

Food purchasing behavior in Rajshahi, Bangladesh:

Shopping practices, food perceptions, and aspirations

Data Note 24

December 2023

ABOUT THIS DATA NOTE | The

Transforming Agrifood Systems in South Asia (TAFSSA) district agrifood systems assessment aims to provide a reliable, accessible, and integrated evidence base that links farm production, market access, dietary patterns, climate risk responses, and natural resource management with gender as a cross-cutting issue in rural areas of Bangladesh, India, and Nepal. It is designed to be a district-level multiyear assessment. Using data collected in February-March 2023, this data note describes who is shopping for food in households, frequency, place of purchase, reasons for preferences for places of purchase, and perceptions about food. This is one of a set of data notes that together provide a holistic picture of the agrifood system on the themes of climate, gender, production, markets, and diets in the district.

Figure 1. District location in Bangladesh

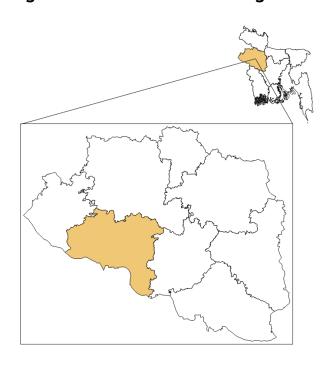


Figure 2. Highlights from this data note



of shoppers in Rajshahi are males



~29%of shoppers
buy unhealthy
foods



68% of shoppers buy food items from haats



~75% of shoppers prefer haats because of distance and convenience





7%
of shoppers
perceive
healthy foods
to be unsafe to
eat













OVERVIEW OF CONTENTS

TAFSSA's district agrifood systems assessment aimed to interview three members from each household: an adult female (aged 20+ years), an adult male (aged 20+ years), and an adolescent (aged 10-19 years). Details on the household and respondent sampling strategy are provided at the end of this data note.

This data note begins by presenting the background characteristics of households, focusing on the female and male adults responsible for purchasing food for their households. It then examines the frequency of food purchases of seven common food items (dal, eggs, fish, green leafy vegetables, bananas, biscuits, and deep-fried foods) in the past 12 months and the cost of the most recent purchase. Furthermore, the data note provides insights into the top three sources of food acquisition, the distance to these sources, and the reasons for preferring them.

Finally, this data note delves into what drives respondents' purchasing decisions and their aspirations regarding food purchases. Definitions of different market types discussed in the data note and a list of the figures and tables are provided below.

MARKET DEFINITIONS

Haat: A market where food products are sold in bulk directly by manufacturers, farmers, or artisans at a fair price, usually in a permanent or semi-permanent structure.

Weekly outdoor market: A multi-vendor market held on a specific day of the week, without a permanent infrastructure, where traders set up shops on the market day.

Mobile vendors: Any retail shop without a fixed location, selling product(s) (single or multiple) using a push-cart or motor vehicle.

Retail outlet: Any type of single vendor shops at a fixed location selling groceries, vegetables, fruits, or animal-source foods such as meat, fish, and dairy.

List of figures

- Table 1. Household and individual characteristics of food shoppers
- Table 2. Time of and amount spent for the most recent food purchase
- Figure 1. District location
- Figure 2. Highlights from this data note
- Figure 3. Frequency of purchase of food items in the 12 months
- Figure 4. Distance to most recent source of food purchase
- Figure 5. Sources of most recent food purchases
- Figure 6. Reasons for preferring a source of purchase
- Figure 7. Perceptions of food shoppers (% who agree with each statement)
- Figure 8. Changes to food purchase behavior if more disposable income or money were available

WHO IS PURCHASING FOOD?

