



After Access 2022-2023 - Measuring digital inequality

Digital Africa Post the Pandemic

AfriSIG - 16 November 2024

RESEARCH
ICT AFRICA



Digital inequality paradox

The wicked policy problem of the digital inequality paradox lies in the fact that as increasingly advanced technologies are being overlaid on existing digital inequalities - themselves a reflection of deeper structural inequality - inequalities are being amplified.

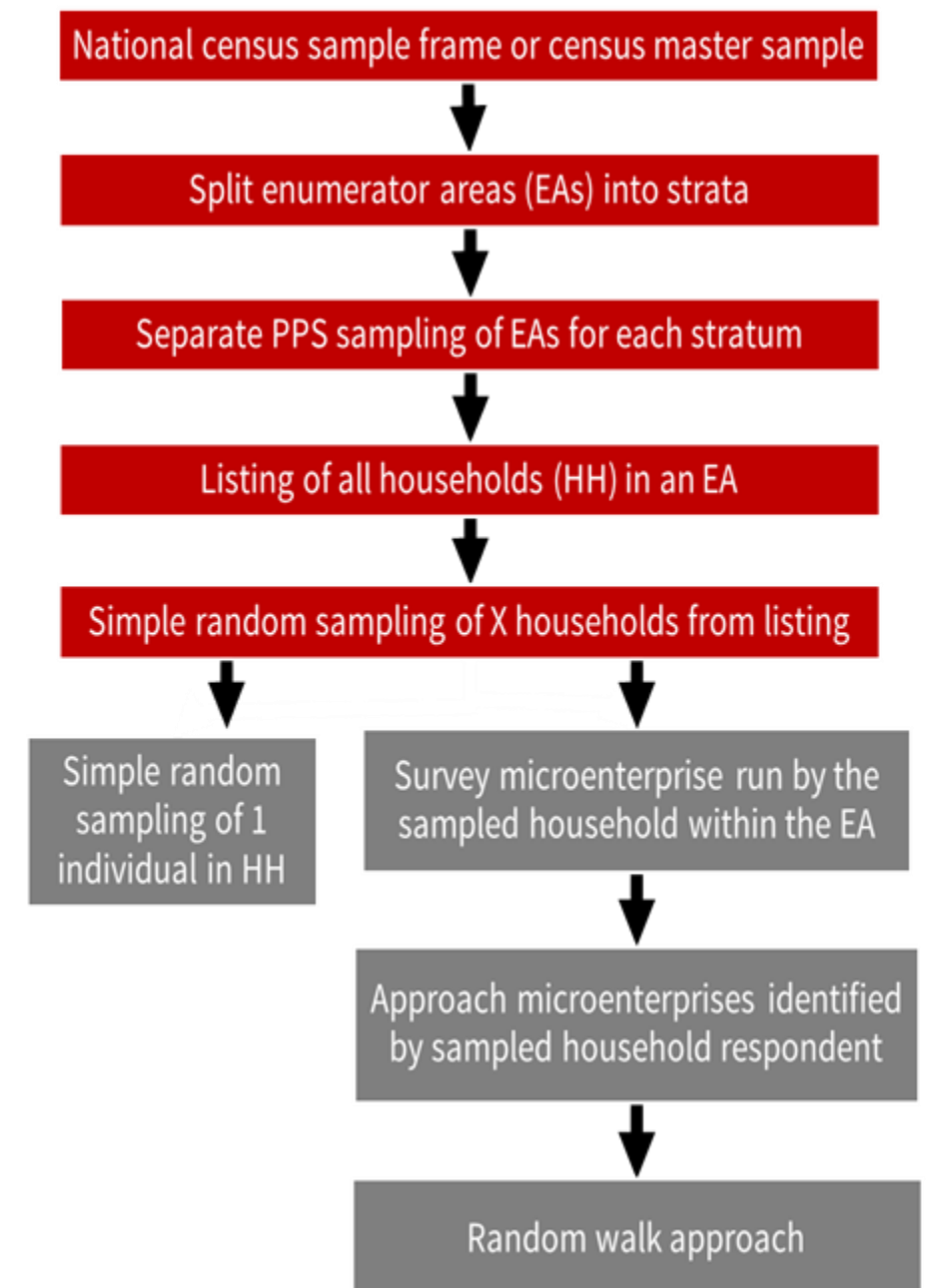
This is not only between those online and those offline (as is the case in a voice and basic text environment), but between those who have the technical and financial resources to use the internet actively or even to contribute to national prosperity, and those who are barely online, passively and intermittently consuming a narrow set of digital services.

After Access Surveys

The After Access survey is the only nationally-representative household survey on digital access and use across multiple African countries prior, during and post the COVID-19 pandemic.

- The fourth round of After Access survey took place between 2022 and 2023 encompassing seven African countries (South Africa, Nigeria, Uganda, Ethiopia, Kenya, Ghana and Tanzania.)
- In each country at least 1000 households were interviewed as well as a randomly selected individual (over the age of fifteen years old) in each household.
- For each of the countries, a parallel survey covered a minimum of 499 microenterprise surveys in the same enumeration areas, identified through the individual survey respondents in conjunction with a *random walk* technique.
- Microenterprises are defined as businesses of up to ten employees (businesses which are part of a franchise were excluded).

After Access sampling steps:

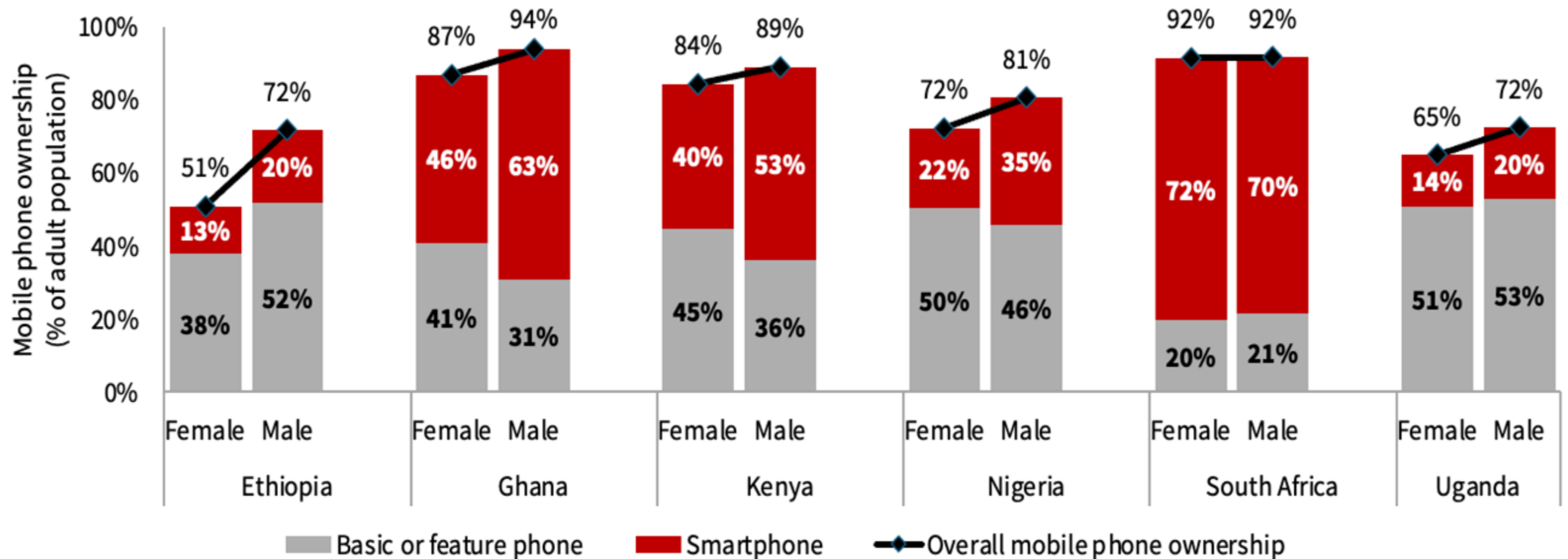


A close-up photograph of a person's hand holding a black smartphone. The hand is positioned in the lower-left quadrant of the frame. A semi-transparent red rectangular overlay covers the middle portion of the image, extending from the left edge to the right edge. The background is blurred, showing green foliage and a person in a white shirt.

Household and individual access and use

Device ownership by gender

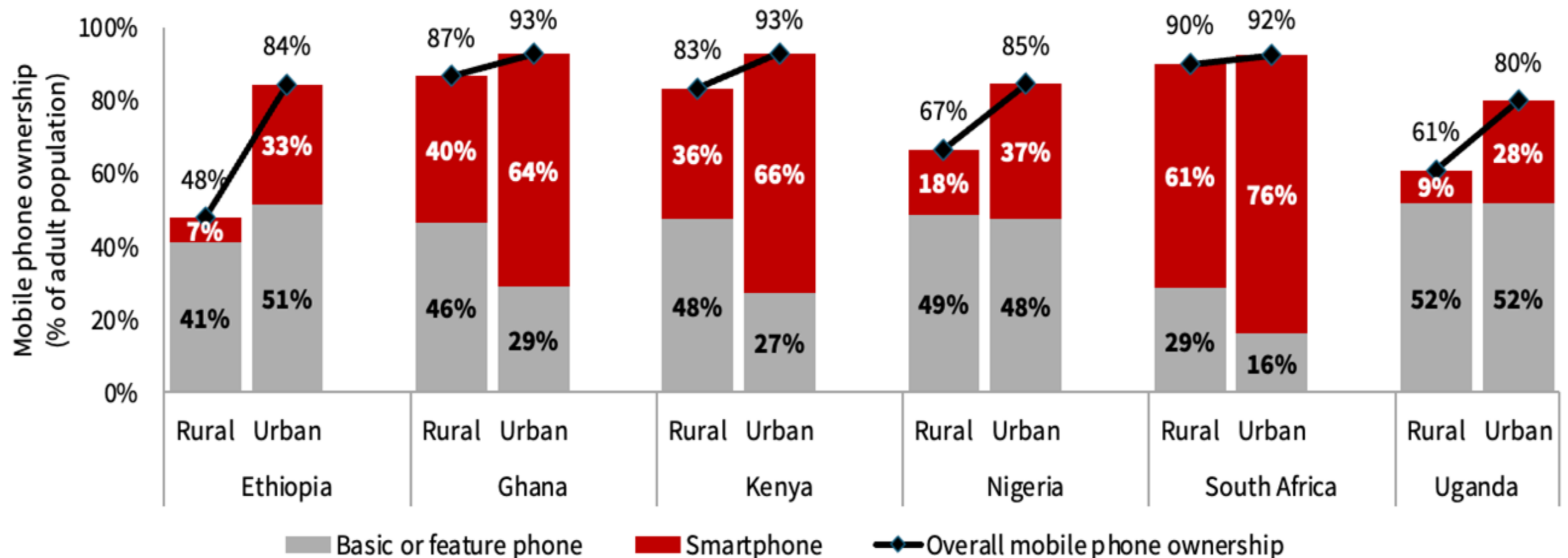
Mobile phone ownership has been growing in all countries, far surpassing computer ownership which remains low. Smartphone ownership and overall mobile phone ownership are lower for females, limiting their access to internet-based services and opportunities.



- In Nigeria, Ethiopia and Uganda mobile phone ownership is dominated by use of basic and feature phones. Mobile phone ownership is driven in particular by a notable increase in smartphone adoption in Ghana and South Africa.
- Nearly all internet users access the internet through smartphones, which reinforces the need to encourage smartphone ownership and reducing gender disparities in smartphone use.

