



Foreign, Commonwealth
& Development Office

Sudan Supply Chain Analysis

Laundry Soap Supply Chains in South Kordofan

June 2026

IMPACT

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Executive Summary

This report presents a qualitative analysis of the laundry soap supply chain in the Rashad and Kadugli market hubs of South Kordofan, Sudan. The analysis draws on 28 interviews with importers, transporters, wholesalers, packagers, retailers, laundry service providers, and households to examine sourcing patterns, transport, pricing, financing, and household access following the outbreak of conflict.

The findings indicate that the laundry soap market has undergone substantial restructuring since April 2023. Laundry soap is supplied to South Kordofan through an international import and domestic redistribution network, with Egypt serving as the primary source of imported products. These products are subsequently redistributed through domestic commercial hubs and transport corridors to Kadugli and Rashad. Before the April 2023, both market hubs sourced laundry soap primarily from manufacturers and suppliers in Greater Khartoum, particularly Um Durman. As manufacturing and trade in Khartoum were disrupted, supply chains shifted towards alternative domestic distribution routes, with Kadugli relying mainly on El Obeid and Rashad on Kosti alongside a partially restored supply link with Omdurman. At the upstream level, the laundry soap entering these domestic distribution networks is imported internationally by Khartoum-based importers and then redistributed within Sudan to markets including South Kordofan. While small-scale liquid soap packaging exists locally, there is no commercial laundry soap manufacturing in South Kordofan, leaving both markets dependent on externally supplied products and vulnerable to disruptions along the domestic redistribution networks.

Transport conditions and market access remain the principal factors influencing market performance. Respondents described Rashad's supply corridor as considerably more constrained than Kadugli which could be associated with higher number of checkpoints, insecurity, and occasional route diversions, resulting in higher transport costs. Additionally, prices fluctuate in response to exchange rate movements, fuel costs, transport disruptions, and checkpoint charges rather than following a sustained upward trend. Traders also reported maintaining relatively low stock levels because limited working capital constrains bulk purchasing, while business financing continues to rely primarily on personal savings and trust-based commercial credit. Despite these constraints, traders reported that the market continued to operate and has adapted by reorganising supply routes.

At the household level, laundry soap was consistently identified as an essential commodity. Respondents reported adopting coping strategies such as reducing washing frequency, purchasing smaller quantities, switching to lower-cost products, and, in some cases, producing homemade soap substitutes. Although urban demand has increased following displacement, respondents generally reported a decline in household laundry soap consumption.

Overall, the assessment identified that the laundry soap market remained operational through significant adaptation of supply chains despite prolonged conflict. However, continued dependence on external

suppliers, transport-related disruptions, and limited access to working capital constrained market resilience. Strengthening trader access to finance, improving market functionality, and supporting local value addition where feasible could enhance the resilience of the laundry soap market while improving household access to essential hygiene commodities.

Key Findings at a Glance

- Both market hubs are currently import-dependent for laundry soap: Domestic production ceased following the disruption of manufacturing in Um Durman, which previously supplied South Kordofan with laundry soap. Additionally, there is no laundry soap production in Kadugli and Rashad hubs, except protracted packaging of imported liquid soap without adding further values.
- Kadugli and Rashad hubs rely on two distinct corridors: Kadugli is currently supplied through El Obeid via Al-Dilling (with an alternative route through Al-Rahad and Hebeela), while Rashad sourced supplies from Kosti and Um Durman through Umm Rawaba and Al-Abbasiya.
- The two corridors encountered notably different checkpoint burdens: Wholesalers and transporters along the Rashad corridor reported passing through approximately 20–30 formal and informal checkpoints between Kosti and Rashad, including a mandatory security convoy departing from Kosti. On the other hand, Kadugli reportedly has comparatively fewer checkpoints and associated costs, primarily linked with transportation of laundry soap in smaller consignments rather than through large-scale commercial trucks.
- Laundry soap prices saw sharp rises in both hubs since April 2023 which could be due to the disruption in the supply chain. Respondents also reported that prices have fluctuated in line with changes in conflict intensity and transport conditions.
- Households in both Kadugli and Rashad described laundry soap as an essential commodity and may prioritise laundry soap over other household items. Rising prices and supply disruptions might have likely forced vulnerable households to adopt unfavourable coping strategies including splitting bars in half, washing clothes less often, and in a small number of cases making laundry soap at home from ash, lalob tree bark, and natron. Demand for laundry soap, however, increased in both hubs since the conflict broke out, likely driven primarily by displacement as households relocated to the urban centres.
- Traders reported that could not maintain large inventories because of financial and security constraints, forcing them to restock in small quantities. In Kadugli, logistics constraints are particularly severe, as traders cannot purchase or transport goods in bulk due to the limited

availability of commercial transport services. Instead, they rely on small trucks that are not designed for commercial freight.

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Acronyms and Abbreviations

JMMI – Joint Market Monitoring Initiative

KII – Key Informant Interview

MPCA – Multipurpose Cash Assistance

VoPs – Vox Pops

1. Introduction and Methodology

1.1 Background

Since April 2023, Sudan has experienced a protracted humanitarian crisis driven by ongoing conflict and widespread insecurity, resulting in large-scale population displacement and significant humanitarian needs. As of 2025, an estimated 12.1 million people have been displaced, and a substantial proportion of the population requires humanitarian assistance.¹ The scale and nature of needs vary across locations, reflecting differences in conflict intensity, accessibility, service availability, and livelihood conditions.

While population movements toward areas of origin have been observed, recent developments in parts of North Darfur highlight the continued volatility of the situation.² Damage to housing, limited functionality of basic services, and disrupted livelihoods continue to constrain recovery and return dynamics. Humanitarian actors are operating in a challenging environment characterised by access constraints, evolving needs, and funding shortfalls, underscoring the importance of timely and reliable operational information.

In this context, information on market supply chains is critical for the effective design and implementation of Multi-Purpose Cash Assistance (MPCA). Although existing exercises, such as the Joint Market Monitoring Initiative (JMML), provide regular market-level information in accessible areas, there remains a gap in consolidated evidence on supply chain functionality, particularly in conflict-affected locations. Addressing this gap is increasingly important given the importance of supply chain evidence base for market-based programming in Sudan.

1.2 Assessment Objectives

The overall objective of this assessment is to provide an analysis of the existing supply chain for laundry soap in the selected logistical hubs in two locations: Kadugli and Rashad in South Kordofan. This analysis will dissect supply routes to inform market-based interventions and ultimately ensure the successful implementation of market-based humanitarian operations. The primary targets of this assessment include humanitarian cash and market programme implementing agencies, inter-agency coordination platforms, relevant clusters, donors, and other actors interested in supply chain information.

1. The specific objectives of this analysis include: To identify and map the primary sources and key transit routes associated with laundry soap across the identified hubs.
2. To understand the current capacity, functionality and roles of key supply chain actors for laundry soap across the target hubs.

¹ OCHA. [Sudan Humanitarian Needs and Response Plan](#) (2025).

² IOM. [Over One Million Return to Khartoum Amid Fragile Recovery](#) (2025).

3. To assess key supply chain barriers affecting operations and their influence on the movement of goods within the identified hubs.

1.3 Assessment Scope

The laundry soap supply chain analysis employs qualitative methods to document perspectives across the laundry soap market systems in South Kordofan State, with a primary focus on the two main market systems of Kadugli and Rashad. These localities were selected because they represent the state's principal market hubs: Kadugli serves as the administrative capital and western commercial centre of the state, while Rashad functions as the main trading hub for the eastern corridor. Together, they capture the distinct market dynamics and trade flows shaping laundry soap availability across South Kordofan.

As a widely available commodity across formal and informal market systems, laundry soap is consistently prioritised by households as an essential good. Beyond its role in maintaining hygiene, it also supports income-generating activities, with households and small-scale actors relying on laundry-related services. Its availability and affordability therefore have broader implications for both public health and local economic activity.

Additionally, laundry soap was prioritised for its versatility and broader functional relevance in crisis-affected settings. In contexts characterised by displacement, overcrowding, limited water access, and inadequate sanitation, it is frequently used for multiple purposes, including washing clothes, cleaning dishes and surfaces, and, where necessary, for personal hygiene. This multi-use nature makes it particularly relevant for analysis, as it intersects with health outcomes, dignity, and livelihood strategies across different population groups.

1.4 Sampling and Data Collection

During the scoping phase, key expert interviews were conducted with market experts and traders to identify the main actors in the laundry soap supply chain and define the respondent categories for the assessment. The selected key informant categories for this assessment included importers, transporters, wholesalers, packagers, retailers, laundry service providers, and household consumers.

Given the targeted respondent groups, the assessment employed purposive sampling using an iterative, waves-based approach. Following an initial round of interviews with each respondent category, the research team reviewed the findings to identify emerging themes, information gaps, and respondent groups requiring further exploration. Subsequent sampling was then targeted towards the most relevant actors and issues identified during the analysis.

Data were collected using two qualitative methods: semi-structured Key Informant Interviews (KIIs) and vox pops (VoPs). KIIs explored supply chain dynamics in depth, while VoPs were short, structured interviews used to complement and triangulate the KII findings by capturing additional perspectives from market

actors and end users. For each data collection method, location-specific, modular tools were developed to capture the perspectives of different respondent categories and facilitate data collection across multiple nodes of the supply chain. The tools were organised into modules tailored to different respondent categories and areas of inquiry, allowing relevant questions to be included or adapted according to the respondent's role in the supply chain while maintaining a common set of core themes across interviews. All interviews were audio-recorded, transcribed, and translated into English prior to analysis.

