

Food purchasing behavior in Rangpur, Bangladesh:

*Shopping practices, food
perceptions, and aspirations*

Data Note 25

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 multi-year 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

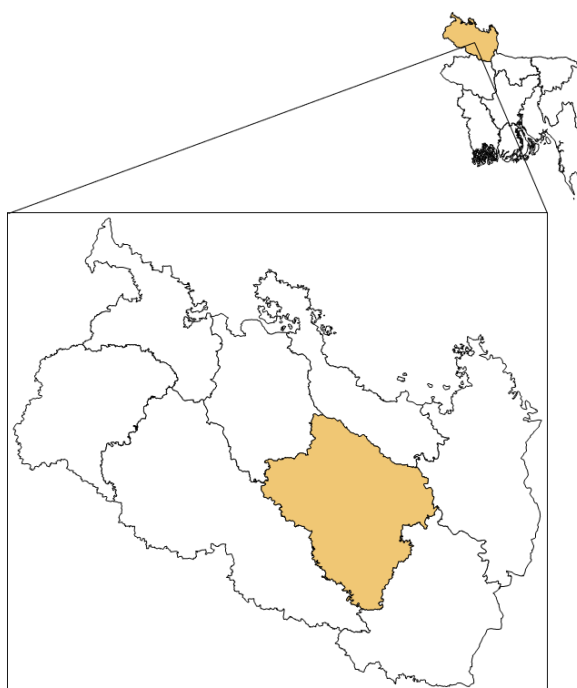


Figure 2. Highlights from this data note



80%
of shoppers in
Rangpur are
males



~28%
of shoppers
buy unhealthy
foods



78%
of shoppers
buy food items
from haats



>70%
of shoppers
prefer haats
because of
distance and
convenience



5%
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

City market: A multi-vendor urban food market held daily in a fixed location where traders and farmers set up shops during the day.

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

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

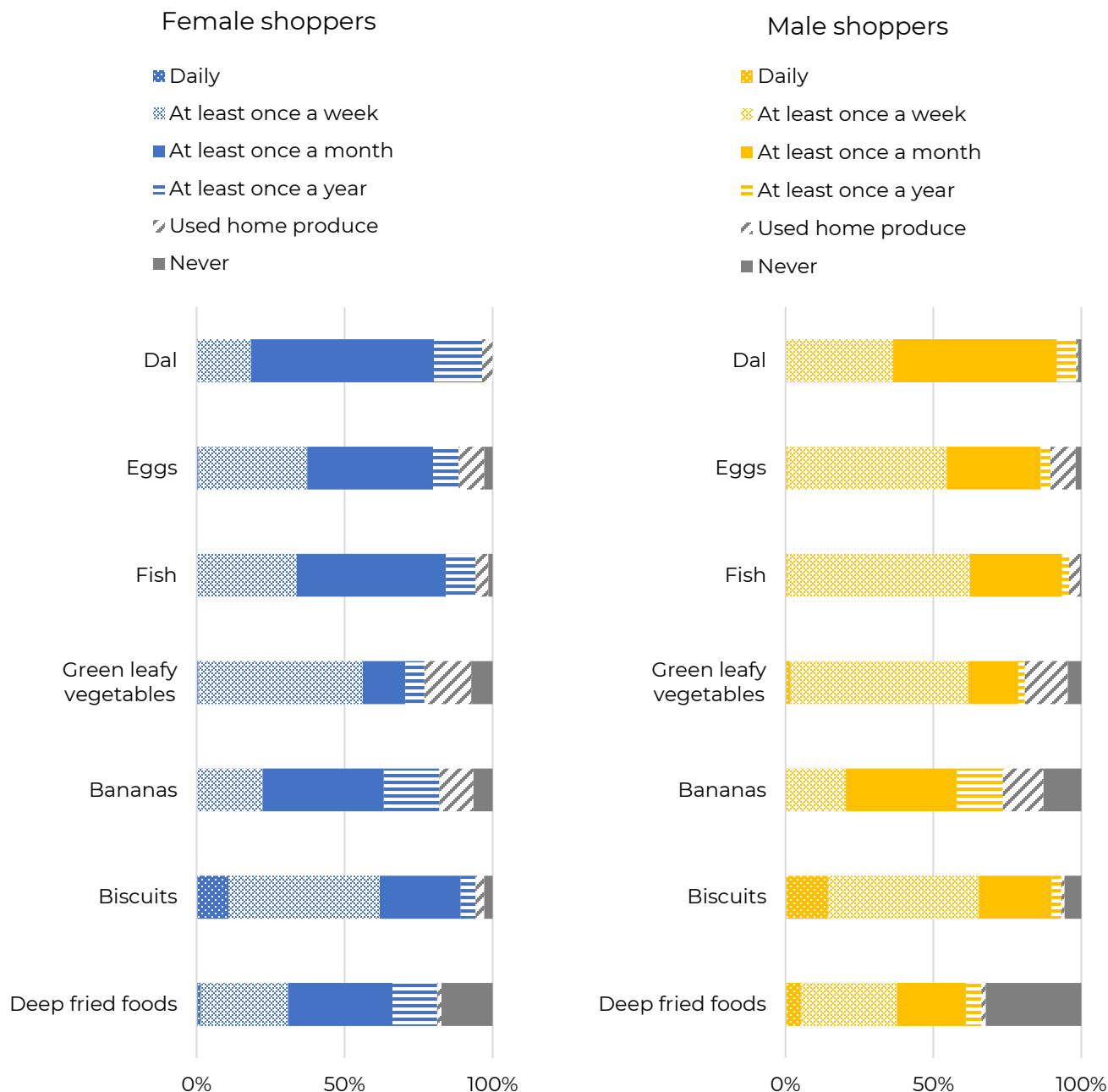
Household characteristics		Individual characteristics		
Number	1000	Number of shoppers = 571		
Female-headed, %	13		Female shoppers (N=113)	Male shoppers (N=458)
Education of head, years	4			
Average household size, members	4	Average age (years)	37	44
Involved in agriculture, %	96	Relation to household head		
Has improved toilet, %	99	Household head, %	98	99
Drinking water source		Spouse, %	1	0
Tubewell or borehole, %	98	Other relation, %	1	1
Piped into dwelling, %	1	Education completed (years)	5	4
Main source of income		Employment status		
Crop cultivation, %	37	Employed, %	44	100
Business, %	26	Primary occupation		
Wages, %	21	Farming, %	21	41
Type of fuel used for cooking		Unpaid household work, %	62	0
Wood, %	93	Own business/ self employed, %	4	31
Straw/grass, %	79	Casual non-farm labour (paid), %	4	12
LPG/natural gas, %	21	Salaried employment, %	3	5

