

Women representation in STEM spheres

How are we doing? What have we done? What more can we do? A
perspective from Rwanda

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Outline

- Evolution of STEM representation in Rwanda & other East African countries
- Key challenges to equitable and inclusive representation
- Initiatives to increase women's participation in STEM research

Evolution of STEM representation in Rwanda

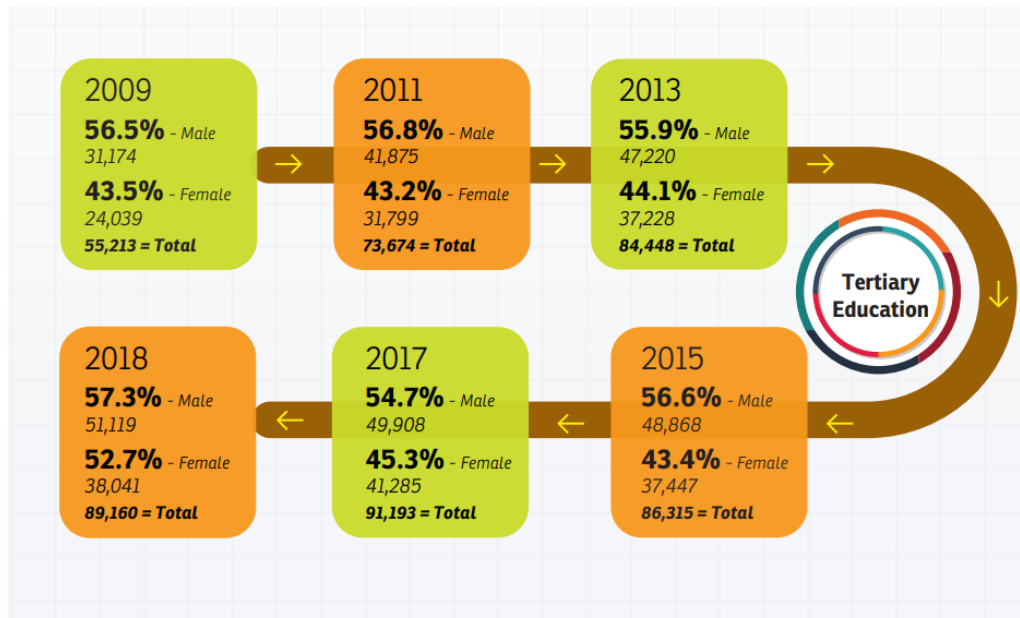
Background

- Landlocked country located in East Africa
- Population of 12.95 million
- Researchers – 152.3 per 1 million
- STI for social economic growth



