INITIATIVE ON
Transforming Agrifood Systems in South Asia
CGIAR

Food markets in Rangpur, Bangladesh

Market and vendor characteristics

Data Note 34 December 2023

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 tha links farm production, market access, dietary patterns, climate risk responses, and natural resourc management in Bangladesh, India, Nepal, and Pakistan. It is designed to be a multi-year assessmen Using data collected in December 2022– June 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 syster in the district.

Figure 1. Map of Rangpur District

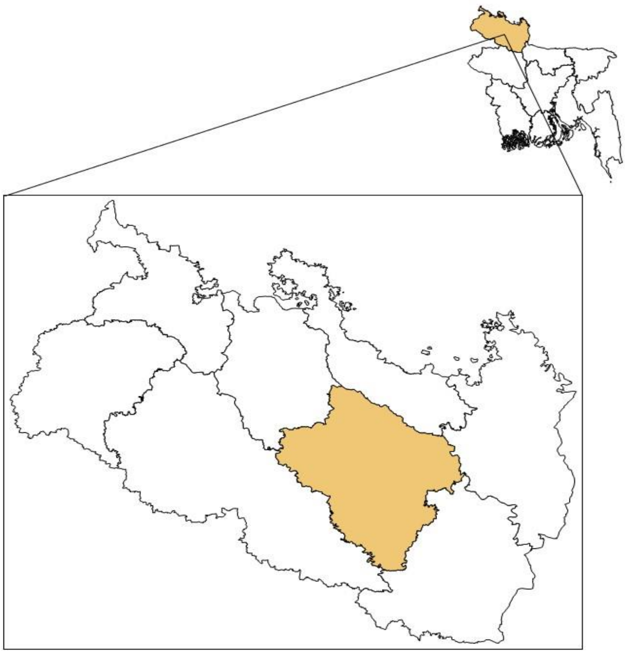


Figure 2. Highlights from this brief

108 & 881 Number of multi-vendor markets & retail shops in 50 villages	**14 & 3** "Grocery stores" and "restaurants & tea stalls" in each village	**99%** Vendors in multi-vendor markets are men	**88%** Retail stores selling biscuits and sweets	**80%** Vendors reporting spoilage of fruits

OVERVIEW OF CONTENTS

This brief examines the prevalence of two types of rural food environments that influence the local diet: multi-vendor food markets and village retail shops. Hereafter referred to as markets and retail shops, respectively. Markets food markets are known for offering a diverse range of fresh foods, such as fruits, vegetables, fish, and meat, at affordable prices. In contrast, village retail shops tend to offer a limited selection of fresh food and prioritize selling packaged goods and everyday household items.

This brief provides valuable insights into the different types of multi-vendor markets and village retail shops in the district and information on the infrastructure and facilities available. Vendors and retailers were asked about their primary source for food items and the distance they travel to procure these items. The next section describes food availability and food spoilage in markets. 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 of food in the markets. To enhance understanding of what different rural food environments look like, the brief includes photographs of both markets and retail shops.

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

List of figures and tables

TYPES OF MULTI-VENDOR MARKETS AND RETAIL SHOPS

Traditional multi-vendor food markets offer a wide range of products to customers. These include fruits, vegetables, and farm products such as livestock, fish, grains, and eggs. Most households prefer to do their weekly grocery shopping at these markets. In contrast, village retail shops operate alone, are open daily, and sell a variety of food items to the local community. Definitions of different categories of food outlets under these two major types are provided below.

Multi-Vendor Food Markets

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

Village 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.

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

Wholesale market/haats/ mandis
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.

