Food purchasing behavior in Banke, Nepal: Shopping practices, food perceptions, and aspirations

Data Note 27  December 2023

ABOUT THIS DATA BELIEF | 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 Nepal

Figure 2. Highlights from this data note

| 55% of shoppers in Banke are females | 46% of shoppers buy unhealthy foods | 59% of shoppers buy food items from retail outlets | >70% of shoppers prefer to shop at city markets because of price | 94% of shoppers perceive healthy foods to be expensive |
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.

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

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## WHO IS PURCHASING FOOD?

Table 1. Household and individual characteristics

<table>
<thead>
<tr>
<th>Household characteristics</th>
<th>Individual characteristics</th>
<th>Number of shoppers = 363</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Female-headed, %</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Education of head, years</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Average household size, members</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Involved in agriculture, %</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>Has improved toilet, %</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td>Drinking water source</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tube well or borehole, %</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Piped into yard or plot, %</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Main source of income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remittance, %</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Crop cultivation, %</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Salary, %</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Type of fuel used for cooking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood, %</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>LPG/natural gas, %</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>Dung, %</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

### FINDINGS

- More females shop for food than males.
- Most shoppers were household heads and had some level of education.
- Most female shoppers were engaged in farming or unpaid household work.
- Most male shoppers were farmers, self-employed or casual laborers.
WHAT FOOD IS BEING PURCHASED, AND HOW OFTEN?

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

**FINDINGS**

✓ There were few differences in the frequency of food purchases between female and male shoppers, except for green leafy vegetables.

✓ Dal, eggs, and bananas were purchased at least once a month.

✓ More female than male shoppers purchased noodles at least once a week.

✓ More male than female 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

<table>
<thead>
<tr>
<th>Food Item</th>
<th>Within past 7 days (%)</th>
<th>Within the past 30 days (%)</th>
<th>&gt;30 days ago (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dal (N=278)</td>
<td>19.8</td>
<td>38.9</td>
<td>41.4</td>
</tr>
<tr>
<td>Eggs (N=277)</td>
<td>31.8</td>
<td>33.9</td>
<td>34.3</td>
</tr>
<tr>
<td>Green leafy vegetables (N=140)</td>
<td>35.7</td>
<td>21.4</td>
<td>42.9</td>
</tr>
<tr>
<td>Bananas (N=318)</td>
<td>25.2</td>
<td>34.0</td>
<td>40.9</td>
</tr>
<tr>
<td>Biscuits (N=329)</td>
<td>65.4</td>
<td>24.0</td>
<td>10.6</td>
</tr>
<tr>
<td>Deep fried foods (N=227)</td>
<td>29.5</td>
<td>32.2</td>
<td>38.3</td>
</tr>
<tr>
<td>Instant noodles (N=320)</td>
<td>65.3</td>
<td>24.7</td>
<td>10.0</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Food Item</th>
<th>Within past 7 days (%)</th>
<th>Within the past 30 days (%)</th>
<th>&gt;30 days ago (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dal (N=278)</td>
<td>2.9 kg 396 NPR</td>
<td>4.0 kg 638 NPR</td>
<td>11.5 kg 1,414 NPR</td>
</tr>
<tr>
<td>Eggs (N=277)</td>
<td>11 eggs 144 NPR</td>
<td>18 eggs 230 NPR</td>
<td>19 eggs 239 NPR</td>
</tr>
<tr>
<td>Green leafy vegetables (N=140)</td>
<td>1.4 kg 78 NPR</td>
<td>1.2 kg 61 NPR</td>
<td>1.2 kg 71 NPR</td>
</tr>
<tr>
<td>Bananas (N=318)</td>
<td>2.3 dozen 147 NPR</td>
<td>1.6 dozen 126 NPR</td>
<td>1.4 dozen 124 NPR</td>
</tr>
<tr>
<td>Biscuits (N=329)</td>
<td>3 pkt 35 NPR</td>
<td>5 pkt 62 NPR</td>
<td>6 pkt 58 NPR</td>
</tr>
<tr>
<td>Deep fried foods (N=227)</td>
<td>5 nos 40 NPR</td>
<td>3 nos 56 NPR</td>
<td>5 nos 54 NPR</td>
</tr>
<tr>
<td>Instant noodles (N=320)</td>
<td>3 pkt 51 NPR</td>
<td>3 pkt 59 NPR</td>
<td>3 pkt 63 NPR</td>
</tr>
</tbody>
</table>