The analysis followed an inductive thematic approach. Interview transcripts were reviewed iteratively to identify recurring themes, patterns, and relationships emerging from the data, rather than applying a predefined analytical framework. Themes were continuously refined as additional interviews were completed, allowing findings from different respondent groups and market hubs to be compared and triangulated.

The assessment conducted 28 interviews, comprising 10 KIIs and 18 VoPs, across the Kadugli and Rashad market hubs, representing the western and eastern market systems of South Kordofan.

Table 1: Number of sample respondents across the two market hubs

Actor Type	Kadugli KII	Kadugli VOP	Rashad KII	Rashad VOP	Total
Importer	0	0	2	0	2
Transporter	0	0	2	0	2
Wholesaler	2	0	3	0	5
Packager / Manufacturer	0	1	1	0	2
Retailer	0	3	0	2	5
Laundry Service Provider	0	2	0	3	5
Household Consumer	0	3	0	4	7
Total	2	9	8	9	28

1.5 Data Analysis

Data analysis followed a phased and iterative thematic analysis approach. Coding began immediately after the end of each data collection session, allowing emerging themes and knowledge gaps to inform subsequent interviews and sampling decisions. Given the qualitative nature of the study, all interview transcripts were managed and analysed using Atlas.ti software.

An initial codebook was developed from the first set of interviews and served as a starting point for analysis. Rather than applying a fixed analytical framework, the codebook was treated as a living document, with codes continuously refined, merged, and expanded as new themes emerged from the data. This iterative

process allowed the analysis to remain grounded in participants' perspectives while ensuring that emerging findings were explored consistently across respondent groups.

The coding process focused on systematically identifying and developing themes from the interview data, while also involved reviewing and refining the coding to ensure consistency, resolve discrepancies, and identify any overlooked insights. Following coding, themes were synthesised across respondent groups and supply chain actors to facilitate triangulation and identify converging and contrasting perspectives.

1.6 Challenges and Limitations

Challenges

- Ongoing security concerns and accessibility constraints created a challenging operating environment, resulting in delays during data collection. Data collection in Kadugli locality was particularly challenging because of the deteriorating security situation. Nevertheless, all planned interviews were successfully completed with the use of local enumerators and community contacts who facilitated access to respondents and helped conduct interviews.
- Obtaining the necessary approvals and authorisations was delayed due to the prevailing security situation.
- The assessment covered geographically dispersed and hard-to-reach respondents, which increased the complexity of coordinating and completing data collection.

Limitations

- This report provides a snapshot of the laundry soap supply chain at the time of data collection. Given the rapidly evolving conflict dynamics and market conditions in Sudan, where market conditions may rapidly change and the findings should therefore be interpreted as reflecting the assessment period rather than as a longer-term representation of market conditions.
- Assessing the overall capacity of the supply chain would require a stronger quantitative component, which was beyond the scope of this study.
- Due to the limited availability of published literature on the laundry soap market, the analysis relied primarily on the qualitative perceptions and experiences of key informants and supply chain actors.
- The number and distribution of respondents across all respondent categories and locations were insufficient to systematically explore differences in experiences by income level, displacement status, market role, or other relevant characteristics. The findings therefore capture a range of perspectives across the assessed supply chain but do not provide an in-depth comparison of experiences across all population or actor sub-groups.

- As the assessment employed a qualitative methodology with purposive sampling, the findings should not be interpreted as statistically representative of the wider population or market actors.

An aerial photograph of a river delta, likely the Nile, showing a dense grid of agricultural fields and a winding river. A white rectangular box is positioned in the lower-left quadrant, and a dark blue hexagon is located at the top-right corner of this box.

Findings

2. Context Overview

2.1 From a Centralised Supply System to Divergent Sourcing Corridors

Before the conflict in April 2023, both Kadugli and Rashad sourced laundry soap predominantly from manufacturers in Greater Khartoum, with Um Durman consistently identified by respondents as the principal production and distribution centre. This reflected Sudan's highly centralised manufacturing system, in which most consumer goods, including laundry soap, were produced in Khartoum before being distributed through established wholesale networks across the country. The outbreak of conflict in April 2023 severely disrupted this system, as insecurity, damage to industrial areas, and the fragmentation of transport networks reduced manufacturing capacity and interrupted the movement of goods from Khartoum to regional markets.

Following these disruptions, the two market hubs reconfigured their supply chains through different sourcing corridors. Kadugli shifted its primary sourcing to El Obeid in North Kordofan, with supplies transported mainly through Al-Dilling and, when necessary, via alternative routes through Al-Rahad and Hebeela. By contrast, Rashad now relies primarily on supplies originating from Kosti in White Nile State, transported through Umm Rawaba and Al-Abbasiya, while some wholesalers reported gradually resuming limited sourcing directly from Um Durman when security conditions permit.

These findings are consistent with broader laundry soap market dynamics observed elsewhere in Sudan, where conflict has required traders to continuously adjust sourcing strategies in response to road closures, insecurity, changing territorial control, and disruptions to commercial transport.³ Rather than continuing to rely on established sourcing relationships and supply routes, traders increasingly adapt their procurement decisions in response to changes in the accessibility, security, and cost of alternative corridors.

Consequently, neither Kadugli nor Rashad has returned to the relatively stable supply system that existed before the conflict. Instead, both markets have adapted to the same disruption, the collapse of the Khartoum-centred manufacturing and distribution system, through different sourcing networks and transport corridors. The differences observed between the two market hubs therefore reflect alternative responses to a common systemic shock rather than fundamentally different pre-conflict market structures.

2.2 Conflict and Security Dynamics

Insecurity affects the laundry soap supply chain primarily by disrupting its transport routes and increasing checkpoint-related burdens. The conflict likely caused fragmentation in the transport networks, increased transport and transaction costs, heightened the risk of delays, looting, and confiscation, and forced traders to continually adapt sourcing and transport routes in response to changing security conditions.

³ IMPACT, [Laundry soap supply chain analysis in South Darfur and Khartoum](#) (2026).

"The pressures of the conflict pushed me to start sourcing from a place called Om Ruwaba, because it was relatively accessible at the time. But then Om Ruwaba also shut down, and I was forced to use another route — not a direct one. That created a lot of problems, especially in transporting the soap."

— Soap Wholesaler, Rashad (KII)

In Kadugli, respondents described insecurity primarily through its effects on supply continuity and route accessibility rather than direct losses during transportation. Laundry soap supplies depend on transport routes connecting Kadugli with sourcing markets, particularly El Obeid. When these routes are disrupted or temporarily closed, traders reported that laundry soap supplies stop arriving until access is restored. Although respondents did not report direct losses or security incidents affecting the transportations of laundry soap in Kadugli, they highlighted that insecurity influenced inventory management decisions. One wholesaler recalled an earlier period of theft that forced the business to reduce the quantity of stock held at one time, reflecting increased caution in managing commodity exposure.

2.3 Regulatory and Governance Environment

The policy and regulatory environment supporting the production, importation, and distribution of essential commodities has become increasingly constrained by insecurity, institutional disruption, and the fragmentation of public services. Although Sudan's national legal framework governing business registration, investment, industrial licensing, taxation, and commercial trade formally remains in place, the conflict has significantly weakened the capacity of public institutions to implement and enforce these functions consistently across the country. Damage to industrial infrastructure, disruption of administrative services, and fragmented territorial control have collectively weakened the enabling environment for private-sector production and trade, particularly in conflict-affected states such as South Kordofan.⁴ These disruptions have contributed to a substantial contraction of Sudan's manufacturing sector, with many factories in Greater Khartoum suspending operations or relocating production following the outbreak of the conflict.⁵

Within the laundry soap market system, these institutional and security-related disruptions have contributed to reshaping both production and commercial distribution networks. Beyond the disruption of production, wholesalers and transporters identified movement restrictions, multiple checkpoints, and administrative constraints on the movement of goods particularly across areas controlled by different armed groups as major barriers to the efficient distribution of laundry soap. Respondents also indicated that weak administrative systems, together with limited capacity of public institutions to facilitate large-scale importation and commercial distribution reportedly increased traders' reliance on informal commercial arrangements and alternative transport routes.

⁴ World Bank Group, [New World Bank Initiative to Strengthen Access to Basic Services, Boosts Food Security, and Builds Resilience for Sudanese Communities](#) (2024).

⁵ UNDP, [Sudan Private Sector Engagement Strategy 2026–2028](#) (2026).

Households and small-scale laundry service providers similarly reported weaknesses in the broader regulatory environment. These respondents expressed concerns about the absence of effective market oversight, particularly regarding price regulation and the consistent enforcement of market regulations, which they believed contributed to substantial price variation across markets. Although these perceptions do not necessarily reflect changes in the formal regulatory framework, they illustrated how weakened market governance and limited institutional oversight are experienced by the respondents. Overall, respondents described an environment in which commercial decisions are influenced by individual actors, particularly wholesalers, due to lack of uniform implementation of formal regulatory requirements.

2.4 Overview of Supply Chain Corridors

This assessment findings indicate that Kadugli and Rashad are supplied through two distinct commercial corridors that emerged following the disruption of the pre-conflict Khartoum-centred supply system. While both markets remain dependent on imported laundry soap, the structure, costs, and risks associated with the respective supply routes differ considerably.