Figure 3. Number of multi-vendor markets, by type
N=108 for 50 villages

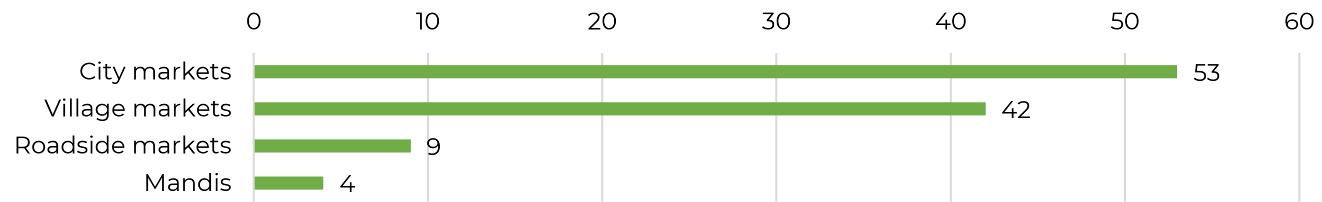


Photo credit: Mohammed Mehedi Hasan, Jakir Hossain Khan, and Md. Mydul Islam

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.

Figure 4. Number of retail shops, by type
N= 881 for 50 villages

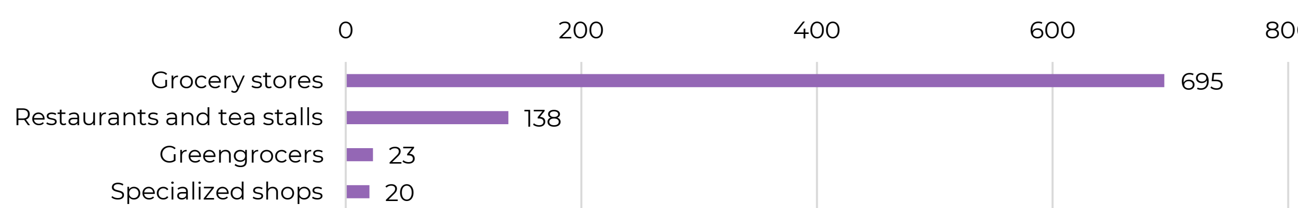


Photo credit: Md. Mottakin Billah, Md. Arman Rahman, Md. Sakhawat Hossain and Md. Rubel Akter

CHARACTERISTICS OF MARKETS AND RETAIL SHOPS

FINDINGS

- ✓ On average, each village has a 2 multi-vendor markets within 10 km radius.
- ✓ The typical village comprises around 14 grocery stores, 3 restaurants and tea stalls, and less than 1 greengrocer and specialized shop.
- ✓ The food landscape is largely informal—95% of markets lacking management structure and 96% of retail shops operating without license.

