

RSM2SNF Project Study on Waste Management in Wholesale Markets (2023)

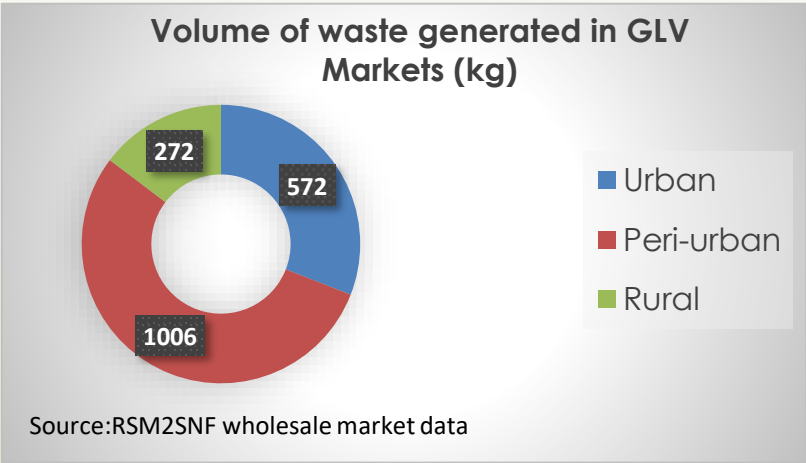
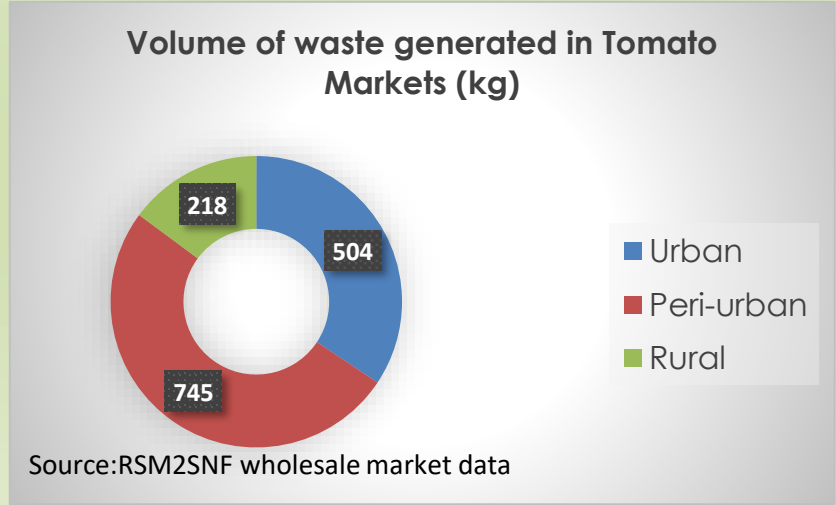
Kaduna State, Nigeria

Infographic produced by Rabi'u Ya'u

In 2023, the RSM2SNF project conducted a study of 80 wholesale markets for tomatoes and green leafy vegetables (GLV) in Kaduna State, Nigeria. The study focused on product waste, waste handling practices, and their environmental impact.

Volume of Waste generated on a typical day

Peri-urban markets generate approximately **1006 kg of waste from GLV** and **745 kg from tomatoes** daily. **Plastic waste** (nylon, polythene bags, and rubber containers) contributes **24-36%** of the total waste in rural markets for both tomatoes and GLVs.



Waste disposal Practices

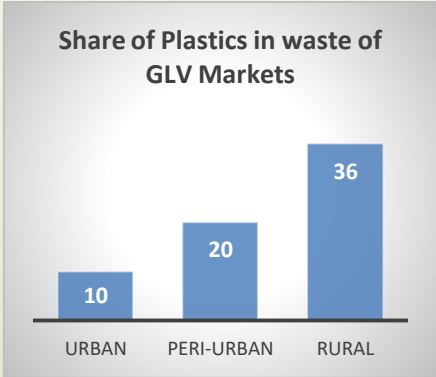
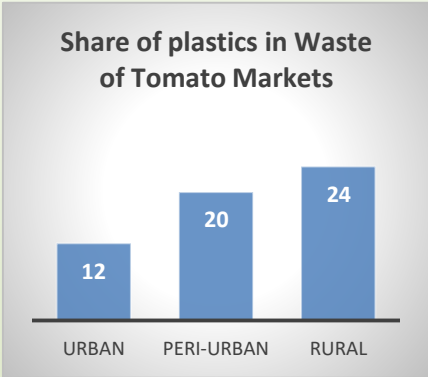
50% of markets dispose of waste **weekly**.
9-20% of market plastic waste is recycled.

Environmental Impacts

Unmanaged waste can cause significant **pollution** (air, water, soil) and public health risks due to **disease transmission**.
Poor waste management can **exacerbate greenhouse gas emissions**, contributing to **climate change** and **ecosystem disruption** (methane emissions).

Plastic Waste Issues:

Plastic waste is **non-biodegradable**, causing **long-term environmental threats** as it accumulates over time.



Source: RSM2SNF wholesale market data

Opportunities for Improvement:

Proper waste management could reduce pollution and generate a **viable source of income** through the production of **compost fertilizer**, which also contributes to **soil health**.

Encouraging **plastic recycling** programs is critical to reducing waste and minimizing its environmental impact.

