

**Elimisha Msichana Elimisha Jamii na Astronomia** (Swahili for “Educate a girl, educate the entire community”).

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In Kenya, although 70.4% of girls (15-19yrs) achieve some sort of primary education, only 4.5% complete secondary education-World Bank, 2012. 86.5% of girls aged 9-13 years live in rural Kenya, with 80.8% of them attending primary school but only 14.3% enroll for secondary education-UNESCO, 2012. These low rates in secondary education attainment amongst school girls in rural areas can be attributed to several socio-economic issues such as teenage pregnancies, early marriages, female genital mutilation (FGM), poverty and lack of mentorship. Addressing this issue of gender disparity and equality in education is critically important for the socio-economic growth and development in these regions. Elimisha Msichana Elimisha Jamii na Astronomia (EMEJA), is helping to address some of these issues in rural Kenya (and now Uganda) via Astronomy/Physics outreach, mentorship and inspirational programmes, targeted STEM workshops and scholarships opportunities, that are guided by long-term student tracking and monitoring. The overall objective of the EMEJA programme is to increase the number of girls completing secondary education in rural areas of Kenya and Uganda. Starting in 2019, the project has positively impacted over 5,000 schoolgirls, their parents and teachers, and has shown the potential that such basic sciences-led interventions could have in addressing the issue of gender disparity and equality in education in these marginalized regions.

I will present our work with the local communities in: i) tackling early marriages and teenage pregnancies; ii) providing leadership programmes for young schoolgirls (12-20 year-olds); iii) promoting early participation of girls in STEM and thus increasing the number of girls enrolling for STEM subjects through the Astro-STEM workshops; iv) creating computer literacy amongst this rural population; and lastly, v) sponsoring girls from economically disadvantaged backgrounds for secondary education. Specifically, I will show how EMEJA is using Astronomy and Physics to promote quality education in rural and underserved schools in Kenya and Uganda. Through the Astro-STEM Workshops & Mentorship programme, we are providing intensive Astronomy and Physics themed workshops targeting Years 1&2 female (14-16 yrs) students in high school in a bid to motivate more girls into STEM courses and careers. We engage the students in a rigorous 2-day hands-on targeted STEM practicals based on the Kenyan curriculum for secondary education. This workshop aims to change STEM misconceptions & promote early participation of girls in sciences, improve grades in STEM subjects, increase number of girls selecting Physics & sitting for the Physics national examination; create resources (e.g. for Physics laboratory) for these often underfunded and underdeveloped rural schools; and lastly create computer literacy (almost non-existence) in these regions.