

# Women’s Participation in Africa’s Nuclear Development – Challenges & Opportunities



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## Introduction

Expansion of nuclear technologies and plans for new plants in Africa makes this an exciting time for more women to be involved in the nuclear sector and there are lots of opportunities across the nuclear value chain for women to participate in. In recent decades, more women are entering the nuclear field and many people are starting to recognize the opportunities for women. In developing countries and in Africa in particular, there is however still a great need for awareness of women’s involvement in STEM fields in general, and to change prevailing attitudes about women’s participation in the nuclear science and technology in particular.

The various opportunities that women have in the expanding nuclear sector in the continent is presented here, as well as to how can these opportunities can be utilized, not only for those in the sciences but also in the business disciplines. The approaches organizations and countries can take in broadening participation of the female gender in the nuclear development in Africa is also presented, including how to address the challenges faced by women in the dynamic nuclear field.

## Methods

The findings presented here are based on information gathered from various discussions and questions from various forums at which the author presented, e.g. conferences, summits, round tables etc. It also includes responses based on discussions held with other Women in Nuclear members from African countries e.g. Kenya, Nigeria, South Africa and Zimbabwe.

## Opportunities

South Africa intends to build additional nuclear power plants with a capacity of about 9 6000 megawatts as part of its nuclear expansion program. Other countries in Africa, example Nigeria and Kenya, are developing plans for the nuclear program. According to the World Nuclear Association (WNA), other countries like Ghana, Namibia, Sudan, & Senegal are actively considering nuclear power programs. This expansion of nuclear technologies and plans for new plants in Africa opens up lots of opportunities for women across the whole nuclear value chain.



Figure 1: Opportunities available to women

## Challenges

Despite radioactivity being discovered by a woman, the nuclear science & technology, like many other highly technical STEM fields, is dominated by men. In developed countries, more people are starting to recognize the opportunities for women, and many women are now entering the field. In most developing countries, particularly in African countries, negative attitudes about women’s involvement in science & technology fields, especially in the nuclear sciences are prevalent. Some of the challenges faced by women in Africa are listed below:

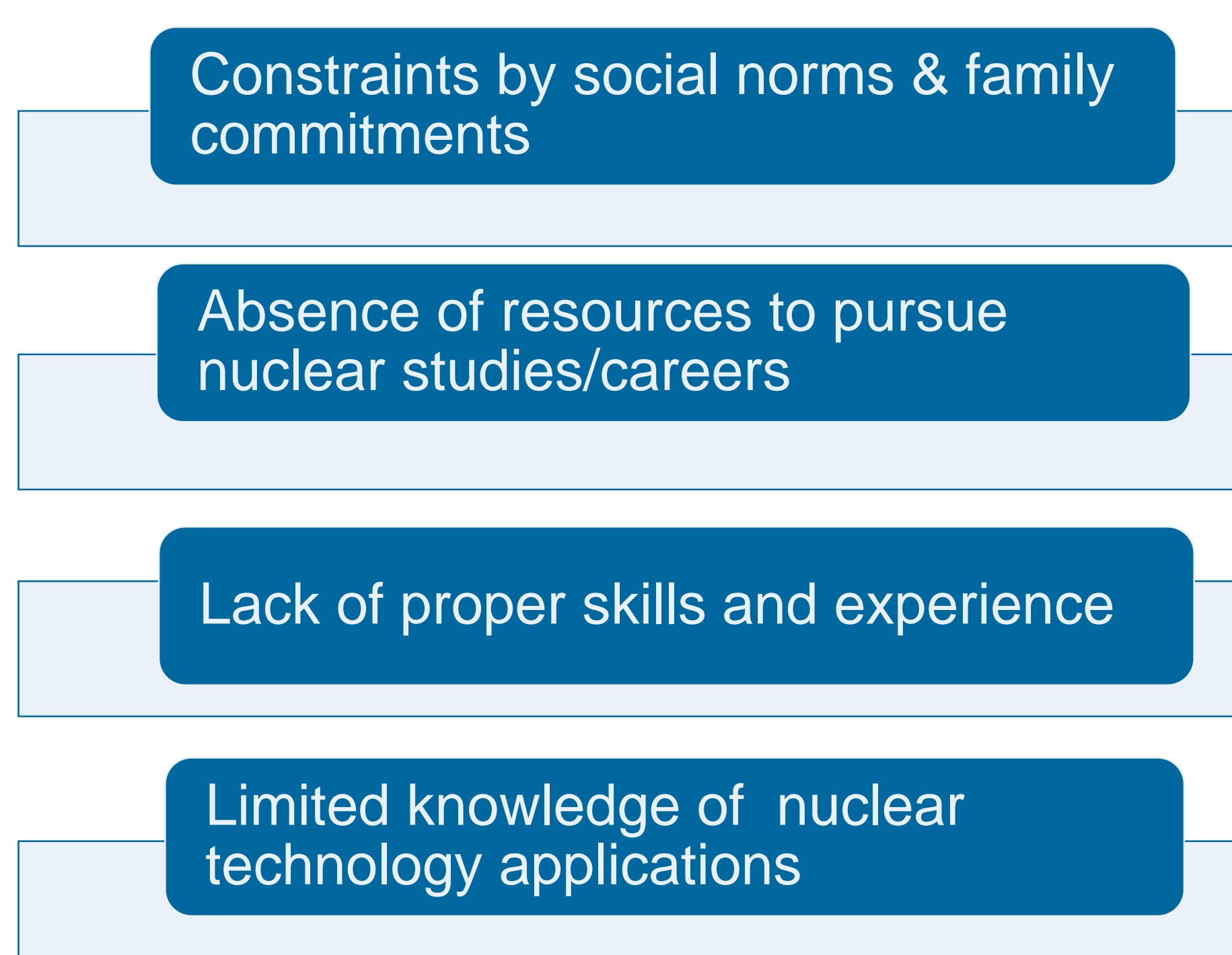


Figure 2: Challenges Faced by Women

In Africa, women normally have greater responsibilities than me. In addition to being considered as the society’s primary caregivers for small children and taking care of the household, women are expected to still earn a living. For Africa to progress, there is a need for greater awareness of women’s central role in contributing towards the development of the each country. This should happen in parallel to changing attitudes about women’s involvement in nuclear science & technology

## Addressing the Challenges

Challenges facing women in Africa are vast, and these needs to be addressed. Starting early in education, girls can learn and enjoy STEM subjects as this will lay the foundation for them to follow careers in science & technology. When they make subject choices, young women must be introduced to the benefits of nuclear science & technology and the reward for having technical and engineering skills.

The assessment of employment process will also improve the representation of women in leadership positions. putting the spotlight on the efforts of STEM-related industries to encourage young women to pursue careers in engineering, science, technology and math. The nuclear science & technology industry need to step up efforts to educate young women about the opportunities for growth and a successful career within the nuclear industry and in the STEM fields in general.

