

**PARTNERSHIP FOR
BETTER LIVING**



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SATO
PART OF LIXIL

Water & Sanitation Products: Plastic Manufacturing & Distribution in **Nigeria**

Research by:
Archipel&Co.

March 2023



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The Partnership for Better Living (PBL) is a five-year cooperative agreement between USAID and LIXIL, through its social brand, SATO.

The partnership aims to expand household access to sanitation and increase adoption of key hygiene behaviors through market-based approaches for at least 2 million people by 2026.

To learn more, please visit:

<https://www.globalwaters.org/content/partnership-better-living>

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SATO has worked with social innovation agency Archipel&Co to inform its **West African Manufacturing and Distribution approach** as part of its USAID partnership: The Partnership For Better Living

Research objectives

- 1** Help **SATO** make faster and better decisions about future **manufacturing and distribution expansion in West Africa**.
- 2** Help other **water and sanitation innovators** make faster and better decisions about future **manufacturing and distribution expansion in West Africa**.

Geographical scope



West Africa

- Ghana
- Ivory Coast
- Liberia
- Nigeria
- Senegal

In 90 days, Archipel&Co has identified long listed organizations, deep dived into short-listed organizations, and developed a data visualization solution



Secondary Research

80+ plastic water and sanitation manufacturers identified

60 plastic water and sanitation distributors identified



Primary Research

5 countries visited in West Africa

20 companies shortlisted across Ghana, Ivory Coast, Liberia, Nigeria, and Senegal



Data visualization solution

1 database built on Airtable for both SATO & open access

24 company profiles built on Shorthand for open access

1 opportunity matrix generated across and within countries

Terminology of Stakeholders

	BUY FROM	SELL TO
<p>✓ Manufacturers Refers to producers of households plastic goods or sanitary products</p>	Import raw materials or components from abroad	Distributors and big retailers in large volumes
<p>✓ Distributors Refers to companies buying directly from manufacturers or importers and selling in high volumes to sub-distributors and wholesalers</p>	Manufacturers and importers	Sub-distributors and wholesalers in volume
<p>✓ Sub-distributors Refers to companies buying from distributors and selling in medium volumes to wholesalers</p>	Distributors	Wholesalers in medium volumes
<p>✓ Wholesalers Refers to companies buying in high volumes, either from manufacturers/ distributors/ sub-distributors, and selling in smaller volumes retailers</p>	Distributors and sub-distributors in volume	Retailers in medium and low volumes
<p>✓ Retailers Refers to small shops (called <i>quincailleries</i> in franchphone West Africa) buying from wholesalers, and selling to end-customers (households, plumbers, or other small retailers)</p>	Wholesalers	End-customers (households, plumbers, other small retailers)

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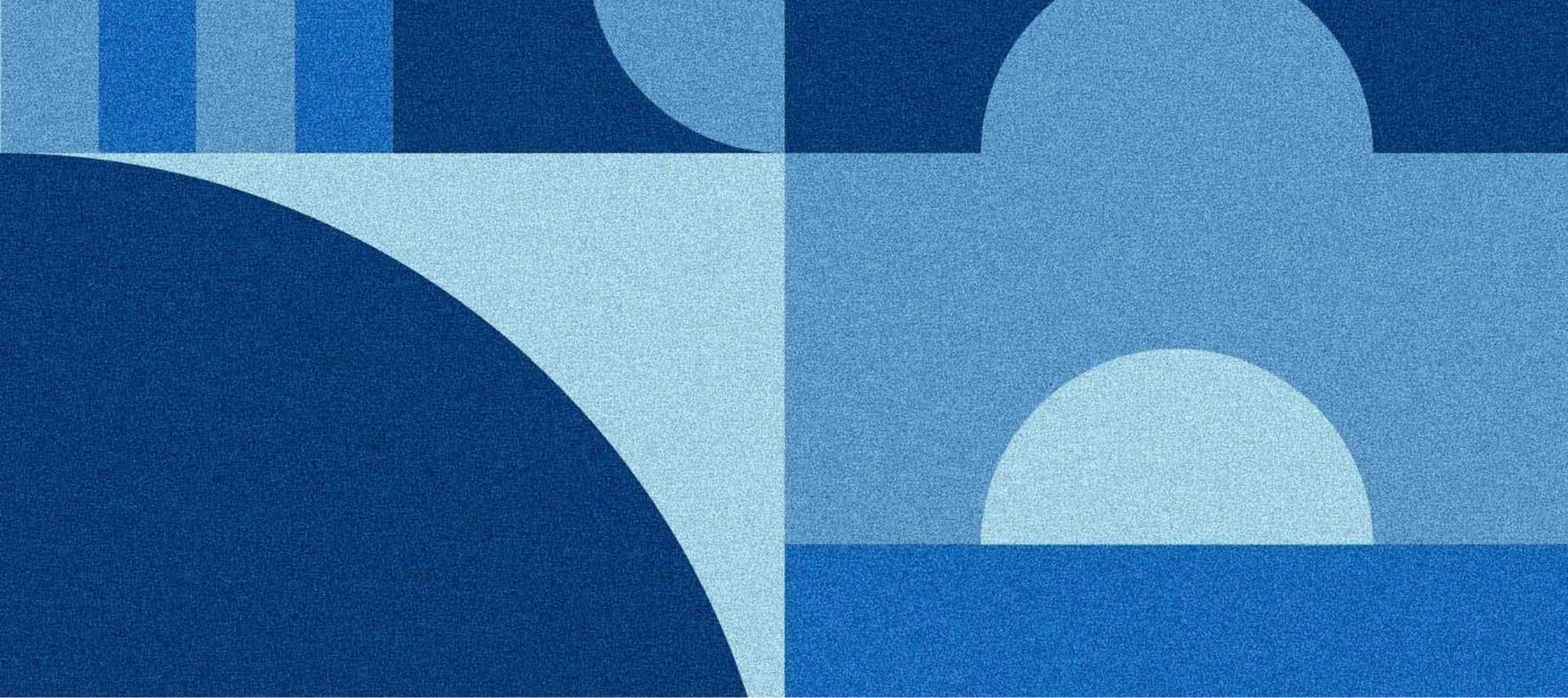
II. EXECUTIVE SUMMARY: WEST AFRICA REGION

A. Key Insights

B. Opportunity Matrix

III. NIGERIA IN FOCUS

IV. NEXT STEPS



II. EXECUTIVE SUMMARY: WEST AFRICA REGION

A. KEY INSIGHTS

The West African water and sanitation distribution market for plastics is very **un-structured**

- » The market is not formally regulated and all players are very opportunistic and **ready to engage with WASH players**
- » A player in the distribution supply chain can **play several roles**: Distributor, sub-distributor, wholesaler and/or retailer
- » Identifying key distributors can be a challenge, especially as players that may **appear small are sometimes handling massive volumes**



Learnings across 5 West African markets revealed key next steps and opportunities for WASH product commercial scale-up

- 1** Every conversation with manufacturers and distributors included the question: “**what volumes?**” Organizations need to have an evidence-based answer and create demand
- 2** Relationships matter across all markets and any new entrant needs to **build trust with time and presence**
- 3** Social and public programs could seed and support commercial reach with **strategic links** (eg: combined awareness/training/demo) and **tactical nudges** (eg: HQ in local market cluster)

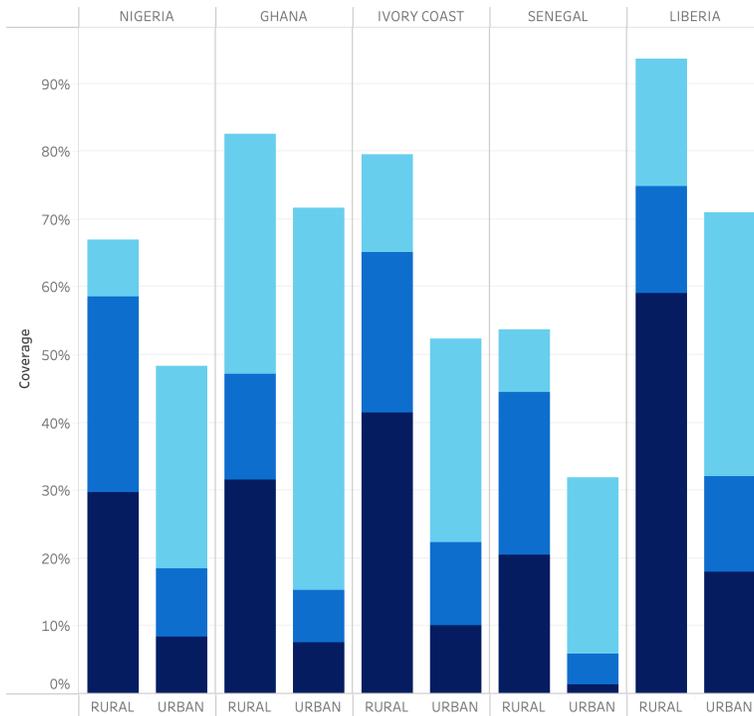


EXECUTIVE SUMMARY

KEY INSIGHTS – OPPORTUNITY MATRIX

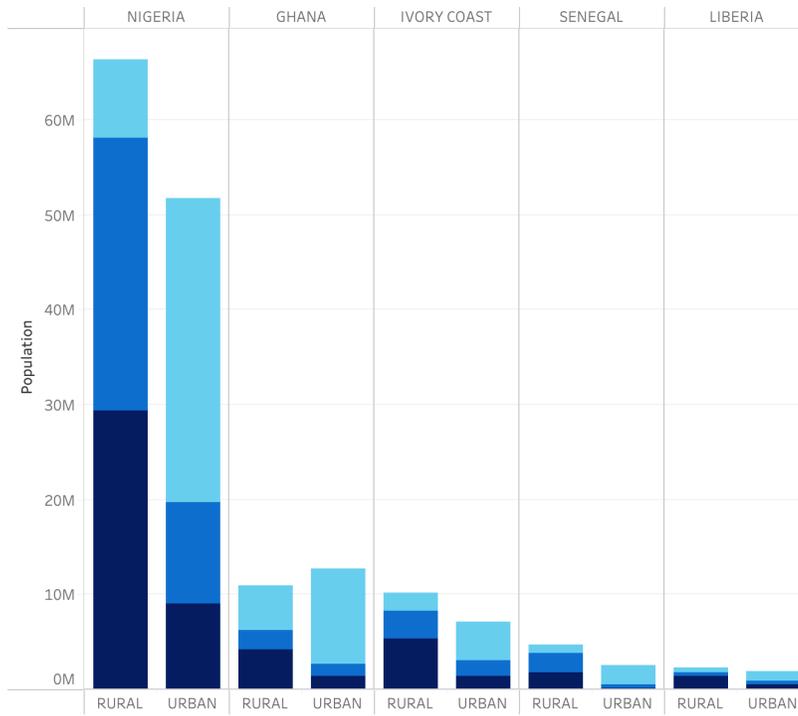
Sanitation levels in rural versus urban areas

SANITATION LEVELS ACROSS COUNTRIES IN RURAL AND URBAN AREAS (%)



SANITATION LEVELS
 Limited service
 Unimproved
 Open defecation

SANITATION LEVELS ACROSS COUNTRIES IN RURAL AND URBAN AREAS (# OF PEOPLE)



KEY FINDINGS

- Nigeria has the highest market potential in terms of market size
- However, Ghana has the highest percentage of limited and unimproved sanitation services in urban areas

5.35M

People living in Senegal only have access to limited or unimproved sanitation services

64%

Of people living in urban areas in Ghana only have access to limited or unimproved sanitation services

Source: WHO/ UNICEF JMP, 2020

EXECUTIVE SUMMARY

KEY INSIGHTS – OPPORTUNITY MATRIX

General diagram of primary product flow and market structure for plastic water and sanitation products

PLASTIC MANUFACTURING

81 companies recorded on Airtable



High-end and ceramic sanitary products are imported from abroad



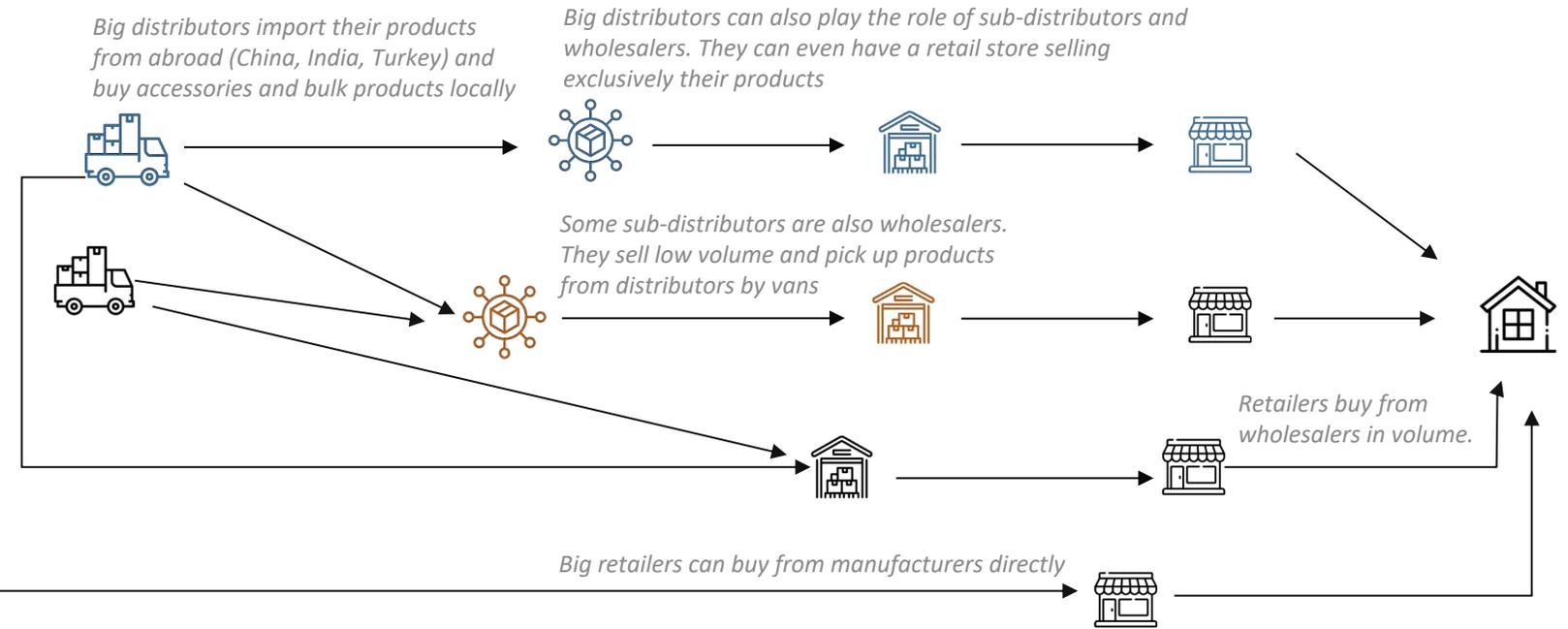
Local manufacturers import raw materials from abroad and produce plastic household items or plastic plumbing products locally

While the manufacturing sector is of plastic households' products, the distribution network of interest is of plumbing and sanitary product

SANITARY AND PLUMBING DISTRIBUTION

60 companies recorded on Airtable

Manufacturers don't own the distribution but work with various major distributors that form their distribution network



Legend

- A colour indicates a specific actor. If black, it refers to multiple actors
- Product flow
- Manufacturer
- Distributor
- Sub-Distributor
- Wholesaler
- Retailer
- Household plumbers, installers

MANUFACTURING

Manufacturers' decisions are mainly **driven by volume**

Organizations can insist on the political capital and benefits* that companies can build

**Especially in Liberia*

Manufacturers are not ready to assume the **costs for the molds**

Organizations must provide evidence of likely volumes and demand estimation to ensure manufacturers cover costs and/or organizations must provide the molds at their own cost

Manufacturers can easily fake products or **make cheaper copies**

Relationship with manufacturers cannot be based solely on trust

Major players have a **strong distribution network**

Organizations can leverage manufacturers' distribution partners while ensuring the channels they reach are those where plumbing products are expected

DISTRIBUTION

Distributors are often found in **market clusters***

Organizations can focus on clusters where distributors are centralised to build relationships and unlock urban and rural distribution

**Except for Liberia and Senegal*

Distributors often **outsource transport***

Organizations can leverage on distributors' flexibility, hiring logistic assets when needed

**Except for Liberia*

Distributors **lack marketing experience** to push sales*

Organizations cannot rely on distributors to promote products. However, most distributors asked for samples to test the product and market before investing

