ABOUT THIS BRIEF | 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 in Bangladesh, India, Nepal, and Pakistan. It is designed to be a multi-year assessment. Using data collected in February–March 2023, this brief describes which food items are available and their prices, characteristics of retail shops, markets, and customers, as well as marketing and promotional activities. It is one of a set of briefs that, together, provide a holistic picture of the food system in the district.

Figure 1. Map of Surkhet District

Figure 2. Highlights from this brief

- **54%** Retail food stores are informal and unlicensed
- **60%** Retail stores owned by women
- **18%** Retail stores selling fruits
- **42%** Retail stores selling biscuits and sweets
- **29%** Retail stores have signs of food spoilage & bad smell
OVERVIEW OF CONTENTS

This brief examines the rural retail food environments that influence the local diet. Retail shops are known for offering a diverse range of processed and fresh foods at affordable prices for everyday household consumption. Retail shops operate alone, are open daily, and sell a variety of food items to the local community.

This brief provides valuable insights into the different types of village retail shops in the district and information on the infrastructure and facilities available. Retailers were asked about their primary source for food items and the distance they travel to procure these items. The next section of the brief covers availability and visibility of food items as well as the presence of promotional messages. The final section shows the prices of sentinel food items, a set of commonly consumed foods, tracked as part of the project, which can be useful in linking household food consumption with the availability and prices of food in the markets. To enhance understanding of what different rural food environments look like, the brief includes photographs of types of retail shops.

Details on sampling methods and definitions can be found in the following pages.

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SURVEY METHODOLOGY

A survey was conducted across 25 wards in the district, selected with a probability proportional to the number of households in each wards. Survey focused mainly on the retail food shops in the wards, as multi vendor, wholesale market are not prevalent in the rural parts of the district.

Using stratified random sampling, 151 formal and informal retail shops offering various food products were selected. The criteria used to select the shops from each sample ward was randomly choosing - 2 local grocery shops, 2 restaurants/ tea stalls, 1 greengrocer (selling only fruits and/ or veg) and 1 specialized store (selling only meat, milk, fish, egg) (total 6 shops/ stores).
Village Food Retail Shops (single vendor type)

Local grocery stores
Fixed structures that sell a variety of food and non-food items, including household staples, packaged and dry foods, and a limited selection of fresh produce.

Vegetable/fruit shops (greengrocer)
Sell only perishable food items, including fresh fruits, vegetables, roots, and tubers.

Specialized shops
Sell exclusively meat, fish, or dairy products.

Restaurants and tea stalls
Sell prepared food items (usually snacks that can be quickly consumed) and tea/coffee.

Photo credit: Rupesh Shrestha, Usha Bogati and Punam Palpali
CHARACTERISTICS OF RETAIL SHOPS

FINDINGS
✓ The built food environment in the rural parts of Surkhet is dominated by local grocery stores and restaurants & tea shops.
✓ Over 60% of rural Surkhet’s food environment comprises local grocery stores and restaurants & tea shops.
✓ Specialized shops and greengrocers constitute 34%, while minimarts account for less than 1%.
✓ 54% of food retail shops are informal and unlicensed, outnumbering the 46% that are licensed.
✓ More retail shops in rural Surkhet are female-owned (60%) than male-owned (40%).

Figure 3. Retail shops surveyed in the district*

Figure 4. Types of retail shops, N=151

Figure 5: Registration status of shops

Figure 6: Gender of vendors and shop owners

- Grocery stores
- Restaurants & tea stalls
- Specialized shops
- Greengrocers

- Not licensed
- Licensed

- Female
- Male
RETAIL SHOP INFRASTRUCTURE

Table 1. Infrastructure of retail shops*

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Retail shops</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Structures</strong></td>
<td></td>
</tr>
<tr>
<td>Open-air/portable unit, %</td>
<td>3.3</td>
</tr>
<tr>
<td>Semi-permanent structure, %</td>
<td>32.5</td>
</tr>
<tr>
<td>Permanent/concrete building structure, %</td>
<td>64.2</td>
</tr>
<tr>
<td><strong>Physical condition</strong></td>
<td></td>
</tr>
<tr>
<td>Good condition¹, %</td>
<td>86.1</td>
</tr>
<tr>
<td>Some structural damage², %</td>
<td>9.9</td>
</tr>
<tr>
<td>Poor condition³, %</td>
<td>4.0</td>
</tr>
</tbody>
</table>

