

SESSION 3: NUCLEAR SCIENCE AND TECHNOLOGY APPLICATIONS: SUSTAINING, ENABLING AND EMPOWERING

PANEL 3.1: Women in nuclear science and technology



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**OVERVIEW OF GHANA'S
SCIENCE, TECHNOLOGY AND INNOVATION (STI) SYSTEM AND LINKS WITH STRATEGIES
BEING IMPLEMENTED FOR GENDER INEQUALITY**

HON. PATRICIA APPIAGYEI
DEPUTY Minister



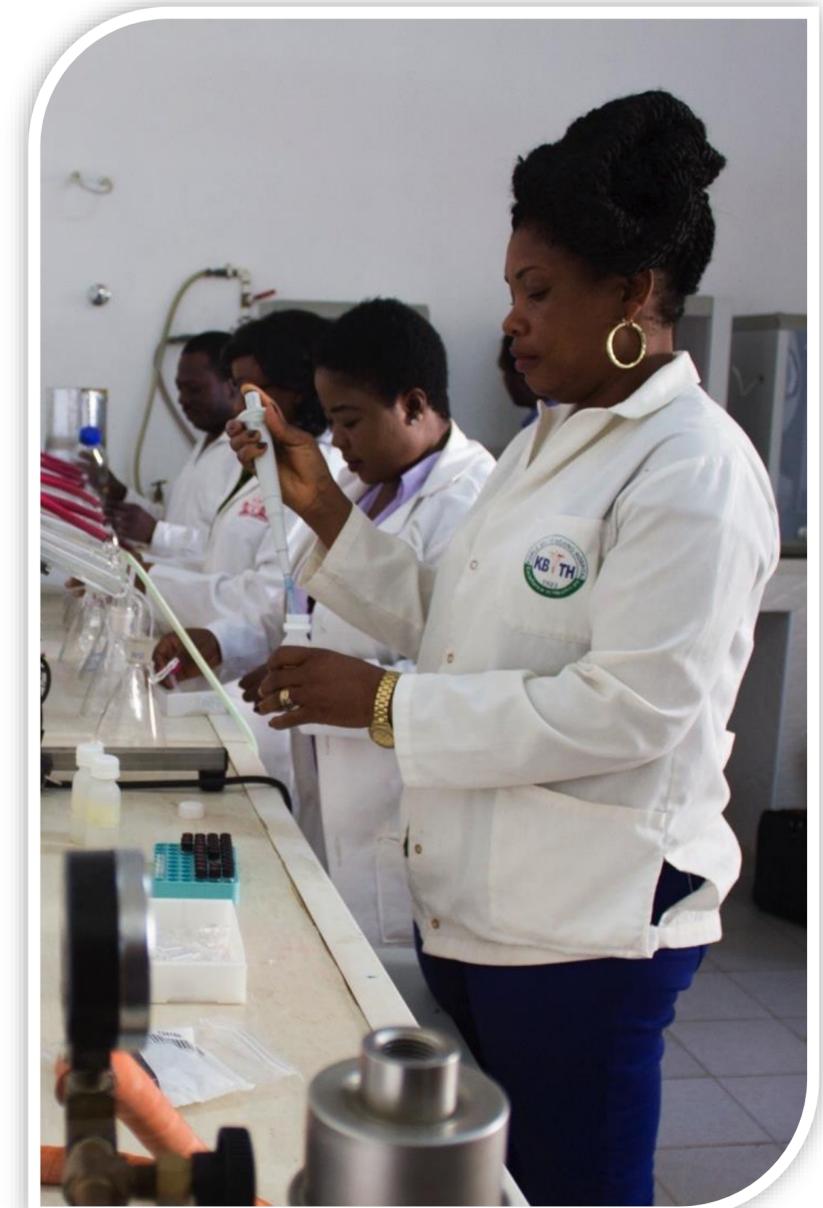
PRESENTATION OUTLINE

- **INTRODUCTION**
- **NATIONAL STI INSTITUTIONS AND GENDER**
- **NATIONAL STI POLICIES, REGULATIONS AND GENDER**
- **NATIONAL STI ,HUMAN RESOURCE AND GENDER**
- **NATIONAL STI PROGRAMMES AND GENDER**
- **NATIONAL STI FUNDING AND GENDER**
- **FACTS AND FIGURES ABOUT TOTAL WOMEN IN NUCLEAR SCIENCE AND APPLICATIONS**
- **CONCLUSION**