Figure 5. Markets and retail shops surveyed in the district*

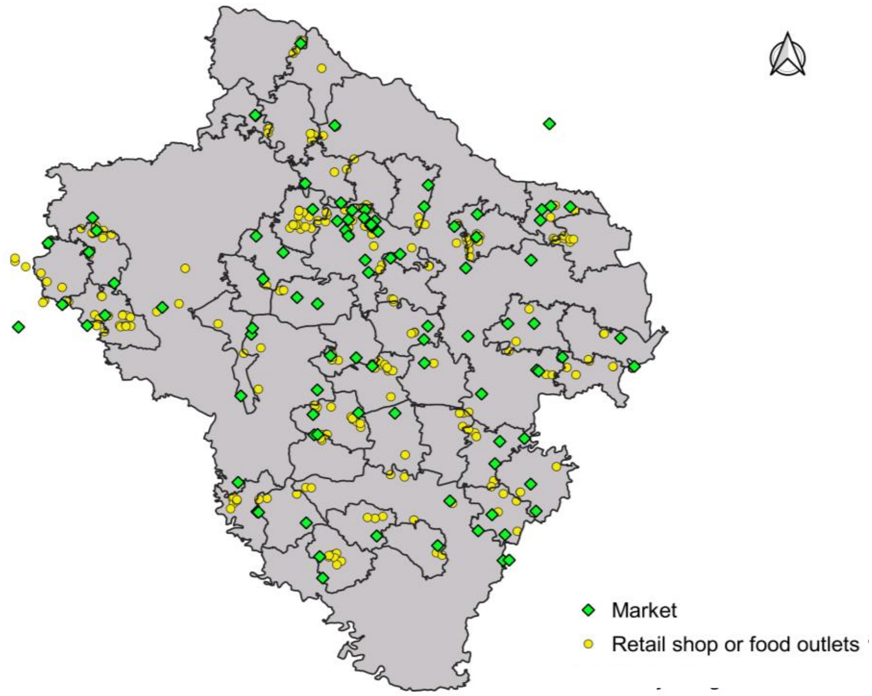


Figure 6A: Management of the multi-vendor market

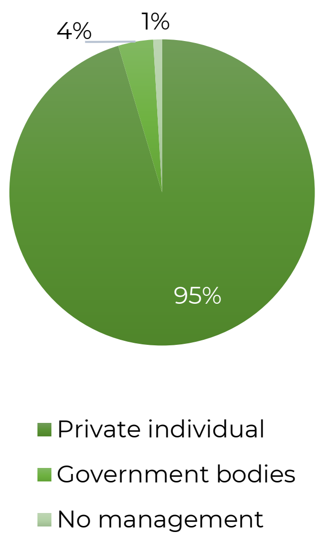


Figure 6B: Registration status of retail shops

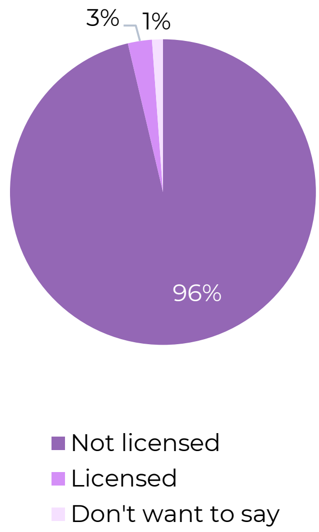
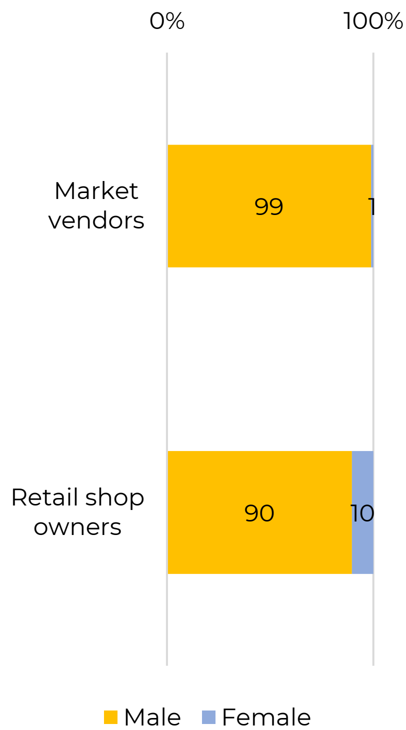


