Dietary Diversity and Determinants Survey

Guide and User's Manual

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List of Acronyms

CRS	Catholic Relief Services
DDDS	Dietary Diversity and Determinants Survey
FAO	Food and Agriculture Organization of the United Nations
GPS	Global Positioning System
HDDS	Household Dietary Diversity Score
ICT	Information and Communications Technology
IDDS	Individual Dietary Diversity Score
WFP	World Food Programme

Acknowledgements

Introduction

With support from a USAID's TOPS Small Grants Program Improvement Award, CRS developed a Dietary Diversity and Determinants Survey (DDDS) questionnaire; tested a digital data collection tool in Title II program areas in five African countries; and refined the product with input from Burkina Faso, Burundi, Democratic Republic of Congo, Ethiopia, and Malawi.

This manual introduces the resulting Dietary Diversity and Determinants Survey (DDDS), which is an adaptable, user-friendly instrument for collecting data on dietary diversity and key determinants of dietary diversity. The DDDS can be used to conduct situational analyses and baseline surveys; monitor changes in diet due to season, intervention, or shocks; and compare diets of different sub-populations. DDDS results provide a snapshot of nutritional trends and gaps, which can inform programmatic decisions for greater nutritional impact in Title II and other food security programs.

Using mobile technology to conduct the DDDS presents opportunities for improved efficiency in data collection, transfer, and cleaning. Furthermore, future adaptation of the digital DDDS tool may provide real-time dietary diversity feedback to interviewers and interviewees to inform customized nutrition counseling based on actual consumption habits.

Measuring dietary diversity

A diverse diet encompasses two major components of a quality diet: adequate coverage of basic macro and micro nutrient needs, and diet variety (SCN Task Force on Assessment, Monitoring and Evaluation). In many low-income and food insecure settings, diets lack diversity and are energy-dense and micronutrient poor. In such settings, dietary diversification is an essential component of a food-based approach to nutrition, as it is associated with increased household food access and higher probability that individuals within the household will consume adequate nutrients (Kennedy et al., 2010). Increased dietary diversity correlates with increased intake of micronutrients such as calcium, vitamin A, and iron with greater consumption of animal source foods, fruits and vegetables, and dairy (Wiesmann et al., 2006 in Kennedy et al., 2010).   Thus, gains in dietary diversity are associated with several improved health outcomes, including birth weight and child anthropometric status (Swindale and Bilinsky, 2006).

Dietary diversity is a measure of the number of foods or food groups consumed in a given reference period (Hoddinott and Yohannes 2002; Ruel 2003). Dietary Diversity Score is a common, straightforward measure of dietary diversity that does not place a heavy burden on

respondents or data collectors compared with other methods for measuring detailed dietary intake. Dietary Diversity Score is a raw numerical score based on a simple count of the number of food groups represented in a full listing of the foods and drinks consumed over the previous 24 hours. The measurement is not weighted, nor does it reflect quantities or frequency of consumption captured by WFP's Food Consumption Score (Wiesmann et al, 2009).

Dietary Diversity Score can be measured on household or individual level. Household Dietary Diversity Score (HDDS) reflects household food access, whereas Individual Dietary Diversity Score (IDDS) is an indicator of diet quality. (See Box 1 for details on this distinction.)

Both individual- and household-level dietary diversity scoring can be used to conduct situational analyses and baseline surveys; monitor changes in diet due to season, intervention, or shocks such as conflict or disaster; and compare diets of different sub-populations. Dietary diversity data can provide a snapshot of food security to inform strategies for making food more

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Box 1. Household vs. Individual Dietary Diversity Score

HDDS is a count of all food groups consumed by one or more members of the household inside of the home. HDDS reflects food access, or a household's overall ability to acquire sufficient food to meet members' energy and nutritional requirements. Increased dietary diversity is associated with higher probability that individuals within the household will consume adequate nutrients (Kennedy et al., 2010) and increases in household per capita consumption, caloric availability, caloric availability from staples, and caloric availability from non-staples (Hoddinott and Yohannes, 2002).

IDDS is based upon a categorization of foods consumed both inside and outside the home by a targeted individual. IDDS indicates diet quality, and has proven to be a good indicator of nutrient adequacy in women, young children, and adolescents (Kennedy et al, 2010, p. 3). It is also associated with individual caloric availability (Hoddinott &Yohannes, 2002). IDDS can provide a snapshot of intra-household food security (Kennedy et al., 2011; Swidale & Bilinsky, 2006).

Disaggregation of food groups can differ based on the diet characteristics that the score intends to capture (energy, micronutrient adequacy, population-specific concerns, etc.). Whereas HDDS usually measures a score out of 12 standardized food groups, Women's Dietary Diversity Scoring has been tested based on as many as 21 food groups, including separate categories to capture consumption of dark green leafy vegetables, vitamin A rich fruits and vegetables, and organ meats (Kennedy et al., 2011, p.25). Decisions regarding the number of food groups to measure generally take into consideration the trade-offs between the level of precision gained and simplicity lost when including larger numbers of more narrowly-defined food groups.

For further discussion of the differences between IDDS and HDDS and food groups, see FAO's 2011 *Guidelines for Measuring Household and Individaul Dietary Diversity* (Kennedy et al.).

accessible, available, and nutritious; producing more diverse food more sustainably; and crafting appropriate and effective education and behavior change approaches.

Key Determinants of Dietary Diversity

A complex combination of underlying social, economic, physical, and environmental factors affect food consumption patterns of individuals and communities. While key determinants of dietary diversity vary by context, commonly they include cultural beliefs and taboos, social and income status, intra-household food distribution, market dynamics, knowledge, and gender.

For example, in much of the world, women often play an important role in household dietary diversity because they remain principally responsible for purchasing and preparing foods that add variety to staples (World Bank, 2009). Gendered patterns of decision-making regarding which foods are purchased, planted, and prepared and control over productive resources, including land, can affect diet quality (Bhagowalia et al., 2012). For example, in CRS Malawi's Title II Multi-Year Assistance Program, a qualitative study of crop diversification found that gender dynamics in decision-making and matrilineal land inheritance influence household investments in which nutritious crops are cultivated for home consumption (Abel et al., 2012). Wider research shows that women's participation in decision-making is linked with a greater proportion of family resources being devoted to children, with consistent positive effect on nutritional status (Desai and Johnson, 2005).

Demographics, seasonal variations, and access to information are also key determinants of dietary diversity in many contexts. For example, households that are female- or child-headed face particular vulnerability to food insecurity. During lean seasons and natural or manmade shocks, when variations in agricultural production and food prices impede food access, many households cope by reducing dietary diversity. In many nutrition and food security projects, exposure to behavior change messaging or different types of training on dietary diversity and production of nutritious foods are also key determinants of interest.

Pilot of the DDDS

The DDDS was developed on the basis of promising previous efforts by CRS Burundi to measure dietary diversity among pregnant and lactating women in Title II project areas. Initial surveys found that certain food items in seasonal crop calendars were scarcely consumed in project areas, providing important insights for behavior change messaging and agriculture programming. With support from a TOPS Small Grants Program Improvement Award, CRS built on this experience and worked with staff in four other Title II project areas across Africa to

develop, digitize, test, and refine a questionnaire to collect data on consumption, food source, and key determinants of dietary diversity.

