THE FOOD ENVIRONMENT TOOLBOX

Tools to measure natural and built food environments in low- and middle-income countries

September 6th, 2024

V1

Community Food Environment Mapping

Mobile vendor census

FOOD ENVIRONMENT TOOLBOX

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Brief Overview

Overview of Community Food Environment Mapping Tools: There are three different tools that are included as part of the community food environment mapping tools: 1) food outlet census; 2) **mobile vendor census**; and 3) roadside food and beverage promotion. Depending on your study needs, it may make sense to use all three tools to allow for a comprehensive depiction of the community food environment.

The Community Food Environment Mapping – Mobile Vendor Census tool is designed to characterize the mobile vendor types in a specified area of the community, as well as the foods they sell and promote, using an observational checklist.

Instructions for the research team

Defining Community

The 'community' food environment can be defined in many ways. The assessment is designed to be used after identifying a community's boundaries using the Participatory Mapping focus group discussion guide included in the Food Environment Toolbox to inform how the target population defines their community. This can also be used to inform the sampling approach.

This document provides an overview of the assessment and the observational checklist in paper form. We also include additional instructions for the researcher team to guide the implementation of the assessment as well as a manual of operations for the enumerator in the accompanying Community Food Environment Mapping – Mobile Vendor Census Supplemental Instructions file. The tool has been adapted to be administered with tablets and mobile devices using the available electronic data collection programming file. The programming file formatting may be adapted by researchers to their needs based on which assessment sections, vendor types, and food groups they would like to include in the assessment.

The **objectives** of this tool are to: assess the types of mobile vendors that consumers have access to, and the availability and quality of food sold and promoted within them.

The **findings** from this tool can be used to describe the quality of foods that people have access to through mobile vendors. It may be used to complement findings from completing the Community Food Environment Mapping – Food Outlet Census tool.

This assessment is administered by an enumerator and includes: 1) identifying each mobile vendor at a key location within the community; and 2) completing the checklist for each vendor.

There are two sections to this assessment including:

- Section 1. Mobile vendor properties and food availability

- Section 2. (Optional) Food and beverage promotion at mobile vendor

Section 2, food and beverage promotion at mobile vendor, is optional and recommended to collect information on the types of promotions that are in a community and where they are seen, including non-commercial health promotions.

Modifications to assessment: The observational assessment may be tailored by the research team to elicit specific information relevant to their research question as well as according to the specific context the tool is being used in. In Section 1, mobile vendor properties, the list of mobile vendor types may be adjusted by the research team to only include those of interest, such as perishable food vendors; additionally, the list of food groups may be altered to only include those of interest, such as fresh foods. It is important to note that these changes will alter the scope of the tool.

Instructions for enumerators

Complete the assessment for each of the mobile vendors in the sampling zone. The research team may provide you with small incentives to thank the mobile vendors for stopping and interacting with you or for purchasing foods.

You will likely need to make slight adjustments to the vendor types based on the local context. In some cases, local names may be used to describe the same mobile vendor types described in the assessment.

Section 1. Mobile vendor properties and food availability

This section is designed to obtain very basic information on the mobile vendor type, as well as information about what foods that mobile vendor is selling and their quality.

Section 1. Mobile vendor properties and food availability		
Question	**Response options**	**Tablet programming notes**
1. Select the gender of mobile vendor	1. Male 2. Female 3. Other gender 4. Multiple vendors that are different genders 5. I do not know	Only select one.
2. Mobile vendor description	1. Non-motorized (on land) 2. Motorized (on land) 3. Non-motorized (Boat) 4. Motorized (Boat)	Only select one.
3. Select the category of mobile vendor	1. Food service (i.e., prepared foods) vendor (If selected, ask question 4 then SKIP TO question 8) 2. Grocery vendor (If selected, ask question 5 then SKIP TO question 8) 3. Specialty vendor (If selected, ask question 6 then SKIP TO question 8) 4. Wholesaler (If selected, ask question 7 then SKIP TO question 8) 5. Other (please specify) (If selected, SKIP TO question 8)	Only select one. The specific mobile vendor types in this question will be displayed for the food outlet category selected in the following questions.
4. Select the specific type of food service vendor	1. Street food vendor 2. Café or coffee vendor	Only select one. Only display if 1 (food service) is selected in question 3.
5. Select the specific type of grocery vendor	1. Small mobile vendor selling non-perishable with/without non-perishable foods 2. Large mobile vendor selling non-perishable with/without non-perishable foods	Only select one. Only display if 2 (grocery retailer) is selected in question 3.
6. Select the specific type of specialty vendor	1. Baked goods vendor 2. Meat, fish/seafood, and/or egg vendor 3. Vegetable vendor 4. Fruit vendor 5. Fruit and vegetable vendor 6. Milk vendor 7. Herb and spice vendor 8. Whole dried foods (e.g., cereals, pulses, etc.) vendor 9. Edible oils/fats vendor	Only select one Only display if 3 (specialty shop or vendor) is selected in question 3.

