COLLECTIVE SUDAN.ORG
مجموعة السودان

Sudan Supply Chain Analysis

Laundry Soap Supply Chains in Khartoum and South Darfur

April 2026

IMPACT
Shaping practices
Influencing policies
Impacting lives

DATAQ

Executive Summary

This report presents qualitative findings from a supply chain analysis of laundry soap across two key market systems in Sudan: Khartoum state and South Darfur (Nyala Janoub). This assessment is designed as an iterative supply chain snapshot rather than a full market systems analysis and draws on interviews with importers, transporters, wholesalers, retailers, local manufacturers, laundry soap service providers, and households. This report is part of a wider supply chain analysis series, including a component on sorghum.

Across both systems, the analysis documents a laundry soap supply chain that has undergone a sharp structural shift since the conflict began. Domestic production has either declined substantially or ceased altogether, and supply is currently sustained primarily through imports. In Khartoum, laundry soap is predominantly imported from Egypt via Port Sudan and land crossings, moving inland through redistribution hubs at Atbara and Shendi. In South Darfur, cross-border trade with Chad, Nigeria, and Cameroon has replaced defunct domestic factories, with supply flowing through the Adré border corridor into Nyala Janoub.

The shift from domestically produced to fully imported supply has fundamentally reshaped the structure of the chain, altering where market power sits, how prices are determined, where stock is held, and which interventions can meaningfully improve household access. What was once a locally anchored system is now entirely import-dependent. In South Darfur, this market only physically resumed operations in mid-2025 after a period of complete closure. Notably, the system is currently sustained by actors absorbing levels of risk well beyond those expected in a stable and functioning market.

Price increases have been severe across both hubs. In South Darfur, the cost of a bar of laundry soap has risen from approximately SDG 200 pre-war to SDG 1,200–1,700. In Khartoum, prices have also increased markedly, from around SDG 800 to SDG 1,200–1,500 per bar, with reported monthly household expenditure on soap reaching approximately SDG 30,000. In both locations, prices are driven primarily by exchange rate volatility and high transport costs. South Darfur faces additional structural pressures, including checkpoint fees, estimated across roughly 25 checkpoints along the main import corridor, and seasonal road closures that can disrupt supply for months at a time.

A notable development is the emergence of small-scale local production in both hubs. In Khartoum, several manufacturers and neighbourhood-level packagers have begun producing and distributing liquid laundry soap, providing a limited domestic buffer to imported supply. In South Darfur, a local factory in Nyala Janoub, the first to operate since the onset of the conflict, has started producing laundry soap at roughly half the price of imported alternatives. These developments represent new supply-side opportunities that were not present earlier in the conflict.

Finally, the humanitarian assistance gap remains both stark and consistent. Field interviews indicate that distributions have focused almost exclusively on food items, with hygiene inputs largely excluded. Laundry soap is absent from current assistance frameworks, exacerbating affordability constraints and reinforcing household vulnerability.

Key Findings

- **Supply system:** Both markets are now predominantly import-dependent. Khartoum relies largely on imports from Egypt with limited local production emerging, while South Darfur depends on cross-border supply from Chad and West Africa.
- **Prices:** Laundry soap prices have risen sharply in both hubs, ranging from five- to eight-fold in South Darfur (SDG 200 to SDG 1,200–1,700) and significantly in Khartoum (SDG 800 to SDG 1,200–1,500), driven by exchange rate volatility and high transport costs.
- **Transport constraints:** Supply to South Darfur is heavily constrained by high transport costs, including approximately 25 checkpoints and seasonal road closures that could disrupt access for 2–4 months; Khartoum faces comparatively fewer physical barriers but still high logistics costs.
- **Local production:** Small-scale local production has re-emerged in both hubs, including liquid soap production in Khartoum and a new factory in Nyala Janoub offering lower-cost alternatives, though overall impact remains limited.
- **Financial constraints:** Liquidity shortages affect all actors in both markets, limiting stock levels, forcing frequent small-scale restocking, and reducing household purchasing power.

Table of Contents

Acronyms and Abbreviations

CVA – Cash and Voucher Assistance

CCS – Collective Sudan (formerly Cash Consortium of Sudan)

CWG – Sudan Cash Working Group

GDP – Gross Domestic Product

IFPRI – International Food Policy Research Institute

JMMI – Joint Market Monitoring Initiative

KI – Key Informant

KII – Key Informant Interview

MEB – National Minimum Expenditure Basket

VP – Vox Pop

1. Background and Methodology

1.1. Background

Sudan has been going through a recurring conflict in most parts of the country. The conflict has left more than 12 million people displaced and about two-thirds (30.4 million people) of the population in need of support in 2025.[1] The conflict has also played a significant role in the loss of livelihoods and deterioration of the humanitarian situation. As a result, several humanitarian agencies have been working to mitigate the crisis using local markets. However, market activities could also be obstructed due to the conflict or factors indirectly related to the conflict.

Understanding market systems in emergencies is critical to informing appropriate responses and ensuring the efficient use of resources. In particular, supply chain analysis enables humanitarian actors to consider a broader range of intervention modalities, including in-kind distributions, cash-based assistance, local procurement, and other forms of market-based support that leverage existing market actors' capacities. A clear understanding of supply routes and associated constraints is therefore essential for the design and implementation of effective emergency programmes.

While the Joint Market Monitoring Initiative (JMMI), maintained by IMPACT and the Sudan Cash Working Group (CWG), includes selected supply chain indicators, such as sources of supply and related constraints, it does not provide a comprehensive analysis of market systems, particularly in areas such as market mapping, integration, and supply chain capacity. To address this gap, IMPACT and DataQ, in close coordination with the Collective Sudan (CCS), conducted this assessment. The assessment is designed as an iterative snapshot rather than a comprehensive, multi-dimensional supply chain analysis. It focuses on regional contexts and localised shocks that may shape variations in supply chain capacity and constraints, generating insights to inform context-specific humanitarian programming.

1.2. Objectives of the Assessment

The overall objective of this assessment is to analyse the supply chains for sorghum and laundry soap in selected logistical hubs[2] in South Darfur and Khartoum, with this report focusing specifically on laundry soap. It examines supply routes, key actors and their roles, pricing dynamics, constraints affecting supply chains, and household access to inform market-based humanitarian interventions and support effective response design.

The primary users of the findings include humanitarian organisations implementing Cash and Voucher Assistance (CVA), coordination platforms (e.g. CWG, CCS, clusters, etc.), as well as donors and private sector actors engaged in local supply chains. The assessment is intended as a qualitative market snapshot to support understanding of current supply chain functionality and comparison across locations, rather than a comprehensive supply chain system.

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

[2] Logistical hubs are locations that serve as a central, business-to-business point, where commodities are assembled, stored, and redistributed. These hubs concentrate wholesale traders and brokers, transport unions, warehousing/loading points, credit/liquidity services that links ultimately to peripheral markets.

The specific objectives of this analysis include:

1. To identify and map the primary sources and key transit routes for the selected items in the target hubs.
2. To understand the current capacity, functionality and roles of the main supply chain actors involved in the supply chain of the selected items in the target hubs.
3. To assess the key supply chain barriers encountered by the supply chain actors and their impact on commodity flow in the target hubs.

1.3 Scope of the Assessment

The Laundry Soap Supply Chain Analysis applies qualitative methods to examine the structure and functioning of the laundry soap market in Sudan, with a focus on Khartoum State and South Darfur (Nyala Janoub). Laundry soap was selected due to its dual importance for both household welfare and livelihoods in the context of Sudan's protracted crisis.

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.

Compared to other hygiene items, 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

A scoping phase using expert interviews identified the main actors in the soap supply chain and defined respondent groups. These groups included importers, cross-border traders, wholesalers, retailers, transporters, local manufacturers, laundry service providers, and households.

This approach helps to target actors with direct and relevant knowledge of the supply chain and market dynamics. The sampling was executed in iterative waves. Following initial interviews with each respondent category, interim data reviews were conducted to identify thematic gaps, bottlenecks, and emerging areas for further exploration. This iterative process allowed subsequent sampling to be strategically directed toward the most relevant actors and specific issues identified during the analysis.

Data was collected using two tool types: Key Informant Interviews (KIIs) with supply chain actors, and short structured vox pop (VP) interviews designed to capture perspectives from end users and service providers.

Five data collection tools were developed, one for each respondent type, covering the actors involved in the laundry soap supply chain. These tools were structured in modular sections so that relevant parts could be administered independently where needed. All interviews were conducted remotely due to security and accessibility constraints, and were recorded, transcribed, and translated into English. In total, the assessment collected 8 KIIs and 21 vox pops. The tables below summarise the data collected across the two hubs.

Nyala Janoub, South Darfur		
Responder Type	**KIIs**	**VP**
Producer/Importer	1	.
Transporters	.	.
Wholesalers	2	.
Retailers	2	2
Consumer – Household	.	6
Consumer – Laundry shop	.	2
Khartoum, Khartoum State		
Responder Type	**KIIs**	**VP**
Producer/Importer	2	.
Transporters	1	.
Wholesalers	.	.
Retailers	.	3
Consumer – Household	.	6
Consumer – Laundry shop	.	2

As noted above, there were gaps in interviews with laundry soap transporters in South Darfur and wholesalers in Khartoum. However, scoping interviews indicated that transportation dynamics were adequately captured through interviews with sorghum transporters, as transporters typically handle multiple commodities, including laundry soap. As a result, additional dedicated interviews with laundry soap transporters were not considered necessary. Similarly, although there was a gap in standalone wholesaler interviews in Khartoum, overlapping market roles meant that producers and importers were effectively performing wholesaling functions and were able to provide the required market-level information.

1.5 Data Analysis

Analysis followed a phased and iterative approach, with coding initiated immediately after each data collection component so that emerging insights could inform subsequent analytical steps. Qualitative analysis was conducted using Atlas.ti software. An initial codebook was developed based on early interviews and the agreed analytical framework and was treated as a living document, codes were refined, merged, and expanded as analysis progressed.

