



# The role of Open Data as a social justice entity

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# Overview

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# Introduction

- Globally - socio-economic inequalities affect some community members - deprived of equal economic, social and political opportunities.
  - Poverty and diverse challenges that call for immediate attention.
- The needs of the marginalised groups should be met to promote social justice - fair allocation of community resources by focusing on the less privileged (Robinson, 2016).
- Opportunity to equally participate in socio-economic & political spheres of the society.



# Background: African challenges

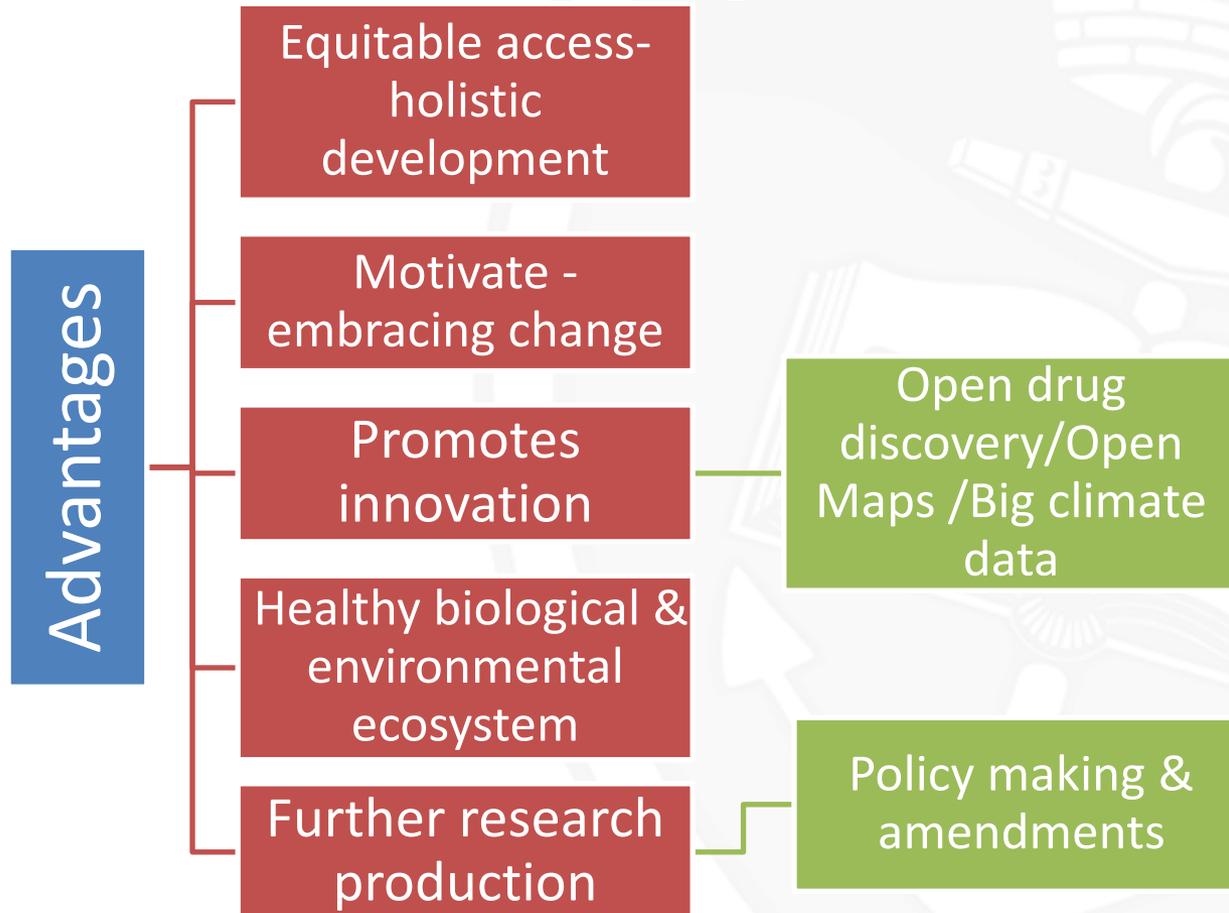
- Cultural, political and socio-economic experiences pose complexities of marginalisation that expose minority groups to various humanitarian challenges:
  - poverty,
  - hunger,
  - socio-economic imbalances,
  - gender discrimination, etc. and these are equally critical for human development.
- The discussion focuses on open data utilisation to end gender violence (Female Gender Mutilation) as gender issues link to other humanitarian challenges.



# Open data

- Open data is perceived critical for the transformation agenda of African as it plays an emancipatory role, which reflects in the gender/reproductive health project to be discussed.
- In science, open data refers to “free availability of data ***on the public Internet*** permitting **any user** to download, copy, analyse, re-process, pass them to software or use them for any other purpose without financial, legal, or technical barriers ...(Pampel & Dallmeier-Tiessen, 2018).
- Research data, collected during a scientific research enquiry or government, community (or donor) owned data.
- Equitable access to data is key to innovation & development.

