New and Upcoming ICP Data Processing and Production Tools

World Bank Survey Solutions for ICP (CAPI | CAWI | CATI)



ICP Inter-agency Coordination Group Meeting
October 20 - 24, 2025
Washington DC

Purpose of the Session

This session aims to overview the Survey Solutions platform and its application to ICP. The platform features Computer-Assisted Personal Interviewing (CAPI), Computer-Assisted Web Interviewing (CAWI), and Computer-Assisted Telephone Interviewing (CATI) modalities, developed for household budget surveys and other surveys, including CPI surveys, and most recently for ICP surveys.

Outline

- 1. Survey Solutions
 - Key features and questionnaire designer
 - Survey management and data collection
- 2. Application to ICP data collection
 - Survey Solutions in the ICP Pacific Islands region
 - Survey Solutions ICP questionnaire example
 - Example of error prevention mechanisms
- 3. Conclusions

SURVEY SOLUTIONS: KEY FEATURES AND QUESTIONNAIRE DESIGNER

Key features: Overview (I)

Capture any type of data with ease

 Design your surveys with a full range of standard questions, utilize nested rosters and answer piping, cascading and linked questions, scan barcodes, capture pictures and audio and record information from external sensors.

Secure and scalable

 Survey Solutions server components can be installed on the server in your premises or in a cloud.

Control quality of your data

 Validate your answers and direct the interview flow; use macros, calculated variables and lookup tables to construct sophisticated data validation algorithms. Monitor survey progress in real time by analyzing rich metadata.

Key features: Overview (II)

Connectivity

 Connect Survey Solutions with external databases, design custom dashboards and reports using rich set of REST APIs.

CAPI/CAWI/CATI and mixed modes

 Collect your data offline on tablets (CAPI), online using web-interface (CAWI), capture phone interviews (CATI), and conduct cost efficient mixed mode surveys.

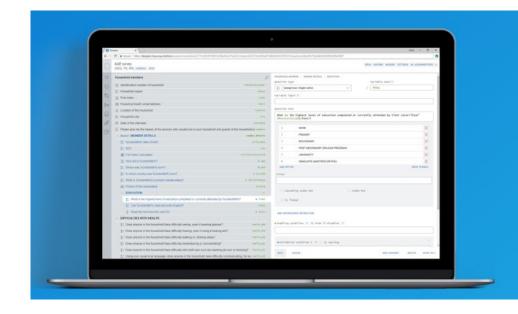
Geographic Information System (GIS)

 Collect detailed GIS information on locations, distances, and areas, apply geofencing and guide interviewers to the point of interview offline using high resolution satellite images and built-in GPS receivers.

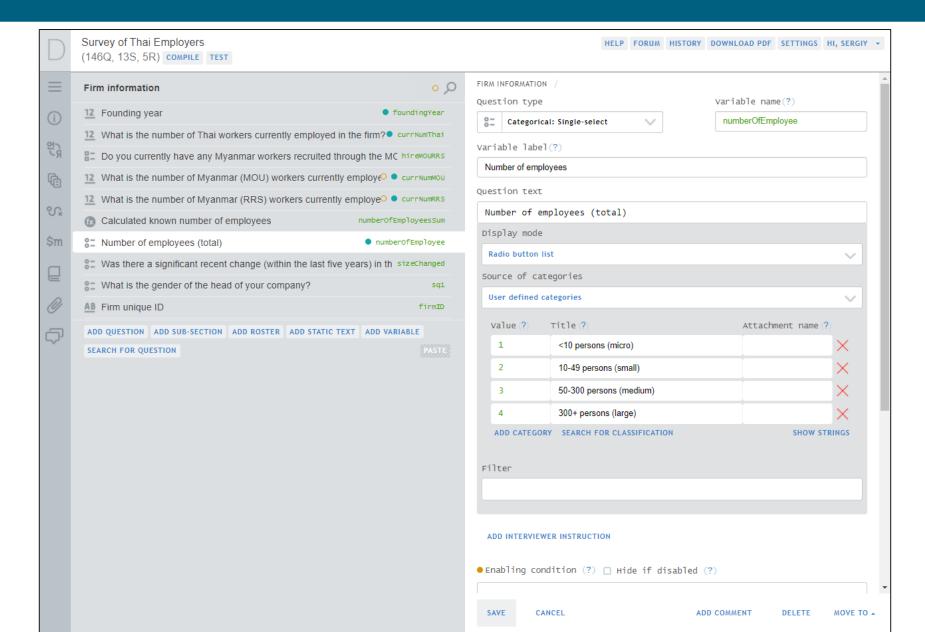
Questionnaire Designer

The Questionnaire Designer allows users to:

- Develop complex questionnaires in several languages.
- Collaborate with colleagues on refining your survey.
- Quickly identify problems and get guidance from a powerful compiler.
- Test questionnaires online and on tablets.
- Produce richly formatted PDF documents for documentation and quality assurance review.