Two rounds of coding were conducted, ensuring identification of key insights. The team conducted two structured rounds of coding. The first round focused on systematic coding and theme development, while the second round served as a validation and consolidation phase to ensure analytical consistency, address gaps, and reduce the risk of overlooked insights. Following coding, findings were synthesised by analytical components to support cross-component comparison and triangulation.

1.6 Challenges and Limitations

This section outlines the operational challenges encountered during the assessment and the limitations of the during the design to ensure a transparent interpretation of the findings.

Challenges

- Operational challenges resulted in delays in the data collection process. This was due to a combination of factors, including accessibility constraints and ongoing security concerns.
- Obtaining approvals and authorisation was delayed due to the prevailing security situation. As a result, interviews in both states were conducted remotely. Many respondents rely on expensive internet services due to the absence of reliable network coverage, which occasionally disrupted communication.
- Actors in the laundry soap supply chain often perform multiple roles, particularly traders. As a result, it was not possible to strictly separate respondents into the originally defined categories. To address this, the data collection tools were designed in a modular format, allowing the field team to adapt the interview flow and select the most relevant sections based on each respondent's actual role and experience in the supply chain.

Limitations

- The assessment had limitations in assessing supply chain capacity. Estimating supply capacity requires a stronger quantitative component, which was beyond the scope of this assessment. Additionally, limited published literature on the laundry soap supply chain meant that the analysis relied primarily on the perceptions and experiences of key experts and supply chain actors.
- While the assessment provides useful insights into market dynamics in the two selected hubs, the findings cannot be generalised to the broader Darfur region or other central regions. Rather, they should be interpreted as context-specific findings from the selected markets included in the analysis.
- This report provides a snapshot of the laundry soap supply chain at the time of data collection. Given the rapidly changing conflict dynamics and market conditions in Sudan, the relevance of specific findings may diminish over time.
- Consumer perspectives were limited in their generalisability, as experiences varied considerably by location, income level, and other contextual factors. Issues such as market access and affordability differed significantly even within the same state or hub and were therefore not examined in depth as a central focus of the study.

Findings

2. Context Overview

2.1 The Two Market Systems: Khartoum and South Darfur

The laundry soap supply chain covered in this assessment is best understood as two distinct but linked market systems. Khartoum functions as a large urban market for consumption and redistribution. Before the war, the city was anchored by domestic factories and structured producer-to-market distribution channels regardless of outstanding market barriers and inflation. Currently, Khartoum retains scale but operates under a different logic: local production has declined sharply, and Egyptian imports now dominate supply.

According to the International Food Policy Research Institute (IFPRI) (2025)[3], the capacity of the overall industrial sector`s output, mostly concentrated in Khartoum, declined by 50% only in the first year of the war, with the value of service providers including transport and trade to the Gross Domestic Product (GDP) fall by 40% in the same period. This shift mirrors broader national trends where the destruction of industrial hubs has forced a transition toward import-dependency to meet basic hygiene needs. Darfur remains a major urban consumption market, but the chain is oriented around imports, transport routes, and secondary redistribution hubs. Small-scale local laundry soap production is showing early signs of recovery, including branded manufacturers and neighbourhood packagers, though quality may not be to standard due to infrastructural and financial limitations, including constraints on electricity and working capital limit growth.

The supply chain system in South Darfur's Nyala Janoub hub is structurally different from the equivalent system in Khartoum because of its smaller and more localised nature. Supply comes through cross-border trade from Chad and other western neighbours rather than factory-linked systems. The Nyala Janoub market was physically closed from April to July 2025 following insecurity and only partially recovered after reopening in August 2025. Similarly, the road connecting Nyala Janoub to Kass and Zalingi was blocked for approximately six months between late 2024 and early 2025. This closure, compounded by informal fees and spiking fuel prices, has had unfavourable implications for supply chain stability and commodity pricing.[4] Additionally, a large proportion of current traders are new entrants who may not yet have the established supplier relationships or capital reserves of more experienced actors. This shift appears to be linked to insecurity affecting established traders, including exposure to theft of cash and assets or other security risks. As some experienced traders exit the market, they are replaced by newer entrants who are operating under challenging conditions and often with more limited capital and weaker supply networks.[5] This has contributed to changes in trading practices, including reduced scale and more cautious engagement in the market. Despite these constraints, recent developments indicate some movement toward local production, including the establishment of a laundry soap factory in Nyala Janoub.

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

[4] ACAPS, Economic impacts and emerging trends in West and Central Darfur (2025).

[5] Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises (SPARC), The impact of war on trade and markets in Darfur (2025).

Dimension	Khartoum	South Darfur (Nyala Janoub)
Core role	Large urban consumption and redistribution market	Localised receiving and retail market
Historical base	Domestic factories and structured distribution	Trader-based and cross-border
Current supply base	Predominantly imports from Egypt; some local production resuming	Cross-border imports from Chad/West Africa; one nascent local factory
Distribution pattern	Semi-structured, multi-node, with hubs at Atbara and Shendi	More direct trader-to-market flows
Market depth	Diverse and deep	Thin and fragile; 90% of traders are new entrants
Shock absorption	Moderate	Low; seasonal closure; single supply corridor

2.2 Conflict and Security Dynamics

The impact of the conflict on the laundry soap supply chain extends beyond disruption, resulting in significant structural changes. In Khartoum, the most important change was the loss of domestic manufacturing as the upstream centre of the supply chain. The Sudanese Federation of Industries indicated that by March 2026, the industrial sector had suffered losses estimated between $50 billion and $58 billion, with approximately 1,800 industrial facilities damaged and nearly 450 factories in the industrial zone south of Khartoum completely destroyed or looted. This destruction dismantled the domestic production base, forcing the market to pivot from local factory supply to a near-total reliance on imported products.[6]

This transition has fundamentally altered the market logic across several key dimensions. First, power dynamics have shifted from domestic manufacturers and their structured distribution networks to a new class of high-level importers and cross-border traders who control the flow of goods, particularly from Egypt and other neighbouring states. Second, price formation is no longer governed by local production costs but is now dictated by volatile international purchase prices, fluctuating exchange rates, and the high cost of informal fees at various checkpoints. Furthermore, storage and distribution patterns have moved toward a just-in-time model, with stock increasingly held in secondary redistribution hubs.

Ultimately, a laundry soap supply chain once defined by its link to production has become a system defined by its link to trade, resulting in a more fragile system highly sensitive to border policies and transport corridor security. Household respondents in Khartoum captured this shift vividly, noting, the disappearance of pre-war brands and the emergence of less-familiar replacements, reporting that even returning brands currently feature altered compositions. Several respondents echoed this sentiment, describing sharp price increases accompanied by significant quality reductions in returning brands.

[6] Sudan Tribune, Sudan industry losses from war estimated at up to $58 billion (2026).

In South Darfur, these dynamics are even more pronounced. The market experienced a period of complete closure, and key infrastructure was severely affected; one wholesaler reported that approximately three-quarters of warehouse capacity was destroyed or lost during this period. Additionally, many established traders who had built long-standing business networks and accumulated capital over time have left the market. While there are emerging signs of local production recovery, the supply chain continues to rely heavily on volatile cross-border flows as domestic capacity gradually rebuilds.

2.3 Demand and Consumption

Demand for laundry soap remains strong, reflecting its status as an essential good; however, the structure of demand has shifted. In South Darfur, demand has increased in line with population growth and the arrival of displaced populations from other regions. This additional demand is largely concentrated among low-income households and is oriented toward lower-priced products. One trader noted:

> *``The demand increased and became better six months ago, because some people came from Al-Fashir and other states. The change usually occurs in the cheaper laundry soaps, such as Abo-Njma, Abo-Tbldya. Those are cheaper and the demand for them is high. Most of the people are displaced, so they always choose the cheapest option.`` Retailer, South Darfur*

In Khartoum, the market exhibits a different but equally stark set of adaptations characterised by quantity compression and functional use-mixing. While weekly purchasing remains common, consumers are not opting out of the market; instead, they are shrinking their participation within it to manage severely constrained household budgets. This is most visible in the shift from bulk or carton buying to per-bar purchasing and the routine use of laundry soap as a universal detergent. Rather than maintaining separate products for specific tasks, consumers increasingly utilise laundry soap for bathing, dishwashing, and general household cleaning. This dissolution of traditional product categories reflects a broader trend of substitution, where brand loyalty has been replaced out of economic necessity by a focus on multi-purpose utility and immediate affordability. Therefore, these shifts in Khartoum and South Darfur indicate a market that is functioning under extreme pressure, where demand is sustained by necessity but limited by the diminished purchasing power of a displaced and conflict-affected population.

3. Supply Conditions

3.1 Khartoum Supply System

The Khartoum laundry soap supply chain system is import-dependent and focuses on finished goods, primarily from Egypt. Commodities, including laundry soap, enter through Port Sudan, Halfa, and Argeen crossings, and are then transported via redistribution hubs such as Atbara and Shendi before reaching urban markets. Some importers continue to use alternative off-road routes despite the reopening of main roads, as informal checkpoint fees along the primary corridor outweigh the logistical convenience of the official route.

Imported products dominate the market due to their greater availability and, in many cases, lower prices following the decline in local production. As one importer noted:

> *"The imported is more than the local because the local products are expensive and not always available, compared to the imported which is cheap, good quality, and always*

> *available. The imported products took over the market when the local production stopped." Importer, Khartoum.*

Alongside the import system, a layer of small-scale local soap production has emerged. Several manufacturers now produce branded soap using a mix of locally sourced and imported (primarily Egyptian) raw materials, supplying wholesalers and markets within Khartoum state. At the neighbourhood level, distributors purchase in bulk from these producers and resell directly to nearby households and shops, often on informal credit terms. These micro-level distribution channels operate in parallel to the import system and help improve last-mile access in residential areas that are less well served by formal markets.

3.2 South Darfur (Nyala Janoub) Supply System

The South Darfur laundry soap supply chain system is primarily based on cross-border imports and trader networks. This commodity is currently sourced from neighbouring countries, mainly Chad, with additional flows from Nigeria and Cameroon, and enters Sudan through the Adré border crossing. Traders either travel to purchase goods directly from agencies on the Chadian side or place orders remotely, coordinating payment digitally and arranging transport back into Sudan through established logistics networks

The Adré corridor serves as the primary supply route for laundry soap into Nyala Janoub. The journey takes approximately 17 hours under normal conditions and passes through a mix of asphalt and unpaved sandy roads. During the rainy season (July–October), sections of the route become impassable as low-lying areas flood, disrupting supply for an estimated 2–4 months.

