INITIATIVE ON
Transforming Agrifood Systems in South Asia

Food purchasing behavior in Nalanda, India:

Shopping practices, food perceptions, and aspirations

Data Note 48

December 2023

ABOUT THIS DATA BEIEF | The Transforming Agrifood Systems in South Asia (TAFSSA) district agrifood systems assessments 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 March- April 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 India

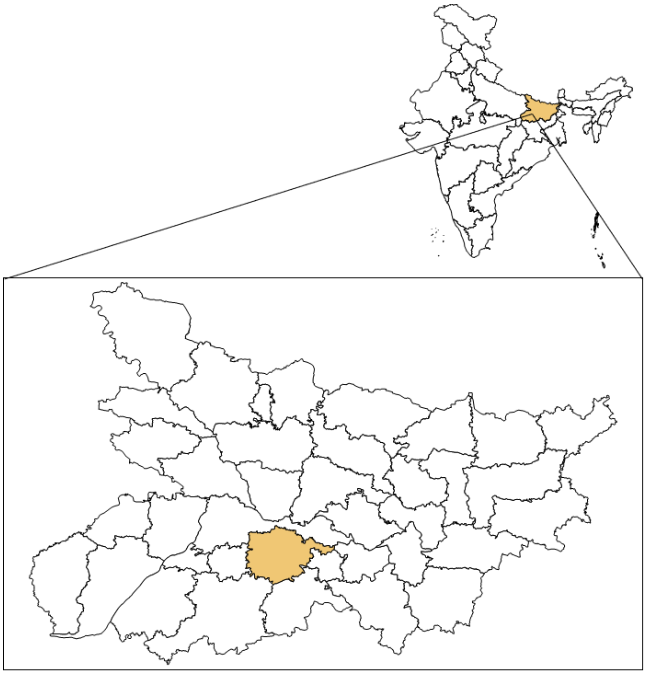


Figure 2. Highlights from this data note

61% of shoppers in Nalanda are males

~35% of shoppers buy unhealthy foods

41% of shoppers buy food items from retail outlets

~37% of shoppers prefer retail outlets because of time and distance

91% of shoppers perceive healthy foods to be unaffordable

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 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, green leafy vegetables, bananas, biscuits, deep fried foods, and instant noodles) 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.

Roadside market: A group of at least 5 vendors in proximity selling food products along the street, without any formal organizational setup.

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 and tables

WHO IS PURCHASING FOOD?

Table 1. Household and individual characteristics

Household characteristics	
Number	1000
Female-headed, %	27
Education of head, years	5
Average household size, members	6
Involved in agriculture, %	82
Has improved toilet, %	41
Drinking water source	
Piped into dwelling, %	39
Tube well or borehole, %	36
Main source of income	
Crop cultivation, %	39
Wages, %	31
Remittance, %	12
Type of fuel used for cooking	
Dung cake, %	87
LPG/natural gas, %	77
Wood, %	60