Questionnaire Designer example



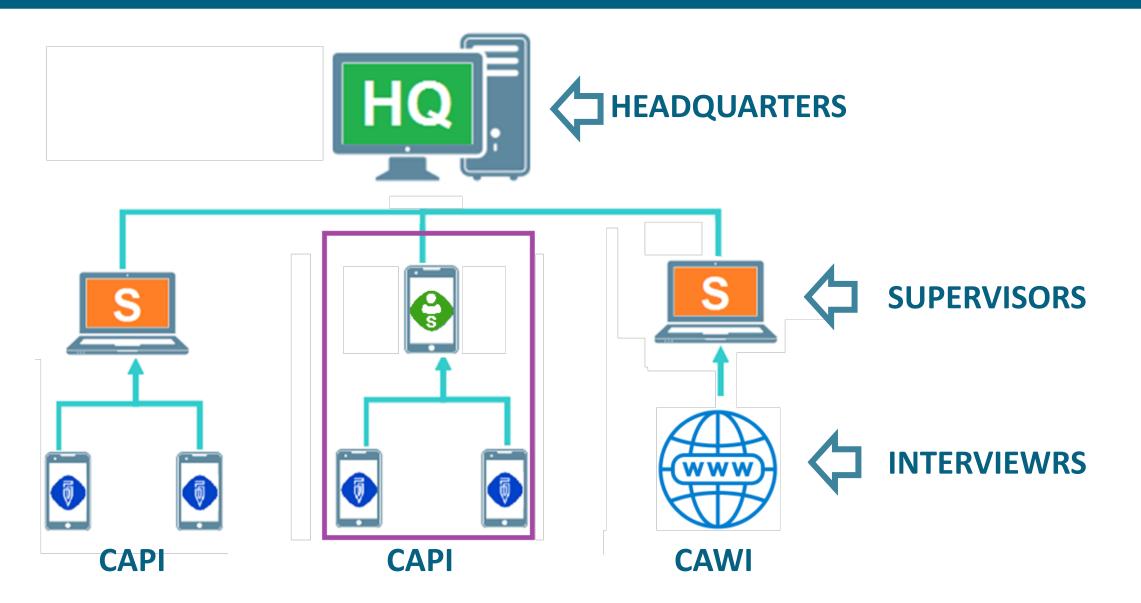
SURVEY SOLUTIONS: SURVEY MANAGEMENT AND DATA COLLECTION

Survey Solutions: Account types

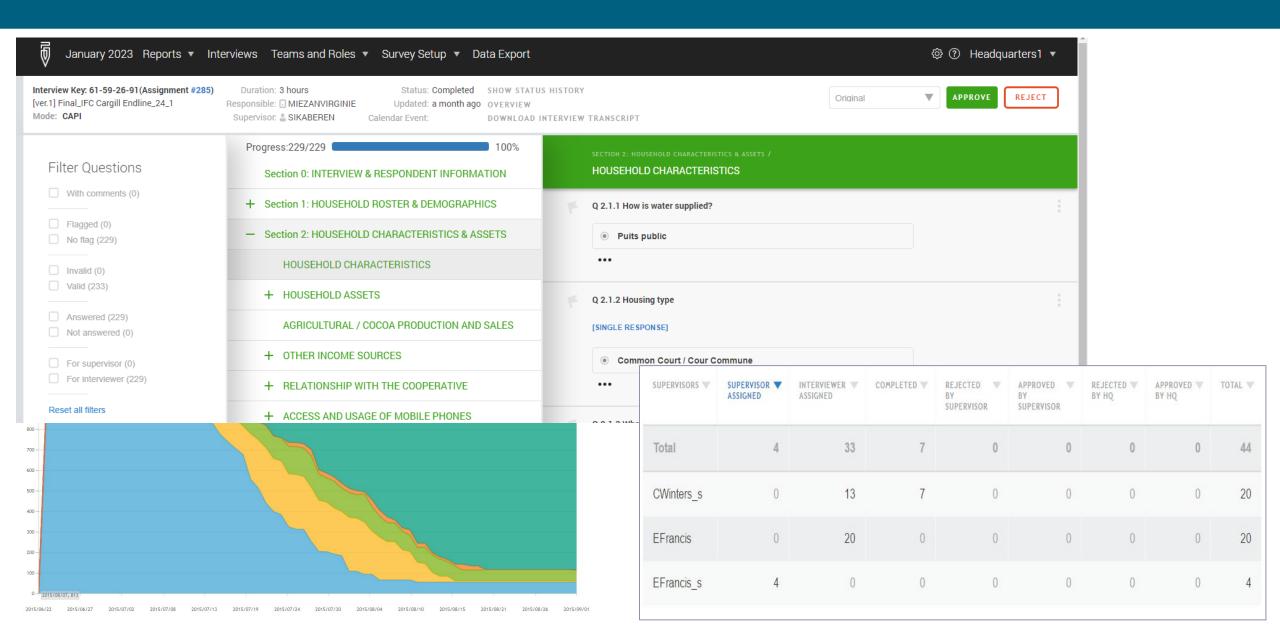
Survey Solutions Data Server provides the following account types:

- > Administrator manages the server, creates workspaces, user accounts.
- Headquarters starts surveys, creates assignments, conducts top-level quality review of interviews, exports data
- > Supervisor manages teams if interviewers, distributes work between interviewers, quality check of interviews;
- Interviewer conducts interviews;
- > Observer observes operations on the server;
- ➤ **API user** entity (e.g. developer, application, or system) that programmatically interacts with the server's API (Application Programming Interface) to access its functionality or data.

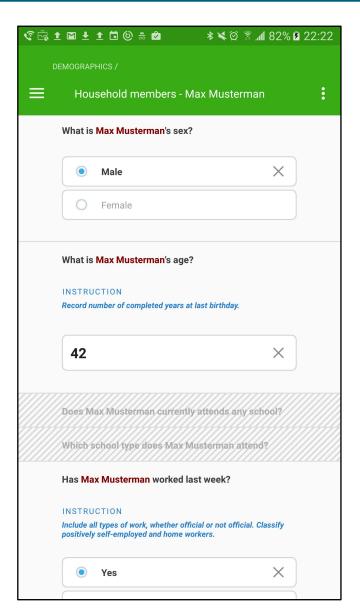
Survey Solutions: Hierarchy

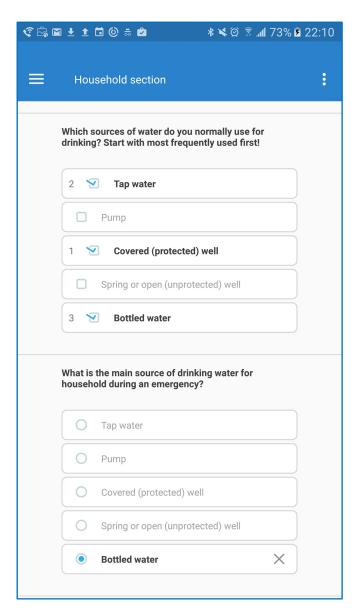


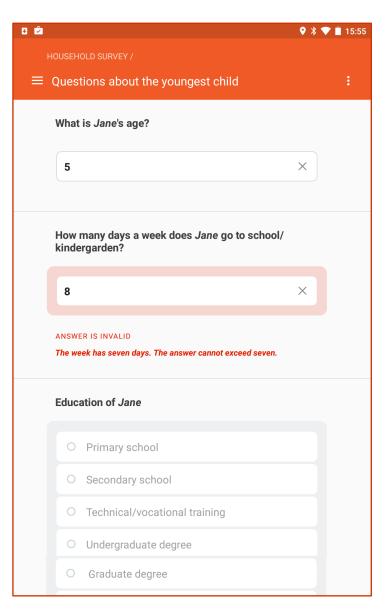
Survey Solutions: Headquarters view example