A secondary route via the Alnaam gate provides limited supplementary access from the south but does not represent a full alternative to the main western corridor. To mitigate seasonal disruptions, some importers and logistics operators occasionally rely on air transport from Adré, although the high cost significantly increases retail prices.

While larger traders attempt to build stock in advance of the rainy season, limited secure warehousing capacity and the risk of looting constrain storage at scale. As a result, some operators store goods in locations closer to the Chad border to reduce exposure to insecurity. During the rainy season, the market therefore relies on a combination of reduced transport flows and partial buffering through local production. However, as household consumption of laundry soap typically declines during this period, these constraints generally lead to price increases rather than full stockouts.

The most significant new development in the South Darfur supply system is the opening of a local soap factory in Nyala Janoub, the first in the city. The factory was established in December 2025 and is not yet widely distributed in markets. It sells a carton of 40 pieces for SDG 20,000, compared to SDG 80,000–84,000 for an imported carton of 80 pieces, making the per-unit price of local laundry soap about half that of imports. This price advantage is a notable departure from the Khartoum market, where the price gap between local and imported goods is less pronounced. While the quality is still evolving to compete with established regional brands, the factory's existence provides a critical domestic fallback and marks a significant move away from total import dependency.

3.3 Laundry Soap Varieties

The assessment highlights a clear divergence in product availability and consumption patterns between the two regions. In South Darfur, the market is dominated by multi-purpose laundry soaps. The most commonly cited brands include Ab Najma (highest quality, largest bar, SDG 1,500–1,700 per piece), Ab Nakhla (mid-range), Abo Tabeldeya (budget option at around SDG 1,000), and Chadian laundry soap. A key consumption pattern is the widespread use of a single bar for multiple purposes, including laundry, bathing, and dishwashing. This reliance on laundry soap for personal hygiene raises public health concerns, as the abrasive nature of these products can contribute to skin irritation and damage to the skin barrier, particularly among children. Pre-war brands such as Ab Shrateen are no longer available following the cessation of production.

In Khartoum, households use a more diversified mix of bar laundry soap, liquid soap, powder detergent, and shower soap, although consumption has shifted toward simpler and more affordable options. Brands such as Oxi, Bushra, Tero, Fab, and locally packaged liquid laundry soaps remain present in the market, but respondents report noticeable variability in quality. Many describe a shift toward purchasing unbranded, factory-packaged liquid laundry soap sold by volume, driven by perceptions of better value and more consistent quality compared to some branded alternatives currently available.

Types and market preferences	
Indicator	**Khartoum**
Main source	Egypt
Type of supply	Predominantly formal import procurement
Product form	Finished goods (bar, liquid, powder, bath)
Local production role	Declining from pre-war; early-stage resumption
Continuity	Relatively stable
Indicator	**South Darfur (Nyala Janoub)**
Main source	Chad, Nigeria, Cameroon
Type of supply	Cross-border and informal trader networks
Product form	Finished goods (predominantly bar of laundry soap)
Local production role	Effectively absent pre-2026; one new factory emerging
Continuity	Continuous but thin; route-dependent; seasonal disruption

4. Supply Chain Structure

4.1 From Factory Chain to Trade Chain

The most significant structural shift documented in this assessment is the transition from a factory-based distribution system to a trader-led import chain. Before the war, Khartoum's laundry soap market was organised around domestic factories and structured, multi-tiered distribution networks that moved goods from producers through regional wholesalers to retailers.

Following the destruction of manufacturing capacity, this formal structure largely collapsed. Rather than disappearing, however, it has been replaced by a more fragmented and less hierarchical system. The supply chain is now driven primarily by import flows and trader liquidity rather than domestic production. Imported laundry soap is often sold directly to wholesalers and retailers, bypassing traditional intermediary layers.

While the system has remained functional, it is now more compressed and less structured, characterised by higher transaction costs, variable product quality, and increased vulnerability to external shocks such as border disruptions and currency volatility.

In addition to serving as the primary laundry soap source for central and eastern Sudan, Khartoum was historically the main supplier for markets in South Darfur. Before the conflict, the laundry soap sold in Nyala Janoub and distributed to surrounding markets was largely produced in Khartoum. However, this domestic supply has been replaced by imported products and external sources due to the dysfunction of Khartoum-based manufacturers and the disruption of traditional supply routes between the two states. Consequently, the supply chain has undergone a structural shift from local production to cross-border trade.

4.2 Key Supply Chain Actors

The supply chain across both Khartoum and South Darfur includes importers and cross-border traders, transporters, wholesalers, market traders, retailers, local manufacturers, laundry service providers, and households.

Importers and cross-border traders primarily control access to stock, particularly in Khartoum (import-led flows) and South Darfur (cross-border sourcing). Transporters bear a significant share of cost and route-related risks across both contexts. Wholesalers and market traders function as key aggregation points, while retailers provide the critical last-mile interface with consumers. Laundry service providers represent a productive demand node within the system, particularly in urban areas. Where present, local manufacturers offer a partial alternative to imported supply, though their role remains limited in scale.

Khartoum		
Actor	**Core role**	**Location**
Importers	External sourcing and entry into Sudan	Primary actors sourcing directly from Egyptian industries; maintain connections with Port Sudan and northern border points
Cross-border traders	Import products across borders	Manage trade flow through key transit hubs including Argeen, Port Sudan, Haya, and Atbara
Transporters	Move goods inland	Operate primarily along the Atbara–Omdurman routes; operations are heavily dictated by fuel costs and checkpoint fees.
Wholesalers	Hold and redistribute stock	Based within the Khartoum hub; Serve as the primary redistribution point for urban and peri-urban markets.
Retailers	Last-mile link to consumers	Situated in local marketplaces within neighborhood clusters to ensure proximity to households.
Local manufacturers	Produce or package laundry soap domestically	Small-scale emerging actors; includes neighborhood-based branded liquid laundry soap makers and manual packagers.
Laundry providers	Use laundry soap as productive input	Small businesses facing severe margin compression due to rising input costs and fixed service prices.
Households	Final consumers	Located across the Khartoum market hub and surrounding catchment areas served by the hub.
South Darfur (Nyala Janoub)		
Actor	**Core role**	**Location**
Importers	External sourcing and entry into Sudan: Large scale imports are less prominent	International supply is largely managed by decentralized cross-border networks
Cross-border traders	Import products across borders; Primary supply link	Operations are centered on sourcing goods from Adré, Chad for redistribution into South Darfur
Transporters	Move goods inland	Operate primarily along the Adré–Nyala corridor
Wholesalers	Hold and redistribute stock	Centered in the Nyala Janoub hub; act as the primary redistribution point for urban and peri-urban markets

Retailers	Last-mile link to consumers	Located in fixed stalls and mobile units across local markets in Nyala and surrounding areas
Local manufacturers	Produce or package laundry soap domestically; Limited number and production	Operates in Nyala janoub
Laundry providers	Use laundry soap as productive input	Small businesses in urban Nyala
Households	Final consumers	Located across the Nyala Janoub hub and surrounding catchment areas served by the hub

The actor matrix highlights two distinct operational dynamics shaped by context-specific constraints. In Khartoum, the system retains elements of a formal trade structure, with importers acting as the main entry point and maintaining direct links to Egyptian manufacturers. However, logistics are heavily influenced by fuel costs and the presence of multiple checkpoints between Atbara and Khartoum, which ultimately shape final retail prices. As a result, retailers operate largely as price-takers with limited ability to negotiate margins, passing cost increases on to consumers who are already reducing overall consumption.

On the other hand, the South Darfur (Nyala Janoub) hub functions through a more localised, trust-based system. Given limited access to formal banking and credit mechanisms, wholesalers and cross-border traders rely heavily on established social and business networks to facilitate transactions. A notable finding is the role of laundry service providers, who, unlike in Khartoum, show a preference for Chadian imports and act as a partial buffer in the system by absorbing some price fluctuations rather than immediately transferring them to customers.

The emergence of local manufacturers in both hubs, although still in early stages, represents a potential partial alternative to import-dependent supply chains. In Nyala Janoub, the new factory reflects an attempt to shorten and localise the supply chain, while in Khartoum, neighbourhood-level packagers represent a more informal response to affordability constraints within an import-dominated market. Together, these actors form a system that remains adaptive but cost-constrained, prioritising short-term availability over structural stability.

4.3 Credit and Trust Structures

A consistent finding across both assessed markets is the importance of trust- and reputation-based credit systems over formal financial instruments. In South Darfur, as one prominent wholesaler explained, “If you are honest and trustworthy, your reputation will bring work to you.” Credit is routinely extended to known buyers without formal agreements, with repayment delays of a month or more often accepted on the basis of established relationships.

By contrast, digital mobile payments (Bankak) are used cautiously and are often associated with a 15–20% surcharge compared to cash transactions. This reflects a strong preference for liquidity, as traders face difficulties converting digital balances into physical cash and in making payments to suppliers who operate outside the formal digital banking system. As a result, digital adoption remains limited, reinforcing reliance on physical cash and increasing exposure to security risks linked to the movement of large amounts of money.

In Khartoum, informal credit arrangements similarly operate across most levels of the supply chain. However, a key constraint exists at the import level, where Egyptian suppliers require full cash

payment in advance, as one importer noted: "The Egyptians require their money delivered first to guarantee your products." This requirement concentrates purchasing power among better-capitalised actors able to absorb upfront costs. Further downstream, more flexible arrangements are observed, with small producers often supplying neighbourhood distributors on consignment, and retailers extending credit to households as a coping mechanism to sustain demand amid high price pressures.

4.4 Market Structure and Power

A defining feature across both systems is a high degree of role overlap, where traditional distinctions between importers, wholesalers, retailers, and financiers have become increasingly blurred in response to a high-risk operating environment. In both Khartoum and South Darfur (Nyala Janoub), individual traders often perform multiple functions simultaneously, combining sourcing, distribution, retail, and informal credit provision.

