



Policy Brief: Strengthening the Fisheries Sector in Kebbi State – Enhancing Economic Contribution through Infrastructural Support

Executive Summary:

The fisheries sector plays a major role in the livelihoods, food security, and economic diversification of the citizens and residents of Kebbi State. Producing about 90,000 metric tons of fish annually and employing over 100,000 people across the value chain, it supports both local and national fish supply (Kebbi State Government 2018). Often, the government may not provide adequate support to promote the use of safe food handling practices, or to evaluate its effectiveness (Seaman and Eves, 2010) especially in open fish markets in Nigeria. For instance, poor infrastructure especially unreliable electricity and lack of safe water undermines optimum productivity, increases losses, and limits economic potential of the fish market subsector in Kebbi State, Nigeria. Foodborne diseases (including from fish products) have been an issue for all societies since the beginning of humanity. The types, severity and impacts of these illnesses have changed through the ages and are still diverse across regions, countries (including Nigeria) and communities (WHO, 2015). Investing in reliable electricity (including solar-powered cold storage) and clean water systems in markets, strengthening public-private partnerships, and building traders' capacity for good hygiene practices and use of efficient technologies is the



Figure 1: Fresh catfish
Source: Google picture



Figure 2: Dried fish in cartons
Source: Google pictures

feasible and strategic way out of this situation. This brief presents some key research findings and policy recommendations to optimize productivity, reduce losses and increase Kebbi State's economic potential to enhance food security and sustainably improve its economy. This brief includes information about the enabling infrastructural

support needed in 22 wholesale fish markets in Kebbi State.

Key findings:

- Market Infrastructure Deficit

Table 1: Distribution of markets and availability of infrastructure

Market type (%)	Functional pipe-borne water (%)	Electricity (%)	Treated water (%)
Urban 36	0	50	0
Peri-urban 18	0	0	0
Rural 46	0	10	0

Source: RSM2SNF wholesale market study (2024)

No functional pipeborne and treated water in any of the identified 22 markets. Electricity coverage is 50% for Urban, 10% for Rural and 0% for Peri-urban markets. In many of these areas, reliance on untreated water from wells and rivers, conveyed in used plastic kegs (formally storing industrial liquids such as vegetable oil, chemicals or syrups) to store the water and preserve the fish. This local system often leads to water contamination leading to fish infestation and eventual spoilage. More so, most traders incur high costs for fuel and maintain electric generators that keep their fish fresh.



Figure 3a: Well or river water stored in plastic kegs

Source: RSM2SNF wholesale market study (2024)



Figure 3b: Well or river water stored in plastic kegs

Source: RSM2SNF wholesale market study (2024)

- Fish Source

Study results showed that 70% of fish sold in Kebbi State is from local rivers, 20% is imported from open sea and 10% from local fish farms. These results indicate the heavy reliance on wild catch fish; signaling an untapped aquaculture potential in the State.

- **Product Types**

In Kebbi State, smoked, fresh and sundried fish dominate the wholesale markets while the frozen types are mostly sold in urban area markets due to limited cold storage in the rural areas. However, fresh fish traders across all these areas face high spoilage and loss due to irregular national electricity supply, high cost of fuel for running personal generating plant and high cost for storage at limited commercial cooling facilities.

