ADB

HOW VIRTUAL SURVEYS CAN HELP YOU GET DATA DURING THE "NEW NORMAL"

LESSONS FROM CONDUCTING SOCIAL AND GENDER ASSESSMENTS DURING THE LOCKDOWN OF 2020 IN THE PEOPLE'S REPUBLIC OF CHINA AND MONGOLIA

Veronica Mendizabal Joffre
Social Development Specialist, East Asia Regional Department, ADB

Zhou Jian
Social Development Specialist, East Asia Regional Department, ADB

Wang Huijuan
Freelance social researcher in the People's Republic of China

Purevtsengel Luvsandandar
Researcher at MMCG LLC in Mongolia

Narantsetseg Jaalaa
Researcher at MMCG LLC in Mongolia

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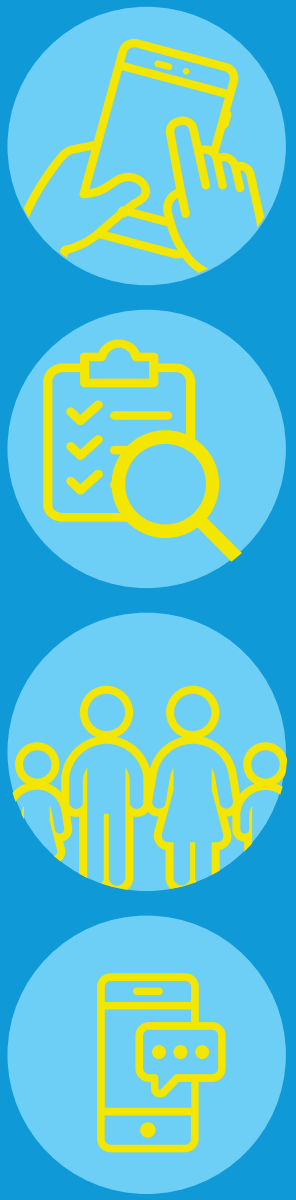

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APPLICATION

- Social and gender assessments
- Household surveys
- Public consultations
- Monitoring during implementation
- Tracking project indicators
- Post project evaluation

METHODS

- Computer-assisted telephone interviews
- Computer-assisted web interviews
- Computer-assisted personal interviewing
- Social media surveys
- Virtual focus-group discussion
- Text message survey
- Mobile applications
- Mixed method virtual survey

Market options for web-based surveys
Google Forms
Survey Monkey
Typeform
SurveyGizmo

Platform that is accessible offline
Survey Solutions

Popular platform in the People's Republic of China
Wenjuanxing
QQwenjuan

SMS is a good choice as mobile use is growing steadily, even in rural areas. The downside is that usually SMS is restricted to one-way communication. Platforms such as FrontlineSMS make 2-way interaction possible, including in extremely poor areas without internet.

Advantages

- Efficient and effective recruitment of respondents
- Real-time availability of data
- Increased data quality
- Integration of geographic information and time stamp
- Survey records accessible throughout the project cycle
- Cheaper and faster
- Reduced CO_2 footprint

Disadvantages

- Difficulties in engaging poor households and vulnerable groups including older persons
- Limited depth and number of questions`
- Quality depens on remote oversight
- Less interest when tokens of appreciation are not available
- Respondents paying the cost of data to answer survey

Tips

1 **Use mix methods.** Be mindful of digital divide.
2 **Keep it simple.** No more than 30 questions.
3 **Make instructions crisp clear.** Use chat, sms, or app-based notifications to follow up.
4 **Good quality panel data can save time and costs of recruitment work.**
5 **Invest in training your survey team.** This will help ensure smooth interaction with respondents.
6 **Provide tokens of appreciation.** Consider mobile data credits to cover data usage incurred by participants.
7 **Plan enough time for the development of the virtual tools.**

The new virtual world

With the onset of the coronavirus disease (COVID-19) countries around the world have taken measures to reduce the rate of transmission and we have entered a “new normal” based on mobility restrictions and extensive virtual communication. How can we collect primary data under these circumstances? Virtual surveys offer an alternative. While their use is not new, lockdowns have provided a unique opportunity to observe their use as the only viable option for data collection.

