WASH Discussion Paper DP/03/2022

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Using Product and Consumer Research Data to Inform Hand Hygiene Programming

SUMMARY

Hand hygiene programming contributes to the prevention of infections including pneumonia, diarrhoea, and COVID-19 (CDC, 2020) amongst others. Various campaigns and tools have triggered hand hygiene behaviour change, and these approaches can rapidly support increased **demand** for soap. However, the **supply** side of hand hygiene service provision has received comparatively less attention to date. This paper discusses the global potential of using market data and information in hand hygiene programming decision making.

Retail measurement of data allows stakeholders (such as manufacturers, suppliers, policymakers, programme managers and others) working in resource-limited settings to determine the feasibility of a market-based intervention. This note reports the highlights emerging from a retail measurement study by NielsenIQ on hand hygiene products in South Asia, including: 1). toilet soap[1] in India, Bangladesh, Sri Lanka and Pakistan and 2) and sanitizer, liquid toilet soap[2] and hand wash in India. As WASH decision makers gain more experience in using market research to support decision making, detailed market data can strengthen programmes to improve results, inform policies and plans, improve the quality of services provided and better target resources (products and funding).

Background

All of us know the need for quality hand hygiene services, both to protect our own health and those around us. In South Asia, only 57 per cent of households have a place in their homes to wash their hands with water and soap (JMP, 2020). In the context of a high disease burden and insufficient levels of hand hygiene, it becomes extremely important for governments, development partners and programme managers to make the best use of their limited resources, which have become further strained through the COVID-19 pandemic. To scale-up and sustain momentum, in June 2020, UNICEF and WHO launched the Hand Hygiene for All global initiative (HH4A) that supports increasing access to basic hand hygiene facilities at homes, schools, health care facilities, workplaces, markets, transportation hubs, and all other public spaces.

[1] A mild and usually perfumed soap for washing the hands and face and for bathing
[2] Liquid form of toilet soap

To achieve hand hygiene for all, the 'right' products and services - like soap and sanitizer - must be accessible to consumers for easy, convenient, and desirable hand hygiene practice. The COVID-19 outbreak has brought opportunities to boost production capacity, adjust production lines and enhance supply chains to respond to increasing demand for hand hygiene goods/services.

The need to develop effective hand hygiene strategies, policies, and interventions based on high-quality data and information is urgent. Yet, data on the market opportunities in the hand hygiene space and gaps in current service provision are rarely used to inform and/or monitor programmes and make decisions for improved hand hygiene.

Such data are critical for programme improvement and decision-making process, as well as long-term sustainability of programming

Market intelligence informs us about market size, market models, available businesses, existing handwashing products, sales volumes, competition, distribution, and other trends

This note reports on the opportunities to use retail measurement data such as that collected by NielsenIQ on sanitizer, toilet soap, liquid toilet soap and hand wash for India, with more limited data on toilet soap[3] available for Pakistan, Bangladesh, and Sri Lanka. It discusses the importance and challenges in using market research data to inform decisions around hand hygiene policies and programmes by a range of professionals.

Picture 1: A child washing hands in a school in Bangladesh

Source: © UNICEF/UN0527560/Sujan

[3] The note adopts the product types as reported by NeilsenIQ, recognizing that WASH actors do not always make such distinctions e.g. between liquid soap and hand wash.

Methodology

NielsenIQ conducts Retail Measurement through its syndicated Retail Measurement Services (RMS), considered the global industry standard for quality data on product movement, market share, distribution, price, and other market-sensitive information.

Retail Measurement is the process of tracking movement of consumer goods from manufacturer to the consumer through the retail trade. It comprises of:

- Measuring the presence of different products across retail outlets
- Quantifying sales for each of those products
- Estimating how much stock remains in trade for future sales

Hand hygiene items, such as soap and sanitizer, are typically fast-moving consumer goods across many markets. The estimation of retail fast-moving consumer goods sales is based on modern trade (e.g., a retail organization or a chain store), as well as traditional trade (independently owned store e.g., grocer, chemist, food outlet) in 2019 and 2020.

Wholesalers and semi-wholesalers, street vendors, hotels, restaurants and other on-premises consumption, seasonal channels, duty-free and inaccessible areas were excluded from the exercise.