Figure 7: Gender of vendors and shop owners



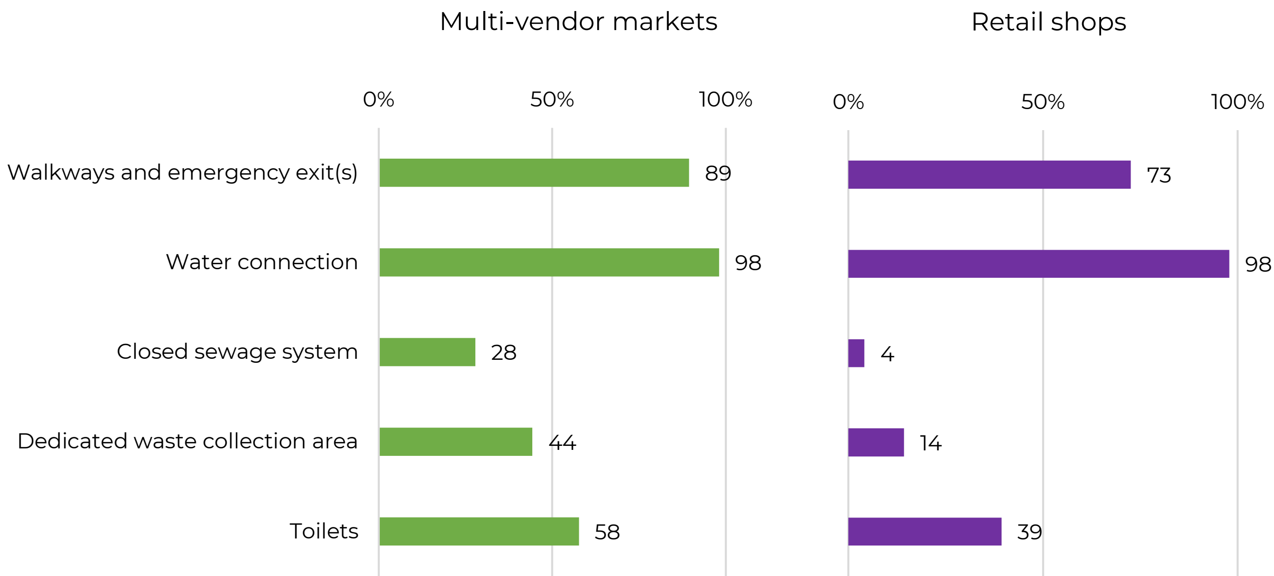
INFRASTRUCTURE

Table 1. Infrastructure of multi-vendor markets and retail shops*

Infrastructure	multi-vendor Markets	Retail shops
Structures		
Open-air/portable unit, %	3.7	1.4
Semi-permanent structure, %	63.0	68.7
Permanent/concrete building structure, %	33.3	29.9
Physical condition		
Good condition[1], %	23.2	30.9
Some structural damage[2], %	72.2	54.5
Poor condition[3], %	4.6	14.7