INTRODUCTION

- Today, women have excelled in nuclear science and its application for betterment of humanity in Ghana.
- There are Women in Ghana Atomic Energy Commission with doctoral degrees working hard with their male counterparts to address the issues of climate change, global hunger, health, water resources management
- Unacceptable levels of female participation in Applied Nuclear Science



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NATIONAL STI INSTITUTIONS AND GENDER

Two (2) main STI policy institutions namely:

- Ministry of Environment, Science, Technology and Innovation
- Ministry of Education

- About twenty five (25) public R & D institutions including academia.
- Gender disparity in the STI institutions being addressed
 - Gender desk offices in the two Ministries
 - Women scientists' associations formed at the institutional level
 - National women fora in STI professional bodies eg Women in Engineering (WINE) of the Ghana Institution of Engineering (GHIE).

- The need for the Ministry to do more in promoting gender equality in scientific decision-making, including national scientific institutions, grant and hiring committees and governance



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NATIONAL STI POLICIES, REGULATIONS AND GENDER

- Ghana's public policies address gender inequalities but have challenges with implementation. For example, the 2010 National STI policy provides :
 - Strategies for promoting participation of women in science and technology institution ,such as programmes to encourage girls to specialize in STEM at the secondary and tertiary level of education.
 - Strategies for promoting innovations to women in micro and small-scale enterprises
- STI policy being reviewed currently under the new government ,more gender policy strategies are being considered, such as:
 - Providing enabling measures for addressing gender inequalities in scientific and technological careers
 - Making the science and technology decision-making process more “gender aware”
 - Addressing ethical issues in science and technology: the gender dimension