From April to June 2020 (after the COVID-19 onset), NielsenIQ used an alternate methodology for sales estimation in Sri Lanka. They physically audited stores for part of the sample and collected information from other stores via calls or SMS messages. Also, some stores lacked stock data. Given these limitations, NielsenIQ assumed that all purchases made in the last month to have liquidated in the current month, therefore projecting that purchases in one month equated to sales in the subsequent month (e.g., purchases for April 2020 = sales of May 2020). Use of an alternate methodology could have caused the estimates to diverge from market reality to a greater extent than what is expected in normal circumstances.

Picture 2: Children adopting hand washing practice

Source: © UNICEF/UNI395828/Soni

Results

In India, sales of liquid toilet soaps reached new levels in the second half of 2020 (H2'20), with extraordinary levels of consumption driven by concerted demand-generation activity around COVID-19. See Table 1. The increase in consumption of these items aided the growth of the overall hand hygiene market.

In India, the hand sanitizer market grew 12 times in H2'20 versus H2'19 (second half of 2019) - led by an enormous jump in demand (see Table 1 and Figure 1). The growth in demand for hand wash seems to be less (see Table 1 and Figure 1). Potential reasons for this include strong promotion of sanitizer as well as increased consumption by institutions/businesses.

In several countries in the region, (India, Sri Lanka, and Pakistan) sales of toilet soaps (used for handwashing as well as bathing) dipped during the early phase of the pandemic but then witnessed a revival with an increase in consumption (see Figure 2 and 3).

As in India, this dip was most likely brought on by the strong promotion of sanitizer at the beginning of the pandemic replacing the use of water and soap with sanitizer for hand hygiene.

Whereas in Bangladesh, sales of toilet soaps have been gradually increasing over time, with industry growth largely led by an increased consumption level and a shift towards premium brands.

In Sri Lanka, toilet soap witnessed a revival in H2'20 post drop in H1'20 (first half of 2020) but had yet to reach its historical levels within the dataset provided.

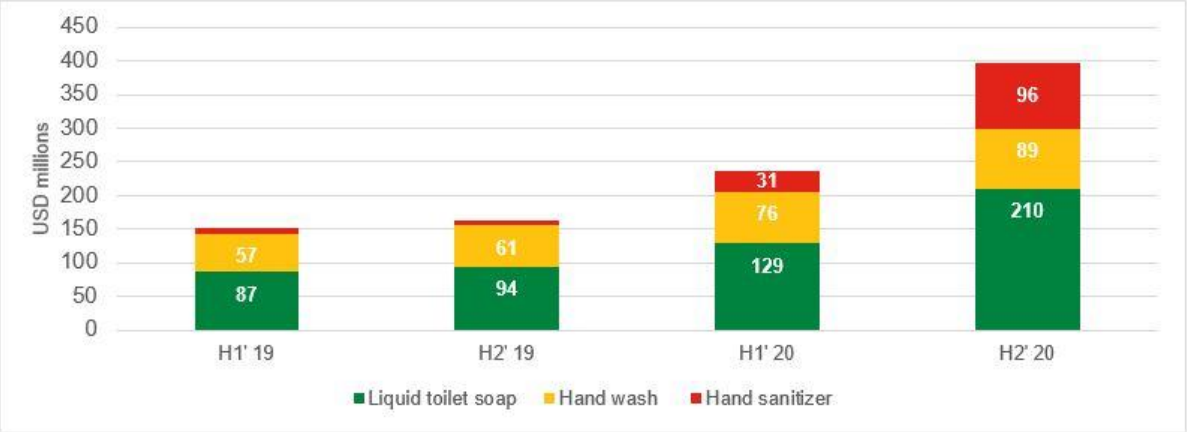
In Pakistan, the industry gradually expanded over time, led by consumption growth. The shift towards premium offerings also helped the industries net value growth – see Figure 3.

Table 1: Sales of liquid toilet soap, hand wash and hand

Product	Value Sales (USD Millions)				Volume Sales (Tonnes/KL)			
	H1'19	H2'19	H1'20	H2'20	H1'19	H2'19	H1'20	H2'20
LIQUID TOILET SOAP[4]	87	94	129	210	23400.6	25329.2	33823.7	52234.6
HAND WASH	57	61	76	89	20625.4	22277.1	28809.4	36009.5
HAND SANITIZER	7	8	31	96	440.0	454.9	2862.3	13983.8