Notes: kg: kilogram; pkt: packets; nos: numbers; NPR: Nepalese Rupee

FINDINGS

✓ Healthy foods: More than a third of shoppers purchased dal, eggs, and bananas 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: Most shoppers purchased biscuits and noodles within the past 7 days.
  • <100 NPR were spent in purchasing biscuits, deep fried foods, or instant noodles 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.
✓ Female and male shoppers primarily purchased both healthy and unhealthy foods from retail outlets.
✓ Retail outlets were the primary source for eggs, biscuits, and noodles.
✓ City markets were accessed to purchase dal and bananas.

Figure 5. Sources of most recent food purchases*

*Note: Based on the top sources accessed by the shoppers
**PRETRENCE FOR SOURCES OF FOOD PURCHASES**

**FINDINGS**
- Price was the most influential factor in choosing city markets for all shoppers.
- Time and distance to the outlet followed by convenience in shopping influenced choosing of retail outlets by all shoppers.
- Only male shoppers reported a preference for home delivery options.

*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)**

<table>
<thead>
<tr>
<th>Perceptions</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know of shop that sells</td>
<td>97</td>
<td>99</td>
<td>91</td>
<td>96</td>
<td>95</td>
<td>99</td>
<td>98</td>
<td>96</td>
<td>99</td>
<td>100</td>
<td>97</td>
<td>98</td>
<td>96</td>
<td>99</td>
<td>100</td>
<td>99</td>
<td></td>
</tr>
<tr>
<td>Safe to eat</td>
<td>99</td>
<td>89</td>
<td>99</td>
<td>96</td>
<td>28</td>
<td>26</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>99</td>
<td>73</td>
<td>99</td>
<td>96</td>
<td>50</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Easy to acquire</td>
<td>94</td>
<td>93</td>
<td>84</td>
<td>69</td>
<td>98</td>
<td>74</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>94</td>
<td>88</td>
<td>92</td>
<td>77</td>
<td>98</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>Affordable</td>
<td>12</td>
<td>22</td>
<td>52</td>
<td>28</td>
<td>64</td>
<td>25</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td>12</td>
<td>21</td>
<td>41</td>
<td>20</td>
<td>63</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Family enjoys</td>
<td>94</td>
<td>81</td>
<td>95</td>
<td>96</td>
<td>74</td>
<td>73</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>94</td>
<td>81</td>
<td>95</td>
<td>96</td>
<td>74</td>
<td>73</td>
<td></td>
</tr>
</tbody>
</table>

**FINDINGS**

✓ Both female and male shoppers agreed that unhealthy foods were unsafe to eat.
✓ Both female and male shoppers agreed that biscuits and instant noodles were easy to acquire and were affordable.
✓ Fewer shoppers perceived healthy foods to be affordable.
✓ Families enjoyed healthy foods slightly more than unhealthy foods.
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 meat and fruits, and less fish and biscuits.
✓ Only male shoppers aspired to buy more of green leafy vegetables.
✓ Only female shoppers intended to buy less of instant noodles.
✓ Only male shoppers intended to buy less of biscuits and baked sweets.
✓ Nearly half of 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 women than men 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 instant noodles whereas more male shoppers frequently bought deep fried foods.

**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 safety, acquisition, affordability, and enjoyment of healthy and unhealthy food items.
  - Healthy foods were perceived to be safe to eat, enjoyable to eat, and easy to acquire, but not 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 meat and fruit and less fish and biscuits.
- Nearly 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., noodles and deep-fried foods)?
2. How can healthy foods be made more affordable?
3. Can retail shops, which are the most accessed markets, increase the availability and affordability of healthy food items?
4. What additional information is needed to facilitate actions to improve purchasing behaviors in the district?
SURVEY METHODOLOGY

Ward and household sampling

We selected 25 wards 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.
AUTHORS

Ishika Gupta, Associate Scientist, IRRI
Rasmi Avula, Research Fellow, IFPRI
Subir Kole, Senior Advisor, Helen Keller International
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


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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

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