³Good condition - store/building has no structural damage and requires no repairs
²Some structural damage - store/building requires minor repairs
³Poor condition - store/building has structural damage and needs renovation

FINDINGS

✔ 64% of retail shops are in permanent buildings; 3% operate from open-air or portable units.
✔ 86% of retail shops are in good physical condition, while only 4% are in poor condition.
✔ 50% of the shops have good road connectivity, and 80% have access to water.
✔ Less than 60% of shops have a closed sewage system and a dedicated area for waste collection.
FOOD AVAILABILITY

Figure 9. Availability of sentinel foods in retail shops

Note: Chips, biscuits, deep fried foods, soft drinks, and tea/coffee are mostly unavailable in food markets

FINDINGS

✓ Retail shops show limited diversity in food items, as indicated by low availability percentages.
✓ Among healthy food items, eggs has highest availability. Unhealthy foods, such as biscuits, sweets, soft drinks, juices, and instant noodles, are more readily available than healthy items.
SOURCES OF FOOD

Table 2. Primary source of food items for retail shop owners

<table>
<thead>
<tr>
<th>Food category</th>
<th>Retailers with wholesaler as primary source (%)</th>
<th>Retailers with marketing agent as primary source (%)</th>
<th>Retailers with farmer as primary source (%)</th>
<th>Average distance from retail shop to wholesaler (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereals</td>
<td>66</td>
<td>28</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>Pulses</td>
<td>67</td>
<td>33</td>
<td>0</td>
<td>26</td>
</tr>
<tr>
<td>Nuts &amp; seeds</td>
<td>17</td>
<td>50</td>
<td>0</td>
<td>43</td>
</tr>
<tr>
<td>Spices &amp; condiments</td>
<td>65</td>
<td>30</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>Edible oils</td>
<td>67</td>
<td>29</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>Leafy vegetables</td>
<td>43</td>
<td>14</td>
<td>43</td>
<td>7</td>
</tr>
<tr>
<td>Other vegetables</td>
<td>67</td>
<td>27</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>Roots &amp; tubers</td>
<td>74</td>
<td>15</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Fruits</td>
<td>61</td>
<td>36</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>Meat</td>
<td>30</td>
<td>4</td>
<td>41</td>
<td>24</td>
</tr>
<tr>
<td>Fish &amp; seafood</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Eggs</td>
<td>57</td>
<td>31</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Milk &amp; milk products</td>
<td>13</td>
<td>25</td>
<td>63</td>
<td>3</td>
</tr>
<tr>
<td>Ultra-processed foods</td>
<td>64</td>
<td>29</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Soda/soft drinks &amp; packaged juices</td>
<td>80</td>
<td>20</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Tea/coffee with sugar</td>
<td>55</td>
<td>40</td>
<td>0</td>
<td>7</td>
</tr>
</tbody>
</table>

FINDINGS

✓ Retailers primarily source food items from wholesalers and marketing agents. Retailers partly source milk, leafy greens and meat directly from farmers.

✓ On average, retailers travel 16 km to procure food items. They travel the shortest distance to procure milk and milk products (3 km) and the longest distance to procure nuts & seeds (43 km).

✓ Retailers use different modes of transportation such as private vehicles like trucks, vans, motorbikes, and bicycles for food procurement.
**FINDINGS**

✓ Perishable items such as fish, leafy vegetables, fruits and other vegetables are most visible in stores, more so than ultra-processed foods and drinks. Non-perishable healthy items are less prominently displayed.
FOOD PROMOTION

FINDINGS
✓ 38% of retail shops displayed food promotional materials on-site.
✓ The highest number of promotional messages are dedicated to Ultra processed foods (23%), followed by meat and egg (21%), and cereals and pulses (17%).
✓ Nearly 30% of shops are located near open drainage or garbage dumps.
✓ 29% of shops have signs of food spoilage and bad odors; rodents were present in 2% of them.
✓ 7% of shops have products that are past their expiry dates.