Kadugli reportedly sourced most of its laundry soap supplies from El Obeid in North Kordofan State, which functioned primarily as a domestic sourcing and redistribution point rather than necessarily as the point of production. Wholesalers indicated that laundry soap entering the Kadugli market was supplied through a broader distribution network, with internationally imported products reaching local markets through upstream importers in Khartoum and subsequently being redistributed to South Kordofan. Supplies are primarily transported through Al-Dilling before reaching Kadugli, with an alternative route available through Al-Rahad, Hebeela, and Al-Dilling based on the routes' situation. Respondents described the corridor as relatively short, covering approximately 60–70 kilometres from El Obeid, although road conditions consist largely of gravel and dirt surfaces that can become difficult during adverse weather conditions. Traders reported a relatively light checkpoint burden, with no significant inspection fees affecting the movement of laundry soap along the main corridor.

In contrast, Rashad reportedly relies on supplies originating from Kosti in White Nile State, although at least one wholesaler reported partially restoring sourcing links with Um Durman in Khartoum state when conditions permit. The Kosti supply route passes through Umm Rawaba and Al-Abbasiya before reaching Rashad, while an alternative route bypasses Umm Rawaba and connects directly through Al-Abbasiya. Respondents estimated that the corridor extends approximately 580–600 kilometres from Kosti and typically requires five to seven days of travel under typical conditions. However, insecurity and route disruptions may force transporters towards longer paths, extending travel times to as much as three weeks. The Rashad corridor also carried a substantially heavier security burden than the Kadugli route. Traders and transporters reported passing through approximately 20–30 checkpoints, in addition to complying with mandatory

security convoy requirements and obtaining intelligence-service authorisations before departing Kosti. Transporters also stated that they are required to pay 5,000 SDG to 7,000 SDG at each checkpoint post. Regarding laundry soap production condition, respondents highlighted that there is no functional laundry soap manufacturer in Rashad, similar to Kadugli. However, respondents noted the presence of a small-scale liquid soap producer that sources inputs from Kosti and Rabak, indicating a limited degree of local value addition despite the absence of full-scale manufacturing.

In general, the findings revealed that while both markets remain dependent on imported laundry soap, Rashad faces a longer, more complex, and more heavily regulated supply corridor than Kadugli. These differences have important implications for transport costs, delivery reliability, trader risk exposure, and ultimately the availability and price of laundry soap within each market.

Table 2: Supply chain corridors of Kadugli and Rashad

Dimension	Kadugli Corridor	Rashad Corridor
Primary source	El Obeid, North Kordofan	Kosti, White Nile State (with a partially-restored link with Um Durman)
Route	El Obeid → Al-Dilling → Kadugli; alternative via Al-Rahad → Hebeela → Al-Dilling	Kosti → Umm Rawaba → Al-Abbasiya → Rashad (or Kosti → Al-Abbasiya directly, bypassing Umm Rawaba)
Approx. distance	Approximately 60–70 km from El Obeid	Approximately 580–600 km from Kosti
Checkpoint burden	Light checkpoint burden because transporters mostly off roads	Approximately 20–30 checkpoints; mandatory security convoy and Intelligence-service stamp required to depart Kosti
Local production	No functional local manufacturer	No functional local manufacturer

2.5 Supply Chain Actors and Roles

Despite differences in sourcing corridors and transport conditions, the laundry soap supply chain systems in both Kadugli and Rashad reportedly followed a broadly similar market structure. Laundry soap moves from importers and distributors in major commercial hubs to wholesalers within South Kordofan before reaching retailers, laundry service providers, and ultimately households. However, the assessment found notable differences in the prominence of each market actor across the two localities. Rashad exhibited a more developed upstream supply network, with importers and transporters playing a crucial role in facilitating cross-state trade. In contrast, the Kadugli market is characterised by shorter supply chains, with wholesalers assuming a greater role in coordinating procurement and distribution due to the limited presence of large-scale transport and import operations. Across both market systems, local manufacturing remained almost

non-existent, leaving the supply chain highly dependent on imported finished products transported from outside the state.

The assessment also highlighted that conflict has altered the functions of several market actors. Importers and transporters experienced security and transport risks, while wholesalers faced higher operating and procurement costs associated with exchange rate fluctuations and transport disruptions. These costs were reported to be transmitted through the supply chain, contributing to higher prices at downstream market levels. Retailers increasingly relied on frequent small-volume purchases to manage cash flow and minimise inventory risks. At the consumer level, households and laundry service providers became highly sensitive to price increases, which may require adjusting purchasing behaviour and consumption patterns in response to rising costs. The table below summarises the roles of each actor and their observed characteristics identified with this assessment.

Table 3: The role of laundry soap supply chain actors

Actor	Core Role	Status in the Assessed Hubs
Importers	Purchase laundry soap from abroad, primarily Egypt, in bulk	Based in Khartoum and operating with limited capacity
Transporters	Transport laundry soap from the source to and within market hubs; navigate checkpoints, convoys, and seasonal road conditions	Operational but exposed to convoy/Intelligence-stamp requirements, security and seasonal challenges, particularly in Rashad
Wholesalers	Purchase laundry soap from importers and sell it to retailers	Active in both market hubs, although constrained by security and financial challenges
Packagers	Pack liquid laundry soap locally using imported products	They are operating in both market hubs
Retailers	Sell laundry soap directly to households and laundry service providers	Active in both market hubs but impacted by security and financial constraints
Laundry Service Providers	Use laundry soap as a productive input for a washing/laundry service	Operational in both market hubs
Household Consumers	Final users of laundry soap	Weakened purchasing power due to challenges including price rise

3. Sourcing and Import Dependence

3.1 Supply Routes Diversion

Greater Khartoum industrial area served as the primary source of laundry soap for both Kadugli and Rashad market hubs until the conflict broke out in April 2023. Every wholesaler and importer interviewed in this assessment identified Um Durman as their principal pre-conflict supply source, reflecting the concentration of Sudan's laundry soap manufacturing industry in Khartoum state. However, the disruption of manufacturing and transport networks following the outbreak of conflict reportedly forced market actors to identify alternative sourcing locations. Similar disruptions to domestic manufacturing and trade have been documented across Sudan, where conflict has fragmented supply chains and significantly reduced industrial production.⁶

Although most respondents experienced the same initial disruption, their adaptation pathways differed according to changing security conditions. One Rashad wholesaler described moving through a sequence of supply sources as conflict expanded geographically. The route initially shifted from Khartoum to Al Jazirah State, before relocating sourcing to Kassala and Al-Dabba, and eventually establishing Kosti as its primary supply hub. Wholesalers reported improved access has enabled them to partially restore commercial links with Um Durman. A comparable pattern was reported in Kadugli, where wholesalers redirected procurement from Khartoum to El Obeid, primarily because it offered a shorter and more reliable supply route once connections with Khartoum became unreliable.

"To be honest, I used to bring [laundry] soap from Khartoum in the early years, before the war. But after the war broke out, we started importing from Al-Jazeera state. Then the war reached Al-Jazeera, so we shifted to importing mostly from Kosti. Currently, thank God, things are recovering somewhat, and we have been getting most of our supply from Kosti throughout the war period. Now I also have contacts in Um Durman who have returned, so I am importing from there again as well."

— Soap Wholesaler, Rashad (KII)

These findings demonstrate that sourcing decisions are no longer based primarily on price or established commercial relationships. Instead, traders continuously adjust procurement strategies according to security conditions, road accessibility, and the availability of functioning markets within a supply network that has become more fragmented than the one that existed before the conflict.

3.2 Post-Conflict Sourcing Patterns

Although both market hubs remained heavily dependent on imported laundry soap, primarily sourced from Egypt, the two market hubs have developed different domestic procurement and redistribution networks

⁶ International Food Policy Research Institute (IFPRI), [Sudan's war is an economic disaster](#) (2025).

since the disruption of the pre-conflict Khartoum-centred supply system. The geographical differences therefore relate primarily to the domestic redistribution points and commercial networks through which imported soap reaches each market, rather than to differences in the international source of the product. Before April 2023, wholesalers reported that domestic manufacturers supplied a significant proportion of laundry soap consumed in Sudan, while imported products accounted for a more limited share of market supply. Following the disruption of manufacturing and commercial activity associated with the conflict, this balance shifted towards greater reliance on internationally imported products, particularly those sourced from Egypt. The reported decline in domestic manufacturing capacity increased the importance of importers and distributors in maintaining supply to downstream markets, including Kadugli and Rashad. In Kadugli, wholesalers reported that most laundry soap is currently procured through El Obeid in North Kordofan, which functions primarily as a domestic sourcing and redistribution point rather than necessarily as a production location. Imported laundry soap reaches Sudan through upstream importers and distributors before being redistributed through domestic commercial hubs to South Kordofan. Kadugli therefore remains dependent on an external supply network even though its immediate procurement point is located within Sudan.

Rashad, by contrast, is currently supplied predominantly through Kosti in White Nile State, while respondents also reported a partially restored commercial link with Um Durman when security and transport conditions permit. This indicates that Rashad's post-conflict sourcing network incorporates multiple domestic procurement points, although access to these alternative sources remains dependent on security and transport conditions.