FINDINGS

- ✓ More males shop for food than females.
- ✓ Most shoppers were household heads and had some level of education.
- ✓ Most female shoppers were engaged in unpaid household work.
- ✓ Most male shoppers were engaged in farming or were self-employed.

WHAT FOOD IS BEING PURCHASED, AND HOW OFTEN?

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










FINDINGS

- ✓ Shoppers purchased healthy foods (dal, eggs, fish and green leafy vegetables) at least once a week.
 - More male than female shoppers purchased these foods at least once a week.
- ✓ >75% shoppers frequently purchased biscuits.
- ✓ More female (81%) than male (66%) shoppers 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=560)	Eggs (N=508)	Fish (N=545)	Green leafy vegetables (N=459)	Bananas (N=429)	Biscuits (N=532)	Deep fried foods (N=400)
Within past 7 days (%)	39.5	66.9	66.8	73.0	35.9	75.4	60.0
Within the past 30 days (%)	45.0	26.4	27.7	20.5	39.4	20.1	29.3
>30 days ago (%)	15.5	6.7	5.5	6.5	24.7	4.5	10.8

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

Within past 7 days (%)	0.9 kg 68 BDT	7 eggs 73 BDT	1.2 kg 218 BDT	1.1 kg 25 BDT	11 bananas 47 BDT	183 gm 49 BDT	151 gm 27 BDT
Within the past 30 days (%)	1.5 kg 125 BDT	13 eggs 134 BDT	1.8 kg 308 BDT	1.0 kg 22 BDT	10 bananas 41 BDT	316 gm 98 BDT	201 gm 37 BDT
>30 days ago (%)	1.7 kg 140 BDT	11 eggs 104 BDT	1.6 kg 247 BDT	0.9 kg 20 BDT	9 bananas 55 BDT	244 gm 68 BDT	188 gm 49 BDT

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

FINDINGS

- ✓ Healthy foods: Most shoppers purchased eggs, fish 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: Most shoppers purchased biscuits and 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?

