

**PARTNERSHIP FOR
BETTER LIVING**



USAID
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SATO
PART OF LIXIL

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

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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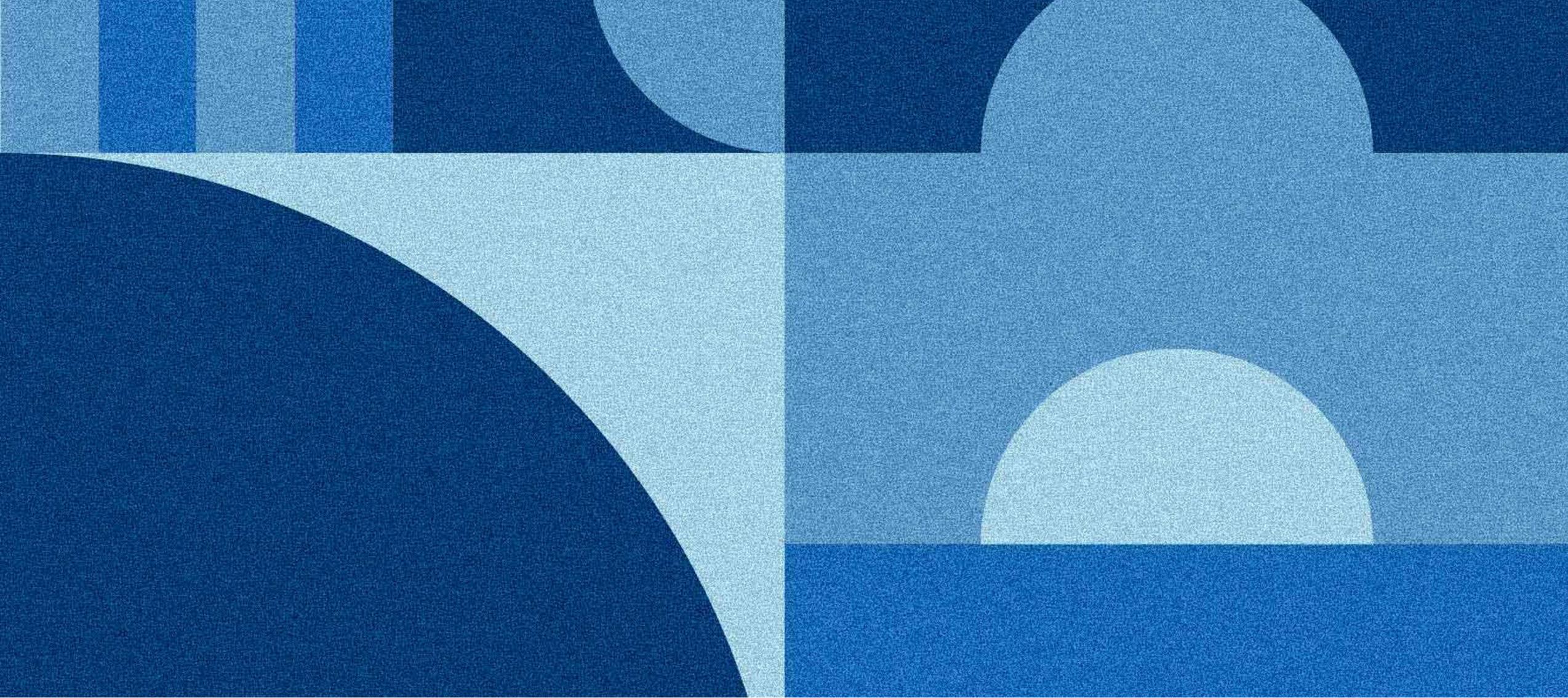
II. EXECUTIVE SUMMARY: WEST AFRICA REGION

A. Key Insights

B. Opportunity Matrix

III. LIBERIA IN FOCUS

IV. NEXT STEPS

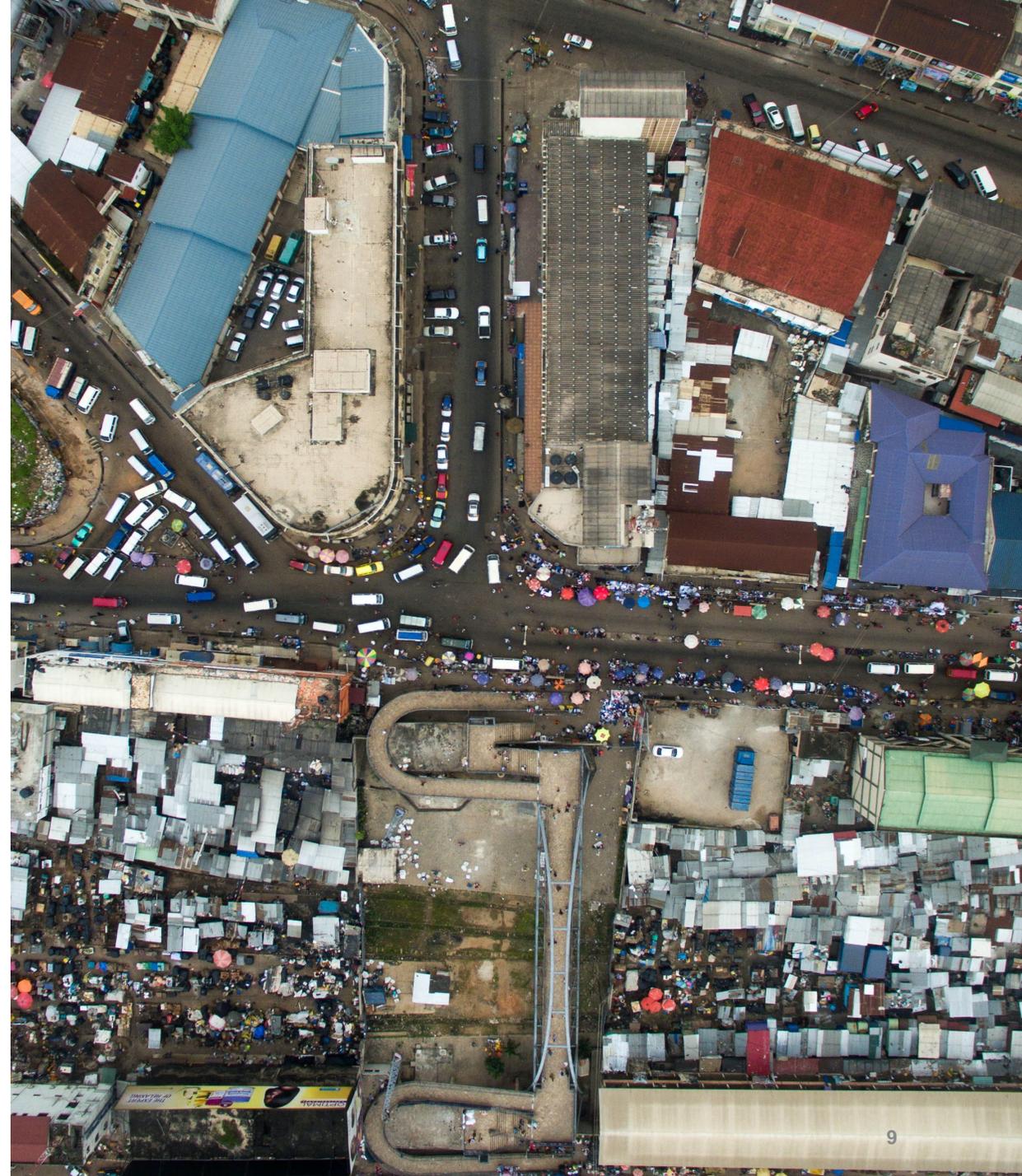


II. EXECUTIVE SUMMARY: WEST AFRICA REGION

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)

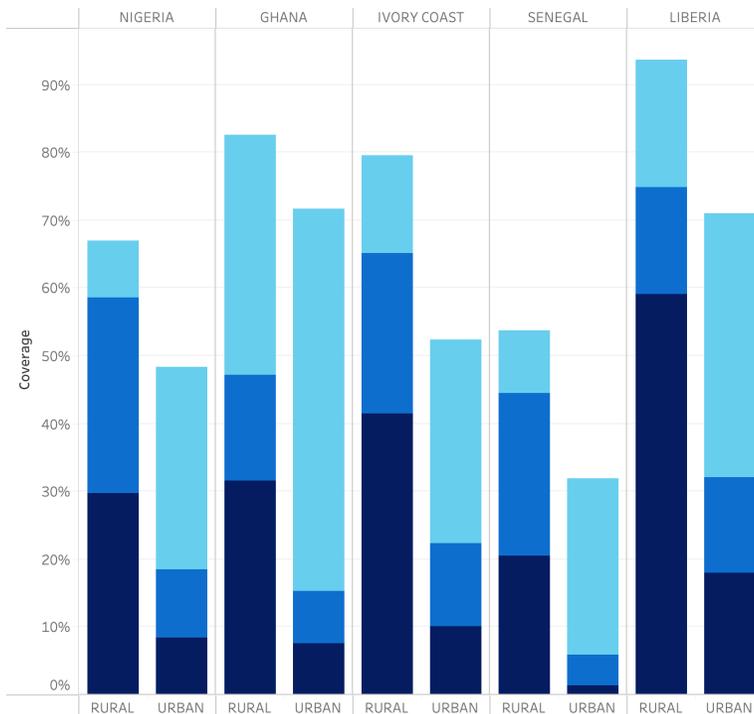


EXECUTIVE SUMMARY

KEY INSIGHTS – OPPORTUNITY MATRIX

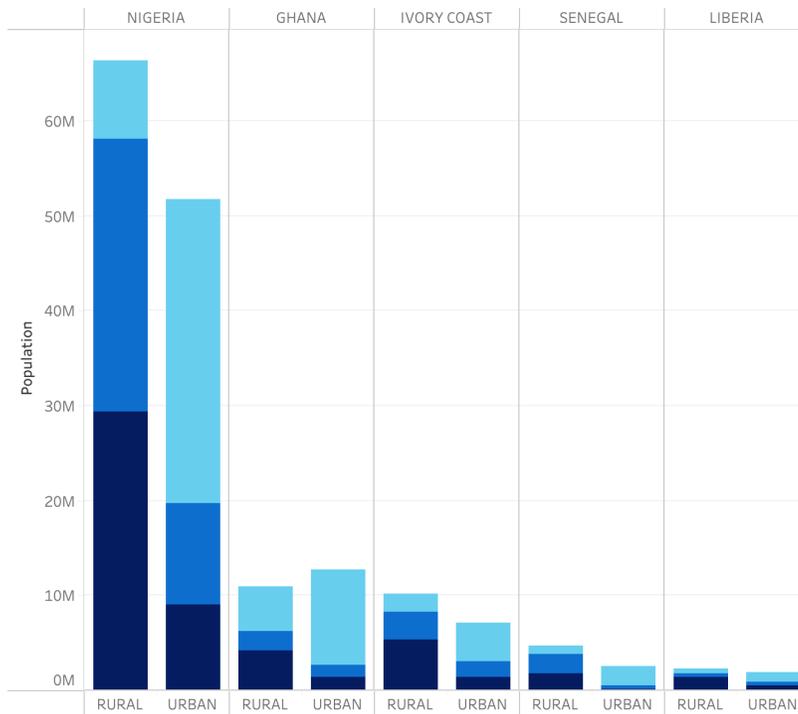
Sanitation levels in rural versus urban areas

