Mixed Mode, Respondent Reaction, and Census vs Survey

Fabián Romero, PhD International Programs Center Population Division

September 2022





Mixed Mode

What is meant by mixed mode when referring to (computer-assisted personal interview) CAPI census?

Utilizing tablets and—at least—one more data collection mode (paper, telephone, internet) to gather information from respondents

It's important to consider the advantages of using mixed modes



2018 Census of Malawi





Mixed Mode

Increasing trend for African countries to consider implementing a CAPI operation in urban areas and PAPI in rural areas for their Population and Housing Censuses

It is important to consider the relative advantage of choosing multiple modes of data collection





Mixed Mode - Example

Multi-mode data collection/capture in Egypt

- Paper questionnaires to be optically scanned (~80%)
- Mobile data collection using tablets (~10%)
- Internet data collection (~10%)





Mixed Mode - Example

Multi-mode data collection/capture in other countries

- Mobile data collection using tablets (preferred)
- Paper questionnaires to be later entered on tablets (backup)

Later we will learn about the mixed mode approach the US implemented for Census 2020





Mixed Mode Implications

- Each mode involves unique considerations, including:
 - Hardware
 - Software
 - IT infrastructure
 - Data entry application
 - Editing
 - Training materials
 - Experienced staff







Mixed Mode Implications

What are your thoughts on utilizing multiple modes of data capture for your census?

Points to consider:

- Cost implications
- Potential data compatibility issues
- Duplication of certain procedures





Respondent Reaction

Varies by country/context

• If it is the first time an NSO intends to implement CAPI, care should be taken to anticipate and mitigate potential opposition

Can profoundly impact the potential success of census or survey





Respondent Reaction



- If CAPI use is new to the context:
 - Develop an introduction strategy for both local collaborators/stakeholders and census/survey respondents
 - Involve local collaborators in census/survey design if possible to facilitate its adoption







Cómo Identificar a un Encuestador del Censo

HORA DEL DÍA

Los censistas visitarán entre las 9 a.m. y las 9 p.m., hora local

IDENTIFICACIÓN

Solicite la identificación oficial de la Oficina del Censo

IDENTIFICACIÓN DEL VEHÍCULO
Se colocará un aviso "Official Business" en el

DISPOSITIVO INTELIGENTE

Los censistas llevarán un iPhone para registra

USARÁN UNA MÁSCARA

Los censistas deben usar una máscara y ma distanciamiento social de 6 pies

En Línea

Por Teléfono

Complete su formulario en linea o por teléfono 2020census.gov/es (844) 468-2020

2020CENSUS.GOV/ES

Dale forn a tu futu EMPIEZA AQU





TIME OF THE DAY

Census taker visits between 9:00 a.m. and 9:00 p.m. local time

ID BADGE

Official Census Bureau identification is worn

VEHICLE IDENTIFICATION

An "Official Business" is placed on the vehicle

MASK

Census taker wears mask and maintains 6 feet social distancing

SMART DEVICE

Census taker carries an iPhone/smart device to gather information

_ o

Online

By Phone

Complete your 2020 Census online or by phone 2020census.gov Toll Free # (844) 330-2020

2020CENSUS.GOV

Shape your future START HERE > Census 2020













Respondent Reaction

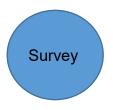
- CAPI Opportunity and Risk
 - Technology, computerization can stimulate census/survey respondent interest and add legitimacy to the interviewers. Interviewers might also be more motivated to use technology in such setting.
 - At the same time and in certain cultures, the use of technology can raise suspicion among respondents





Census vs. Survey

Scale!









- Purchasing tablets for a Census in a large country can become cost prohibitive
 - India 2021 Census (postponed to 2023) would require more than 2.5 million tablets
 - Ethiopia (pop ~ 100M) will purchase about 180K tablets
 - Malawi (pop ~18M) will purchase about 35K tablets

```
Pop. Ukraine = aprox. 40 million
```

Pop. Georgia = aprox. 4 million How many tablets are needed?

Pop. Armenia = aprox. 3 million





- Purchasing tablets for a survey (or a census with a small population) is often easier to justify
 - Re-use for future surveys
 - Repurposing tablets







- Technological Infrastructure
 - Internet or mobile service throughout country for census
 - Surveys can be confined to certain areas (urban)







- Training Enumerators:
 - Census
 - Volume of enumerators
 - Best practice is to hire enumerators from the locality
 - May not have experience/know how to operate handheld device



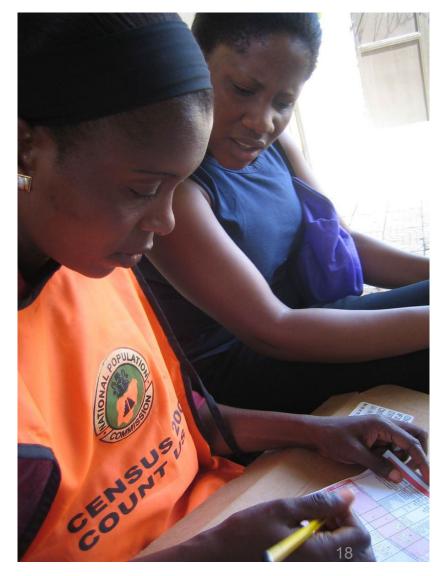




- Training Enumerators:
 - Survey
 - Can hire more specialized enumerators







Questions?



