BREAKING BARRIERS
30 AND UNDER: WOMEN IN STEM

As part of Africa Science Week—Kenya (ASW—Kenya) 2019, we are celebrating Kenyan women who are 30 and under, and breaking barriers as young, female, scientists. Our Breaking Barriers women are using science, technology, and innovation for socio-economic development and have already shown demonstrable success in their young careers. These six scientists are equally notable for their scientific and technical accomplishments as they are for the priority they place on mentorship and leadership.

MEET YARIWO KITIYO
A geospatial consultant and data visualisation expert, who wants to harness the power of data for gender equality.

The power of data makes Yariwo Kitiyo come alive. Yariwo is a leading specialist in Geographic Information Systems (GIS) at Esri Eastern Africa where she focuses on spatial analysis and providing geographical solutions. GIS is a computer system designed to capture, store, manipulate, analyze, manage, and display all kinds of spatial or geographical data. Yariwo says she fell in love with it as soon as she first saw the tool. “It is through location analytics that we can analyze big data to unlock patterns and understand behaviour for informed decision making. Just think of any challenge, from gender equity, to emergency response, to transportation, and market segmentation among others, all these have a location component to them.”

For this reason, using data effectively is one of Yariwo’s focuses. Recently, Yariwo has been working on using data to examine gender equity in Kenya. Her belief is that gender-differentiated statistics should look at more than what women’s contributions have been to society, but also clearly outline major gendered issues to help policymakers address them. It is through his kind of approach that we can help improve responses to gender inequality.

To help move this conversation forward, Yariwo also co-founded Women In GIS Kenya, an initiative that creates space for sustainable mentorship of women in data, science, and spatial analytics. Women In GIS Kenya also leverages the power of data analysis for gender equity and frequently works in partnership, to organize mentorship and training programs in universities. During these training programs, students are challenged to come up with practical solutions to newly identified issues within their county using the technical skills they have garnered. Women In GIS Kenya have, so far, partnered with the Kenya Space Agency, Africa Media Hub, Esri Eastern Africa, Pathways International, and the University of Nairobi. Yariwo stresses the importance of working with university students, “I am convinced that building an effective talent pool in universities is a smart investment in the future.”

For Yariwo, data has no real value if it does not lead to actionable solutions. What can be frustrating as a data analyst, is realising that your data is not being seen by the right people. She explains, “It’s quite interesting because even for our [Women In GIS Kenya] technical events, it’s mind-blowing how you will get really great technical people in a room and then no policymaker. It’s a very big gap that you are trying to find a workaround... where we can bring together tech people and policymakers.” To help address this gap, Women In GIS organizes technical sessions that include input from senior-level government officials. Additionally, in 2020, they plan to host frequent breakfast meeting sessions whose sole purpose is to connect data analysis to policymakers.

Yariwo has also interacted with other data analytics tools for analytics and visual data. The idea of the public being able to access vital data is invigorating, and her dream is simple, “I would want to transform data presentation and dissemination from extensive PDFs to comprehensive dashboards. I want a future that is accustomed to data presentation in a user-friendly format that can be consumed by the common mwananchi [average person].” As she works on completing her Masters in GIS and Remote Sensing at the Jomo Kenyatta University of Agriculture and Technology (JKUAT), her career seems linked to that of the future of data in Kenya.

“Data rock stars are the missing link we so urgently need for open governance and policy change,” Yariwo emphasizes. Not only is she a data rock star herself, but Yariwo is also ensuring that the future generation of Kenyans will have no shortage of data scientists.