

EGTI/EGH 2025

Rethinking Household Internet Access

REPORT ON ANALYSIS OF HH6
Brazilian ICT Households survey

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| Motivation

- 2024 EGH meeting in Geneva, discussions with the BDT team highlighted issues surrounding the importance of data collection on household Internet access
- The ITU is currently in conversation with the UN Statistics Division on revising their recommended census questions
- Difference between individual Internet access and household Internet access have minimal variation (difference) for some countries while for others they differ significantly
- In Brazil, the results are consistent, but we have been noticing some specific discrepancies. Misunderstandings arise when interpreting “household Internet access”

| Conceptual Issues in Measuring Access

HH6 – Household Internet Access

Definition:

This is the proportion of households with Internet access at home. The Internet is a worldwide public computer network. It provides access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files, irrespective of the device used (not assumed to be only via a computer it may also be by mobile telephone, tablet, PDA, games machine, digital TV etc.). Access can be via a fixed or mobile network.

Clarifications and methodological issues:

“Household with Internet access” means that the Internet is **generally available** for use by all members of the household at any time, regardless of **whether it is actually used**. The connection and devices may or may not be owned by the household but should be considered household assets. If one member of the household has a mobile phone with connection to the Internet and makes it available for all members, then it should be considered that the household has access to the Internet. An Internet connection in the household should be working at the time of the survey.

| Conceptual Issues in Measuring Access noted in Brazil

- Internet access differs from other utilities services (e.g. water, electricity)
- Mobile connections blur household vs. individual access
- “Generally available” and “whether it is actually used” are ambiguous
- Misreporting is common in single-person households

Data



- Annual probabilistic survey on ICT infrastructure and use
- Four questionnaires: household, residents, individuals, and children/teens
- Covers macro-regions, urban/rural, income, age, education, employment
- 2024 sample: 23,856 households



Analysis


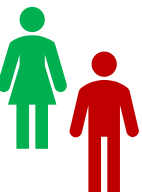
- Evaluation of responses from single resident households for HH6 and HH7
- Simulation of Internet use at home for multiple residents' households (proxy respondents for Internet use in the residents questionnaire)

| Results of Alternative Estimates

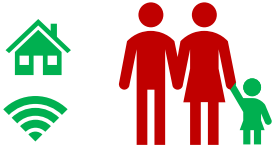
- Published estimate: 83.5%
- Alternative methods: 85.2% – 90.1%
- HH6 imputation, the household is set to have Internet access if:

  1. Answered “No” to HH6, is a **single resident** household, and the resident is an **Internet user** that uses the Internet **at home**

  2. Answered “No” to HH6, is a household with **two residents**, and **all** of them are **Internet users**, and use Internet **at home**

  3. Answered “No” to HH6, is a household with **two residents**, **at least one** is an **Internet user**, and use Internet **at home**

| Results of Alternative Estimates



4. Answered “No” to HH6, is a household with **more than two residents**, and **at least one** resident uses the Internet **at home**



5. Answered “No” to HH6, is a household with **more than two residents**, and if **more than half** of the residents use the Internet **at home**

- Assuming majority residents use Internet at home raises figure by 5+ points

| Findings

Single resident households

- 29% of ICT survey households were single-resident
- 25% reported inconsistencies: Internet users at home but household answered “no access”
- For those, household Internet access should equal resident Internet use at home

Larger Households

- It is not possible to uniquely identify household Internet access
- Alternative classification options tested produced significantly different estimates
- Estimates varied by up to 7 percentage points

| Final Remarks

- “Household Internet access” is not uniformly understood
- Misinterpretations affect reliability of statistics
- Growth of 5G coverage may increase individual connections at home
- Need to revisit the measurement questions related to household Internet access



Thank you