**Except for rare exceptions*

Distributors' decisions are driven by **volume & distance**

Organizations will need to show evidence of demand and work with distributors that already have rural coverage

Major plumbing players are focused on **high-end products**

Organizations could work with major players whose focus is a different type of (non-WASH) plastic product, or smaller players who distribute lower-end products and may be more ready to invest and create demand

Key importation insights across countries

	GHANA	IVORY COAST	LIBERIA	NIGERIA	SENEGAL
Total plastic importation (in millions)	\$808	\$506	\$55	\$2,203	\$381
Share of plastic importation	5.4%	5.04%	0.58%	4.3%	3.5%
Import duty on plastic products	20%	5%	5%	5%	5%
Main country of importation for plastic products	China	China	China	China	China
Total plastic wash basin importation (in millions)	\$7.83	\$5.75	\$0.309	\$11.2	\$3.3

Source: The OEC, 2022

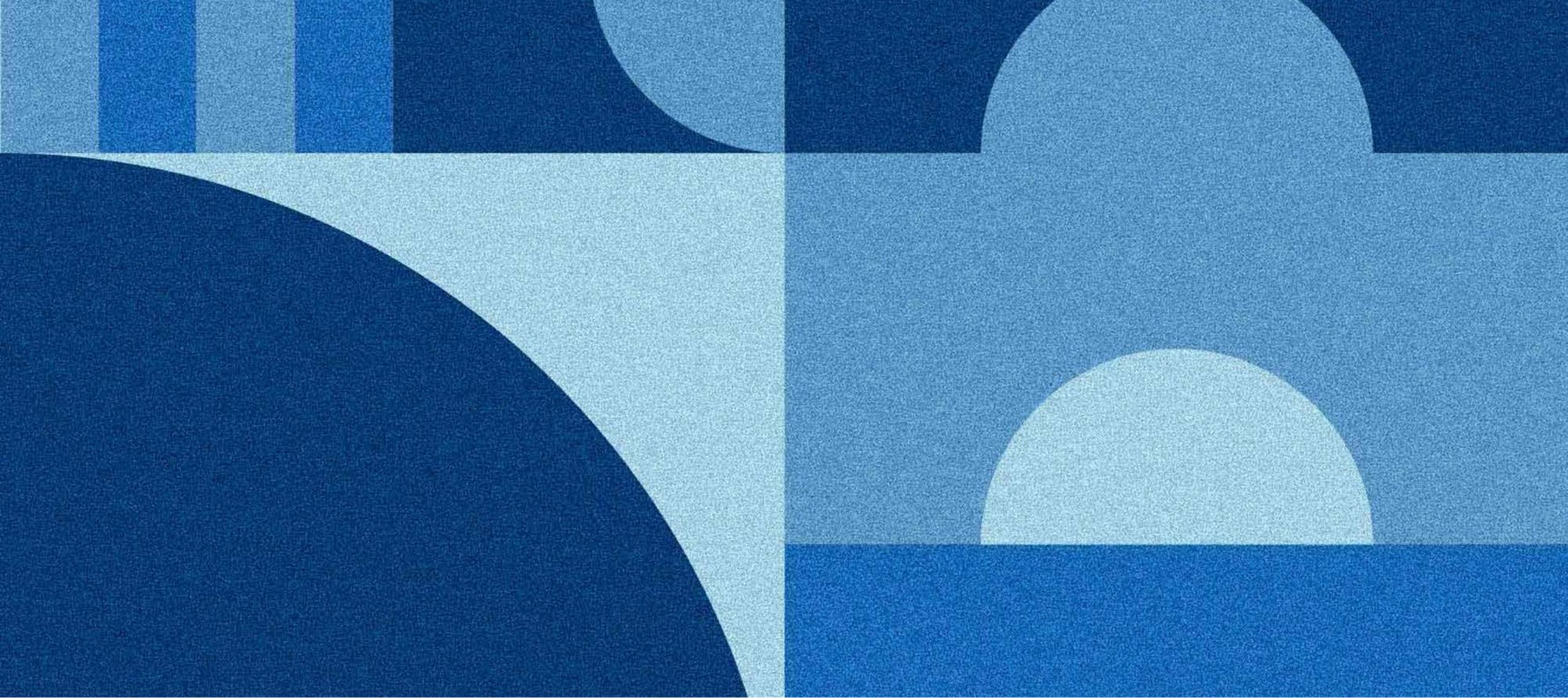
EXECUTIVE SUMMARY

KEY INSIGHTS – OPPORTUNITY MATRIX

Summary of stakeholders and hubs identified across countries

	GHANA	IVORY COAST	LIBERIA	NIGERIA	SENEGAL
MANUFACTURERS	<ul style="list-style-type: none"> • QUALIPLAST • KGM 	<ul style="list-style-type: none"> • CORAXEL (TAJ PLAST) • OKPLAST 	<ul style="list-style-type: none"> • DURAPLAST 	<ul style="list-style-type: none"> • MC PLASTIC 	<ul style="list-style-type: none"> • SOTRAMAP • SIMPA
DISTRIBUTORS	<ul style="list-style-type: none"> • SUNDA • TFHO • MY OWN TRADING STORE • SAMODAK • THE LORD OF HOST 	<ul style="list-style-type: none"> • MCN 	<ul style="list-style-type: none"> • SETHI BROTHERS • CITY BUILDERS • OMEGA 	<ul style="list-style-type: none"> • DIVINE UCHESON INTERNATIONAL • FAVOURED DUBEK INTERNATIONAL • VERIS CHRIS ENTERPRISES • JAKADA BUSINESS ENTERPRISES • TANDO & BROTHERS • SMOOTHFLUSH • ANYITECH • STANTECH • FLOW CITY PLUMBING • ROLEX HOME 	<ul style="list-style-type: none"> • TQG • LEGRAND
MAIN HUBS	<ul style="list-style-type: none"> • KANTAMANTO 	<ul style="list-style-type: none"> • ADJAME 	<ul style="list-style-type: none"> • GANTA 	<ul style="list-style-type: none"> • ORILE (LAGOS) • KOFAR RUWA (KANO) • ONITSHA (ANAMBRA) 	<ul style="list-style-type: none"> • RUE FLEURUS (LOW REACH)

[Online profiles accessible here](#)



II. EXECUTIVE SUMMARY: WEST AFRICA REGION

B. OPPORTUNITY MATRIX

We built a **market prioritisation tool** to select the focus markets for profiling and deeper analysis

Business impact indicators

Internal stakeholder input
+
Country economic data
+
Country political data
+
Country trade and exchange data



Market need indicators

Access to septic systems
+
Sanitation levels (urban, rural, total)
+
Access to hygiene facilities
+
Access to water source
+
Water stress indicators



Opportunity Matrix



Market segmentation driven by internal data and public data on water and sanitation needs guides execution focus and prioritisation

Potential business impact indicators are driven by various metrics, organizational capability within regions, strategic and growth trends

POTENTIAL BUSINESS IMPACT INDICATORS

- Ease of Doing Business
- Inflation Rate
- Interest Rate
- Tariffs and Imports Rate
- Trade Facilitation Performance
- Corruption Perception
- Market Readiness
- Market Presence
- Importance of the country in organization’s long term plan
- Importance of the country in USAID’s long term plan
- Ease of distribution

COUNTRY	Ease of Doing Business Rating	Inflation Rating	Corruption Rating	Interest Rate Rating	Trade facilitation Rating	Market Readiness Rating	Market Presence Rating	Importance of the country in SATO's long term plan	Importance of the country in USAID's long term plan	Ease of distribution Rating	BUSINESS INDEX RATINGS
GHANA	1	4	1	4	1	2	2	2	2	2	2.1
SENEGAL	2	3	1	1	1	2	2	2	2	2	1.6
IVORY COAST	1	1	3	1	3	3	3	3	3	3	2.1
LIBERIA	4	2	4	3	4	3	3	3	2	4	2.8
NIGERIA	3	4	4	4	2	1	1	1	1	2	2.12

Ease of Doing Business Score (from 0 to 100, where 0 is the lowest and 100 the best performance) (2020)

60
59.3
60.7
43.2
56.9

SATO	COUNTRY	Market Readiness Rating	Market Presence Rating	Importance of the country in SATO's long term plan	Importance of the country in USAID's long term plan	Ease of distribution Rating
Donte	GHANA	1	1	1	1	
	SENEGAL	2	3	2	1	
	IVORY COAST	4	4	4	4	
	LIBERIA	3	2	2	1	
	NIGERIA	1	1	1	1	
Jed	GHANA	2	2	2	4	2
	SENEGAL	3	3	2	2	3
	IVORY COAST	3	4	3	4	2
	LIBERIA	3	3	3	1	3
	NIGERIA	1	1	1	1	1
SATO/USAID Average	GHANA	2	2	2	2	2
	SENEGAL	2	2	2	2	2
	IVORY COAST	3	3	3	3	3
	LIBERIA	3	3	3	2	4
	NIGERIA	1	1	1	1	2

Market need indicators are driven by A&Co research and publicly available WASH data

MARKET NEED INDICATORS

- Coverage of septic tank and latrines
- Access to unimproved, limited, basic, and safely managed sanitation facilities in rural and urban areas (coverage and total number of people)
- Open defecation in rural and urban areas
- Coverage of basic hygiene facilities in rural and urban areas
- Coverage of basic, limited, and no sanitation in schools
- Share of the population without access to an improved water source
- Water stress level

COUNTRY	Coverage of Septic Tank - Rating	Coverage of Latrine - Rating	Access to sanitation RURAL - Rating	Open defecation RURAL - Rating	Access to sanitation URBAN - Rating	Open defecation URBAN - Rating	Open defecation TOTAL - Rating	Coverage of basic hygiene facility - Rating	Access to sanitation in schools - Rating	Access to water source - Rating	Water stress level - Rating	MARKET INDEX RATING
GHANA	1	1	1	3	1	4	4	3	4	4	2	2.55
SENEGAL	4	3	3	4	3	4	4	1	4	4	4	3.45
IVORY COAST	1	2	2	2	3	2	2	1	1	1	2	1.73
LIBERIA	3	4	3	1	2	1	1	No data	3	3	1	2.20
NIGERIA	2	2	2	4	3	3	3	2	2	2	3	2.55

1. Coverage of Septic Tank (2020)

19.59%
36.70%
17.28%
23.98%
21.26%

3.a Coverage of unimproved sanitation facilities in rural areas (2020)

15.57%
24.04%
23.53%
15.72%
28.94%

3.b Coverage of limited sanitation facilities in rural areas (2020)

35.39%
9.29%
14.48%
18.83%
8.34%

3.c Coverage of basic sanitation facilities in rural areas (2020)

2.44%
22.34%
20.50%
6.36%
7.44%

3.d Coverage of safely managed sanitation facilities in rural areas (2020)

14.98%
23.90%
No data
No data
25.59%

2. Coverage of Latrine (2020)

48.43%
29.31%
33.11%
23.24%
32.03%

Opportunity Matrix results for commercial scale-up

- **Senegal ranks highest for the Business Index** with **manufacturers and distributors ready to partner** with WASH companies. However, the market opportunity ranks lowest compared to the other countries: while the sanitation need is high in Senegal, it is mostly located in rural areas.
- **Ghana, Nigeria, and Ivory Coast are more attractive for both Market and Business Indexes** and seem to be optimal markets, with a sanitation need that remains high in peri-urban areas and potential partners with good capacity.
- Comparatively, **Liberia** may be more **difficult to enter commercially**

OPPORTUNITY MATRIX



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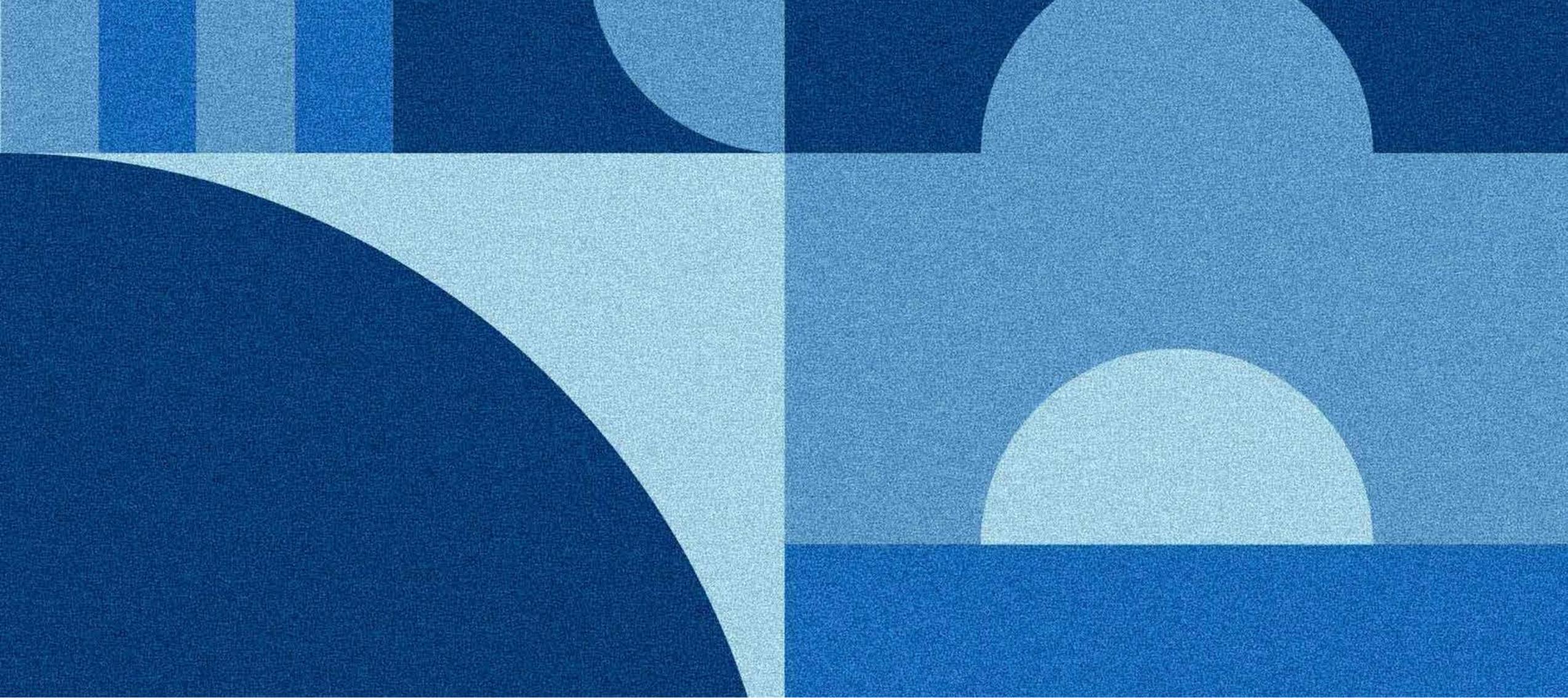
A. Country Overview