Device ownership by location

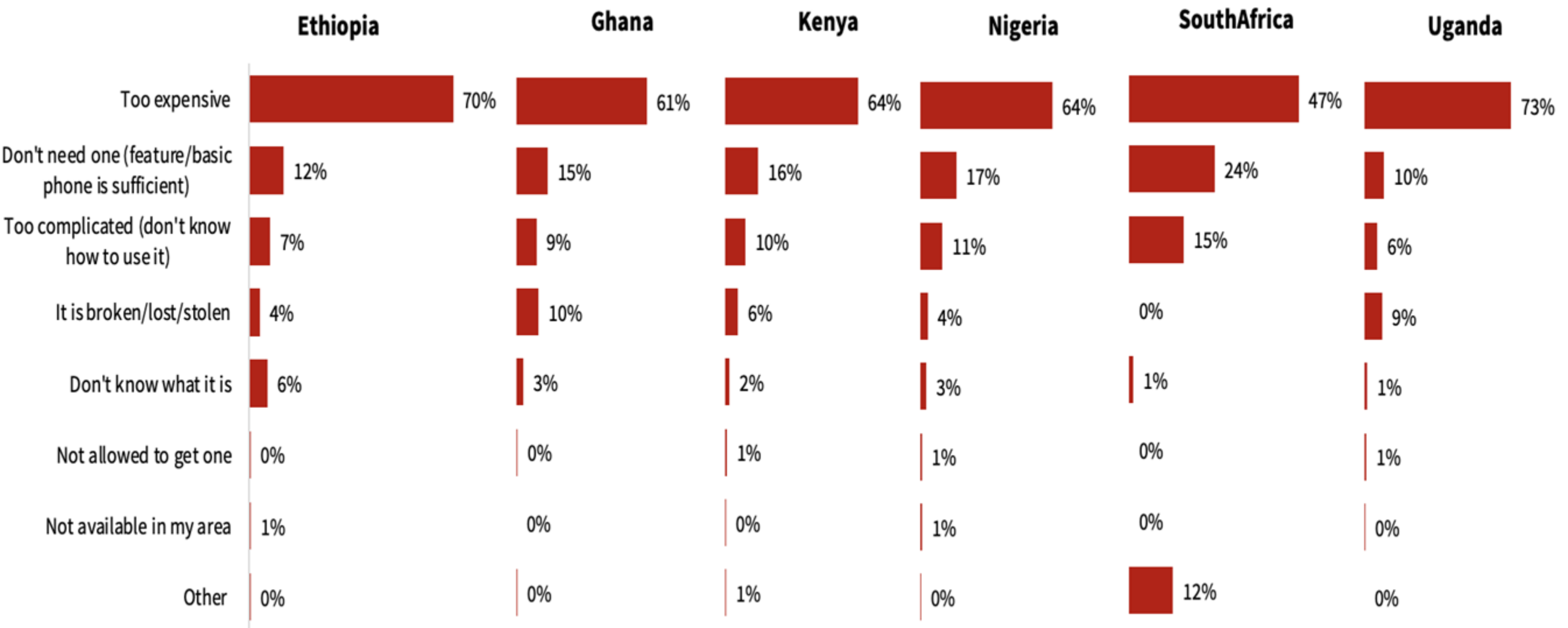
Analysis of location-disaggregated data shows that within categories of urban and rural areas, there is a high level of heterogeneity. As in 2018 people in urban areas are more likely to own smartphones than those in rural areas.



- Similar to gender gaps, the location gaps in smartphone ownership are more pronounced in countries with low levels of smartphone ownership.
- Intersectional analysis reveals that, compared to other groups, women from rural areas face greater disadvantages.

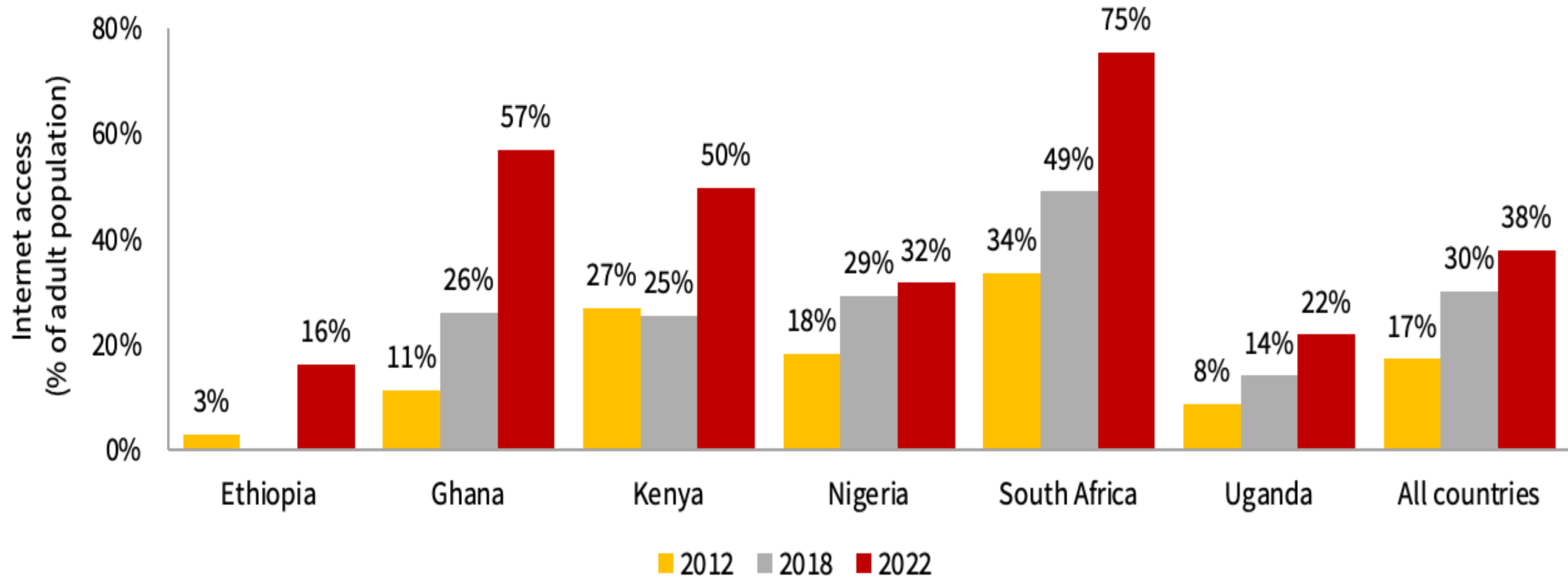
Barriers to smartphone adoption

A major barrier to smartphone ownership is cost. Pro-poor strategies to reduce the cost of devices, and stimulate demand (though relevant content, local language automation, tax waivers and free public wi-fi access, will all benefit women who are concentrated at the 'bottom of the pyramid'.



Internet Access

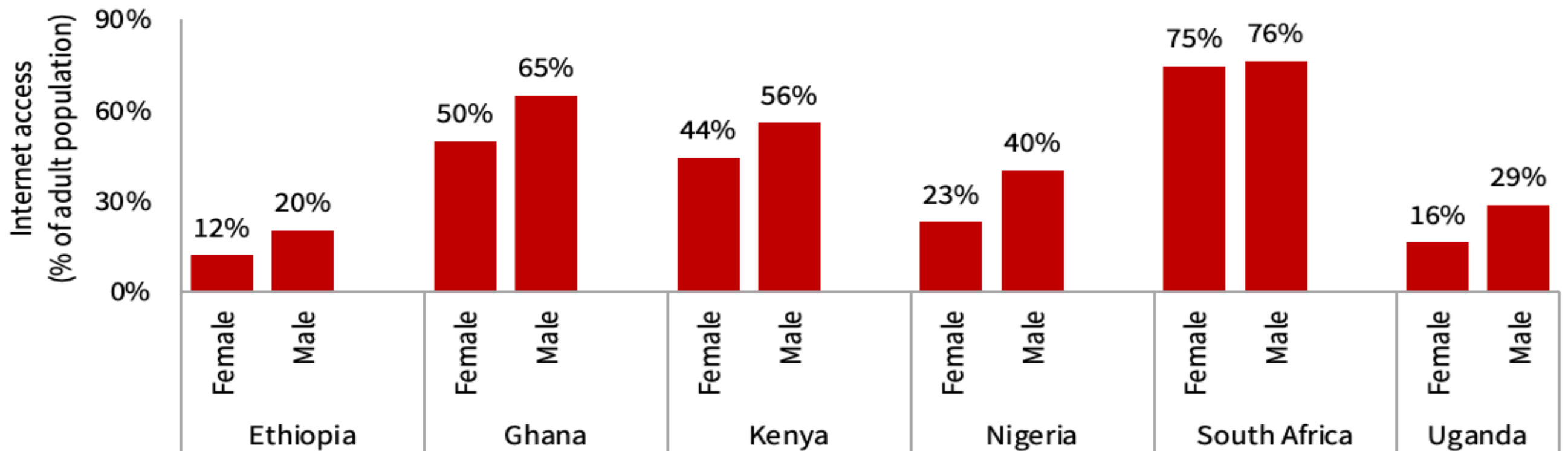
- ❖ Although there has been an increase in internet access between 2012 and 2022, overall internet access is still relatively low at 38% in 2022.
- ❖ In 2022, more than half of the adult population in Nigeria, Uganda and Ethiopia do not have access to the internet.



Gender gaps in internet access persist

- ❖ Whilst the internet access gaps between males and females have been declining, men continue to have more access than women.
- ❖ The estimated gender gaps in internet access are more pronounced in countries with low internet access (Uganda, Ethiopia and Nigeria).

Internet access by gender



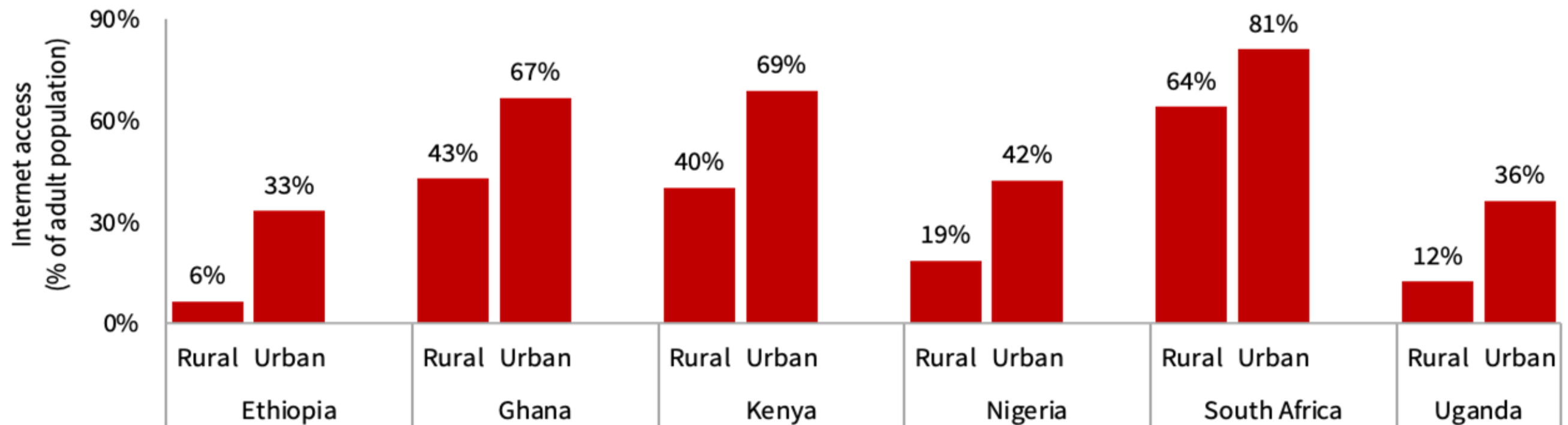
Gender gaps			
Country	2012	2018	2022
Ethiopia	106%	0%	52%
Nigeria	48%	59%	54%
Uganda	116%	29%	57%

Gender gaps			
Country	2012	2018	2022
Ghana	91%	41%	27%
Kenya	60%	36%	23%
South Africa	36%	16%	2%

Location gaps in internet access persist

- ❖ Despite the decline in geographic location gaps in internet access, significant geographic inequalities remain, with urban areas having more access than rural areas.
- ❖ The estimated gaps in internet access are more pronounced in countries with low internet access (Uganda, Ethiopia and Nigeria).

