



Global Aviation Gender Summit

Cape Town, South Africa | 8 to 10 August 2018

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BY 2030!



The Natural Sciences Sector

UNESCO

How accessible is STEM for girls and young women?

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Food for thought?

- 1.76 billion people owned a smartphone in 2014 (up 25% than 2013); “...by 2017, more than a third of all people around the globe will be smartphone users..” - eMarketer, 2014
- 25% fewer women are online than men in developing countries - with this figure rising close to 45% in sub-Saharan Africa.
- More women play video games than ever before (52% gaming audience) -Internet Advertising Bureau, 2014
- Bringing another 600 million women online could contribute +/- \$13 to \$18 billion to the annual GDP across 144 developing countries





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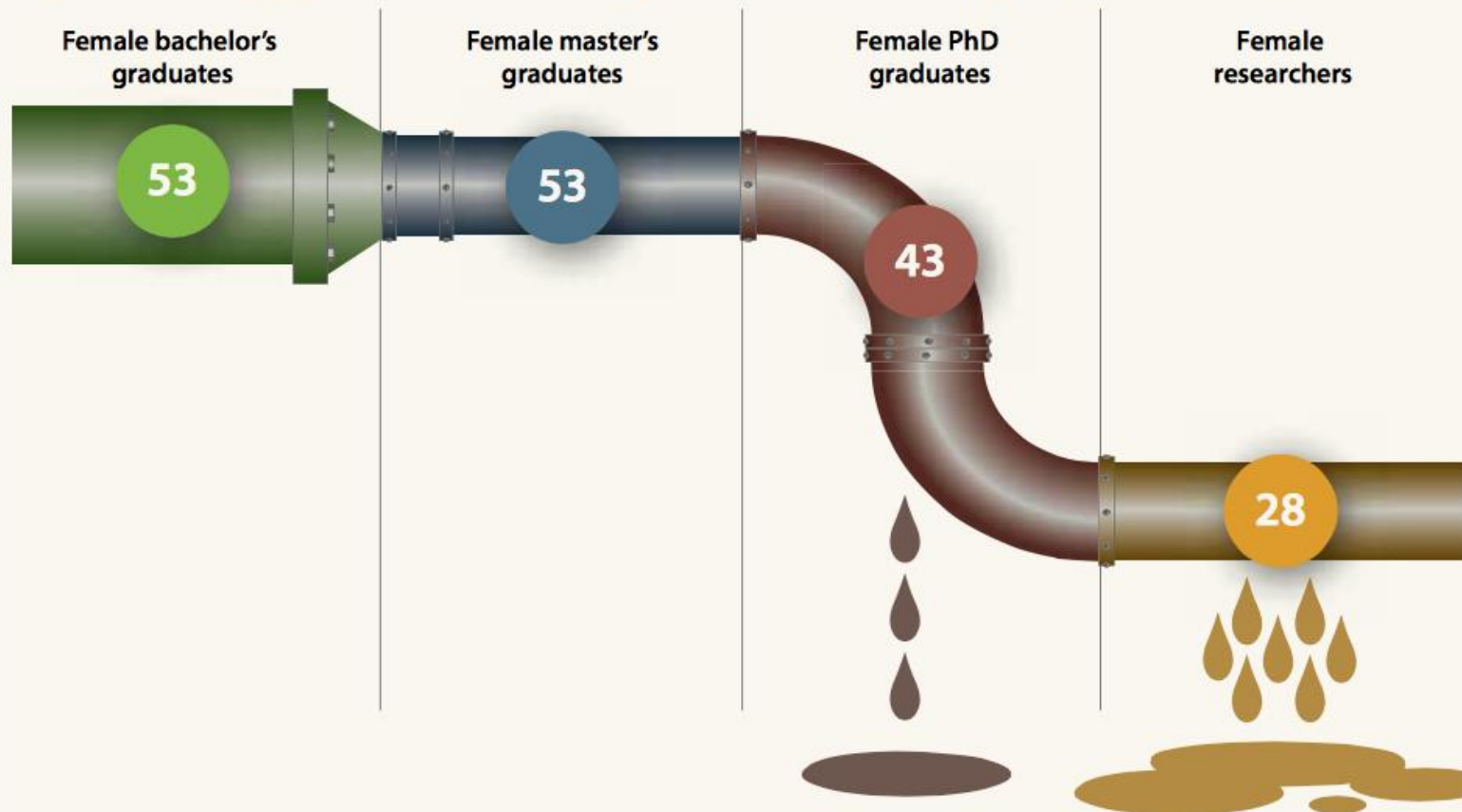
- Women and girls continued to be excluded from participating fully in science.
- According to a study conducted in 14 countries, the probability for female students of graduating with a Bachelor's degree, Master's degree and Doctor's degree in science-related field are 18%, 8% and 2% respectively,
- while the percentages of male students are 37%, 18% and 6%.