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



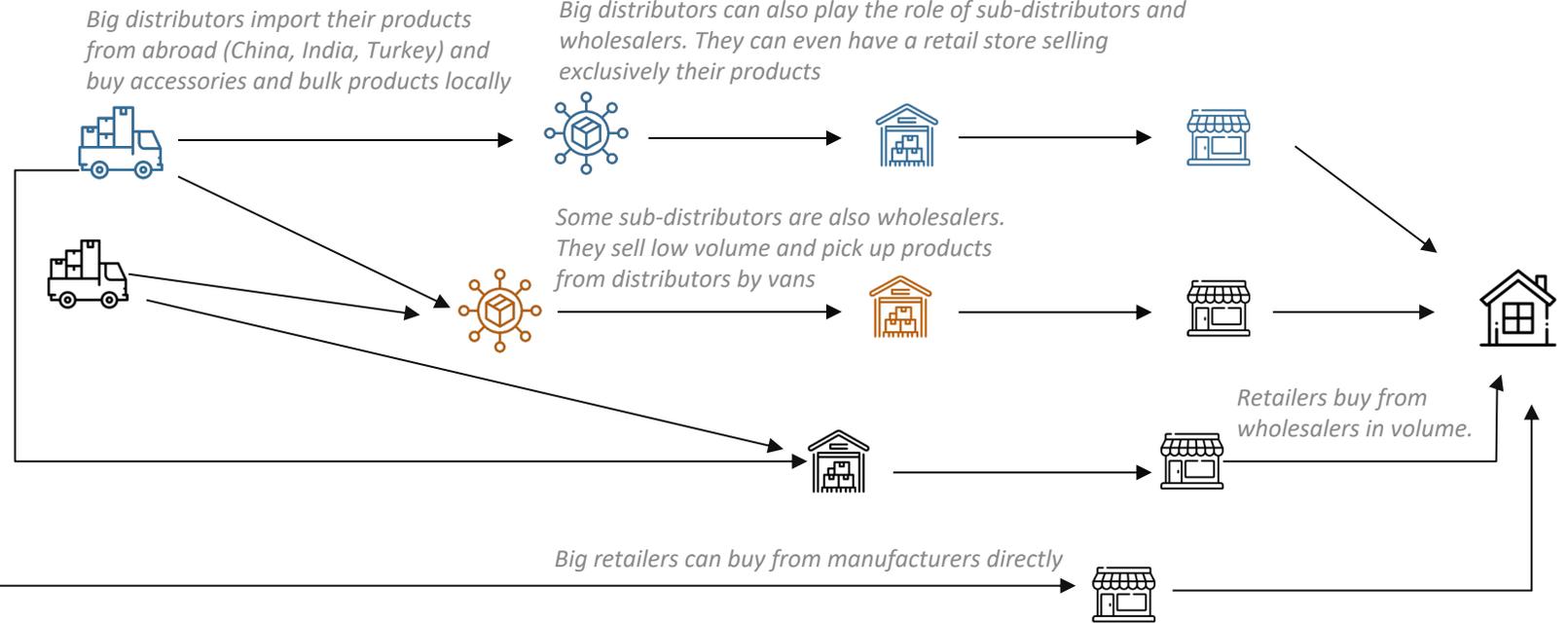
Local manufacturers import raw materials from abroad and produce plastic household items or plastic plumbing products locally

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

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 the organization must provide the mold at its 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

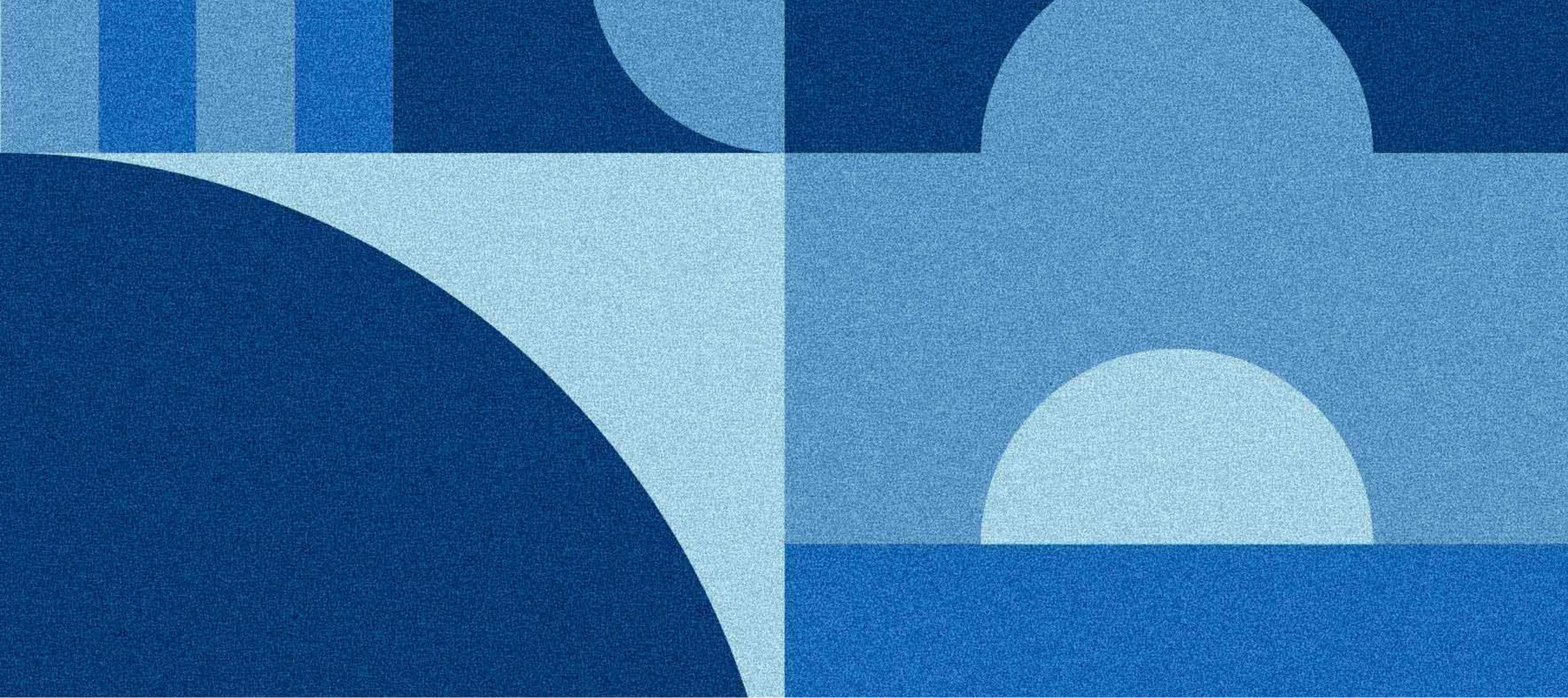
	GHANA	IVORY COAST	LIBERIA	NIGERIA	SENEGAL
Total plastic importation (in millions)	\$808	\$506	\$55	\$2,203	\$381
Share of plastic importation	5.4%	5.04%	0.58%	4.3%	3.5%
Import duty on plastic products	20%	5%	5%	5%	5%
Main country of importation for plastic products	China	China	China	China	China
Total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