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

Figure 8. Facilities available in multi-vendor markets and retail shops

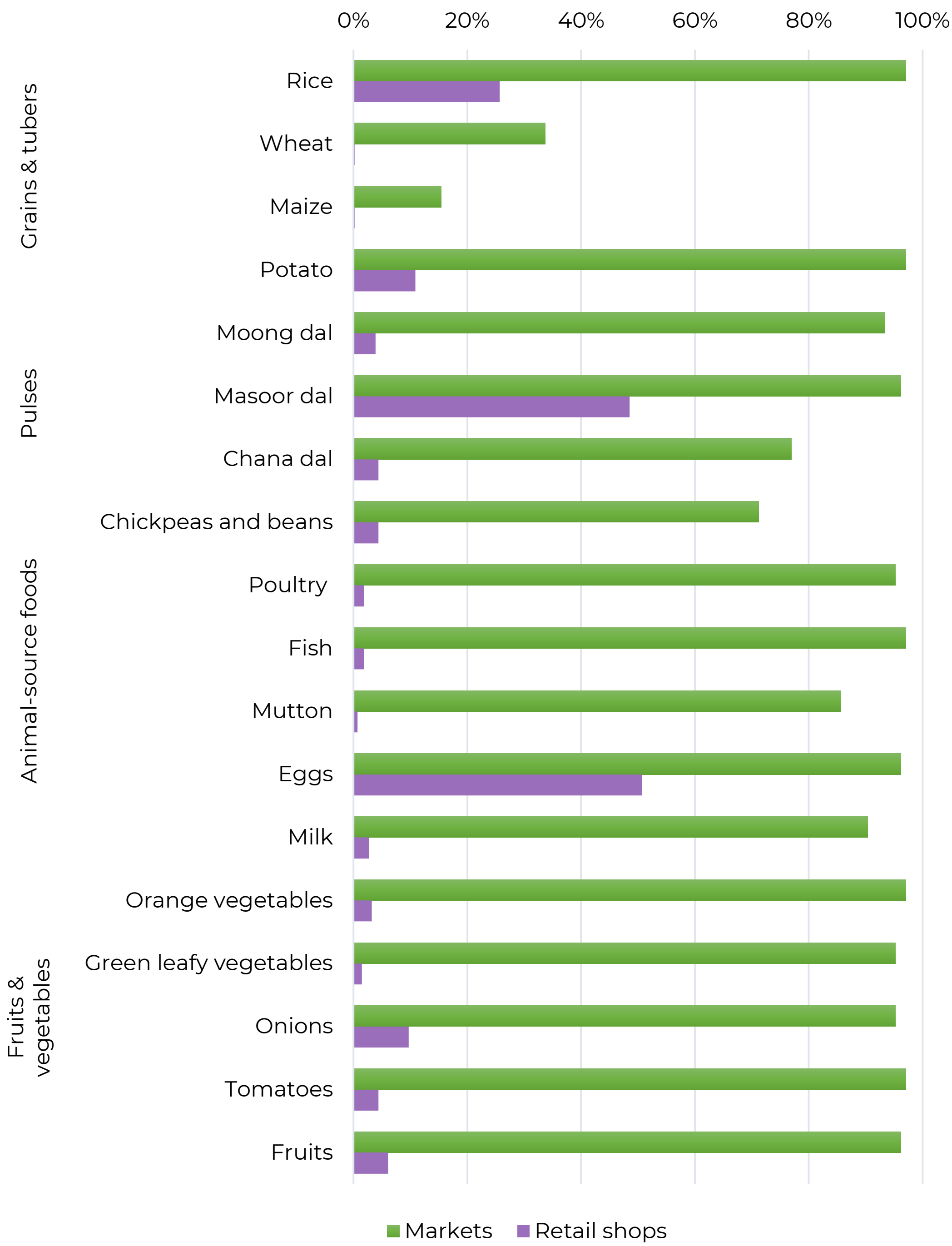


FINDINGS

- ✓ Most markets and retail shops are housed in semi-permanent structures and permanent structures, with less than 5% operate as open-air or portable units.
- ✓ A significant portion of markets and retail shops exhibit some structural damage and small chunk of them are in poor physical state.
- ✓ Markets generally have better road connectivity and more amenities like water connections, sewage systems, waste collection areas, and toilets compared to retail shops.

FOOD AVAILABILITY

Figure 9. Availability of sentinel foods in multi-vendor markets and retail shops



FINDINGS

- ✓ Multi-vendor food markets offer more healthy foods than retail shops. Masoor dal and eggs are the highest available (50% of retail shops) nutrient dense foods in retail shops.

SOURCES OF FOOD

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

Food Category	Multi-vendor markets		Retail Shops	
	Vendors with wholesaler and marketing agent as primary source (%)	Average distance from source to vendors (km)	Retailers with wholesaler and marketing agent as primary source (%)	Average distance from source to retail shops (km)
Cereals	97	9	95	4
Pulses	99	10	100	5
Nuts & seeds	100	8	100	3
Spices & condiments	99	11	99	4
Edible oils	100	6	100	4
Leafy vegetables	70	8	50	4
Other vegetables	81	11	91	5
Roots & tubers	83	10	86	6
Fruits	100	29	84	8
Meat	77	11	100	12
Fish & seafood	92	15	100	16
Eggs	90	6	98	4
Milk & milk products	63	4	84	3
Ultra-processed foods	N/A	N/A	100	2
Soda/soft drinks & packaged juices	N/A	N/A	92	3
Tea/coffee with sugar	N/A	N/A	98	3