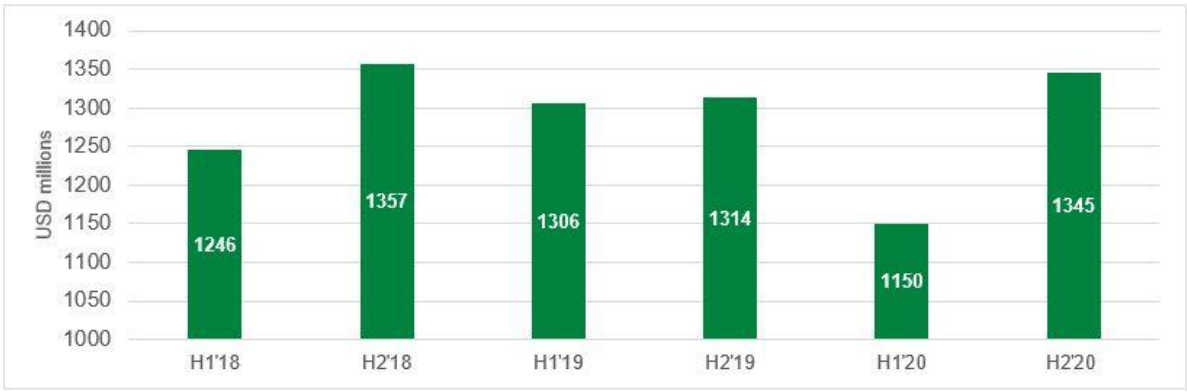
[4] Liquid hand soap is a product of natural origin, while hand wash is a product of synthetic origin

Figure 1: Sales of liquid toilet soap, hand wash, hand sanitiser, India (USD millions



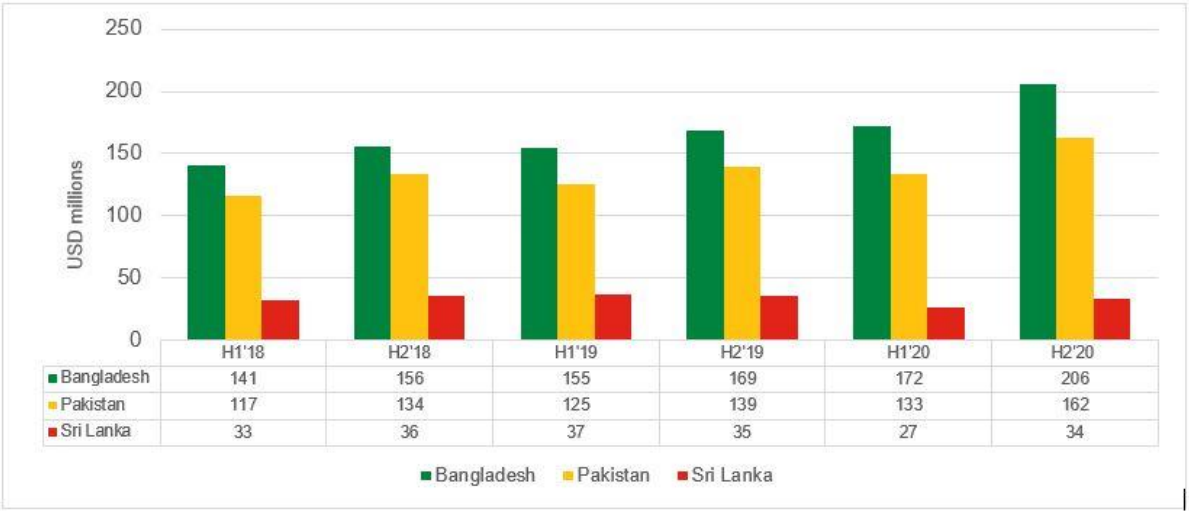
1 USD = 75 INR

Figure 2: Sales of Toilet Soap, India (millions)



1 USD = 75 INR

Figure 3: Sales of Toilet Soap, Bangladesh, Sri Lanka and Pakistan (USD millions)



	H1'18	H2'18	H1'19	H2'19	H1'20	H2'20
Bangladesh	141	156	155	169	172	206
Pakistan	117	134	125	139	133	162
Sri Lanka	33	36	37	35	27	34

1 USD= 86 BDT, 175 PKR and 203 LKR

Discussion

Hand hygiene is one of the most effective - and cost-effective ways - to prevent the spread of COVID-19 and other infectious diseases. Findings for South Asia show that washing hands with soap and water receives too low a priority at home despite the availability of water. Four in ten households in South Asia do not have handwashing facility with soap and water on premises (JMP, 2020). A quadrupling of efforts is required to ensure universal access to basic hygiene services at home. At current trends only 75% of the population of South Asia will have access to basic hygiene services by 2030 (JMP, 2020). To achieve hand hygiene for all, we each need to change our individual behaviours, but we also need to increase access to the products and services that enable new behaviours. Markets provide the best means through which households will have sustainable access to soap and the facilities needed to make handwashing easy, convenient, and desirable. This requires a solid understanding of motivators and barriers to uptake of the targeted behaviour.

