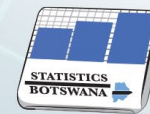


EXPERIENCE AND APPROACH TAKEN BY STATISTICS BOTSWANA FOR DATA COLLECTION ON ICT USE AND ACCESS IN BOTSWANA

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Outline

- Introduction
- History of ICT Data Collection in Botswana
- The 2024 ICT Household Survey
- How Funding Was Secured for the 2024 ICT Survey
- Future Surveys
- Advocacy Likely Required
- How Statistics Botswana has coordinated with other agencies in Botswana to shape the survey content
- Challenges Encountered During The Survey
- Lessons Learned
- Notable findings and Their Implications For National Policy.
- Conclusion

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INTRODUCTION

- ICT Statistics are critical for monitoring digital transformation
- They support evidence-based policymaking, planning, monitoring, and evaluation.
- Botswana collects ICT statistics to meet national, regional, and international data needs. (i.e. Measure progress towards national development goals, Monitor SDGs, Support international reporting to organisations, e.g. ITU, SADC)
- Statistics Botswana is responsible for producing official ICT statistics in collaboration with key stakeholders.

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HISTORY OF ICT DATA COLLECTION IN BOTSWANA

- Administrative ICT Statistics
- Incorporation of ICT indicators in the Census and other surveys.
- The First dedicated ICT Household Survey was conducted in 2014
- In 2019 an ICT Module was incorporated into the Quarterly Multi-Topic Survey
- In 2024 the Nationwide ICT Household Access and Individual Use Survey was conducted
 - Statistics Botswana conducts ICT Household Surveys on a regular cycle, every 5 years.

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Administrative ICT Statistics

Before household ICT surveys were introduced, Botswana primarily relied on administrative data collected from telecommunications operators, postal services, radio broadcasters, print media and other ICT service providers.

These statistics were compiled through government institutions and sector regulators to monitor:

- Telephone subscriptions
- Internet subscriptions
- Postal services
- Broadcasting services
- ICT sector performance (e.g. Contribution of ICT as well as Postal and Courier Services to the Gross Domestic Product (GDP)).

These statistics are compiled by Statistics Botswana as part of the country's official ICT statistics.

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Incorporation of ICT Indicators in Other Surveys

- In the past a few indicators on household access and use were included in:
 - The Population and Housing Census and
 - Other Household Surveys done by Statistics Botswana.

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The First ICT Household Survey (2014)

- A major milestone was reached in 2014 when Botswana conducted its **first** dedicated household ICT standalone survey.
- The survey was designed to produce internationally comparable indicators on:
 - Household access to ICTs
 - Individual use of ICTs:

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ICT Module in the Quarterly Multi-Topic Survey (2019)

- To maintain a flow of ICT indicators while managing costs, an ICT Household Module was incorporated into the Botswana Quarterly Multi-Topic Survey in 2019.
- This approach allowed Botswana to continue producing selected ICT indicators without conducting a full stand-alone survey due to lack of funds.
 - Collected data on Household access to ICTs only.
 - Indicators on Individual use of ICTs were not included.

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The 2024 ICT Household Survey

- Recognising the need for updated and comprehensive ICT indicators, Statistics Botswana carried out the 2024 Botswana Household Access and Individual Use of ICTs Survey.
- A follow-up to the 2014 ICT Survey and the 2019 Module in the BQMTHS.
- It was a standalone survey.

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Data Collection Approach

Survey Methodology

- ❑ Nationally representative household survey
 - Covered All Botswana Districts (Urban & Rural areas)
 - Private dwellings only
- ❑ Probability-based sample design
- ❑ Face-to-face interviews using Computer-Assisted Personal Interviewing (CAPI)

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Data Collection Approach

Target Population

- Households
- Individuals within households
- Members of the household aged 5 years and above

Fieldwork was conducted nationwide from June to August 2024.

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Topics Covered

The survey collected information on:

Household Access to ICTs

- Household ICT Access
- Protection of Child Online
- ICT e-waste awareness

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Topics Covered Cont.

Individual Use of ICTs

- Use of Mobile Phones
- Use of Computers (i.e. Desktop, Laptop and Tablet)
- Use of Internet
- E- skills
- Use of E-commerce
- Use of E-government
- ICT Usage in Education (E-Education)
- Security and Privacy In Individual Use of ICTs
- Media Usage (Radio, TV and Print Media)

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Quality Assurance Measures

Ensuring Data Quality

- Enumerator training
- Pilot testing
- Field supervision
- Real-time monitoring
- Data validation checks
- Consistency checks
- Data cleaning procedures

Result

Production of reliable and internationally comparable ICT indicators.

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Securing Funding

- The Government of Botswana through budget allocations to Statistics Botswana, financed the 2024 ICT Household Survey and the other preceding ICT Household Surveys.