This process required compiling and validating country-specific food lists and identifying which key determinants of dietary diversity to measure across the five pilot countries of Burkina Faso, Burundi, DRC, Ethiopia, and Malawi. Exploratory questions were used to capture items not on standardized food lists, including foods (including wild fruits and insects) gathered freely from the environment, common processed or packaged foods, and foods generally reserved for only certain members of the household due to cultural reasons or taboos. Once complete, each food list was categorized into food groups using food composition tables in consultation with nutrition staff and loaded onto the DDDS digital data collection tool in iFormBuilder.

For the key determinants portion of the survey, the common questionnaire tested across the CRS Title II programs included questions on the determinants of dietary diversity that were identified as shared across the five pilot countries and agreed upon by involved staff. The chosen determinants measured include: household decision-making by gender, land ownership, seasonal variations and shocks, and exposure to project and non-project agriculture and nutrition training. On a case-by-case basis, future program management using the DDDS should evaluate whether the key determinant questions that were appropriate in the five test countries apply to the local context or should be altered.

Respondents in field tests completed the household DDDS in approximately thirty minutes each. The results of the DDDS provide a snapshot of nutritional trends and gaps that can inform management and programmatic staff with an evidence base from which to make strategic decisions for greater nutritional impact. By better understanding exactly what foods households and individuals consume from which sources, CRS and other actors can design and refine project activities to improve nutritional outcomes. Measuring changes in dietary diversity over time with the DDDS can help track nutritional trends due to seasonal variability, project activities, or other factors.

Mobile Data Collection

CRS has tested the use of a mobile data collection tool created in iFormBuilder for conducting the DDDS in Title II programming in five African countries. This experience has shown that using mobile technology presents opportunities for improved efficiency in the data collection process as well as new possibilities for data analysis and real-time feedback loops.

Compared to traditional paper-based survey methods for collecting similar information, the fixed costs for ICT data collection are higher, but variable cost savings (particularly cost of hiring a data entry clerk) are significant over time. Mobile data collection can also save time, providing higher quality data more quickly. For a side-by-side sample budget comparison of digital and paper-based surveying in Burundi, see Box 2.

Data collectors testing the DDDS in CRS Title II areas enjoyed working with digital devices and praised the logistical ease of preparing and conducting a paper-free survey. Simple transfer of collected data over a network connection circumvented the uncertainty of deciphering surveyor handwriting and errors in data entry. The digital data capture minimized the amount of data cleaning.

Furthermore, the DDDS digital tool could undergo customization in order to produce real-time dietary diversity score feedback to interviewer and interviewee. This type of adaptation would allow the digitized DDDS to expand beyond a monitoring and evaluation tool into a programming tool to guide customized nutrition counseling based on actual consumption trends.

For further information and the latest version of the DDDS digital data collection tool, contact CRS Burundi's Chrispin Mwizero at Chrispin.Mwizero@crs.org or Erin Lewis at Erin.Lewis@crs.org.

Box 2. Sample Budget and Time Comparisons of Digital vs. Paper-based Surveying

The comparison below is based on experience of CRS Burundi. All estimates are for four data collections of 200 households each over the course of one year.

Budget Comparison (US Dollars)		
	Paper	Digital
Equipment		
iPods	$0.00	$547.57
Supplies		
printing	$3.75	$0.00
photocopies	$99.00	$0.00
iForm license	$0.00	$500.00
pens	$2.25	$0.00
clipboards	$15.00	$0.00
milage	$387.00	$387.00
Services		
hotel	$1,875.00	$1,687.50
per diem	$2,025.00	$1,620.00
Staff		
driver	$450.00	$450.00
surveyors	$3,375.00	$3,375.00
data clerk	$1,125.00	$0.00
data analyst	$1,000.00	$1,000.00
Total:	$10,357.00	$9,567.07
Savings:	$789.93	

Time Comparison (Hours)		
	Paper	Digital
training	3.00	1.00
data collection	600.00	400.00
data entry	266.67	0.00
data cleaning	48.00	20.00
data analysis	96.00	96.00
reporting	96.00	96.00
Total:	1,109.67	613.00
Savings:	496.67	hours

Implementation Guidance

Setting Survey Objective

As with any survey instrument or monitoring tool, program managers must understand what the DDDS measures and how they intend to inform decision-making with results before setting objectives and operational plans related to its use. For example, does the program want to use DDDS as a monitoring tool to assess impact of a nutrition program on dietary diversity for pregnant women? Or is the purpose to conduct a one-time analysis of household food access in the area? The answers to these kinds of questions will help in choosing between the measurement of HDDS or IDDS, and guide any necessary adaptation of the digital DDDS data collection tool.

For considerations on timing of dietary diversity measurement, refer to FAO's 2011 *Guidelines for Measuring Household and Individual Dietary Diversity* (Kennedy et al.), page 13.

ICT Considerations

When planning to use ICT to conduct the DDDS, planners must also assess the technical and technological capacity of the organization. Does the staff have access to the necessary devices to carry out the survey electronically and the software to run data analysis? Is there enough in-house technical know-how to equip a team of data collectors to carry out the survey at the planned scale? If not, what type of time and resources are necessary to build this type of capacity or bring it on board?

Throughout the TOPS project, CRS Burundi made use of CRS' ICT4D expertise at headquarters level as well as in-country ICT staff and monitoring and evaluation staff.

Sampling

Define a sampling rationale based on the objective specified by survey planners. What population must be interviewed to provide reliable data to fulfill the objective? Will operational or budgetary constraints impact your sampling method or size? Consider questions of sampling error and confidence level according to the chosen sample size.

Customize Survey Tool

Any use of the DDDS will involve some customization to the specific context, considering that each program will have differing objectives in the tool's use.

All programs using the DDDS should ensure that the survey is adapted to include a validated list of locally-consumed foods. This list and all questions must be translated into appropriate local languages. Planners must consult with technical staff to make decisions regarding the minimum quantity of a food that should be included, classification of any foods that could fall into multiple food groups, and, in the case of household-level dietary diversity score, whether it is appropriate to ask about foods consumed outside of the household.

Finally, the team must also decide upon which supplementary questions regarding key determinants of dietary diversity should be included alongside the standard Dietary Diversity Scoring elements.

For detailed guidance in how to undertake these steps, refer to FAO's 2011 *Guidelines for Measuring Household and Individual Dietary Diversity* (Kennedy et al.), pages 15-19.

Box 3. Tips from CRS DDDS Field Testers

Initial feedback from digital data collection field tests of the DDDS indicate the importance of discussing specific challenges that arise when interviewers use new information technologies.

Feedback from CRS-Goma in the Democratic Republic of Congo indicated that some interviewees felt that data collectors were not listening to their responses because they were "playing on their phones" when they were recording responses on iPods. This feedback underscores the importance of training data collectors to explain the role of the digital device to interviewees prior to beginning survey questions.

In Burkina Faso, field testers had trouble keeping iPods charged when collecting data over multiple days in remote areas without access to power. CRS Burundi staff resolved this challenge by using car chargers for iPods when traveling between survey areas. Organizers can also explore solutions such as solar charging devices, but should always have a plan in place in areas where power is unreliable.

Training Data Collectors

Once the specific survey objectives are finalized and the data collection tool customized, planners should select data collectors who are literate in the language used by the tool and, if possible, have some basic level of familiarity with ICT such as mobile phones or other devices. However, the DDDS tool is simple enough that previous experience with iFormBuilder is not necessary for field-based staff. See Box 3 for lessons learned in field testing.