We share lessons learned from using virtual surveys for conducting social and gender assessments in the People’s Republic of China (PRC) and Mongolia during the lockdown of 2020.[1] Virtual surveys are primary data collection methods using computer-assisted means, with various levels of interviewer involvement (see Box 1 for the various types). Our experience suggests that virtual surveys can be effective to obtain high-quality data, result in time and cost savings, and can contribute to lowering the CO2 footprint associated with field-based data collection.

Measures to prevent the spread of COVID-19 are easing around the world. Nonetheless, maintaining social distance will remain an important prevention measure. This note provides practical tips on using virtual surveys during this time.

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[1] We thank Arun Ramamurthy, Senior Infrastructure Specialist, East Asia Regional Department, and Akiko Terada-Hagiwara, Principal Economist, East Asia Regional Department, for their useful comments to this note.

What are virtual surveys?

Virtual surveys are primary data collection methods using computer-assisted means, with various levels of interviewer involvement.

Computer-assisted telephone interviews (CATI): an interviewer communicates with respondents remotely and enters their responses in a computerized questionnaire.

Computer-assisted web interviews (CAWI): data is collected via online surveys through a web interface. Respondents answer the questions on their own computer, tablet, or smartphone.

Computer-assisted personal interviewing (CAPI) interviewers collect data using tablets or mobile phones; data is transferred to a survey management website.

Social media surveys: data is collected through platforms such as Facebook, LinkedIn, Twitter, and in PRC WeChat.

Virtual focus-group discussion in which video conferencing and chat platforms are used to bring together participants for a structured discussion. Platforms can include Zoom, Google Meet, Skype, MS Teams and in PRC QQ and WeChat groups.

Text message survey in which responders receive polls, voting opportunities, or links to survey sites through text messages (SMS).

Mobile applications in which responders download a custom-made application and are provided with login credentials to access the survey.

Mixed method virtual survey in which a variety of virtual survey methods are used.

Which web-based platforms and software can you use?

Market options for web-based surveys include Google Forms, Survey Monkey, Typeform, and SurveyGizmo. All these require internet access. If you need a platform that is accessible offline, **Survey Solutions** might be for you, but it requires mobile equipment and a survey team on site.[a] If you are conducting your survey in PRC, **Wenjuanxing** and **QQwenjuan** are popular virtual platforms.

SMS is a good choice as mobile use is growing steadily, even in rural areas. The downside is that usually SMS is restricted to one-way communication. Platforms such as **FrontlineSMS** make 2-way interaction possible, including in extremely poor areas without internet.[b]

[a] Survey Solutions enables data collection offline on tablets (CAPI), online using web-interface (CAWI), capture phone interviews (CATI), and conduct mixed method surveys. https://mysurvey.solutions/

[b] FrontlineSMS is a free open source software that enables information distribution and collection via text messaging. The software works without an internet connection and with a cell phone and computer. https://www.frontlinesms.com/

Advantages, disadvantages, and tips

What we learned about virtual survey compared with conventional methods

Advantage

- Recruitment and replacement of survey participants is efficient and effective
- Web-based control platforms enable immediate data export and real-time data availability as the survey is underway
- On-the-spot data input increases data quality. Data gaps or unclear statements can be identified and clarified immediately with respondents
- Virtual surveys can capture location through global positioning system (GPS), time stamps, and geographic information system (GIS)-integrated data;
- Virtual surveys allow for a system of records accessible and referenceable throughout the project life and enable data analytics for progress monitoring.
- Virtual surveys are cheaper, reducing or eliminating travel and extensive data entry costs, and can be conducted in less time than conventional ones;
- Virtual surveys reduce CO_2 emissions linked to travel and reduce the use of paper and printed materials.

Disadvantages

- People without mobile phones, poor mobile network access, or low digital literacy risk being left out in virtual surveys.
- Virtual questionnaires need to be straightforward, with clear instructions, and a limited number of questions to compensate for lack of face-to-face interaction.
- Remote oversight is needed to ensure the quality of virtual surveys. The use of web-based control platforms can facilitate this.
- It is difficult to provide incentives for respondents using online surveys and this can reduce interest.
- Participants can incur costs when downloading data to answer the survey. This must be factored in the design.