Share of Women in Research

Figure 3.1: The leaky pipeline: share of women in higher education and research, 2013 (%)



Source: UNESCO Institute for Statistics estimates based on data from its database, July 2015



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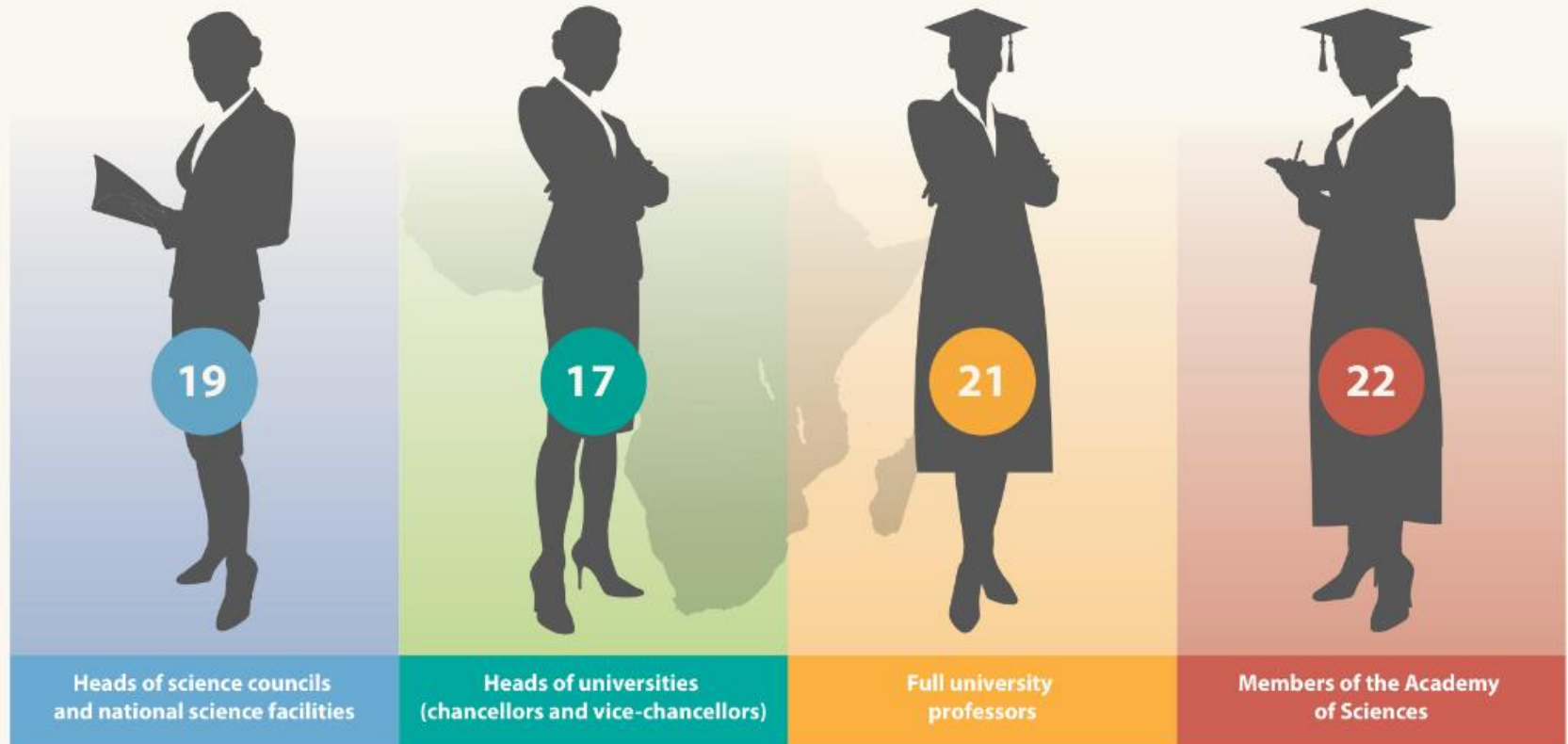
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Share of Women in Research

