Innovative Collection Methods During The Covid-19 Period:

Sharing experience with three surveys: the survey on the impact of covid-19 on companies in the industrial sector, the survey on the impact of covid-19 on households and informal enterprises and the survey of pos-covid-19 investment intentions of formal sector enterprises.

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INTRODUCTION

• Data collection approaches based on probabilistic sampling are identical in many steps: sampling design, tools of data collection, interviewers training, to list a few;
• Once the sample is selected, the questionnaire is submitted to the sampled units;
• But in the health crisis context, it is not easy to maintain a fixed selected sample through the data collection duration;
• Some modification becomes crucial to conserve the minimum size of sample and to respect the sample design.
APPROACHES USED DURING PAST HEALTH CRISIS 1/3

• In 2002, data collection was not deeply modified because no SARS cases were reported in the country;

• The restriction was done to limit interviewer's age (less than 45 years);

• The survey was conducted by paper questionnaire into face-to-face interview;

• Once completed, the paper questionnaires are codified and then entered on computers through an input mask developed with Cscope.
APPROACHES USED DURING PAST HEALTH CRISIS 2/3

• Unlike SARS-2002, influenza A has affected Senegal with more than 300 confirmed cases and 0 deaths;

• For Household surveys, it was used a telephone interview where interviewers notified the responses on a paper questionnaire;

• For economic surveys, the questionnaires were sent by email and the “interviewers” is charged to supervise it;
The Ebola epidemic in 2014 severely affected West African countries, particularly Guinea, where the only case recorded in Senegal came from;

Data collection operations were suspended for a three weeks and some collect were done by phone interview;

CAPI (Computer Assisted Personal Interviewer) survey were now adopted and the number of interviewers reduced.
DATA COLLECTION METHOD DURING COVID 19

• In March, the state of emergency was declared, including a curfew, a stop of travel between regions, the closure of schools, the limitation of the number of passengers in the vehicles of public transport etc;

• Data collection operations were suspended for three months except for price statistics that was done by phone interview;

• Three surveys was realized using online web interface: CAWI.
DATA COLLECTION METHOD DURING COVID 19

• The three surveys are: “the impact of covid-19 on households and informal production units”, “the impact of covid-19 on companies in the industrial sector” and “companies' post-covid-19 investment intentions”;

• An online form has been developed using the World Bank's Survey Solution platform;

• In drawing the sample, a non-response rate of 50% was considered, which increases the value of the theoretical size by half. This was justified by a possible unavailability of respondents due to the reduction of staff (homeworking, worker overall, etc.) as well as the reduction in working hours.
DATA COLLECTION METHOD DURING COVID 19

• In the sampling frame, after creating a variable containing random values (between 0 and 1) a sample is selected within each stratum (by combining size and activities sectors);

• Once the awareness and email update step is completed, the list of sampled units is distributed among the interviewers. They are responsible for sending the form links to the enterprises assigned to them, providing them the specific access parameters;
DATA COLLECTION METHOD DURING COVID 19

• When the enterprise does not respond 24 hours after sending the link, the interviewers calls the manager or owner by phone for a reminder and resend the link;

• When the unit cannot be found through the address available in the database, it is then removed from the sample and replaced by another unit from the same stratum following the order of selection;

• For all three surveys, the response rate was at least 70%, which is satisfactory.
DIFFICULTIES AND COMPARATIVE COST

• The health crisis posed a constraint of non-mobility in the collection procedure. The applicable kind of data collection is CATI (Computer Assisted Telephone Interview) or CAWI (Computer Assisted Web Interview);

• This assumes that all units in the population of interest have a contact which can be either a phone number or an email. This is not always the case in informal sector: so the study is reduced;

• In addition, the possibility of replacing a unit that does not respond to the form is sometimes abused by interviewers who, instead of carrying out recalls, prefer to replace the unit. This could lead to exhausting the list of replacement units in a stratum.
ISSUES AND COMPARATIVE COST

• The CAWI is less expensive because apart from some variable costs, only interviewer's salaries are covered;

• The CATI is more expensive because of the cost of calling and the duration of interview.
SOME RESULTS: The survey on the impact of covid-19 on households and informal enterprises

• More than 90% of industrial companies declared to have been impacted by Covid-19 because of:
  – Supplies of raw materials
  – Acquisition of capital goods
  – Market shares
  – Turnover and investment

• The majority of companies consider that their activity has deteriorated more than 25% in terms of production
SOME RESULTS: The survey on the impact of covid-19 on households and informal enterprises

Household Head (HH) job situation

- Population: HH who have kept their jobs (60%), HH who have stopped their jobs due to others factors than covid-19 (39%), HH who have changed their jobs (11%)
- Others services: HH who have kept their jobs (46%), HH who have stopped their jobs due to others factors than covid-19 (40%), HH who have changed their jobs (14%)
- Public administration: HH who have kept their jobs (41%), HH who have stopped their jobs due to others factors than covid-19 (48%), HH who have changed their jobs (11%)
- Financial services, insurance: HH who have kept their jobs (41%), HH who have stopped their jobs due to others factors than covid-19 (36%), HH who have changed their jobs (13%)
- Transport and communication: HH who have kept their jobs (45%), HH who have stopped their jobs due to others factors than covid-19 (36%), HH who have changed their jobs (19%)
- Trade: HH who have kept their jobs (42%), HH who have stopped their jobs due to others factors than covid-19 (36%), HH who have changed their jobs (22%)
- Building: HH who have kept their jobs (36%), HH who have stopped their jobs due to others factors than covid-19 (36%), HH who have changed their jobs (28%)
- Electricity, gas, water: HH who have kept their jobs (36%), HH who have stopped their jobs due to others factors than covid-19 (36%), HH who have changed their jobs (28%)
- Manufacturing: HH who have kept their jobs (36%), HH who have stopped their jobs due to others factors than covid-19 (36%), HH who have changed their jobs (28%)
- Extractive (mines and quarries): HH who have kept their jobs (36%), HH who have stopped their jobs due to others factors than covid-19 (36%), HH who have changed their jobs (28%)
- Agriculture: HH who have kept their jobs (36%), HH who have stopped their jobs due to others factors than covid-19 (36%), HH who have changed their jobs (28%)

Informal Production Units (IPU) situation

- Small: Open (94.1%), Temporarily closed (5.8%)
- Micro-enterprises: Open (88.1%), Temporarily closed (9.2%)
- Medium: Open (92.3%), Temporarily closed (12.0%)
- Population (IPU): Open (98.5%), Temporarily closed (9.1%)
SOME RESULTS: The survey of post-covid-19 investment intentions of formal sector enterprises.

Average amounts of investments planned in the short term according to need (in millions of FCFA)

- Website development and online trading: 3,8
- Acquisition of computer hardware or software: 14,9
- Employee training and recruitment: 15,9
- Acquisition of license or patent: 21,8
- New niche: 23,1
- Purchase of commercial buildings and land: 38,1
- Construction and renovation: 83,7
- Enterprises acquisition: 90,3
- Machinery, equipment and vehicle: 113,5
- Others investments: 167,1