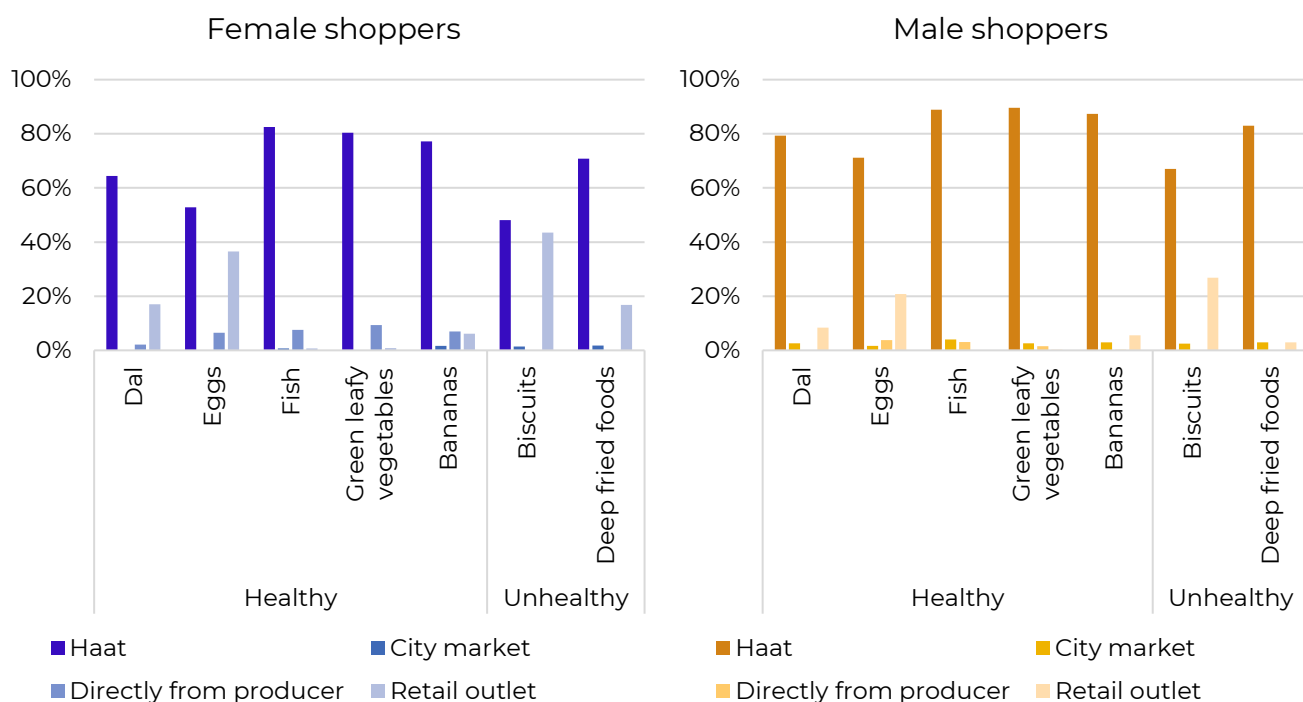
Figure 4. Distance to most recent source of food purchase



FINDINGS

- ✓ Shoppers traveled the farthest to access city markets.
- ✓ >70% shoppers purchased food items from haats whereas <5% purchased from city markets and directly from producers.
- ✓ More female than male shoppers purchased eggs and biscuits from retail outlets.