Reliable data on hand hygiene is notoriously hard to gather. A variety of indicators are used, such as proxy indicators like: “Soap present in the household” and “Soap and water present together at a handwashing place”, self-reporting: “Self-reported handwashing with soap at any critical event/at specific critical event” are used to measure hand hygiene in households and on national scale. The JMP has identified the presence of a handwashing facility with soap and water on-premises as the priority indicator for global monitoring of hygiene. Household surveys increasingly include a section on hygiene practices where the surveyor visits the handwashing facility and observes if water and soap are present (www.washdata.org).

Market intelligence is another valuable source of information that can help understand markets better and improve the way hygiene product supply systems function, making them more effective and more competitive.

The data presented in the Results is related to sales only: it does not directly tell us about access or distribution. Thus, market data related to availability/access in local markets is also needed. Such data can also help to identify failures (such as where there is limited distribution/access to soap) preventing households and institutions access hygiene products. Initiatives can then be developed to overcome the binding constraints. The data can help generate new knowledge about underserved populations, any barriers to purchase or the need for new products or services. Further it has potential use in monitoring the impact of behaviour change campaigns based on the hypothesis that a population that increasingly practices hand hygiene will consume and therefore buy more products[5].

Why don’t WASH decision makers currently routinely use product and consumer data to inform their decisions?

Hand hygiene actors and programme implementers have not traditionally used market research to inform decision making. There are many possible reasons for this disconnect between stakeholders and available data: perhaps because the value of data in improving the provision of services is not fully recognized. The tools and skills needed to analyse and then apply this analysis to programmatic needs may also need to be strengthened among stakeholders. The cost of market data may further be prohibitive as data (depending on the level of breakdown (national/regional/local) can be rather costly together with a gap in communication between WASH data users (policymakers, programme managers) and private sector data producers (market intelligence/research agencies).

[5] Provided that campaigns aren’t accompanied by distributions of free products

What can we do to improve market research-informed decision making?

The COVID-19 pandemic has seen increased financial commitments by the international community to provide the necessary programmes and services to meet the hand hygiene needs of target populations and achieve the SDG 6 targets. However, these commitments and improvement do not always lead to data-informed decision making, with the risk that development partners' procurement has a detrimental effect on product pricing or the broader market availability of hand hygiene. It could also have a negative impact on local markets when offshore procurement takes place.

Whilst WASH actors have several data sources to improve hand hygiene programmes, such as the JMP, formative research on target beneficiaries, national studies including hand hygiene data such as Multiple Indicator Cluster Surveys, M&E data (including surveys, evaluations, research studies) that tracks progress in the delivery of hand hygiene services and evaluates the outcome and impact of these services on the health status of communities, market intelligence is typically not considered yet to inform programming. In addition, expenditure tracking can illuminate life cycle costs for hand hygiene services. Yet, actors don't always refer to the markets. Market intelligence for hand hygiene products and services can complement the traditionally collected and referenced data. If used strategically by the WASH sector (programmes, service delivery organizations, policymakers, and other stakeholders), it can inform decisions on where to invest most efforts and funding in hand hygiene programmes. It can further support advocacy and help partner with the private sector as it brings both together via a common language. It is key to choose the right level data (national, sub-national, regional) to be able to get to meaningful results, when analysing.

How can market intelligence be used in hand hygiene programmes?

Whilst useful, the sales data presented earlier is not sufficient to determine availability. In future, purpose made market assessments are required that serve two main purposes: i) to provide implementers with systematic information on the hand hygiene products and services available; and ii) to recommend where implementers should focus on in market development. UNICEF can play a key role in leading these assessments in the Region. The data can be used to test whether the assumptions that underpin hand hygiene programmes (e.g., that soap is either too costly or supplies are unavailable) are supported by evidence. Programme designers can then use the data to develop robust Theories of Change, underpinned by accurate assumptions, and then assess how effective their interventions have been in delivering outcomes and impacts.