Source: The OEC, 2022

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

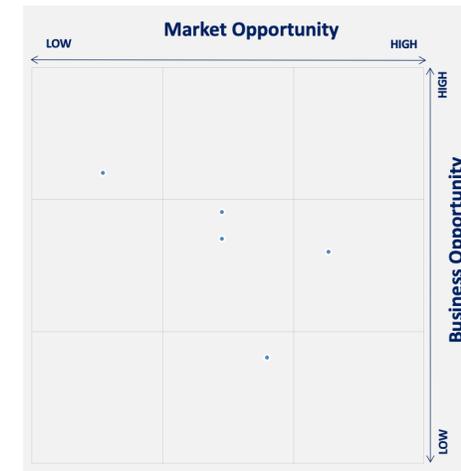


Market need indicators

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

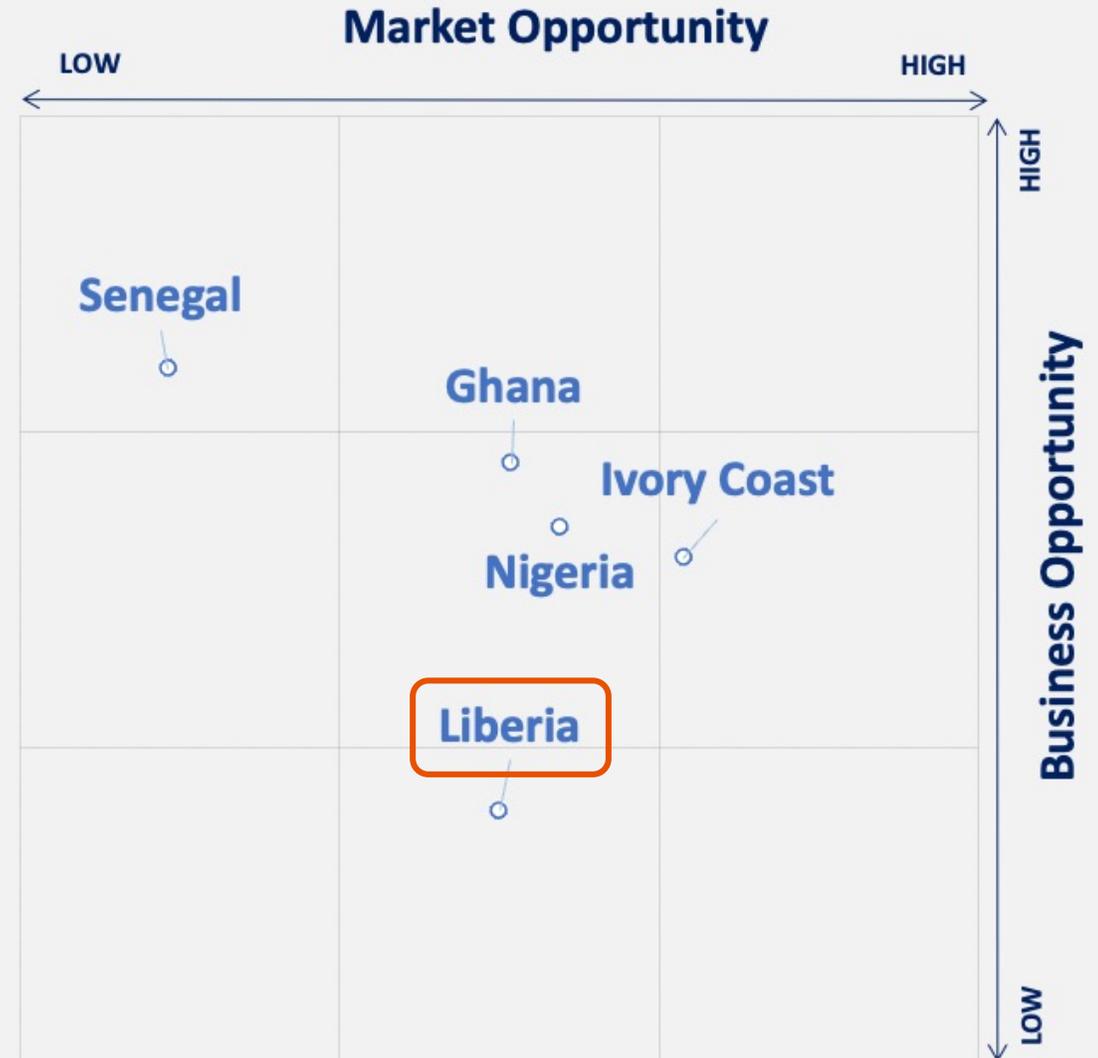


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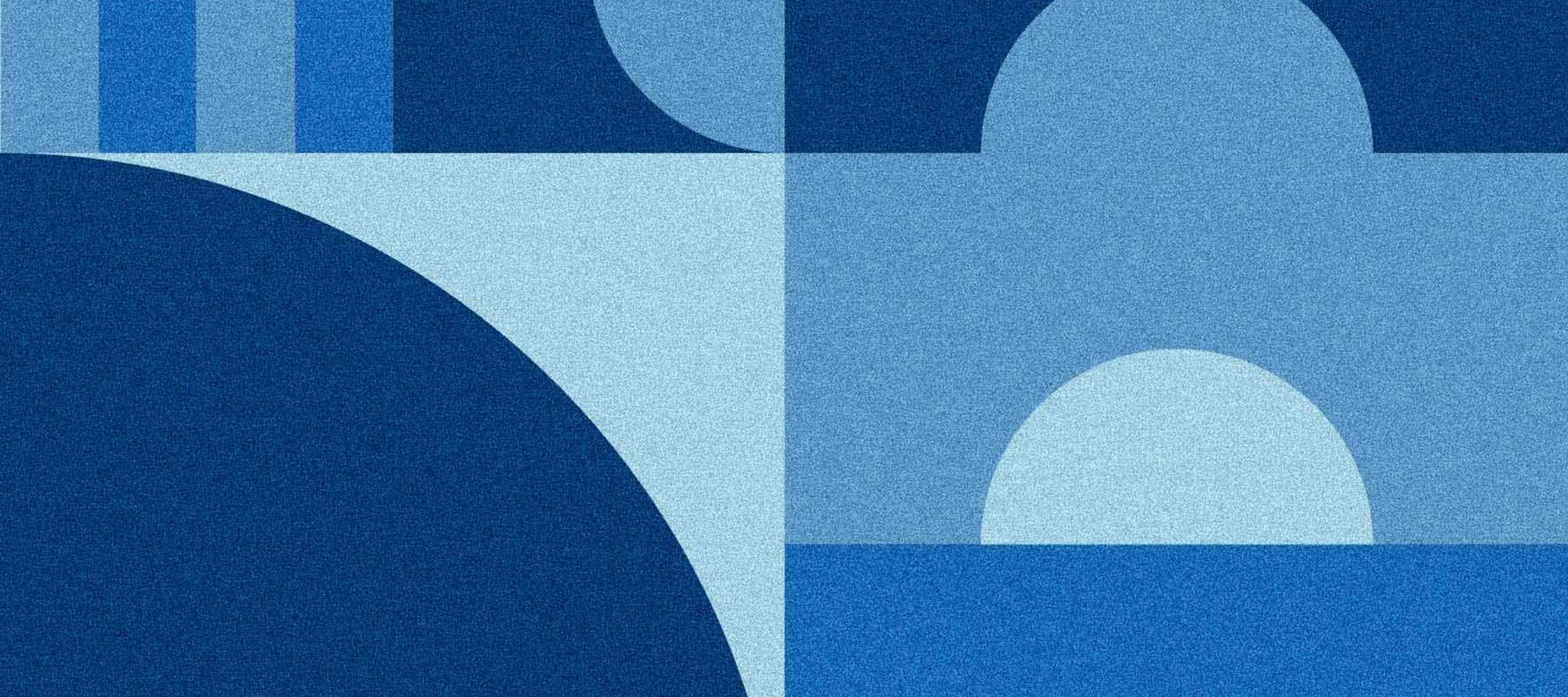
A. Country Overview

B. Opportunity Index

C. Market Structure

D. Stakeholders

IV. NEXT STEPS



III. LIBERIA

A. COUNTRY OVERVIEW

Liberia



Demographics

- **Population:** 5.19 Million, 47% rural¹
- **Households:** 1.2 Million HHs²
- **Economy:** Services (38%), Industry (18%), Agriculture (37%)¹

Water & Sanitation

- **18%** of the population use at least **basic sanitary services** (basic and safely managed)¹

Plastic WatSan Products

- Relatively underdeveloped market characterised by a lack of middle-income market
- Most commercial activity driven by imported fixtures and appliance and some local infrastructure
- General market observation:
 - High potential for social / public GTM
 - B2B potential with mines / plantations



Country and market general information



Demographics

- Population: 5.19 Million (2021), 2.1% annual growth¹
- Median age of the population: 17.9 years old²
- Urban (53%), rural (47%)¹



Geography

- Country size ranking #104³
- Nature of land: Flat coastal lowlands to rolling hills and plateaus further inland, and low mountains in the northeast³



Economy

- GDP per capita: 675.7\$¹
- Poverty rate (extreme international poverty line): 44.4% (2020)¹
- Economy model: Market-oriented policies, highly dependent on natural resources, foreign aid, and foreign direct investment (FDI)⁴



Politics

- Political stability index: -0.24(-2.5 weak ; 2.5 strong)⁵
- Political system: Multiparty republic



Culture

- Around 85.5% of the population is Christian and 12.2% is Muslim⁶
- The major ethnic groups are Kpelle (20.3%), Bassa (13.4%), Grebo (10%), Gio (8%), and Mano (7.9%)⁷