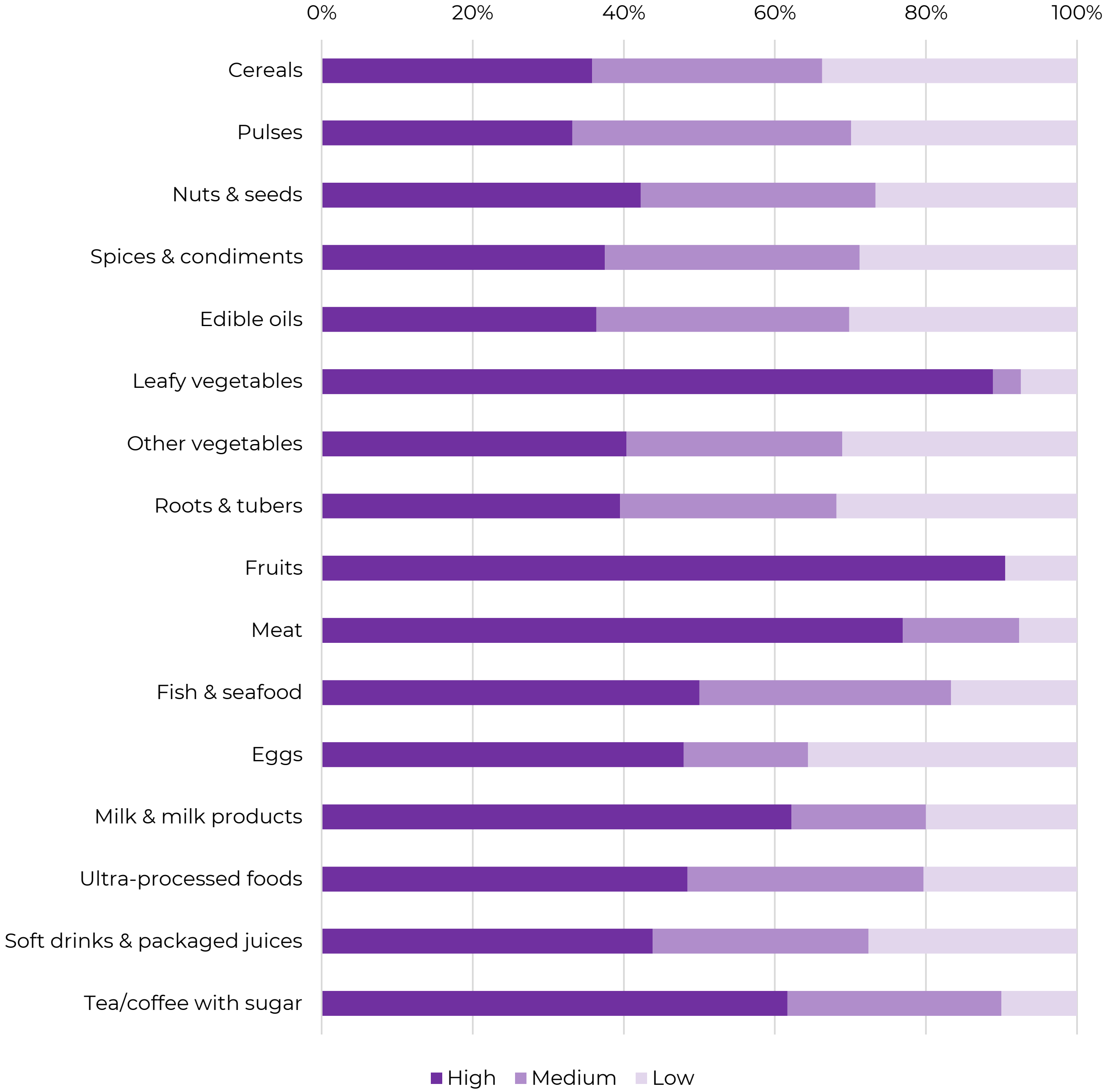
Note: N/A = Not applicable. Ultra-processed foods are mostly unavailable in multi-vendor food markets and so are not considered here.

FINDINGS

- ✓ Food items are mostly sourced from wholesalers and marketing (>80% of market vendors and retailers), except for milk and leafy vegetables, which are partly sourced from farmers or from one's own production.
- ✓ Other sources for food items include farmers, processing units and one's own production.
- ✓ The average distances travelled from the source to vendors and retail shops indicate that, generally, vendors travel further than retailers to source their products which could be due to the location of wholesale markets or other supply points.

VISIBILITY OF FOOD IN VILLAGE

Figure 10. Visibility of food items in retail stores



Note: Visibility of food items in retail shops is classified as high, medium and low, based on their placement in retails shops. In this context "placement" refers to where the food items are positioned or displayed within the retail shops. This placement determines how easily customers can see or access these items

FINDINGS

✓ Perishable items such as fruits, leafy vegetables, meat, and milk are placed in the shops to have the highest visibility, followed by ultra-processed foods and drinks. Less perishable healthy items have relatively lower visibility than the high perishable healthy foods.