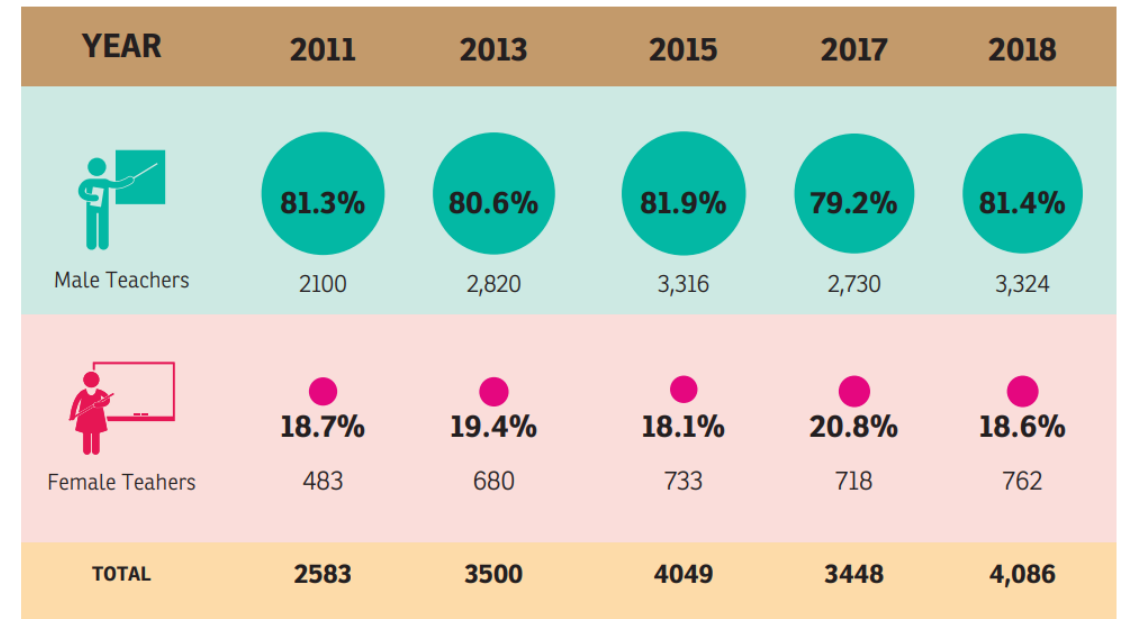
Education

iv. Tertiary Education



Source: Education Statistical Yearbooks 2011 – 2018

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Education

Table 4. 41: Tertiary Students by Fields of Education 2018/2019

Field of education	Number of Students			Percentage by Sex		Percentage by Field of Education		
	Male	Female	Total	Male	Female	Male	Female	Total
Education	6,402	4,473	10,875	58.8%	41.13%	13.04%	12.05%	12.62%
Humanities & Arts	590	383	973	60.6%	39.36%	1.20%	1.03%	1.13%
Social Sciences, journalism and information	3,151	3,107	6,258	50.3%	49.65%	6.42%	8.37%	7.26%
Business, Administration and Law	11,481	14,227	25,708	44.6%	55.34%	23.39%	38.33%	29.82%
Natural Sciences, Mathematics and Statistics	2,461	1,314	3,775	65.1%	34.81%	5.01%	3.54%	4.38%
Information and Communication Technologies	5,888	3,539	9,427	62.4%	37.54%	11.99%	9.53%	10.94%
Engineering, Manufacturing and construction	11,423	2,797	14,220	80.3%	19.67%	23.27%	7.54%	16.50%
Agriculture, Forestry, fisheries and veterinary	1,909	998	2,907	65.6%	34.33%	3.89%	2.69%	3.37%
Health and Welfare	3,477	3,249	6,726	51.6%	48.31%	7.08%	8.75%	7.80%
Services	2,308	3,029	5,337	43.2%	56.75%	4.70%	8.16%	6.19%
Total	49,090	37,116	86,206	56.9%	43.06%	100.00%	100.00%	100.00%

Source: MINEDUC

Table 4. 42: Tertiary education students with disability in 2017/2018 and 2018/2019