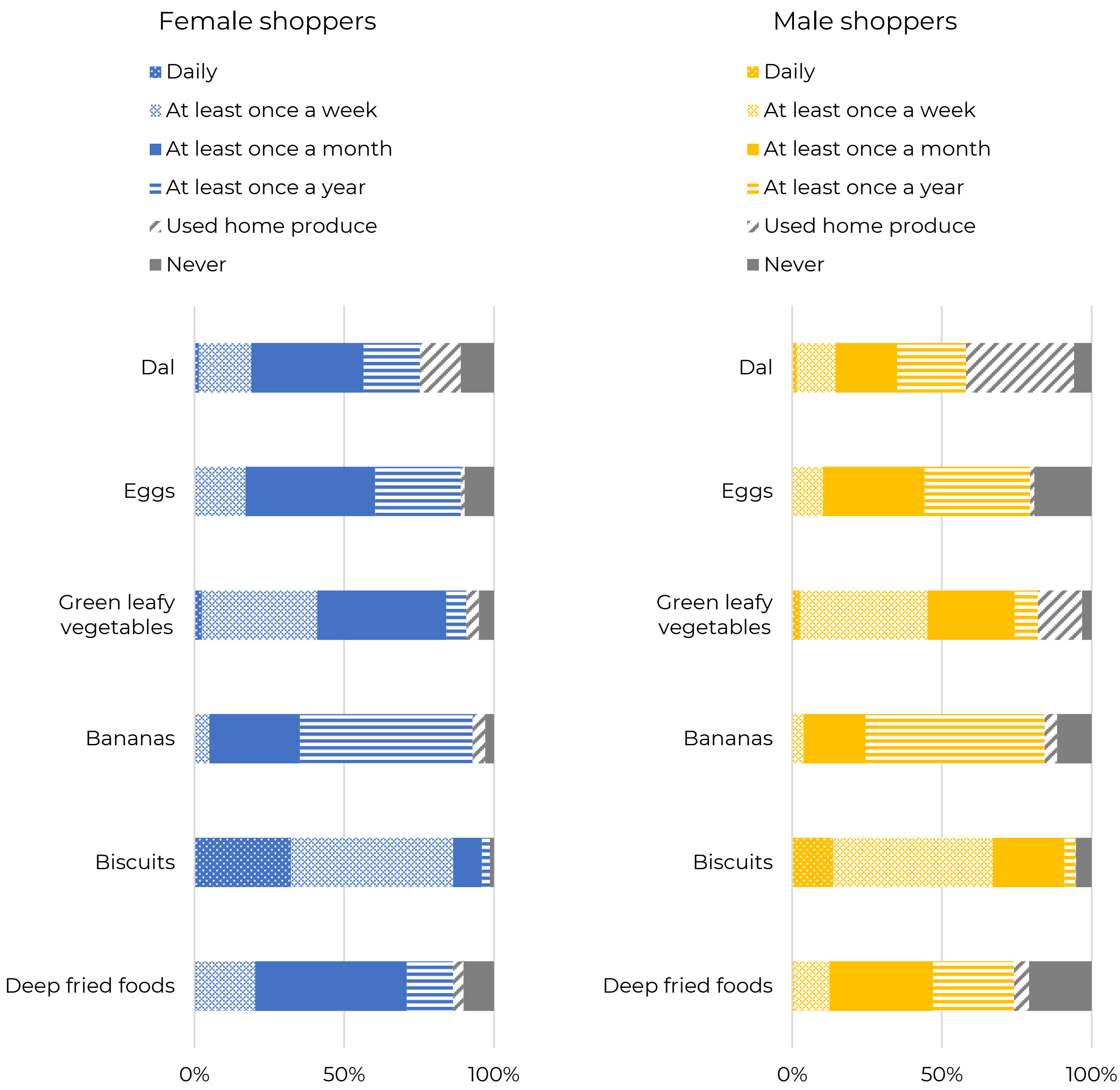
Individual characteristics	**Number of shoppers = 698**	
	Female shoppers (N=269)	Male shoppers (N=429)
Average age (years)	40	48
Relation to household head		
Household head. %	82	95
Spouse, %	15	0
Other relation, %	3	5
Education completed (years)	2	7
Employment status		
Employed,%	64	98
Primary occupation		
Farming, %	35	60
Unpaid household work, %	36	0
Own business/ self employed, %	4	12
Casual non-farm labour (paid), %	2	17
Salaried employment, %	3	3

FINDINGS

- ✓ More males shop for food than females.
- ✓ Most shoppers were household heads and had limited education.
- ✓ More than a third of female shoppers were engaged in farming or unpaid household work.
- ✓ 60% male shoppers were farmers..

WHAT FOOD IS BEING PURCHASED, AND HOW OFTEN?

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



FINDINGS

- ✓ Overall, there were few differences in the frequency of food purchases between female and male shoppers.
- ✓ Twice as many male shoppers used home-produced dal compared to female shoppers.
- ✓ >50% female than male shoppers purchased biscuits at least once a week.
- ✓ More female than male shoppers purchased deep fried foods at least once a month.