In South Darfur, this overlap is particularly pronounced due to the smaller scale of the market and the fragmented nature of cross-border trade. While this flexibility allows actors to adapt quickly to changing supply routes and commodity availability, it also reduces system redundancy. As a result, disruptions affecting a single key trader, such as loss of stock, mobility constraints, or personal shocks can have immediate and localized impacts on supply continuity.

This convergence of roles also concentrates significant market power among a limited number of actors who control access to capital, suppliers, and transport routes. The resulting trader-centred structure places households and service providers, including laundry businesses, in a largely price-taking position with limited influence over cost formation. As a result, increases in input costs, such as transport expenses, checkpoint fees, or fuel prices, are transmitted rapidly through the chain, with limited buffering capacity, ultimately absorbed by end consumers.

5. Transport, Logistics, and Market Access

5.1 Transport as the Backbone of the Laundry Soap Supply Chain

Transport has become a core structural determinant of supply chain performance in the current Sudanese laundry soap market, rather than a secondary logistical function. With the system now heavily dependent on imports, market continuity relies on the sustained movement of goods across long distances and multiple administrative and security constraints.

In Khartoum, this involves the routing of goods entering through northern border points or Port Sudan, followed by inland distribution via hubs such as Atbara. In South Darfur, the system is more fragile, depending on cross-border inflows from Chad under conditions of insecurity and weak infrastructure. Across both contexts, disruptions to transport are rapidly transmitted through the system, resulting in immediate supply shortages and price increases at market level.

Constraint	Khartoum routes	South Darfur (Adré) routes
Checkpoint density	Multiple; duplicate local fees; no coordination	Around 25 checkpoints; More than SDG 250,000 per trip
Road quality	Primary roads are passable year-round; off-road alternatives are used	Sandy sections cut off in autumn; large vehicles are restricted
Fuel costs	Nearly 50% of operating cost; price-sensitive; Directly translated into retailing price	Constitute significant proportion of the overall operating cost; Directly translated into retailing price
Alternative routes	Off-road tracks use alternative but risky roads to reduce checkpoint exposure	logistics operators and traders use single route except a few and limited exceptions; No alternative main route
Loading costs	Carried by the seller at the origin and the logistics operator covers the unloading cost	Seller pays loading costs; vehicle owner pays unloading costs

Checkpoint Costs and Price Uncertainty

The transport environment is characterised by a high density of checkpoints that function as informal revenue collection points. In Khartoum, weak coordination between local authorities results in overlapping fee structures, increasing costs before goods even reach urban markets. In South Darfur, the situation is more severe, with transporters passing through approximately 25 checkpoints per trip. Total transit costs, exceeding SDG 250,000 per journey, operate as a persistent but opaque levy. This unpredictability limits price stability, as wholesalers face significant variation in landed costs depending on conditions encountered along the route.

Seasonality and Route Dependence

A key divergence between the two hubs lies in route resilience. Khartoum benefits from multiple routing options, including alternative desert tracks that are used to avoid high-fee checkpoints or areas of insecurity. In contrast, South Darfur is dependent on a single viable corridor via Adré, with no practical alternative for bulk imports. During the rainy season (July–October), sandy sections of this route become impassable, disrupting supply for up to four months and creating pronounced seasonal price and availability fluctuations in Nyala Janoub.

Fuel as a Key Price Driver

Fuel costs are a central determinant of final soap prices in both hubs. In Khartoum, fuel accounts for approximately 50% of total transport operating costs. In South Darfur, the dependency is even more pronounced, as fuel is sourced and paid for in Adré prior to transport. Given limited capital buffers among traders, fuel price fluctuations cannot be absorbed within the supply chain. As a result, changes in diesel prices at the border are transmitted to retail markets in Nyala Janoub within 24–48 hours, directly affecting affordability for low-income households.

5.2 The Darfur Corridor

The primary Darfur supply corridor runs from Nyala Janoub to the Adré border crossing on the Chad frontier, a journey of approximately 17 hours under normal conditions. The route passes through alternating road conditions: asphalt from Nyala Janoub to Gemeza, unpaved sandy sections to Zalingi, asphalt again from Zalingi to Ag Geneina/El Geneina, and finally unpaved sandy road from Ag Geneina/El Geneina to Adré. Transport capacity is reduced on sandy sections, where large lorries operate with lower loads, while smaller 4x4 vehicles ("cruzers") are used for more difficult terrain but at a higher cost (approximately SDG 7,000 per carton compared to SDG 5,000 for lorries).

The corridor is also characterised by a high density of checkpoints, estimated at around 25 along the route—including both official and informal stops. Fees are not standardised and vary depending on cargo type and checkpoint. For a full lorry, cumulative checkpoint payments along the Zalingi–Kass–Nyala Janoub stretch can reach SDG 250,000–280,000 per trip. These costs are fully passed through the supply chain and ultimately embedded in final consumer prices.

Seasonal conditions further constrain movement. During the rainy season (July–October), flooding in low-lying areas renders sandy road sections impassable to heavy vehicles, frequently disrupting supply for two to four months. Traders with sufficient capital often mitigate this risk through pre-stocking during the dry season, sometimes using credit to build inventory buffers. In contrast, less capitalised traders are more exposed to price spikes and shortages when routes reopen and supply is constrained. The lack of a continuous asphalt road between Zalingi and Adré is consistently identified as the most significant structural bottleneck in the Darfur supply chain.

While this assessment focuses on the Adré corridor, limited information was available on alternative routes such as Foro Baranga and Al Naam, which were not significant for soap flows at the time of fieldwork. Further analysis of connectivity with Ag Geneina/El Geneina and Ed Daein would be useful for a more complete understanding of regional trade dynamics.

Route / Pathway	Function in the Chain	Main Barrier / Pressure
South Darfur – Nyala Janoub Hub		
Supply Route 1: Chad – / Adi Kong Corridor Cameroon → Adré (Chad) → Adi Kong → Ag Geneina/El Geneina → Zalingi → Nyala	Main international supply corridor for Darfur. Feeds Nyala Janoub as the central distribution hub supplying South, West, and Central Darfur, as well as parts of Kordofan.	Extremely high checkpoint density (up to ~25 checkpoints); cumulative fees at multiple points; poor road conditions (especially sandy sections); high transport costs; seasonal disruption during rainy season (roads become impassable).
Supply Route 2: Chad – Foro Baranga Corridor (Independent) Chad → Foro Baranga → Ag Geneina/El Geneina → Zalingi → Nyala Janoub	Independent cross-border route supplying West Darfur markets, particularly Ag Geneina/El Geneina, before feeding into Nyala Janoub distribution system. Acts as an alternative when main corridor is constrained.	Less structured and more informal supply chain; High security risks; Unreliable route, reliability depends on conditions; limited scale compared to Adré corridor; potential risk of goods loss.

Supply Route 3: South Sudan – Abyei Corridor (Independent) South Sudan → Alnaam Souk (Amiet Market) → Almuglad → Babanusa → Al-Deein (East Darfur) → Nyala Janoub	Southern entry corridor supplying East Darfur through Al-Deein, which acts as a secondary hub before goods move to Nyala Janoub. Provides an additional supply pathway into the Darfur system. (Currently unused for soap)	Insecurity and instability along cross-border areas; transport constraints; variable accessibility; informal trade conditions; limited infrastructure; inconsistent flow compared to main corridor. Quality issues with soap imported from the south.