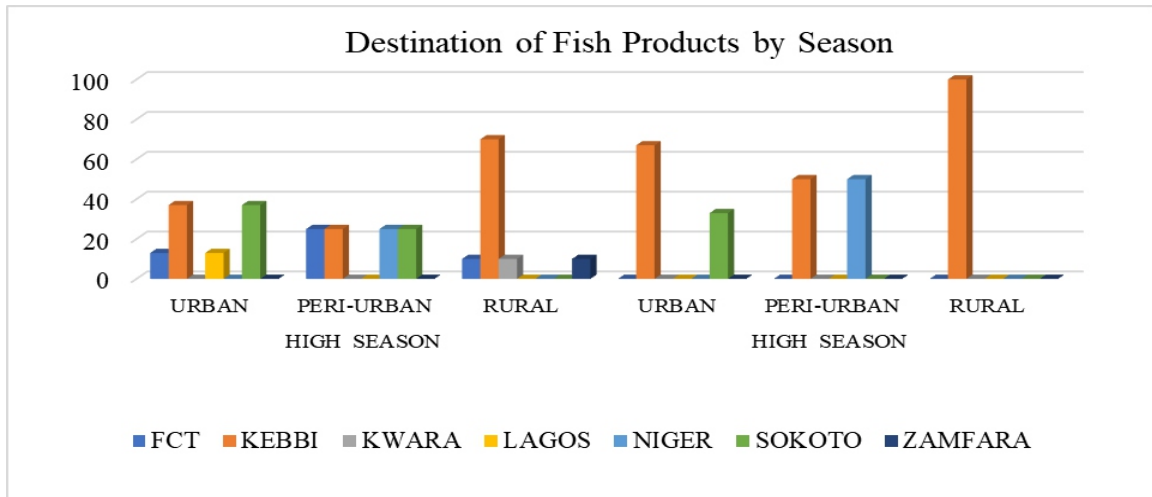


Figure 4a: An open fresh fish market
Source: RSM2SNF wholesale market study (2024)



Figure 4b: An open smoked/dried fish market
Source: RSM2SNF wholesale market study (2024)

Figure 5: Destinations of fish products by season from Kebbi to other states in Nigeria



Source: RSM2SNF wholesale market study (2024)

• Fish Distribution

The study revealed that fish do not come from other states into Kebbi State. However, Figure 3 (above) shows that fish products from the wholesale markets in Kebbi State go to other states in high and low seasons. These states are Niger, Sokoto, Lagos, FCT, Kwara and Zamfara. The wholesale markets and the fish sector in Kebbi State therefore, play a vital role in sustaining the fish supply chain across Nigeria. This supply chain can be sustainably developed through consistent and strategic investments.

Policy Recommendations:

A. Infrastructure Investment

- Expand electricity supply and alternative access by prioritizing fishing hubs and markets with mini-grid solar powered projects; support access to cold storage units.
- Provide clean water by extending pipe borne water to markets; promote rainwater harvesting and low-cost water treatment in remote areas.
- Research and develop alternative, safer and cheaper water storage systems suitable for individual fish sellers to end the use of old plastic kegs formerly used for storing harmful liquids).

B. Partnerships & Funding

- Leverage Public-Private Partnerships (PPP) by encouraging private investment in infrastructure and processing facilities in strategic locations across rural and urban areas.

C. Capacity & Compliance

- Training programs- Equip traders and processors with skills in energy efficiency, water management, and good hygiene practices.
- Strengthen Market Hygiene Monitoring Ensure that Environmental Health Officers are equipped and required to carry out regular inspections.
- Food Safety Education Promote low-cost adoption of safe handling and preservation methods. This will encourage the adoption of good practices, particularly when the cost of adoption is low (Seaman and Eves 2010; WHO, 2015).

Why a Sustainable and Strategic Investment in this Sector matters now

A day without critical intervention means more fish spoilage, higher operational costs, and loss of income for thousands of households in Kebbi State with ripple effects on the economy of the states that Kebbi State supplies (see figure 3). Therefore, investing in the areas captured in the policy recommendation such as electricity and clean water needs could:

- Reduce post-harvest losses
- Increase market profitability
- Create sustainable jobs and enhance national food security from the cascading effects from Kebbi State.

Conclusion

Kebbi State's fisheries sector has the potential to become a national model for integrated agriculture and fisheries growth. With targeted infrastructure investment and capacity building, the state can improve productivity, boost trade, and significantly reduce poverty.

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This policy brief is intended to guide strategic actions and foster discussions on enhancing food safety and improve infrastructure in Kebbi State. For further information or to discuss these recommendations in more detail, please do not hesitate to contact the RSM2SNF project via Mrs. Amadi Grace (the Project Management Assistant) using 09162066036 or grcraji@gmail.com.

References

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- Seaman, P., and Eves, A. (2010). Perceptions of food safety training and knowledge among food handlers. *Journal of Food Protection*, 73(7), 1238-1246.
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