The main change since the conflict has therefore been both an increase in reliance on imported laundry soap and a reconfiguration of the domestic distribution network through which imported products reach the two market hubs. Before the conflict, both markets were directly connected to the Khartoum-centred manufacturing and distribution system, where domestic production supplied a significant share of market demand. Following the disruption of domestic manufacturing and commercial activity in Khartoum, traders increasingly relied on internationally imported products, particularly from Egypt, while also shifting towards alternative domestic redistribution hubs to maintain supply to Kadugli and Rashad.

The reported increase in import volumes provides further evidence of this shift. One importer reported increasing monthly imports from approximately 700–800 cartons before the conflict to 1,000–1,200 cartons, while another reported an increase from 350 cartons to approximately 700 cartons per month between 2024 and 2026.

3.3 Local Production

Neither of the assessed market hubs has an operational laundry soap manufacturer. The closest activity to local production is small-scale liquid laundry soap packaging, which was reported in both market hubs. In Kadugli, one packager explained that he started the business in response to a market-wide shortage of laundry soap that coincided with a cholera outbreak. He trained a neighbour in basic laundry soap preparation and packaged approximately six 3-litre jars per production batch. However, he reported suspending operations once his stock of imported raw materials was exhausted.

"Specifically, the raw materials [are the obstacle]. The labor is available, financing is available, but the raw materials are the obstacle standing in our way. As I mentioned earlier, the materials I had were not many. We produced enough with them, then they ran out and we stopped at that point."

— Soap Packager, Kadugli (VOP)

A similar situation was reported in Rashad, where small-scale liquid soap packagers were also operating. One packager described producing liquid laundry soap in 20-litre batches using imported processed ingredients, including sulfonic acid, dexaphone, a foaming agent, soda, rock salt, colourants, and fragrances sourced primarily from Kosti and Rabak. Respondents were explicit that the core inputs, particularly sulfonic acid and dexaphone, have no locally available substitutes, and that shortages of these inputs may directly result in delays or interruptions in production and distribution. However, less specialised inputs, such as colourants and salt, could be procured locally. Respondents therefore emphasised that the availability of imported chemical inputs is the primary determinant of continuity in their operations.

In general, these findings indicated that local production capacity was found to be limited, and that the laundry soap supply chain remained heavily dependent on imported products and imported packaging inputs. The existing packaging enterprises could only contribute marginally to meeting market demand.

3.4 Available Laundry Soap Types

Wholesalers and retailers in both market hubs described noticeable changes in the range of available laundry soap types since April 2023. They also reported that several established and popular brands had disappeared from the market, while new brands had emerged to replace them. This suggests that the market adapted to supply disruptions in Sudan's manufacturing and distribution system by substituting that were previously domestically manufactured in Khartoum with imported alternatives, thereby maintaining product availability despite changes in the product mix.

In Kadugli, retailers identified the Elephant and Television brands as products that disappeared following disruptions to domestic manufacturing in Khartoum. Similarly, respondents in Rashad reported that the previously popular Garnok and Abo-Sefeen laundry soap brands, which were manufactured in Khartoum, were no longer available and had been replaced by newer brands. One laundry service provider further

explained that white laundry soap had become more difficult to obtain than brown laundry soap. Respondents also noted that brown laundry soap, which was the most widely available variety, had become more expensive.

These findings indicate that the laundry soap market has demonstrated a degree of adaptability by replacing brands previously manufactured in Khartoum with alternative imported brands following disruptions to domestic production and supply chains. However, consumers emphasized that the newly available products were not necessarily considered equivalent substitutes in terms of quality. Wholesalers similarly explained that they adjusted their procurement strategies to maintain product availability despite ongoing disruptions to manufacturing, transport, and wholesale distribution networks. Overall, changes in the range of available laundry soap types reflect the broader restructuring of the laundry soap market system following the outbreak of the conflict.

4. Transport and Routes

Transport emerged as one of the most critical components analysed in this assessment, as it was consistently identified by respondents as a key factor affecting the laundry soap market system across both market hubs. Transport serves as the principal mechanism through which commodities move from source markets to traders, and it is also one of the most security-sensitive components of the supply chain. While both Kadugli and Rashad experienced disruptions following the breakdown of the Khartoum-centred supply system, the assessment revealed substantial differences in the complexity and security risks associated with their respective transport corridors. These findings suggest that transport constraints, combined with other issues, have become a major determinant of the functionality of the laundry soap supply chain.

4.1 The Rashad Corridor: Distance, Checkpoints, and a Convoy System

Among the two assessed market hubs, according to transporters, Rashad experienced the greatest transport constraints. Laundry soap is primarily transported from Kosti to Rashad through Umm Rawaba and Al-Abbasiya, covering an estimated distance of approximately 580–600 km. Transporters consistently described the corridor as comprising three transport segments: Kosti–Umm Rawaba, Umm Rawaba–Al-Abbasiya, and Al-Abbasiya–Rashad. While the first two segments were generally considered accessible throughout most of the year, transporters consistently identified the final section between Al-Abbasiya and Rashad as the most difficult because of its poor road conditions and predominantly unpaved surface. Respondents also reported that transport costs increased progressively along the corridor as road conditions deteriorated. Transporters explained that transporting laundry soap from Kosti to Rashad typically requires five to seven days under typical conditions. Respondents suggested that this duration includes loading and unloading activities, administrative procedures, convoy arrangements, checkpoint delays, and the slow movement of

heavy vehicles along poor road sections. During the rainy season, respondents reported that the same journey may take up to three weeks because flooding and deteriorating road conditions substantially reduce vehicle mobility.

Transporters further identified checkpoints as one of the defining characteristics of the Rashad corridor. They also estimated passing through approximately 20–30 formal and informal checkpoints, with unofficial payments becoming more common during periods of heightened insecurity. Several respondents explained that checkpoint arrangements change according to territorial control, increasing both transport costs and travel uncertainty. In addition to checkpoints, transporters described a formal security convoy system operating from Kosti. Before departure, transporters are required to obtain clearance from the Intelligence Service before joining an escorted convoy, for which an additional fee is charged. They explained that convoy departures are scheduled rather than continuous, meaning transporters may wait several days before commencing their journey.

"First, if you are leaving Kosti, you load your shipment there. After loading in Kosti, you go to Intelligence. If they do not stamp your papers, you cannot leave. After they stamp them, they tell you to wait for the convoy. If you are traveling through the Umm Rawaba road, you wait for the convoy. You pay a fee of 20,000 and travel with the convoy."

— Soap Transporter, Rashad (KII)

This indicates that the physical and administrative characteristics of the Rashad corridor may increase the time, cost, and uncertainty associated with moving laundry soap into the market. Transport has also become a significant constraint affecting the efficiency and reliability of the supply chain.

4.2 Security Conditions and Transport Adaptation

Security conditions were identified as a major factor shaping transport operations across both assessed transport corridors, although the nature and severity of these constraints differed substantially between Rashad and Kadugli. In Rashad, transporters described insecurity as a major factor shaping transport operations along the corridor. One wholesaler reported that, during a period when Umm Rawaba was a frontline area, a truck transporting laundry soap was held until a ransom of two to three million Sudanese pounds was paid. The respondent explained that such incidents prompted transporters to avoid the area altogether by using alternative wilderness routes originating from Kosti. This account was supported by another transporter, who identified the Umm Rawaba–Al-Abbasiya section as the most difficult and dangerous part of the transport corridor. These findings indicate that transporters continuously adapt their routing decisions in response to changing security conditions, balancing transport costs, travel time, and security risks to maintain commodity flows.

Compared with Rashad, the Kadugli corridor is considerably shorter and operationally less complex. Supplies are sourced primarily from El Obeid and transported through Al-Dilling, with an alternative route via Al-Rahad and Hebeela used when security conditions make the primary route inaccessible. One wholesaler explicitly distinguished the presence of security forces from financial barriers, explaining that although security personnel remain present along the route, no inspection fees are currently charged. However, transporters and wholesalers emphasized that transport conditions in Kadugli remain adaptive rather than fixed. Route selection depends primarily on prevailing security conditions, and transport costs remain substantially higher than before the conflict.

These findings reveal that although insecurity affects transport operations in both market hubs, its consequences are considerably more severe along the Rashad corridor, where transporters likely face longer routes, greater security risks, more frequent operational disruptions, and higher transaction costs. On the contrary, the Kadugli corridor is comparatively more stable, although traders and transporters continue to adjust transport routes and face higher transport costs in response to the evolving security environment.

4.4 Fuel as a Common Transport Cost Driver

Despite the differences in transport corridors and checkpoint-related constraints between Rashad and Kadugli, wholesalers and retailers in both market hubs consistently identified fuel availability and fuel prices as the principal drivers of transport costs. One importer also explained the relationship between fuel costs and transport expenses, noting that "transport costs increase as fuel prices increase because the road is difficult, so vehicles consume more fuel." The same respondent also identified fuel shortages as the one of the most critical constraints affecting the importation process. Similarly, a Kadugli retailer explained that when fuel is readily available, transport costs decline and commodities can be purchased at lower prices, whereas a mere fuel shortage may increase transport costs and ultimately raise market prices.

Overall, these findings indicate that fuel availability is a structural constraint affecting transport systems across both market hubs. Beyond increasing transport costs, fuel shortages reduce the efficiency and reliability of commodity movement, contributing to higher market prices and increasing the vulnerability of supply chains to conflict-related disruptions.