Figure 5. Sources of most recent food purchases*



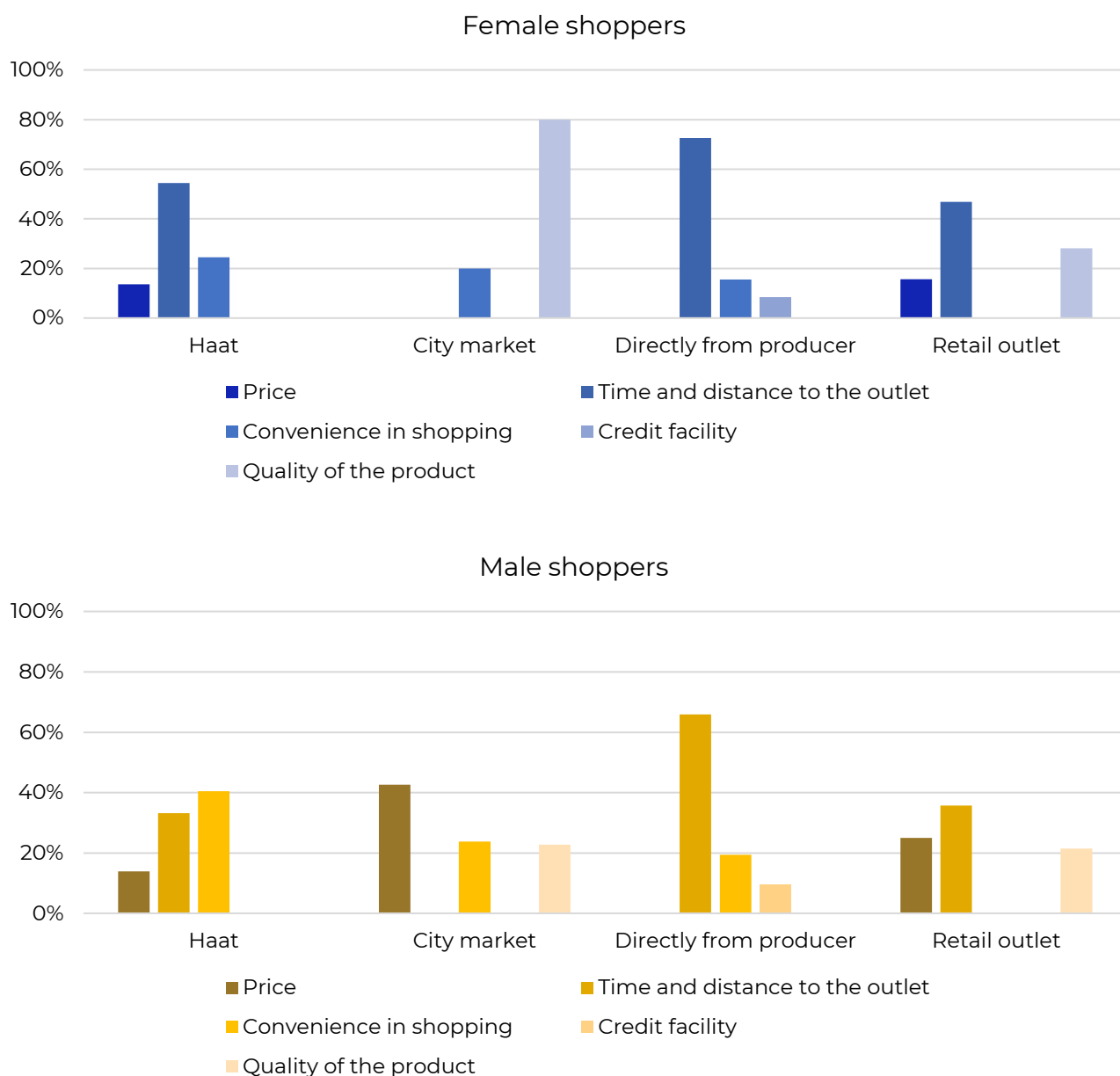
*Note: Based on the top sources accessed by the shoppers

PREFERENCE FOR SOURCES OF FOOD PURCHASES

FINDINGS

- ✓ Female shoppers (54%) cited time and distance whereas male shoppers (41%) cited convenience as a reason for preferring haats.
- ✓ Female shoppers cited quality of the product (80%) whereas male shoppers (43%) cited price as a reason for preferring city markets.
- ✓ Shoppers preferred purchasing from producers and retail outlets because of time and distance.