Survey Solutions: Interviewers view example



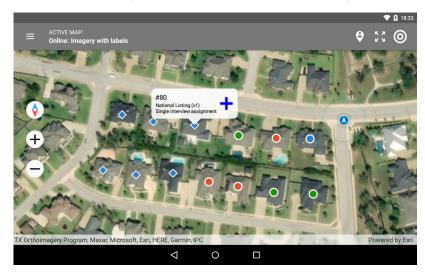


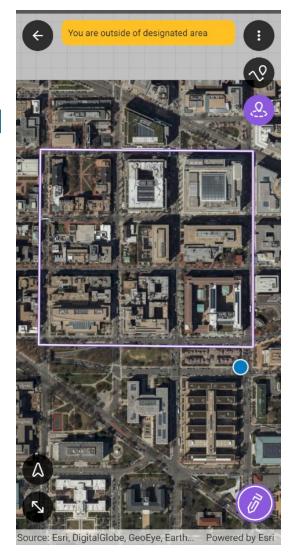


Survey Solutions: Recent additions

Geofencing and geotracking enhance the quality of data and management of the data collection process by providing tools to control interviewer location making sure they are:

- collecting data in designated areas only, and
- comprehensively scout the assigned areas.







APPLICATION TO ICP: SURVEY SOLUTIONS IN THE ICP PACIFIC ISLANDS REGION

Survey Solutions in the ICP Pacific region

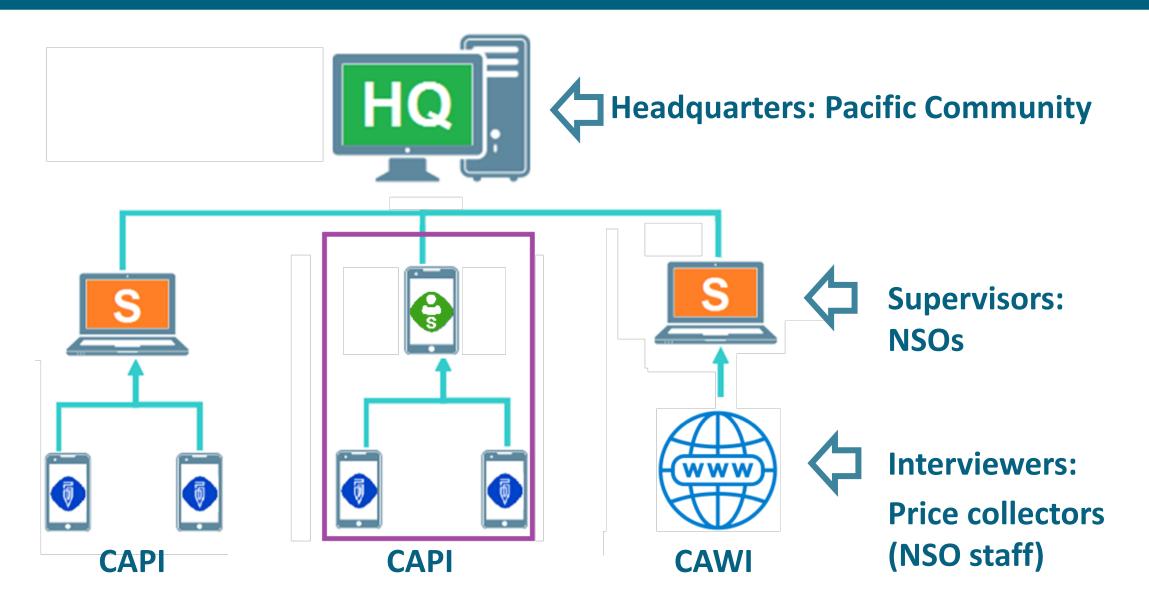
- The Pacific Island countries have not participated in the ICP since the ICP 2011 cycle.
- Most of these countries have small populations and limited resources, including statistical capacity.
- Survey Solutions has helped to design and manage a questionnaire for approximately 200 household consumption items.
- Price collection is ongoing in 18 out of 20 countries and the feedback using this new tool has been very positive.