Rwanda strategy

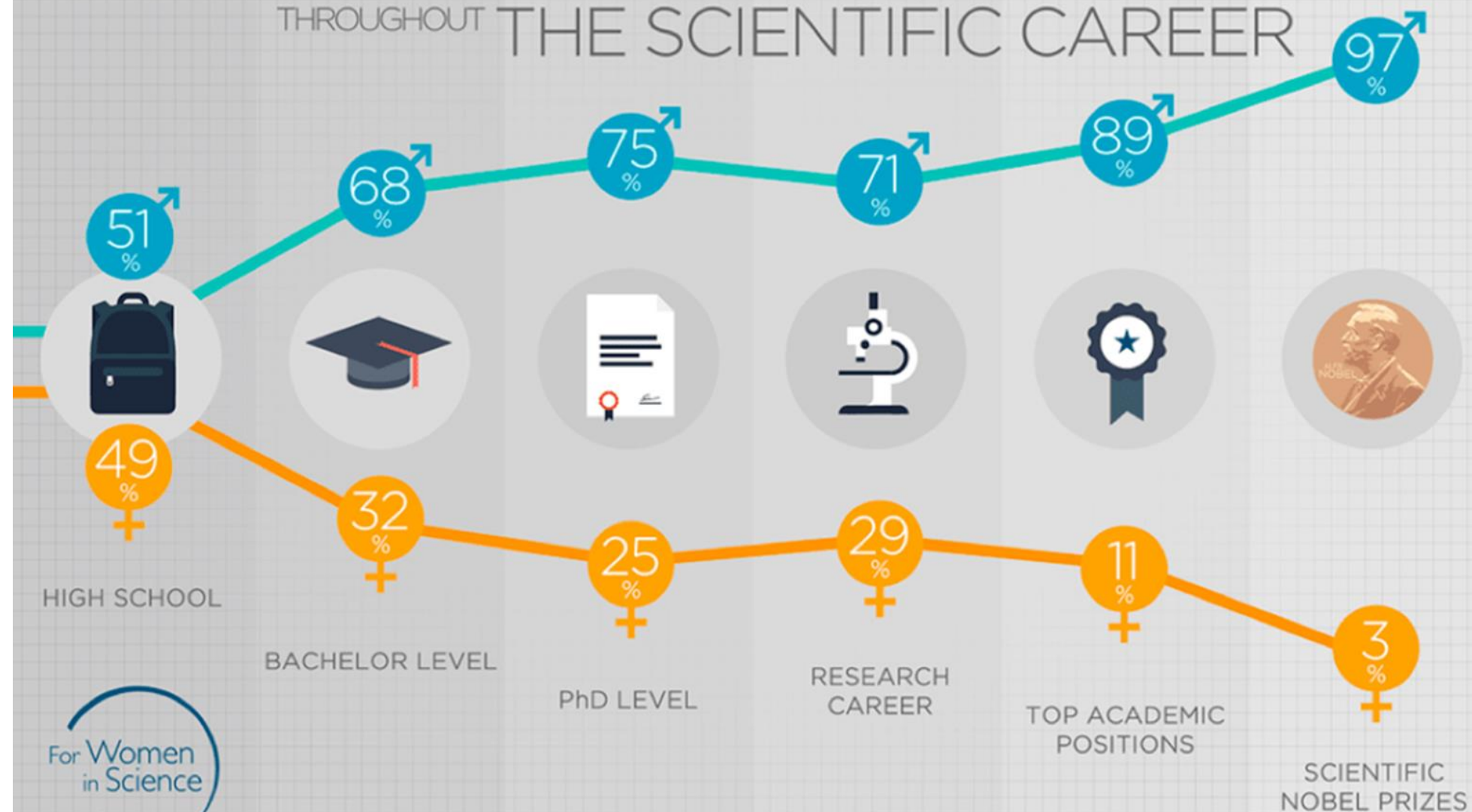
- National Council for Science & Technology
 - Increase production of quality R&D output (patents, publication)
 - Oversee government research funds
 - STI conferences
 - Awards
- National gender policy
 - Quotas in leadership

Regional advancements

- Establishment of the Inter-University Council for East Africa
- Adoption of the Africa's Science and Technology Consolidated Plan of Action (CPA, 2005–2014) and its successor, the Science, Technology and Innovation Strategy for Africa (STISA-2024).
- Establishment of networks and centre of excellence.
- Research Institutes
- Creation of Innovation Hubs


Key challenges to
equitable and inclusive
representation

THE UNDERREPRESENTATION OF WOMEN THROUGHOUT THE SCIENTIFIC CAREER



Other challenges

- Gender & cultural bias
- Non conducive system
 - Academia
 - Work environment
 - etc



Initiatives to increase women's participation in STEM

Anecdotes & Examples

Grants for ECR women

- OWSD
- Schlumberger Foundation
- Etc

Advocacy for women in STEM

- INWES
- RAWISE
- OWSD
- etc

African Institute for Mathematical Sciences

- Intake made of 30% female
- Fellowship for women

Rwanda Institute for Conservation Agriculture

- Intake 50% female
 - Academic staff 30% female
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Key strategies & Conclusion

Policies

- Governments
- International & National Agencies or Organizations

Create safe space & conducive environment for women

- At university
- Work-place

Specific initiatives targeted to women

- National level
- NGO & INGOs
- Private institutions

Better communication

- Timely
- Right channels