B. Opportunity Index

C. Market Structure

D. Stakeholders

IV. NEXT STEPS



III. NIGERIA

A. COUNTRY OVERVIEW

Nigeria



Demographics

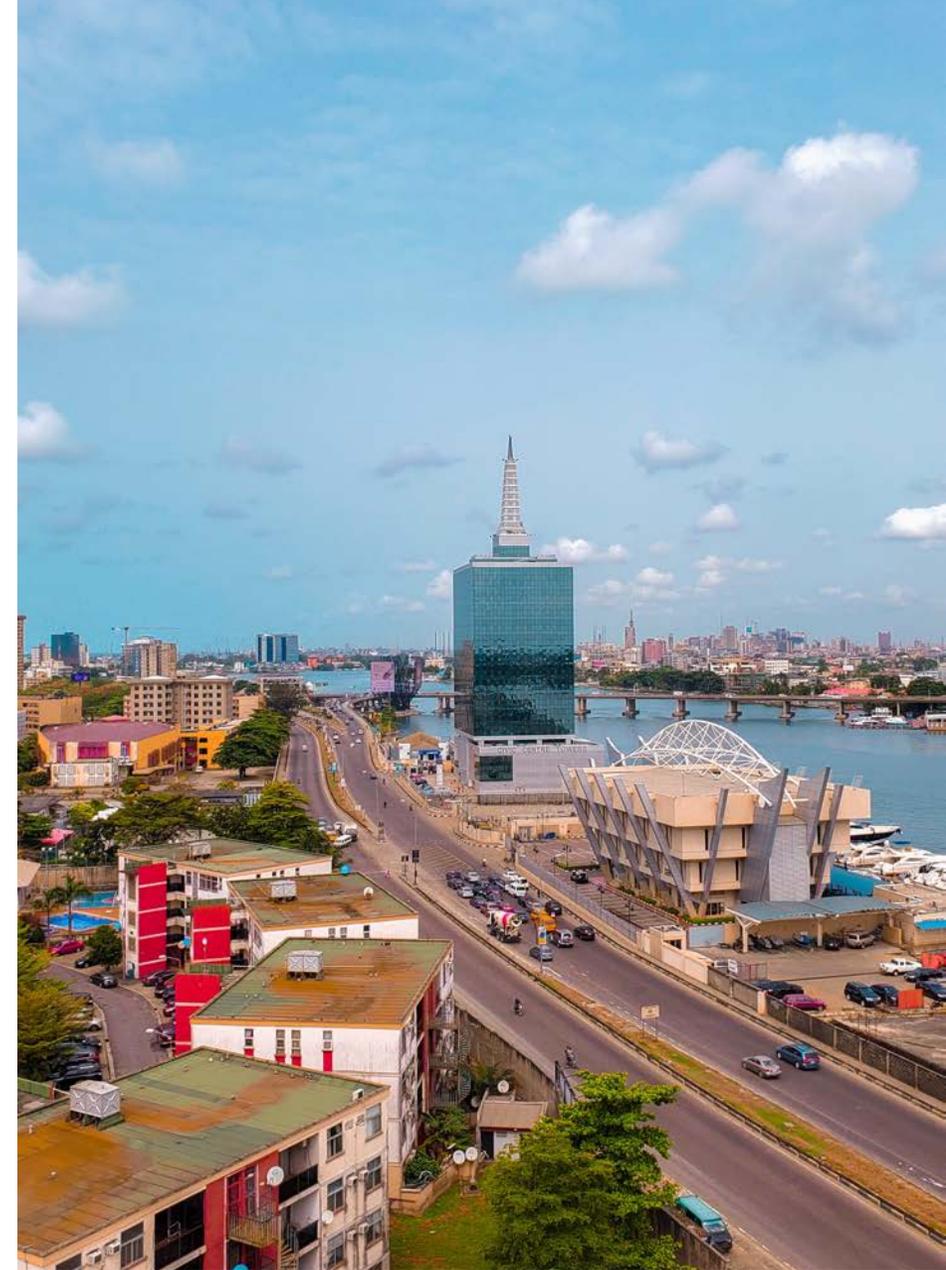
- **Population:** 213,401 Million, 47% rural¹
- **Households:** 43 Million HHs²
- **Economy:** GDP \$441 billion - Services (54%), Industry (21%), Agriculture (26%)¹

Water & Sanitation

- 43% of the population use **basic sanitary services** (basic and safely managed)¹

Plastic WatSan Products

- General market observation:
 - Most of the plastic WatSan are locally made
 - There are many manufacturers across the country
 - The instability of the Naira is impacting manufacturing
 - While there is competition among manufacturers, the demand for products is high due to the size of the market and pace of development



Country and market general information



Demographics

- Population: 213,401 Million (2021)¹
- Annual growth: 2.4%¹
- Median age of the population: 17 years old²
- Urban (47.2%), rural (52.8%)
- The Southern states are more densely populated while the population of the North is sparse, but with more people



Geography

- Country size ranking #32³
- Nature of land: Plains in the North and South interrupted by plateaus and hills in the centre of the country
- Climate: Tropical monsoon (South), savannah (Central), Sahelian hot/semi-arid (North)



Economy

- GDP per capita: 2,065.7\$¹
- Poverty rate: 40.1%⁴
- Economy model: Mixed market economy, which allows private ownership of resources but with a substantial public sector ownership and the state also partake in the production of economic activities



Politics

- Political stability index: -1.78 (-2.5 weak ; 2.5 strong)⁵
- Political system: Federal republic with a presidential system and bicameral legislature
- Units: Central government; 36 states and 774 local governments
- Tenure of office: Two terms of four years for executives but unlimited tenure for legislature



Culture

- Multi-ethnic nation with over 400 different tribes and languages
- Islam is dominant in the North while Christianity is dominant in the South. There are traditionalist too.
- Community-oriented structure in rural areas but more individualistic settings in urban sources

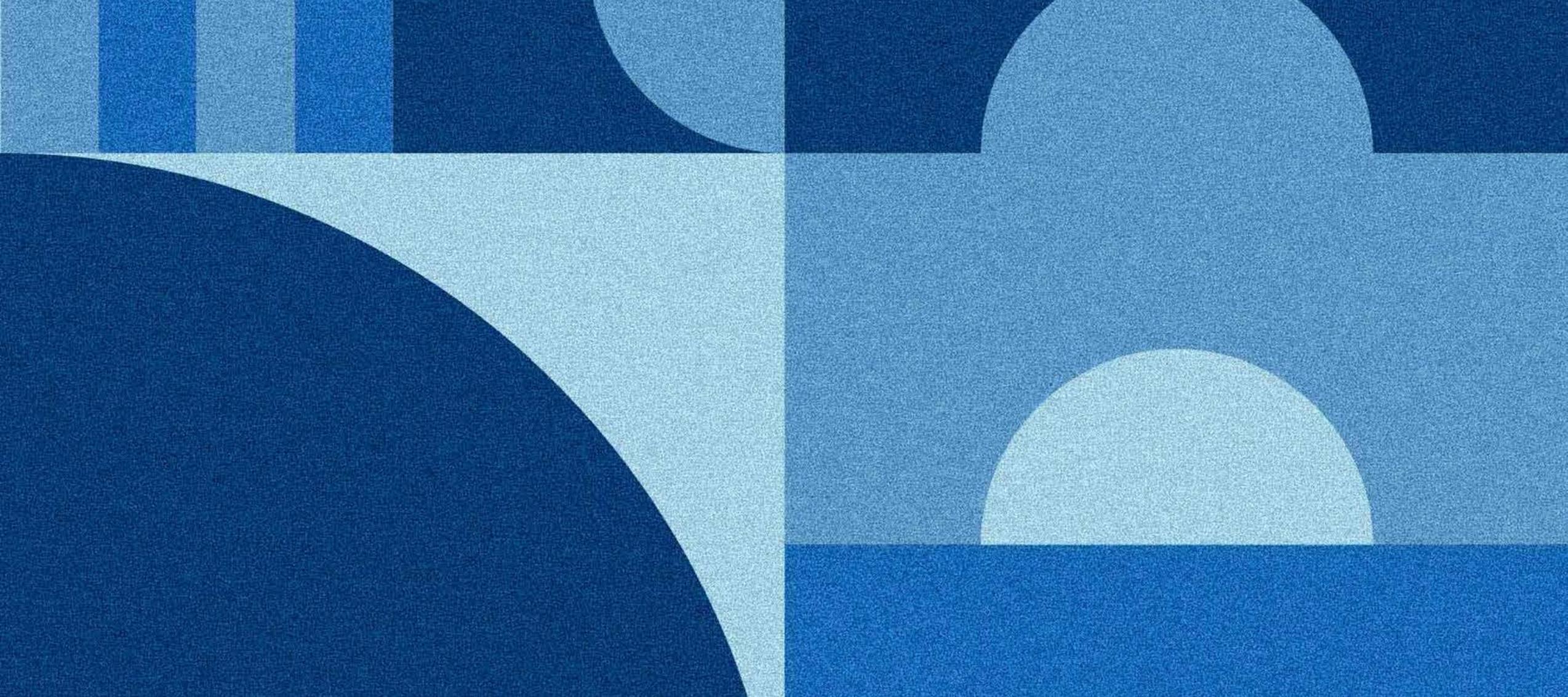
Sources: 1. World Bank, 2021

2. World Economics, 2022

3. World Population Review, 2023

4. Federal Government of Nigeria through the National Bureau of Statistics, 2022

5. The Global Economy, 2022



VI. NIGERIA

B. OPPORTUNITY MATRIX

Nigeria, a market with a high volume opportunity

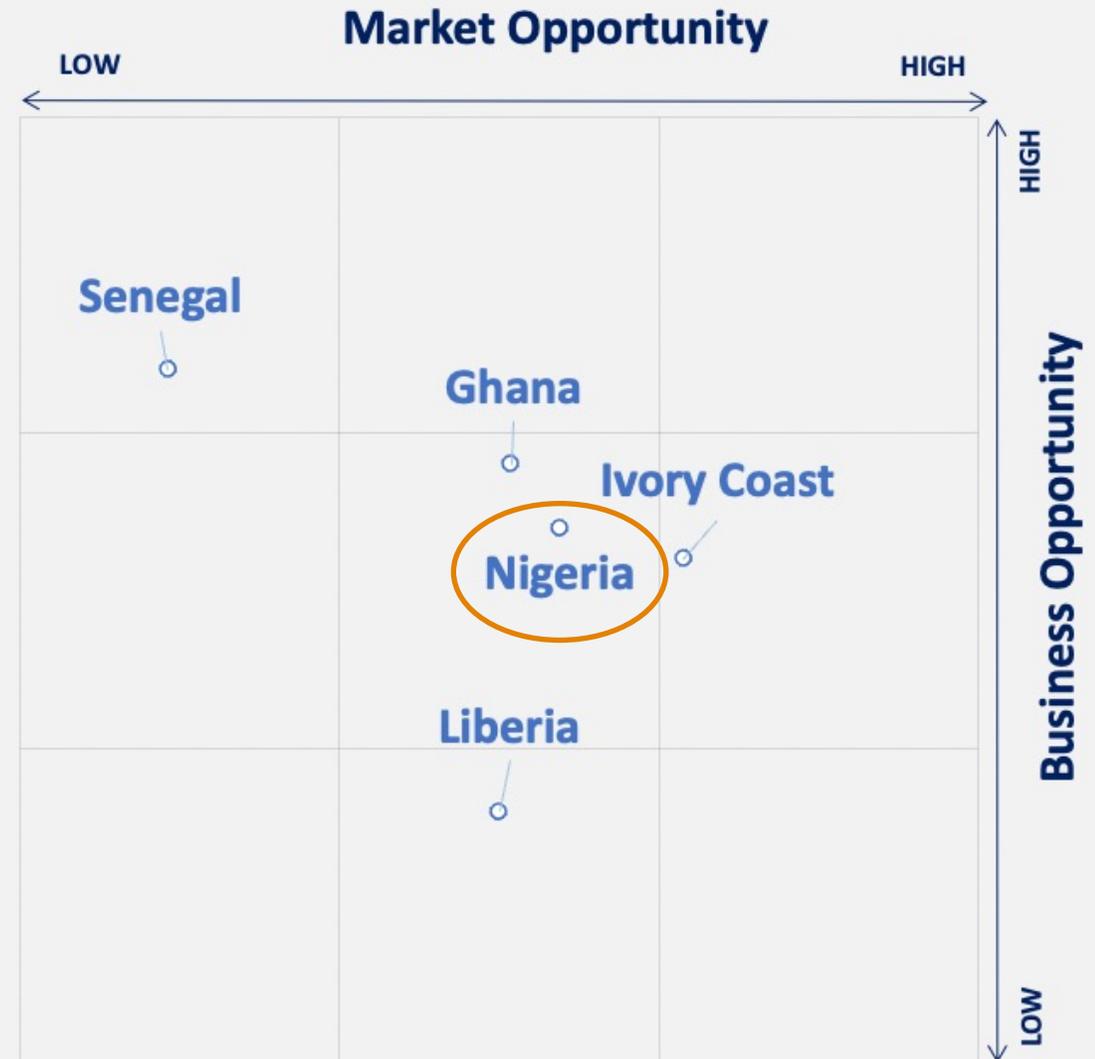
CHALLENGES

1. Cultural barriers shaping preferences and acceptance for consumers who prefer ceramic and white toilets
2. Process to import is difficult and costly
3. Availability of FX and the instability of Naira, high cost of borrowing and credit default
4. Unreliable power supply

OPPORTUNITIES

1. A 28% increase in population from 2020 to 2030, leading to high demand for new housing and plumbing products (pipes and tanks are the most demanded products)
2. Cost of transportation that will likely decrease
3. Growth in distributor options driven by the Igbo incubation process

OPPORTUNITY MATRIX



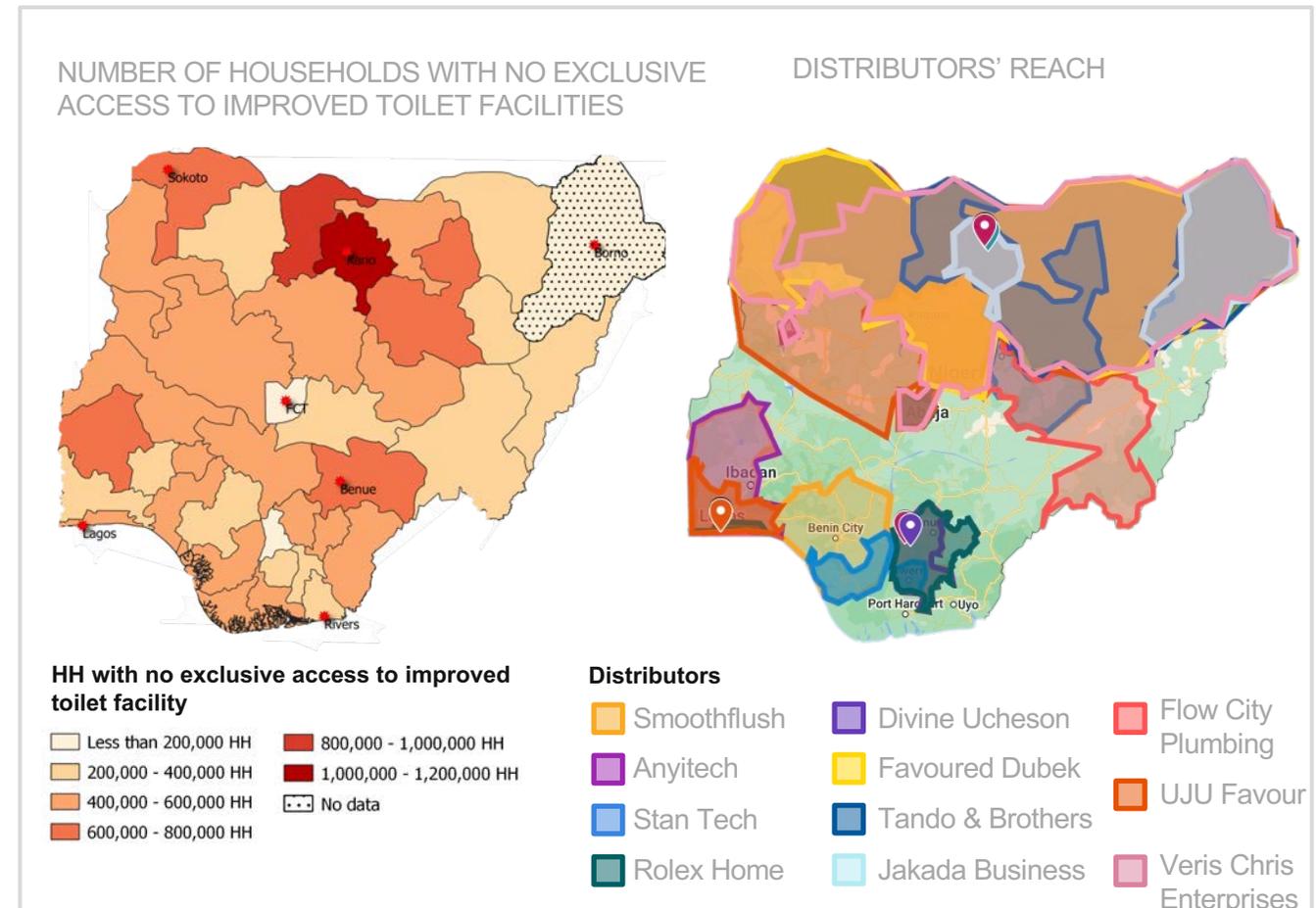
[Access to the full matrix here](#)

The higher sanitation market opportunity for SATO is located in the Northern regions

The need for sanitation facilities is higher in North-West and North-Central regions, especially in Kano where the coverage of improved toilet facilities is the lowest.

Main distributors' reach is in the North-West and North-East, as well as South-East and South-West where population density is higher.