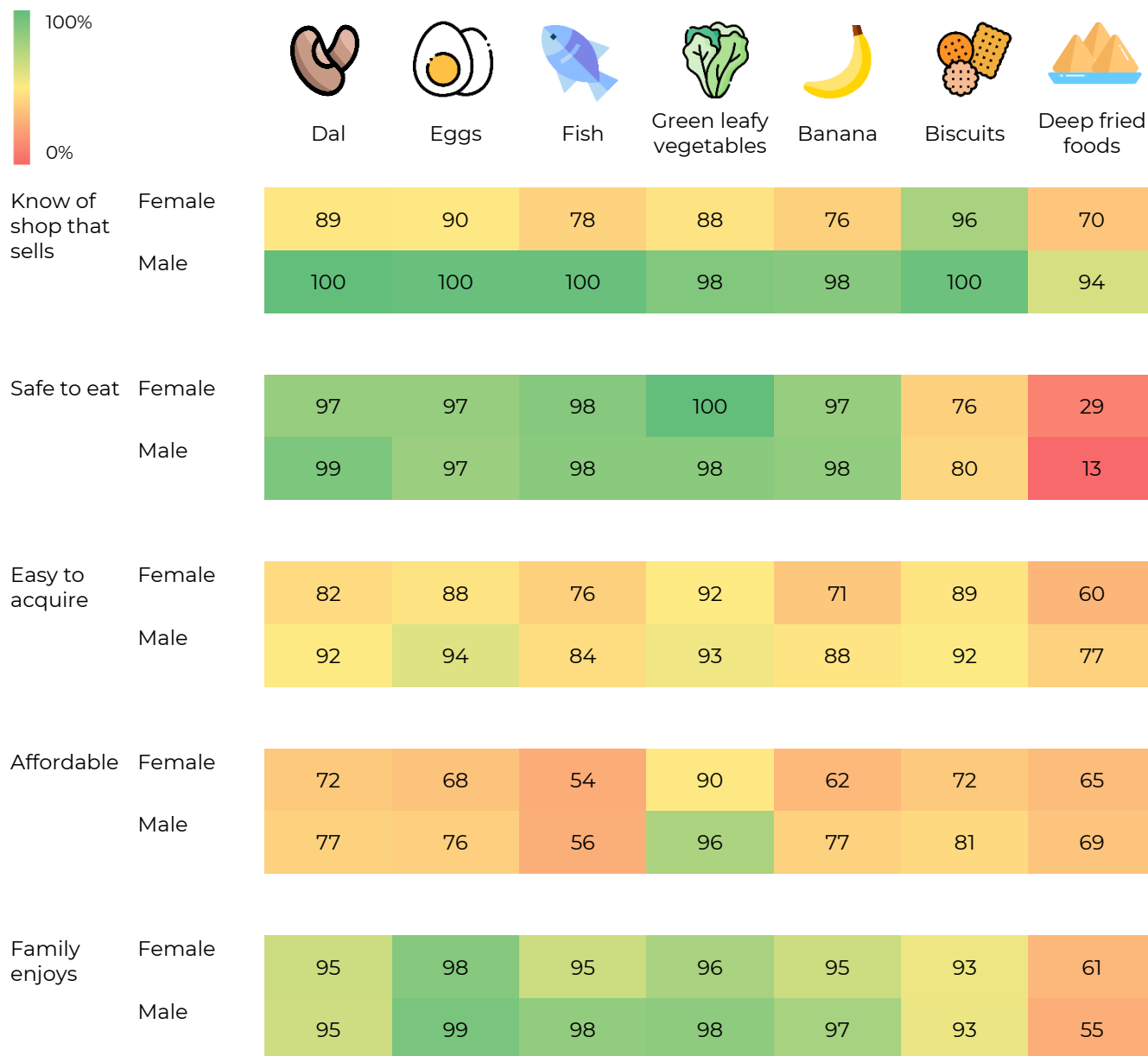
Figure 6. Reasons for preferring a source of purchase*



*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)