Sources: 1. World Bank, 2021

2. World Economics, 2022

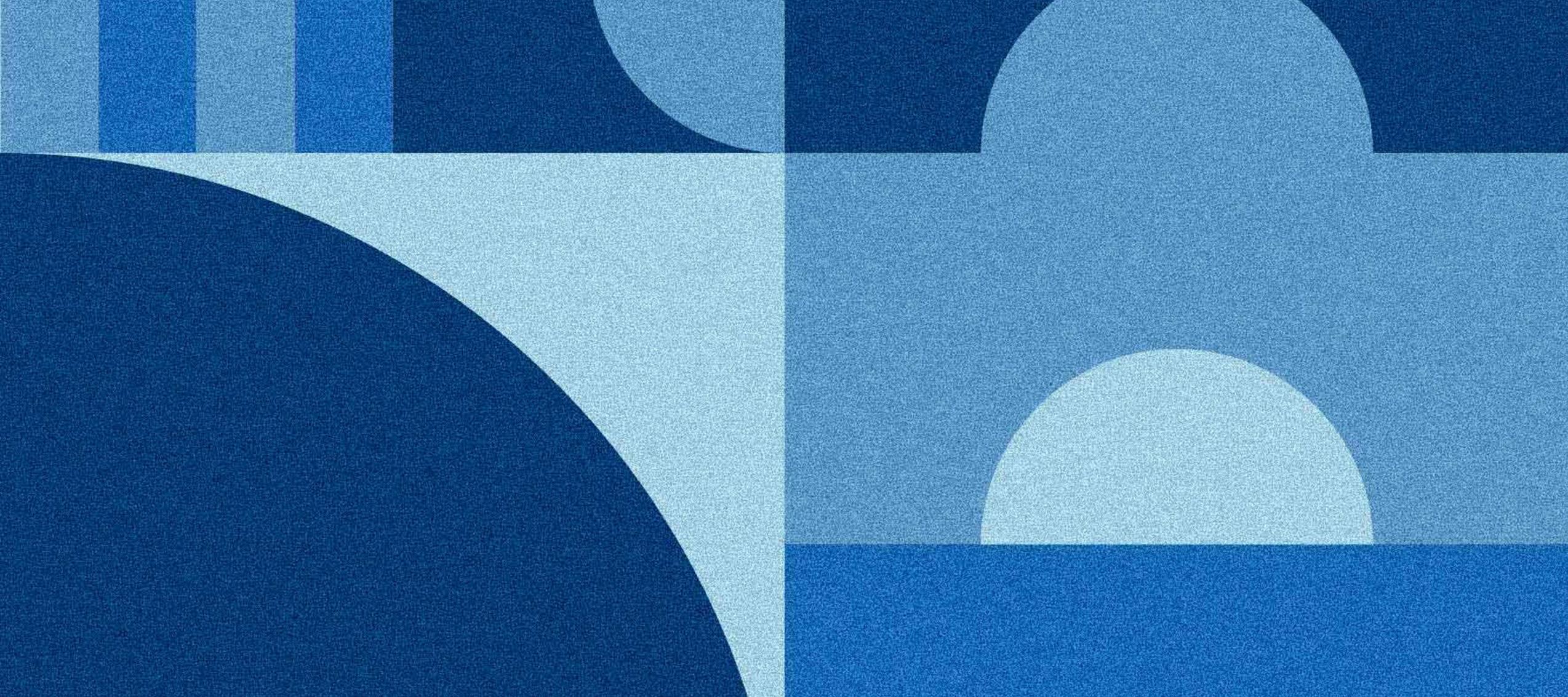
3. USAID/ USGS, Landscape of West Africa

4. International Trade Administration, Liberia Commercial Guide

5. The Global Economy, 2022

6. World Population Review, 2022

7. World Directory of Minorities and Indigenous People, 2022



V. LIBERIA

B. OPPORTUNITY MATRIX

Liberia, an attractive market with commercial potential

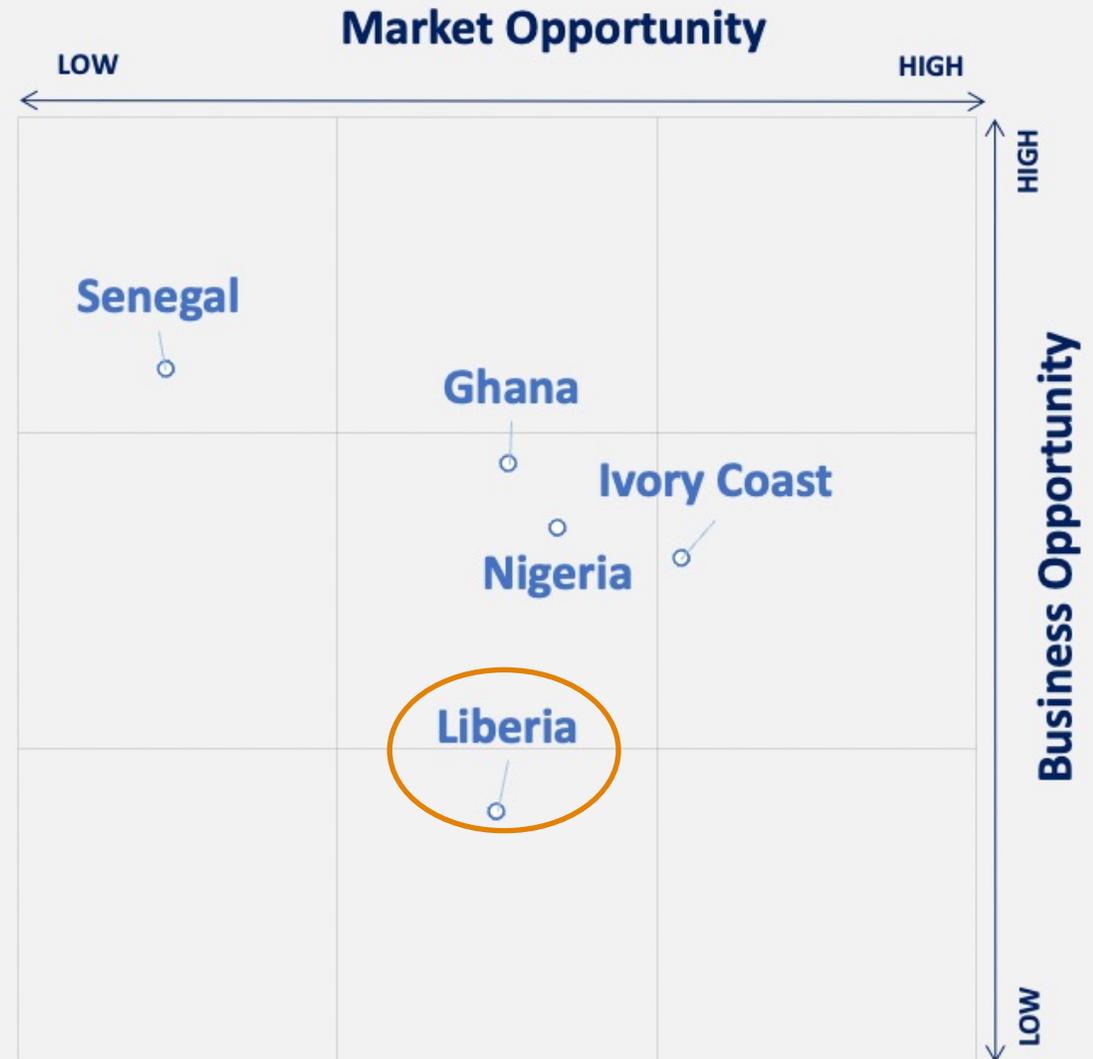
CHALLENGES

1. While sanitation is poor and OD significant, this may be challenging market to enter *commercially*
2. Small market (5 million total pop) with limited lower-middle income households
3. Very limited supply chain into rural areas
4. Focus of existing distributors and retailers is upper income

OPPORTUNITIES

1. The country is developing rapidly and economy growing
2. Duraplast is a professional potential manufacturing partner with direct links to government and its own distributor, Sethi Brothers
3. Montserrado County, near Monrovia, is a good starting point for commercial introduction

OPPORTUNITY MATRIX



Liberia has a critical need for sanitary facilities, as open defecation remains prevalent in many regions

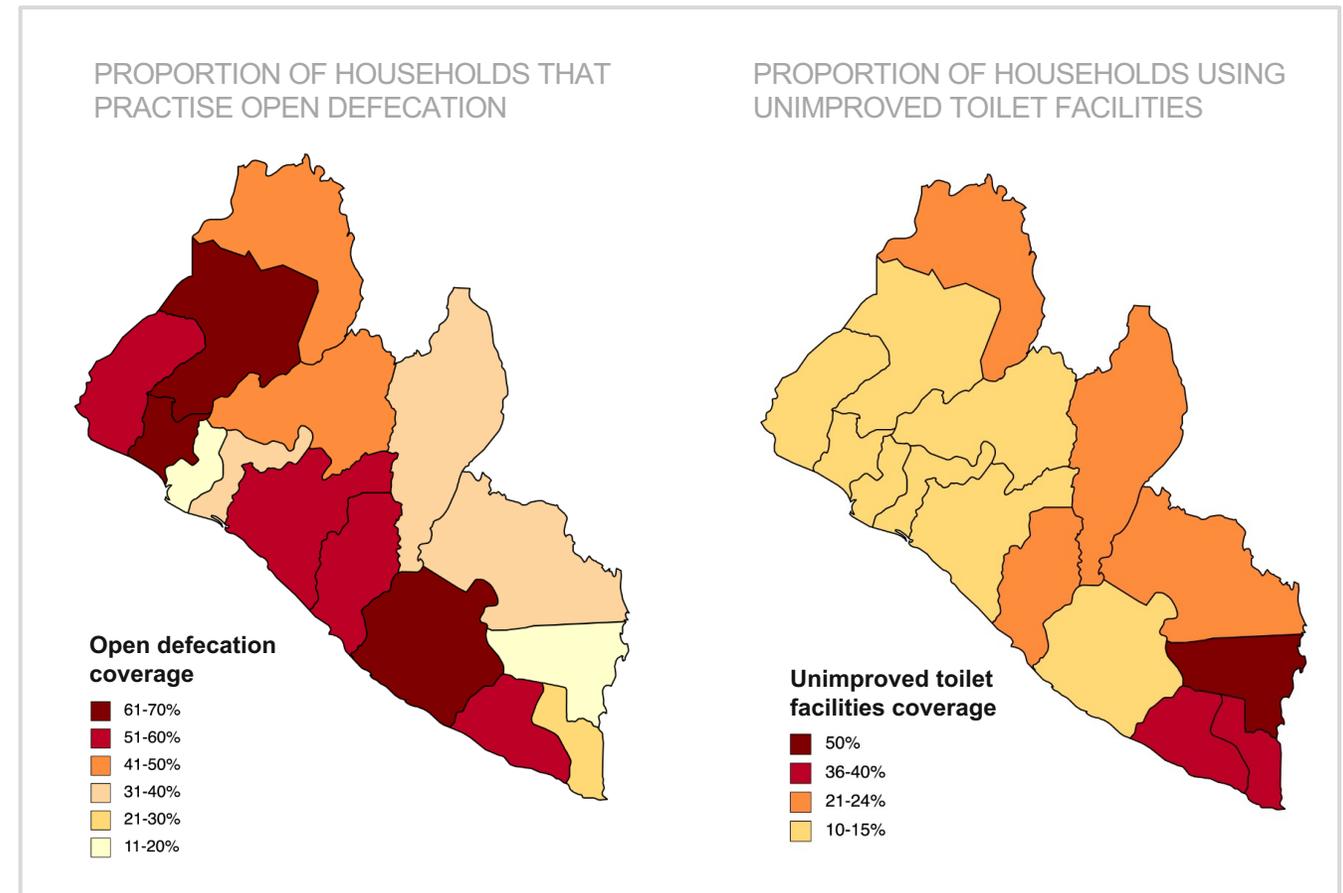
Open defecation is still very much present in Liberia with **8 regions having over 50% open defecation coverage:**