Train data collectors in accordance with the specific survey objectives and customization of the DDDS tool. By the end of training, all team members should understand the survey objectives in a program context and have a shared comprehension of the DDDS questionnaire and local foods list. The training should include discussion of standards of digital data collection and instructions for ensuring proper care of an ICT device. After becoming familiar with the DDDS and data collection technology, data collectors should conduct a pre-survey field test.

For step-by-step instructions on how to use the digital DDDS data collection tool, see section below on "How to Use the DDDS Mobile Data Collection Tool."

How to Use the DDDS Mobile Data Collection Tool

General Use of DDDS Tool: Save Drafts, Complete Survey, Submit Answers

Steps 1-3: Starting DDDS

Step 4: Consent

Step 5: Country

Step 6. Date

Step 7. Location

Step 8. GPS Location

Step 9: Season

Step 10: Respondent name

Step 11. Age of interviewee

Step 12. Head of the household or spouse

Step 13. Status of Head of the household

Step 14. How many people live in your household

Step 15. Participating in MYAP activities

Step 16. Training on how to have a balanced diet in the last year

Step 17. Source of information or training received

Step 18. Information or training on agriculture techniques in the last year

Step 19. Sources of information or training received

Step 20. How much input do you have in household decisions about foods to buy

Step 21. How much input do you have in household decisions about food and livestock

Step 22. Who owns the land on which this household produces food

Step 23a-d. What did you and your family members eat at home over 24 hours yesterday

Step 24. If you chose "other" in the *Food list* question above, specify the food here

Step 25. General comment for the survey

Step 26. Finish the survey.

General Use of DDDS Tool

There are two kinds of screens on DDDS. Each screen provides specific actions.

The first screen is the main questionnaire screen for all questions. (This screen changes as you go down.)

Save Drafts. If you want to end a survey without saving any data, select *Cancel*. If you want to save the entire DDDS interview as an unfinished draft before completion, select *Save*. A survey can only be saved on the main questionnaire screen. A survey cannot be saved in the middle of selecting an answer on the answer screen. It is only possible to revisit a saved survey before it is synced through a wireless connection. In places of connectivity, the wireless connection should be deactivated until the surveyor finishes the survey.

Complete Survey. When the surveyor finishes the survey, the device can be connected to sync the data. When the surveyor completes the entire DDDS interview, select *Done* at the bottom of the main questionnaire screen. You cannot change your answers or save an unfinished draft after you click *Done* at the bottom of the main questionnaire screen.

The second screen is the answer screen for each individual question. This screen changes by question.

Submit Answers. For each question, use the answer screen to select the answer. Then select an answer by scrolling through the list and selecting the accurate answer. Then select *Done* for that question. After you select *Done* for each answer, you will return to the main questionnaire screen. If you want to return to the main questionnaire screen without selecting an answer for a question, select *Cancel*. To change your previous answer, return to the question, select the correct answer, then select *Done* for that answer.

Note the differences between the main questionnaire screen and the answer screen. On the main questionnaire screen, selecting *Cancel* will erase the entire survey, and selecting *Done* will complete the entire survey. On the answer screen, selecting *Cancel* will erase one answer, and selecting *Done* will enter one answer.
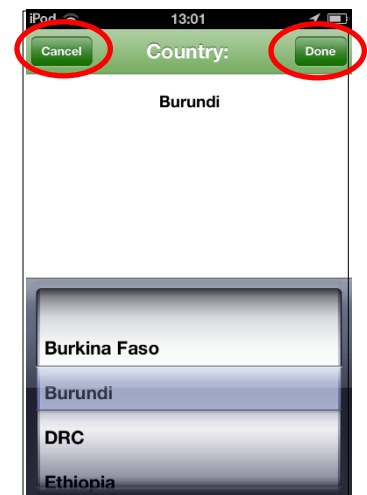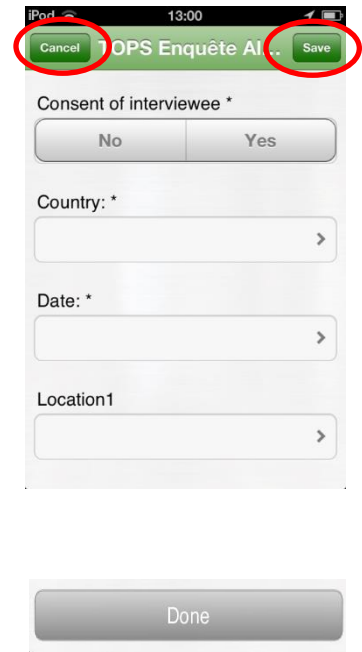
Using the DDDS Tool to Perform a Survey

This is a picture of the screen of a device. Find the icon symbol for the iForm application that controls DDDS.

(Your screen may look different than the screen in the photograph. Steps are numbered below for instructions, but steps are not numbered in the DDDS tool.)

Step 1: Select the icon symbol for *iForm*

Step 2: Select *Tops Dietary Survey*
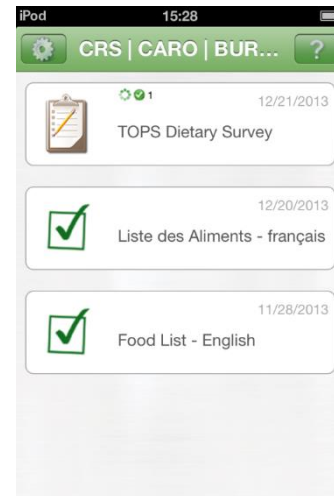
Step 3: Select **+** in the upper right corner to start a new interview.

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Step 4: **Consent of the interviewee.** The surveyor should get the consent of the respondent to participate to the interview and permission to record her names. Select one: *Yes, No*. If the answer is *No*, then select *Cancel* and do not continue with the survey.

You are now ready to begin the questionnaire.

Each step will use the main questionnaire screen and the answer screen. Select the question button to reach the answer screen.

Main questionnaire screen   ➡   Answer screen

Step 5: **Country.** Choose one: *Burkina Faso, Burundi, DRC, Ethiopia, Malawi*. Select the right country then select *Done* to confirm and move to the next step.
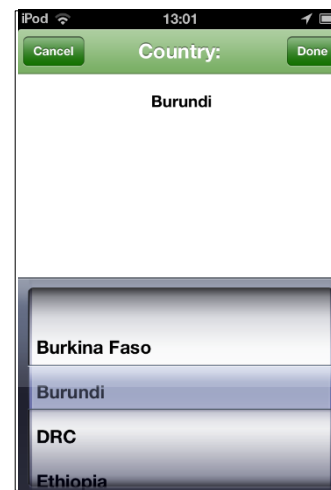
Step 6. Date. Select *Done* to confirm the current date.