Figure 3.3: Share of women in selected South African institutions, 2011(%)



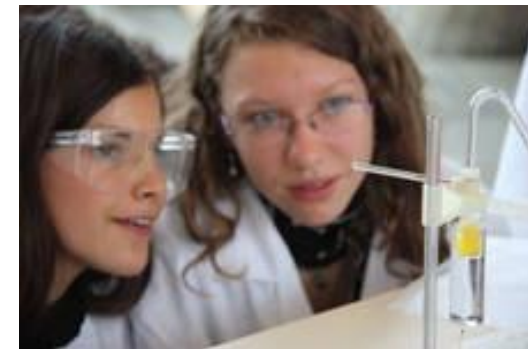
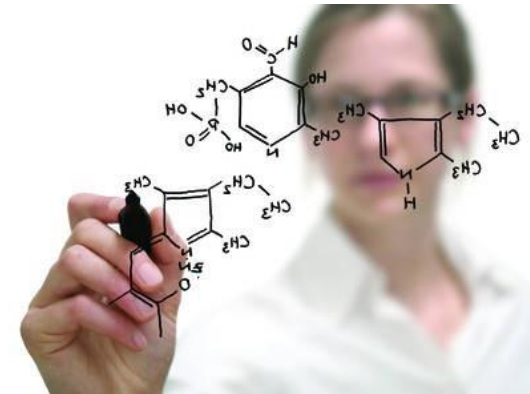
Note: The data for the share of women among full university professors are for 2009.

Source: ASSAf (2011)



Women in Research

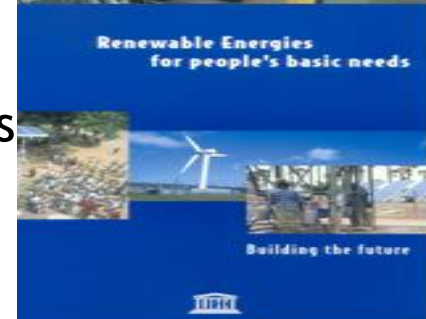
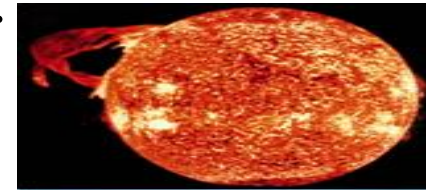
- Women now account for 53% of the world's bachelor's and master's graduates and 43% of PhDs but just [28% of researchers](#)
- There are also great disparities from one region to another.
 - Southeast Europe - women researchers have obtained parity and,
 - On the verge of doing so in Central Asia and Latin America and the Caribbean - 44%
 - In the European Union, on the other hand, just one in three (33%) researchers is a woman,
 - In the Arab States - 37%
 - Women are also better represented in sub-Saharan Africa (30%)
 - than in South Asia (17%)
- More women graduates in the life sciences > 50%.
- However, in North America and much of Europe, few women graduate in physics, mathematics and computer science but, in other regions, the proportion of women may come close to parity in physics and mathematics.





Women in Engineering

- Women are consistently underrepresented in engineering.
- Europe and North America are generally low: 19% in Canada, Germany and the USA and
- 22% in Finland,
- but there are some bright spots: 50% of engineering graduates are women in Cyprus and 38% in Denmark.
- Regional exceptions: share of women graduating as engineers has risen in sub-Saharan Africa, for instance, in the Arab States and in parts of Asia.
- > 3/10 engineers are women in Viet Nam (31%), Malaysia (39%) and Brunei Darussalam (42%).
- Of the seven Arab countries reporting data, four observe a steady percentage or an increase;
- the highest scores come from the United Arab Emirates and Palestine (31% each), Algeria (31%) and Oman, with an astonishing 53%.





Women in Computer Science

- Computer science shows a steady decrease in female graduates since 2000 - especially high-income countries.
- Exceptions in Europe include Denmark, where female graduates increased from 15% to 24% between 2000 and 2012, and Germany, which saw an increase from 10% to 17%. These are still very low levels.
- The situation in LAC is worrying: in all countries reporting data, the share of women graduates in computer science has dropped by between 2 and 13 percentage points since 2000
- There are exceptions. Turkey, the % women graduating in computer science rose from a relatively high 29% to 33%.
- India - image of engineering changed