- Gbarpolu: 70%
- Bomi: 64%
- Sinoe: 63%
- Grand Kru, Grand Cape Mount, and River Cress: 56%
- Grand Bassa: 53%

Most of the regions with the **highest unimproved toilet facilities coverage** are located in the **South and East:**

- River Gee: 50%
- Maryland: 40%
- Grand Kru: 36%

» **Regions with a high open defecation rate can be challenging for commercial businesses. Efforts could be located in regions where unimproved toilet facilities are the highest, but open defecation remains relatively low compared to other regions.**



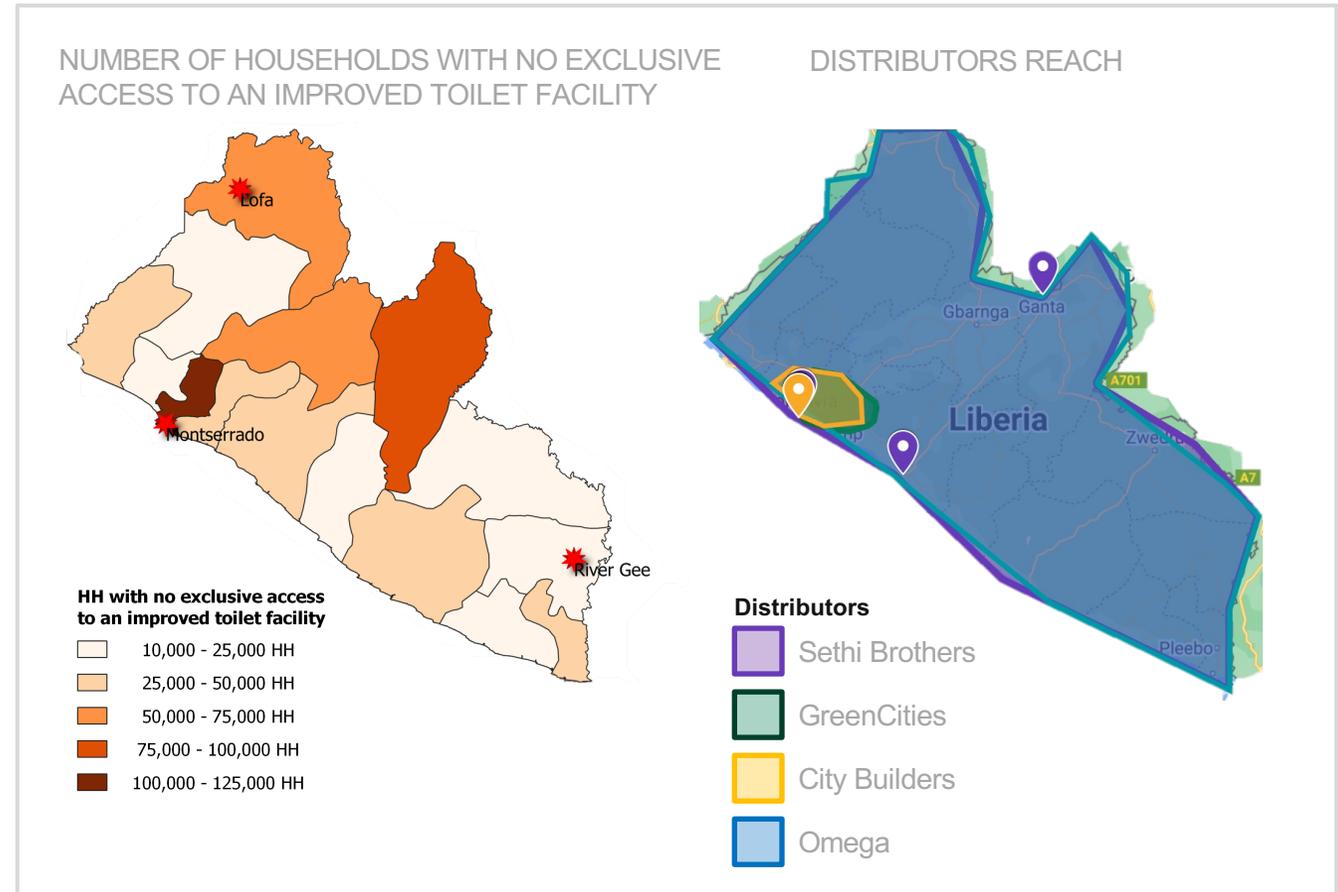
Source: Maps adapted from Demographic and Health Survey, DHS Program, 2020

Montserrado region could be a good starting point for commercial activities in Liberia

Looking at the market opportunity, regions with the highest number of households lacking access to improved toilet facilities are:

- Montserrado
- Nimba
- Lofa and Bong

» A starting point could be to focus its efforts in Montserrado county, where the need and market size is the highest, while having an easy access to manufacturing and distribution activities



Source: Map adapted from Demographic and Health Survey, DHS Program, 2020

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

Plastic import reached \$55 million in 2020, representing a 24.2% increase since 2019¹

- According to the World Trade Organization (WTO), MFN applied duty rate for plastic products are 5% AVE
- The primary import country of plastic products is China with a trade value of \$16.1 million, followed by the United States with a trade value of \$10.4 million (19% of plastic import)¹
- In 2020, Liberia imported \$309K worth of plastic wash basins, mainly from China (54.4%) and India³