Market facilitating activities that stimulate the markets for soap to develop and grow. Data can be used to support coordination between actors, funding or building capacity of market actors, as well as influencing policy and regulations of the hand hygiene market. Supply chains in the Region can be limited by barriers such as poor road conditions, bureaucratic processes, security issues, and frequent natural disasters. Landlocked or island countries in the Region may have lower production capacity. Consequently, the majority of rural households are likely to use a limited range of soap products. Data could support local suppliers and manufacturers to increase their offer with a range of affordable, durable, and high-quality hand hygiene products. Greater trade in soap is likely to positively impact the financial sustainability of manufacturers who would be able to increase volume of sales and scale of production, increase the availability of appropriate options, and bring down prices. For instance, the data from Bangladesh and Pakistan reveals a shift in type of products offered such as premium offerings (see NielsenIQ (2020) for the detailed results).

Increasing awareness about hygiene is a key factor driving growth of the hand hygiene market. Data could then inform the development of generic communication campaigns designed to promote and establish handwashing with soap, rather than promoting a specific brand.

Market engaging activities: Data can support programme implementers to engage with soap entrepreneurs, business owners, manufacturers, distributors, and retailers in order to build capacity in the market to meet the requirements of the poorest. Data can help development partners understand the viability of soap businesses (i.e., models, margins, profits, and business plans) and the market's capacity to supply and scale up new or modified hand hygiene goods in response to an increase in demand. Such data could help development partners to strengthen the capacity of private sector actors, Soap Manufacturers Associations and government agencies to engage with, and benefit from hand hygiene markets. It can also support monitoring the availability and prices of hand hygiene products and supplies to ensure hand hygiene market systems are robust and capable of responding to fluctuations and disruptions.

Targeting: With a data-informed strategy for last mile distribution, businesses can diversify the range of products and services available in rural areas. Currently, certain consumers face a disproportionate cost and burden in accessing soap. While soap options are generally widely available on the market, access and use at the household level remains somewhat fragmented. The isolation of some rural communities in the Region affects the marketing, supplies, product options and price of soap. For instance, countries with sparsely populated areas may face particular challenges in making sure soap makes the 'last mile' from the small town to the village household (for instance due to the challenge of transport or poor road conditions). Cost currently makes some options impractical for the rural poor and can incentivize using local materials (such as ash or soil), which are less effective. Further emphasis on targeted distribution (e.g., using data demonstrating gaps in sales) is required to ensure that the products can find their way to the most vulnerable households.

High volume sales are one way to drive down the costs of soap businesses. Additionally, the affordability of soap and the purchasing behaviour of low-income households can be supported through subsidies targeted to reach the lower income groups as well as other vulnerable groups. Policies such as removing VAT to ease affordability of soap and tracking the type / value of soap sales in particular geographic areas can also facilitate the targeting of appropriately priced hygiene products. In so doing, it will contribute to increasing accessibility of hygiene products to under-served households and places as part of the cross-cutting objectives that UNICEF aims to deliver.

Picture 3: Hand washing in action

Source: © UNICEF/UN0139604/LeMoyne

Conclusion

UNICEF has initiated market-based approaches to strengthen its hand hygiene interventions. Market research can help determine the feasibility of a market-based intervention, inform the design of new hand hygiene programmes and interventions, assist in managing and monitoring ongoing programmes and services as well as improve the pro-poor benefits of programmes, policies and advocacy.

Next steps with the information reported in this note include for Country Offices, with the support of Regional Office, to connect this data with programming (with the aim to respond to demand, address barriers, and respond to market gaps) as well as to review the ability of the market to respond to the demand that has been created by the COVID-19 pandemic as well as the market actions necessary to sustain the increased demand.

Going forward, more detailed market assessments will be required to profile national and sub-national markets for hand hygiene products and services as well as to identify consumer preferences, the acceptable price range and opportunities to meet the needs of specific market segments (such as vulnerable groups, hard to reach geographies, schools and health care facilities).

More detailed data can further inform programme engagement with businesses to upscale the availability of aspirational and affordable hand hygiene products and services. For this to happen WASH stakeholders require the resources to access/purchase the data and the technical capacity to manage and analyse the findings. This means working with market research companies to ensure that the information is available and in a format that is easily interpretable for WASH stakeholders for its ultimate use, which is to contribute to better health outcomes for the most vulnerable.

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