# Open data – opportunities & advantages





# Challenges of sharing data

- Challenges may be discipline specific and some include:
  - Competitive culture in the scientific world – publish or perish,
  - Publish for promotion and tenure and not as a public good.
- Springer (2018) highlights:
  - Organizing data in a presentable & useful way,
  - Unsure about copyright and licensing,
  - Not knowing which repository to use ,
  - Lack of time to deposit data – metadata/use of software,
  - Costs of sharing data – space costs and infrastructure.
- Ethical issues affect researchers in humanities.



# State of data sharing in Africa

- Scientists acknowledge the opportunities presented by data sharing but they are ambivalent about opening up research data.
- Africa, generally has closed data culture and institutional resistance to open data means less adoption of data policies by countries on the continent (Brandusescu & Nwakanma, 2018).
- Significant observation - African countries do not only lack open culture but also legislation, structures and processes in various sectors are not gender responsive (Brandusescu & Nwakanma, 2018).
  - hence the challenges to end gender based violence & inequalities including gender income gaps.



# State of data sharing in Africa

- Available data do not respond effectively to the needs of women, and are not representative enough to address issues that affect, especially, rural women.
  - Greatest data demands are around women's economic capacity & opportunities (Brandusescu & Nwakanma, 2018), and women health, active data portals do not publish this.
  - Sub-Saharan Africa has the most closed datasets and sex-disaggregated data is not published open.
  - Only Kenya and South Africa feature in the top 50 of the Open Data Barometer ranking.
- \*Few commitments that intersect open data and gender (globally).



# Gender based violence in Africa

- Pronounced gender inequalities in both land ownership (Arends, 2009) and other spheres of life.
  - customary land is allocated to men and patriarch supports male gender superiority.
- In Africa, gender based violence and gender inequalities emanate from culture and patriarch (Taoulost, 2011), which has costed women and children rights.
- Common experiences, include coercive early sexual relations (for girls as young as six), and forced marriages (Taoulost, 2011), female gender mutilation (FGM) (Ross et al., 2016) and early school dropouts for various reasons.



# Gender based violence in Africa

- Cases of rape and incest are also common human rights violations (Taoulost, 2011), which exposes victims to trauma, emotional stress, viral & bacterial infections, thus compromising social justice.
- FGM also known as female sexual mutilation (female circumcision) is classified as a health and human right issue as it has harmful consequences for sexual and reproductive health (Andro & Lesclingand, 2016).
- At least 200 million women and girls have been subjected to the FGM practice around the world (UNICEF, 2016) and the majority of FGM victims live in Africa (Andro & Lesclingand, 2016).



# Gender based violence: FGM practice

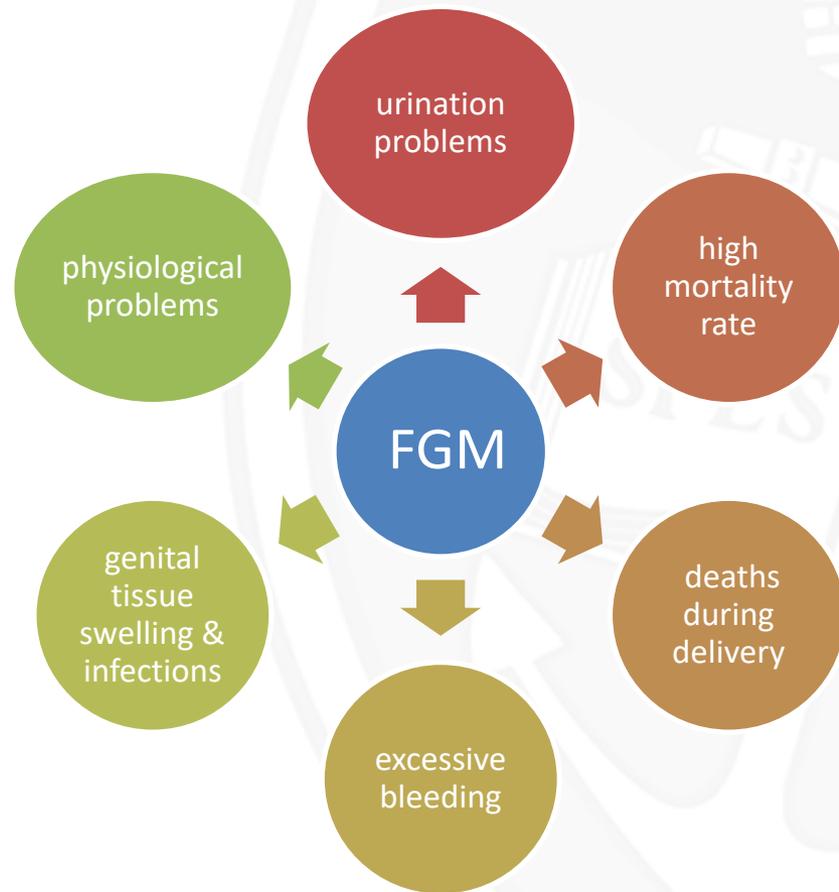
- FGM procedures involve partial or total removal of the external female genitalia, or other injuries to the female genital organs for non-medical/non therapeutic reasons and the target population is girl children between infancy and age 15 (WHO, 2018 (a)).
- FGM practice violates women's rights to health, security and physical integrity, the right to be free from torture and cruel, inhuman or degrading treatment, and the right to life when the procedure results in death (WHO, 2018 (b)) .