0.58%

Share of plastic import in overall import in 2020¹

5%

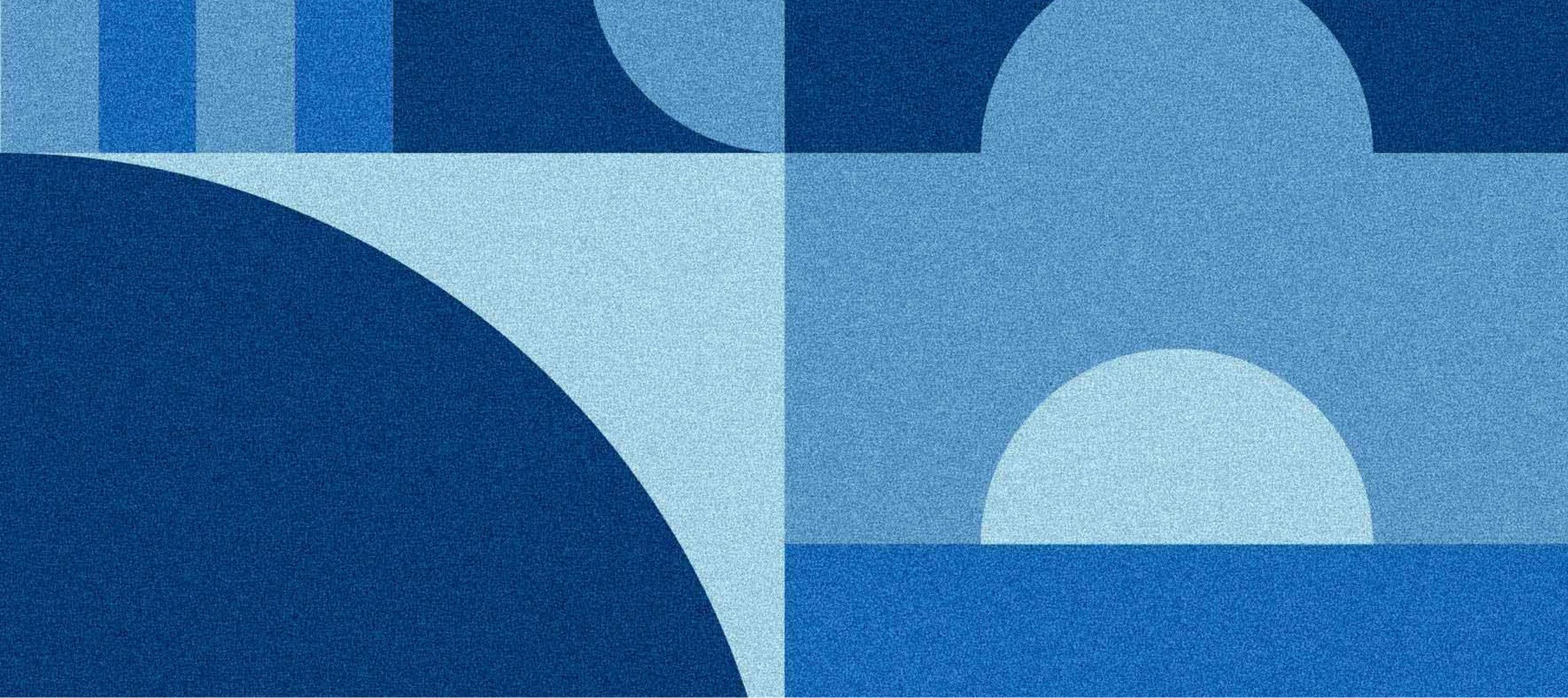
Import duty on plastic products²

29.2%

Plastic import from China (highest) in 2020³

Source: 1. Trading Economics, 2022
2. WTO, 2023
3. The OEC, 2022





V. LIBERIA

C. MARKET STRUCTURE

Diagram of primary product flow and market structure for Liberia

PLASTIC MANUFACTURING

3 companies recorded on Airtable

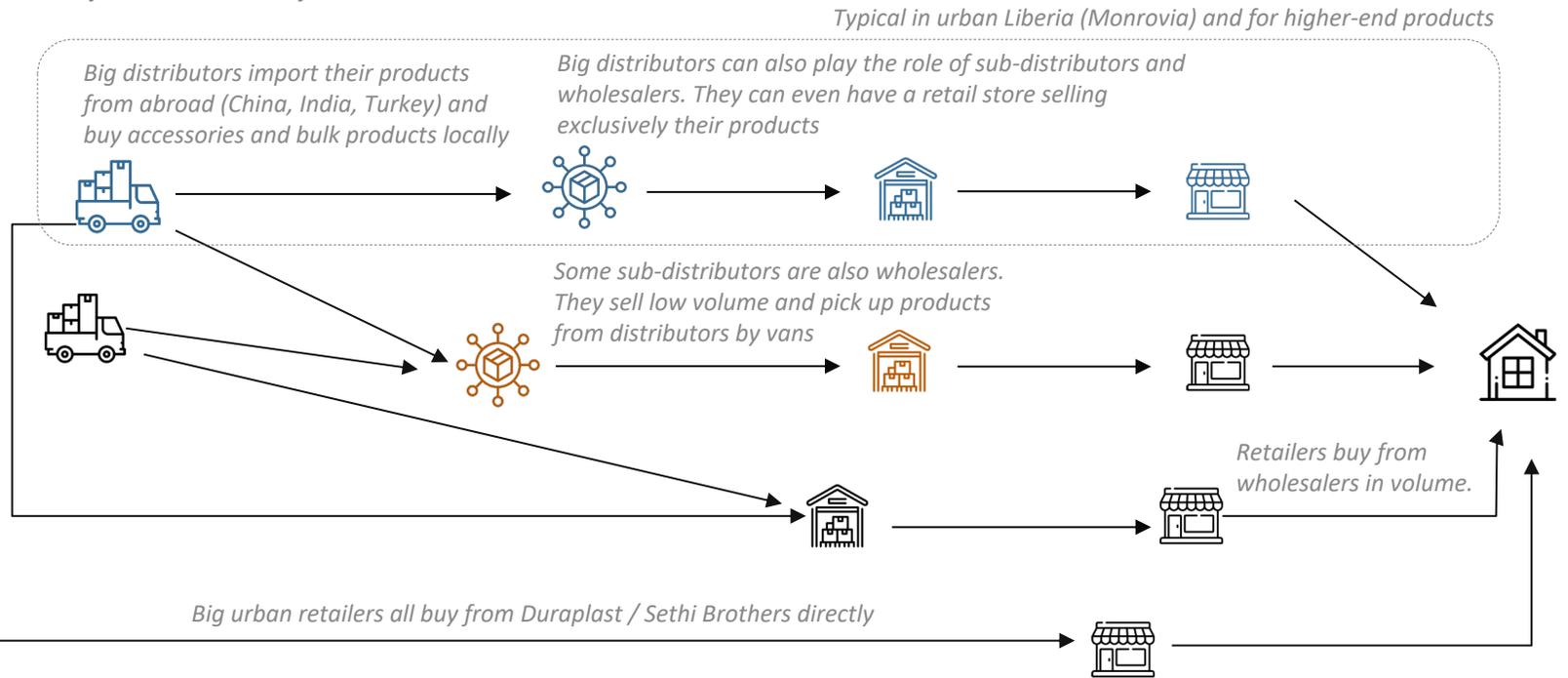


While the manufacturing sector is of plastic households' products, the distribution network of interest is of plumbing and sanitary product

SANITARY AND PLUMBING DISTRIBUTION

15 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 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

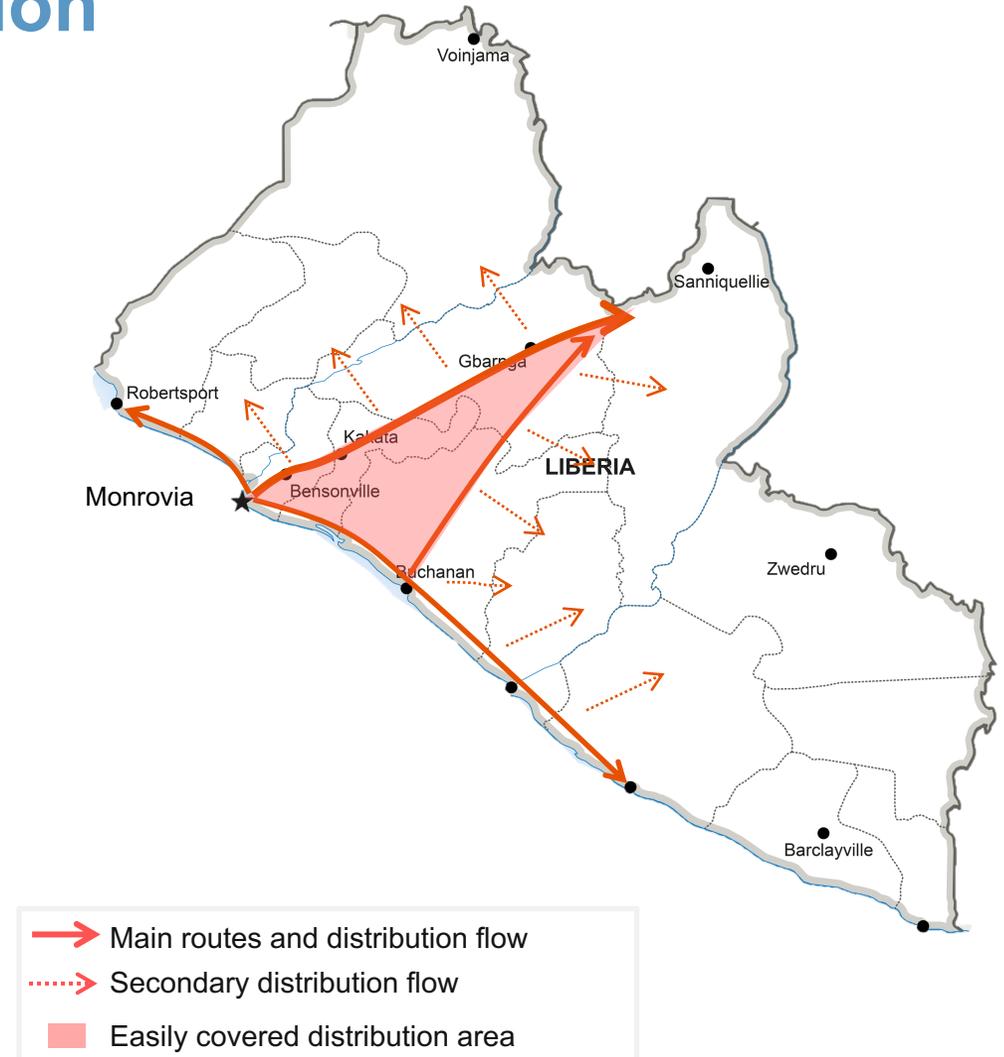
Without dominant clusters, distribution has evolved with more of a hub and spoke model

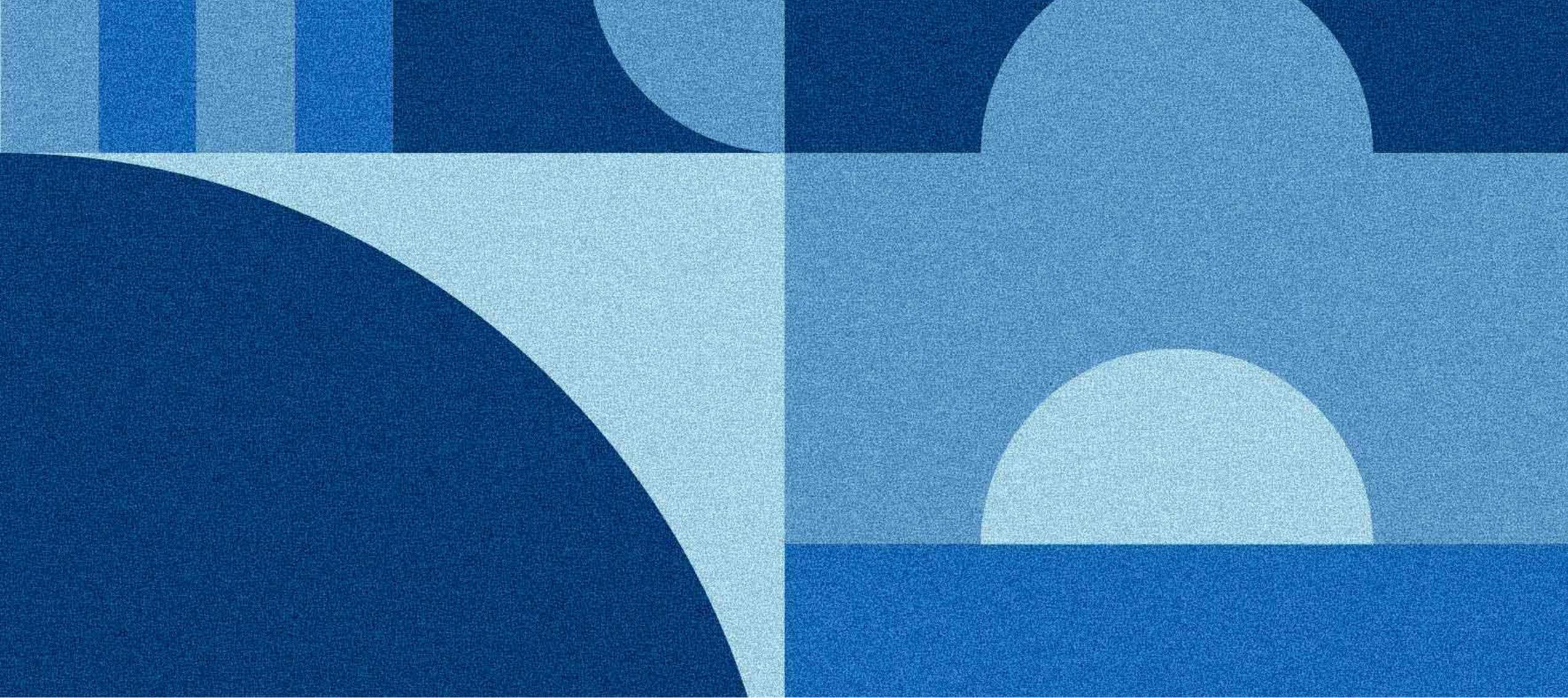
The Liberian plumbing products market is spread along major transport routes from Monrovia to the “interior”

