achieved. Do not stop asking questions, surround yourself with a support system (both males and females)





# #WomenInScience: Future of women in science depends on investment in tech, innovation

BY: DR EUNICE UBOMBA-JASWA

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When the South Africa Water Research Commission (WRC) opened its doors nearly fifty years ago in 1971, it was because of a serious water shortage that threatened the economy, livelihoods and the overall health and well-being of the population. Water became a keen focus for research scientists and, through the WRC, has resulted in a large repository of research reports that help us navigate the consistent challenges we face with water supply, water quality, sanitation and environmental conservation.

<https://www.bizcommunity.com/Article/196/640/200539.html>



# THANK YOU

# QUESTIONS?

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