	10. Sweets vendor 11. Packaged salty snacks and/or instant noodles vendor 12. Sugar-sweetened beverage vendor 13. Coffee or tea vendor (does not include prepared coffee or tea)	
7. Select the specific type of wholesaler	1. Mixed goods wholesaler (e.g., grocery) 2. Specialty wholesaler	Only select one. Only display if 4 (wholesaler) is selected in question 3.
8. Photo	Take a photo of mobile vendor	This is optional. Allow multiple photo uploads.
9. Which foods are being sold by the mobile vendor?	1. Starchy staples 2. Legumes/pulses 3. Nuts and seeds 4. Unsweetened milk, yogurt, and fresh cheese 5. Eggs 6. Red meat 7. Poultry, game meat, and insects 8. Fish and seafood 9. Processed meat 10. Vitamin A-rich vegetables 11. Dark green leafy vegetables 12. Other vegetables 13. Vitamin A-rich fruits 14. Other fruits 15. Fats and oils (If selected, ask question 10) 16. Sweets (If selected, ask question 11) 17. Sweet drinks (If selected, ask question 12) 18. Ultra-processed salty snacks (If selected, ask question 13) 19. Ultra-processed ready-to-eat/heat foods 20. Prepared foods by street vendors and restaurants (If selected, ask question 14) 21. Salt, MSG, and salty sauces 22. Simple sugars 23. Fast food 24. Bottled water 25. Alcohol 26. Fortified mixes 27. Spices, tea, coffee, and condiments 28. Other (please specify)	Check all food groups that apply.
10. What type(s) of 'fats and oils?'	1. Animal fats and oils 2. Plant fats and oils 3. Hydrogenated fats and flavored spreads	Check all that apply. Only display if 15 (fats and oils) is chosen in question 9.
11. What type(s) of 'sweets?'	1. Grain-based 2. Other sweets 3. Ice cream	Check all that apply. Only display if 16 (sweets) is selected in question 9.

Question	Response options	Tablet programming notes
12. What type(s) of 'sweet drinks?'	1. Sweet tea/coffee/cocoa/milk-based drinks 2. Fruit juice, smoothies, and other fruit-based sweet drinks 3. Sodas, energy drinks, sports drinks, etc.	Check all that apply. Only display if 17 (sweet drinks) is selected in question 9.
13. What type(s) of 'prepared foods by street vendors and restaurants?'	1. Deep fried 2. Mixed-dishes, soups, and meals 3. Prepared salad and other fruit- or vegetable-based dishes	Check all that apply. Only display if 15 (prepared foods by street vendors and restaurants) is selected in question 9.
14. Indicate in which form the majority of foods are sold by the mobile vendor	1. Raw/fresh 2. Boiled or steamed 3. Fermented or pickled 4. Baked or grilled 5. Smoked 6. Stir-fried 7. Shallow/pan-fried 8. Deep-fried (prepared) 9. Dried or canned 10. Packaged 11. Other (e.g., poaching, combination of methods like roasting and simmering, boiling and deep frying, etc.) (please specify)	Only select one.
15. How much of the food sold is damaged (broken or cracked/blemished/squashed/torn), spoiled, or has insects on them?	1. All 2. Nearly all 3. Some 4. None	Only select one.

Section 2. Food and beverage promotion at mobile vendor

In this section we want to illicit information on any promotions that are visible at the mobile vendor and for what foods they are for.

Section 2. Food and beverage promotion at mobile vendor		
Question	Response options	Tablet programming notes
16. Are there food or beverage promotions at the mobile vendor?	1. Yes 2. No (If not, SKIP TO end of survey)	If 'no' is selected, skip to the end of the survey.
17. Please indicate which food group(s) you see promotions for	1. Starchy staples 2. Legumes/pulses 3. Nuts and seeds 4. Unsweetened milk, yogurt, and fresh cheese 5. Eggs 6. Red meat 7. Poultry, game meat, and insects 8. Fish and seafood 9. Processed meat 10. Vitamin A-rich vegetables	Check all that apply.

	11. Dark green leafy vegetables 12. Other vegetables 13. Vitamin A-rich fruits 14. Other fruits 15. Fats and oils 16. Sweets 17. Sweet drinks 18. Ultra-processed salty snacks 19. Ultra-processed ready-to-eat/heat foods 20. Prepared foods by street vendors and restaurants 21. Salt, MSG, and salty sauces 22. Simple sugars 23. Fast food 24. Bottled water 25. Alcohol 26. Fortified mixes 27. Spices, tea, coffee, and condiments 28. Other (please specify)	
18. Select the promotion type seen or heard at the mobile vendor for [food group]	1. On mobile vendor vehicle 2. On mobile vendor window 3. Radio or verbal advertisement 4. On umbrella 5. On cooler, fridge, or other branded materials 6. Posters/pamphlets/leaflets 7. Promotion through attractive display 8. On vendor cart 9. Free food samples 10. Other	Check all that apply. Ask for every food group chosen.
19. Select the promotion categories seen or heard for [food group]	1. Price promotion 2. Promotional characters (attracting children) 3. Quantity discounts 4. Game/sweepstakes/prize promotion 5. Combo offers 6. Food delivery app promotion 7. Non-commercial/government promotion of 'healthy' food/beverage/diet 8. Commercial promotion of 'healthy' food/beverage/diet	Check all that apply. Ask for every food group chosen.
20. Please rate the visibility/audibility of [food group] promotions	1. Not clearly visible (faded or covered), readable, or audible 2. Partially visible and somewhat readable or audible 3. Clearly visible (not faded or covered), readable, or audible 4. A mix of visible/audible and non-visible/audible promotions	Only select one per food group. Ask for every food group chosen.
21. How many [food group] promotions are targeting children?	1. All 2. Nearly all 3. Some 4. None	Only select one per food group. Ask for every food group chosen.

Question	Response options	Tablet programming notes
22. How many [food group] promotions do you see in total?		Ask for every food group chosen.

Conclusion

Conclusion. Photos and comments (OPTIONAL)		
Question	**Response options**	**Tablet programming notes**
23. Attach any relevant photos of any aspects of this assessment that you are unsure of how to classify (optional).		Allow multiple photo uploads. Allow write-in, text response caption. Optional