# Gender based violence: FGM practice

- The societal impact of gender mutilation practice reflect in girls as young as nine years.
  - dropping out from primary schools for early marriages with adult males, for their families to receive possessions to alleviate poverty.
- FGM is considered a necessary part of raising a girl, and a way to prepare her for adulthood and marriage (increase marriageability) (Shell-Duncan et al., 2018).
- The practice aims to ensure premarital virginity and marital fidelity, as FGM is believed to reduce a woman's libido, which is therefore believed to help women resist extramarital sexual acts (WHO, 2018(a)).

# Effects of Female Gender Mutilation





# Utilisation of open data to eradicate FGM

- In March 2018, a case of open data utilisation to rescue girls from FGM procedures in a Tanzanian village was shared.
- Crowd2Map Tanzania established a collaborative task team, coordinated to map geographical locations that assisted in the rescuing of vulnerable girls scheduled for FGM.
- The team produced a video that summarises the rescue process which was widely shared for awareness purposes (HOTOSM Community, 2018).



# Utilisation of open data in gender based violence

- The task team collects data using manual survey, GPS devices, aerial photography, and other free sources and the crowdsourced data is made available under the Open Database License.
- Availability of open data guarantees continuous mapping of rural geographical points to allow rescue teams to reach vulnerable girls and other community members with critical needs.
- In the video, a legal officer shared how open maps were utilised to reach a girl who was due for genital cutting that very night.
- The girl was rescued and placed in a safe home other rescued girls.
- The leader of the rescue team, is FGM survivor who narrates how she nearly lost her life through loss of blood after the procedure.



# Utilisation of open data in gender based violence

- The leader committed to advocate for women rights and set up a safe house for the girls with the aim to educate the communities on the dangers of the FGM practice and advocate for alternative, safer, rites of passage.
- Open mapping data presented opportunities for Tanzanian rural communities to participate in citizen science through mapping their villages adding schools, hospitals, roads, buildings and villages, to allow better navigation which saved lives of girls from life threatening consequences of FGM.