Internet access by geographic location

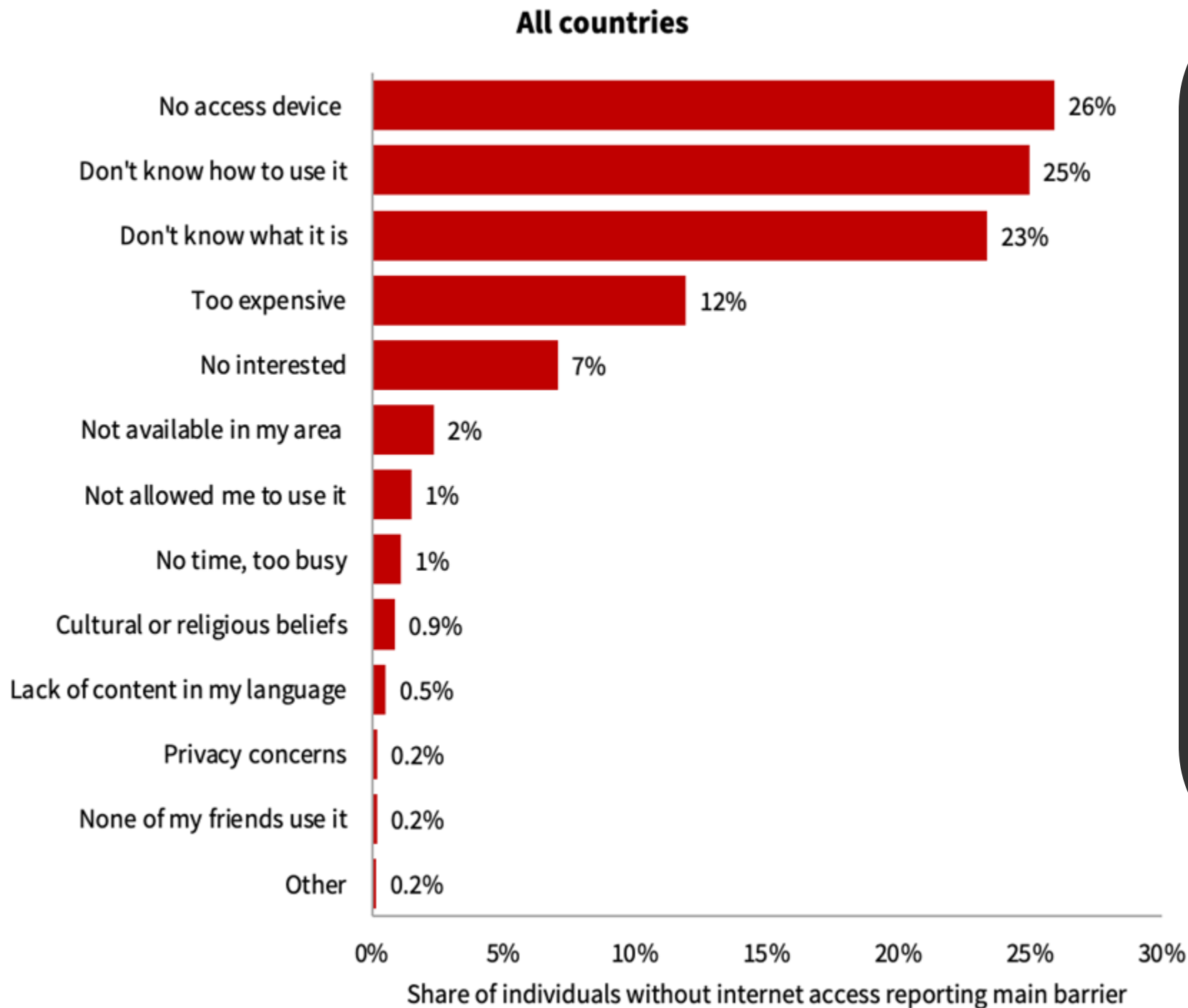


Location gaps			
Country	2012	2018	2022
Ethiopia	289%	0%	167%
Nigeria	40%	74%	75%
Uganda	125%	148%	110%

Location gaps			
Country	2012	2018	2022
Ghana	78%	76%	42%
Kenya	-1%	146%	58%
South Africa	57%	45%	23%

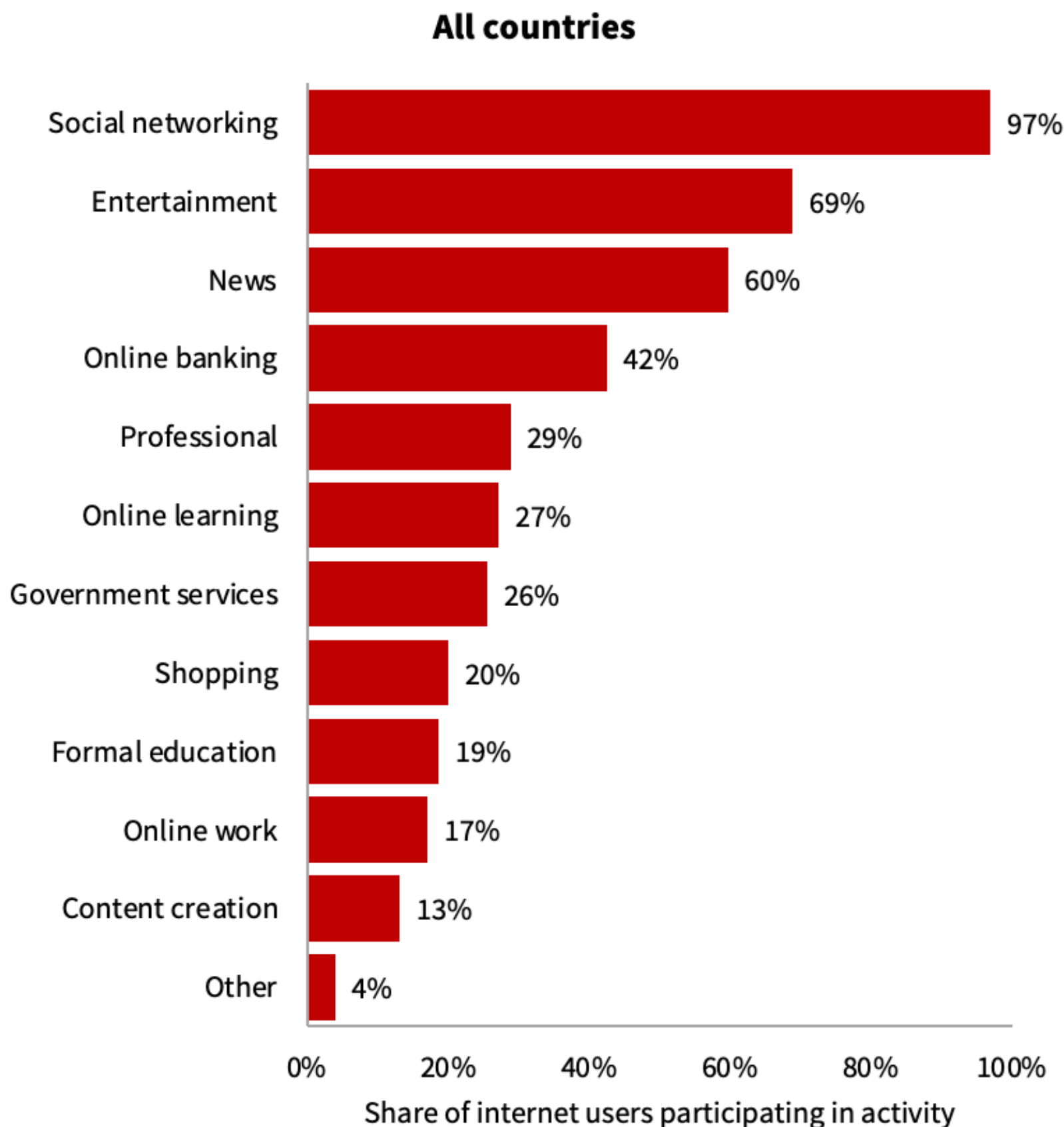
Access barriers

Although the availability of devices and affordability of services are significant barriers, **nearly half (48%) of respondents are constrained by either lack of internet skills or lack of awareness about the internet.**



- In Ethiopia, Nigeria and South Africa, the major barrier to internet access is the lack of digital skills required to navigate the internet (i.e. more people without internet access say they don't know how to use it.)
- Lack of access to internet-enabled devices is a major barrier to internet access in Ghana, Kenya and Uganda.

Internet use

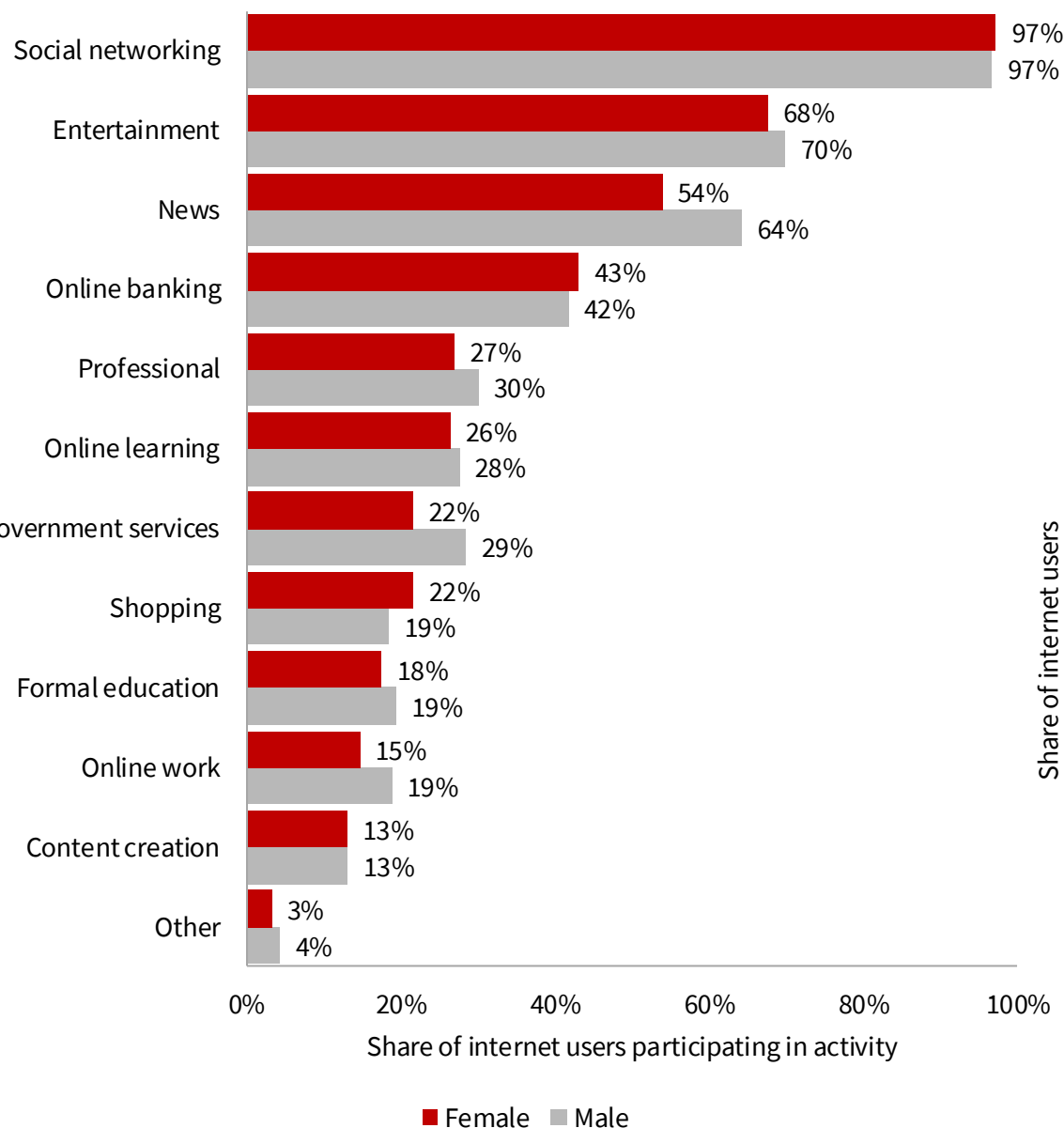


- Almost all internet users report using the internet for social media.
- Despite clear gains in relation to digital access, use of the internet for activities with direct economic benefits (e.g. online work, government services, formal education and shopping) remains very limited.
- There are slight differences in internet use across countries.