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

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

	Dal (N=471)	**Eggs** (N=579)	**Green leafy vegetables** (N=600)	**Bananas** (N=610)	**Biscuits** (N=672)	**Deep fried foods** (N=546)
Within past 7 days (%)	34.8	18.3	54.7	8.9	79.2	27.1
Within the past 30 days (%)	35.9	35.1	31.7	24.6	14.7	40.5
>30 days ago (%)	29.3	46.6	13.7	66.6	6.1	32.4
Average quantity bought and amount spent on food items during the most recent purchase						
Within past 7 days (%)	2.6 kg *151 INR*	10 eggs *60 INR*	1.3 kg *25 INR*	3.0 dozen *115 INR*	3 pkt *14 INR*	4 nos *33 INR*
Within the past 30 days (%)	4.1 kg *286 INR*	11 eggs *76 INR*	1.7 kg *26 INR*	2.8 dozen *84 INR*	2 pkt *21 INR*	5 nos *37 INR*
>30 days ago (%)	8.7 kg *526 INR*	12 eggs *80 INR*	1.1 kg *18 INR*	2.6 dozen *82 INR*	4 pkt *16 INR*	4 nos *33 INR*

Notes: kg: kilogram; pkt: packets; nos: numbers; INR: Indian Rupees

FINDINGS

✓ Healthy foods: >33% shoppers purchased dal within the past 7 days or the past 30 days, and eggs within the past 30 days.

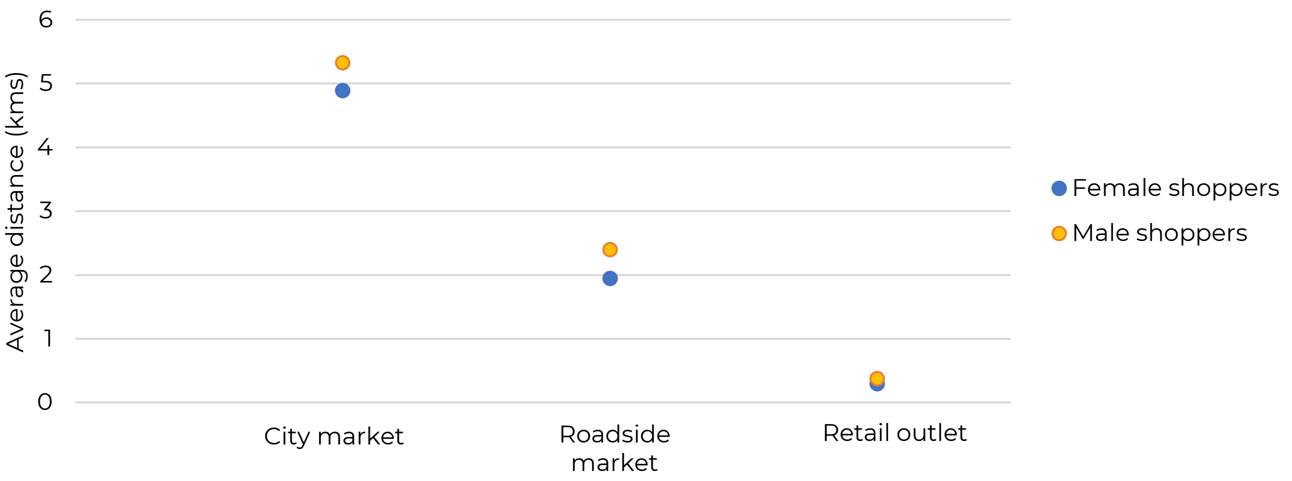
- More money was spent on purchasing dal, eggs, and bananas more than any other food item at any time during the most recent purchase.

✓ Unhealthy foods: 79% shoppers purchased biscuits within the past 7 days whereas 40% purchased deep fried foods in the past 30 days.

- <40 INR were spent in purchasing biscuits, or deep fried foods at any time during the most recent purchase.

WHERE IS THE FOOD PURCHASED?