» Organizations could start by reaching Northern market where there is a strong distribution network and a critical need for basic sanitation facilities



Source: Map adapted from Nigeria Living Standards Survey 2019-2020

Source: Map by Archipel&Co based on in-field study

Plastic import amounts to \$2.23 billion in 2020 and importation is often through Lagos ports¹

- The World Trade Organization states that MFN applied duty rate for plastic products are 5% AVE. However, our study on the field found that plastic products attract 20% import duty, plus 7.5% VAT on % import duty
- Clearing of goods at the port is done through licenced agents. Agents have 21 days to clear goods from the port to avoid getting into uncleared cargo lease
- The major risk of importation include, volatile FX market, delay in clearing of goods from the port, as well as corruption from customs officials
- Nigeria imports plastic primarily from China, followed by India (10.4%)¹
- In 2020, Nigeria imported \$11.2 million worth of plastic wash basins, mainly from China (69.9%), followed by Turkey (7.6%)¹

4.3%

Share of plastic import in overall import in 2020¹

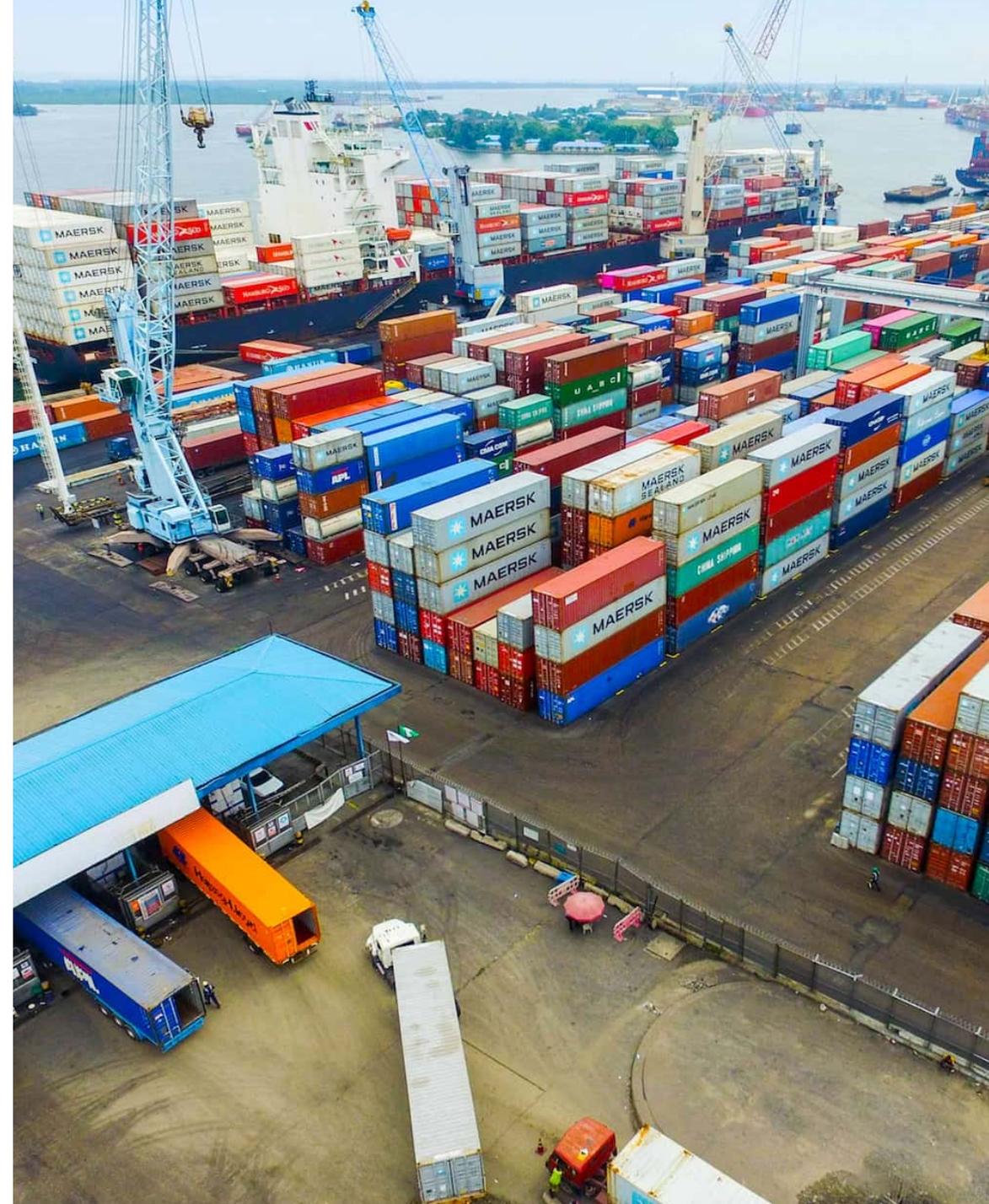
20%

Import duty on plastic products²

36.5%

Plastic import from China (highest)¹

Source: 1. The OEC, 2022
2. WTO, 2023



Demand for toilet pans is booming

OPPORTUNITIES

- **Increase in rural population and demand** for better toilet facilities
- **Government and NGOs** can be key to provide better facilities for some at-risk populations (eg: the disabled)

CHALLENGES

- **Marketing required to build awareness**
- **Current cost of transportation** from transporting goods from supplier

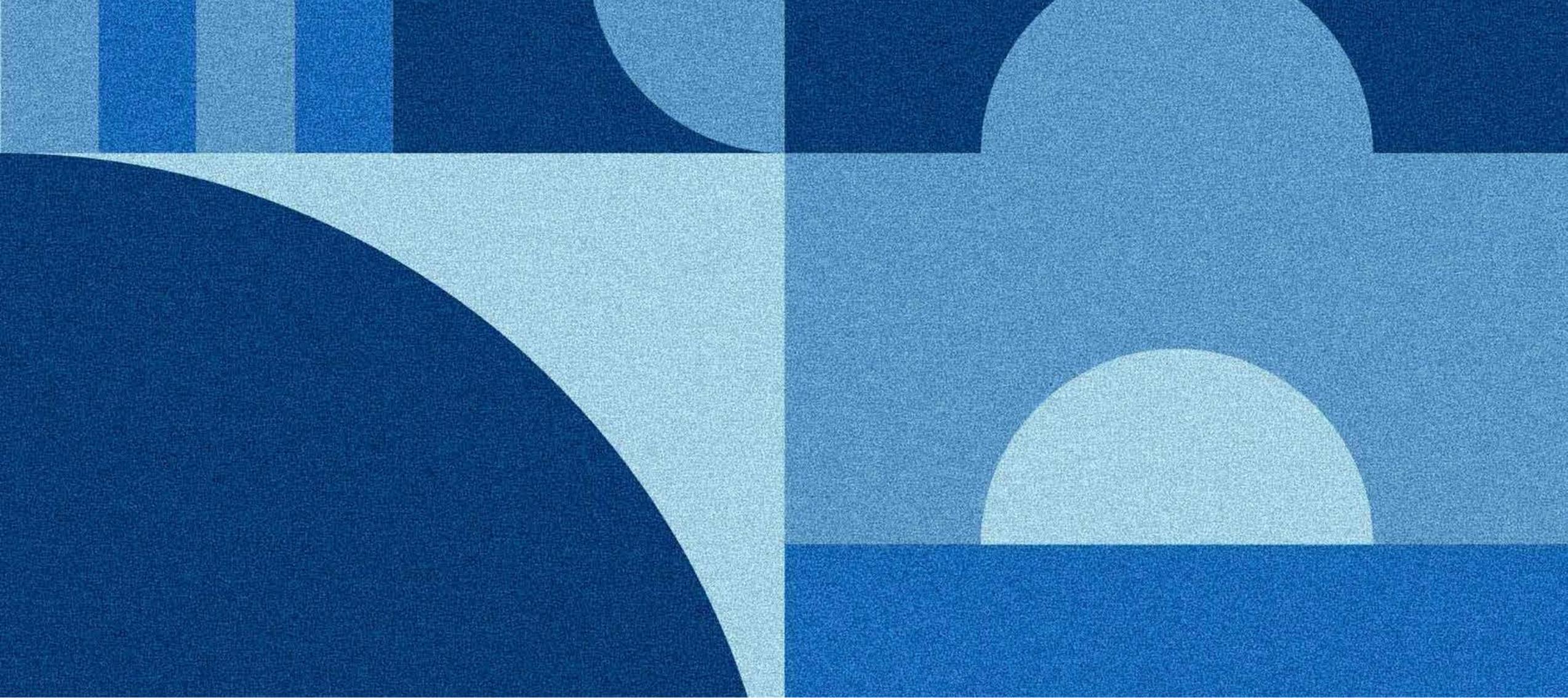
A&Co led an interview with SYNCO CHRIST LTD., a distributor/ retailer who provided insights on their activities and the Nigerian market

MARKET DYNAMICS

- **Rapid development in Kano** for the past 6 months
- **Price increase of ceramic and plastic squat pans**, hence demand will continue to go up as more customers become familiar with lower priced options.
- Demand was helped when the **government and an NGO** built some toilet facilities for the physically challenged persons across Kano state

ABOUT SYNCO C.

- Primary activity: wholesales and retail of building and plumbing materials (pipes, toilet fittings in ceramics and plastic)
- Secondary activity: boreholes drilling and supply of construction materials
- Imports goods (ceramic materials) and buys locally
- **Major distributor in Kofar Ruwa market.** Get supplies from a major distributor based in Kaduna
- **Can sale up to 100 cartons (1,200 pieces) within 3-4 weeks**



VI. NIGERIA

C. MARKET STRUCTURE

Diagram of primary product flow and market structure for Nigeria

PLASTIC MANUFACTURING

36 companies recorded on Airtable



High-end and ceramic sanitary products are imported from abroad



Local manufacturers import raw materials from abroad and produce plastic household items or plastic plumbing products locally

While the manufacturing sector is of plastic households' products, the distribution network of plumbing and sanitary product

SANITARY AND PLUMBING DISTRIBUTION

58 companies recorded on Airtable

An importer can:

- Have its **own production** abroad through contracted manufacturers
- **Buy raw materials/agents** from international manufacturers and finish production in Nigeria
- **Buy finished, branded products** from international manufacturers
- **Repackage and rebrand** imported generic products or manufacture locally from raw materials

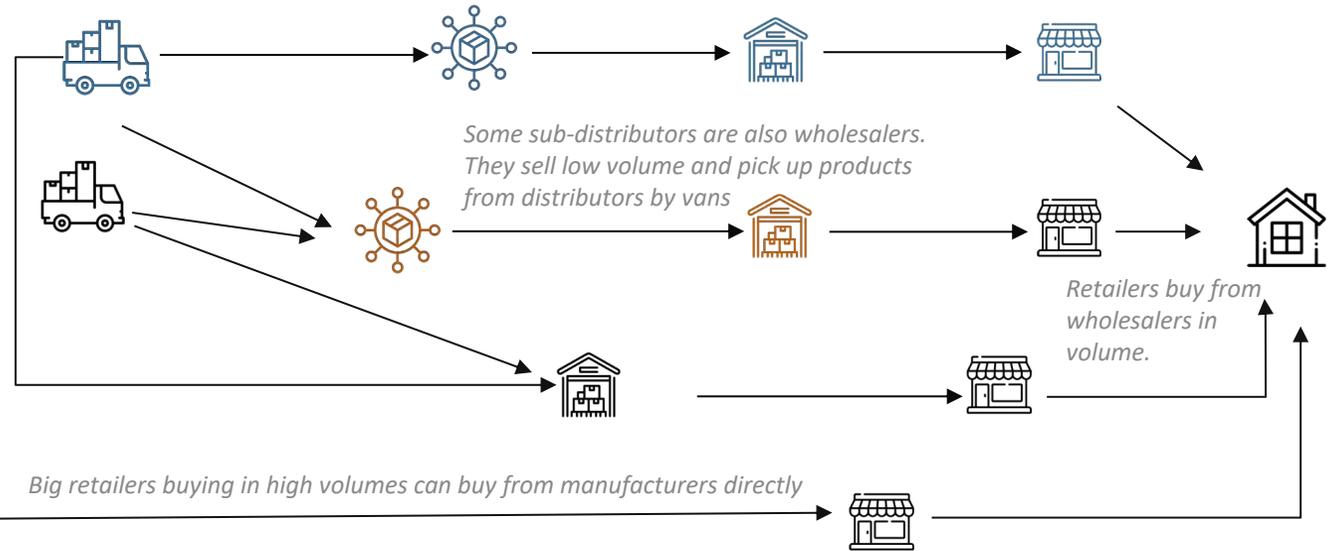
Big distributors import their products from abroad (China, India, Turkey) and buy accessories and bulk products locally

Big distributors can also play the role of sub-distributors and wholesalers. They can even have a retail store selling exclusively their products

Some sub-distributors are also wholesalers. They sell low volume and pick up products from distributors by vans

Retailers buy from wholesalers in volume.

Big retailers buying in high volumes can buy from manufacturers directly



Legend

A colour indicates the same actor playing different roles in the value chain (except for black color)

→ Product flow

Manufacturer
 Distributor
 Sub-Distributor
 Wholesaler
 Retailer
 Households, plumbers, installers

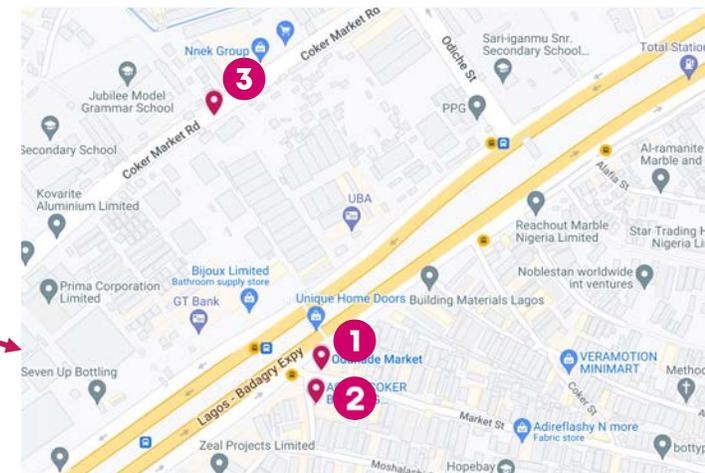
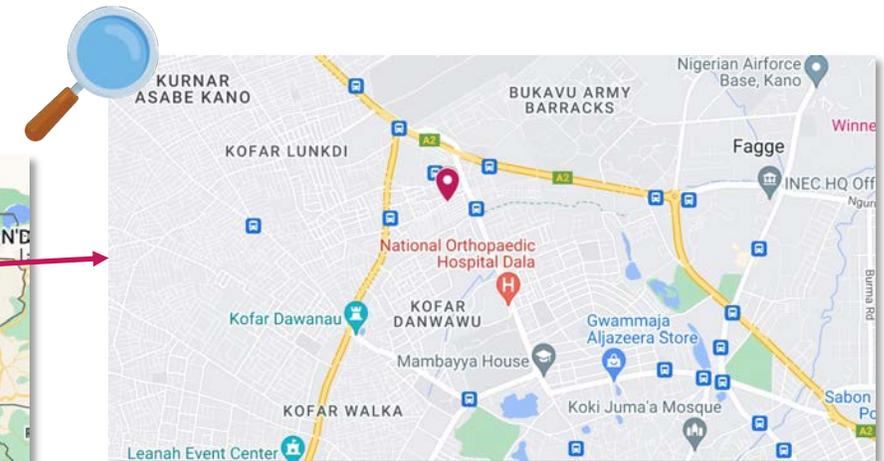
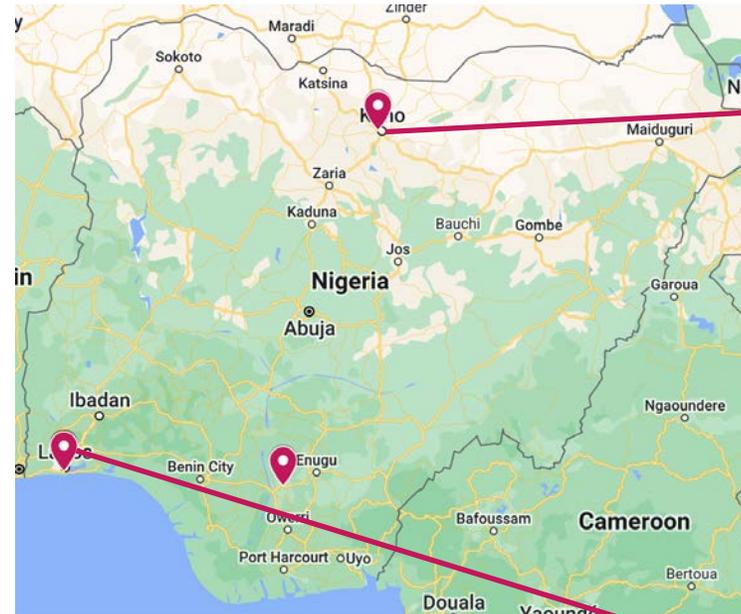
Distribution is organised in clusters, located in major cities and serving as hubs for the entire country

3 sanitary and plumbing distribution clusters with key relevant locations:

- Lagos: Orile Buildings Market** (along the Badagry Expressway) with sub-clusters (Odun-Ade Building Materials Market, Agric Building Materials Market, Coker Market Road).
- Kano: Kofar Ruwa Market**
- Anambra: Onitsha market** (in Eastern region of Nigeria so may not be interested in plastic pans but may be in other sanitary wares)

Clusters are organized in sub-clusters with specific locations for distributors, logistics, storage, etc...