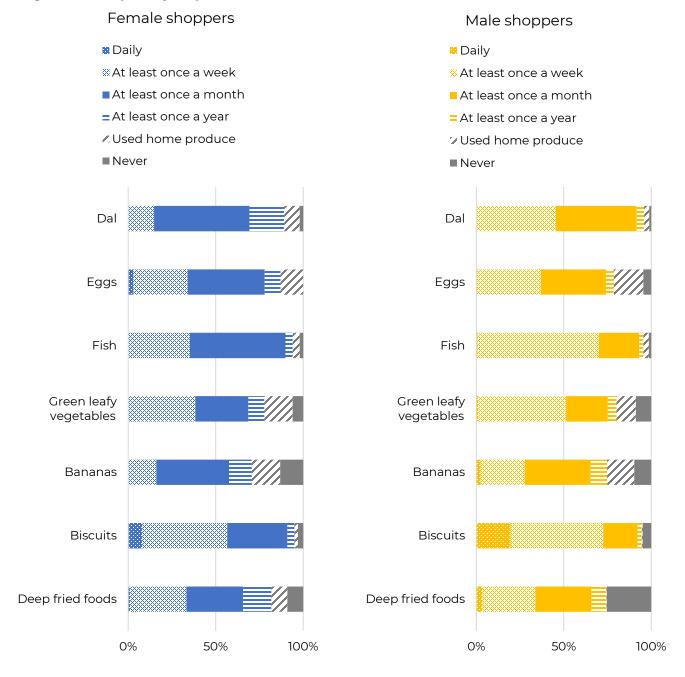
Table 1. Household and individual characteristics

Household characteristics		Individual characteristics				
Number	1000	Number of shoppers = 520				
Female-headed, %	8		Female shoppers (N=80)	Male shoppers (N=440)		
Education of head, years	5	Average age (years)	38	44		
Average household size, members	4	Relation to household	30	' '		
Involved in agriculture, %	91	head				
Has improved toilet, %	98	Household head, %	93	100		
Drinking water source	30	Spouse, %	6	0		
Dimining Water Source		Other relation, %	1	0		
Tube well or borehole, %	89	Education completed				
Piped to neighbour, %	4	(years)	5	5		
Main source of income		Employment status				
Crop cultivation, %	41	Employed, %	31	99		
Business, %	25	Primary occupation				
Wages, %	22	Farming, %	15	46		
Type of fuel used for cooking		Unpaid household work, %	70	0		
Wood, %	88	Own business/ self employed, %	6	25		
Straw/grass, %	78	Casual non-farm labour (paid), %	1	13		
Dung cake, %	45	Salaried employment, %	5	6		

- ✓ More males shop for food than females.
- ✓ Most shoppers were household heads and on average had five years of education.
- ✓ Nearly all male shoppers were employed whereas less than a third of female shoppers were employed.
- ✓ Male shoppers were engaged in farming (46%) or were self-employed (25%).

WHAT FOOD IS BEING PURCHASED, AND HOW OFTEN?

Figure 3. Frequency of purchase of food items in the last 12 months



- ✓ More male than female shoppers purchased fish and eggs at least once a week.
- Frequency of purchase of dal varied between male and female shoppers.
 - More male shoppers purchased dal at least once a week whereas more female shoppers purchased it once a month.
- √ 95% shoppers purchased biscuits.
- ✓ More female (82%) than male shoppers (74%) purchased deep fried foods.

WHAT, WHEN, AND FOR HOW MUCH FOOD WAS PURCHASED?

Table 2. Time of and amount spent for the most recent food purchase















	Dal (N=492)	Eggs (N=414)	Fish (N=495)	Green leafy vegetables (N=417)	Bananas (N=389)	Biscuits (N=492)	Deep fried foods (N=391)
Within past 7 days (%)	56.9	54.4	73.7	62.1	43.2	79.9	55.0
Within the past 30 days (%)	33.3	34.8	21.8	26.6	40.1	17.5	31.5
>30 days ago (%)	9.8	10.9	4.4	11.3	16.7	2.6	13.6

Average quantity bought and amount spent on food items during the most recent purchase