5. Market Dynamics and Prices

5.1 Volatility in Both Directions

Respondents in both market hubs reported that laundry soap prices have fluctuated considerably since the outbreak of the conflict. Although the direction and magnitude of these fluctuations varied across respondents, they consistently described periods of sharp price increases followed by subsequent adjustments as market conditions evolved. Table 4 summarises the price ranges reported by respondents

across the assessment period, illustrating substantial variation in retail prices, wholesale prices, and payment methods between the two market hubs.

Table 4: Laundry soap price evolution

Laundry soap item	Time	Price -Kadugli	Price - Rashad
Laundry soap bar	Between April 2023 and 2024	Approximately 10,000 SDG	Not reported
Laundry soap bar	May 2025	Approximately 2,000–10,000 SDG	Approximately 750–1,500 SDG
Laundry soap bar	May 2026	Approximately 1,000–3,000 SDG	Approximately 2,000–2,500 SDG

The reported price ranges indicated that laundry soap prices have remained highly volatile throughout the conflict period. In Kadugli, respondents described retail prices increasing to as much as 10,000 SDG per bar during the peak of the conflict before declining to current levels ranging from approximately 1,000 to 3,000 SDG, depending on the product type and brand. In Rashad, respondents similarly reported substantial price fluctuations, although they primarily associated these with periods of product scarcity and transport disruption rather than a single peak price. Current retail prices generally ranged between 2,000 and 2,500 SDG per bar.

Wholesalers and retailers consistently attributed these price fluctuations to changes in exchange rates, fuel prices, transport costs, and, particularly in Rashad, the cumulative costs associated with checkpoints and insecurity. The findings also revealed a consistent price differential between cash and mobile money payments, particularly through Bankak, with mobile-money prices reported to be approximately 33% to 50% higher than cash prices across the two market hubs. Respondents associated this difference with the relative scarcity of cash and the additional transaction costs and limitations associated with mobile-money payments, which may increase the cost of receiving or making payments through Bankak. As a result, buyers able to pay in cash may negotiate lower prices, while sellers may apply a premium to transactions conducted through mobile money. This suggests that payment method has become an additional factor influencing the effective price paid by consumers, beyond the underlying market price of laundry soap. These findings indicated that the laundry soap market remained highly responsive to conflict-related and macroeconomic shocks. For households, persistent price volatility reduced purchasing power and contributed to expenditure on essential hygiene products increasingly unpredictable, encouraging households to adjust consumption and adopt coping strategies. For traders, fluctuating procurement and

transport costs increased commercial uncertainty, requiring frequent price adjustments and exposing businesses to greater financial risk when replenishing stocks.

5.2 Price Formation

Wholesalers explained that wholesale prices are generally determined by adding a profit margin to the total landed cost, including the purchase price, transport costs, and any losses incurred during transportation.

Unlike more centrally regulated markets, respondents did not describe the existence of an external pricing mechanism or regulatory body influencing wholesale prices, indicating that traders independently determine selling prices based on operating costs and prevailing market conditions.

Reported gross marketing margins varied across market actors and trading scales. One wholesaler in Kadugli reported margins of approximately 15,000–25,000 SDG per carton, while one wholesaler in Rashad operating at substantially higher volumes reported margins of only 500–1,000 SDG per carton. Importers in Rashad reported margins ranging from approximately 5,000 to 15,000 SDG per carton. These differences appear to reflect both economies of scale and the different functions performed by market actors, with higher-volume traders accepting lower margins per unit while relying on larger sales volumes to maintain profitability. Retail pricing follows a similar cost-plus approach. One retailer in Kadugli reported adding approximately 200–500 SDG to the wholesale purchase price of each bar sold, while noting that customers actively compare prices between retailers, thereby limiting the extent to which retailers can increase their margins.

5.3 Household Displacement and Laundry Soap Demand

Wholesalers and retailers consistently reported that demand for laundry soap increased in both Kadugli and Rashad following the outbreak of the conflict. However, respondents attributed this increase primarily to population displacement rather than higher levels of consumption by individual households. An interviewed wholesaler in Rashad explained that the near doubling of purchase volumes was driven by the arrival of displaced households from neighbouring conflict-affected areas.

"The demand for these products increased. The second thing is the displacement of people from areas near Rashad who came to the centre of the city. All of these reasons made us increase the quantity."

— Soap Importer, Rashad (KII)

Another Rashad wholesaler described a similar trend, explaining that the town became one of the few relatively stable urban centres during the conflict, attracting large numbers of displaced people and increasing demand to the extent that stock replenishment shifted from once per week to two or three times per week.

At the same time, consumers consistently reported declining household purchasing power, which reduced the quantity of laundry soap purchased by individual households despite the increase in aggregate market demand. These findings suggest the coexistence of declining household purchasing power and reduced household-level demand for soap, alongside increased market-level demand driven by a growing number of households purchasing and consuming soap locally. While displacement expanded the number of consumers purchasing laundry soap, rising prices and declining purchasing power likely reduced the quantity purchased by individual households, leading many households to adopt coping strategies to manage expenditure on essential hygiene products.

For traders, the arrival of displaced households created additional market demand and increased sales opportunities. However, retailers also noted that many traders faced financial constraints that limited their ability to expand inventories or increase procurement to fully respond to the growing customer base. For households, higher prices and declining purchasing power constrained access to laundry soap despite its continued availability in local markets, increasing the risk that essential hygiene needs would not be fully met.

6. Storage

6.1 Low Physical Loss, High Financial Constraint

Storage-related physical losses in the laundry soap supply chain appear to be minimal, reflecting the relatively limited stock levels maintained by traders. Laundry soap does not spoil under normal storage conditions. Several wholesalers explicitly confirmed this, noting that "soap has no loss" and that "good-quality soap is not easily damaged," with any losses attributed primarily to poor handling rather than prolonged storage. Consequently, physical deterioration during storage does not appear to be a significant constraint affecting the laundry soap market system.

Instead, respondents consistently identified limited working capital as the principal constraint affecting storage practices. Wholesalers in both Kadugli and Rashad described purchasing relatively small quantities and restocking frequently rather than maintaining large inventories. Respondents explained that this strategy reflects financial constraints rather than limited warehouse capacity. One wholesaler in Kadugli stated, "We are working with our own capital; we cannot take risks," while a wholesaler in Rashad similarly explained that larger inventories would only be possible if additional financial capital were available.

Although respondents reported warehouse capacities substantially larger than their current stock levels, available capital determined the quantity of soap that could actually be stored. For example, one wholesaler described a warehouse capable of storing approximately 1,000–1,500 cartons, with a potential capacity of up to 2,000–3,000 cartons, but reported maintaining only enough stock to meet confirmed or anticipated sales.

"Storage capacity depends on one's financial ability. If a person has the means, they could store two thousand to three thousand cartons. At present, I store around five hundred to six hundred cartons."

— Soap Wholesaler, Rashad (KII)

These findings indicate that storage infrastructure is not a major constraint within the laundry soap market system. Rather, limited working capital restricts traders' ability to maintain larger inventories, reducing their capacity to absorb supply disruptions, respond to sudden increases in demand, or benefit from bulk purchasing opportunities. Consequently, financial constraints, rather than physical storage limitations, reduce the resilience of the laundry soap supply chain.

6.2 Storage Facilities and Security Considerations

Respondents reported using rented commercial warehouses or ordinary shop storage facilities in both market hubs, with little difference in storage types between Kadugli and Rashad. However, respondents described several indirect effects of the conflict on storage practices. One wholesaler in Kadugli reported changing warehouses after the previous owner left the state following displacement, illustrating how conflict continues to reshape the commercial infrastructure supporting local markets. The same respondent also explained that previous experiences with theft had prompted reductions in stock holdings to minimize potential losses. These revealed that although storage facilities remained generally functional, insecurity and population displacement continued to influence how traders manage inventories and select storage locations. As a result, traders tend to maintain relatively small stock levels to reduce both financial and security risks, which may further limit the markets' ability to buffer temporary supply disruptions.

7. Household Demand and Consumption

7.1 Soap as a Non-Negotiable Priority

One of the most distinctive findings of this assessment is the consistency with which households described laundry soap as a non-negotiable household necessity. Across both Kadugli and Rashad, respondents consistently portrayed soap not as a discretionary commodity but as an essential item closely linked to health, dignity, and everyday living. Several respondents explicitly stated that they would prioritize purchasing soap over food if household resources were insufficient to meet both needs.

One household respondent in Rashad expressed this particularly clearly, explaining that if given 100,000 SDG, most of the money would be allocated to purchasing soap, with only a small proportion reserved for food and healthcare. Another respondent emphasized that maintaining personal hygiene was essential for preventing disease, making soap an indispensable household expenditure even during periods of severe financial hardship. Similar views were expressed in Kadugli, where one retailer observed that households

often reduced spending on sugar, rice, sweets, and vermicelli before reducing expenditure on soap. These findings indicate that demand for laundry soap remained relatively price inelastic. Rather than eliminating laundry soap purchases altogether, households adjusted consumption patterns and reduce expenditure on other goods to maintain access to this essential hygiene commodity. This highlights the critical role of laundry soap in protecting household health and dignity despite worsening economic conditions.

"If I have soap, at least cleanliness will keep me away from diseases; health-wise, I am able to avoid diseases."