» The “Market street” within the Odun-Ade market cluster is a key location for distributors; a good place to start building a relationship/ distribution network



- 1 Odun-Ade Building Materials Market
- 2 Agric Building Materials Market
- 3 Coker Market Road

Clusters main findings



VOLUME

Distributors in markets are reluctant to disclose any numbers of distribution centres and warehouses, for taxes and costs should authorities find out. A distributor with a seemingly small storefront could be moving large volumes everyday



RELATIONSHIPS

Markets run on relationships and distributors can outsource their storage space to others depending on who has available space and products coming



COMPETITION

The Nigerian market does not allow for a monopoly in distribution. Competition is fierce, especially as there are few manufactures but an increasing number of distributors





Ecosystem patterns can be identified within the clusters

Although distributors within the Lagos cluster are not limited in the products they distribute, they can be categorized into 2 main groups:

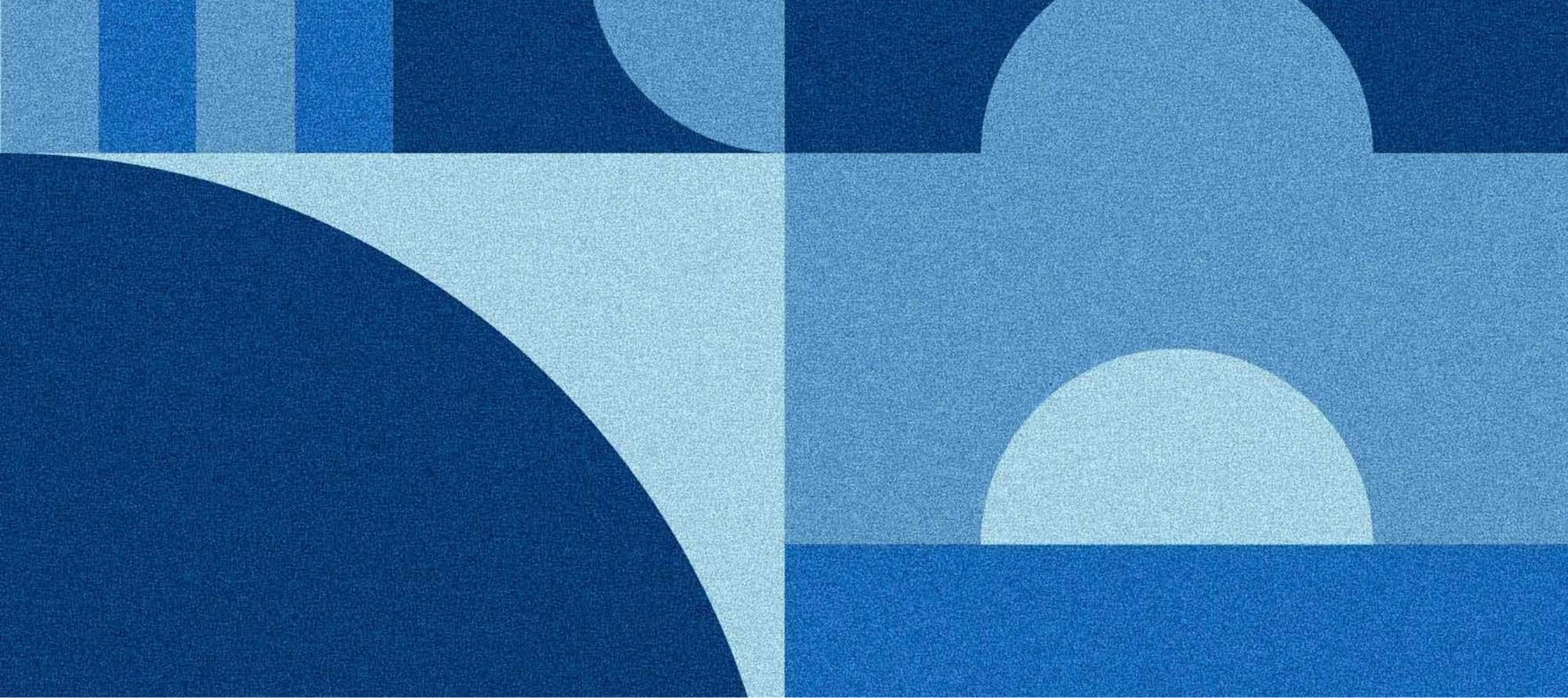
1. Distributors of sanitary wares, plumbing materials, and bathroom accessories

- These can be sub-divided into “*Strictly high-end distributors*” & “*General merchants/distributors of sanitary wares, plumbing materials, and bathroom accessories*”
- “*General Merchants*” are not limited by material (plastic and ceramic)
- Tend to have “Sanitary wares” on their store sign posts

2. Distributors of plastic pipes and fittings

- Tend to be uninterested in plastic toilet products despite the fact that they specialize in plastic products





VI. NIGERIA

D. STAKEHOLDERS

Amongst our interviews, we have shortlisted 1 manufacturer and 10 distributors in Nigeria

MANUFACTURERS



1. MC Plastic

DISTRIBUTORS



1. Divine Ucheson International Co
2. Favoured Dubek International Co
3. Veris Chris Enterprises
4. Jakada Business Enterprises
5. Tando & Brothers
6. Smoothflush
7. Anyitech
8. Stantech
9. Flow city plumbing
10. Rolex Home

MANUFACTURING

Manufacturers' decisions are mainly **driven by volume**

Organizations can insist on the political capital and benefits that companies can build

Manufacturers are not ready to assume the **costs for the molds**

Organizations must provide evidence of likely volumes and demand estimation to ensure manufacturers cover costs and/or must provide the mold at their own cost

Manufacturers can easily fake products or **make cheaper copies**

Organizations' relationship with manufacturers cannot be based solely on trust

Major players have a **strong distribution network**

Organizations can leverage manufacturers' distribution partners while ensuring the channels they reach are those where plumbing products are expected

MANUFACTURING

Some manufacturers are increasing **recycled content** for production of certain products

Organizations could reduce the cost of production and improve environmental sustainability of their products

Stand-by generators are required for production due to intermittent supply of power

Organizations will need to account for increase cost of production due to more spending on diesel. The potential for the AKK gas pipeline in Kano could change manufacturing landscape completely

Importation of raw materials and machines is being impacted by the **currency volatility**

Organizations will need to account for the increasing volatility of the real cost of materials and production, sometimes leading to significant losses

More companies are **entering the manufacture** of plastic products

Organizations may need to account for increased competition and profit margin pressure amongst manufacturers

MC Plastic Nigeria Ltd.

Manufacturer in Kano

[Access to the online profile here](#)

INTERVIEW MAIN FINDINGS

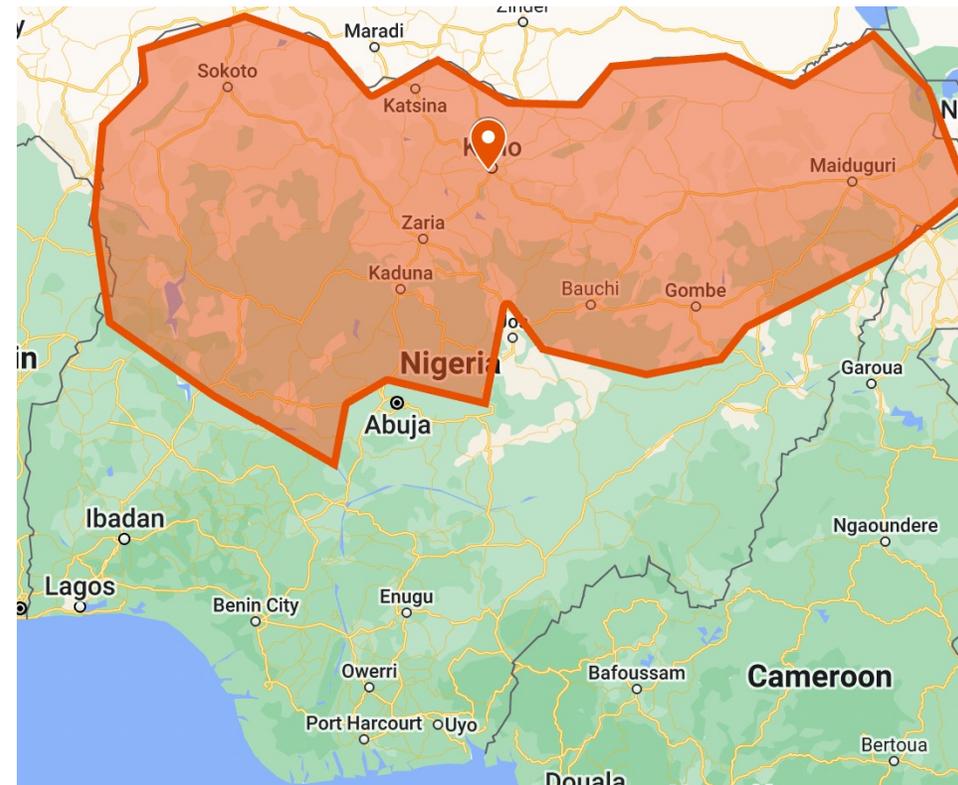
PRODUCTS & CUSTOMERS

- Sell household plastic products and PVC pipes
- Sells mostly to major distributors, and also wholesalers

TECHNICAL INFORMATION

- Injection molding machines
- Use recycle plastic for specific products (ex: shoe cast)
- Connected to the national grid with back-up generator sets
- Quality assurance team in the factory

GEOGRAPHICAL REACH



- Two manufacturing sites in Kano
- We only visited the blow and injection molding site
- Major customers are based in Kano state and other parts of Northern Nigeria
- International customers are from Niger, Chad, and Cameroon
- Ensures shipping in Nigeria and across other neighbouring countries

MC Plastic Nig. Ltd

Manufacturer in Kano

OUTSIDE THE FACILITY



Click on the image to access a 360 view



Click on the image to access a 360 view

MC Plastic Nig. Ltd

Manufacturer in Kano

INSIDE THE FACILITY



MC Plastic Nig. Ltd

Manufacturer in Kano

INSIDE THE FACILITY – 360 tour



Click on the image to access a 360 view



Click on the image to access a 360 view

DISTRIBUTION

Distributors are often found in **market clusters**

Organizations can focus on clusters where distributors are centralised to build relationships and unlock urban and rural distribution

Distributors often **outsource transport***

Organizations can leverage on distributors' flexibility, hiring logistic assets when needed

Distributors **lack marketing experience** to push sales*

Organizations cannot rely on distributors to promote products. However, most distributors asked for samples to test the product and market before investing

**Except for rare exceptions*

Distributors' decisions are driven by **volume & distance**

Organizations will need to show evidence of demand and work with distributors that already have rural coverage

Major plumbing players are focused on **high-end products**

Organizations could work with major players whose focus is on a different type of (non-WASH) plastic products, or smaller players who distribute lower-end products and may be more ready to invest and create demand

DISTRIBUTION

Instability of the Naira is impacting the cost of importation

Increase in prices of products is leading to less customer patronage

Distributors must face **delay in the arrival of goods and cost** of clearing at the ports

Huge losses are impacting on the profitability of the business

Construction is booming, leading to **high demand for sanitary products**

Positioning in the market could lead to growth

Importers, distributors and wholesalers **sell products on credit** based on experience/trust

Credit provision is an increasingly common practice based on trust built up over time

Market players are affected by, but also enforce, **systematic price controls**

One can't sell below the control price, or sanctions (official or informal) will be imposed by other traders

DISTRIBUTION

Distributors prefer to **pick-up goods at manufacturers' / suppliers' locations**

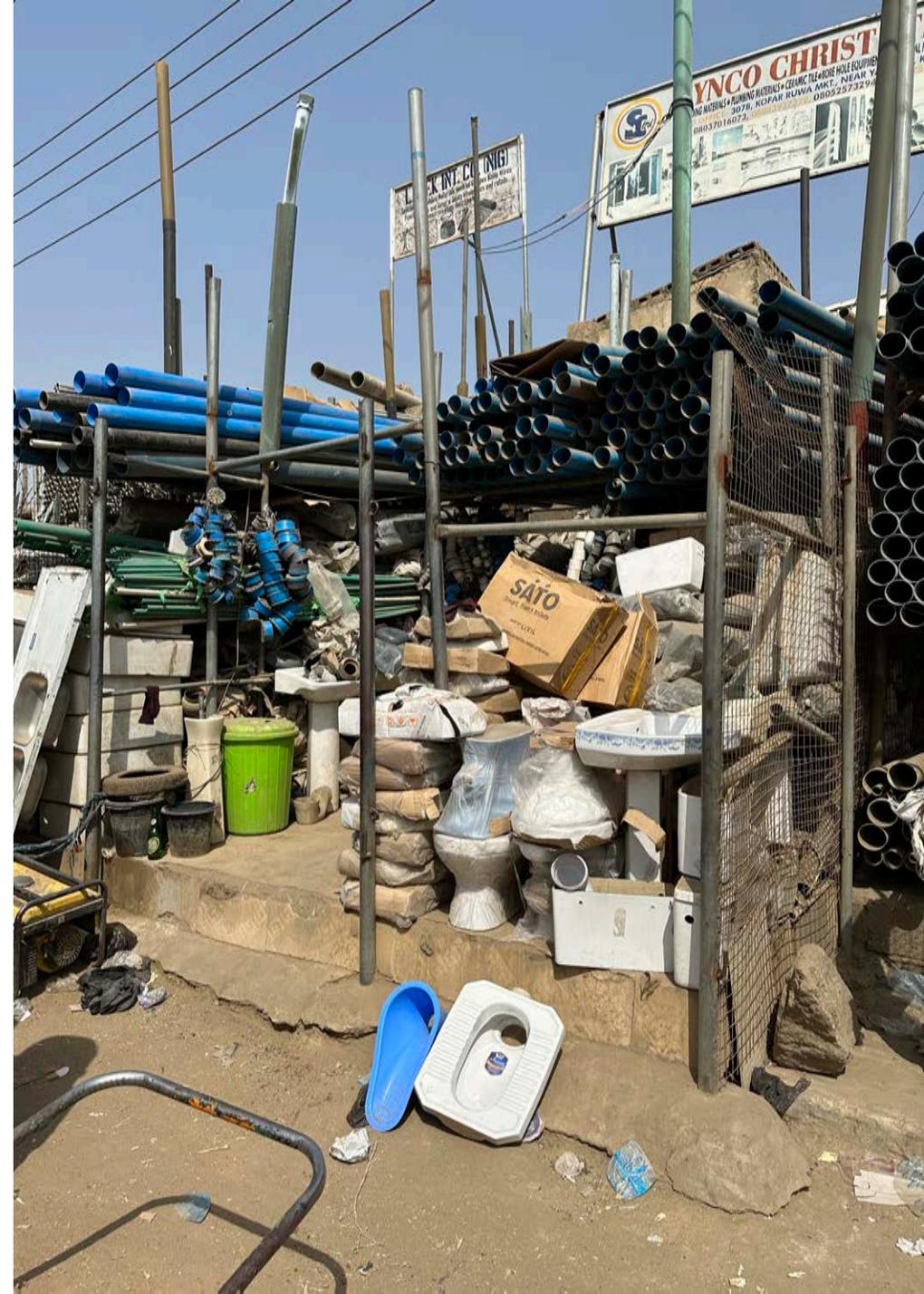
This pick-up model helps build trust and relationships. They go to manufacturers with cash and pick-up goods according to their capacities and give product improvement insights

Distributors prefer **in-person interactions**, and on the phone once loyalty is established

Organizations could have a physical presence with local representatives that serve as key contacts. Distributors want to “see who they are doing business with”

There is **competition for plastic pans in the Nigerian market**

Some distributors in Lagos clusters mentioned that Golden Diamond (local manufacturer) had tried to push plastic squatting pan samples to the market