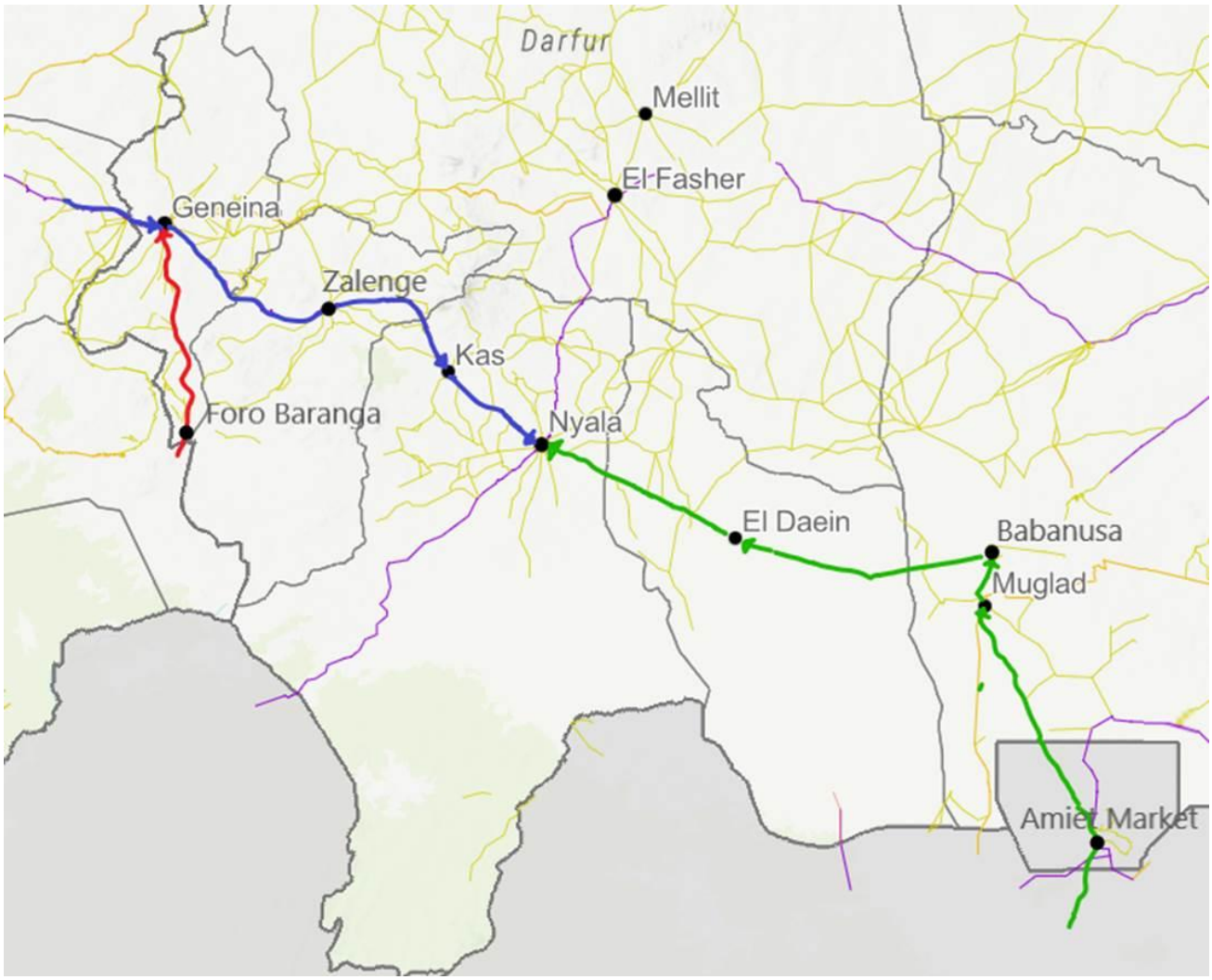

Figure 1. Nyala Janoub supply chain routes for laundry soap

The map (Figure 1) illustrates the spatial structure of Darfur's main commercial routes, highlighting Nyala Janoub as a central hub where three international supply corridors converge. The primary north-western corridor (blue) links Nyala Janoub to the Chadian border via Ag Geneina/El Geneina and Zalingi, forming the main route for laundry soap imports despite significant constraints related to checkpoint density. The February 2026 JMMI[7] reflect this high level of connectivity, with primary

[7] IMPACT Initiatives, Joint Market Monitoring Initiative (JMMI) (February 2026).

hygiene supply chains flowing from Chad through Foro Baranga and Geneina to service both Nyala Janoub and Nyala Shimal. This international reliance is further underscored by the role of cross-border corridors in sustaining availability in more isolated localities, such as Wadi Salih and Gharb Jabal Marrah, which remain largely dependent on the broader Nyala hubs and the Foro Baranga–Chad transit points for essential hygiene commodities. While southern routes via Ed Daein continue to facilitate some movement from South Sudan, the Chadian corridors appear to remain the dominant logistical anchor for the regional market system.

To the west, a secondary corridor (red) runs through Foro Baranga, providing an alternative cross-border connection that can support supply to West Darfur when the main route is disrupted. Further south, a third corridor (green) connects Amiet Market in South Sudan to Nyala Janoub via Babanusa and Ed Daein. Although currently limited in its role for laundry soap due to quality and security concerns, this route represents a potential pathway for broader regional trade integration, with East Darfur acting as an intermediary zone for goods moving toward the Nyala Janoub market.

5.3 Khartoum Transport Environment

Transport along routes linked to Khartoum operates within a layered and fragmented cost environment. Checkpoint fees are applied at multiple administrative levels, with vehicles often charged repeatedly when moving between localities, as each authority imposes its own uncoordinated charges. In addition, fees are frequently collected informally and without official receipts, regardless of whether formal customs or zakat payments have already been made. As one transporter described, "Vehicles on the road are treated as a source of income, with informal payments and no official receipts."

> *"The amount spent on the road is very high and there is no supervision and there are no substitute roads, the fees are not predetermined, and anyone can harass and force you with the amount of fees they want." — Transporter, Khartoum route*

Fuel accounts for approximately 50% of total transport operating costs in Khartoum, making it a key driver of final prices. To manage overall costs, some transporters continue to use off-road routes even after the reopening of main roads, as the cumulative burden of informal checkpoint fees along official corridors can exceed the additional logistical costs. An alternative routing strategy involves passing through Omdurman, where checkpoint density is comparatively lower and market activity has recovered, making it an increasingly attractive distribution node.

Route / Pathway	Function in the Chain	Main Barrier / Pressure
Khartoum Hub		
Supply Route 1: Egypt – Argeen / Wadi Halfa Corridor Egypt → Argeen / Wadi Halfa → Dongola → Omdurman / Khartoum	Primary land-based import corridor supplying Khartoum wholesale and consumption markets. Historically important route for Egyptian soap imports.	High customs and taxation at Argeen and Wadi Halfa; strict VAT enforcement at Dongola (~17%); risk of trucks being stopped and charged large informal fees; duplication of taxes; delays and high cost accumulation; traders increasingly avoid this route or use off-road bypasses.

Supply Route 2a: Egypt – Port Sudan Corridor Egypt → Port Sudan → Haya → Atbara → Khartoum North / Khartoum	Main maritime import corridor and currently the preferred route. Supplies national distribution system through Atbara, which functions as the central aggregation hub.	Port clearance procedures and certification requirements; transport costs over long distances; checkpoint pressures inland (lower than Argeen corridor but still present); logistical delays at port.
Supply Route 2b Alternative: Egypt – Port Sudan Corridor Egypt → Port Sudan → Haya → Atbara → Omdurman / Khartoum	Alternative route to Route to avoid high tolls on main route through Khartoum North.	

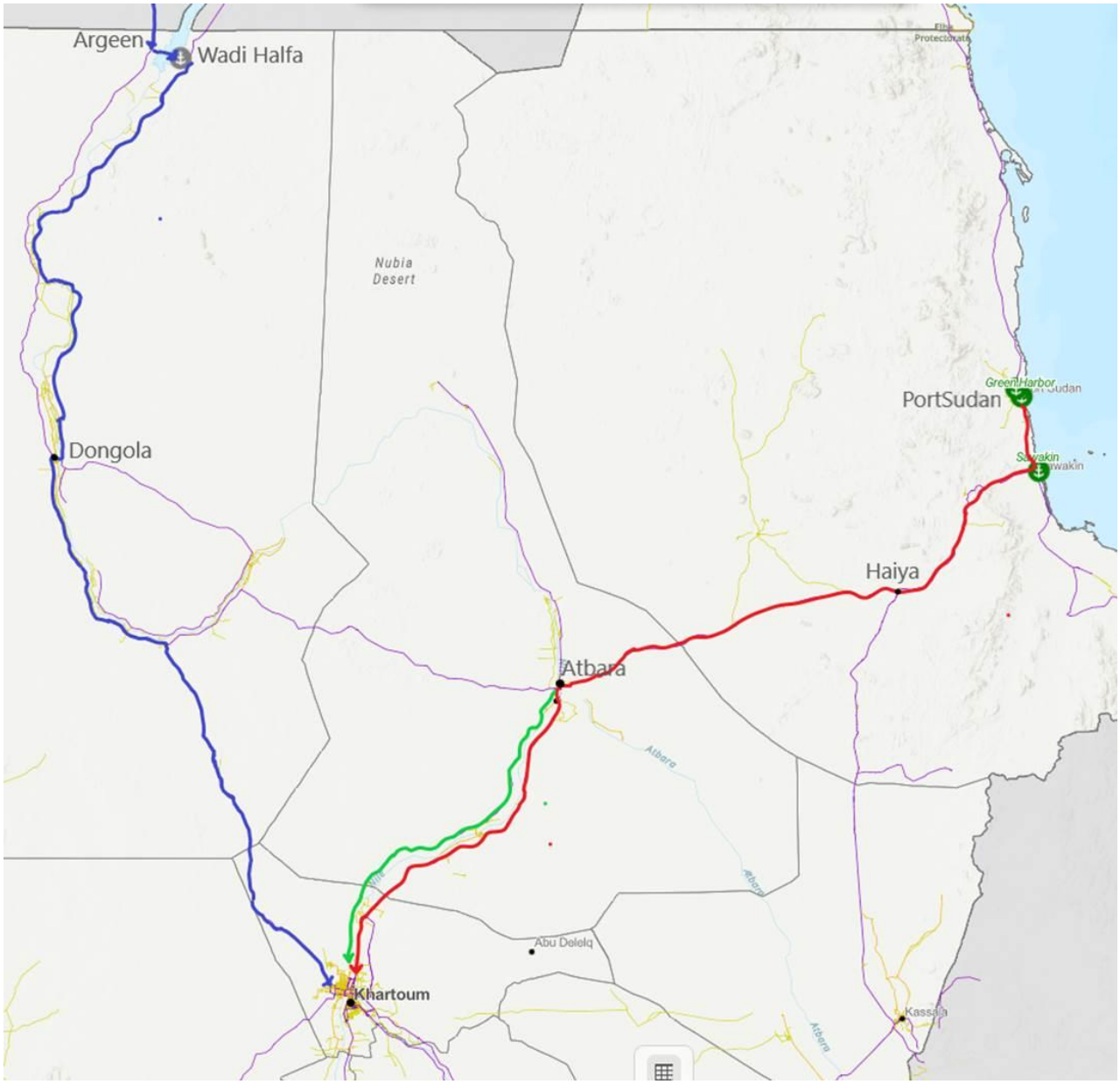

Figure 2. Khartoum supply chain routes for laundry soap

The map (Figure 2) illustrates the dual-entry structure currently supplying the Khartoum market, with Atbara emerging as a key inland distribution node. The northern corridor (blue) represents the traditional land route from Egypt via the Argeen and Wadi Halfa crossings. However, this route involves extended transit through areas such as Dongola, where traders face cumulative taxes and uncoordinated local fees.

In contrast, the eastern corridor (red) links Khartoum to Port Sudan and serves as the primary maritime entry point for imported soap. The map also highlights Atbara as a critical junction, where routes diverge to provide alternative pathways into the capital. One such option is the Omdurman bypass (green), which allows transporters to avoid high-density checkpoint areas within Khartoum while accessing a market where commercial activity has been recovering.

5.4 Transport as a Price Transmission Mechanism

The laundry soap market illustrates how transport functions as a central mechanism for price transmission in a fragile market system. In the absence of domestic price controls or effective stabilisation mechanisms, transport-related costs are passed along the supply chain with minimal absorption at each stage. Importers establish prices based on international purchase costs and the high cost of inland transit. These are then transferred through the chain, where traders incorporate additional costs linked to insecurity and weak governance, including fuel price volatility and cumulative checkpoint fees, effectively creating what can be described as a conflict tax embedded in distribution margins. Retailers, operating with limited flexibility and narrow margins, pass these costs directly on to households and service providers. In this context, transport costs are a central determinant of final market prices.