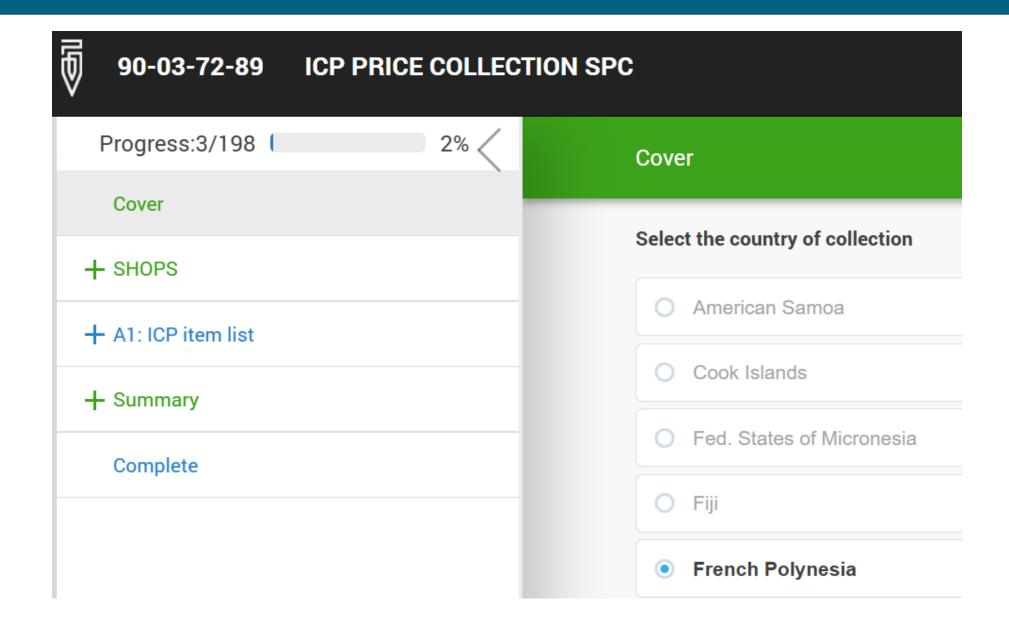


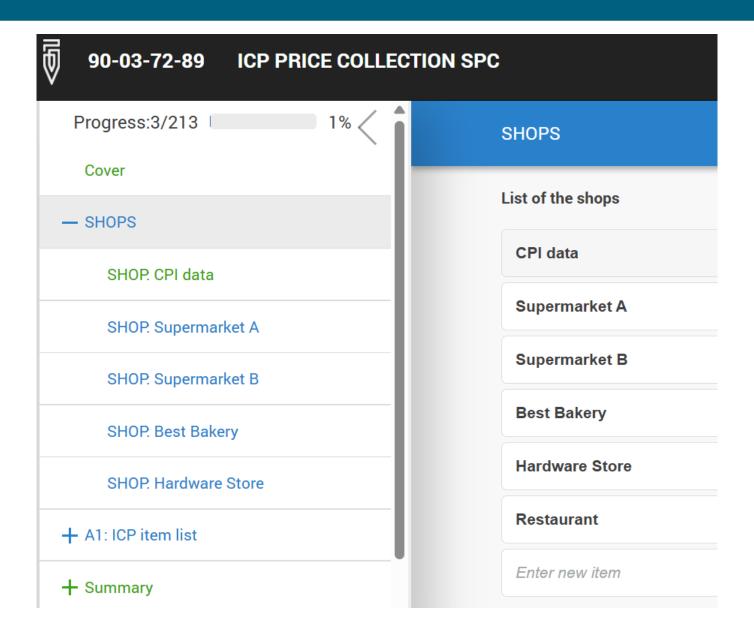


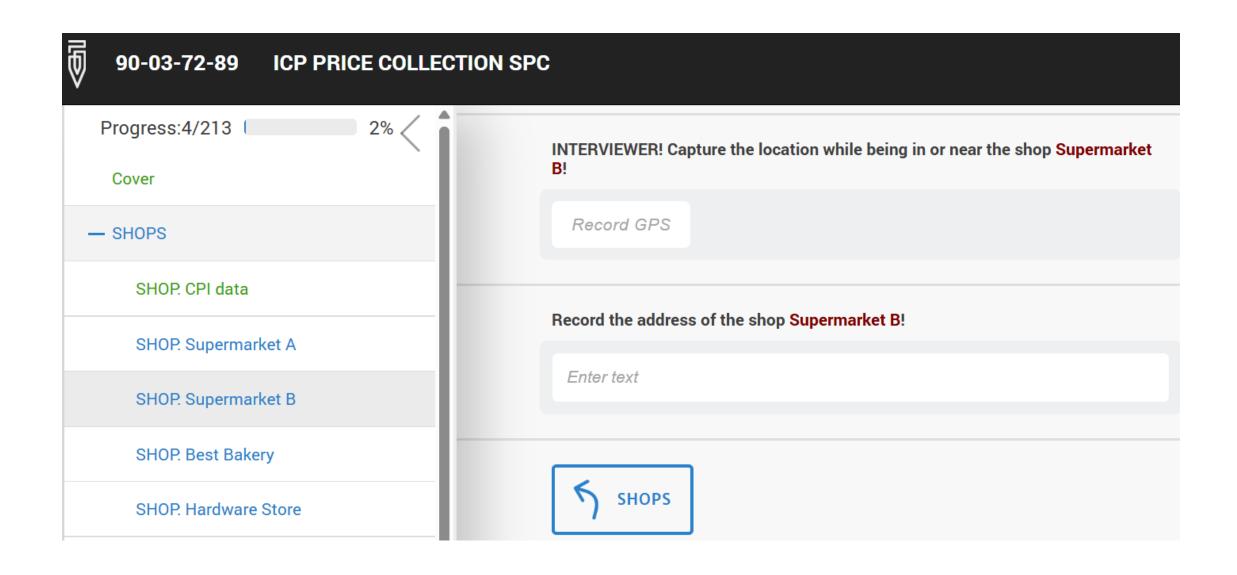
ICP Pacific and survey solutions hierarchy