FOOD SPOILAGE, QUALITY AND HYGIENE

Figure 11. Vendors and retailers who faced food spoilage in last 7 days

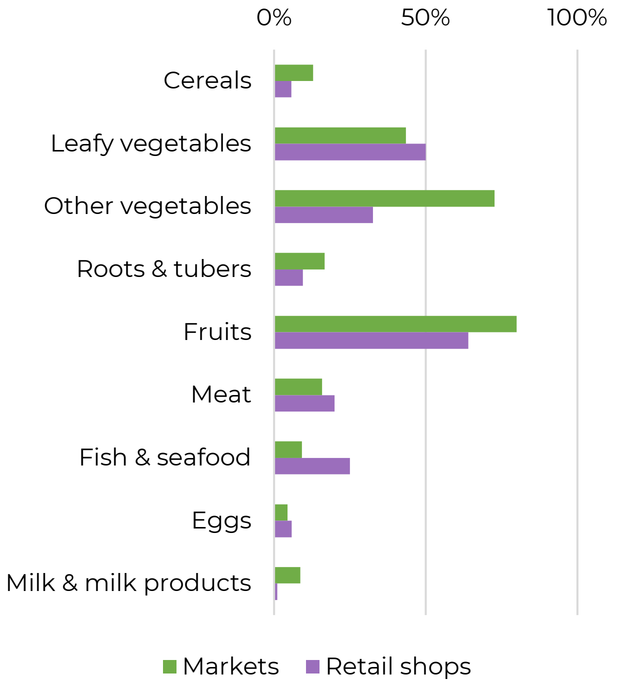
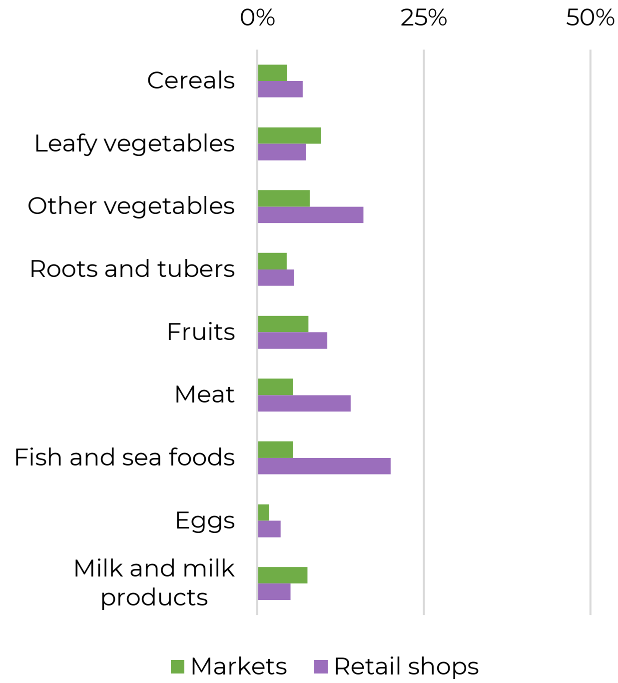