Divine Ucheson International Co. Ltd

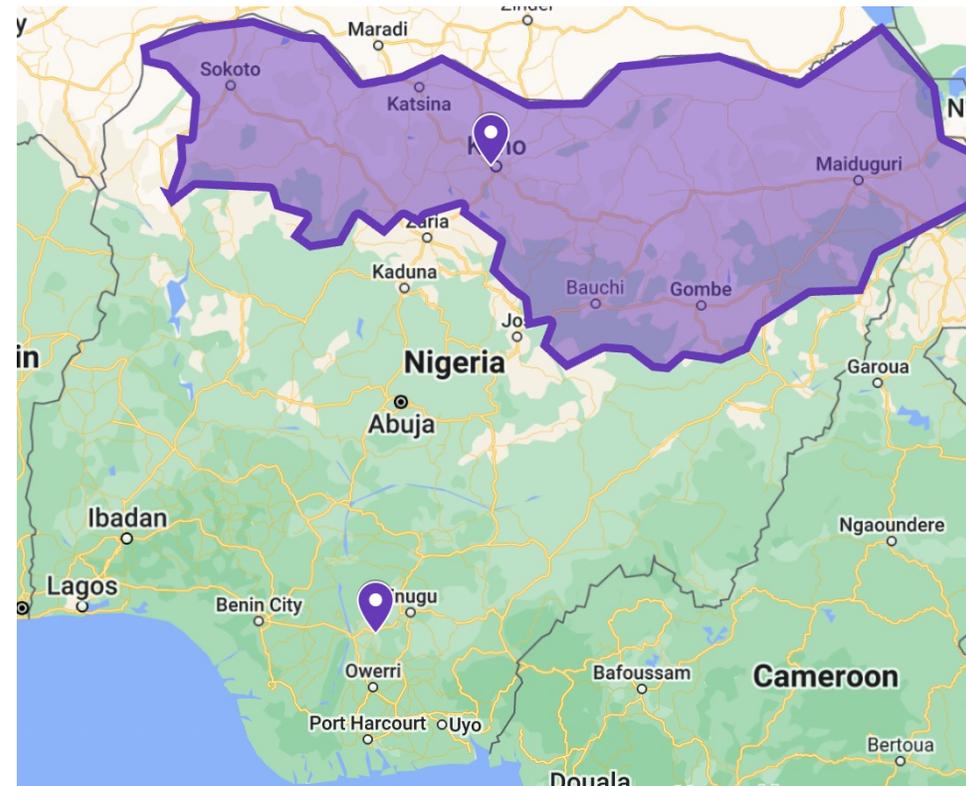
Distributor/ wholesaler/ retailer in Kano

[Access to the online profile here](#)

INTERVIEW MAIN FINDINGS

- Plumbing and construction materials (PVC pipes, tanks)
- Major customers are wholesaler who buy to resell in their shops. They have 7 major wholesalers who have other wholesalers buying from them
- 65% urban (building materials) vs 35% rural customers (irrigation plumbing materials)
- Most products sold are locally made (around 65%). Have the capacity to import but not keen to do so. Imported goods are supplied from importers in Lagos and Onitsha
- In a good week, sales can get up to ₦10 million in one branch (most from pipes, tanks and other plumbing materials like WC)
- 10 permanent staff with unspecified casuals (casual services are for loading/ offloading depending on needs)

GEOGRAPHICAL REACH

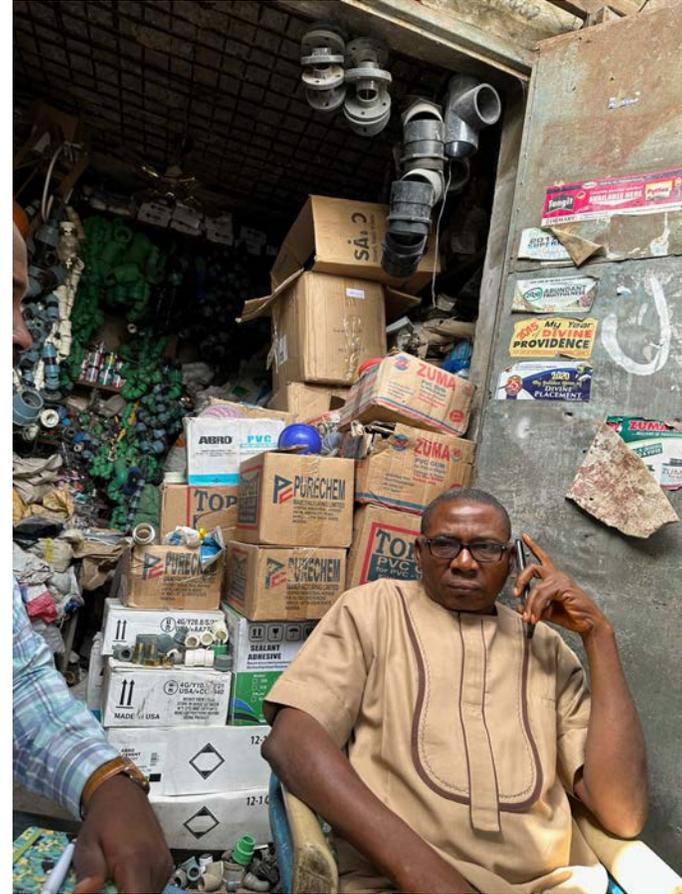


Divine Ucheson appears to be a trusted company which has operated for over 30 years and is open for future collaboration

- HQ in Kofar Ruwa (Kano) and a branch in Awka (Anambra). No sub-distribution centers
- Customers come mostly from North-Western and North-Eastern states: Kano, Borno, Katsina, Zamfara, Jigawa, Sokoto, Yobe, Gombe, Bauchi
- International customers come from Niger, Chad and Sudan
- No company fleet but works with transporters. Can sometimes pay for loyal clients

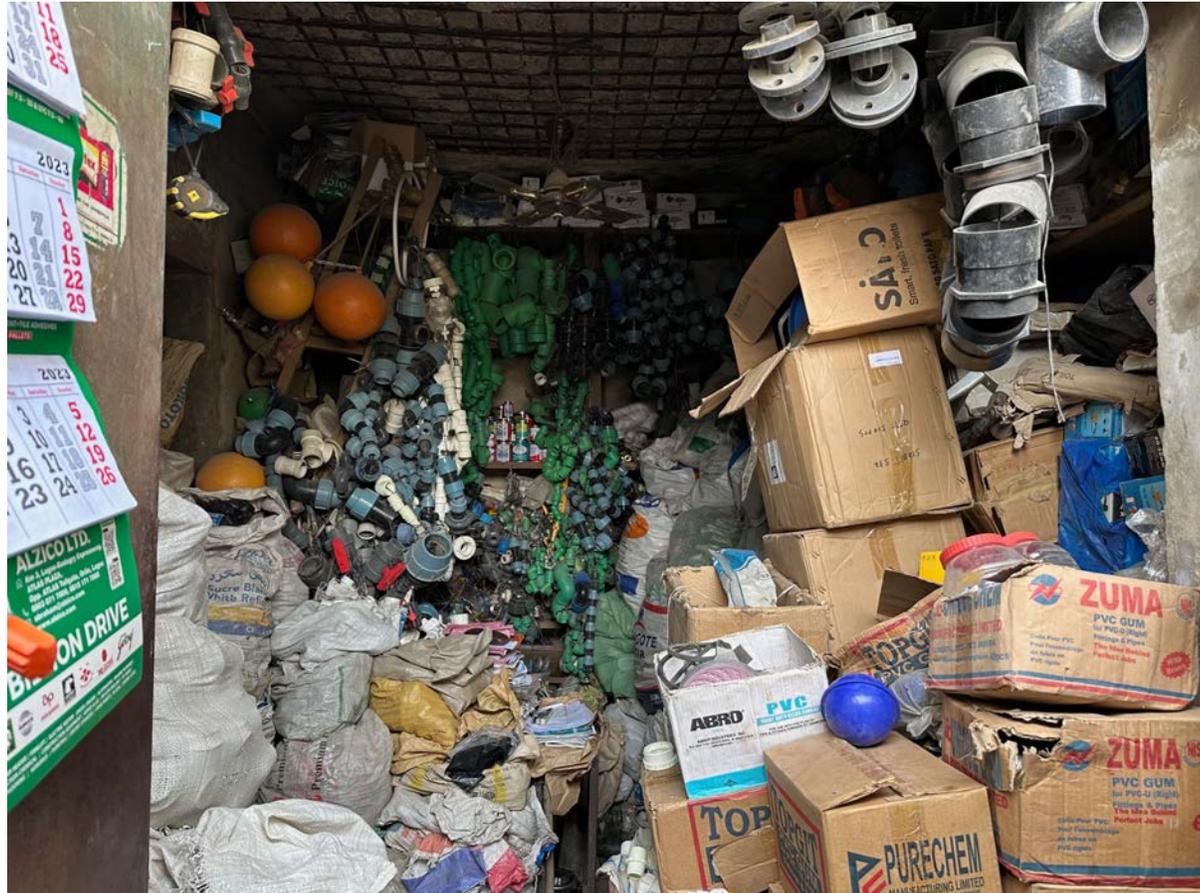
Divine Ucheson International Co. Ltd

Distributor/ wholesaler/ retailer in Kano



Divine Ucheson International Co. Ltd

Distributor/ wholesaler/ retailer in Kano

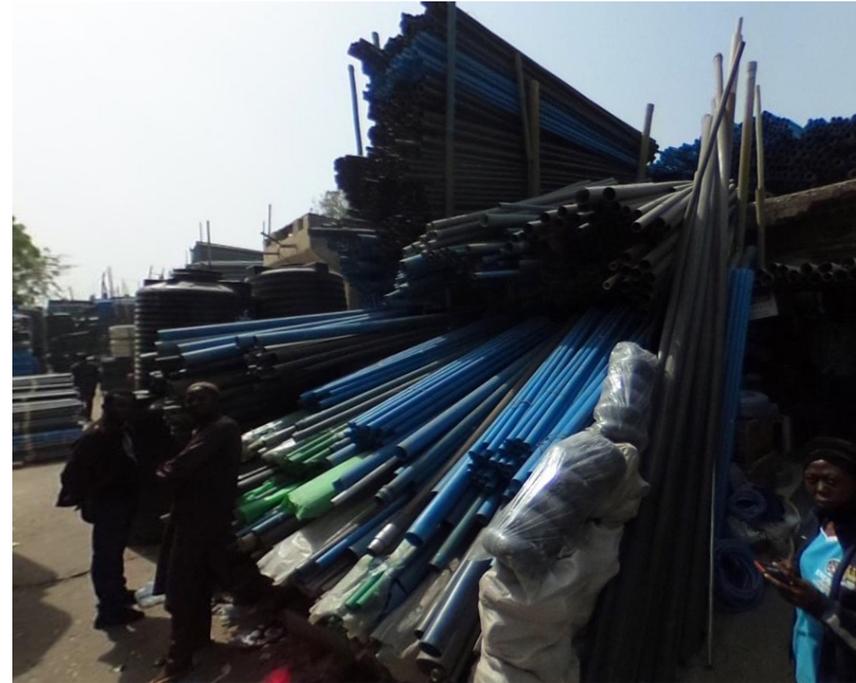


Divine Ucheson International Co. Ltd

Distributor/ wholesaler/ retailer in Kano



[Click on the image to access a 360 view](#)



[Click on the image to access a 360 view](#)

Favoured Dubek International Co. Ltd

Distributor in Kano

[Access to the online profile here](#)

INTERVIEW MAIN FINDINGS

- Sells plastic plumbing materials (Pipes and tanks). Tanks are the most-demanded
- Sells mostly to wholesalers. Can do retail within Kano
- Get supplies directly from manufacturers for local products and from main importers from Lagos for foreign products
- Customers get supplies once per week, but international clients can buy twice a week
- Daily sales from ₦600,000 to ₦3 million
- No non-commercial partners

GEOGRAPHICAL REACH



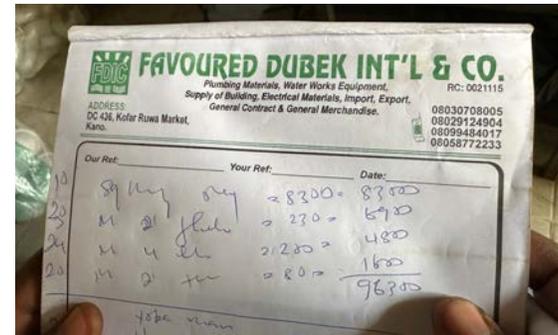
- Has two retail locations in Kofar Ruwa Market. No distribution centers
- Sells mostly to wholesalers in urban centers (Kano)
- Supplies also in all parts of North-West and North-East states: Katsina, Kaduna, Zamfara, Kebbi, Jigawa and Sokoto, Borno, Yobe, Gombe, and Bauchi
- International clients are in Niger, Chad (when they get a bargain) and Cameroon
- Used to have 2 trucks (problems of maintenance) and now rely on commercial transporters



Over 70% of customers don't go to markets, but place orders through phone/Whatsapp, make payment through the bank and rely on commercial transporters for delivery

Favoured Dubek International Co. Ltd

Distributor in Kano



Veris Chris Enterprises Ltd

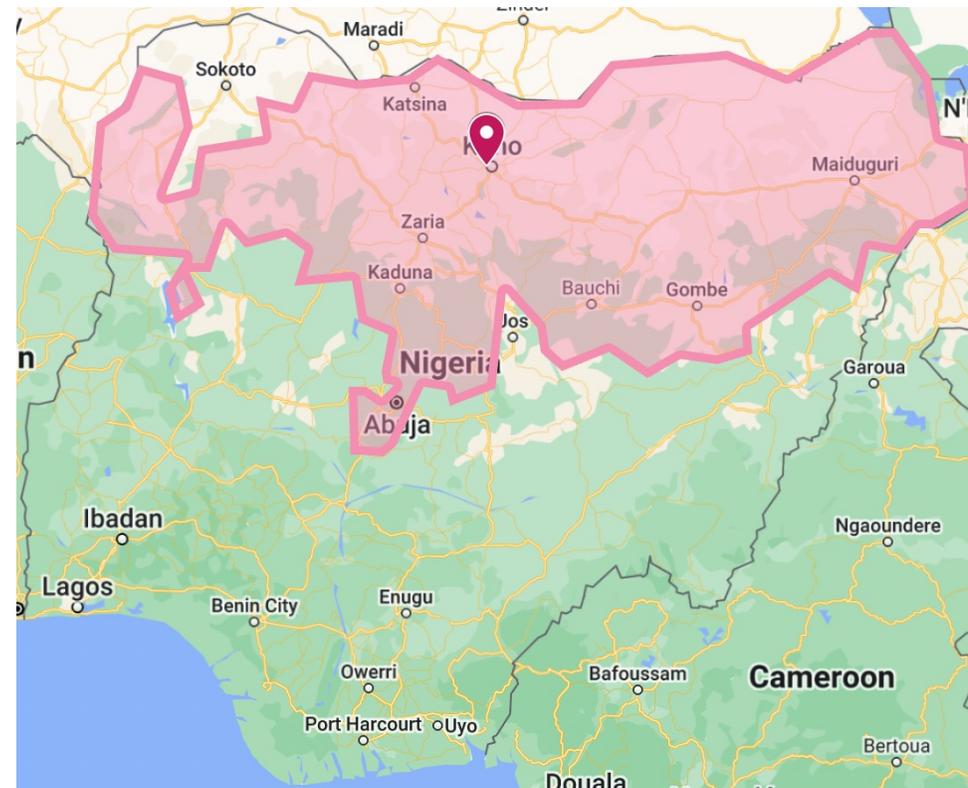
Distributor/ Sub-distributor/ Wholesaler in Kano

[Access to the online profile here](#)

INTERVIEW MAIN FINDINGS

- Plumbing materials (plastic and ceramic), adhesive (red-gum and Pure Chem)
- Sells mostly to major distributors and wholesalers in urban centers (who sell to other wholesalers and rural buyers) and end-customers. Difficult to estimate the ratio
- No specific number of wholesalers serviced, higher than the others interviewed
- Main suppliers include Geepee, Nig Pipe, Sacvic, Holbon, Topgic...
- As the biggest distributor of Red-Gum, Pure Chem is paying staff for their sales

GEOGRAPHICAL REACH



- Offices in Kofar Ruwa market and one large warehouse
- Sells mostly to Northern regions, but also supply pipes to East and Lagos region
- Major towns of distributors are: Kano, Katsina, Abuja, Dutse, Zaria, Maiduguri, Damaturu, Gombe, Bauchi, Kebbi, Gusau and all major towns in northern Nigeria
- Some customers have retail stores in the same areas of Veris Christ (Kofar Ruwa)
- International reach to Niger and Chad
- No fleet, rely on commercial transporters for distribution