Key justification for funding included:

- Growing demand for ICT statistics
- Monitoring national digital transformation
- International reporting obligations
- Evidence-based policymaking
- Tracking digital inclusion

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Future surveys

❑ Future surveys require:

- Continued government support
- Integration into national statistical programmes
- Partnerships with stakeholders

❑ To sustain ICT data collection beyond 2024, budget allowing Botswana anticipates to conduct another survey in 2029.

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Advocacy Undertaken to Support ICT Data Collection

- ICT household surveys compete with many other statistical priorities for funding and resources.

Therefore, Statistics Botswana needed to continuously advocate for the importance of ICT statistics among policymakers, funding authorities, regulators, and data users.

- Effective advocacy helped position ICT statistics as an essential input for planning, monitoring and evaluating Botswana's digital transformation.

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Advocacy Undertaken Cont.

Key advocacy arguments included:

1. Engaged key stakeholders

- To build support for ICT data collection and use.

2. ICT Statistics Are Essential for Digital Transformation

- To measure progress and guide digital transformation initiatives.
- Policymakers require evidence on access, usage, affordability, and digital inclusion.

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Advocacy Undertaken Cont.

3. To Support Evidence-Based Policy Formulation

ICT survey data support several key policies and strategies for ICT development and measurement in Botswana. Some of these are:

- Botswana Vision 2036
- National Development Plan (NDP) Frameworks
- Digital Transformation Agenda (SmartBots)

4. Measuring the Digital Divide

To identify disparities in ICT access and use, including Urban–Rural, Gender, Age Groups and Employment Status for inclusive digital policies.

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Advocacy Undertaken Cont.

5. To Support Regulatory and Industry Planning

To provide evidence for ICT regulation, infrastructure planning and private-sector investment for Data users such as BOCRA, government ministries, telecommunications operators, researchers, and development partners.

6. Shared findings with stakeholders

To demonstrate how ICT statistics can inform policy and programmes.

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Advocacy Undertaken Cont.

7. Meeting International Reporting Requirements

Botswana is expected to provide ICT data required for international reporting and comparison.

- Aligned data collection with ITU-recommended indicators and standards to strengthen international comparability.
- ICT statistics contribute to monitoring the Sustainable Development Goals (SDGs).

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Coordination Of Statistics Botswana And Other Agencies To Shape The Survey Content

- Statistics Botswana coordinated with key institutions to ensure that the survey addressed both national information needs and international reporting requirements. Hence there was:
 - Engagement with Government Ministries (Ministry of Finance, Ministry of Communication, Ministry of Education, Ministry of Trade and Investment)
 - Collaboration with ICT Sector Regulator; Botswana Communications Regulatory Authority (BOCRA)

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Coordination Of Statistics Botswana And Other Agencies Cont.

- Consultation with ICT sector stakeholders (Telecommunications Operators, Internet Service Providers and Broadcasters)
- Collaboration with Academic and Research Institutions
- Alignment with Development partners (ITU, SADC, World Bank etc.)

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Purpose of the Coordination

- To ensure that the survey:
 - Helped SB to identify priority topics
 - Meets user data requirements
 - Produced data that addresses national priorities
 - Produces internationally comparable indicators

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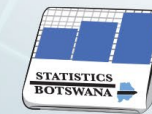


Approach Used by Statistics Botswana

To ensure support for the survey, Statistics Botswana:

- Conducted consultations with key stakeholders.
- Reviewed emerging national ICT priorities.
- Aligned survey content with ITU recommendations.
- Demonstrated the value of ICT statistics for planning and decision-making.
- Shared previous survey results to illustrate policy impact.
- Built consensus on priority indicators to be included in the questionnaire.

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Outcome of the Stakeholder Engagement

- Improved stakeholder ownership of the survey.
- Greater support for funding and implementation.
- Increased likelihood that survey results would be used in policy formulation and monitoring.

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Challenges Encountered

➤ Large Questionnaire Demands

- Many stakeholders requested additional indicators.
- Hence the questionnaire was too long and took a long time to administer.
- Some people were not enumerated

➤ Reaching Remote Areas Was a Challenge

- Long travel distances
- Difficult terrain
- Higher operational costs

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Challenges Encountered Cont.

➤ Respondent Availability

- Some respondents unavailable during visits
- Multiple callbacks required which time constraining.

➤ Budget Constraints

- ICT surveys are resource-intensive
- Competing priorities for limited resources

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Lessons Learned

- ❖ Early stakeholder engagement is essential.
- ❖ Alignment with international standards improves comparability.
- ❖ Pilot testing improves questionnaire quality.
- ❖ Digital technologies improve data collection efficiency.
- ❖ Continuous advocacy is needed to secure sustainable funding.

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Notable Findings and Their Implications For National Policy

❑ High Mobile Phone Use and Smartphone-Dominated Internet Access

Mobile phone use was widespread among individuals, confirming that mobile technology remains a primary gateway to digital services in Botswana. Most internet users accessed online services through smartphones rather than computers.