Distributors and retailers are focused on reducing transport costs so seem to have struck a balance between proximity to customer in the interior and suppliers in Monrovia

No hubs were evident in Monrovia or mentioned in any other Liberian cities

The only significant customer for plumbing products in the interior mentioned by distributors and retailers in Monrovia were B2B (mines and rubber plantations)





V. LIBERIA

D. STAKEHOLDERS

Amongst our interviews, we have shortlisted 2 manufacturers and 3 distributors in Liberia

MANUFACTURERS



1. Duraplast
2. Green Cities

DISTRIBUTORS



1. Sethi Brothers
2. City Builders
3. Omega

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 organization must provide the mold at its 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

Duraplast may be open to **political & social capital** as a reason to engage

Organizations may be able to use the potential political and social capital of improved sanitation as Duraplast leadership clearly politically connected with a lot of investment at risk

While capital is not an issue, Duraplast is **unlikely to purchase the molds**

Very savvy businessmen, the leadership of Duraplast will need to be convinced of the business case before investing

Potential to copy so **IP protection** will be key in Liberia

Other players in the market were cautious but did warn that Duraplast was capable and may be tempted to copy products if they sell well

Duraplast and Sethi Brothers makes a **strong distribution network**

Organizations can leverage the combined network and work with the manufacturers' distribution partners

Green Cities is not a potential manufacturer

Organizations could partner with Green Cities with their waste management expertise, but the company will not manufacture toilet products

Duraplast

Manufacturer (Sister company to Sethi Brothers)

INTERVIEW MAIN FINDINGS

- Owned and managed by Jai Khanija
- Only plastic manufacturing player in Liberia involved in the production of plastic and plumbing materials for local used
- Only manufacturer of plastics, pipes and fittings (UPVC, PVC) in Liberia
- Sell to major distributors and retailers through Sethi Brothers with a minimum initial purchase of \$10,000 to set up account
- 200 to 300 local distributors in Liberia (through Sethi Brothers)

TECHNICAL INFORMATION

- 400 to 600 employees (1100 total with with Sethi Brothers)
- Facilities operate 100% on generator for the production process and imported a 3 megawatt generator in addition to several already on site

GEOGRAPHICAL REACH



Warehouse and storage facilities in Congo Town back road, Monrovia, along the Robert International Airport



Duraplast

Manufacturer (Sister company to Sethi Brothers)

INSIDE THE FACILITY AND BLOW MOULDING AREA



Click on the image to see a 360 view

Duraplast

Manufacturer (Sister company to Sethi Brothers)

MANUFACTURING SITE FOR METAL, CEMENT, PIPES, FILM, AND MORE



Click on the image to see a 360 view

Duraplast

Manufacturer (Sister company to Sethi Brothers)

TANK MANUFACTURING AND PIPE/ EXTRUSION MANUFACTURING



Click on the image to see a 360 view



Click on the image to see a 360 view

Green Cities

Manufacturer (and waste management)

[Access to the company's website](#)

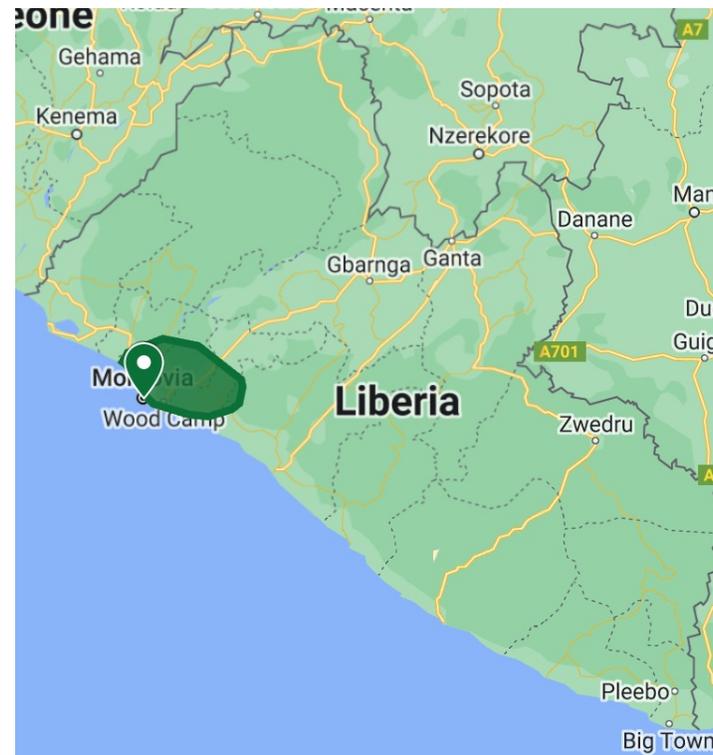
INTERVIEW MAIN FINDINGS

- Founded and managed by James Mulbah
- Founded in 2012, registered in 2014
- Founded as a social enterprise focused on waste, recycling and community engagement
- Plastic manufacturing is not their primary activity
- Interesting potential partner for social impact and exploring local recycled content

TECHNICAL INFORMATION

- 2 blow moulding machines
- 1 seemed to be out of use
- They manufacture intermittently to make simple products (eg: rubber collection cups) from mostly recycled content

GEOGRAPHICAL REACH

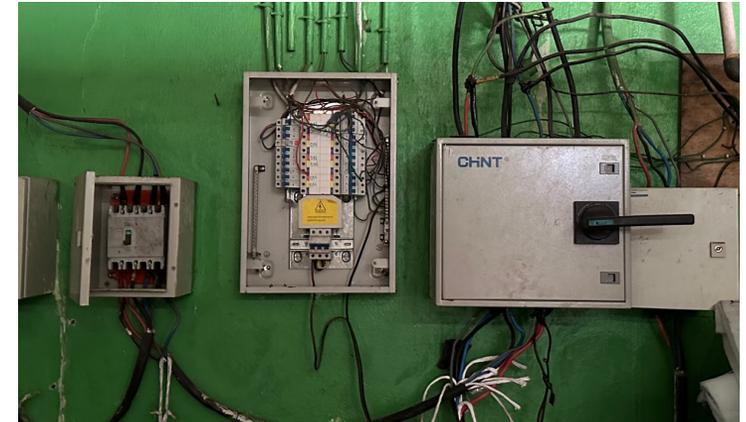


- Main location in Monrovia is offices and small manufacturing location
- Large warehouse and storage facilities on the outskirts of Monrovia

Green Cities

Manufacturer (and waste management)

INSIDE THE FACILITY



Green Cities

Manufacturer (and waste management)

INSIDE THE FACILITY AND BLOW MOLDING AREAS



Click on the image to see a 360 view



Click on the image to see a 360 view

DISTRIBUTION

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 other types of (non-WASH) products, or smaller players who distribute lower-end products and may be more ready to invest and create demand

DISTRIBUTION

There is no dominant cluster for distribution

While there is no cluster, we were not able to find evidence of any major players outside of Monrovia

Wholesalers are spread along transport routes from Monrovia

Transportation costs are a major factor so wholesale and retail serving non-urban markets have grown along major transport routes out of Monrovia

Most players span from distribution to retail

The market structure is very loose with everyone, except Sethi Brothers, acting as distributors, wholesalers and retailers

Working across sectors is typical for some distributors

Omega was clearly comfortable and experienced working with public and social sector clients as well as "key accounts" like mines and plantations

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

Organizations could work with major players whose focus is other types of (non-WASH) products, or smaller players who distribute lower-end products and could be more ready to invest and push demand

Sethi Brothers

Distributor (Manufacturer is Duraplast)

INTERVIEW MAIN FINDINGS

- Owned and managed by Jai Khanija
- Leader in building materials, steel, electrical, plumbing and roofing zincs
- 400 to 500 employees (1100 total with Sethi Brothers)
- Sethi Brothers serve as a distribution point to local Liberian businesses
- Distributors are only allowed to buy from Duraplast through Sethi Brothers, with a starting minimum order size of \$10,000
- They serve 200 - 300 distributors and retailers across Liberia (through Sethi Brothers)

GEOGRAPHICAL REACH



- 10 outlets are in major markets across Liberia currently combined distribution and retail points
- Closing retail business and focusing on distributor and wholesaler
- 2 central branches connecting south-eastern counties (Ganta, Nimba County and Buchanan, Grand Bassa County)



Sethi Brothers is referred as the “godfather of building materials” in Liberia by other players



Sethi Brothers is reducing its retail outlets for strategic reasons (structure and develop the market) and perhaps political reasons too.