Step 7. **Location**. Type up to 4 administrative levels, as determined by your country. Please type each administrative level in sequence (for example, district, province, or county), starting with the largest level then ending with the most specific level. For each administrative level, type the open-ended answer on the answer screen. Then select *Done* to confirm and move to the next step.
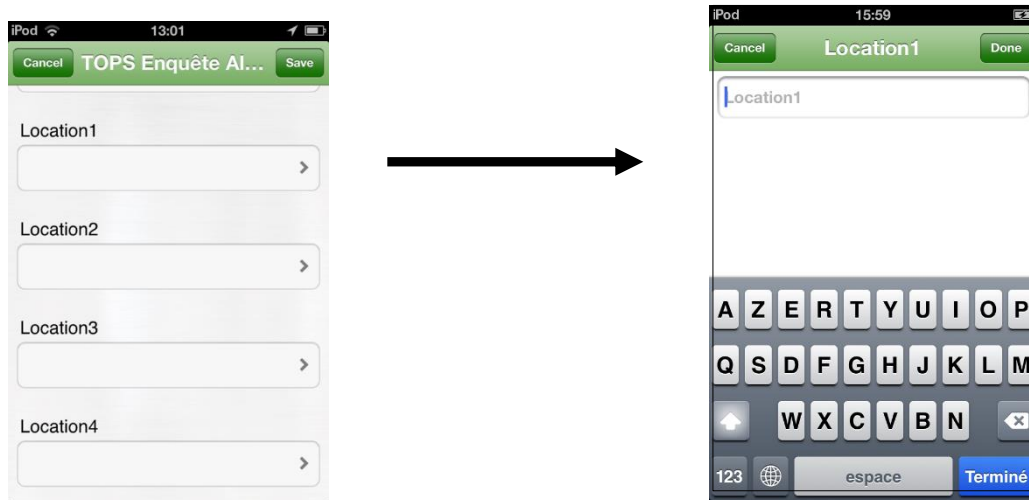
Step 8. GPS Location. Select *Refresh* if your device is connected to the network. If you are not connected to a network, skip this step.
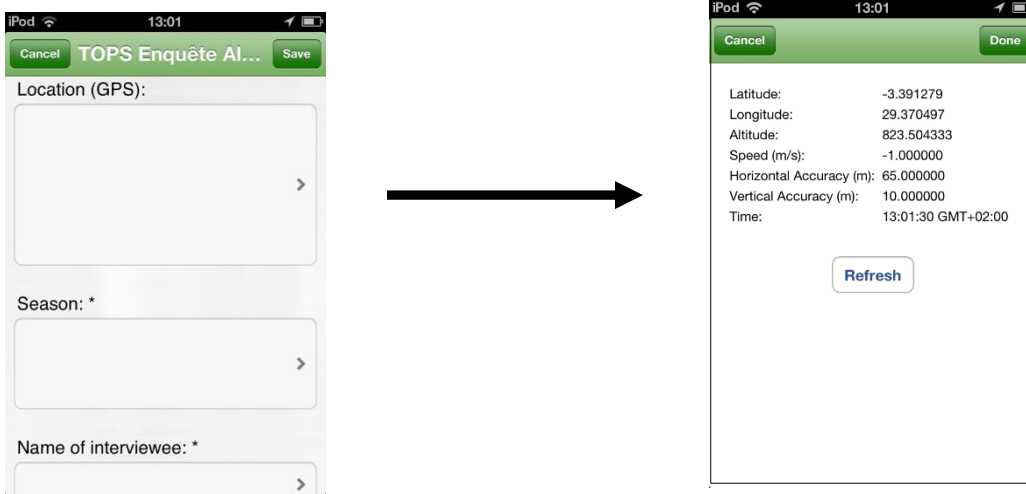
Step 9: Season. Determine this by consulting official sources before the survey. Select all that apply: *Low, Planting, Harvest*. Then select *Done* to confirm and move to the next step.
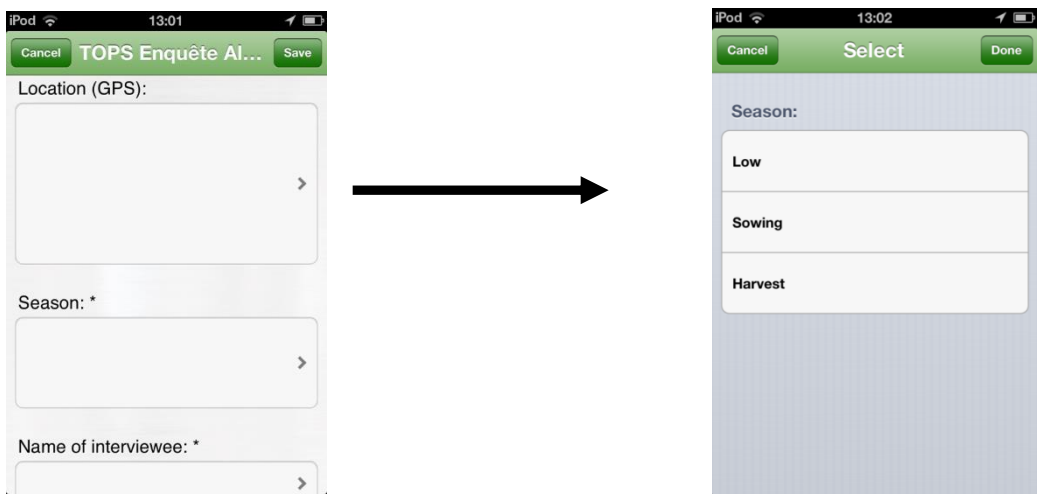
Step 10: Respondent name. Type the full name of the interviewee. Interview the person responsible for preparing meals for the household the previous day.
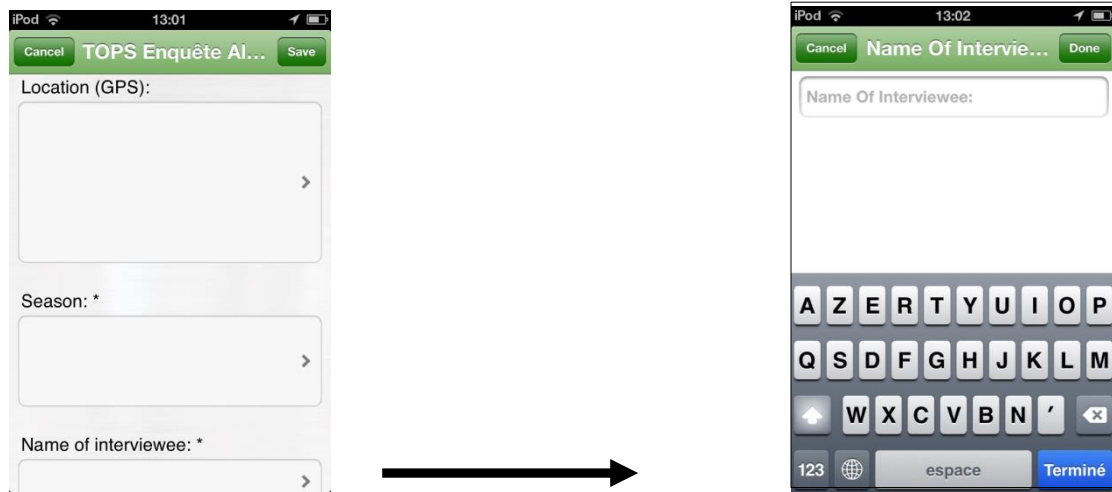
Step 11. Age of interviewee. Select the age by going up or down the list. Then select *Done* to confirm and move to the next step.
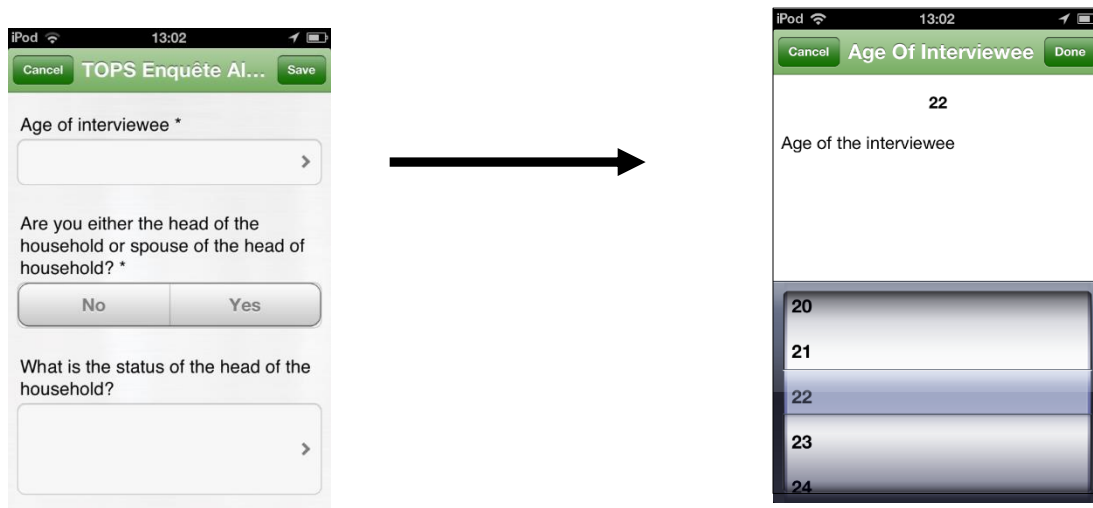
Step 12. **Head of the household or spouse.** *Select one: Yes, No.* Select *Yes* if the interviewee is either the head or the spouse of the head. Otherwise select *No.* There is no separate answer screen for this question. It is not necessary to select *Done*.
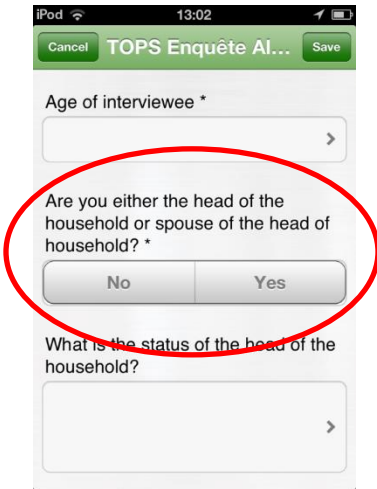
Step 13. Status of Head of the household. Select all that apply: *Male, Female, Under 18 years old, Married, Unmarried, Divorced, Widowed.* Then select *Done* to confirm and move to the next step.
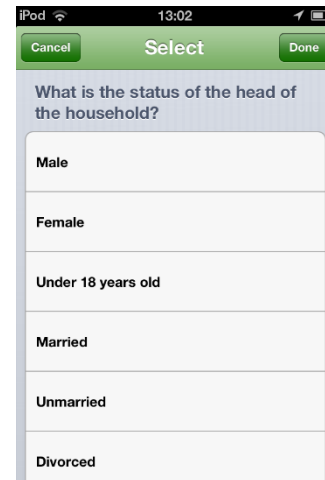
Step 14. How many people live in your household? Select a number from the list. Then select *Done* to confirm and move to the next step.
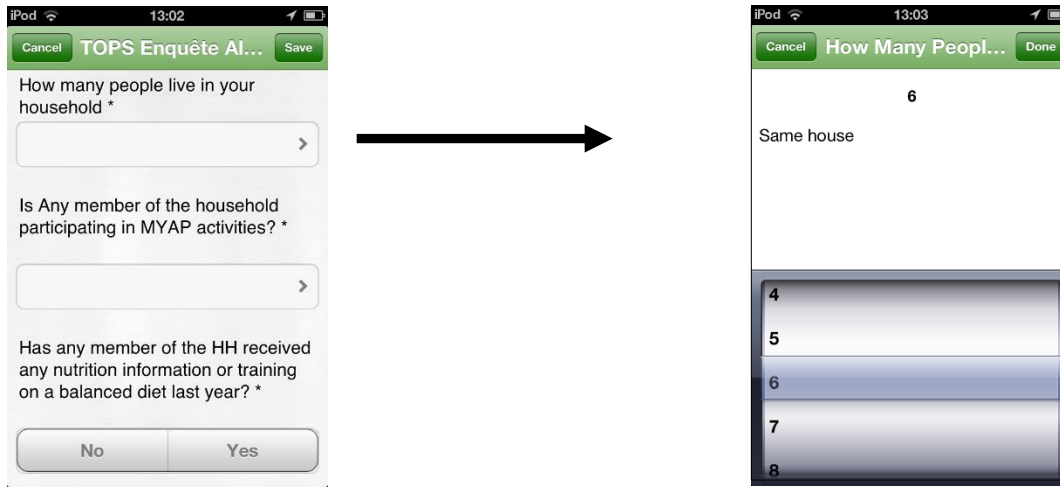
Step 15. Participating in MYAP activities. *Select one: Yes, No, Don't know.* Then select *Done* to confirm and move to the next step.
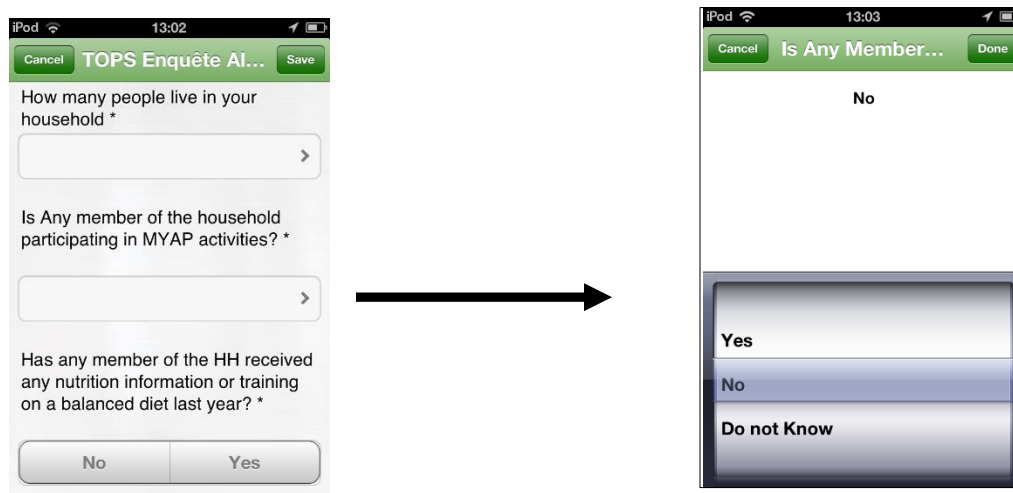
Step 16. Training on how to have a balanced diet in the last year. Select one: *Yes, No.* There is no separate answer screen for this question. It is not necessary to select *Done*.
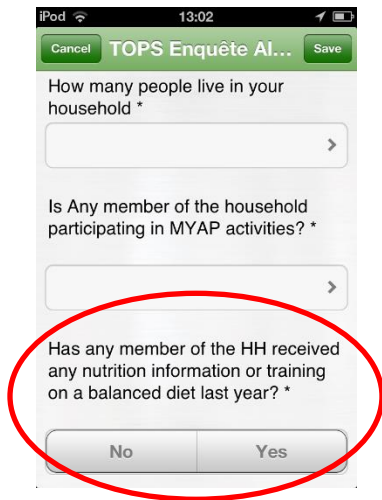