Creating Demand

They have partnered with Pure Chem to buy a truck and pay a sales person to travel across the north selling various products and building awareness of and usage of Red-Gum

Veris Chris Enterprises Ltd

Distributor/ Sub-distributor/ Wholesaler in Kano

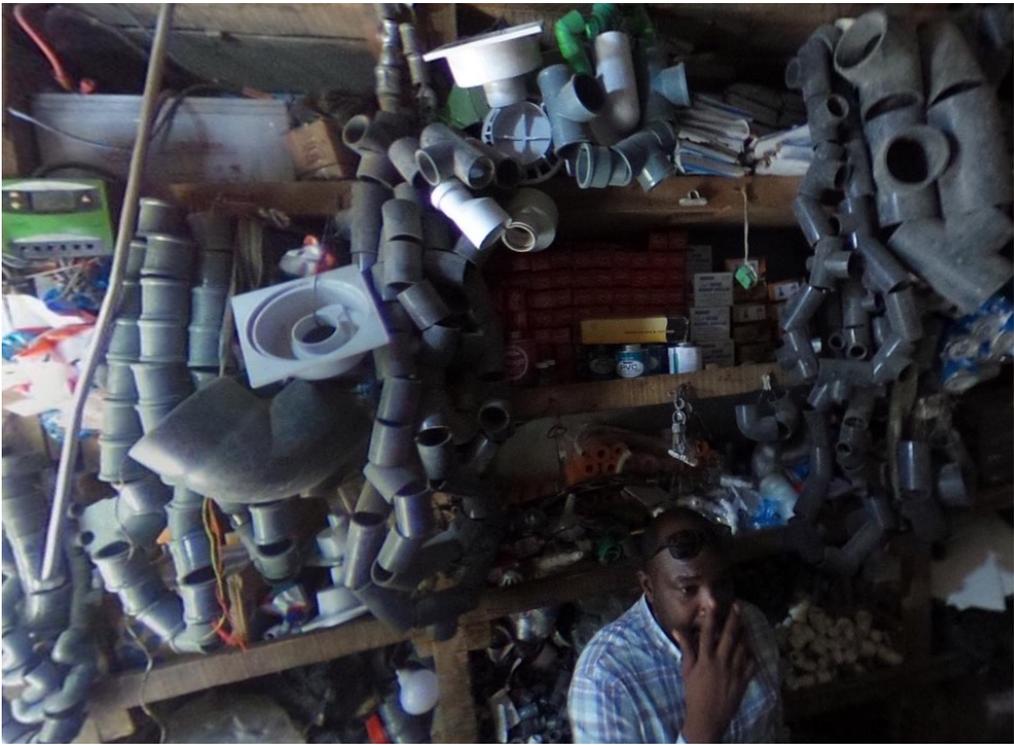


Veris Chris Enterprises Ltd

Distributor/ Sub-distributor/ Wholesaler in Kano



Click on the image to access a 360 view



Click on the image to access a 360 view

Jakada Business Enterprises (subsidiary of Zaj Global Associates Nig. Ltd)

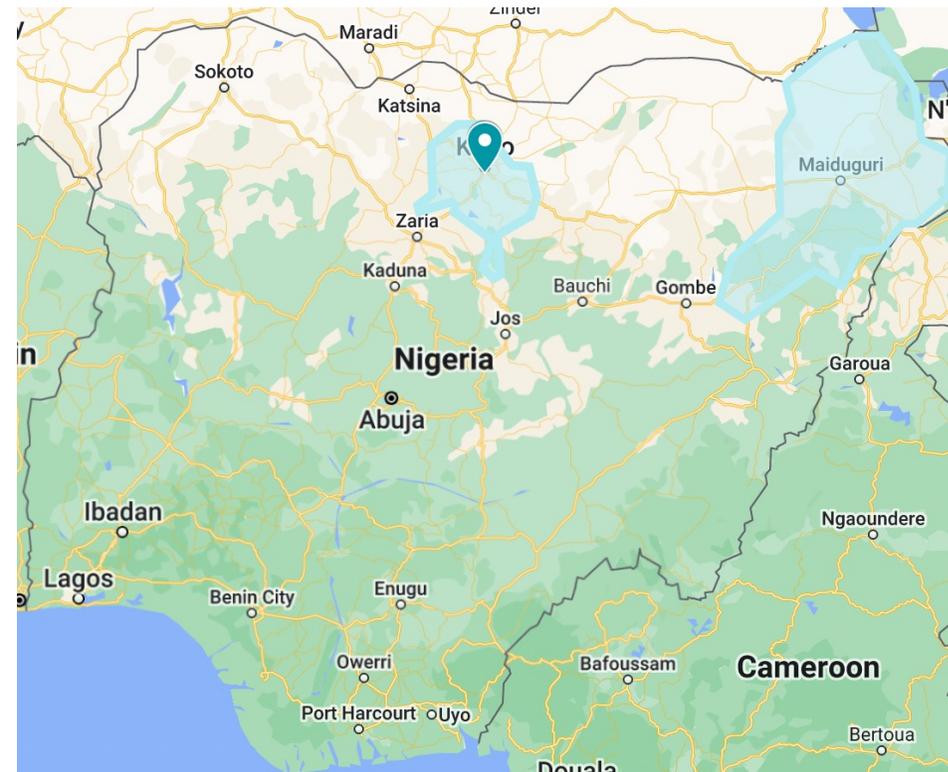
Distributor in Kano

[Access to the online profile here](#)

INTERVIEW MAIN FINDINGS

- Sells ceramic and plastic plumbing materials
- Primary suppliers include Nigeria tank, Karishma (based in Kano), Golden Diamond (based in Lagos), Choice and Aristor Heaters (from importers in Lagos)
- Sells to wholesalers and retailers (50% each in terms of numbers, but 70% and 30% respectively in terms of sales volume)
- More than 15 regular wholesaler customers
- No longer imports products (had imported from China but stopped)
- Daily sales from ₦300,000 to ₦600,000

GEOGRAPHICAL REACH



- 2 outlets in Kano
- Customers are mostly in Kano, but also Maiduguri (Bono state)
- Mostly urban customers or nearby peri-urban and rural areas
- One mini truck but relies mostly on commercial transporters



Market insights

- The CEO commented that he had to lock his capital for over 3 months to import products
- Lots of imitations on the market: people only care about the price, not the brands

Jakada Business Enterprises (subsidiary of Zaj Global Associates Nig. Ltd) Distributor in Kano



[Click on the image to access a 360 view](#)



[Click on the image to access a 360 view](#)

Jakada Business Enterprises (subsidiary of Zaj Global Associates Nig. Ltd) Distributor in Kano



Click on the image to access a 360 view

Tando & Brothers Ltd

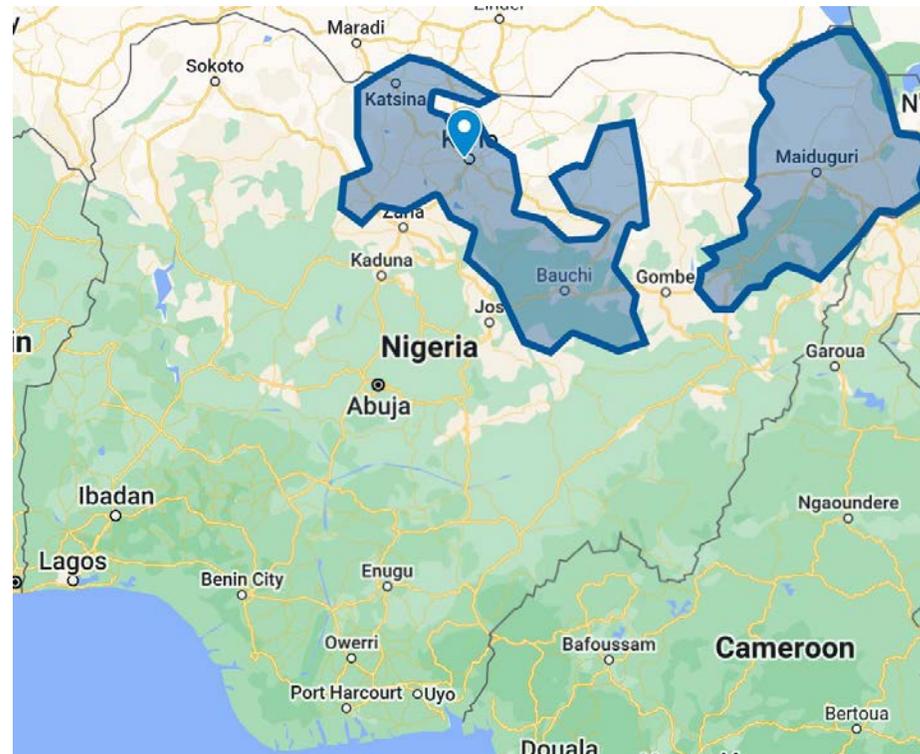
Distributor in Kano

[Access to the online profile here](#)

INTERVIEW MAIN FINDINGS

- Dealer of plumbing materials (ceramic and plastic). Other activities include drilling of boreholes
- Sells to wholesalers and retailers, both urban and rural, who sell to other wholesalers in other states
- Major suppliers include Nigeria Tank, Golden Diamond, Choice, Karishma, Aristor Heaters, Leno...
- Daily sales from ₦500,000 to ₦1.5 million
- Tando & Brothers wants to manufacture in the next 3-5 years (plumbing fittings like joints, connectors...) but finance is a major challenge for expansion
- Has a Whatsapp group (no website) for customers to advertise new products
- Not importing goods anymore

GEOGRAPHICAL REACH



- 2 retail shops in Kano, an outlet, and an open warehouse
- Locations are outside the market and in an area with massive construction
- It is better to start outside the cluster due to competition and because the traders' union regulate prices in the market
- Customers are from Kano state and other North-West states: Katsina, Bauchi, Borno
- Used to have 5 mini trucks but only 2 now (rest were sold to drivers based on hire purchase but with the agreement that they will work for the company)

Tando & Brothers Ltd

Distributor in Kano



Click on the image to access a 360 view



Click on the image to access a 360 view

Tando & Brothers Ltd

Distributor in Kano



[Click on the image to access a 360 view](#)



[Click on the image to access a 360 view](#)

Tando & Brothers Ltd

Distributor in Kano



Click on the image to access a 360 view

Smoothflush Link Ventures (Alinco)

Distributor/ sub-distributor/ wholesaler in Lagos

[Access to the online profile here](#)

INTERVIEW MAIN FINDINGS

- Dealer and supplier of building and plumbing materials (Sanitary wares, pipes...)
- Also a general contractor
- Customers include other distributors, sub-distributors, wholesalers, retailers and end-customers
- Primary suppliers are international manufacturers, local manufacturers, and other major distributors
- Most business over Whatsapp, phone call or in-person (no website)
- Daily sales per branch is ₦3 to ₦10M
- Large volume and capacity (ex: 200 squatting pan for 1 order, or a pickup of 11,000 units)
- Outsource transportation

GEOGRAPHICAL REACH



Leader in the industry with a very good understanding of the market and strong connections. Very interested and willing to distribute new sanitation products.

- Located in Odun-Ade sub-market cluster (within Orile market)
- Very popular and known across the entire sub-clusters of the Orile market
- Distributes and receives supply from other major market clusters in the country
- International reach: Togo, Benin
- Distributes across Nigeria, especially: South Western regions (Ogun, Oyo, Ondo), Eastern (Anambra, Imo, Enugu, Abia), Central and North (FCT, Abuja, Sokoto, Kaduna, Kano, Jos), Southern (Edo, Delta)
- No sub-distribution centers but customers come from various parts of Nigeria

Smoothflush Link Ventures (Alinco)

Distributor/ sub-distributor/ wholesaler in Lagos



Anyitech

Distributor/ sub-distributor/ wholesaler in Lagos

[Access to the online profile here](#)

INTERVIEW MAIN FINDINGS

- Products include sanitary wares, plumbing and building materials (mostly ceramic)
- Most business over Whatsapp, phone call or in-person (no website)
- Customers are other sub-distributors, wholesalers, retailers, end-customers
- Primary suppliers are local manufacturers and international suppliers
- Handles large volumes (100,000 units). Minimum of 500 units.
- Outsource transportation to other businesses within the transportation cluster

GEOGRAPHICAL REACH



Leader in the industry with a solid network in Lagos and Southern and Eastern Nigeria. Willing to start with a few samples and do a market test with fellow cluster distributors.

- Located in Odun-Ade sub-market cluster (within Orile market), on Market Street (popular for sanitary wares)
- Didn't specify the number of distribution centers but all are located in the Orile market
- Nationwide reach, especially: South Western (Lagos, Ogun, Oyo), Eastern (Anambra, Imo, Enugu, Abia), Central and North (FCT, Abuja, Sokoto, Kebbi, Zamfara)

Anyitech

Distributor/ sub-distributor/ wholesaler in Lagos



Click on the image to access a 360 view

Stan Tech Global Resources

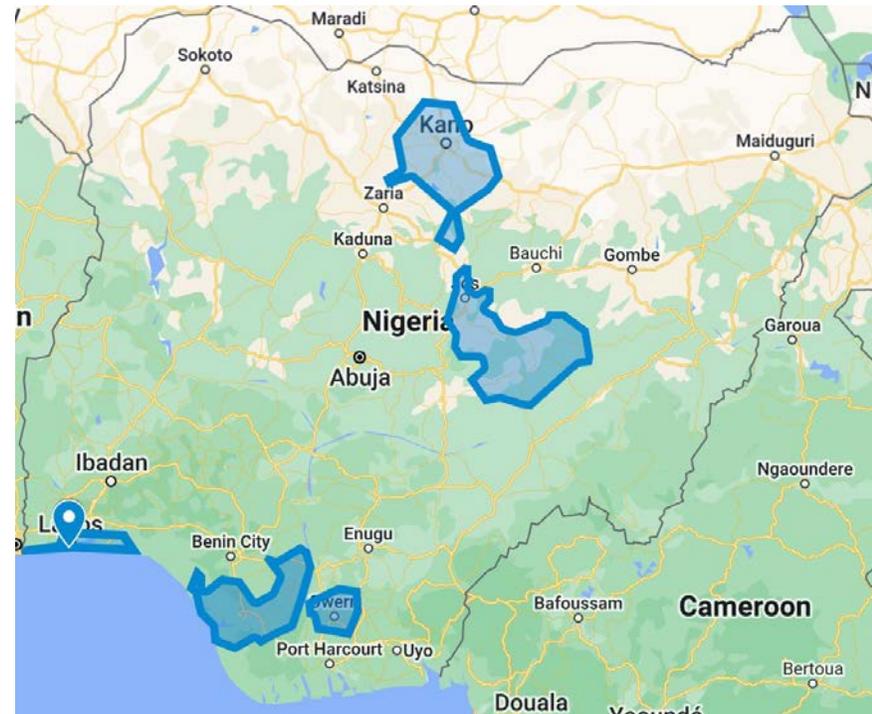
Distributor in Lagos

[Access to the online profile here](#)

INTERVIEW MAIN FINDINGS

- Mostly focused on high-end products, including sanitary wares, WCs, tiles, jacuzzis
- Customers include sub-distributors, wholesalers, retailers, end-customers
- Very diverse portfolio of customers (high-end to low-end)
- Primary suppliers are local manufacturers and importers
- Doesn't have a website but active with e-commerce via Whatsapp and other social media channels
- Handles high volumes
- Outsource transportation and don't cover costs for transportation

GEOGRAPHICAL REACH



Leader in the market. Mentioned that customers in the North (Kano and Plateau states) would be more interested in plastic toilets.

- Main branch located in Odun-Ade sub-market (part of Orile)
- 11 stores within the Orile Market (can become warehouses for other distributors when not used)
- Depots/ retail points in Lagos, Delta, Kano, Plateau
- International reach in West Africa
- National reach, especially in the South (Delta), East (Imo), North (Kano, Plateau)

Stan Tech Global Resources

Distributor in Lagos



Flow City Plumping Distributor in Lagos

[Access to the online profile here](#)

INTERVIEW MAIN FINDINGS

- Products include plumbing, bathroom, building materials, and kitchen wares
- Customers are sub-distributors, wholesalers, retailers, end-customers
- Primary suppliers are local manufacturers
- Not keen to import: focuses on nationwide delivery and inter-state business transactions
- Handles high volumes (hundreds to thousands of units)
- Outsources transportation
- Only company interviewed with a website (owner is young and tech-savvy) and with social media presence

GEOGRAPHICAL REACH



Very good understanding of the Northern market with strong connections and contacts in the region (capacity for conducting business surveys there). Familiar with squatting pans and knows where they should sell with customers that would be interested.