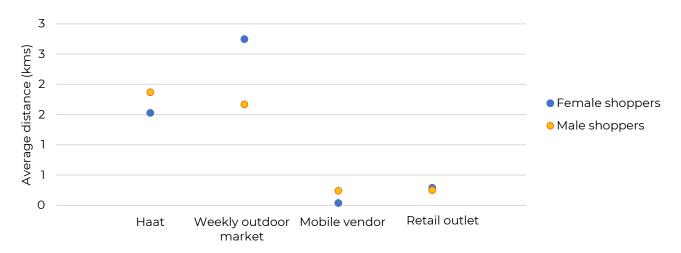
Within past 7	1.1 kg	9 eggs	1.6 kg	1.4 kg	9 bananas	207 gm	184 gm
days (%)	<i>87 BDT</i>	95 BDT	264 BDT	34 BDT	<i>43 BDT</i>	<i>45 BDT</i>	<i>35 BDT</i>
Within the past 30 days (%)	1.5 kg	15 eggs	2.3 kg	1.2 kg	11 bananas	358 gm	212 gm
	131 BDT	153 BDT	373 BDT	26 BDT	49 BDT	69 <i>BDT</i>	40 BDT
>30 days ago	3.9 kg	13 eggs	2.8 kg	1.0 kg	9 bananas	350 gm	178 gm
(%)	270 BDT	126 BDT	442 BDT	22 BDT	<i>43 BDT</i>	62 BDT	34 BDT

Notes: kg: kilogram; gm: gram; BDT: Bangladeshi Taka

- ✓ Healthy foods: More than 70% of shoppers purchased fish and more than 50% purchased dal, eggs and green leafy vegetables within the past 7 days.
 - More money was spent on purchasing fish more than any other food item at any time during the most recent purchase
- ✓ Unhealthy foods: Nearly 80% shoppers purchased biscuits and 55% purchased deep fried foods within the past 7 days.
 - <100 BDT were spent in purchasing biscuits or deep fried foods at any time during the most recent purchase

WHERE IS THE FOOD PURCHASED?

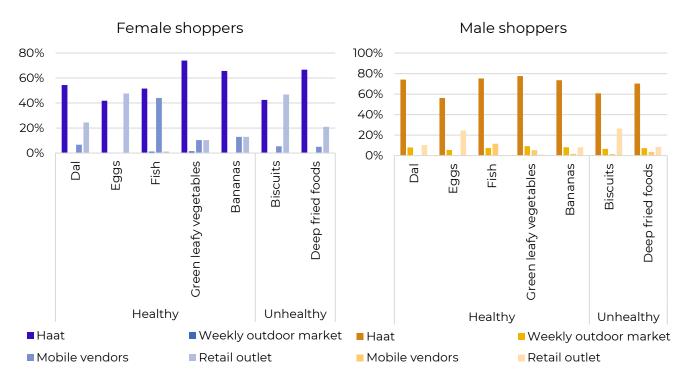
Figure 4. Distance to most recent source of food purchase



FINDINGS

- ✓ Shoppers traveled the farthest to get to weekly outdoor markets.
- ✓ >70% male shoppers purchased most food items from haats.
- ✓ Female shoppers purchased food items from varied sources. >50% purchased dal, fish, green leafy vegetables, and bananas from haats, and >45% purchased eggs and biscuits from retail outlets.

Figure 5. Sources of most recent food purchases*

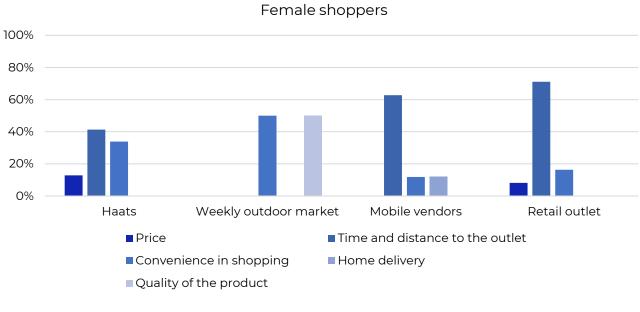


*Note: Based on the top sources accessed by the shoppers

PREFERENCE FOR SOURCES OF FOOD PURCHASES

- 41% female and 38% male shoppers cited time and distance as a reason for preferring haats for food purchase.
- ✓ 50% female shoppers cited convenience in shopping and quality as a reason for preferring weekly outdoor markets..
- ✓ Majority of shoppers preferred purchasing from mobile vendors and retail outlets because of time and distance.