FINDINGS

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

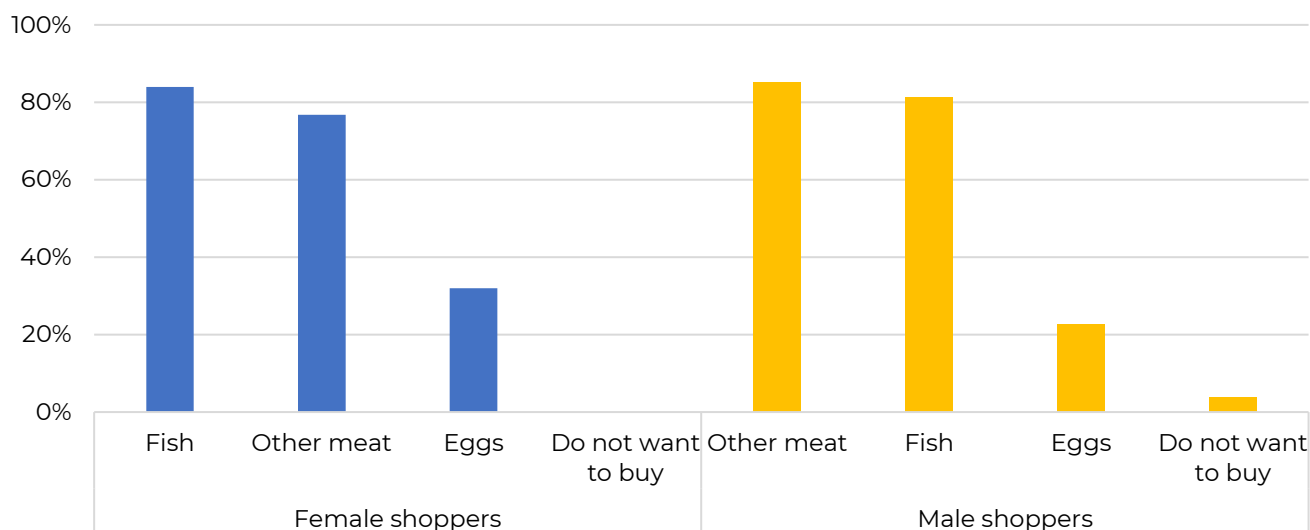
FOOD ASPIRATIONS

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

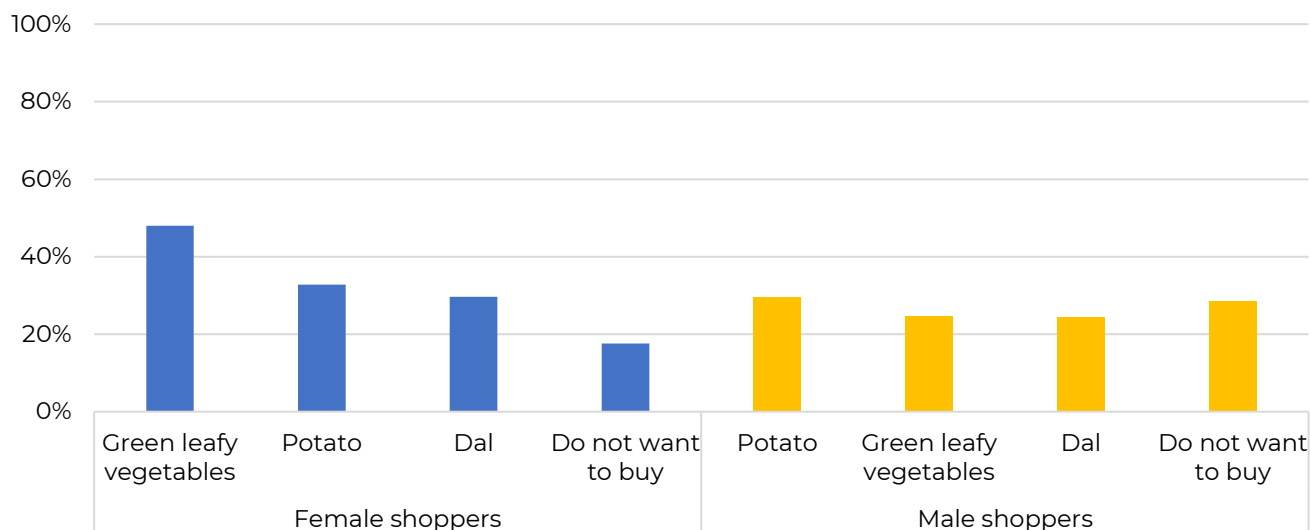
FINDINGS

- ✓ Female and male shoppers aspired to buy more fish, meat and eggs.
- ✓ Female and male shoppers intended to buy less green leafy vegetables, potato and dal.
- ✓ 18% female shoppers and 29% male shoppers did not intend to reduce their purchase of any food.

Would you buy more if more income/ money available



Would you 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: Shoppers purchased healthy foods frequently.
- Unhealthy foods: Nearly three-quarters of shoppers frequently bought biscuits. More males compared to females never purchased deep fried foods.

Where and why?

- More than 70% shoppers most recently purchased food items from haats.
- Haats were the preferred source of food purchase due to time and distance for female shoppers and convenience for male shoppers.
- Less than 5% shoppers most recently purchased food from city markets.
- Retail outlets were the closest compared to other types of markets.
- Both female and male shoppers had similar perceptions about safety, affordability, and enjoyment of healthy and unhealthy 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 fish, meat and eggs and less green leafy vegetables, potatoes and dal.
- Less than a third of shoppers did not intend to buy less of any food.

KEY QUESTIONS FOR ACTION

1. What are the reasons for high frequency purchase 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 Vecchi, 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, Vecchi J, Khan A.Y, Veettil P.C. 2023. Food purchasing behavior in Rangpur, Bangladesh: *Shopping practices, food perceptions, and aspirations*. TAFSSA Data Note 25. 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).