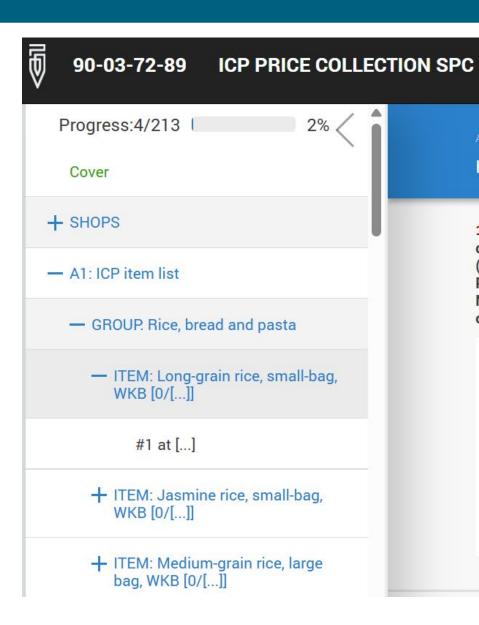


APPLICATION TO ICP: SURVEY SOLUTIONS ICP QUESTIONNAIRE EXAMPLE







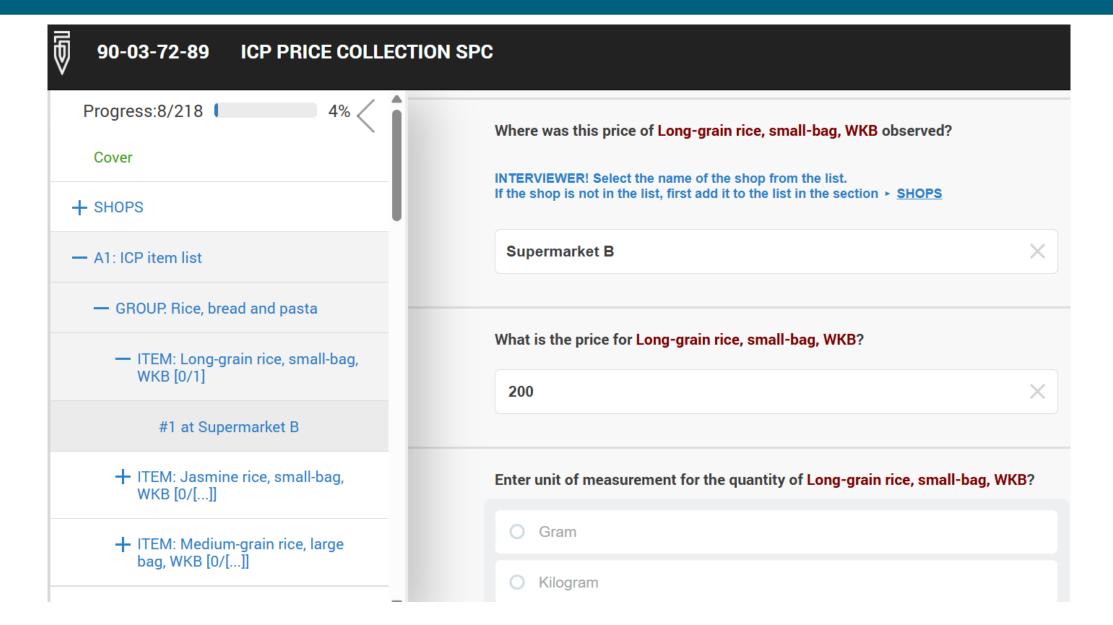