Step 17. If yes, from which source or sources was this information or training received? (This question should only be completed if the answer to the previous question is *Yes*. If the answer to the previous question is *No*, skip to the next question.) Select or type all that apply: *Radio; Other mass media (i.e. television, newspaper, posters); Peers (neighbors, friends, relatives); Community-based nutrition group; Home visit by Community Health Worker; Health facility; MYAP-funded activities; Other (specify).* Then select *Done* to confirm and move to the next step.
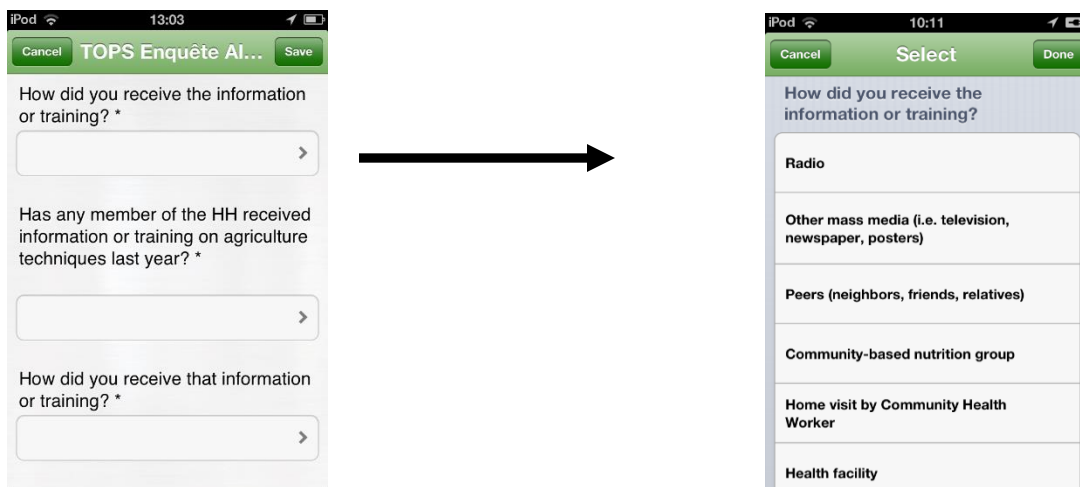
Step 18. Has any member of this household received information or training on agriculture techniques in the last year? Select one: *Yes, No, Don't know.* Then select *Done* to confirm and move to the next step.
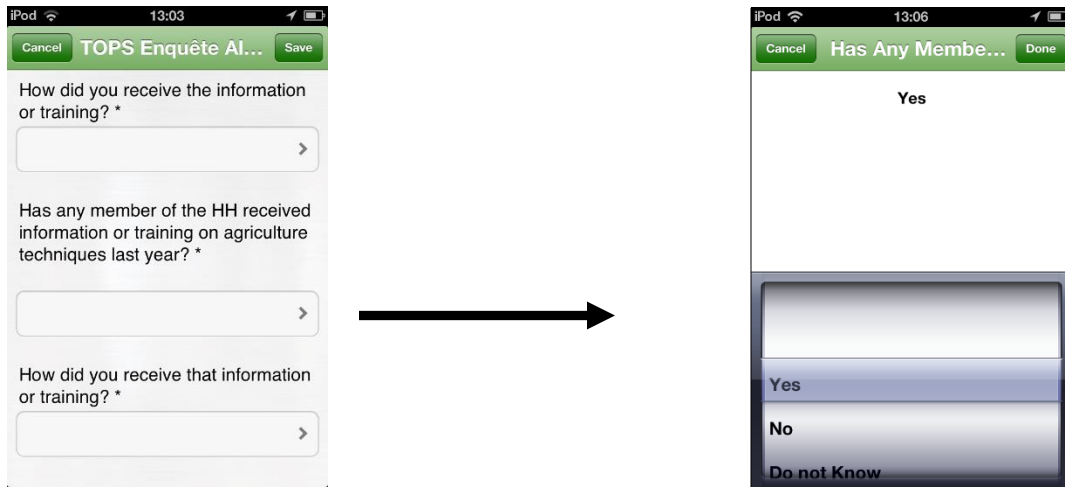
Step 19. If yes, from which source or sources was this information or training received? (This question should only be completed if the answer to the previous question is *Yes*. If the answer to the previous question is *No*, skip to the next question.) Select or type all that apply: *Radio; Other mass media (i.e. television, newspaper, posters); Peers (neighbors, friends, relatives); Community-based farming group (i.e. Farmer Field School); Farm or home visit by agriculture extension agent; MYAP-funded activities; Other (specify).*
Then select *Done* to confirm and move to the next step.
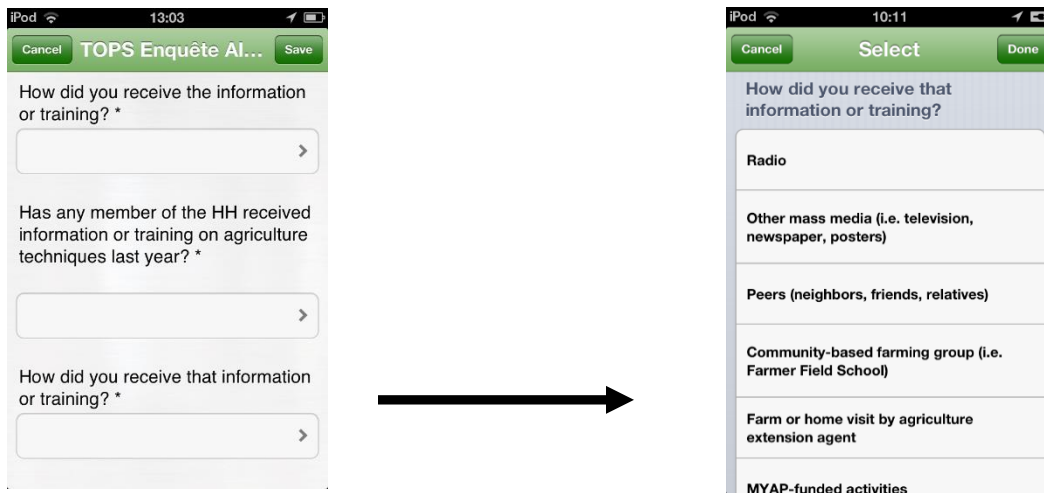
Step 20. How much input do you have in household (HH) decisions about what foods to buy for home consumption? (This is a LINKED QUESTION to step 12 seeking the head of the household or their spouse. If step 12 is *Yes*, ask this question. If step 12 is *No*, skip this question.) Select one: *No input*, *Input into some decisions*, *Input into all decisions.* Then select *Done* to confirm and move to the next step.
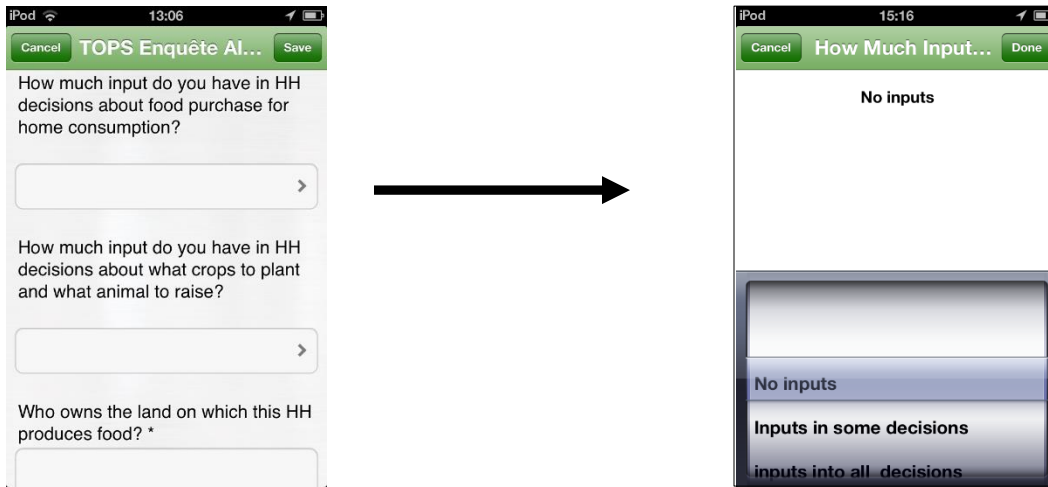