7 Tips to make the most of virtual surveys

1. **Use mix methods** to increase the participation of people with low levels of digital literacy or limited access to smart phones or mobile network.
2. **Keep it simple.** Your questionnaire should be short with no more than 30 questions. If using mobile apps, these must be straightforward and intuitive.
3. **Instructions for respondents must be crisp clear** to overcome limited face-to-face interaction. You can enhance communication with respondents to solve issues and answer questions during the survey using chat platforms, sms, or app-based notifications.
4. **Good quality panel data can save time and costs of recruitment work.** Consider collaborating with community organizations that could reach target groups through their social networks or work with local research companies with access to large datasets. Consider sample size and cross check your results against other findings to increase their quality.
5. **Invest in training your survey team.** This will help ensure smooth interaction with respondents and increase efficiency. Ensure highest ethical standards for privacy and interaction with participants.
6. **If possible, provide tokens of appreciation to the respondents** for their time and to increase their interest in participating, particularly if you are surveying low-income participants. Consider mobile data credits to cover data usage incurred by participants for undertaking the survey or negotiate with mobile operator companies to reduce or remove such cost from the phone bill of participants.
7. **Plan enough time for the development of the virtual tools.** Especially if you are new to virtual surveys, take the time to ensure the tools are user-friendly and adequate.

CASE STUDIES

What we learned from applying virtual surveys during the lockdown of 2020

CASE 1

Using virtual surveys to prepare a new project in PRC

In January 2020, we were in the midst of conducting the social and gender assessment of the ADB financed Shaanxi Green Intelligent Transport and Logistics Management Demonstration Project. We had started by conducting focus group discussion (FGDs) with stakeholders and planned to follow up with a survey in February. The COVID-19 pandemic forced us to change plans and to instead carry out a virtual survey using online questionnaires distributed via WeChat.[2]

Our first step was to prepare questionnaires for different groups of respondents (e.g. residents, truck drivers, business owners), test the questionnaires, and generate QR codes to make them easily accessible.


居民调查问卷

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为了能够更好地评估项目可能产生的社会、经济和环境效益，了解当地居民的实际需求，特此开展本次调研。
这项调查是匿名的，并且保证不泄露您的任何个人信息。非常感谢您的关怀和合作。

[第1页/共1页]

一、基本信息

1. 请选择您所居住的城市:

2. 您所在 区/县, 街道/乡镇, 村

*3. 您所在的地区是城市还是农村?
城市
农村
城市郊区
县城

*4. 您的性别:
男 女

*5. 您的家庭人口有 人

QR Code and Questionnaire, Shaanxi Green Intelligent Transport project social and gender assessment, February 2020

The survey team could not travel to the survey site. To address this challenge, we requested support from the project management office (PMO) to distribute the questionnaires to the target respondents by sending QR codes through WeChat groups. To expand outreach, the PMO printed the QR codes and posted them in public places, such as bulletin boards in logistics parks, factories, and village committees.

We aimed to have 250 respondents participating in the survey. However, we ended up receiving 330 valid questionnaires in two weeks. More respondents than expected participated, except among low-income households.

To increase the participation of respondents with lower digital access or capabilities, PMO staff contacted them by phone, read the questionnaire to them, and filled the answers provided in their own mobile phones. We complemented the online survey with phone calls when clarifications were needed. The responses helped us to prepare social and gender action plans for the project that would have been impossible to do without the use of virtual surveys during the lockdown period.