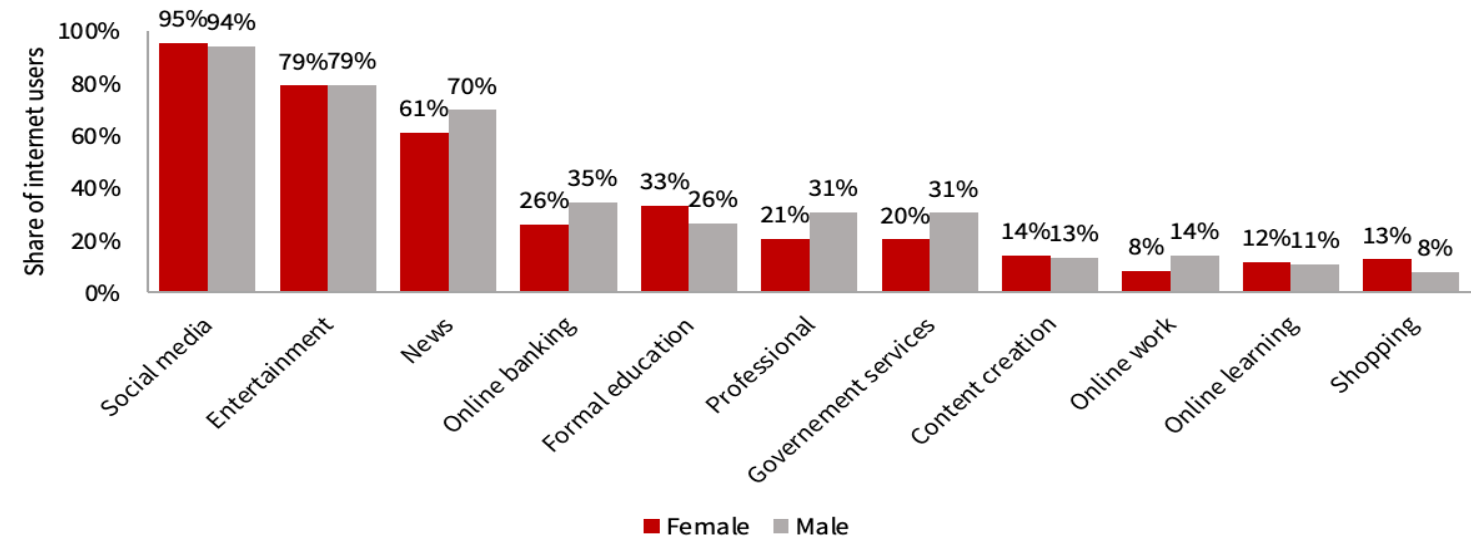
Internet use by gender

- ❖ Women with internet access face heightened barriers in the ability to use the internet for purposes associated with economic benefits.
- ❖ Amongst those online, males experience wider use of the internet than females, particularly in relation to online work and accessing public (government) and private (professional/financial) services.

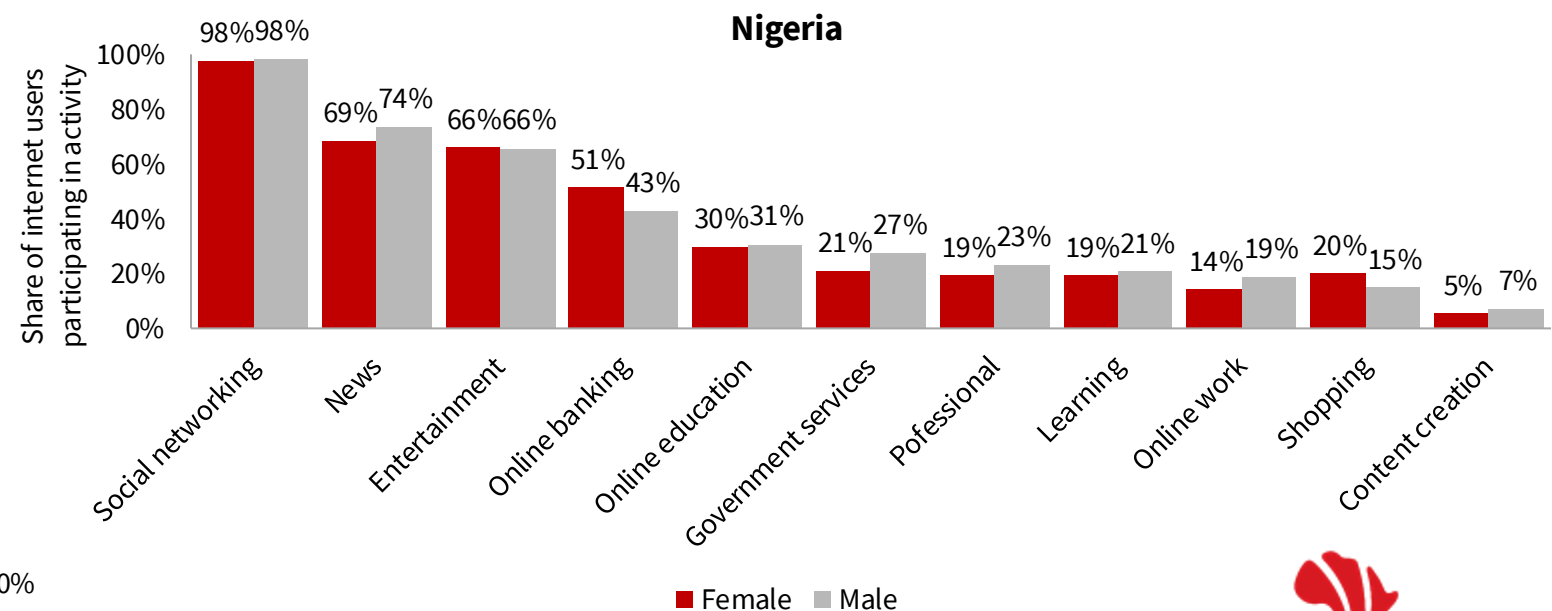
All countries



Ethiopia

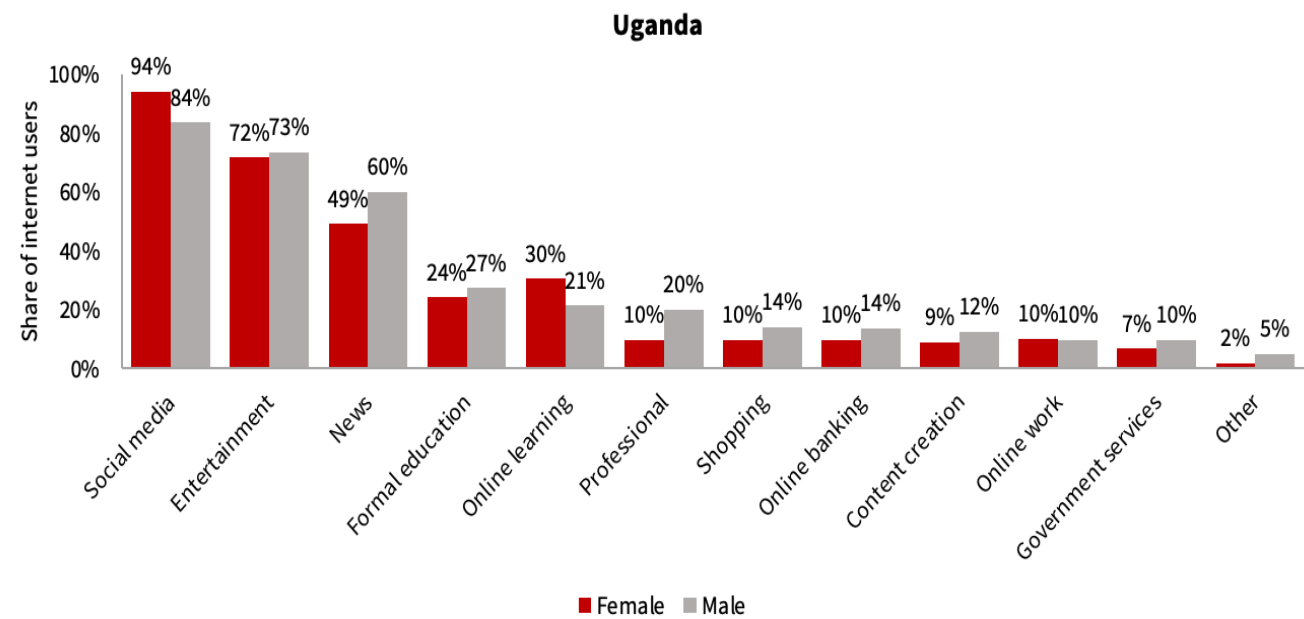
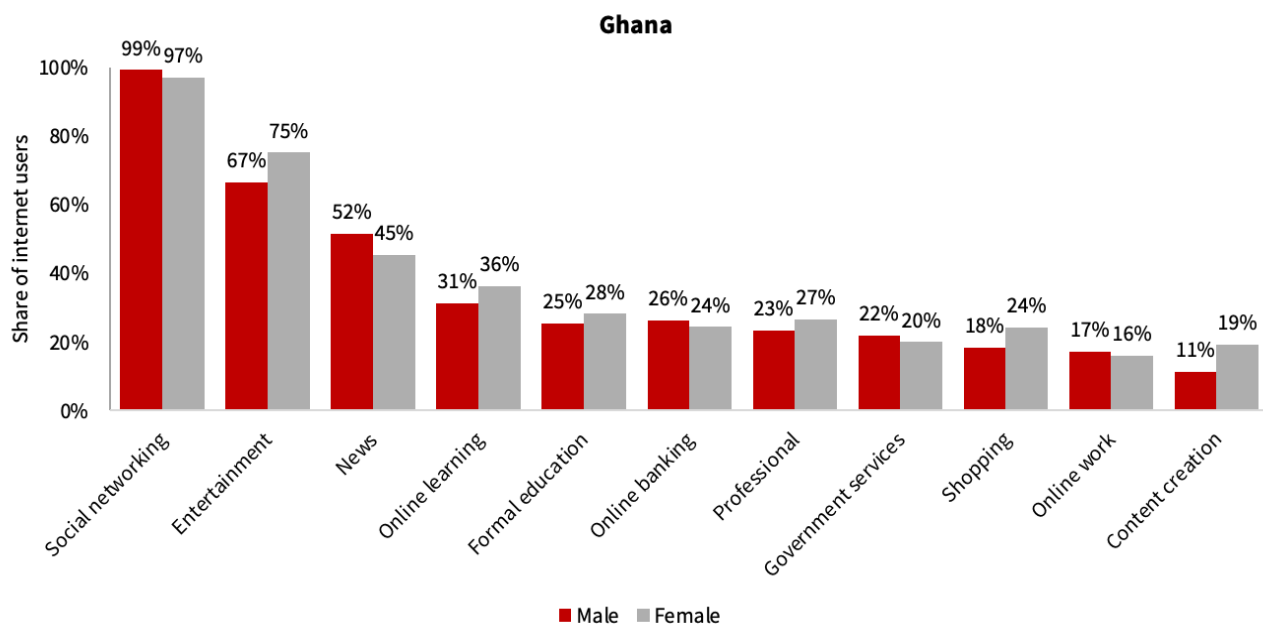
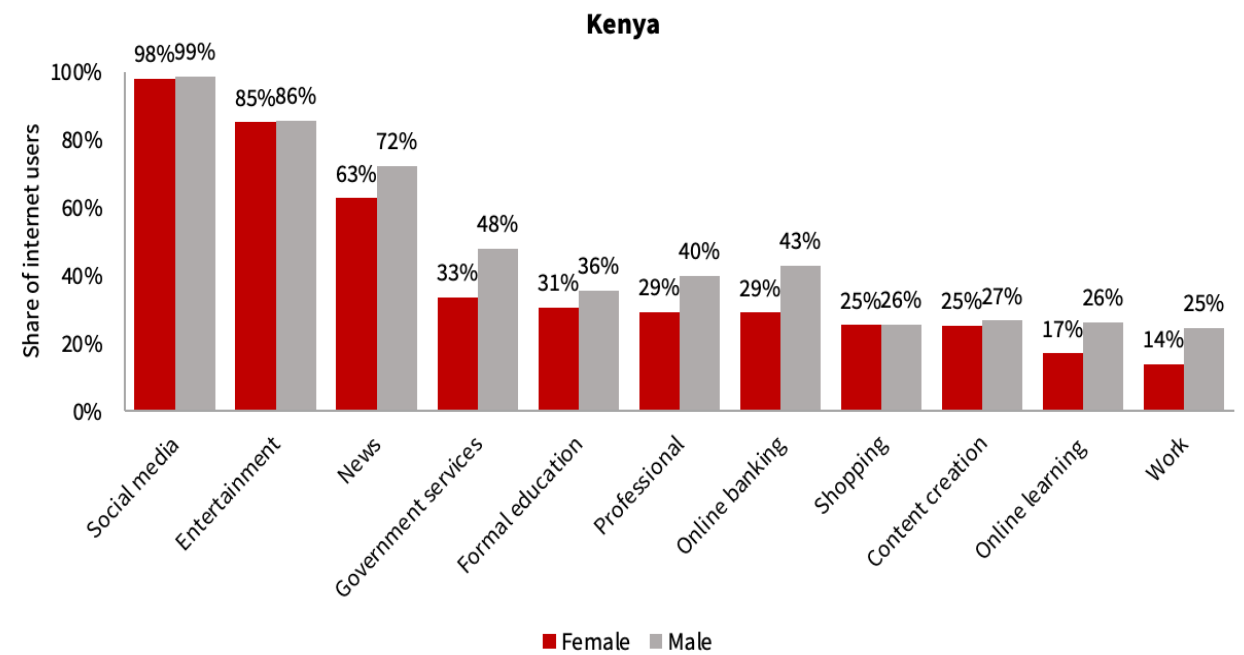
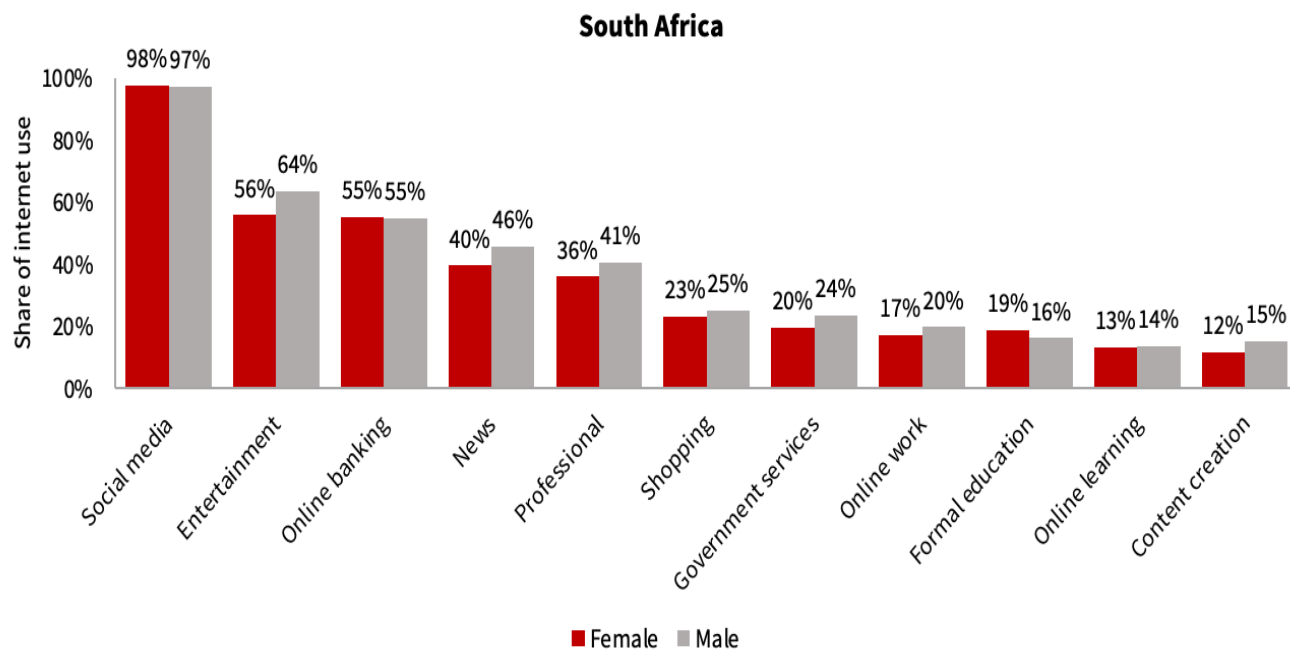