Unlike more stable market environments, where logistics represent a relatively fixed cost, transport in the Sudanese laundry soap market acts as a highly variable driver of price volatility. Increases in fuel prices or checkpoint-related costs are not absorbed within the system due to limited capital reserves among traders. Instead, they are transmitted rapidly through the supply chain, particularly given the reliance on short-term restocking practices. As a result, price changes at key transit points can affect retail markets within a short timeframe.

This dynamic creates a direct link between transport conditions and household access. Delays, route disruptions, or increased transit costs translate into higher retail prices and reduced purchasing power. For households in areas such as Nyala Janoub, these pressures can lead to reduced consumption of essential items, including soap, with implications for hygiene and overall well-being. In a system characterised by high import dependence, the cost and reliability of transport are therefore key determinants of both market functionality and household access.

6. Storage and Inventory Management

6.1 Storage Practices

Storage plays a different role in the laundry soap supply chain compared to staple commodities. Given the low risk of spoilage, soap can be stored for extended periods without significant quality deterioration. However, storage capacity remains a key indicator of market power, reflecting which actors are able to manage price volatility and which are constrained to short-term, liquidity-driven operations.

In Khartoum, importers and larger traders use storage as a short-term buffer against supply and price fluctuations. Local manufacturers also maintain inventories of finished products across different formats, allowing them to meet demand even during temporary production interruptions.

In contrast, in Nyala Janoub, storage capacity is more directly constrained by access to capital. Better-capitalised traders are able to build stocks in anticipation of price changes, while smaller actors rely on rapid stock turnover to sustain cash flow.

In South Darfur, storage is closely linked to seasonal access constraints. Wholesalers commonly build up inventory ahead of the rainy season, when road conditions disrupt supply. As one trader noted, "having goods at any price is better than having no goods at all." During these periods, carton prices typically increase from SDG 68,000–69,000 to SDG 80,000–82,000, reflecting anticipated shortages.

However, this buffering capacity is unevenly distributed along the supply chain. Retailers and small-scale laundry service providers maintain limited stock due to financial constraints and the need for continuous liquidity. At the household level, purchases are typically made on a per-bar basis, reflecting constrained purchasing power rather than preference. As a result, the most vulnerable actors have little capacity to absorb seasonal price increases.

Physical storage infrastructure in South Darfur also remains constrained. Damage to warehouse facilities during the conflict has reduced available capacity, with some traders reporting significant losses. Although partial reconstruction is ongoing, storage limitations continue to restrict the volume of stock that can be held at the hub level.

6.2 The Financial Fragility Cascade

Liquidity constraints observed in this assessment affect all actors along the supply chain and create a cumulative effect on market functioning. At the upper levels, importers and large traders—affected by conflict-related disruptions and limited access to formal financial services—operate with constrained capital and rely on informal credit mechanisms. This limits both the volume of goods they can import and the level of stock they can maintain.

Further downstream, wholesalers and distributors operate on narrow margins and depend on rapid stock turnover. Delays in sales or disruptions in supply can directly affect their ability to restock. Retailers, in turn, rely on daily cash flow, maintaining minimal inventories and restocking in small quantities, while passing on price fluctuations to consumers.

At the end of the chain, households and laundry service providers have very limited capacity to absorb shocks. Purchases are made in small quantities and at high frequency, reflecting constrained purchasing power and limited ability to build reserves. This pattern is indicative of broader stress across the supply chain.

These dynamics have important implications for intervention design. Improving access to working capital at the trader and retailer levels could strengthen distribution capacity, reduce volatility linked to low stock levels, and improve price stability. While the system continues to function, it does so under constrained conditions, with limited capacity to absorb additional shocks.

> *"If I go bankrupt, I'll see the nearest trader who can give me money to operate for 1 or 2 days. During these days I'll work and get customers, then I'll return his money and continue to work." — Laundry service provider, South Darfur*

6.3 Financial Challenges to Storage Access

A key finding of this assessment is that storage capacity functions primarily as a proxy for financial liquidity rather than a purely logistical constraint. The ability of actors to hold inventory is determined less by the availability of physical storage space and more by access to cash. Smaller supply chain actors are often forced to liquidate stock prematurely to meet immediate operational costs or household needs, regardless of prevailing market conditions.

This structural imbalance means that the gains associated with scarcity-driven price increases are largely concentrated among better-capitalised importers and large wholesalers, who are able to retain stock and time sales. As a result, improvements in physical storage infrastructure alone are unlikely to stabilise the market. Addressing liquidity constraints at lower levels of the chain is necessary to reduce forced sales and enable more stable trading patterns.

7. Prices and Market Functionality

7.1 Price Formation

The laundry soap market is characterised by an externally anchored pricing structure, where base prices are determined outside Sudan and transmitted into local markets through exchange rate conversion and transport and distribution costs. Unlike staple commodities linked to domestic production systems, laundry soap pricing is primarily shaped by import costs, currency volatility, and inland logistics. As a result, the market is highly sensitive to both exchange rate fluctuations and disruptions along transport corridors, with limited capacity for local price stabilisation.

7.2 Price Levels and Market Change (Pre-war to March 2026)

Across both Khartoum and South Darfur (Nyala Janoub), field data indicates a severe deterioration in purchasing power, marked by a shift from bulk purchasing to high-cost per-unit consumption. In Nyala Janoub, the price of a single bar of laundry soap has increased from approximately SDG 200 pre-war to SDG 1,200–1,700, while in Khartoum prices have risen to SDG 1,200–1,500 from a similar baseline range. This represents a five- to eight-fold increase depending on location and product type. In a similar trend, JMMI data collected in February 2026 provides similar price levels in South Darfur and Khartoum at SDG 1,347 and SDG 1,000, respectively.[8]

A notable structural change is the collapse of bundled purchasing. Pre-war multi-bar packages have largely disappeared in South Darfur, replaced by per-unit pricing that significantly increases the effective cost of consumption. At the same time, imported cartons have increased by approximately 25–40% in recent periods. The emergence of local factory production in Nyala Janoub has introduced a significantly cheaper alternative, with local cartons (40 pcs) priced at roughly SDG 20,000—approximately half the cost of imported equivalents. However, this cost advantage is partially offset by additional transaction charges linked to digital payments, with 'Bankak' transfers often attracting a 15–20% surcharge over cash prices, further increasing effective purchase costs. The trend implies that even when supply remains physically available, it is increasingly economically out of reach, forcing households to prioritize caloric intake over essential hygiene. Consequently, sustained price pressure is not only depleting remaining household liquidity but also posing significant long-term public health risks as soap consumption is rationalized to an absolute minimum.

[8] IMPACT Initiatives, Joint Market Monitoring Initiative (JMMI) (February 2026).

Price data from interviews should be interpreted as indicative ranges rather than systematically verified market monitoring values, reflecting respondent recall and local market variation. These figures capture the lived experience of market actors in a highly fragmented system, where prices fluctuate frequently based on daily security conditions, fuel price, exchange rate, transport availability, and other localised factors.

7.3 Exchange Rates, Credit Conditions, and Price Instability

Exchange rate volatility is a central driver of price formation. Suppliers in neighbouring countries and Egypt require payment in hard currency or equivalent exchange-rate-adjusted pricing, exposing importers and traders to external currency dynamics. One retailer in South Darfur noted that transport, taxes, and conversion costs can increase landed prices by up to 80%, with rapid transmission to retail markets.

Beyond structural inflation, prices vary significantly across traders and time periods. In South Darfur, identical cartons may differ in price by several thousand SDG depending on sourcing timing and route conditions. During periods of constrained supply, stockholders often increase prices beyond transport-cost justification, reinforcing short-term arbitrage behaviour.

Speculative trading is present but inconsistent. Some traders who purchased stock in anticipation of further price increases experienced losses when prices declined, reinforcing cautious and reactive market behaviour rather than sustained speculation.

7.4 Household and Service Provider Responses

Despite sharp price increases, laundry soap remains an essential good, and demand persists across both locations. However, households respond through consumption compression rather than exit from the market. This includes reduced quantities per wash, substitution between product types, mixing of cheaper alternatives, and multi-purpose use of soap for bathing and dishwashing. In South Darfur, larger households commonly distribute limited quantities across daily cycles rather than purchasing in bulk.

Laundry service providers face similar constraints, as laundry soap represents a major share of operating costs (in some cases up to 50%). This has led to significant margin compression, with providers reluctant to increase service prices due to declining customer purchasing power. Adaptation strategies include reducing detergent use per wash, delaying price increases, purchasing on short-term credit, and selectively shifting to more efficient or lower-cost soap sources. As one provider explained:

> *"If I want to reduce the number of bars I use, I boil it — because when you boil soap in hot water you end up using less detergent. Sometimes when you finish the first piece and start the second, you don't wash it right away. You wash it in the next round and then hang it. This way you save on detergent." — Laundry provider, South Darfur*

These responses highlight that adjustment in the system is driven primarily by efficiency extraction and consumption reduction rather than price stabilisation.

8. Impact of Conflict on the Laundry Soap System

8.1 Khartoum: Structural Change with Partial Recovery

In Khartoum, the conflict has driven a structural shift from a domestically anchored production system to an import-dependent distribution model. While the market continues to function and product availability remains relatively stable, its foundation has become more externally dependent and cost-sensitive than in the pre-war period.

Domestic production has partially re-emerged in limited forms. Liquid soap manufacturing has resumed at small scale, and neighbourhood-level packagers have filled distribution gaps in residential areas. Some pre-war brands, including Bushra and Tero, have reappeared, although often with perceived changes in formulation and quality. Respondents consistently indicated that the current market is dominated by these modified or entirely new products, noting that even established brands have been altered so significantly that they no longer resemble their pre-war equivalents in performance or composition.