“We want to sell to Liberians because they understand the market best and we want to create opportunities” – Mani, General Manager of Sethi Brothers



Other players said organizations working with Sethi Brothers (and Duraplast) need to be politically and legally protected in terms of IP

Omega Supply Chain

Distributor/ Wholesaler/ Retailer

INTERVIEW MAIN FINDINGS

- Founded in 2013 by several brothers all involved in the business
- Abdullah Mansour is the general manager and one of the co-founders
- A key part of their business is key account sales to mines, plantations and major public and social sector programs (eg: Liberian Water and Sewer & World Bank project)
- They import 30-35% of their plastic products and buy the rest from Sethi Brothers

GEOGRAPHICAL REACH



- They have a wholesale/retail outlet where we met in Monrovia
- They have two warehouses near Monrovia
- The company has 2 pick-up trucks
- When delivering product to clients, usually outsource logistics
- They claimed to be able to deliver product anywhere in Liberia
- Mining and plantation customers often require rural delivery done by third party providers



Omega was very open and ready to explore how it could help bring and grow commercial WASH products in Liberia

LIBERIA

↳ COUNTRY OVERVIEW - OPPORTUNITY INDEX - MARKET STRUCTURE - **STAKEHOLDERS**

Omega Supply Chain

Distributor/ Wholesaler/ Retailer

MAIN OFFICE AND RETAIL POINT



Click on the image to see a 360 view



Click on the image to see a 360 view



Click on the image to see a 360 view

Omega Supply Chain

Distributor/ Wholesaler/ Retailer

WAREHOUSE IN CENTRAL MONROVIA



Click on the image to see a 360 view

City Builders

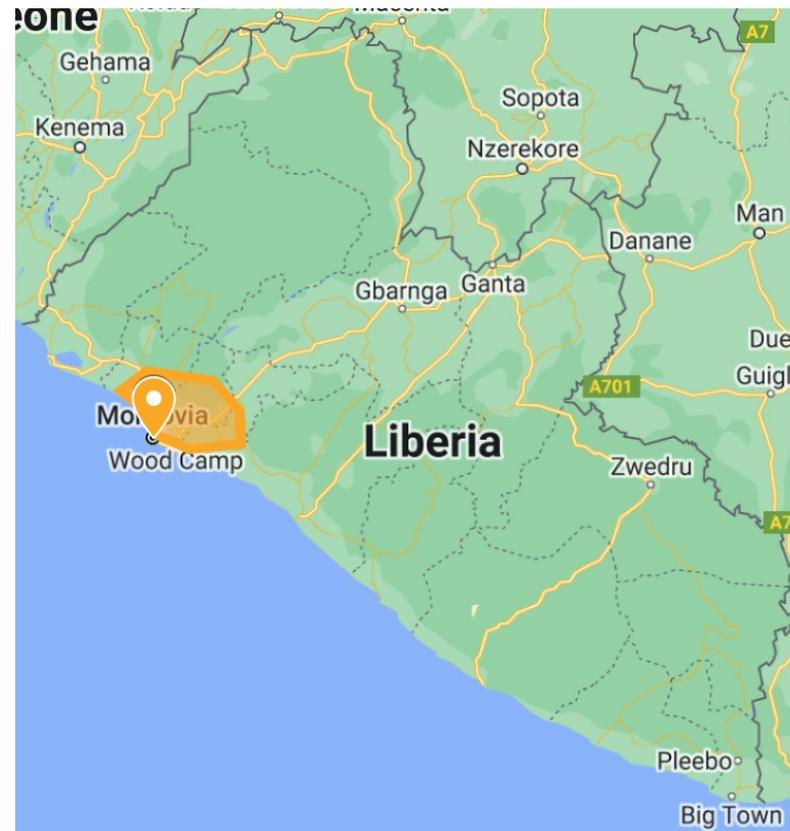
Distributor

Access to website [here](#)

INTERVIEW MAIN FINDINGS

- Established in 2001 and claim to be the market leader (retail)
- Owner and manager, Marwan, was unavailable but is key contact
- Products are more high-end focused
- Customers include any player in the value chain (sub-distributor, wholesaler, retailer) and builders
- Approx 50% of sales to NGOs
- 100% of their products are imported
- Sometimes they buy from others to fill demand (Sethi, Omega...)
- Sell primarily within Monrovia
- Customers from peri-urban areas come to them to get variety and products not available elsewhere
- Can deliver depending on quantity

GEOGRAPHICAL REACH



- Sell to upper income clients in Monrovia and surroundings
- They are expanding their showrooms and opening new outlets
- Can provide transportation on larger orders
- Own several large trucks and outsource logistics when they need it

City Builders

Distributor



Click on the image to see a 360 view



Click on the image to see a 360 view

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- I. CONTEXT, OBJECTIVE, AND METHODOLOGY
- II. EXECUTIVE SUMMARY: WEST AFRICA REGION
- III. LIBERIA 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.** For example, 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: D2D agents
- Learning #3: Non-buyers
- Learning #4: Main barriers to adoption are Price, Shared decision-making and Installation

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 (pan + install) range from ~20GH¢ for a retrofit to >100GH¢ for a new toilet & 78% of users have installed the pan in an existing latrine bringing total costs down (66GH¢)
- 49% of non-buyers "not able to make purchase decision" & they worry about others not taking care of the toilet (cleaning is a shared responsibility for over 70%)
- 55% 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 Process

Training & Activation Program

TRAIN & ENGAGE

TEST & DEMO

EXECUTE & ITERATE

In-Market Training & Activation

Training is: Visible, Public, Obvious

Sales training includes: Technical & Hands-on, Social media, Identifying local influencers

Training outputs: Installers ready, Influence (D2D), Local buzz / 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: Reliable installers, Vetted D2D agents, SATO installed & in use at key locations

D2D Agents Sell & Refine Approach

Key messages, Evaluation, Peer Learning

In markets that show potential but are under-performing, understand why

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

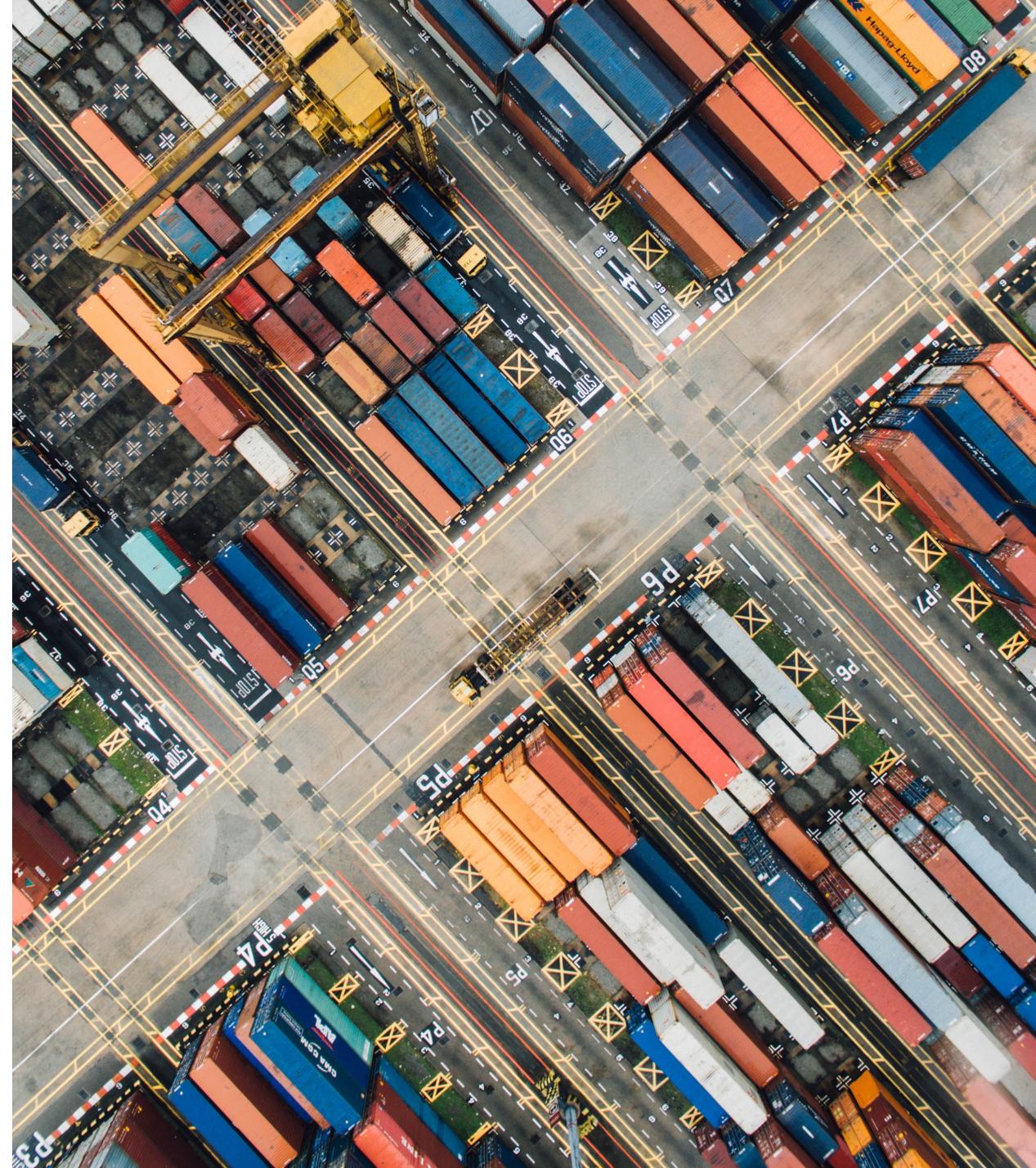
"Abandonment Curves"

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

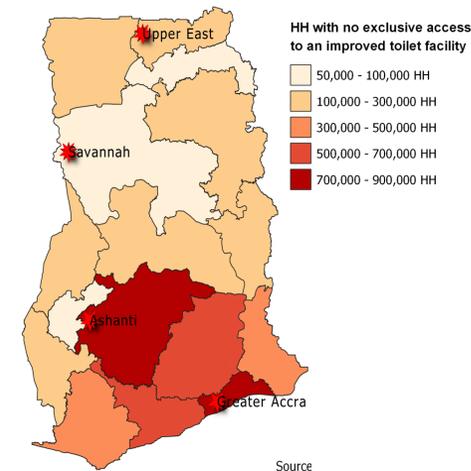
Fixed mold investment
Variable production costs
IP risk
Complexity



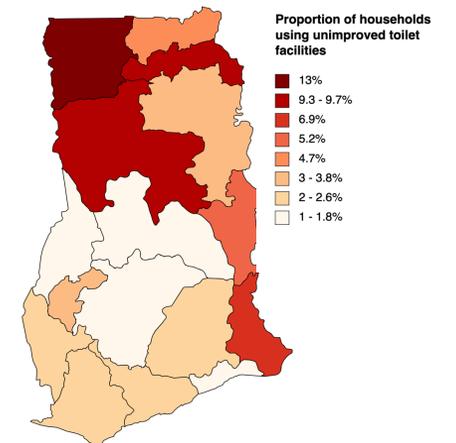
Success may depend on a dynamic symbiosis between social (meeting needs) and commercial (fulfilling demand)

- 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



For example, in Ghana, 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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For more information, please visit:

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

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