Nigeria



Internet use by gender

❖ Amongst those online, males experience wider use of the internet than females, particularly in relation to online work and accessing public (government) and private (professional/financial) services, **this is the case even in South Africa.**

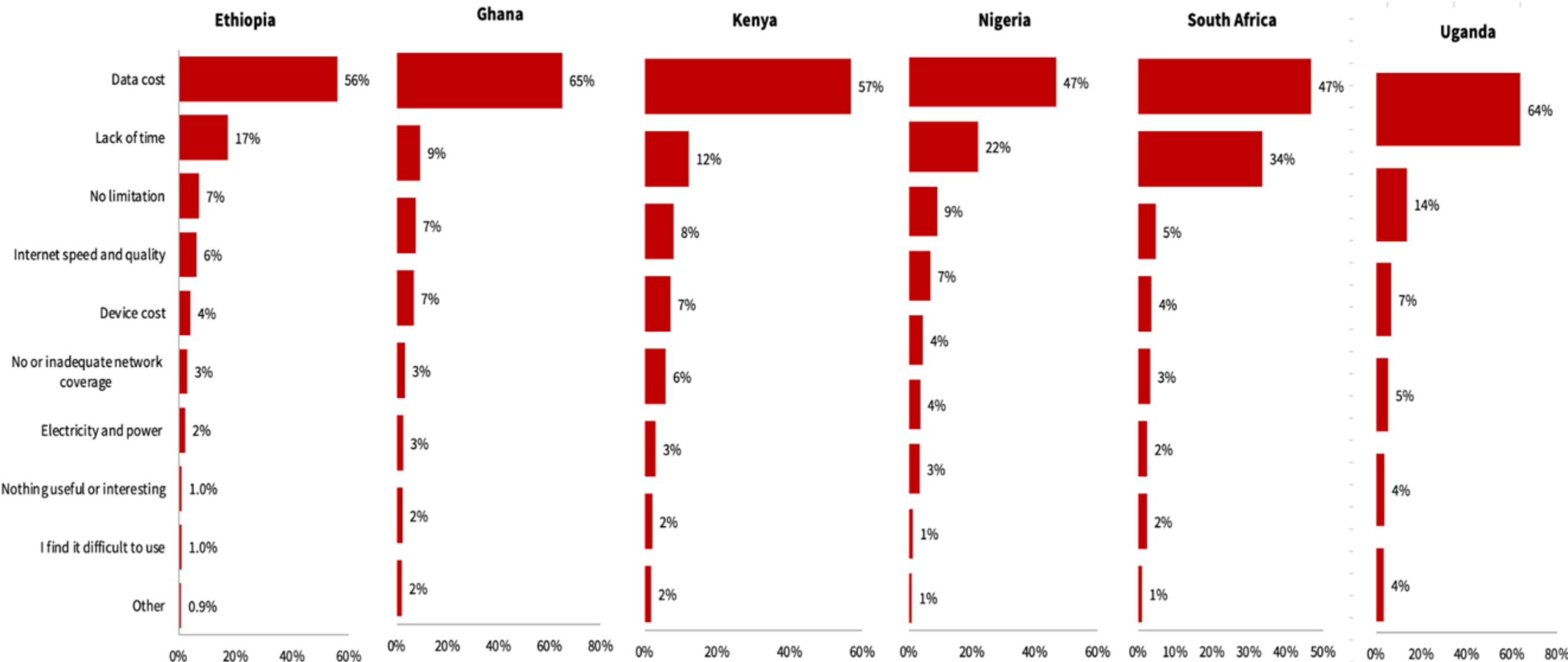


Similar differences are observed between urban and rural areas.

Internet use limitations

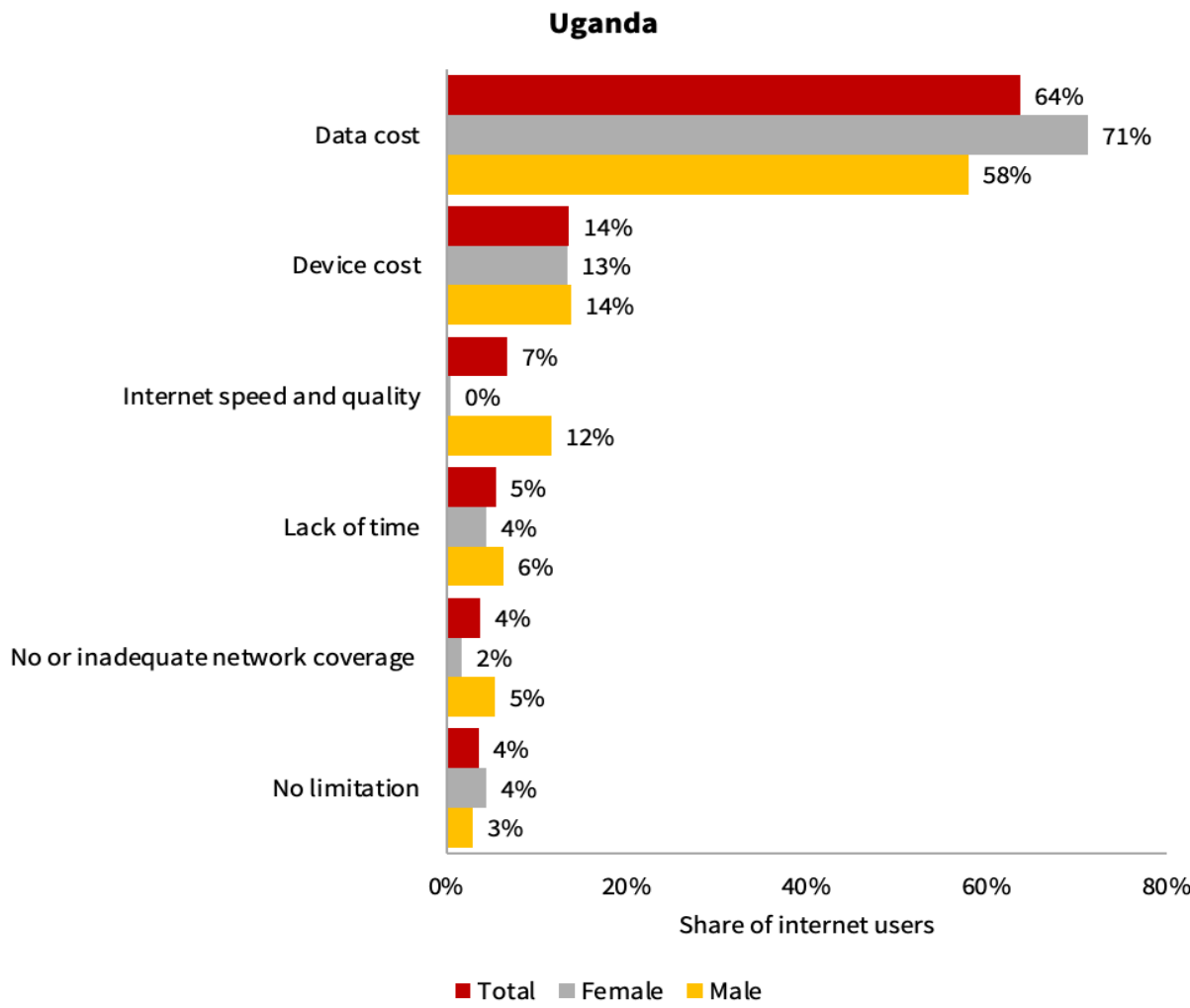
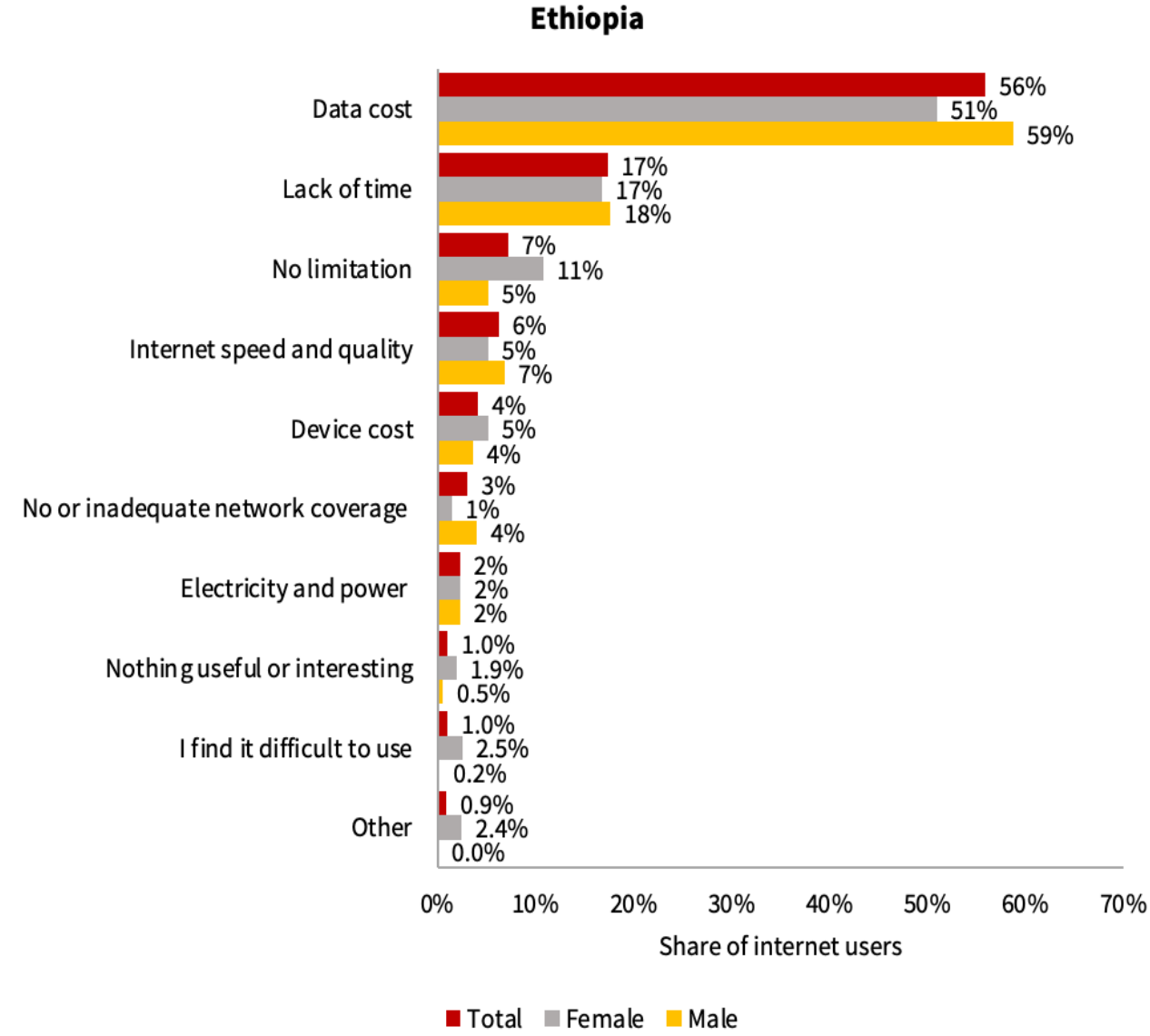
❖ **Affordability of internet services limits usage:** Data costs continue to be the primary factor limiting internet use among internet users across all countries surveyed in 2022.

