



PROJECT BRIEF

Transforming InStitutions to Advance women leadeRS in Science Technology Engineering and Mathematics (SISTARS Project)

Project Team

¹Faith Karanja, ²Caroline Kabaria ²Blessing Mberu, ¹Betsy Mugo, ³Leunita Sumba, & ³Simon Thuo

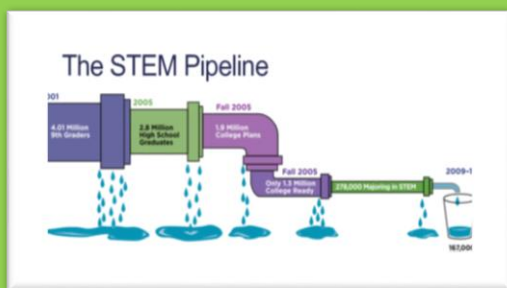
1 University of Nairobi (UoN)

2 African Population and Health Research Center (APHRC)

3 Women in Water and Sanitation (WIWAS)

Introduction

There are few (30.4%) women scientists in Africa (1), where only 28% are researchers in all fields, and of this, only 30% move into science, technology, engineering and mathematics (STEM) related fields (2). The number of women scientists, particularly those working in STEM related professions continue to increase. Yet, barriers to academic and career advancement continue to be a toll order in advancement to leadership position in STEM (3,4). This is attributed to leaky STEM pipelines (4).



As such, by the time students reach college, women are underrepresented in STEM majors. For instance, only around 21% of engineering majors are women and only around 19% of computer and information science majors are women (5).



While mentorship, leadership, role models and related factors are concepts explored more succinctly and frequently in literature originating in the United States and Europe, scanty information exists on these topics in the African context (7). Further, African context is silent on how to effectively implement policies to support underrepresented groups, including women in STEM careers.

Women in STEM in Kenya

In Kenya, for example, policies and legislations have been enacted in different sectors and institutions to increase female enrolment, and for equal opportunity for both men and women (4). Though progress has been made, these efforts are still not meeting the expectations of narrowing gender inequity, especially towards advancing women to leadership positions in STEM. These have been linked to complex issues, including gender based norms and socio-cultural practices which need further understanding (3).

Research objectives

The overall goal of the project is to assess institutional efforts at gender mainstreaming in STEM and propose innovative strategies to promote institutional advancement and protection of women in leadership positions in academia and industry.

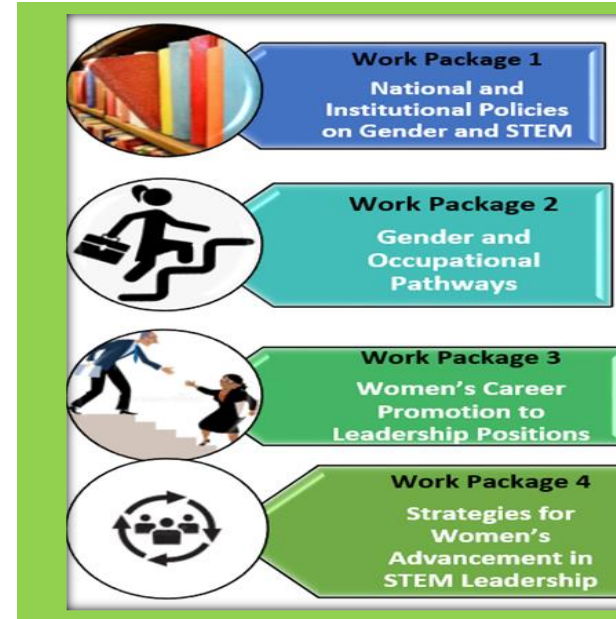
The specific objectives are to:

1. Undertake a landscape analysis of STEM academic institutions and industry in Kenya and understand how gender equity and opportunities for women's leadership have been mainstreamed in national and institutional policies, plans, and practices;
2. Identify extrinsic and intrinsic factors that influence the progression of women along occupational pathways and advancement or exit from selected STEM institutions;
3. Identify successful strategies that advance, protect, and promote women to leadership positions in STEM institutions;
4. Co-develop and test innovative strategies with selected case study institutions and trigger organizational change to support, advance and protect women for leadership positions in STEM careers.

Methodology

The study will employ a mixed methods approach (quantitative and qualitative). The qualitative component will aim at providing more insights on the findings from the quantitative survey.

Work packages



Research Process



Kenyan Partners



Ghanaian Partner



Funder



Authors: Caroline Kabaria & Ivy Chumo