Step 21. How much input do you have in household decisions about which food crops to cultivate and livestock to raise? (This is a LINKED QUESTION to step 12 seeking the head of the household or their spouse. If step 12 is *Yes*, complete this step 21. If step 12 is No, skip this this step 21.) Select one: *No input*, *Input into some decisions*, *Input into all decisions.* Then select *Done* to confirm and move to the next step.
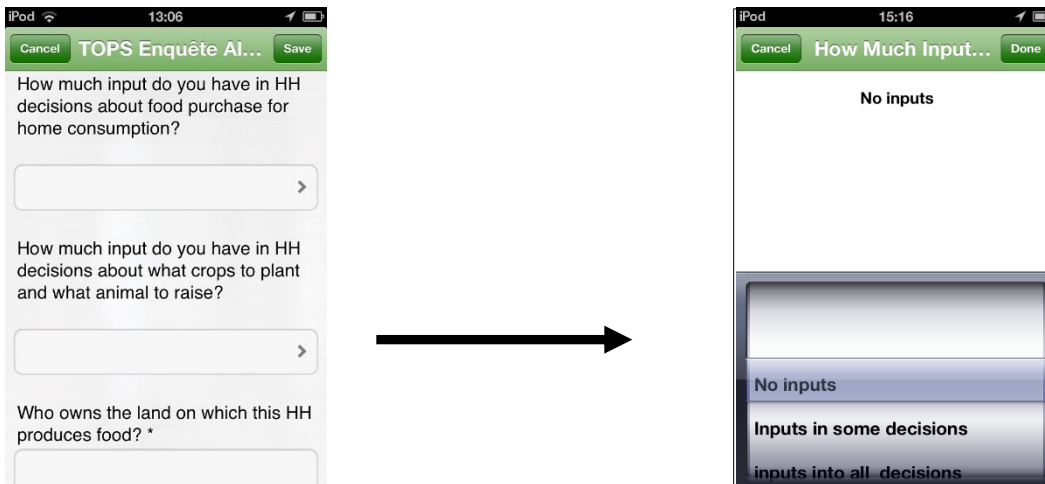
Step 22. Who owns the land on which this household produces food? Select all that apply: *Wife/woman, husband/man, husband and wife, family of the wife, family of the husband, borrowed, rented, not applicable, don't know, other (specify).* Then select *Done* to confirm and move to the next step.