❖ These are relatively consistent across gender and geographic locations.



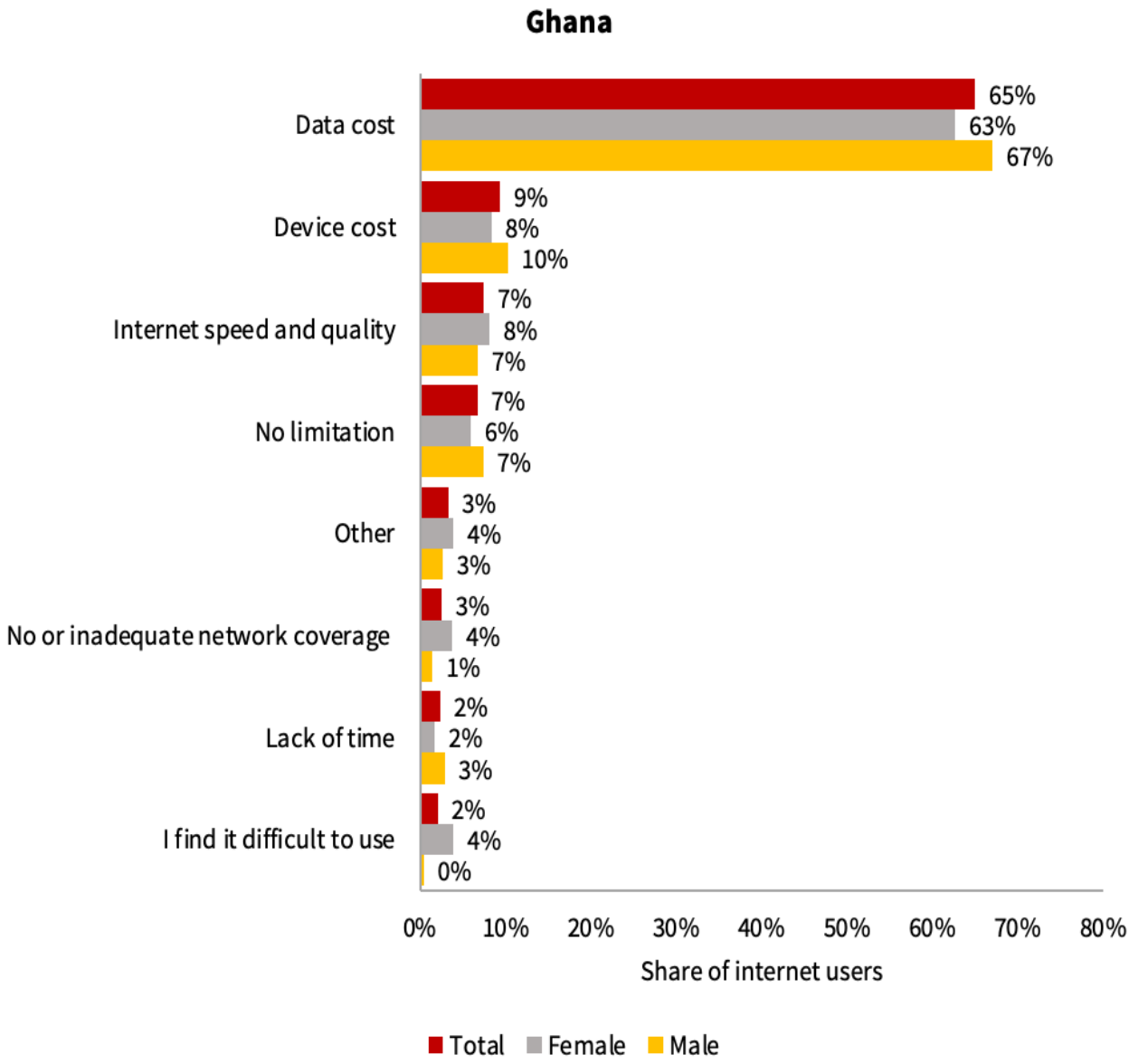
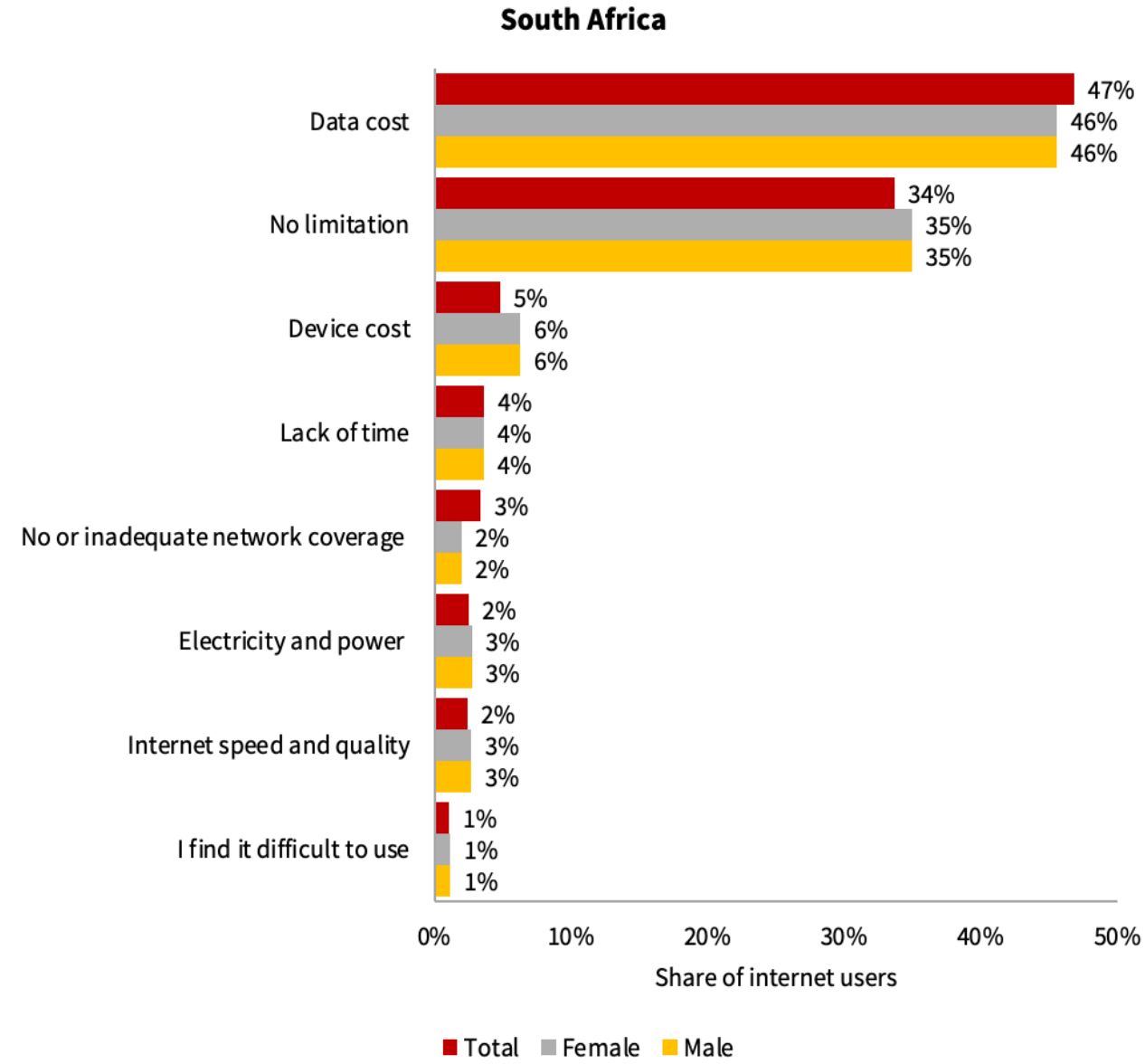
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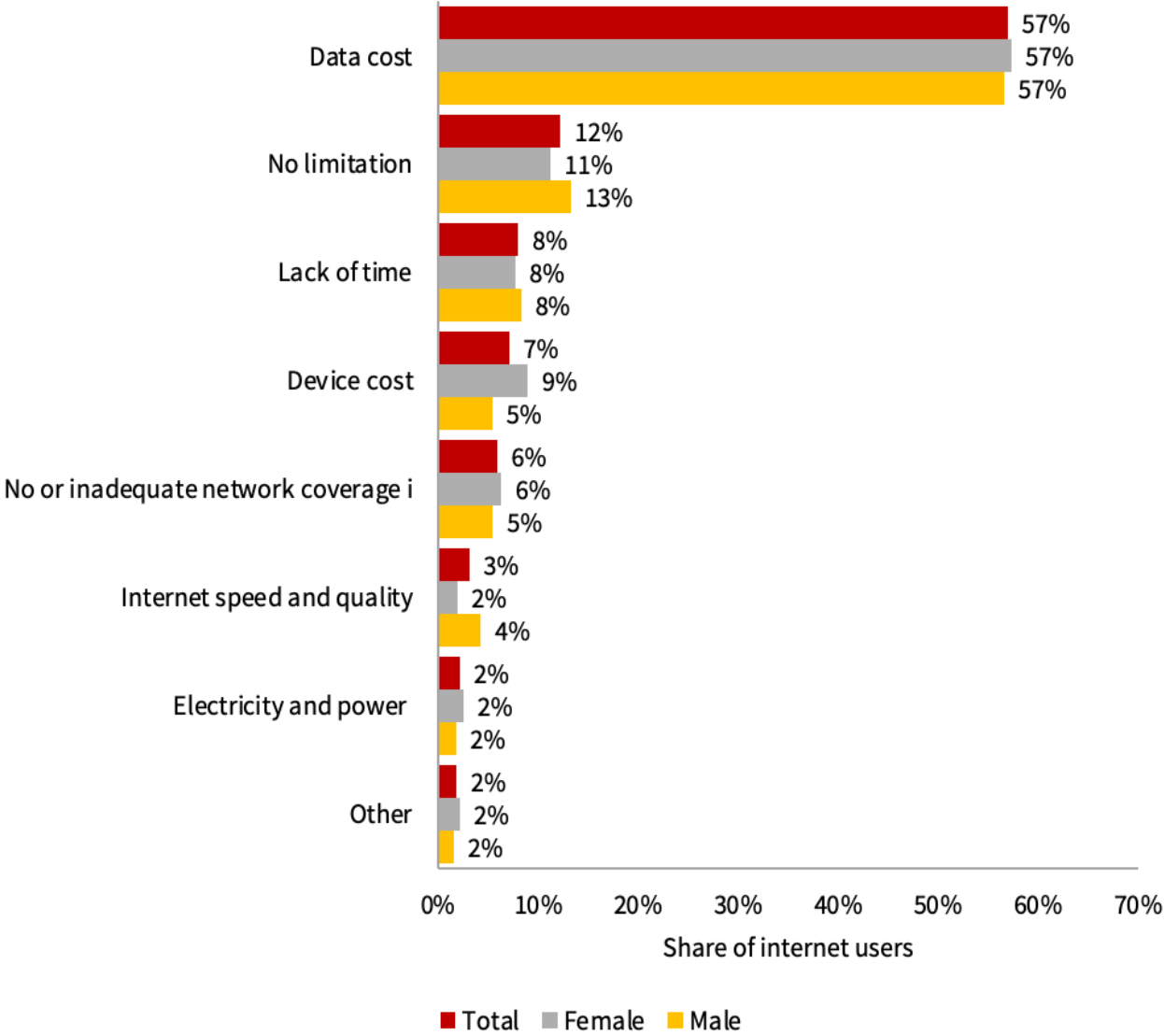
There are negligible differences between males and females.