— Household Consumer, Rashad (VOP)

7.2 Coping Strategies

Where livelihood opportunities have been disrupted and household income is insufficient to maintain pre-conflict consumption patterns, respondents described a consistent hierarchy of coping strategies. Reports on household adoption of coping strategies suggest a progressive sequence of reliance on coping mechanisms, with households moving from less severe to more severe strategies as pressures increase and less severe options become exhausted. Households first reduce the frequency of use, then substitute with cheaper products, while homemade alternatives are generally used only as a last resort. Overall, these coping strategies revealed that households prioritise maintaining at least a minimum level of laundry soap consumption despite declining purchasing power.

- **Reducing washing frequency:** This was the most commonly cited response across both market hubs. Respondents explained that they wash clothes less frequently or prioritise washing only essential clothes.
- **Splitting a single bar:** Some households in Kadugli reported cutting one bar into smaller pieces to extend its use over a longer period.
- **Switching to cheaper products:** Respondents in both market hubs described replacing bar soap with powdered detergent or switching between white and brown soap depending on which product is temporarily affordable or available.
- **Prioritising household uses:** Using the same bar of laundry soap for multiple purposes, such as washing dishes before using it for bathing, rather than buying separate products for different uses.
- **Homemade substitutes:** A small number of respondents in Kadugli reported producing traditional washing items by burning lalob tree wood, mixing the ash with natron, and boiling the resulting infusion before using it washing. Another respondent described when commercial soap was completely unavailable, they resorted to washing with water alone.

"We go and cut down the lalob tree, pour natron into it, and then boil it with the ashes infusion, and use it for washing." — Household Consumer, Kadugli (VOP)

7.3 Household Consumption and Expenditure

Reported household consumption generally ranged from one bar for one to three days for an average household, equivalent to approximately 10–30 bars per month depending on household size, demographic situation, health situation, and the extent to which the same bar was used for multiple purposes, including laundry, bathing, and dishwashing. Monthly household expenditure on laundry soap varied considerably, ranging from approximately 10,000–20,000 SDG among smaller households to around 60,000 SDG among households reporting daily use for laundry purposes. This variation is broadly consistent with the substantial price volatility observed across the assessed markets and reflects differences in household size, local prices, and consumption practices rather than differences in the perceived importance of soap. Regardless of expenditure levels, respondents consistently regarded laundry soap as an essential household commodity.

7.4 Household Spending Priorities

When discussing overall household expenditure, households consistently ranked laundry soap alongside other essential needs, including education, healthcare, and food, with their relative importance varying according to household circumstances. For example, a household in Rashad ranked education and healthcare as the highest household priorities, allocating the remaining household budget, including expenditure on soap, afterwards. This does not contradict the findings presented in Section 7.1. Rather, it illustrates that households continually balance expenditure across several essential needs while ensuring that laundry soap remains part of their minimum household budget.

This implies that household expenditure decisions involve balancing multiple essential needs under severe financial constraints. While respondents consistently regarded laundry soap as indispensable for maintaining hygiene and preventing disease, they continuously made trade-offs between laundry soap other essential items, and other necessities depending on their immediate circumstances. For traders, this sustained demand may provide a relatively stable customer base, although sales remained constrained by households' declining purchasing power. For households, continued expenditure on laundry soap likely require sacrificing other essential goods and services, highlighting the growing pressure that conflict-related economic conditions could place on household livelihoods.

8. Financing and Credit

8.1 Primary Source of Finance

Personal capital was the dominant source of business financing across most market actors interviewed in both Kadugli and Rashad. Wholesalers consistently reported relying on their own financial resources to establish and operate their businesses, with one respondent stating, "It is my own capital. I do not take

money from banks or other financing sources." Similar financing arrangements were reported by importers and small-scale soap packagers. Where external financing was available, respondents described it as informal and relationship-based rather than obtained through formal financial institutions. For example, one importer in Rashad explained that he borrowed his initial business capital from his brothers, who were established farmers, and gradually repaid the funds as the business became profitable. Another respondent reported establishing his business through a financial partnership with his sister, repaying the investment within six months before continuing operations independently.

"The capital was through partnership. I had brothers here who are big farmers, I borrowed the capital from them and I worked for a while and started paying back the capital."

— Soap Importer, Rashad (KII)

This suggests that access to formal finance remains scant within the laundry soap market system. Instead, traders rely primarily on personal savings and family networks to finance business operations. While the informal financing arrangements reportedly enable market participation, they may also constrain business expansion because the amount of available capital is typically limited to traders' personal resources and social networks.

8.2 Trade Credit Situation

Trade credit, whereby wholesalers allow retailers or other buyers to pay after receiving goods, was reported in both market hubs but operated through different mechanisms. In Kadugli, wholesalers described relatively structured credit arrangements. One wholesaler reported providing payment periods of approximately 10–15 days for larger purchases, particularly to established customers. Where retail-buyers were not already well known, credit was reportedly secured using collateral such as cheques, guarantees from trusted individuals, house ownership documents, vehicle registration certificates, or other forms of property documentation. The wholesaler also reported that repayment disputes had, on at least one occasion, resulted in legal proceedings.

On the other hand, wholesalers in Rashad described trade credit as being based primarily on long-term business relationships and mutual trust. One wholesaler explained that he had financed five individuals who possessed trading experience but lacked sufficient start-up capital. Rather than relying on formal repayment agreements or schedules, these arrangements depended on ongoing commercial relationships, with the wholesaler continuing to supply goods and, in some cases, matching prevailing market prices despite higher procurement costs in recognition of his initial investment in their businesses.

At the retail level, extending credit to trusted customers was reportedly common in both market hubs and was described to have increased following the outbreak of the conflict. One retailer in Kadugli explained that credit was provided only to customers who were personally known and considered reliable. Similarly, a

retailer in Rashad described a system in which customers made partial payments through Bankak, collected goods against their outstanding balance during the month, and settled the remaining amount at the end of the month.

8.3 Exchange Rate Exposure and Working Capital Constraints

Importers consistently identified exchange rate fluctuations as one of the most significant issues affecting their businesses. Although the assessment identified some operational constraints, respondents explained that fluctuations in foreign exchange rates substantially increased procurement costs and created uncertainty when purchasing imported laundry soap. One wholesaler in Rashad clearly described the interaction between limited working capital and exchange rate exposure, explaining that insufficient capital prevented traders from purchasing larger quantities of stock when exchange rates were favourable. Instead, traders were forced to make repeated purchases at prevailing market prices, increasing their exposure to currency fluctuations.

"If I could buy a large quantity and store it, the dollar could rise or fall as much as it likes, and I would not need to scramble for a new shipment. I would already have goods in hand."

— Soap Wholesaler, Rashad (KII)

In general, this assessment revealed that financing constraints and exchange rate volatility reinforce one another. Limited working capital likely restricts traders' ability to purchase inventory in bulk, while repeated procurement exposes them to continued exchange rate fluctuations that increase operating costs.

Consequently, traders could be left with limited opportunities to stabilise procurement costs, increasing price volatility throughout the laundry soap supply chain. For households, these higher procurement costs are ultimately reflected in retail prices, reducing the affordability of an essential hygiene commodity.

9. Conflict and Structural Change

9.1 Conflict and Laundry Soap Producers

The defining disruption affecting the laundry soap market system was the disruption of manufacturing and commercial activity in Omdurman, which had previously supplied both Kadugli and Rashad market hubs before April 2023. Wholesalers and importers consistently stated tracing their sourcing arrangements to this single structural shock, although respondents subsequently adopted different procurement strategies to restore supply. The disruption of domestic manufacturing reportedly shifted the market from reliance on locally produced laundry soap to imported products sourced through alternative commercial hubs. As a result, traders established new supply networks centred on Kosti and El Obeid while gradually diversifying procurement routes as security conditions evolved.

9.2 Conflict Effects Along Transport Corridors

Beyond the initial disruption to domestic production, transporters consistently described conflict as continuing to affect the laundry soap market system through transport-related constraints. These included checkpoint-related costs, reported ransom incidents in Umm Rawaba, and frequent changes in territorial control that forced transporters to use longer, more expensive alternative routes. As a result, these disruptions reportedly increased transport costs, extended travel times, and reduced the predictability of commodity movements.

In Kadugli, transport-related disruptions were comparatively less severe. Transporters more frequently described intermittent road closures and temporary access restrictions than direct attacks on commercial shipments. However, one wholesaler explained that a previous theft incident prompted the business to reduce inventory levels, demonstrating that insecurity influences not only transport operations but also stock management decisions. Although these security risks were less pronounced than those reported in Rashad, they nevertheless reportedly encouraged more cautious inventory management and reduced traders' capacity to maintain larger buffer stocks.

10. Vulnerability and Hazard Analysis

10.1 Structural Bottlenecks

- **Limited local production:** both localities lost their historic Um Durman source and have rebuilt supply from alternative external sources, but neither has built any domestic production capacity that could cushion a future disruption to whichever external source is now in use.
- **Checkpoint and convoy burden (Rashad):** 20–30 checkpoints plus a mandatory security convoy function as a direct, structural tax on trade volume into Rashad, with no equivalent burden documented on the Kadugli corridor.
- **Working-capital-constrained storage:** traders who lack capital cannot hold stock through price swings, missing the arbitrage opportunity that better-capitalised competitors can capture.
- **Exchange-rate pass-through with no buffer:** the same capital constraint that prevents bulk buying also prevents importers from timing purchases around favourable exchange rates, so every shipment is bought at whatever rate prevails on that specific day.
- **The cash-versus-Bankak price wedge:** paying by mobile money costs noticeably more than paying in cash across multiple accounts in both localities — a finding specific to this chain that further squeezes cash-poor households already economising on soap.
- **Displacement-driven demand outpacing supply adjustment:** import and purchase volumes have risen substantially, particularly in Rashad, but the underlying transport and financing constraints

documented above mean this demand growth has been absorbed mainly through price increases and brand substitution rather than through proportionate supply expansion.