Step 23a. What did you and your family members eat at home over 24 hours yesterday? Click on the country. For example, if you are surveying in Burundi, click on *Burundi food list*. Then scroll up or down to find the food items available in Burundi. Select a food item said by the interviewee and click on done to confirm. If the respondent's food item is not included in the answer list, select *Other.*
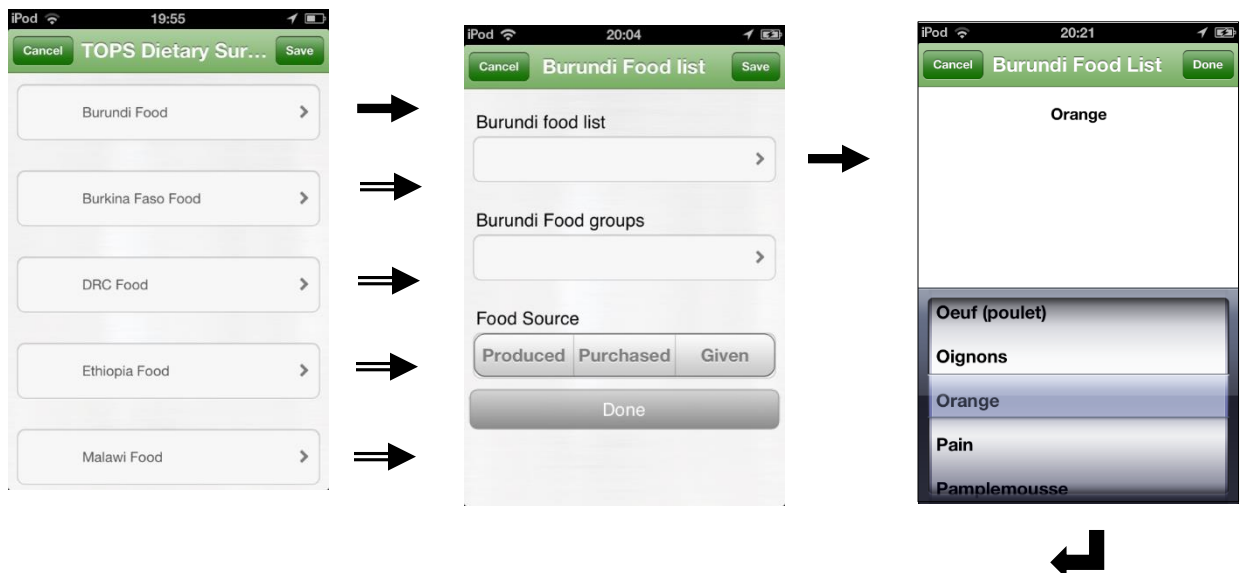
Step 23b. The corresponding food group will be selected automatically. (No action required.)

Step 23c. Food Source. Select one: *Produced, Purchased, Given*. Then select *Done* to confirm and return to the "food list" screen.
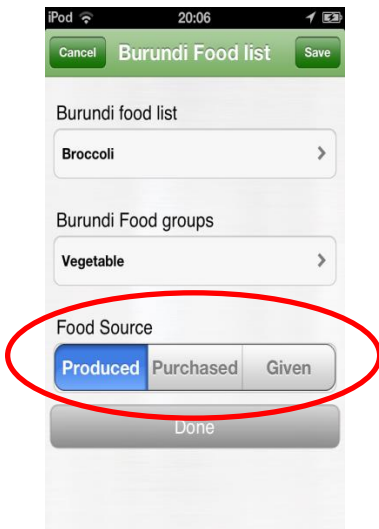
23d: Click on *Burundi food list* to go back to the food list to enter all the food cited following the same procedure. Repeat steps 23a, 23b and 23c to continue with each food item mentioned by respondents. Then select *Done* to confirm and move to the next step. The same process will be done by a surveyor from Burkina Faso, DRC, Ethiopia or Malawi for a specific country food list.