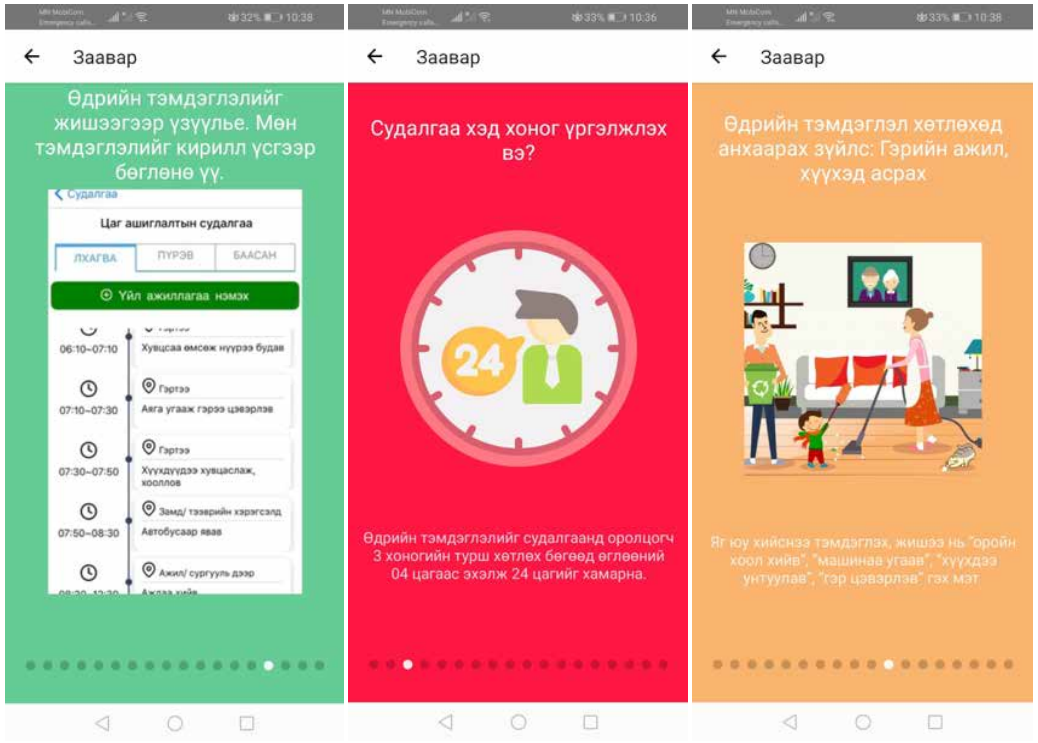
[2] WeChat is a multi-purpose messaging, social media and mobile payment application developed by Tencent Holdings Inc. It is the most widespread social media platform in PRC.

CASE 2

Capturing time-use during the COVID-19 pandemic in Mongolia

In Mongolia, we conducted a rapid assessment of time use during the COVID-19 lockdown to understand how men and women were distributing their time during the pandemic, the types of activities they were undertaking, if these were paid or unpaid, and done for themselves or others.[3] The assessment took place between May and June 2020, at the height of the quarantine period in this country.[4]

We conducted the survey using mixed methods. We asked respondents to fill a diary for 72 hours using a mobile phone application "*Sudalgaa*" (meaning survey in Mongolian) developed specifically for this survey using open source tools.[5] We recruited respondents over the phone and used a paper survey to capture the responses of people without mobile devices or with low digital literacy. We used a web-based control platform to register respondents and supervise their diary entries.[6]



Screenshots of "Sudalgaa" app Time-Use Survey instructions for respondents

Data collection included respondent recruitment and entry of daily activities in a diary, which were performed simultaneously and resulted in time savings. Respondents who agreed to participate in the survey received detailed instructions on how to use the app, including downloading, installation, and password.

The app had a notification function to enable communication with respondents in case of errors or requests for clarification on entries. Responses were anonymous in accordance with Mongolian personal privacy regulations and ISO:20252|2019 standards.

The survey was successfully implemented. Over 570 people participated in Ulaanbaatar city and 4 provinces despite the lockdown. Respondent rate was high, with 86% completing the survey. The quality of responses was also high. We noticed that the use of a mobile app had created a closer engagement from respondents than is usually the case with paper-based questionnaires. Respondents recorded more comprehensive information than expected, such as "I decided to go out", expressing intention rather than just recording an action. Some made detailed records of their activity: "I am reading the book *100 Years of Solitude*", "I am stuck in a taxi in a traffic jam" or "I just bought 2 kilos of meat, 4 kilos of vegetables, and a toiletry set from the market".