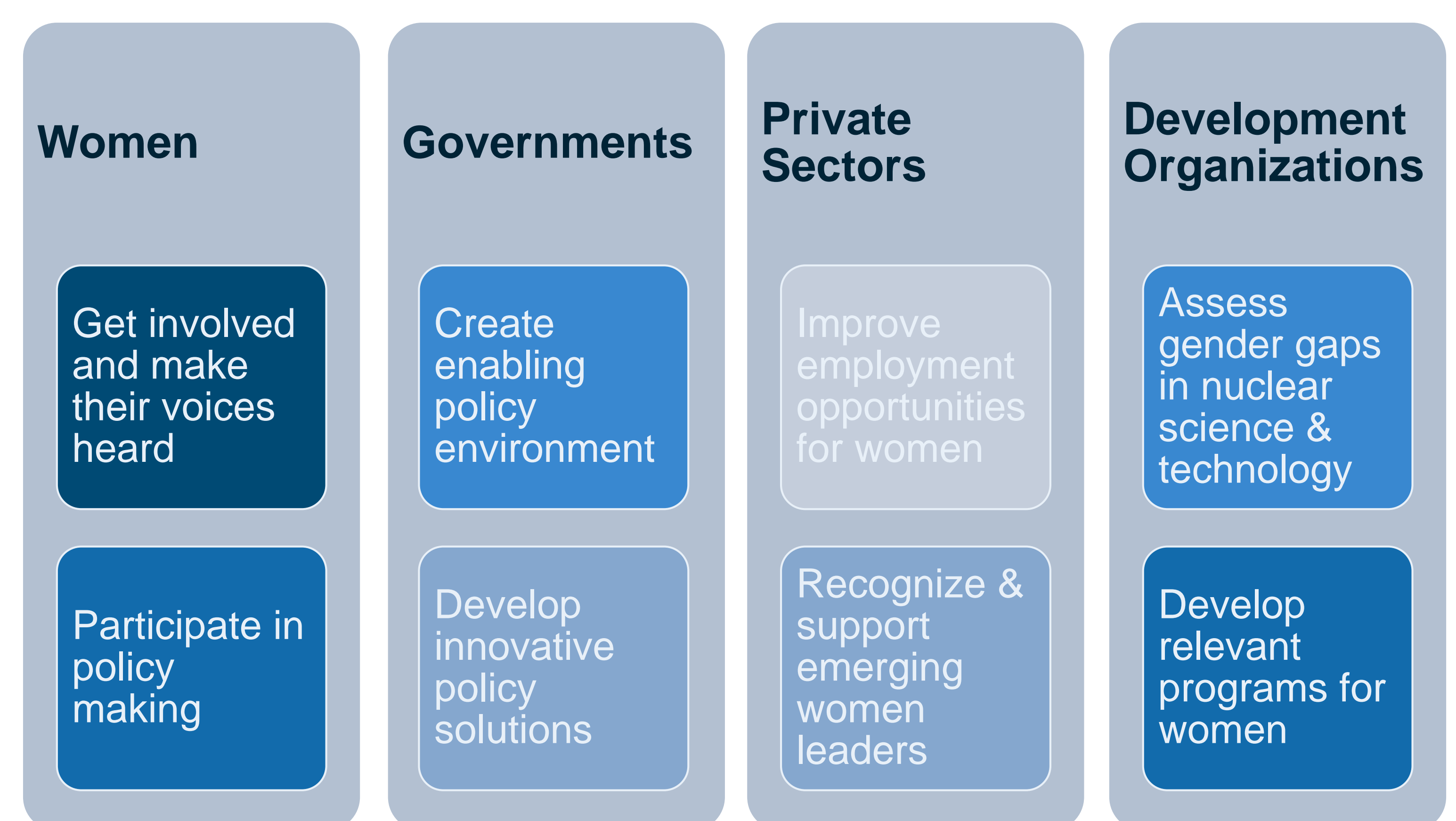


Figure 3: Addressing the Challenges

Raising public awareness about the benefits of nuclear sciences and technologies cannot be overemphasized. Women need to take action and promote the value of existing nuclear installations through available resources.

## Summary

Opportunities to shape the future of nuclear sector and have more women participate exists. In order for this to be realized, organizations need to play their part in ensuring that the sector is fit and adequately represented for this incredibly exciting decade of innovation and change.

In Africa, women face challenges and barriers in their work life, but with the right support, and the right mind-set from senior management those challenges can be easily overcome to make the work environment one that’s more inclusive for everyone. On the other hand, women need to ensure that men in the industry recognize the issues women face, so that they can also participate in addressing the issues.

## Acknowledgements

I hereby acknowledge contributions by various women and men in all sectors, including the WIN members from various African countries.