Policy Implications

- Government can continue prioritizing mobile-first delivery of public services.
- Expand mobile-based e-government services to increase citizen access.
- Leverage mobile platforms to support digital financial inclusion, health information, and education services.
- Government websites and digital services should be optimized for smartphone users.
- Digital literacy programmes should focus on effective and safe smartphone use.
- Education policies should address limitations associated with smartphone-only access for learning and productivity.

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Notable Findings and Their Implications For National Policy

The 2024 Botswana Household Access and Individual Use of ICTs Survey produced several important findings with direct implications for national digital transformation, education, economic development, and cybersecurity policies.

❑ Strong Internet Usage but Persistent Digital Gaps

Internet use has increased, reaching **57.5%**, particularly among younger people and urban residents. However, significant disparities remain between urban and rural populations and across geographical areas. Rural areas and some districts continue to experience lower levels of ICT access and participation.

Policy Implications

- Botswana should continue investing in rural broadband and universal access programmes, with targeted interventions in underserved districts.
- Affordability barriers to devices and internet services need to be addressed to ensure that connectivity translates into meaningful ICT use.
- Policies should focus on reducing the urban-rural digital divide.

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Notable Findings and Implications For Policy Cont.

❑ Low Computer Ownership and Use

Computer use remained considerably lower, it declined from **41.4%** in 2014 to **32.2%** in 2024. Lack of access to a computer, inadequate computer skills and affordability were among the reported barriers. Household access to laptops and desktop computers also remains relatively low.

Policy Implications

- Policies should promote affordable access to computers and higher-capability devices, particularly for education, employment and productive activities.
- Digital skills programmes should also go beyond smartphone use and strengthen computer literacy.

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Notable Findings and Implications For Policy Cont.

❑ Digital Skills Gaps Remain

Although **59.2%** of individuals reported having e-skills, basic skills were more prevalent than advanced skills. Lack of skills was also reported as a barrier to internet access.

Policy Implications

- Botswana should strengthen practical digital skills development, with programmes covering both basic and advanced competencies.
- Greater emphasis should be placed on skills that enable people to effectively use computers, the internet and digital services for education, employment and economic activities.

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Notable Findings and Implications For Policy Cont.

❑ Low Uptake of E-Government and E-Commerce

Internet use increased, but participation in e-commerce was **7.9%** and e-government was **8.5%**, indicating that internet connectivity is not yet translating into widespread use of digital services.

Policy Implications

- Government and other stakeholders should improve the awareness, accessibility, usability and trustworthiness of online services.
- Digital government platforms should be more integrated, user-friendly and vulnerable populations should not be excluded from public services.
- Policies should support e-commerce, digital payments and participation of Small and Medium Enterprises (SMEs) in the digital economy.
- Strengthening consumer protection in online markets becomes increasingly important.

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Notable Findings and Implications For Policy Cont.

❑ Child Online Safety and Protection

Children are increasingly exposed to online environments, with reported incidents including scams, offensive content, harassment or cyberbullying, peer pressure and misuse of images. The use of content filters and parental-control tools remains relatively low.

Policy Implications

- Botswana should strengthen child and parental online-safety awareness
- Develop of child online protection policies and programmes.
- Promote practical parental protection measures and strengthen reporting and referral mechanisms.
- Continued monitoring is also needed to identify emerging online risks.

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Notable Findings and Implications For Policy Cont.

❑ Cybersecurity and Online Privacy

Only **42.4%** of individuals reported using internet protection tools, with considerable variation in the protective measures adopted. Some individuals took protective measures such as changing privacy settings, installing security software, or limiting information sharing, while others took no action after experiencing incidents.

Policy Implications

- Public awareness and digital literacy programmes should promote practical online security and privacy practices, including secure passwords, software protection, privacy settings and data backup.
- National cybersecurity initiatives should continue promoting safe online behaviour.

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Notable Findings and Implications For Policy Cont.

❑ ICT E-Waste Management

A high proportion of households keep unused ICT equipment at home, while reported recycling remains low. There is also an observed urban-rural gap in awareness of responsible e-waste management.

Policy Implications

- Botswana should strengthen accessible systems for collection, repair, reuse, refurbishment and recycling of ICT equipment.
- Public awareness should be expanded, particularly in rural areas, and coordination between government, local authorities, private sector and other stakeholders should be strengthened.

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CONCLUSION

- ❑ ICT statistics are essential for Botswana's digital transformation agenda.
- ❑ Statistics Botswana has adopted an inclusive, stakeholder-driven, and internationally aligned approach.
- ❑ The 2024 ICT Household Survey provides critical evidence for policymaking and planning.
- ❑ Continued investment in ICT statistics will support Botswana's transition to a digitally inclusive and knowledge-based economy.

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Thank you

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