This perceived decline in quality is linked by respondents to increased consumption volumes per wash cycle, as less effective soap requires higher quantities to achieve the same result. Alongside production changes, the market has become geographically fragmented. Areas affected by active or recent conflict experienced temporary or complete breakdowns in distribution, forcing households to rely on distant markets or reduce consumption. These localized access constraints are not always visible in aggregate city-level availability but represent a significant barrier to consistent household supply.

8.2 South Darfur: Impact and Recovery

In South Darfur, the impact of conflict has been more severe and direct, resulting in a near-total disruption of the supply system during the peak of insecurity. The market was fully closed between April and July 2025, and approximately three-quarters of warehouse infrastructure was damaged or lost.

The pre-conflict trading structure, dominated by large and capitalised merchants, has largely disappeared due to displacement and insecurity. The current market is effectively a reconstituted system, with approximately 90% of traders being new entrants. These actors generally operate with limited capital, weaker supplier networks, and reduced capacity to manage seasonal and logistical shocks.

Domestic production remains extremely limited, with the exception of a newly established factory in Nyala Janoub, which is still in early stages of market integration. As a result, the system remains heavily dependent on cross-border supply chains, which function under conditions of insecurity, route uncertainty, and financial constraint.

> *"The traders you see in the market now, just 10% of them are from the pre-war period. The other 90% are all new in the market. Demand is not like the past. In the past we imported from the east; now we import from the west. Currently we have good demand but not like the past. Even the possibilities are not like the past."* Retailer, South Darfur

Despite partial recovery in trade flows, operational risks remain high across the supply chain. Another trader noted:

> *"The biggest challenges are: first, insecurity, the moment you put your goods on the market, you lose them. Second, sale on credit, sometimes you are forced to sell on credit*

> *because the market is stagnant. Third, transportation, if you import goods, it takes a while before it arrives, and after it is delayed, you pay customs fees."* Retailer, South Darfur

Impact area	Khartoum	South Darfur
Domestic production	Sharp decline with partial recovery in small-scale liquid soap production and neighbourhood packaging	Near collapse; only one nascent factory recently established
Market infrastructure	Reconfigured import and distribution system; increased reliance on alternative routes and inland hubs	Temporary market closure (Apr–Jul 2025); extensive warehouse destruction (~75%)
Trader composition	Mixed adjustment: some exit and re-entry during disruption period	Highly reconstituted market; ~90% new entrants replacing pre-conflict traders
Supply resilience	Moderate resilience supported by diversified import inflows (notably from Egypt)	Low resilience; single dominant corridor with seasonal interruption and limited buffering
Consumer impact	High price pressure and perceived decline in product quality	High price pressure combined with reduced product diversity and periodic access constraints

8.3 Adaptive Capacity

The continued functioning of the laundry soap market is driven less by structural stability than by adaptive strategies across all levels of the supply chain. In both Khartoum and South Darfur, actors have developed practical mechanisms to operate under conditions of insecurity, liquidity constraints, and transport disruption.

These adaptations include flexible sourcing arrangements, reliance on informal credit, and decentralised distribution systems that allow goods to circulate even when formal banking systems and primary transport corridors are constrained. Short supply cycles and frequent replenishment patterns also help maintain market continuity under volatility.

At different points in the chain, these strategies take distinct forms. In Khartoum, importers often use alternative off-road routes to reduce exposure to checkpoint-related costs and delays. In South Darfur, wholesalers rely heavily on reputation-based credit to secure inventory ahead of seasonal road closures. Service providers adjust consumption practices to reduce input costs, while households reduce quantities, substitute products, and use laundry soap for multiple purposes to maintain basic hygiene under constrained purchasing power.

These adaptations sustain market activity but do not resolve structural fragility. Instead, they redistribute risk and cost along the supply chain, shifting a growing burden toward downstream actors. Final consumers ultimately absorb the cumulative effects of transport costs, route inefficiencies, and informal fees embedded throughout the system.

> *"We did our best and bought it from far places. There is no alternative for it."*
> *— Household, Khartoum*

9. Comparative Analysis: Khartoum vs. South Darfur

Khartoum and South Darfur are linked through consumption patterns and commodity flows but represent fundamentally different market systems in terms of structure, resilience, and vulnerability. Khartoum functions as a broader and more diversified import-reliant market, where supply remains relatively continuous but is exposed to high transport costs, exchange rate volatility, and fragmented distribution. South Darfur, by contrast, operates as a geographically constrained and structurally thinner system, where supply depends on a limited number of cross-border corridors and is highly sensitive to seasonal disruption, insecurity, and trader-level fragility.

These structural differences have direct implications for humanitarian programming. Interventions cannot be standardised across both contexts, as the binding constraints differ fundamentally between them.

In Khartoum, the primary constraint is affordability rather than physical availability. Laundry soap remains widely present in markets, but purchasing power has eroded significantly. As a result, the most effective intervention entry points are on the demand side, including cash-based assistance to restore purchasing capacity, working-capital support for retailers operating on thin margins, and targeted measures to address last-mile gaps in underserved neighbourhoods where market presence does not translate into household access. Given that exchange-rate pressures and transport costs are largely external, affordability support remains the most direct mechanism for improving access.

In South Darfur, constraints are both supply- and demand-driven. Local production is extremely limited, with only one nascent factory currently operating, and the system remains dependent on cross-border supply chains. These supply routes are highly vulnerable to insecurity, seasonal closures, and liquidity constraints among traders. Consequently, even short-term disruptions can lead to immediate reductions in availability. Programming therefore needs to combine support for trader network continuity and corridor functionality with measures to improve household access. In contexts where supply interruptions are frequent, in-kind assistance may be more appropriate than purely cash-based approaches.

Impact Area	Khartoum	South Darfur (Nyala Janoub)
Primary constraint	Affordability (high availability but reduced purchasing power)	Dual constraint: supply fragility and affordability pressures
Domestic production	Declined significantly; partial recovery in small-scale production	Effectively collapsed; one nascent factory not yet systemically integrated
Market structure / infrastructure	Reconfigured import-based system with alternative routing and inland redistribution hubs	Market closure (Apr–Jul 2025); major warehouse destruction (~75%)
Trader base	Mixed continuity; partial exit and role adjustment among pre-war actors	Highly reconstituted market; ~90% new entrants

Transport system	Multi-route system with partial flexibility; high checkpoint and informal fee exposure	Single dominant corridor; highly exposed to seasonal closure and insecurity
Supply resilience	Moderate, supported by multiple import channels	Low, due to single corridor dependency and seasonal disruption
Market access conditions	Persistent affordability pressure with localized access gaps	Combined affordability pressure and intermittent physical access constraints

10. Household Access to Laundry Soap

10.1 Access Constraints

Laundry soap access is shaped by a dual constraint: physical distribution and acute affordability. For households in Sudan, laundry soap has shifted from a standard consumable to a priority-survival item. The data indicates a necessity paradox, where as one South Darfur respondent noted:

> *"People may not eat or drink, but laundry soap is very necessary. When you go to some house you may not find sugar, but you probably find laundry soap."* *Household, South Darfur*

However, this apparent availability masks significant access constraints. While laundry soap is physically present in markets, households increasingly access it through forced substitution, shifting to multipurpose, lower-quality bars and reducing quantities used per wash.

For laundry service providers, the constraint is structural. With laundry soap accounting for approximately 50% of operating costs in some cases, price stability is essential for operational viability. Access in this context is defined by the ability to secure wholesale pricing and predictable purchasing conditions, both of which are increasingly constrained.

10.2 Purchasing Power

A key structural shift is the move toward small-unit, high-frequency purchasing. Driven by income compression and limited liquidity, households have shifted from bulk or weekly purchasing to daily or per-use procurement. This creates a poverty premium, where the inability to purchase in bulk results in higher effective unit prices for lower-income households.

This shift also affects retailers, who operate with limited working capital and are increasingly forced into frequent small-volume restocking. This increases exposure to exchange rate volatility and raises transaction costs at the retail level. Rather than smoothing costs through scale, the system amplifies them through fragmented purchasing patterns.

10.3 Laundry Provider Dynamics

Among laundry service providers, two dominant adaptation patterns are observed. The first is margin absorption, particularly in Nyala Janoub, where providers maintain service prices despite rising input costs in order to retain a shrinking customer base. These providers apply efficiency measures such as reducing detergent consumption through boiling techniques and switching to Chadian soap, which is perceived to offer higher washing efficiency per unit.

The second pattern is service contraction, where providers are forced to increase prices, resulting in reduced demand, smaller quantities of clothing per customer, and, in some cases, staff reductions.

Across both patterns, laundry service providers consistently highlight the structural importance of restoring local production as a mechanism for reducing input costs and stabilising service delivery. This reflects the extent to which transport and import dependencies now drive cost escalation within the system.

User group	Main access constraint
Households	Affordability; forced substitution to inferior products
Households in underserved areas (KH)	Proximity and local availability, not just price
Small-scale laundry service providers	High input costs and the inability to buy in bulk lead to margin compression; businesses are restricted to daily restocking at retail prices
Retailers	Working capital and exchange rate constraints

11. Risk and Vulnerability Analysis

The laundry soap supply chain in both Khartoum and South Darfur is exposed to a set of interconnected risks: external supply dependency, exchange-rate volatility, transport costs, financial undercapitalisation, seasonal disruption, market fragmentation, and insecurity. These risks reinforce each other and are transmitted through the system rather than absorbed, producing cumulative vulnerability in both hubs.

In Khartoum, the system is structurally dependent on imported supply chains routed through Egypt and Port Sudan. While availability remains relatively stable, the system is exposed to upstream disruptions in border movement, port logistics, and foreign currency access. Transport risks are driven by fragmented internal governance of road networks, where multiple authorities impose uncoordinated checkpoint fees that accumulate along distribution routes and increase landed costs

In South Darfur, these constraints are more acute. Supply depends almost entirely on fragile cross-border networks through the Adré corridor, with approximately 25 checkpoints and fully embedded informal fees. Seasonal disruption is a defining constraint, as the corridor becomes impassable for 2–4 months during the rainy season, fully interrupting supply flows unless traders pre-stock inventory.[9]

> *"Security is the main problem. Second, liquidity, if liquidity is available, it will stabilize the market. In addition, transportation is very important. Traffic flow should be smooth, and the road should be in good condition. Tax rates have increased and this is worsening things."* — *Transporter, South Darfur*

[9] Security Council Report, Sudan: Closed consultations (2025).