Figure 6. Reasons for preferring a source of purchase*





^{*}Note: Based on the top three reasons mentioned by the shoppers

WHY DO THEY PURCHASE DIFFERENT FOODS?

Figure 7. Perceptions of food shoppers (% who agree with each statement)

100%		8					8	7
0%		Dal	Eggs	Fish	Green leafy vegetables	Banana	Biscuits	Deep fried foods
Know of shop that sells	Female	90	95	83	78	79	96	68
	Male	100	100	98	98	100	100	97
Safe to eat		95	96	99	99	98	61	18
	Male	99	98	97	98	97	77	14
Easy to acquire	Female	91	93	80	90	80	84	66
	Male	93	95	87	91	94	95	81
Affordable		80	70	58	94	75	76	65
	Male	73	73	62	95	79	81	66
Family enjoys	Female	100	99	99	99	95	84	70
	Male	96	98	98	98	99	89	57

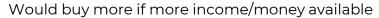
- ✓ Most male shoppers knew of the shops selling food items.
- ✓ Most shoppers felt most of the foods were easy to acquire.
- ✓ Most shoppers perceived deep fried foods to be unsafe to eat.
- ✓ Most shoppers perceived both healthy and unhealthy food items to be affordable, except for fish.
- ✓ Most shoppers perceived their families to be enjoying both healthy and unhealthy foods.

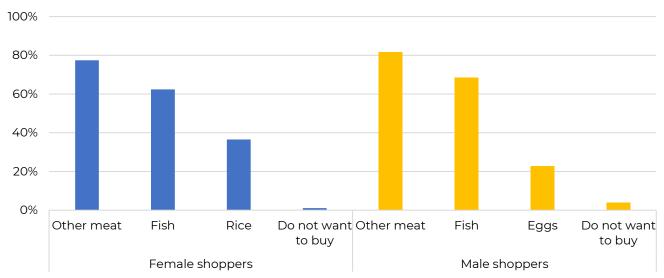
FOOD ASPIRATIONS

Figure 8. Changes to food purchase behavior *if* more disposable income or money were available*

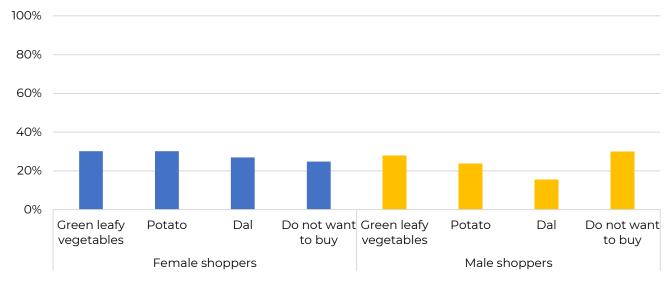
FINDINGS

- ✓ Majority of shoppers aspired to buy more meat and fish.
- ✓ Between 25-30% shoppers intended to buy less of green leafy vegetables and potatoes, if more income became available.
- ✓ 25% female shoppers and 30% male shoppers did not intend to reduce purchase of any food if more income became available.





Would buy less if more income/money available



*Note: Based on the top three food items mentioned by the shoppers

KEY TAKEAWAYS

Gender-based purchase patterns

• More males than females shopped for food.

What and how often?

- Healthy foods: More male shoppers purchased healthy foods frequently.
- Unhealthy foods: More male compared to female shoppers bought biscuits daily. A quarter of male shoppers but only 9% of female shoppers *never* purchased deep fried foods.

Where and why?