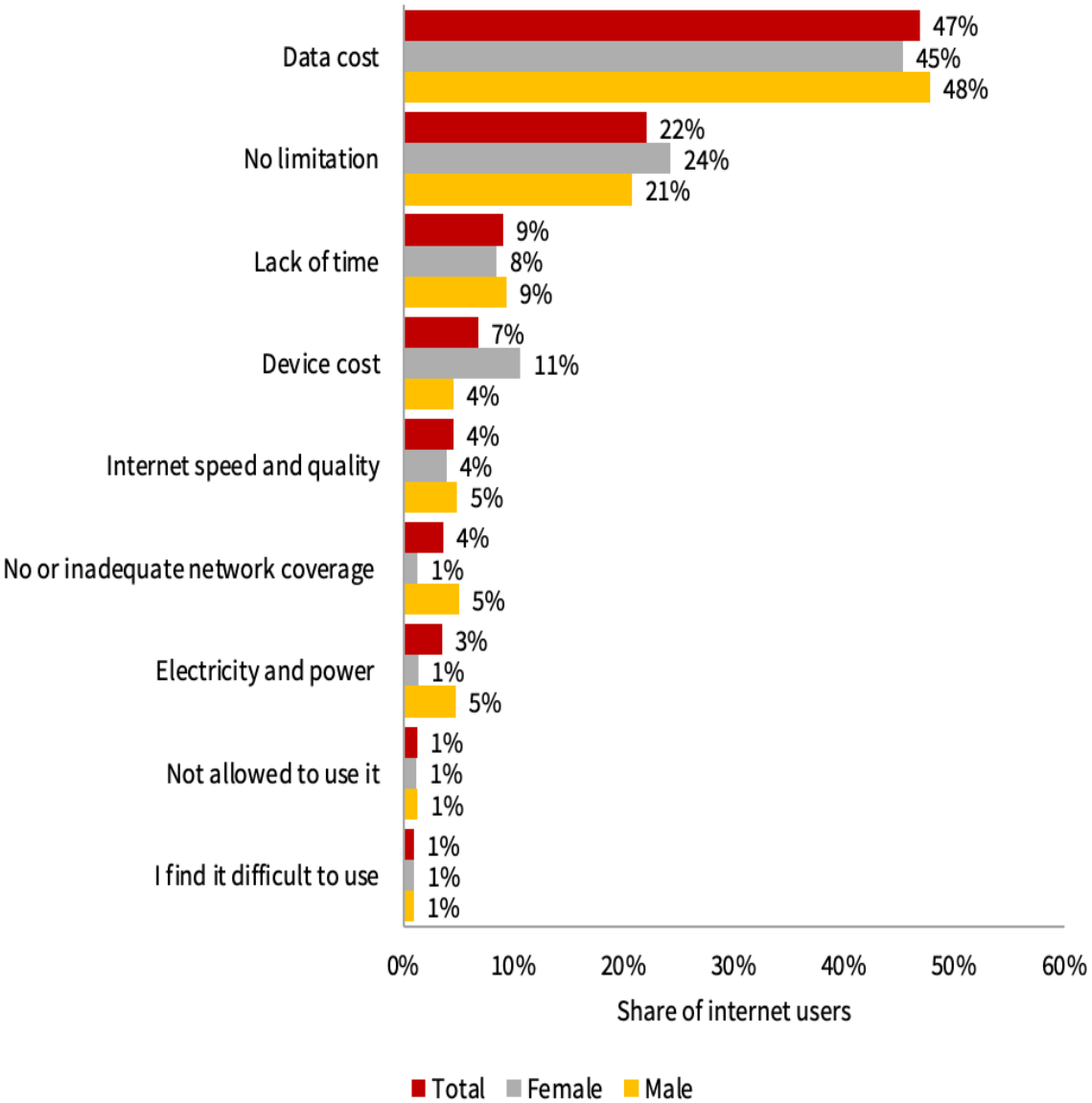
Internet use limitations

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Kenya



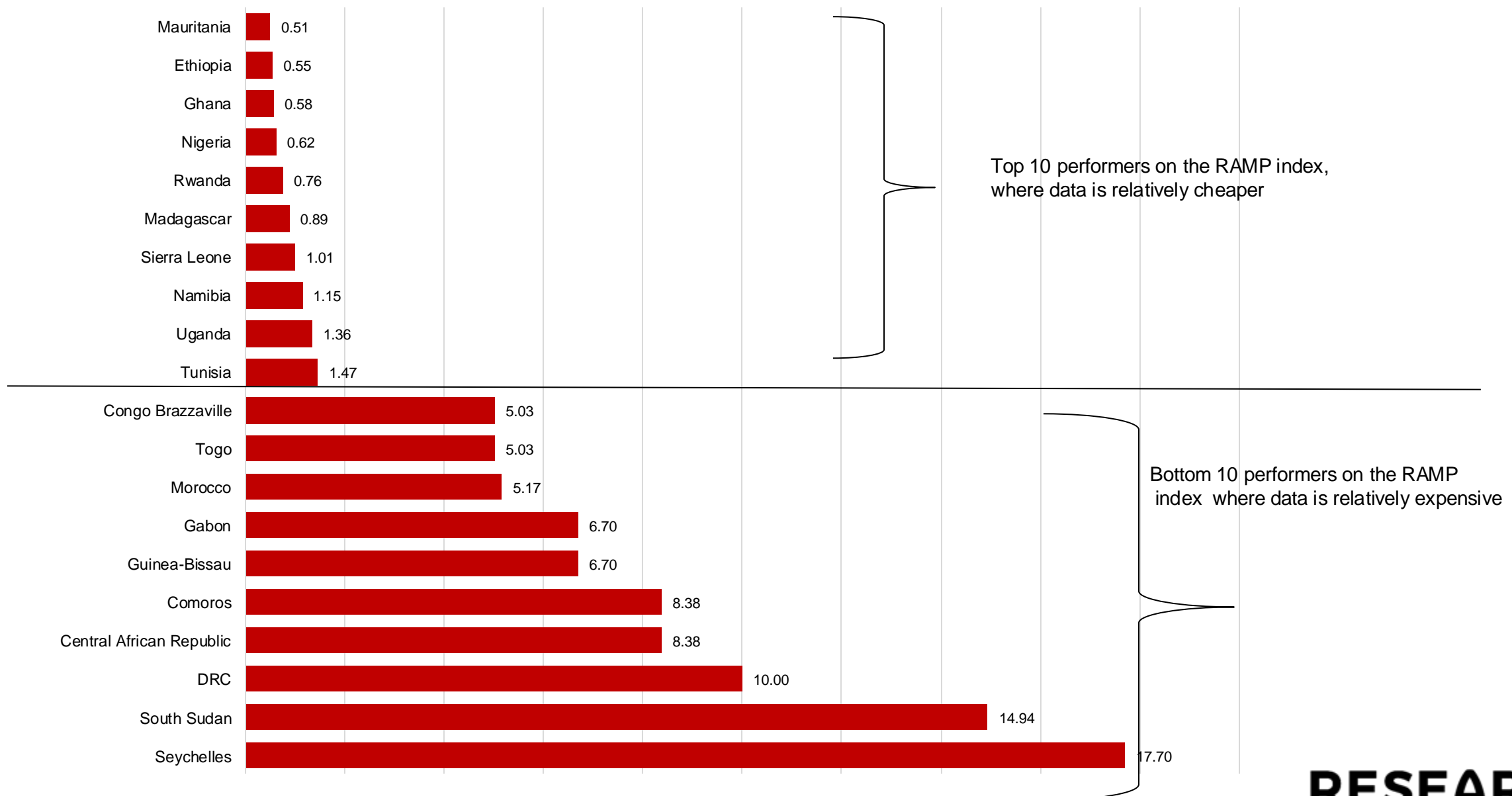
Nigeria



Supply side analysis

- ❖ Despite relatively lower data costs in most countries surveyed in 2022, pricing remains a significant barrier to internet access and use.
- ❖ Low prices do not equate to improved access and use because of factors like high levels of unemployment and inflation.

Top ten and bottom ten performing operators on the RAMP index for 2024 Q3 (Price per 1GB monthly basket in USD)



Microenterprise survey



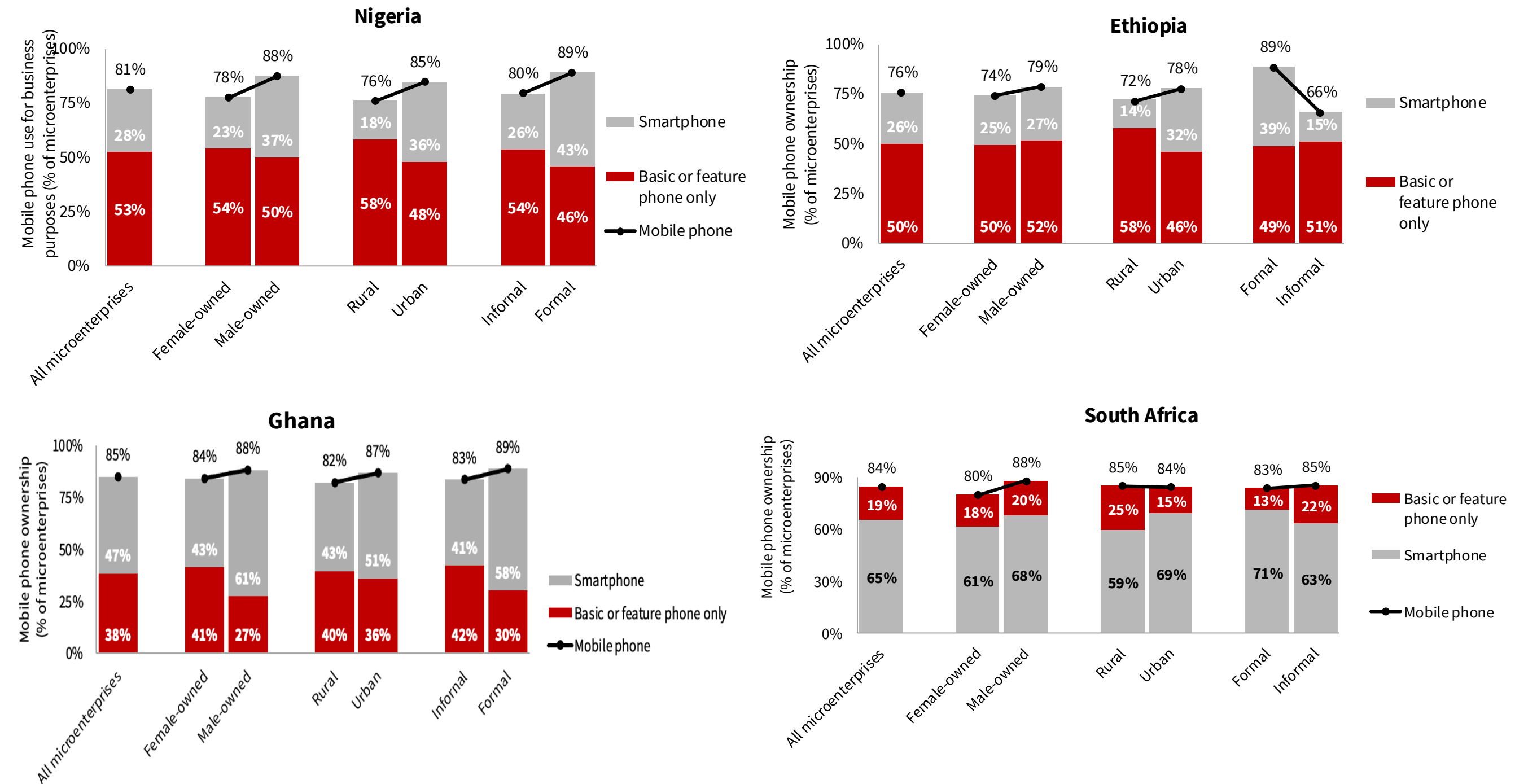
ELECTRICITY
& AIRTIME
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Mobile phone ownership

In most countries, mobile phone ownership amongst microenterprises is dominated by use of basic phones and there are differences across genders, locations and formality.