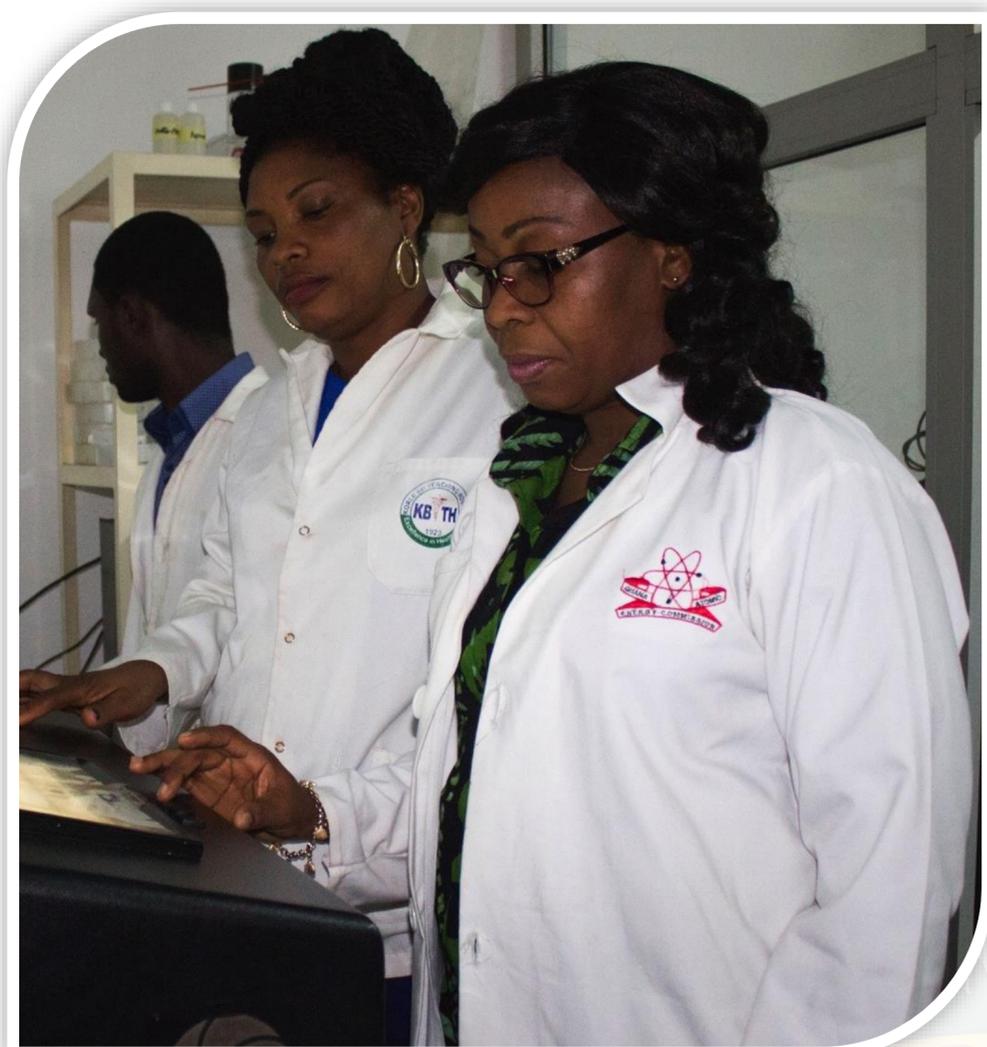


NATIONAL STI ,HUMAN RESOURCE AND GENDER

- Between 2013 and 2015, the total enrolment at Senior Secondary School
 - 44,963 for girls
 - 118,645 for boys
- Similar story at the tertiary level where we have low enrolment of students (both boys and girls) in science programmes
- The trends of women enrolment in STEM programmes at the educational level also affect the R & D human resources in our institutions.
- Challenges in career progression of female researchers eg. the Kwame Nkrumah University of Science and Technology currently have only 2 female full professors.



The total population of female researchers in the public research institutions versus male researchers



FEMALE: 1 452



MALE 4,121



NATIONAL STI HUMAN RESOURCE AND GENDER CONT

- Key strategies used are providing support systems for female researchers nation –wide such as :
 - Scholarships
 - Research grants
 - Mentorship programmes

NATIONAL STI PROGRAMMES AND GENDER

- Eligible females highly considered in Mathematics, Science and Technology Bursary Schemes .
- In the coming years, the Ministry aims to ensure that strategic programmes targeting gender equality in STI are implemented.
 - Innovation Competitions
 - Technology Transfer programmes targeting women SME groups
 - providing better support systems to female S & T groups



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NATIONAL STI FUNDING AND GENDER

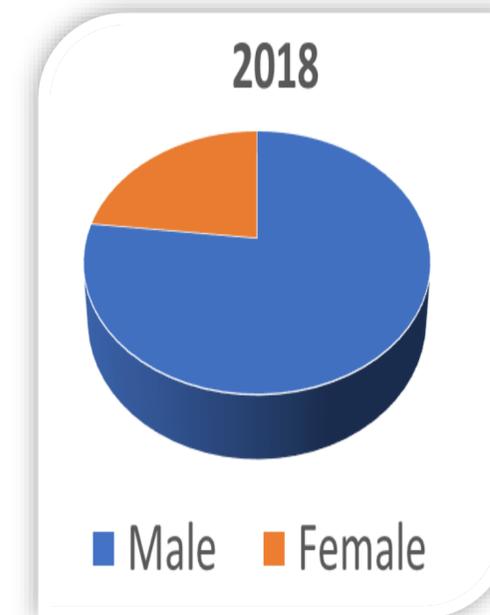
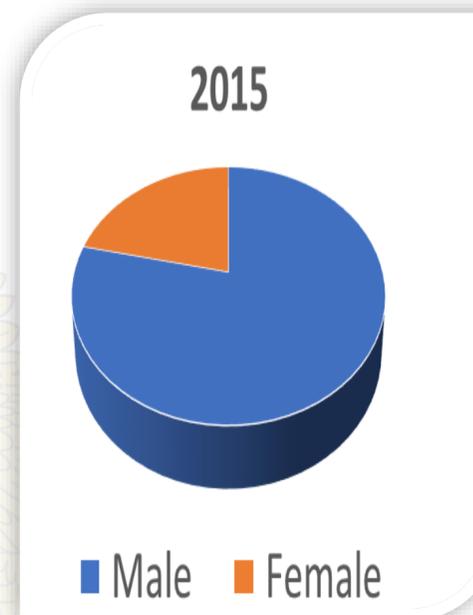
- Ghana yet to fully establish National STI Fund.
- Draft bill soon to be submitted to the new Cabinet.
- STI programmes has been done at the institutional level where it has been difficult to address the gender inequality challenges
- Most female scientists argue that it is very difficult to assess funding at their institutions
- The Ministry will use the opportunity to incorporate best practices around the world to address gender inequalities in research funding.