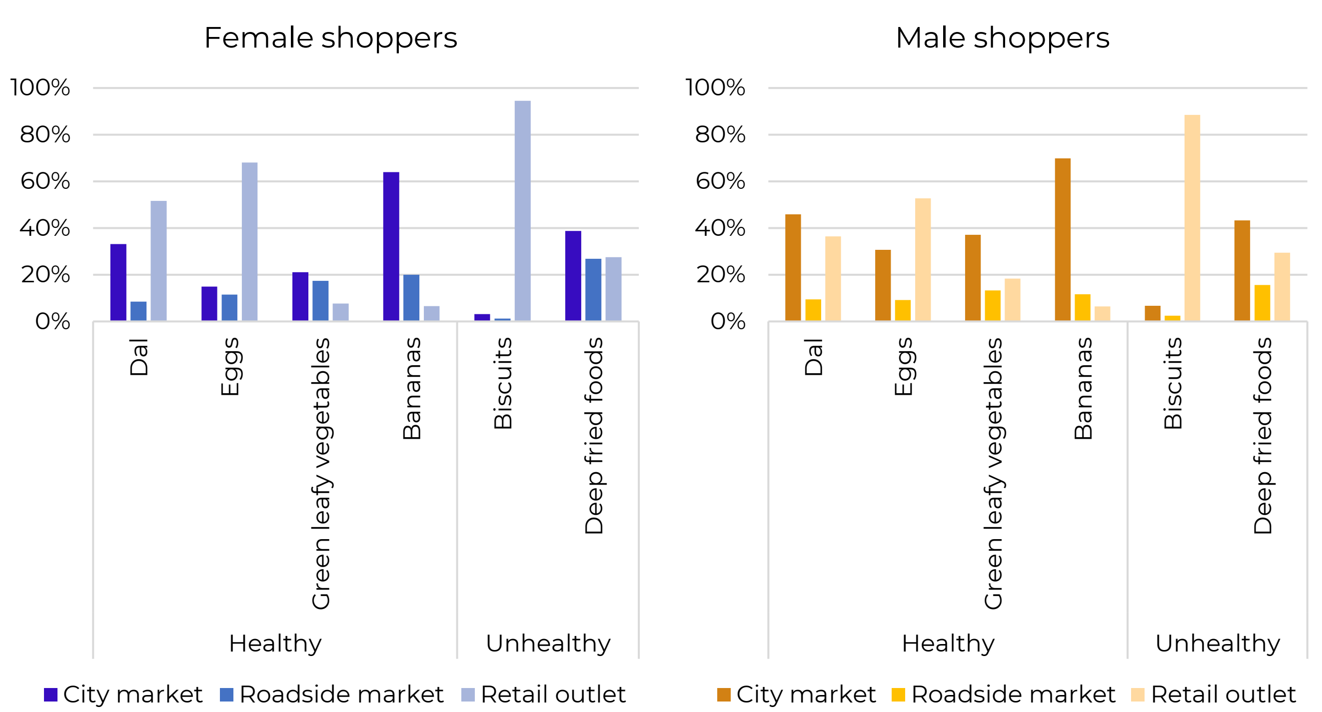
Figure 4. Distance to most recent location of food product purchase



FINDINGS

- ✓ Shoppers traveled the farthest to access city markets.
- ✓ City markets were among the top three most recent locations accessed to purchase dal, eggs, bananas, and deep fried foods by both male and female shoppers.
- ✓ Female and male shoppers primarily purchased both healthy and unhealthy foods from retail outlets.
- ✓ Retail outlets were the primary source for most recent purchase of eggs and biscuits for male and female shoppers.