Figure 11. Promotional messages for food items in retail stores

N=57

- Ultra-processed foods: 23%
- Meat & egg: 21%
- Cereals & pulses: 17%
- Spices & Condiments: 9%
- Tea/coffee with sugar: 9%
- Others: 21%

Figure 12. Food quality and hygiene in retail stores

- Open drainage outlets near the shops
- Garbage dumps near the shops
- Movement of rodents observed
- Foods with visible signs of spoilage and bad smells
- Damaged packages or signs of decay of processed foods
- Products past their expiry date

Yes □ No □ Not applicable
### Table 3. Average prices of sentinel foods in Retail shops (NPR)

<table>
<thead>
<tr>
<th>Sentinel Foods</th>
<th>Unit</th>
<th>Price per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice (non-parboiled fine)</td>
<td>kg</td>
<td>84</td>
</tr>
<tr>
<td>Maize</td>
<td>kg</td>
<td>140</td>
</tr>
<tr>
<td>Potato</td>
<td>kg</td>
<td>40</td>
</tr>
<tr>
<td>Moong dal</td>
<td>kg</td>
<td>180</td>
</tr>
<tr>
<td>Masoor dal</td>
<td>kg</td>
<td>155</td>
</tr>
<tr>
<td>Chana dal</td>
<td>kg</td>
<td>135</td>
</tr>
<tr>
<td>Chickpeas and beans</td>
<td>kg</td>
<td>143</td>
</tr>
<tr>
<td>Orange vegetables (carrots)</td>
<td>kg</td>
<td>60</td>
</tr>
<tr>
<td>Green leafy veg (spinach)</td>
<td>kg</td>
<td>40</td>
</tr>
<tr>
<td>Onions</td>
<td>kg</td>
<td>60</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>kg</td>
<td>60</td>
</tr>
<tr>
<td>Fruits (grapes)</td>
<td>kg</td>
<td>240</td>
</tr>
<tr>
<td>Eggs</td>
<td>Count</td>
<td>15</td>
</tr>
<tr>
<td>Milk</td>
<td>kg</td>
<td>80</td>
</tr>
<tr>
<td>Chicken (broiler)</td>
<td>kg</td>
<td>400</td>
</tr>
<tr>
<td>Fish</td>
<td>kg</td>
<td>1200</td>
</tr>
<tr>
<td>Buffalo meat</td>
<td>kg</td>
<td>900</td>
</tr>
<tr>
<td>Instant noodles (maggi)</td>
<td>Packet</td>
<td>17</td>
</tr>
<tr>
<td>Chips (lays, kurkure)</td>
<td>Packet</td>
<td>10</td>
</tr>
<tr>
<td>Biscuits and baked sweets (packet biscuits)</td>
<td>Packet</td>
<td>10</td>
</tr>
<tr>
<td>Deep fried food (samosa)</td>
<td>Packet</td>
<td>15</td>
</tr>
<tr>
<td>Soft drinks and packaged juices (packaged fruit juices)</td>
<td>Packet</td>
<td>50</td>
</tr>
<tr>
<td>Tea/coffee with sugar</td>
<td>Cup</td>
<td>15</td>
</tr>
</tbody>
</table>
KEY TAKEAWAYS

1. The built food environment in the rural parts of Surkhet is dominated by local grocery stores and restaurants & tea shops, with share of > 60%.

2. 54% of food retail shops are informal and unlicensed, outnumbering the 46% that are licensed.

3. Retail shops show limited diversity in food items, as indicated by low availability percentages.

4. Unhealthy foods, such as biscuits, sweets, soft drinks, juices, and instant noodles, are more readily available than healthy items.

5. 38% of retail shops displayed food promotional materials on-site.

6. 29% of shops have signs of food spoilage and bad odors

KEY QUESTIONS FOR ACTION

1. How can we enhance rural food market governance in the Surkhet district?

2. How can the availability of healthy food be improved in rural retail shops?

3. What are the solutions for reducing the spoilage of food in the food market?

4. How can we improve the quality and hygiene of food products and shops premises?

5. What strategies and messages can the market implement to facilitate healthy food selling?
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SUGGESTED CITATION

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/

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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.

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