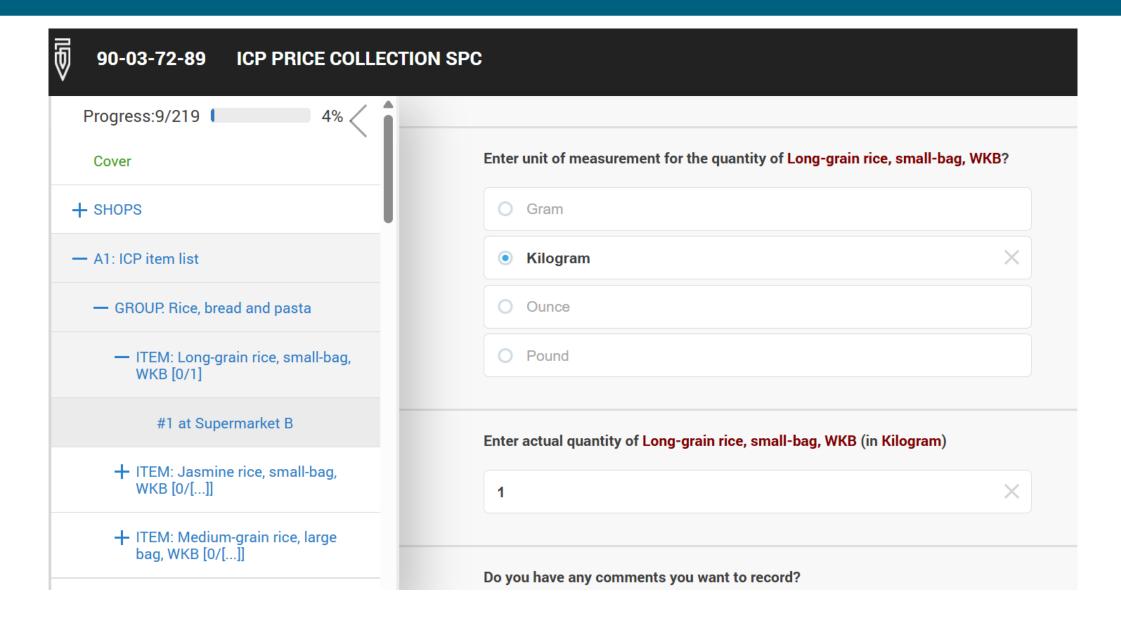
A1: ICP ITEM LIST / GROUP: RICE, BREAD AND PASTA A

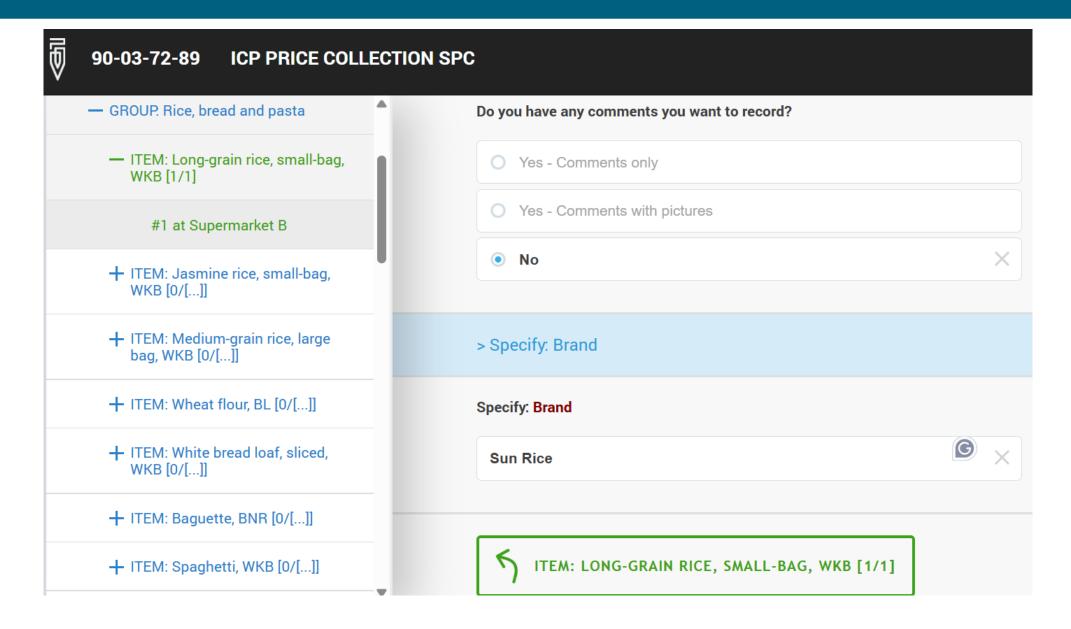
ITEM: Long-grain rice, small-bag, WKB [0/[...]]