Step 24. If you chose "other" in the *Food list* question above, specify the food here. Type the food item in the space provided. Then select *Done* to confirm and move to the next step. Skip step 24 if you did not choose "other" in step 23.
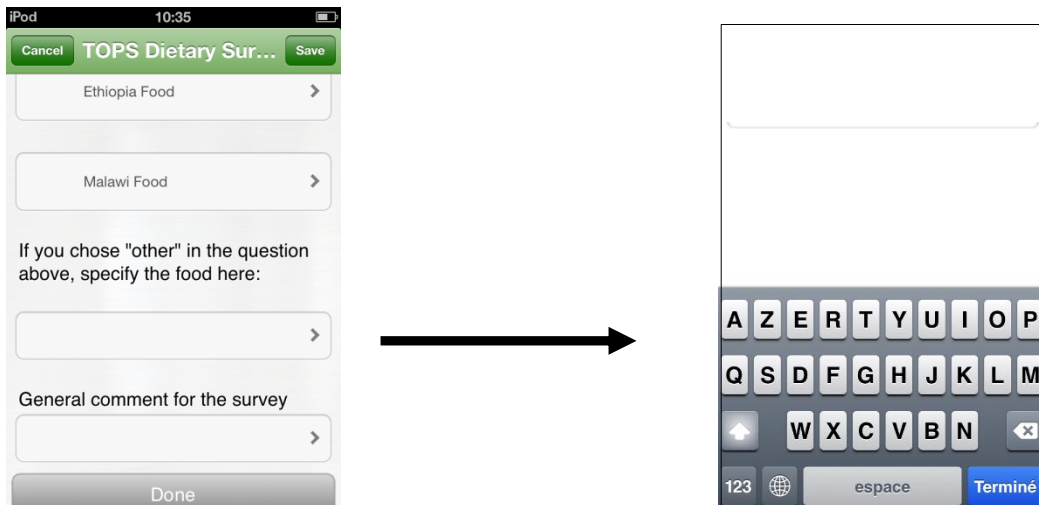
Step 25. General comment for the survey. If you have any comment to make about the interview, type comments here. Skip step 25 if you do not have additional comments to make. Then select *Done* to confirm and move to the next step.
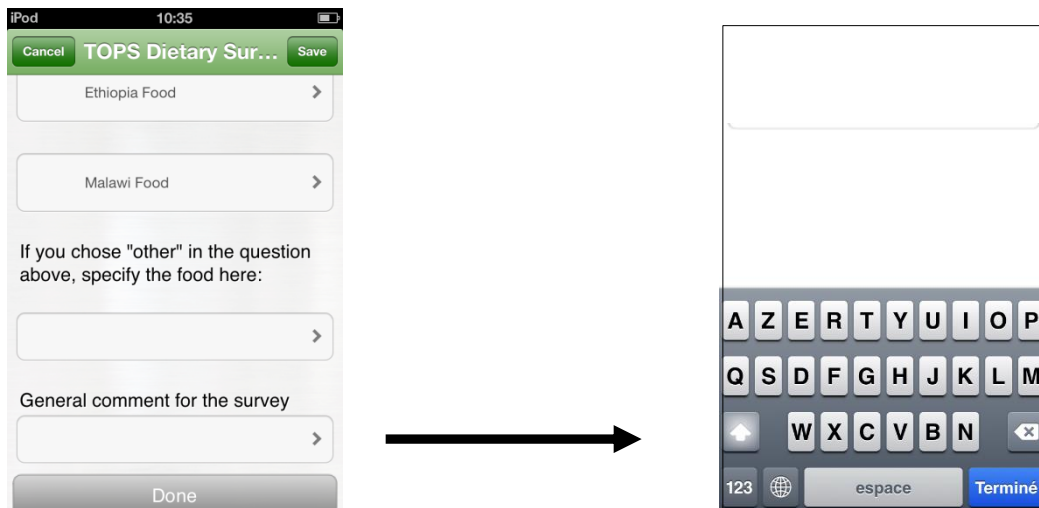
Step 26. Finish the survey. When all questions have been answered, select *Done* at the bottom of the questionnaire to finish the survey. The questionnaire is then completed and no revisions to the interview answers are possible.
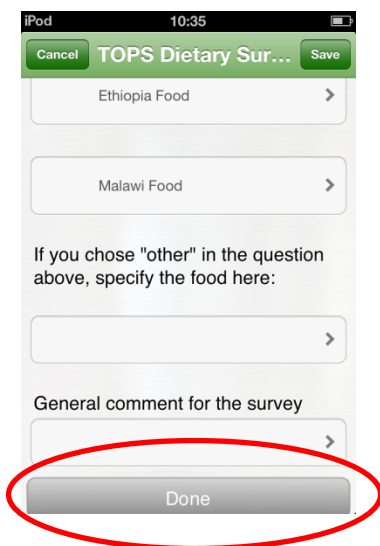
After the interview is completed, the DDDS tool will display a list of completed interviews.

Syncing Data

With iFormBuilder, DDDS data can be stored on the device (i.e. iPod, iPad, Android phone, or other device running iFormBuilder) until a network connection is available.

Once data collectors have a reliable connection, the device can be synced with the iFormBuilder website by first turning on the device's internet connection. Then use the iFormBuilder application on your device to sync data with the iFormBuilder website.

Following syncing, click on the "Excel" icon on the iFormBuilder website to export data into Microsoft Excel for analysis.

Data Analysis

With all survey data downloaded from iFormBuilder into Microsoft Excel, users have flexibility in how they can analyze and work with the data according to the survey objectives set out by management. However, the experience of CRS Monitoring and Evaluation departments indicates that a statistical software such as SPSS is best suited for analysis of DDDS data. The

actual steps taken for analysis will depend upon the survey objectives set out by program managers.

Technical Information on iForm

Compatible devices:
iFORM IOS: Requires iOS 5.0 or later. Compatible with iPhone, iPad, and iPod touch. This app is optimized for iPhone 5.
Android: Nexus 7, Samsung Galaxy Tab, Samsung Galaxy 3, Kindle Fire 1
Languages: English, Arabic, Bokmål, Norwegian, Chinese, Croatian, Czech, Danish, Dutch, Finnish, French, German, Italian, Malay, Norwegian Nynorsk, Polish, Portuguese, Russian, Serbian, Simplified Chinese, Slovak, Spanish, Swedish, Traditional Chinese

Use of iFormBuilder offers flexibility, security, and multiple data views and data feeds. Network coverage is not required to collect data. All data collected is stored locally and can be uploaded to the server when network connectivity is available. iFormBuilder's Zerion Mobile Behaviors uses Javascript commands for adding skip logic, conditional elements and interconnected forms and subforms.

For support with iForm products see:
https://iformbuilder.zendesk.com/home
https://iformbuilder.zendesk.com/forums
https://getsatisfaction.com/iformbuilder

For further information on iForm see:
http://www.iformbuilder.com/

Future Development of DDDS

During testing of the DDDS tool, data collectors observed potential for the survey to expand beyond feeding into standard monitoring and evaluation datasets to directly empower interviewee households with information about their consumption habits using customized nutrition advice. In future versions, the tool may be adapted for use by community health workers and nutrition counselors to improve dietary diversity through real-time feedback. In addition to its current use to provide data for decision making, DDDS can be expanded to support personnel in service delivery to beneficiaries and to support health outcomes.

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