[3] We used the International Classification of Activities for Time Use Statistics (ICATUS) to classify activities and encoded all respondents' activities in alignment with the classification used for the 2019 Mongolian Time Use Survey conducted by the National Statistic Office.
[4] Time-use surveys and statistics aim to measure dimensions of gender equality and human well-being by assessing the distribution of unpaid work between women and men, and help to understand the contribution of unpaid work to the national economy. We wanted to understand the distribution of paid and unpaid work and time allocated to each by men and women during the pandemic, and if paid and unpaid tasks were undertaken for oneself or for others. We compared the survey results with the latest nationally representative Time Use Survey of 2015.
[5] React Native is an open source mobile app framework created by Facebook.
[6] We used ASP.NET model view controller (MVC). https://dotnet.microsoft.com/apps/aspnet/mvc

A STEP-BY-STEP CHECKLIST

Brief summary on how to conduct virtual survey

START

STEP 1

Designing the virtual survey

Define
objectives, identify target groups, the types of questionnaires needed for the various respondent segments, sample size, geographical distribution.

Develop
the electronic survey questionnaire.

Consider
using mixed methods to enhance outreach to populations with no internet or mobile access, or low digital literacy.

Prepare
your survey budget, considering fees for the use of the software or digital platform, purchase or rental of handheld devices and wireless routers, developer fees for app development and web control system, survey team recruitment and related costs, local travel cost if CAPI methods are used, tokens of appreciation or mobile data bundles for respondents, and other unforeseen expenses.

STEP 2

Organizing the survey team

Consider
hiring a local survey team if you are using CAPI or mixed methods, train them remotely and establish a virtual social media network with them for continued communication during survey implementation and data processing.

CATI methods have proven effective for recruiting participants and registering demographic information without distance restrictions. Consider partnering with private sector or local organizations to get support in accessing local datasets of potential respondents.

Establish
a communication and feedback a communication and feedback mechanism with the field enumerators to solve technical and methodological problems during data collection. Before the survey, provide a detailed description of the survey principles and requirements to the enumerators.

STEP 3

Finding a suitable virtual platform and survey software

Consider
software that is commonly used in the project area and that is easy to use, download, and install.

The free version of online survey platforms tends to be limited. If you work with local private research companies these usually have professional versions of online survey services.

If your project is in PRC, Wenjuanxing and QQwenjuan are good online platform choices.

If you have enough budget and time, you could develop an exclusive data collection tool, such as a dedicated app. This can help to align better to local language and culture, avoid confidentiality issues, and encourage participation in areas with less acceptance of a third-party survey software.

STEP 4

Preparing the electronic questionnaire

Make
the questionnaire as simple as possible and tested before use.

Add
a detailed description of the project information at the beginning of the questionnaire to ensure that respondents have a solid understanding of the objectives of the survey.

Conducting prior focus group discussions and key informants’ interviews can help to improve the design of questionnaires and if possible, should be conducted in advance.

STEP 5

Conducting the virtual survey

Train
enumerators in the field on how to distribute the electronic survey and how to fill it for people who do not have their own mobiles.

Provide
tokens of appreciation to the respondents to encourage their participation, especially among the poor and if costs are incurred due to mobile or data charges.

Keep
the contact information of respondents, such as telephone number, social media account or email for further interview or clarifications. Note that this must be handled with special care. Researcher ethic standard must be followed, and contact information should only be used for survey purposes.

STEP 6

Complete the assessment based on virtual survey results

and complemented with literature review and triangulation with relevant studies, if available.

STEP 7

Beyond one-time surveys

Establish
private social media network for interested groups for continuous engagement and communication. This can be useful for longitudinal surveys, or to assess progress and impacts of ongoing project operations during implementation. Such groups can be called “online interest group communities” that participate during the whole lifecycle of the project, from design, implementation to evaluation. The members can share their experiences on the changes brought about by the project. Project managers can also obtain feedback and suggestions from the community on an ongoing basis. This has to me managed with extreme caution and ethical standards on confidentiality and limited to the purpose of the survey.