- Located in the Coker and Odun-Ade sub-clusters (part of Orile)
- Nationwide reach, especially: Northern states (Kano, Taraba) and surrounding (Kaduna, Plateau)
- No sub-distribution centers

Flow City Plumping

Distributor in Lagos



Rolex Homes (JAC Davison Concept)

Distributor in Lagos

INTERVIEW MAIN FINDINGS

- Distributor, importer and exporter of all building and plumbing materials (pipes, fittings, sinks, taps, tiles...)
- Only distributor interviewed who focuses more in plastic pipes and fittings over sanitary wares, but open to test products with other distributors
- Customers include sub-distributors, wholesalers, retailers, end-customers
- All business is through phone, Whatsapp.
- First-time meetings must be in-person
- Primary suppliers are importers and local manufacturers
- Capacity to import products

GEOGRAPHICAL REACH



While there is a good interest in plastic toilets, this distributor showed less expertise in the sector and flexibility in doing business

- Located in the Agric building sub-market cluster (within Orile)
- Nationwide reach: FCT and all states in the South-Eastern regions (Enugu, Anambra, Imo, Abia, Ebonyi)
- No sub-distribution centers

Rolex Homes (JAC Davison Concept) Distributor in Lagos



Click on the image to access a 360 view



Rolex Homes (JAC Davison Concept) Distributor in Lagos



Rolex Homes (JAC Davison Concept) Distributor in Lagos



UJU Favour Ventures (Modest)

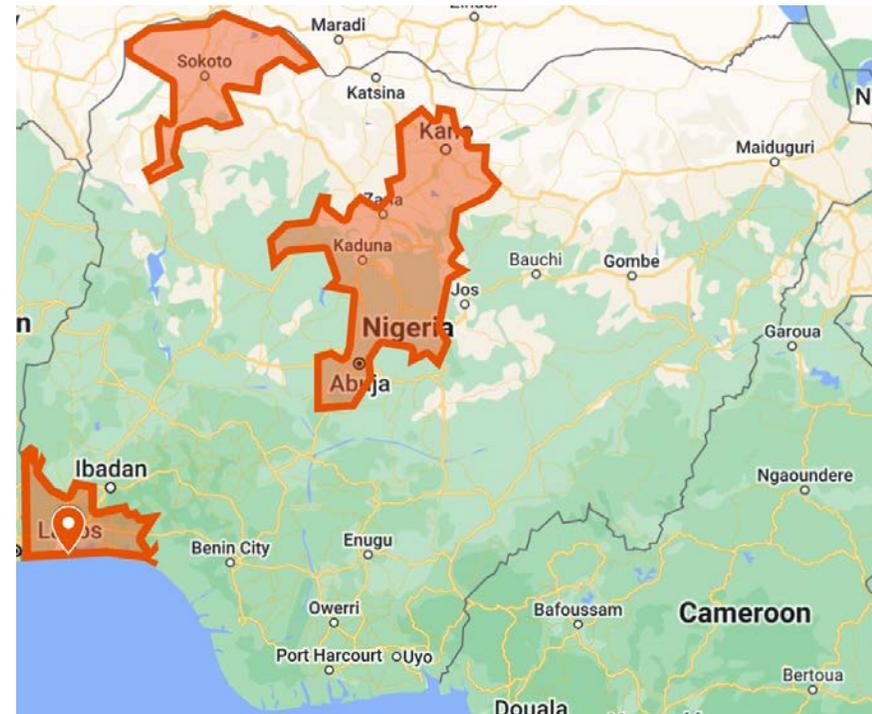
Sub-Distributor in Lagos

[Access to the online profile here](#)

INTERVIEW MAIN FINDINGS

- Products are building and plumbing materials (fittings, pipes), sanitary wares, squatting pans
- Customers are wholesalers, retailers and end-customers
- Aspire to grow to distributor size and increase quantity but less capacity than other distributors in the market
- Major suppliers are other local distributors (sometimes local manufacturers)
- All business is done in-person, phone or Whatsapp
- No capacity to import products
- Usually supplies 20-25 cartons of squatting pans (5 per carton) per order and can do more

GEOGRAPHICAL REACH



Small business although relatively well known in the market. Quite conservative to disclose actual distribution capacity or volume to purchase. The owner is looking for diversification opportunities but may not have the capital to purchase in large quantities.

- Located in the Odun-Ade sub-market (within Orile)
- Nationwide reach, especially South-West (Lagos, Ogun), Central and Northern (Sokoto, Kano, Kaduna, Abuja)
- Distributes squatting pans by 2 different manufacturers to customers in the North

UJU Favour Ventures (Modest)

Sub-Distributor in Lagos

Although the owner consented to providing information, she did not allow us take pictures. These 360 shots are from the sub-market where UJU Favour Ventures is located



Click on the image to access a 360 view



Click on the image to access a 360 view

TABLE OF CONTENTS

- I. CONTEXT, OBJECTIVE, AND METHODOLOGY
- II. EXECUTIVE SUMMARY: WEST AFRICA REGION
- III. NIGERIA IN FOCUS
- IV. NEXT STEPS**



From building demand for WASH products to building a network in the field

1. Demand creation

Every conversation with manufacturers and distributors included the question: “what volumes?” Organizations need to have an evidence-based answer and create demand.

- A&Co’s 2020 Go To Market study in peri-urban Accra included initial recommendations for a combined training, demand and sales model.
- Further demand quantification studies may be necessary to focus commercial efforts.
- Partners like WRP can also be helpful to build sales capacity.

2. Network building

Relationships matter across all markets and any new entrant needs to build trust with time and presence.

- Organizations can do so with incentivised local agents based in key market clusters.
- Social and public programs could seed and support commercial reach by locating staff and facilities in key market hubs
- Understanding product flows to tier 2-3 cities and rural areas to “reverse engineer” routes to these key markets would be a valuable build on this study

Volume is the key element to unlock business opportunities

- **Manufacturers will only invest if there is enough volume.** In Ghana, for example, KGM mentioned a minimum of 10,000 to 15,000 units per month
- Volume will **determine distributors' level of interest**
- **Distributors are not reliable or experienced partners for demand creation,** but can and should participate in trials.
- Distributors expect **demand creation to be driven and delivered by organizations themselves**

➔ Likely volumes must be supported by a **strong business plan** with both elements of:

1. **Likely market demand** through consumer research
2. **Funded plans for demand creation & growth**



NEXT STEPS

A&Co's 2020 GTM study included initial recommendations for a combined training, demand and sales model

- While open defecation presents an opportunity for the social channel, a WASH commercial strategy resides in unimproved and improved sanitation facilities
- Commercial opportunity is both B2C sales (for households), and B2B sales (for large implantations with households and employees)

Key takeaways and learnings

Key action takeaways for SATO market entry

- Learning #1: Income, Existing Toilet and Psychographics to target sales efforts
- Learning #2: ...
- Learning #3: ...
- Learning #4: ...

Market selection

- Design efficient local market selection process
- Create toolkit for field teams to identify priority SATO buyers and installers
- Build a local SATO ecosystem coordinating D2D agents, retailers and local masons

Learning #4

Main barriers to adoption are Price, Shared decision-making and Installation

- Total project costs (over 4 installs) range from ~200GHC for a retrofit to ~1000GHC for a new toilet & 78% of users have installed the part in an existing latrine bringing total costs down (50GHC)
- 49% of non-buyers "not able to make purchase decision" & they worry about others not taking care of the toilet (sharing as a shared responsibility for over 70%)
- 50% of non-buyers do not understand product benefits or would like to see others using it first & sales agents and retailers recommend demonstration by KOLs
- 68% of buyers have not installed the SATO pan, majority referring to "lack of funds" or "problems with installer"

Market entry training program

Suggested Market Entry Prototypes To Develop & Test

Market Selection → Training & Activation Program

Training & Activation Program

TRAIN & ENGAGE

TEST & DEMO

EXECUTE & ITERATE

In-Market Training & Activation

Masons: Technical & Hands-on

D2D: Sales training includes: In-market attempts, Social media, Identifying local influencers

Retailers: Training outputs: Installers ready, Influencer (KOL), Local trust / awareness, Mapping of needs & aspirations, Sales materials & messaging selected

Each agent to get 5 "influencers" to agree to a free SATO installation

Masons need to show up on time to perform a demo installation

Test outputs: Relative installers, Verified D2D agents, SATO installed & in use at key locations

D2D Agents Sell & Refuse Approach: Key messages, Evaluation, Peer Learning

Market Analysis: Needs & Aspirations, Adoption drivers/barriers

Adoption curves across sanitation levels

Phasing across the adoption curve can be assumed

This study did not go beyond Innovators / Early Adopters so this insight is based on experience and extrapolation, rather than empirical evidence

Adoption Curves, Abandonment Chutes & Sanitation Ladders

o If we can get very good about inspiring and supporting adoption of new sanitation technology, we can accelerate SDG 6.2 & reduce pandemic risks from shared assets

o But adoption is only half the story: recent studies show that "abandonment" creates a gap between availability of a sanitation option and its usage

o "Abandonment Chutes" are a daily reality, especially in low-income urban and peri-urban settings

o Drivers include: cost of shared/community options, cleanliness & odour, safety and convenience (eg. waiting times)

o Research questions to further explore this include:

- How do users make daily usage decisions between types of available sanitation solutions?
- What are the adoption & usage drivers across the ladder?
- What are the psychographic profiles most likely to adopt/abandon?
- What are the "abandonment chute" triggers?

OPEN DEFECTION → UNIMPROVED → SHARED → IMPROVED → SAFELY MANAGED

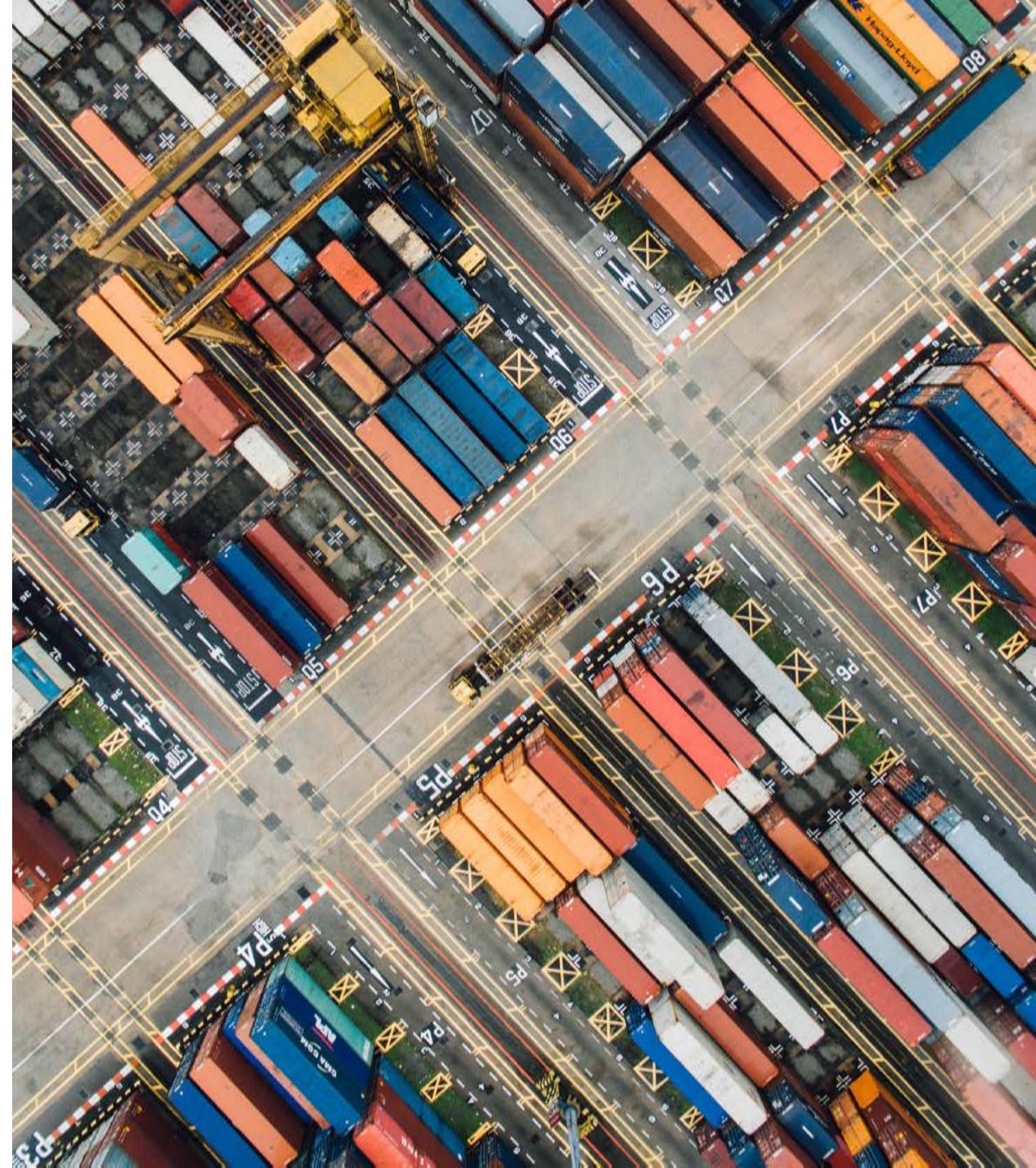
"Abandonment Curves"

Localised manufacturing or a hub and spoke model?

- ✓ All local distributors interviewed preferred locally made products
- ✓ For public tenders projects, bonus points can be given when products are locally made*
- ✓ There are viable manufacturers across all 5 West African countries studied
- ✓ An economic model should be built to quantify the thresholds for investing in local manufacturing

Import duties saved (~5%)
Transport Cost & Time
Product leakage & breakage
Market positioning

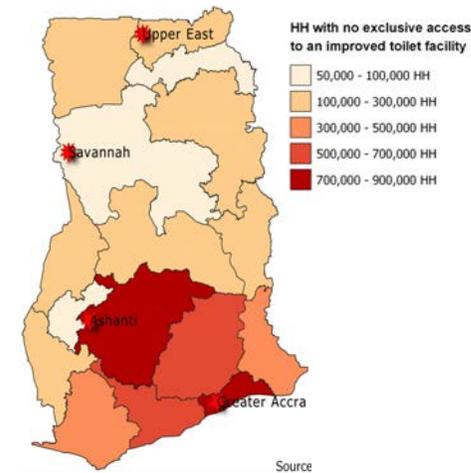
Fixed mold investment
Variable production costs
IP risk
Complexity



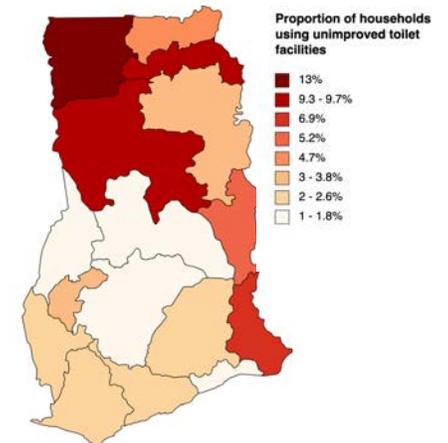
Success may depend on a dynamic symbiosis between social (meeting needs) and commercial (fulfilling demand)

- While the need for sanitation facilities might be greater in rural areas, the **demand for sanitation improvement may be higher in urban and peri-urban areas** due to population density
- Organizations should build the **commercial demand in urban and peri-urban areas**, where consumers have a slightly higher income and pre-existing infrastructure
- Improved **knowledge and experience sharing** across programs and geographies will be a driver of success
- Build **strategic links** (eg: combined awareness/training/demo) and **tactical nudges** (eg: HQ in local market cluster) between social and commercial approaches

NUMBER OF HOUSEHOLDS WITH NO EXCLUSIVE ACCESS TO AN IMPROVED TOILET FACILITY



PROPORTION OF HOUSEHOLDS USING UNIMPROVED TOILET FACILITIES



In Ghana, for example, while the proportion of households using unimproved toilet facilities is predominant in the North, the number of households with no access to improved toilet facilities is higher in the South

Thank You

To learn more about ways of working with SATO and the Partnership for Better Living, please contact:

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<https://www.globalwaters.org/content/partnership-better-living>

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