Figure 5. Sources of most recent food purchases*



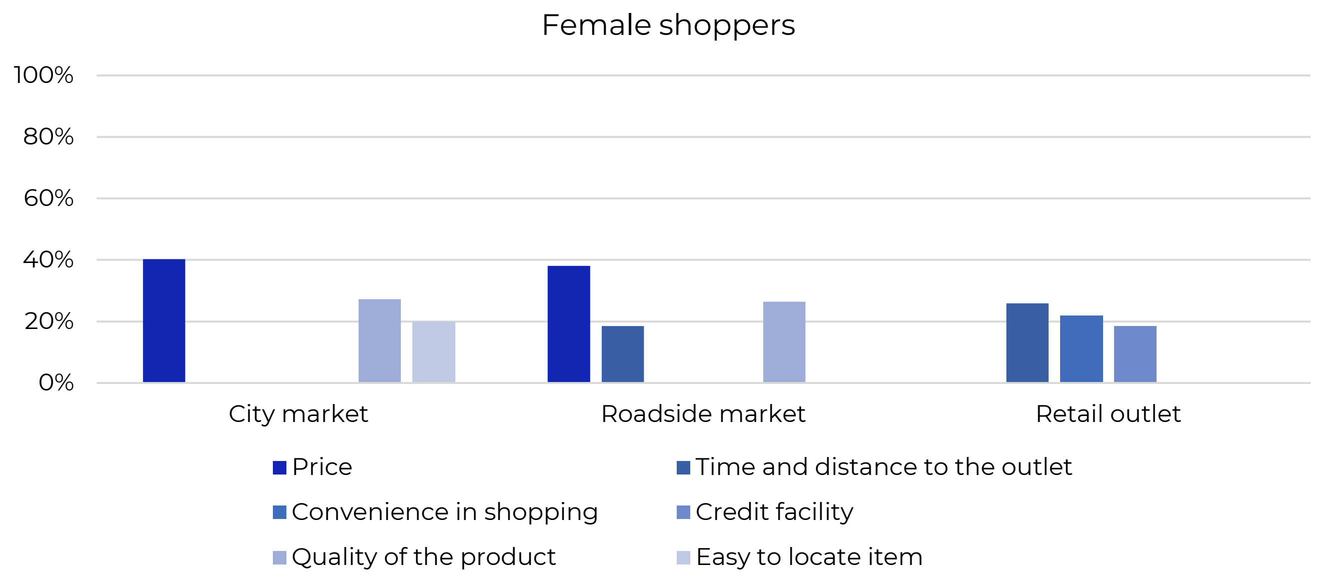
**Note: Based on the top sources accessed by the shoppers*

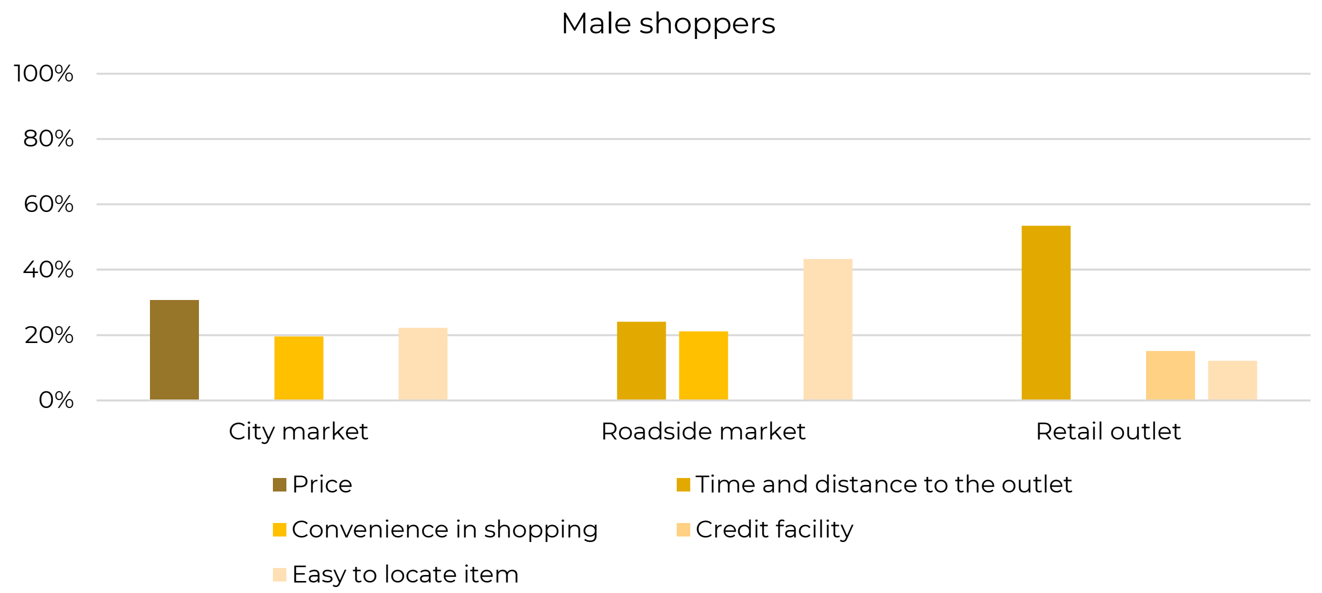
PREFERENCE FOR SOURCES OF FOOD PURCHASES

FINDINGS

- ✓ City market: Price was the most influential factor in choosing city markets for female and male shoppers.
- ✓ Roadside market: For male shoppers, time and distance and being able to easily locate the items were the reasons for choosing roadside markets whereas for females' price and product quality were the reasons.
- ✓ Retail outlet: Shoppers preferred to shop at retail outlets due time and distance and credit facility.