- More than 70% male and >50% female shoppers most recently purchased food items from haats.
- Haats, mobile vendors, and retail outlets were preferred sources of food purchase due to time and distance.
- Weekly outdoor markets were the farthest compared to other types of markets.
- Both female and male shoppers had similar perceptions about safety, affordability, and enjoyment of most food items.
 - ✓ Most shoppers perceived healthy food items, except fish, to be affordable.
 - ✓ Unhealthy foods were perceived to be enjoyable to eat, easy to acquire, and affordable, but not safe to eat.

What would be done with more access to income/money?

- Shoppers aspired to purchase more of meat and fish, and less of green leafy vegetables and potatoes, if more money became accessible.
- Less than a third of shoppers did not intend to reduce purchasing of any food items.

KEY QUESTIONS FOR ACTION

- 1. What are the reasons for high purchasing patterns of biscuits and deep-fried foods?
- 2. Can haats, which are the most accessed markets, increase the availability and affordability of healthy food items?
- 3. What additional information is needed to facilitate actions to improve purchasing behaviors in the district?

SURVEY METHODOLOGY

Village and household sampling

We selected 25 villages in the district with a probability proportional to the number of households that reside in each village. Within each village, we conducted a household listing to identify eligible households, that is those with adolescents (10-19 years old). From the households with adolescents, we randomly invited 20 households to participate in the survey. If a household refused, we replaced that household with another randomly selected eligible household, to retain a total of 1,000 households in the district. Thus, the findings reported in this data note are representative of rural households from this district that include an adolescent.

Respondent selection

Within households, one adult female aged 20+ years, one adult male aged 20+ years, and one adolescent aged 10-19 years were selected as the respondents for the survey. When multiple adolescents were living in a household, the oldest adolescent was selected. In some households, an adult male was not available (often due to migration for work). In such households, the female was the only adult respondent (See Table 1 for respondent sample sizes). At the beginning of the interview, the adult in the household primarily involved in agriculture (either male or female) and the adult primarily responsible for food purchasing (either male or female) were identified as the primary respondents.



Photo credit: Abdul Momin



AUTHORS

Ishika Gupta, Associate Scientist, IRRI
Rasmi Avula, Research Fellow, IFPRI
Kaosar Afsana, Professor, BRAC University
Morgan Boncyk, PhD Student, University of South
Carolina

Sejla Isanovic, PhD Student, University of South Carolina Joseph Vecci, Assistant Professor, Gothenburg University Asfand Yar Khan, PhD Student, University of Turku Prakashan Chellattan Veettil, Senior Scientist I, IRRI

SUGGESTED CITATION

Gupta I, Avula R, Afsana K, Boncyk M, Isanovic S, Vecci J, Khan A.Y, Vettil P.C. 2023. Food purchasing behavior in Rajshahi, Bangladesh: *Shopping practices, food perceptions, and aspirations*. TAFSSA Data Note 24. New Delhi, India: Transforming Agrifood Systems in South Asia (TAFSSA).

FUNDING ACKNOWLEDGEMENT

We would like to thank all funders who supported this research through their contributions to the CGIAR Trust Fund: https://www.cgiar.org/funders/

To learn more, contact: pc.veettil@irri.org

To learn more about TAFSSA, contact: t.krupnik@cgiar.org; p.menon@cgiar.org

ABOUT TAFSSA

TAFSSA (*Transforming Agrifood Systems in South Asia*) is a CGIAR Regional Integrated Initiative that supports actions improving equitable access to sustainable healthy diets, that boosts farmers' livelihoods and resilience, and that conserves land, air, and water resources in a climate crisis.

ABOUT CGIAR

CGIAR is a global research partnership for a food secure future. Visit https://www.cgiar.org/research/cgiar-portfolio to learn more about the initiatives in the CGIAR research portfolio

DISCLAIMER

This publication has been prepared by the TAFSSA Initiative and has not been peer reviewed. Any opinions stated herein are those of the author(s) and do not necessarily reflect the policies or opinions of initiatives, donor agencies, or partners.

© 2023 CGIAR System Organization. This publication is licensed for use under a Creative Commons Attribution 4.0 International License (CC BY 4.0).