FACTS AND FIGURES ABOUT TOTAL WOMEN IN NUCLEAR SCIENCE

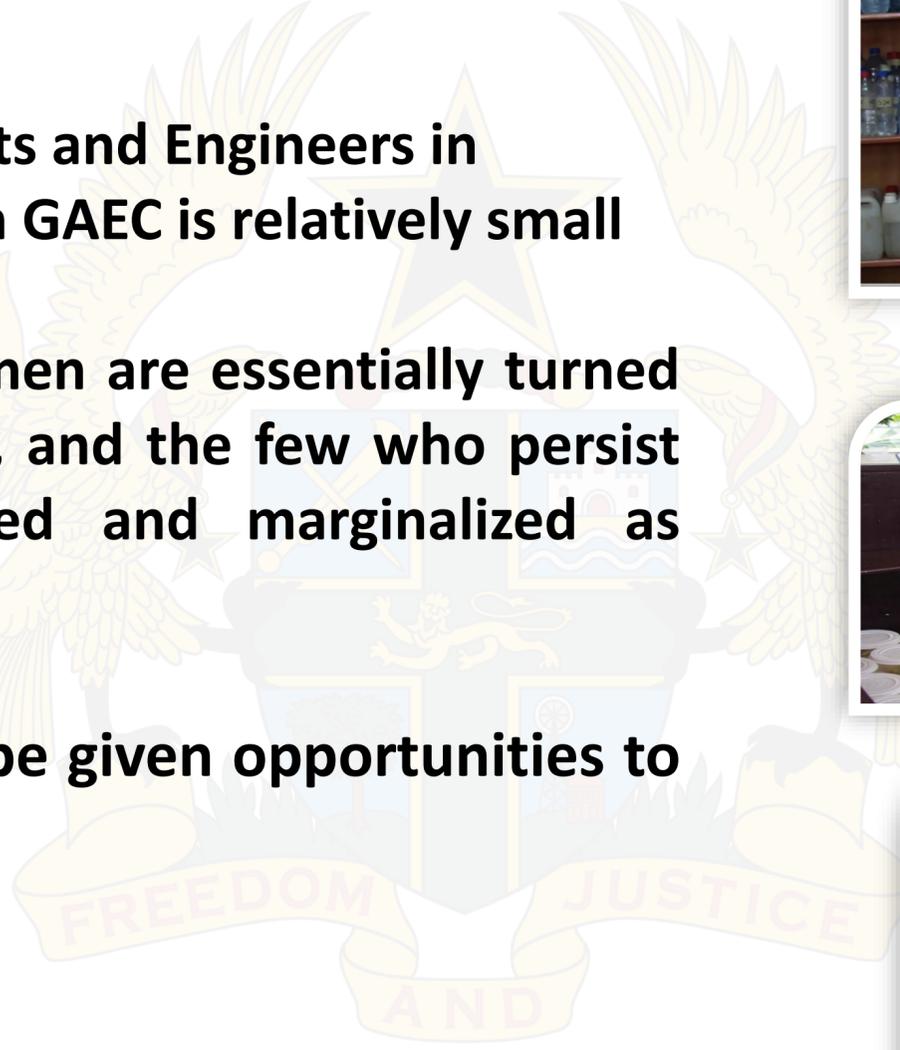
- In 2015, total number of Scientist was 273
- Out this, women were fifty-nine (59) representing 21%

- In 2018, the total number of scientist was 233.
- Out of that the total number of women in nuclear science was 54 representing 23.2%.



FACTS AND FIGURES ABOUT TOTAL WOMEN IN NUCLEAR SCIENCE CONT

- The number of women in Scientists and Engineers in Nuclear Science and applications in GAEC is relatively small
- Talented and capable nuclear women are essentially turned away from these and other fields, and the few who persist typically find themselves isolated and marginalized as nuclear women scientist.
- Both males and females should be given opportunities to excel



CONCLUSION

- The components of Ghana's STI system is fairly established and it has a great potential of ensuring that the gender inequalities that exists in our STI system are addressed.
- We avail ourselves for the opportunity to collaborate with other countries and organizations to strengthen our National system of Innovation and promote gender parity.



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Thank You