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%

0%

		Dal	Eggs	Green leafy vegetables	Banana	Biscuits	Deep fried foods
Know of shop that sells	Female	96	92	91	77	98	90
	Male	96	86	92	81	97	85
Safe to eat	Female	99	85	99	93	80	57
	Male	98	66	97	88	63	35
Easy to acquire	Female	88	83	83	44	95	63
	Male	82	70	75	47	89	58
Affordable	Female	22	27	47	21	56	30
	Male	18	25	42	26	57	28
Family enjoys	Female	94	83	93	93	86	88
	Male	94	66	97	88	77	69

FINDINGS

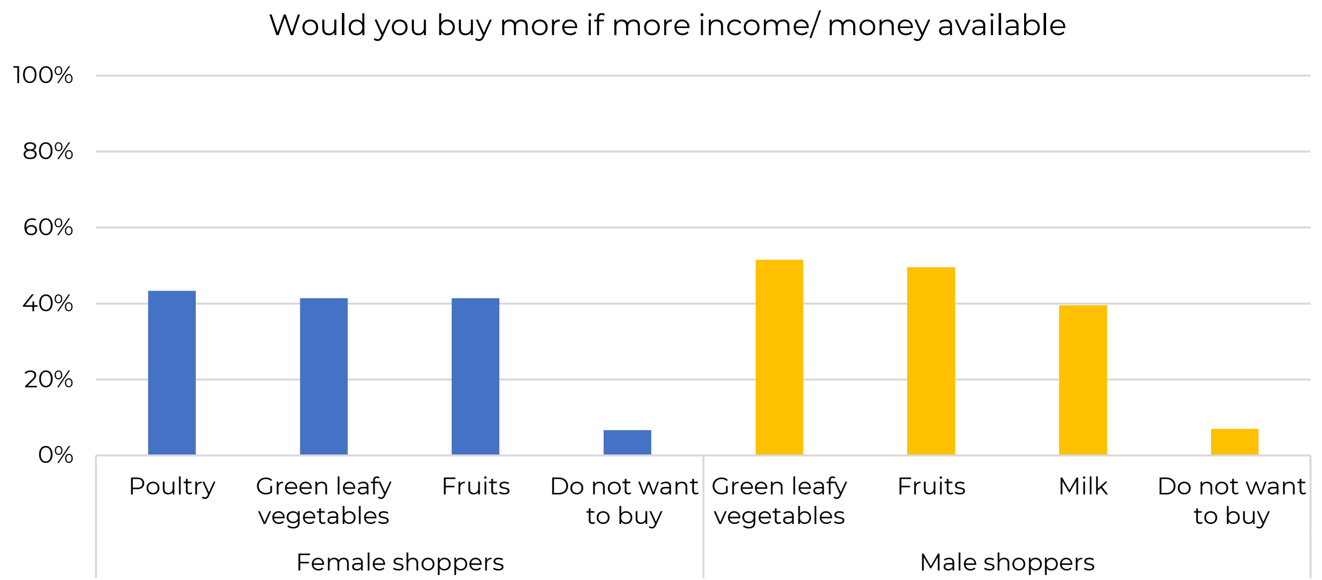
- ✓ >33% female and >50% male shoppers perceived deep fried food to be unsafe to eat.
- ✓ At least 70% female and male shoppers agreed that dal, eggs, green leafy vegetables, and biscuits were easy to acquire.
- ✓ <33% shoppers perceived dal, eggs, bananas, and deep fried foods to be affordable.
- ✓ Families enjoyed healthy foods slightly more than unhealthy foods, except eggs.