Exchange-rate volatility affects both hubs through parallel market pricing of imports. In South Darfur, the effect is amplified by limited liquidity and a 15–20% surcharge on digital payments, which accelerates price transmission through the chain. In Khartoum, larger traders partially absorb short-term fluctuations, but retail prices remain highly responsive to currency shifts.

Financial undercapitalisation constrains both systems, though in different ways. In Khartoum, it is concentrated among retailers and small distributors, while importers maintain limited buffering capacity. In South Darfur, it is systemic, with most traders unable to hold buffer stocks or access formal credit, resulting in immediate transmission of shocks through the chain.

Market fragmentation is moderate in Khartoum, where importers still function as central distribution anchors, but higher in South Darfur following trader turnover and the erosion of established networks. Insecurity affects both systems, but in South Darfur it directly constrains market access and transport reliability.

Overall, Khartoum operates under high but partially buffered risk exposure, while South Darfur functions under structurally amplified vulnerability with minimal absorption capacity.

Risk	Severity — Khartoum	Severity — South Darfur	Key mechanism
External supply dependency	High: Structurally dependent on imports via Egypt and Port Sudan; sensitive to upstream port and border disruptions	Very high: 90% of SD traders are new entrants without resilient supplier networks	90% of SD traders are new entrants without resilient supplier networks
Exchange rate volatility	High: Prices are highly responsive to parallel market shifts; larger traders provide only a limited, short-term buffer	High: Parallel market determines import cost; Bankak premium of 15–20%	Parallel market determines import cost; Bankak premium of 15–20%
Transport costs and checkpoints	High: Accumulation of uncoordinated fees from multiple authorities along internal road networks	Very high: 25 checkpoints in SD; informal fees fully passed to retail	25 checkpoints in SD; informal fees fully passed to retail
Seasonal road closure	Low: Minimal impact on primary supply routes compared to South Darfur	Very high: Adré corridor: 2–4 months impassable to large vehicles	Adré corridor: 2–4 months impassable to large vehicles
Market monopolisation	Moderate: Functioning importers act as central distribution anchors, providing	High: Stockholders raise prices during supply shortfalls; no regulatory check	Stockholders raise prices during supply shortfalls; no regulatory check

	some systemic stability		
Financial undercapitalisation	High: Concentrated among retailers and small distributors; limited buffering capacity at the top of the chain	Very high: All shocks pass through — no actor has a meaningful buffer	All shocks pass through — no actor has a meaningful buffer
Market fragmentation	Moderate: Anchor importers still provide a degree of network cohesion despite broader conflict impacts	High: 90% trader turnover means thin relationship networks and weak information sharing	90% trader turnover means thin relationship networks and weak information sharing

12. Recommendations

- **Geographically differentiated programming based on functional hubs:**

  Indicative mapping of supply chain functionality suggests varying degrees of market integration across the assessed supply chain systems. However, some markets, for instance Atbara displayed stronger connectivity to Egyptian imports. This indicates that market-based interventions may remain viable in Khartoum, particularly through private sector engagement and trader support. In contrast, in South Darfur, Nyala Janoub appears to function as a critical but fragile aggregation point, suggesting it could serve as a focal entry point for interventions aimed at improving retailer liquidity, stock availability, and last-mile access.
  Given the differentiated supply chain profiles observed, a uniform programming approach may be suboptimal. In Khartoum, where markets remain functional but liquidity-constrained, cash-based interventions may be appropriate in functional nodes. In South Darfur, where markets are more fragmented, a combination of supply-side stabilisation, trader support, and seasonal buffering mechanisms may be more suitable.

- **Liquidity-sensitive transfer value calibration (real value erosion):**

  Findings suggest that laundry soap pricing is highly sensitive to transport costs, import dependence, and trader liquidity constraints. These dynamics may contribute to real value erosion of cash assistance over time, particularly in contexts of rapid price transmission and informal financial costs. Transfer values (including MPCA benchmarks where applicable) could therefore be more systematically aligned with real-time price monitoring, while also accounting for liquidity-related transaction costs that affect effective purchasing power. Additionally, households are reportedly prioritising food items and reducing the quantity of laundry soap purchased. In this context, in-kind top-ups of laundry soap alongside cash assistance could help address basic hygiene needs where market access or purchasing power is constrained.

- **Targeted support to mitigate trader liquidity constraints:**

  The assessment data suggests increasing reliance on informal credit mechanisms across the supply chain. This may expose the system to cascading disruptions, where liquidity shocks at trader level rapidly affect availability and pricing downstream. Targeted working capital support or structured value-chain financing mechanisms could be considered for smaller or emerging traders, particularly those lacking buffer capital to absorb price fluctuations without immediate pass-through to consumers.

- **Corridor-based risk and cost monitoring (Zalingi–Adré):**

  The Zalingi–Adré corridor emerges as a critical supply route for South Darfur, but appears exposed to checkpoint-related costs, insecurity, and potential seasonal disruption. Strengthening corridor monitoring systems could support more adaptive logistics planning, including consideration of transport subsidies or negotiated facilitation mechanisms where appropriate to reduce friction costs.

- **Feasibility assessment of local production as resilience entry points:**

  Nascent local production and packaging activities in Nyala Janoub and Khartoum may represent early-stage resilience nodes within the supply chain. A structured feasibility assessment could be conducted to evaluate whether these actors can be supported as

market stabilisers. If viable, local procurement and processing support may reduce reliance on high-cost import routes, including Argeen and Adré crossings.

- **Liquidity–market functioning linkage monitoring:**

  Findings suggest that trader liquidity constraints may be an important transmission channel linking supply chain disruption to price volatility and reduced market absorption capacity. Monitoring systems could therefore benefit from tracking liquidity conditions alongside prices and availability to better anticipate breakdowns in cash transfer effectiveness.

13. Conclusion

The laundry soap supply chain in the assessed market hubs remains operational despite capacity gaps and other constraints along the supply chain lines. The war appears to have shifted the system from a domestically anchored production model toward a more import-dependent trade network. This may have produced a differentiated geography of vulnerability: a broader but more externally exposed market in Khartoum, and a thinner, more fragile system in South Darfur that remains sensitive following the recent reconstitution of trade activity.

Across the assessed contexts, system fragility appears to be driven by the interaction of external dependency, transport costs, and constrained liquidity. These factors suggest a rapid transmission of shocks from upstream disruptions to retail prices. Within this study sample, the limited buffering capacity indicates that fluctuations in exchange rates or supply routes are likely reflected relatively quickly at the household level.

Overall, laundry soap functions as a potential indicator commodity within the current market context; its pricing and availability reflect broader constraints in transport and finance. While these conclusions are based on a specific sample, they point toward the relevance of treating laundry soap as a core non-food commodity in market-sensitive programming to support both household consumption and micro-enterprise resilience.

Acknowledgement

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, specializing 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 organizations, 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 organization 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.

IMPACT Shaping practices Influencing policies Impacting lives

COLLECTIVE SUDAN.ORG مجموعة السودان

DATAQ

Annex A: Thematic Coding Summary (Initial Study)

The following respondents contributed to this analysis. All interviews were conducted remotely in March 2026.

Code	Type	Location	Key contribution
KIIIMSKH3	Importer / Distributor	Khartoum	Egyptian import dynamics; border crossings; VAT and inspection; off-road routing
KIIMFSKH10	Local laundry Soap Packager	Khartoum	Neighbourhood liquid laundry soap distribution; transport cost as margin constraint
KIIMSKH5	Local laundry Soap Manufacturer	Khartoum	Lamsa brand; local production inputs; electricity and manpower constraints
KIIRSSD3	Transporter	Khartoum route	Checkpoint taxonomy; fuel costs; duplicate local fee structures
KIIWSSSD7	Wholesaler / Warehouse Owner	South Darfur	Adré sourcing; 25-checkpoint corridor; local factory observation; seasonal storage
KIIWSSSD8	Transporter	West Darfur	17-hour Nyala Janoub–Adré route; road surfaces; seasonal closure; vehicle economics
VPCSSD15	Household Consumer	South Darfur	12-member family; multi-purpose laundry soap use; no assistance received
VPCSSSD6	Household Consumer	South Darfur	Assistance diversion via intermediaries; cash preference rationale
VPCSSSD4	Household Consumer	Khartoum / S. Darfur	Day-labour income; powder laundry soap; price volatility experience
VPCSSD13	Household Consumer	South Darfur	Displaced-then-returned; bulk-to-retail purchase shift; cash preferred
VPCSSD14	Household Consumer	South Darfur	Ab Najma loyalty; seasonal price spikes; autumn availability gaps

VPCSSKH-14	Household Consumer	Khartoum	Food-only assistance; laundry soap absent; quality degradation of Bushra and Tero
VPCSSKH-15	Household Consumer	Khartoum	Bar laundry soap at SDG 1,200 (up from SDG 1,000); neighbourhood access
VPCSSKH-17	Household Consumer	Khartoum	SDG 70,000–100,000/month laundry soap spend; improving local brand quality
VPCSSKH-20	Household Consumer	Khartoum	Factory-packed liquid laundry soap; Oxi and Bushra brand shift; quality concerns
VPCSSKH-21	Household Consumer	Khartoum	Bushra-to-Oxi shift; quality as primary purchasing driver
VPCSSKH-22	Household Consumer	Khartoum	Monthly-to-retail purchase shift; liquid and bar laundry soap mix strategy
VPLLSSD1	Laundry Provider	Nyala Janoub	Chadian laundry soap preference; boiling technique; informal credit from trader
VPLLSSD7	Laundry Provider	South Darfur	Machine and manual wash; laundry soap as 50% of operating cost; staff reduction
VPLRSSD16	Retailer	West Darfur	Security as primary problem; theft; market closure; single-route constraint
VPRTSSD10	Retailer	South Darfur	Price-searching behaviour; carton price rise; monopolisation during supply shortfall