

Shared Spectrum for Community Networks in Kenya







Strathmore

UNIVERSITY





DIDSA DYNAMIC · SPECTRUM · ALLIANCE



Key Statistics : Kenya



Map of Kenya's Population Distribution Source: Kenya National Bureau of Statistics, 2020

Inclusive Digital Transformation??

- 22% of Kenyans used digital services to access only basic digital services limited to sending and receiving money, buying airtime and data using mobile money.
 - 85% of rural residents with non-primary education,
 45% people with disabilities and 44% of older people across all geographies are basic digital services users or non-users.
- **35%** of women are advanced digital services users, compared to **54%** of men.
- Inequalities accelerated by the COVID-19 Pandemic.
 - A number of key challenges limit basic digital services users to the use of mobile money:
 - **69%** of basic digital services users have no access to the internet,
 - **95%** have only basic phones,
 - **54%** cannot pay for internet connection,
 - **69%** need help to use digital services, and
 - **71%** who use shared devices are allowed less time than other family members to use digital services.

Source:

https://digitaleconomy.ke/assets/download/Kenyas_Digital_Ecomony_Full_report Aug_2021.pdf



Source: "Working Together to Connect the World by 2020 – Reinforcing Connectivity Initiatives for Universal and Affordable Access", available from: www.broadbandcommission.org.



Half have a GNI/capita of < US\$ (PPP) 6,500, a large proportion of which are located in Africa and Asia-Pacific

60% live in rural areas, of which a

large proportion is located in Africa and Asia-Pacific The elderly have much lower Internet penetration levels than the overall population across all regions



Individuals with low educational attainment often remain unconnected across all regions

Diversity in Access Technologies for Community Networks



Community Networks Framework & Social, Economic Impact

Licensing

- ★ For Cooperative societies, Community-Based Organizations and Non-Governmental Organisations.
- ★ Limited in geographic scope to a division (sub-county).
- ★ Licence term of 10 years with simplified application
 - requirements and fit-for-purpose quarterly compliance reporting.

Spectrum

- \star Fee waiver for access to spectrum.
- ★ Establishment of a regulatory sandbox for localised spectrum access for small operators.
- ★ Development of a framework for dynamic assignment of IMT spectrum.
- Local control over how the network is established and operated.
- Attention to gender & age gaps and community needs \rightarrow Covid19 response
- Fostering the digital ecosystem: production of content, skills, etc.
- Lower costs and retention of funds and skills in the community.

Framework: https://www.ca.go.ke/public-consultation-on-draft-licensing-and-shared-spectrum-framework-for-community-networks-in-kenya/

Community Network Service Provider



Head Office

CA Centre P.O.Box 14448 Nairobi 00800 **Mobile: 0703042000 Email:** <u>info@ca.go.ke</u>

CA Western Regional Office

1st Floor KVDA Plaza P.O.Box 2346 Eldoret 30100 Mobile: 0703042105 Email: wro@ca.go.ke

CA Coast Regional Office

3rd Floor, NSSF Building P.O.Box 8041 Mombasa 80100 Mobile: 0703042152 Email: cro@ca.go.ke

Central Regional Office

Ground Floor, Advocates Plaza P.O Box 134 Nyeri 10100 Mobile : 0703042181 Email : cero@ca.go.ke

Nyanza Regional Office

2nd Floor Lake Basin Mall, P.O Box 2016 Kisumu 40100 Mobile: 0703042130 Email: nro@ca.go.ke