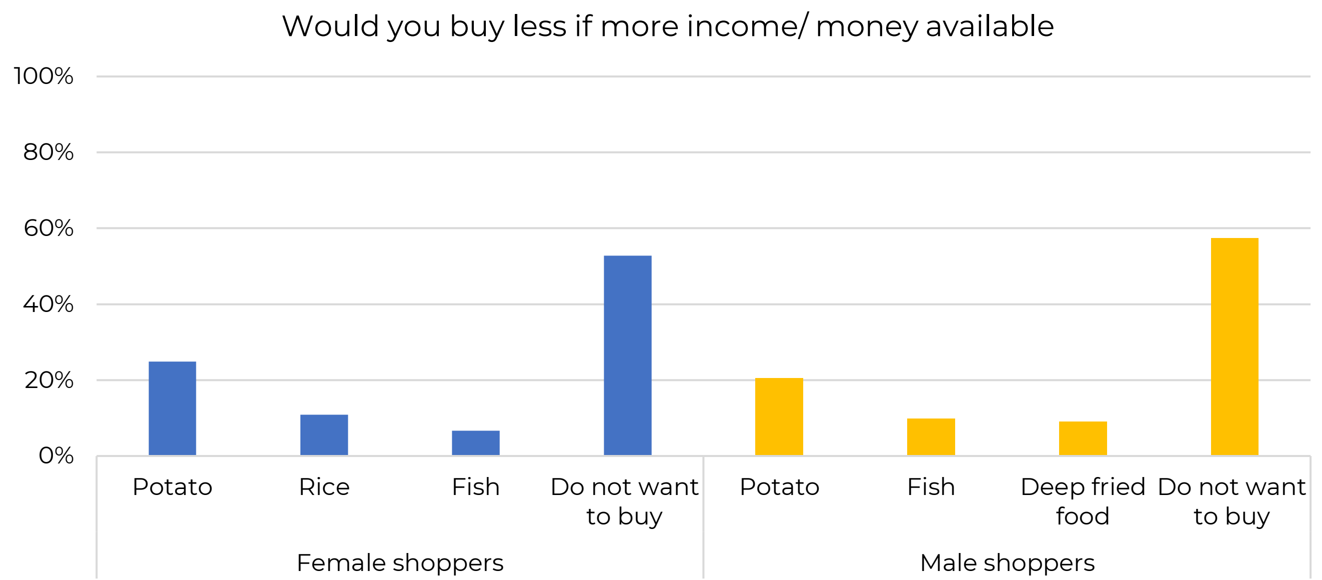
FOOD ASPIRATIONS

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

FINDINGS

- ✓ Female and male shoppers aspired to buy more of green leafy vegetables and fruits, and less of potato and fish.
- ✓ Only male shoppers aspired to buy more milk.
- ✓ Only female shoppers intended to buy less rice.
- ✓ Only male shoppers intended to buy less deep fried foods.
- ✓ >50% shoppers did not intend to reduce their purchase of any food.





**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: The frequency of purchase of healthy foods was similar for female and male shoppers.
- Unhealthy foods: More female shoppers frequently bought deep fried foods compared to male shoppers.

Where and why?

- Majority of shoppers most recently purchased food items from retail outlets.
- Retail outlets were closer than other types of markets.
- City markets were preferred for the price of the food items.
- Both female and male shoppers had similar perceptions about affordability, and enjoyment of healthy and unhealthy food items.
    - Healthy foods were perceived to be safe to eat, but not affordable.
    - Unhealthy foods, particularly, deep fried foods were perceived to be unsafe to eat and not affordable.

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

- Shoppers aspired to purchase more green leafy vegetables and fruits and less potato and fish.
- More than half of shoppers did not intend to buy less of any food.

KEY QUESTIONS FOR ACTION AND POLICY CONSIDERATION

1. What are the reasons for high frequency purchase of unhealthy foods (e.g., deep-fried foods) by female shoppers?
2. What are the reasons for low frequency purchase of bananas?
3. How can healthy foods be made more affordable?
4. Can retail shops, which are the most accessed markets, increase the availability and affordability of healthy food items?
5. 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

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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

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