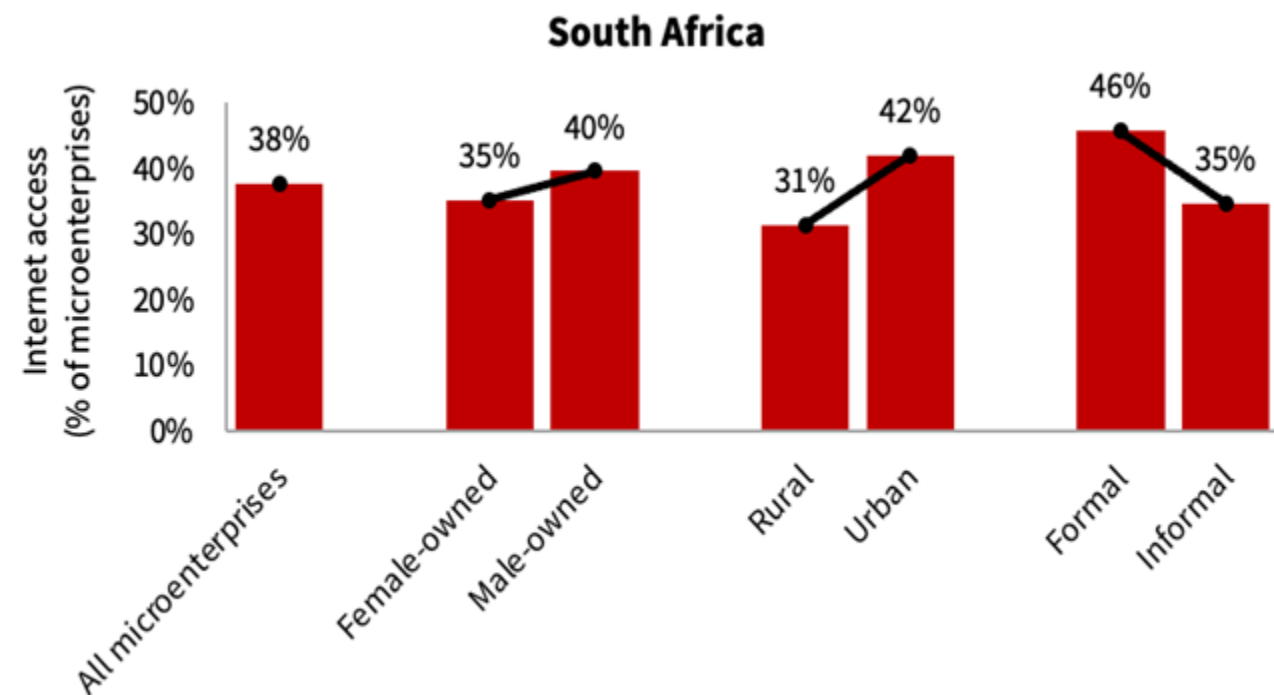
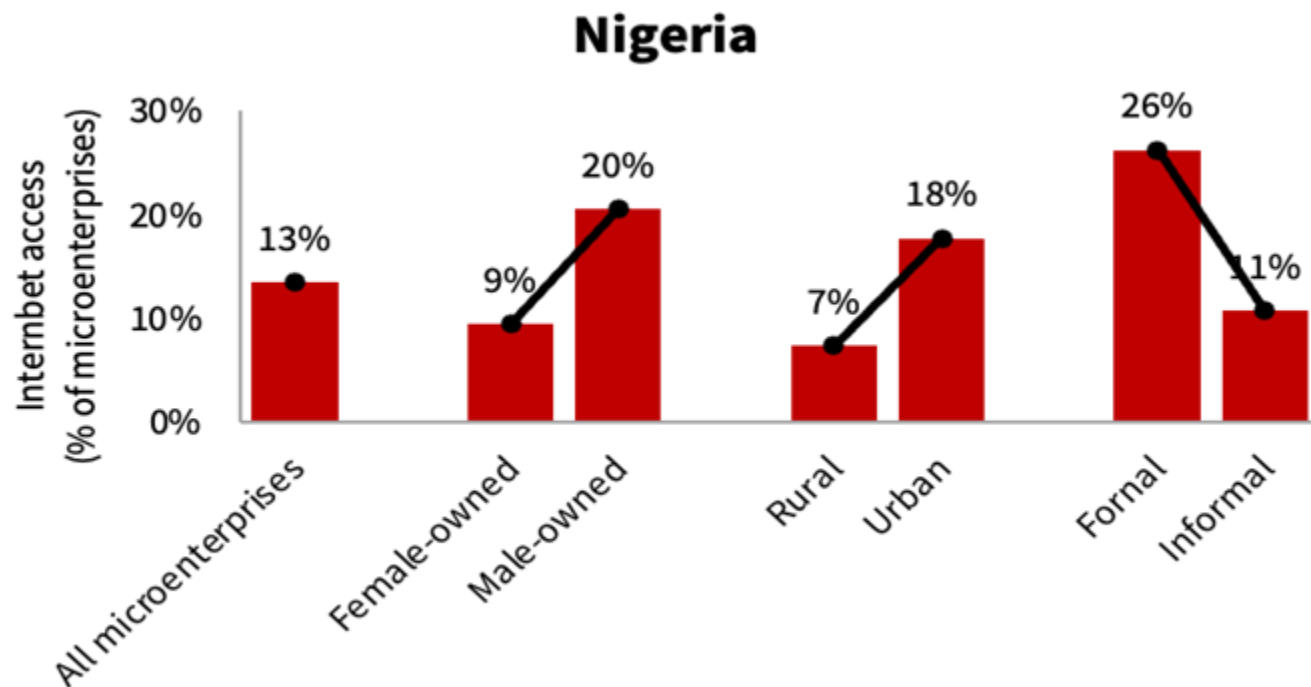
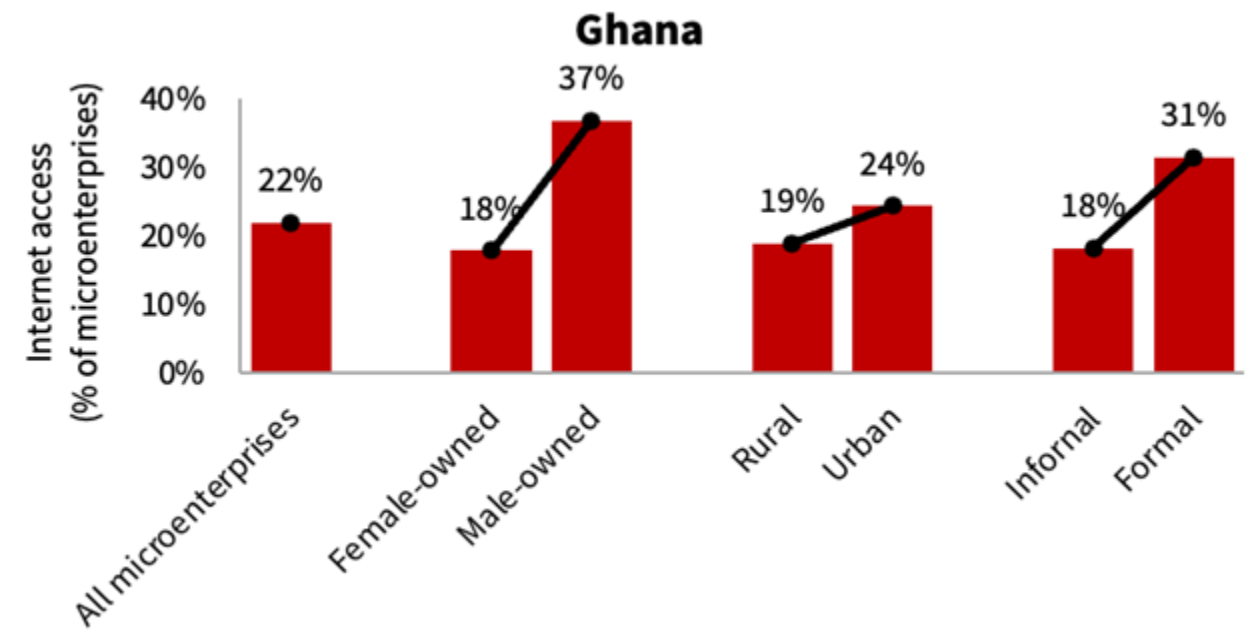
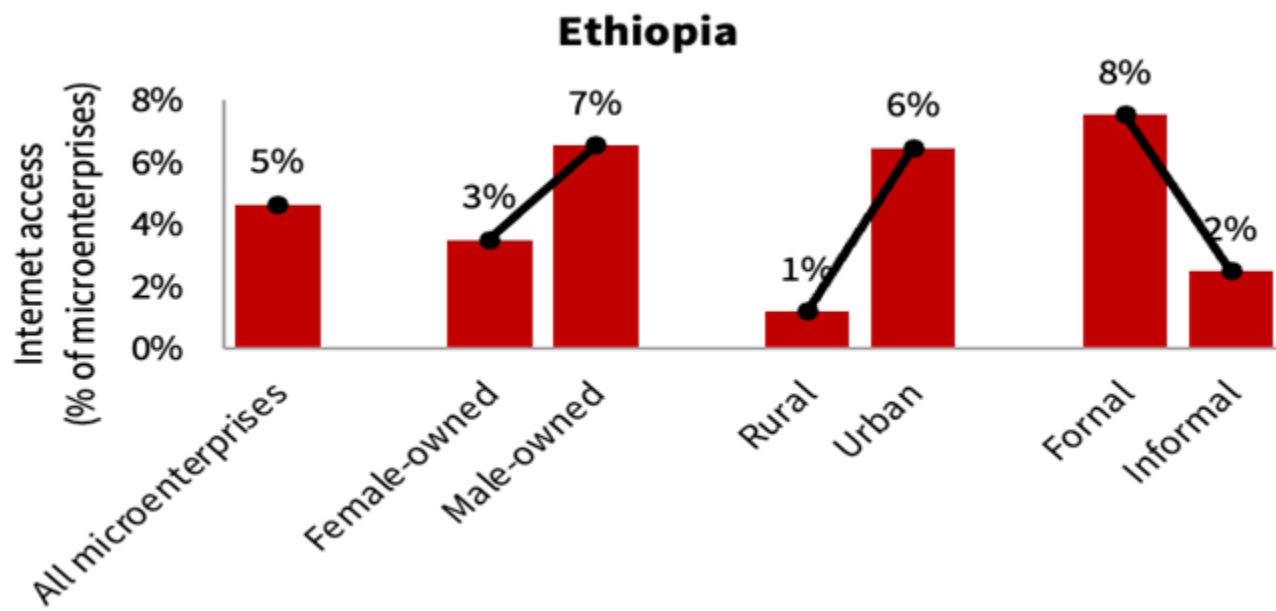
Mobile phone ownership amongst microenterprises



Internet access

Few microenterprises use the internet for business activities and there are significant disparities across genders, locations and formality.

Internet access amongst microenterprises



Internet access

Some of the microenterprises that use smartphones for business purposes are not using the internet in their business activities.

Country	Smartphone ownership	Internet access
Ethiopia	26%	5%
Ghana	47%	22%
South Africa	65%	38%
Nigeria	28%	13%

- High data costs continue to be a significant barrier to internet access for individuals who own smartphones but are not actively using the internet.

Conclusion

- ❖ The analysis highlights the importance of demand-side data in informing on the state of digital access and use and the identification of inequalities therein.
- ❖ Without this data, not only will there be a misalignment between policy priorities and the needs of Africans, but this misalignment will specifically lead to the misrepresentation of marginalised groups.

- This is particularly the case for people living in rural areas, if they are women, aged or have low levels of education or income.
- Challenges persist in ensuring widespread and affordable internet access, particularly in rural areas.
- Although Africa shows promise for ICT-driven growth, addressing digital inclusion and internet use gaps is crucial for maximising this potential.

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