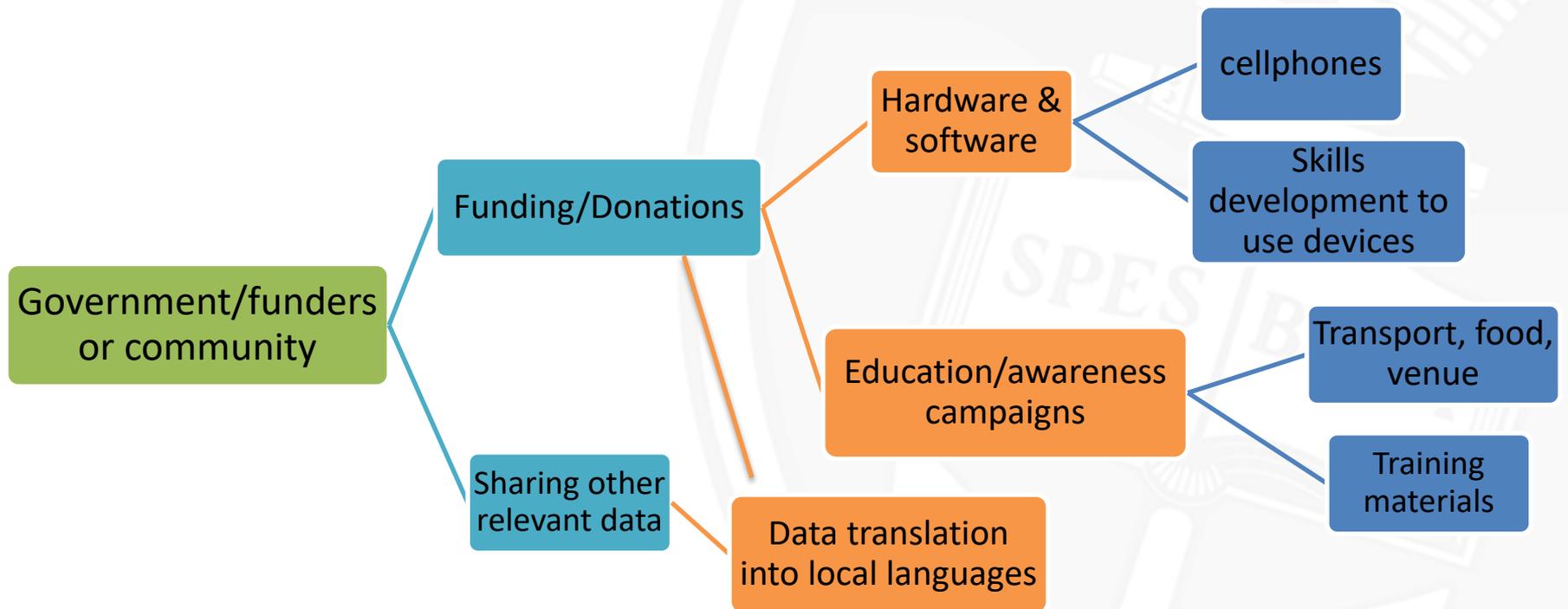


# General observations

- The availability of Open Maps made the rescues of girls a success, giving them hope and maps will continue to service .
- Open Maps can be utilised for other humanitarian challenges.
- The project is on-going and FGM activism is intended to spread to other villages, however the challenge is to complete the mapping before the next FGM cycle, usually carried out in December.
- Projects would be more successful with the buy in from community members and leaders, since both men and women have over the years endorsed the FGM culture as norm.
- It has been noted that fellow women in the community stigmatise women not cut ( categorised unclean women).



# Identified needs for FGM eradication projects



# Need for awareness campaign

- Community awareness on the dangers of FGM is required to educate the community on the need to eradicate the practice.
- An understanding on the dangers of FGM can:
  - increase participation through supplying of information on FGM schedules.
  - increase participation in village open mapping projects.
  - reduce stigma experiences by girls and women not cut.
  - reduce further abuse of women not gender mutilated in their marital relationships.
  - Increase financial aid and emotional support for the girls in safe houses and support for the victims.



***Thank you!***



# References

- Andro, A., & Lesclingand, M. 2016. Female Genital Mutilation. Overview and Current Knowledge. *Population*. 71(2): 216.
- Arends, U.R. 2009. Women and land: access to and use of land and natural resources in the communal areas of rural South Africa (Master's Thesis). Faculty of Arts: University of the Western Cape.
- HOTSOM Community. 2018. Map a task for people in need. Available: <https://tasks.hotosm.org/> [2018, October 1].
- Pampel, H. & Dallmeier-Tiessen, S. Open Research Data: From Vision to Practice. In *Opening science: the evolving guide on how the internet is changing research, collaboration and scholarly publishing*, Sönke Bartling & Sascha Friesike, Eds. New York: Springer Open. 213-224. DOI: 10.1007/978-3-319-00026-8\_14.
- Robinson, F. 2016. Equality and social justice. Available: <http://blog.timesunion.com/frankrobinson/2016/07/03/equality-and-social-justice/> [2017, August 6].
- Ross, C.T., Strimling, P., Ericksen, K.P., Lindenfors, P. & Mulder, M.B. 2016. The Origins and maintenance of female genital modification across Africa. *Human Nature*. 27(2): 173-200. DOI: 10.1007/s12110-015-9244-5.



# References

- Springer Nature. 2018. Researchers' challenges in sharing data cross geographic borders and disciplines. Available: <https://group.springernature.com/gp/group/media/press-releases/researchers-challenges-in-sharing-data-cross-geographic-borders-/15545272> [2018, October 30].
- Taoulost, S. 2011. Gender-Based Violence and its Patriarchal Roots: Case in Kenya. Available: <https://ampglobalyouth.org/students/gender-based-violence-and-its-patriarchal-roots-case-in-kenya/> [2018, October 17].
- UNICEF. 2016. Female Genital Mutilation/Cutting: A Global Concern. New York: UNICEF. Available: [https://www.unicef.org/media/files/FGMC\\_2016\\_brochure\\_final\\_UNICEF\\_SPREAD.pdf](https://www.unicef.org/media/files/FGMC_2016_brochure_final_UNICEF_SPREAD.pdf) [2018, February 14].
- World Health Organisation (WHO). 2018(a). Health risks of female genital mutilation (FGM). Available: <http://www.who.int/news-room/fact-sheets/detail/female-genital-mutilation> [2018, October 1].
- World Health Organisation (WHO). 2018(b). Health risks of female genital mutilation (FGM). Available: [http://www.who.int/reproductivehealth/topics/fgm/health\\_consequences\\_fgm/en/](http://www.who.int/reproductivehealth/topics/fgm/health_consequences_fgm/en/) [2018, October 1].