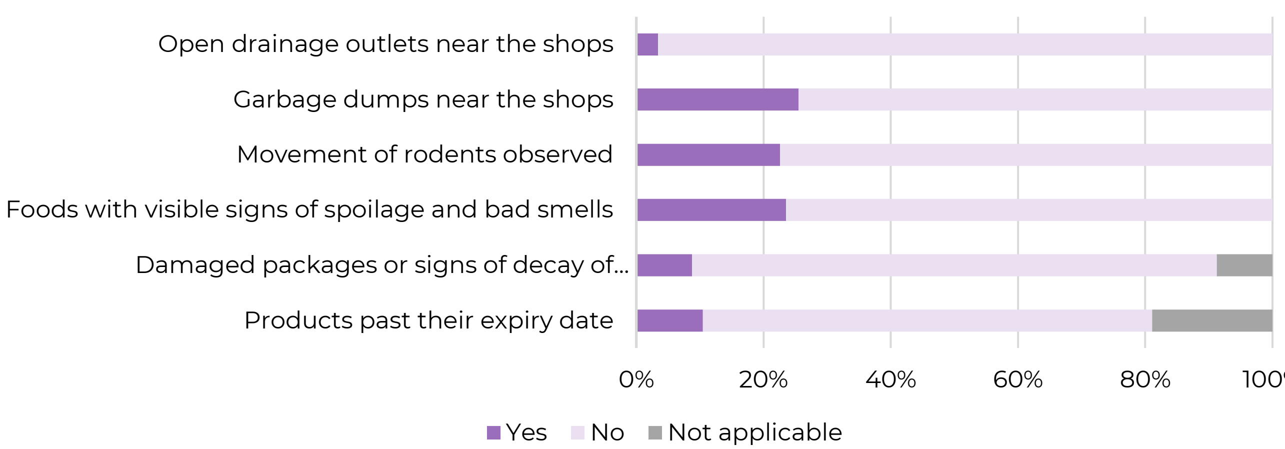
Figure 12. Quantity of spoilage reported by vendors and retailers who faced food spoilage in last 7 days



FINDINGS

- ✓ The highest spoilage are reported by vendors selling fruits (80% of vendors), followed by vegetables (72% of vendors) in multi-vendor markets. Retailers reported highest spoilage for fruits (64%) and leafy vegetables (50%).
- ✓ 21% of foods have visible signs of spoilage & bad smells, 28% of the shops have garbage dumps near the shops and movement of rodents was observed in 20% of shops.
- ✓ About 5% of shops carried products past their expiry date.

Figure 13. Food quality and hygiene in retail stores



KEY TAKEAWAYS

1. Retail shops (18 per village, on average) were much more common in the rural food environment than markets (2 market within 10 km radius of a village, on average).
2. Markets are mostly unorganised and informal, with 95% of markets having no management structure and 96% of retail shops not licensed.
3. Availability of sentinel foods, particularly healthy foods, is greater in food markets (located farther from villages) compared to retail shops (located nearby).
4. 80% of vendors reported spoilage of fruits and, on average, 8% of these fruits spoiled.
5. About 99% of market vendors and 90% retail shop owners are men.

KEY QUESTIONS FOR ACTION

1. How can rural food market governance be improved in the Rangpur 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 healthy food in the food market?
4. How can the participation of women in markets as vendors be increased?
5. What are the strategies and messages that the market can take to facilitate healthy food selling?

CENSUS AND SURVEY METHODOLOGY

Methodology overview

A census was conducted across 50 villages in the district, selected with a probability proportional to the number of households in each village. The census included all formal and informal markets offering various food products as well as retail food shops of the selected village. In addition, in-depth interviews were carried out with a sample of market vendors, village shop owners, and market managers.

Data collection and stratification

The census yielded a list of market managers, market vendors, and retail shop owners, along with key attributes such as the type of market they operate in and their level of mobility. This information was used to conduct a detailed market survey using stratified random sampling. The market survey was organized into two primary categories: Multi-vendor markets and Retail Shops.

For the survey phase, samples were selected from each village based on the existence of establishments, as listed in the census following the below mentioned criteria.

Categories	Sampling criteria (per village)	Actual samples (per 50 Villages)
Multi-vendor market	All	108
Local grocery store	Up to 6	276
Restaurants and tea stall	Up to 2	94
Vegetable/ fruit shop	All	19
Specialized shop	All	17

Transforming Agrifood Systems in South Asia

AUTHORS

Afrin Zainab Bi, Assistant Scientist, IRRI
Ishika Gupta, Associate Scientist, IRRI
Darshanaben Mahida, Assistant Scientist, IRRI
Sejla Isanovic, PhD Student, University of South Carolina
Morgan Boncyk, PhD Student, University of South Carolina
A.N.M. Faijul Kabir, Associate Scientist, IRRI
Samira Choudhury, Scientist I, IRRI
Prakashan Chellattan Veettil, Senior Scientist I, IRRI

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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
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