11011110102: Brand Type: Well Known || Minimum quantity: 0.5 || Maximum quantity: 1.2 || Unit of measurement: Kilogram || Type: Long grain, white rice (milled rice) || Packaging: Pre-packed; paper or plastic bag || Quality: High grade || Parboiled: No || Share of broken rice: Very low (less than 5%) || Aromatic (fragrant): No || Exclude: Premium rice (e.g. basmati rice, jasmine rice), sticky rice, quick cooking rice || Specify: Brand









APPLICATION TO ICP: EXAMPLES OF ERROR PREVENTION MECHANISMS

Common mistakes and how Survey Solutions may help

Mistake #1: Data entry mistakes

- Data collected from different sources are often prone to data entry mistakes (e.g. paper, excel, different software tools and databases).
- Survey solutions provides a harmonized platform where these errors can be minimized.

Mistake #2: Non-numeric entries in numeric fields

- When data is collected on paper or in systems that do not enforce a specific format, price collectors may enter non-numeric values by mistake.
- Survey solutions ensures that entry fields such as prices or quantities only accept numeric values.

Common mistakes and how Survey Solutions may help

Mistake #3: Wrong reference units

- A common mistake found during price validation are wrong reference units (e.g. grams instead of kilograms, or gallons instead of liters)
- Survey solutions allows price collectors to enter the observed quantities in grams and automatically converts the observed price to kilograms (if specified in the survey designer). It may also restrict observations to the specified reference unit.

Mistake #4: Wrong quantity range

- This mistake occurs when the observed quantity falls outside the quantity range specified in the item description.
- In this case, survey solutions flags the observed quantity as a possible mistake, prompting users to confirm or leave a comment if no other item can be found.

Common mistakes and how Survey Solutions may help

Mistake 5: Price outliers

- In some cases, the price entered is "too high" or "too low" relative to what is commonly expected from such a product.
- Survey solutions allows "reference prices" to be pre-loaded before the survey starts and check for any significant deviations. For example, it is possible to use last survey's prices as a reference and automatically alert interviewers if the reported price surpasses a predefined threshold.

Mistake 6: Wrong product

- In some cases, the item description is insufficient, and the wrong product is priced.
- Survey solutions allows the addition of images in the survey questionnaire, which facilitates the identification of the specified products.

CONCLUSIONS

Conclusions

- Survey solutions is a versatile and free software tool which can be used for a variety of surveys, including ICP and CPI data collection.
- The implementation in the Pacific Community's member-countries showcases a proven application to ICP surveys.
- The design of each questionnaire may be adapted to the specific requirements of each ICP survey and ICP region.
- The survey solutions questionnaire is only a data collection tool. While it provides initial data quality checks, it is not meant to replace intra-country and inter-country validation.
- It is not required that all countries adopt survey solutions within the same ICP region. Some countries may opt to use their current methods while others switch to survey solutions.

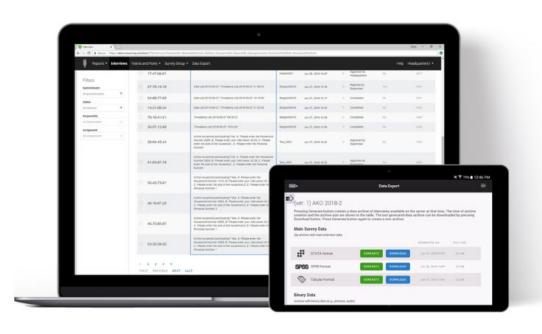
Additional information on Survey Solutions

Take your survey for a test drive on the public demo server:

- Survey Management
- Data Aggregation and Export
- Data Analysis
- Reporting functionality of Survey Solutic

Learn more about Survey Solutions by:

- Watching dozens of <u>instructional videos</u>
- Reading comprehensive documentation and topical articles
- Browsing through the <u>user forum</u> and release notes
- Guide software development through feedback and feature requests.



SURVEY

1. Current NSO approach(es)

- A. Are CAPI/CAWI/CATI by NSOs in your region?
 - i. If yes, which solution, World Bank Survey Solutions, or some other platform?
 - ii. If yes, for which statistical domains?

2. World Bank Survey Solutions

A. Are you interested in the exploring the use of Survey Solutions in your region, and if yes, for which statistical domains?