10.2 Vulnerability by Actor Group

Kadugli Hub

In Kadugli, household consumers were assessed as exhibiting high levels of vulnerability. Respondents consistently reported affordability challenges, with households frequently making difficult trade-offs between purchasing soap and meeting other essential needs. As documented in Section 8, many households have adopted coping strategies such as reducing washing frequency, switching to cheaper products, or using homemade substitutes when commercial soap is unavailable.

The local small-scale soap packagers exhibit higher level of vulnerability. The main underlying vulnerability is the operation's dependence on imported chemical inputs, including sulfonic acid and other additives, for which respondents reported no viable local substitutes. This leaves the operation with limited capacity to adapt when imported inputs become unavailable. Supply disruptions therefore translate directly into production interruptions, rather than being absorbed through alternative sourcing or local substitution.

Wholesalers experience a moderate level of vulnerability. Although they retain considerable influence over price setting and operate within a corridor with relatively limited checkpoint-related costs, their reliance on personal capital limits their capacity to purchase larger quantities of stock or withstand periods of exchange rate volatility. Retailers face similar financing constraints but continue to operate through frequent small-volume restocking, which represents an adaptation to limited working capital and helps reduce their exposure to inventory losses. Competition from price-conscious consumers limits their ability to increase profit margins.

Laundry service providers are assessed as having medium-to-high vulnerability because soap represents a direct production input for their businesses. Although increases in soap prices raise operating costs, respondents indicated that customers are often unwilling or unable to absorb equivalent price increases, forcing service providers to reduce profit margins in order to remain competitive.

Table 5: Vulnerability of the laundry soap supply chain actors in Kadugli

Actor Group	Vulnerability	Primary Drivers
Wholesalers	Medium	Constrained by limited access to finance and reliance on personal-capital
Packager/Manufacturer	High	Single, opportunistic operation; fully dependent on imported raw materials with no local substitute; production stops when materials run out

Retailers	Medium	Small-scale, frequent restocking; thin margins disciplined by price-aware customers
Laundry Providers	Medium–High	Soap is a direct input cost to their own service price; customers resist price increases, forcing margin absorption
Household Consumers	High	Affordability pressure; soap-versus-food trade-off; reliance on coping strategies up to and including homemade substitutes

Rashad Hub

The Rashad market system exhibits a higher overall level of vulnerability than Kadugli, largely because of its greater exposure to transport and security-related risks along the Kosti corridor. Importers were found to exhibit high levels of vulnerability. Their operations are directly affected by the mandatory convoy system, numerous checkpoints, exchange rate fluctuations, and documented security incidents, including the reported ransom of a commercial shipment. These factors substantially increase operating costs and introduce significant uncertainty into procurement and supply planning.

Similarly, transporters exhibit high vulnerability reportedly because their operations depend heavily on the availability of functioning transport corridors, while their ability to absorb disruptions is constrained by high fuel and maintenance costs, limited route alternatives, and the additional costs associated with security requirements and route diversions. In Rashad, transporters reported this vulnerability is particularly pronounced because they depend largely on a single commercial corridor, leaving them with limited flexibility when insecurity or seasonal flooding disrupts access. Convoy requirements, checkpoint payments, and longer alternative routes represent response mechanisms and operational consequences of these disruptions but also increase the financial burden on transporters and limit their ability to maintain reliable services. Together, these constraints reduce transport reliability and increase the overall cost of moving goods into Rashad.

Wholesalers experience medium-to-high vulnerability. While relatively strong demand and the ability to influence pricing provide some resilience, wholesalers remain heavily dependent on the same high-risk transport corridor used by importers and are therefore exposed to many of the same logistical and security challenges. In contrast, the small-scale soap manufacturer currently operates under relatively more stable conditions despite remaining fully dependent on imported raw materials.

In Kadugli, retailers exhibit moderate vulnerability, primarily associated with limited working capital and frequent inventory replenishment. Laundry service providers continue to experience pressure from rising input costs while operating in a market where customers have limited purchasing power, constraining their ability to pass increased costs on to consumers.

Finally, household consumers remain among the most vulnerable actors in Rashad. Respondents reported many of the same affordability pressures observed in Kadugli, but these challenges are compounded by

higher transport costs and, in several interviews, larger household expenditure shares devoted to purchasing soap. Consequently, households continue to rely on a range of coping strategies to maintain access to this essential commodity despite persistent economic pressures.

Table 6: Vulnerability of laundry soap supply chain in Rashad

Actor Group	Vulnerability	Primary Drivers
Importers	High	Heaviest checkpoint/convoy burden in the dataset; direct exchange-rate exposure; documented security/ransom risk on the corridor
Transporters	High	Mandatory convoy system; RSF-driven route avoidance; seasonal closure of up to 5–7 days at a time
Wholesalers	Medium–High	Strong volumes and price-setting power, but exposed to the same corridor risk as importers and transporters
Packager/Manufacturer	Medium	Single operation, fully input-dependent, but currently stable
Retailers	Medium	Small-scale, frequent restocking; thin margins disciplined by price-aware customers
Laundry Providers	Medium–High	Soap is a direct input cost to their own service price; customers resist price increases, forcing margin absorption
Household Consumers	High	Affordability pressure; soap-versus-food trade-off; reliance on coping strategies up to and including homemade substitutes; compounded by higher reported expenditure shares in some accounts

10.3 Supply Disruption Categories

- **Seasonal risk:** Seasonal road impassability along the Al-Abbasiya–Kosti stretch of the Rashad corridor, where heavy vehicles may be unable to operate for five to seven days during the rain season. Kadugli's shorter route is comparatively less exposed, although still gravel/dirt and slower in wet conditions, which become more difficult to navigate during periods of heavy rainfall.
- **Logistical risk:** Fuel scarcity and high fuel cost were consistently identified as the primary drivers of transport costs across both market hubs. Additional logistical constraints include checkpoint and convoy fees, which are heavily concentrated on the Rashad corridor and exchange-rate volatility. Exchange rate fluctuations are particularly significant for this import-dependent supply chain, as the landed cost of every carton is directly affected by currency movements at the time of purchase.
- **Conflict-related risk:** Conflict-related risks include the closure or relocation of factories in Um Durman that traders to establish alternative sourcing arrangements. The control of transit towns

by competing forces which required transporters to use longer alternative routes, and direct security incidents including the reported truck-for-ransom. In Kadugli, theft incidents that led one wholesaler to reduce inventory levels.

Overall, Rashad exhibits a higher concentration of conflict-related and logistical risks than Kadugli, consistent with the transport findings presented in Section 5. By comparison, Kadugli's risk profile is currently influenced more by climatic conditions and financing constraints than by direct conflict-related disruptions.

11. Comparative Synthesis: Kadugli Vs Rashad

Although Kadugli and Rashad experienced the same initial disruption, the loss of Um Durman as their primary source of laundry soap following the outbreak of the conflict, the two market systems have adapted in markedly different ways. Both localities remain highly dependent on external supply sources and continue to face significant financing constraints. However, differences in transport corridors, security conditions, and market structure have resulted in distinct levels of vulnerability and market functionality.

Overall, the assessment indicates that Kadugli's market system has recovered through a comparatively shorter and less constrained supply corridor centred on El Obeid, whereas Rashad continues to operate through a longer and considerably more complex corridor originating in Kosti. The mandatory convoy system, numerous checkpoints, and higher exposure to insecurity along the Rashad corridor translate into higher transport costs, greater operational uncertainty, and increased vulnerability for traders and transporters. Consequently, although both markets remain functional, Rashad exhibits a more fragile operating environment than Kadugli.

Table 7: Comparison of the laundry soap supply chain in Kadugli and Rashad

Dimension	Kadugli	Rashad
Current primary source	El Obeid, North Kordofan	Kosti, White Nile State (plus a partially-restored Um Durman link for one wholesaler)
Checkpoint/convoy burden	Light; no current inspection fees described	Heavy; 20–30 checkpoints plus a mandatory security convoy out of Kosti
Documented conflict incidents	Past theft leading to reduced stock-holding	Truck held for ransom in Umm Rawaba; RSF control forcing route avoidance
Local production	One past, now-dormant liquid-soap packaging effort	One active liquid-soap manufacturer, input-dependent
Demand trend	Rising, displacement-linked	Rising sharply, displacement-linked, with the largest reported volume increase in the dataset

The comparison highlights that the primary distinction between the two hubs lies not in consumer demand, but in the structure and resilience of their supply systems. Both markets have experienced increased demand because of displacement, and both remain heavily dependent on imported laundry soap. However, Kadugli benefits from a shorter supply corridor with relatively limited security-related transport costs, while Rashad continues to operate under substantially greater logistical and conflict-related constraints. Despite these differences, neither locality has developed sufficient domestic production capacity to reduce dependence on external suppliers, leaving both market systems vulnerable to future disruptions affecting upstream manufacturing, transport corridors, or access to imported inputs.

11.1 The Checkpoint Gap

The single most important structural difference between the two supply corridors is the checkpoint and convoy burden, rather than distance or road quality alone. Although Rashad's corridor is longer and more challenging, the disparity between the two hubs is driven primarily by the number and density of checkpoints. A Rashad transporter must pass through approximately 20 to 30 checkpoints and join a mandatory security convoy before reaching the locality, whereas wholesalers in Kadugli consistently described a route with no current inspection fees.

This suggests that the two market hubs are not simply experiencing the same constraints at different levels of severity. Rashad's supply chain is subject to an additional structural layer of transaction costs that is largely absent in Kadugli. This burden would continue to affect transport costs and market performance even if other constraints, such as fuel prices, financing limitations, or demand pressures, were alleviated. Consequently, interventions aimed at reducing laundry soap prices in Rashad should consider the checkpoint and convoy system as a primary structural constraint rather than a secondary factor.

11.2 Market Trajectory

Findings from this assessment suggest that the laundry soap market is continuing to adapt rather than moving toward either collapse or full recovery. Respondents in both localities reported that demand continues to increase because of displacement, while supply has adjusted primarily through higher import volumes, particularly in Rashad, and increased substitution between available soap brands in both markets, rather than through the development of new domestic production capacity.

The re-establishment of a partial sourcing link with Um Durman by at least one wholesaler in Rashad indicates that the pre-conflict supply network is not entirely inaccessible. However, no respondents anticipated a return to the stable, single-origin sourcing strategy that characterised the market before the conflict. Instead, traders expect to continue relying on multiple supply sources and adaptive procurement strategies in response to changing security and market conditions. The laundry soap market system remains

in a prolonged phase of adjustment, continually adapting to sustained conflict-related disruptions rather than transitioning toward a stable post-conflict equilibrium.

12. Conclusion

The laundry soap supply chain in South Kordofan tells a related, yet distinct, story from the sorghum market system examined in the companion report. Whereas the vulnerability of the sorghum market is rooted primarily in production constraints, including farmers' access to land, agricultural inputs, and the challenges of transporting a bulky commodity produced across dispersed locations, the vulnerability of the laundry soap market is driven almost entirely by its dependence on a limited number of external supply sources. Both Kadugli and Rashad lost their historic and direct supply link to manufacturers in Greater Khartoum following the outbreak of the conflict and have subsequently rebuilt their supply chains around alternative sources, primarily El Obeid for Kadugli and Kosti, together with a partially restored Um Durman link, for Rashad. However, neither locality has developed sufficient domestic production capacity to provide a meaningful buffer against future disruptions affecting these external supply hubs.

The most significant difference between the two localities is not only transport distance or consumer demand, but the structural burden imposed by the transport corridor serving Rashad. The requirement to pass through approximately 20–30 checkpoints, together with the mandatory security convoy departing from Kosti, creates a substantial layer of transaction costs that is largely absent from the Kadugli corridor. This structural disadvantage, more than any other factor documented during the assessment, explains why Rashad's laundry soap market remains considerably more vulnerable than Kadugli's, despite both localities sharing the same underlying dependence on imported supplies.

At the household level, the findings consistently demonstrate that laundry soap is perceived not as a discretionary commodity but as an essential household necessity that competes directly with food for limited household resources. Several respondents explicitly described situations in which laundry soap was prioritised over some essential commodities because of its perceived importance for maintaining health and hygiene. The coping strategies documented throughout the assessment, including reducing washing frequency, purchasing smaller quantities, switching to cheaper brands, and, in the most severe cases, producing homemade substitutes from ash, natron, and lalob tree bark, illustrate the considerable lengths households are willing to go to maintain access to soap.

Overall, the findings suggest that the laundry soap market system should be understood as one of continued adaptation rather than either collapse or full recovery. Both localities have adjusted to a prolonged supply shock by identifying new sourcing arrangements, increasing import volumes, modifying transport routes, and substituting between available brands and product types. Nevertheless, the market remains fundamentally dependent on external, conflict-affected supply corridors, while domestic production continues to play only a marginal role. As long as this structural dependence persists, any significant disruption affecting El Obeid, Kosti, or other major upstream supply centres is likely to trigger renewed shortages, higher transaction costs, and another cycle of market adjustment similar to that observed

throughout the current conflict. Consequently, strengthening market resilience will require interventions that address not only household purchasing power but also the structural constraints affecting transport, financing, and the development of local production capacity.

13. Recommendations

The findings suggest that while the laundry soap market remains functional in both Kadugli and Rashad, it continues to operate under significant structural constraints related to transport, financing, and dependence on external supply sources. The recommendations below distinguish between immediate actions that can improve market functioning under the current humanitarian context and longer-term interventions aimed at strengthening market resilience.

13.1 Short-Term Recommendations

- **Support market functionality through cash-based assistance**

Where markets remain operational, humanitarian actors should consider market-based assistance, including cash-based assistance where appropriate, rather than relying on in-kind soap distributions. Cash-based assistance enables households to purchase laundry soap according to their needs while supporting existing market systems rather than bypassing them. However, the choice of assistance modality should be informed by market functionality, availability, affordability, and the feasibility and safety of cash-based delivery mechanisms.

- **Coordinate humanitarian assistance with local market actors**

Where in-kind distributions remain necessary, humanitarian organisations should procure soap through local wholesalers wherever feasible. Several wholesalers in Kadugli already supply humanitarian organisations, demonstrating that local procurement can support existing businesses while reducing the risk of undermining commercial supply chains.

- **Monitor the cash-versus-Bankak price differential**

Humanitarian agencies implementing cash programmes should investigate the reported price premium associated with purchases made through Bankak or other mobile money platforms. Where this differential persists, programme design should consider measures to minimise its impact, ensuring that the value of cash assistance is not eroded at the point of purchase.

- **Strengthen market monitoring**

Given the rapidly changing security situation, humanitarian actors should regularly monitor transport routes, checkpoint costs, fuel prices, exchange rates, and soap availability, particularly along the Kosti–Rashad corridor. Continuous monitoring will allow programmes to adapt quickly to changes in market functionality.

13.2 Medium to Long-Term Recommendations

- **Improve trade and transport conditions**

Engage with relevant authorities and local stakeholders to reduce unnecessary transaction costs along the Rashad corridor. Efforts to harmonise checkpoint procedures, minimise unofficial payments, and improve the efficiency of the convoy system would significantly reduce transport costs and improve market access for traders.

- **Expand access to working capital**

Develop financing mechanisms that improve access to affordable working capital for importers, wholesalers, and small manufacturers. Improved liquidity would enable traders to purchase larger volumes, build strategic inventories, and reduce repeated exposure to exchange rate fluctuations, thereby strengthening market stability.

- **Support local value addition and manufacturing**

Invest in the development of small-scale soap manufacturing and packaging capacity in South Kordofan. Existing packaging initiatives demonstrate both entrepreneurial interest and technical capability; however, expansion will require improved access to imported raw materials, technical assistance, appropriate equipment, and business financing. Increasing local production would reduce dependence on external supply corridors and improve market resilience during future disruptions.

- **Strengthen essential commodity market resilience**

Future livelihood and market system programmes should adopt a broader essential commodities market systems approach that integrates transport infrastructure, market finance, private sector development, and local production. Building resilience across the entire market system, rather than addressing individual constraints in isolation, will reduce vulnerability to future conflict-related disruptions and improve the reliability of essential commodity supply chains.

- **Promote market-based humanitarian programming**

Where security conditions permit, humanitarian programming should increasingly integrate market support interventions alongside household assistance. Combining cash transfers with support to traders, transporters, and local manufacturers can simultaneously improve household purchasing power and strengthen the capacity of local markets to respond to increased demand during future shocks.

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We gratefully acknowledge the support of Ahmed Suliman for his contribution to this report. Mr. Suliman is a development professional with over 12 years of experience in programme design, management, and analysis, specialising in value chain and supply chain analysis, market systems development, and evidence-based programming in fragile and conflict-affected contexts. He has worked with UN agencies, international organisations, and research institutions on agriculture, food security, and livelihoods programming.

ABOUT IMPACT

Founded in 2010 and headquartered in Geneva, IMPACT Initiatives is a leading applied research organisation and the largest independent provider of data in crisis-affected contexts. Through our initiatives, we enable humanitarian and other aid actors to make better, evidence-based decisions by delivering timely, relevant, and methodologically rigorous data and analysis. Our extensive presence across crisis-contexts allows us to collect data directly from crisis-affected people wherever needed, including among the most vulnerable and hard-to-reach.

ABOUT DataQ

DataQ is a Sudanese research and advisory firm dedicated to inclusive participation in Research and MERL processes as a pathway to more participatory and locally led humanitarian systems. DataQ's approach focuses on leveraging local capacities and resources while equipping communities with the tools and platforms they need to shape the policies and programs that impact their lives. Since its establishment DataQ has supported over 45 local and international partners through tailored research, MEAL, and capacity-building services.

Annex A: Interview Sample Frame

The table below lists every interview contributing to this report, by locality and actor type.

Locality	Tool	Actor Type	Count
Kadugli	KII	Wholesaler	2
Kadugli	VOP	Packager/Manufacturer	1
Kadugli	VOP	Retailer	3
Kadugli	VOP	Laundry Provider	2
Kadugli	VOP	Household Consumer	3
Rashad	KII	Importer	2
Rashad	KII	Transporter	2
Rashad	KII	Wholesaler	3
Rashad	KII	Packager/Manufacturer	1
Rashad	VOP	Retailer	2
Rashad	VOP	Laundry Provider	3
Rashad	VOP	Household Consumer	4