

# Sanitation Market Analysis

SUMMARY REPORT: PAKISTAN

# Acknowledgements

UNICEF contracted Oxford Policy Management to conduct an assessment of the sanitation markets in Bangladesh, Nepal and Pakistan. This report is part of a series and includes findings from the assessment in Pakistan.

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# Summary

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## Context:

Following the 2010 floods, the Government of Pakistan developed the Pakistan Approach to Total Sanitation (PATS) as a country specific strategy to scale up sanitation programmes, particularly in rural areas to end open defecation. PATS has helped almost 18 million people to construct and use toilets. The last ten million people who need to construct toilets are mostly poor, whereas 176 million need to upgrade their sanitation facilities to meet the SDG target of safely managed sanitation by 2030.

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## Key products include:

Sanitation products are manufactured and procured in production hubs. Large manufacturers generally produce higher-end sanitary products while smaller-scale manufacturers produce a combination of medium-cost products, but of mixed quality standards. The sanitation industry has not focused on low-cost products in Pakistan. Sanitation products are also imported from China.

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## Levels of demand and market size:

The analysis of the costs of various latrine types constructed in the recent past shows that the prices ranged from US\$264 to US\$33. The affordability analysis shows that only ventilated brick-lined direct pit latrine met the affordability criteria for most households. If all households currently practicing open defecation purchased the cheapest toilet design, this would represent a market value of US\$100 million. If all households accessing an unimproved or shared facility upgraded to a pour-flush off-set latrine, this would represent a market value of US\$430 million. Whereas to reach the standard of safely managed sanitation, an overall market worth US\$2.8 billion exists in Pakistan.

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## Constraints faced by businesses in sanitation include the following:

Rural SanMart owners struggle to keep prices down for their customers and are subject to fluctuating demand; entrepreneurs and small businesses struggle to access finance; costly and inconsistent supply reduces the competitiveness of domestically manufactured products; manufacturers and distributors lack information on the sanitation market; rent-seeking by public officials and high levels of tax are also among the key challenges.

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## Key opportunities to expand the sanitation market include the following:

Use of microfinance networks to share information about sanitation demand as well as to boost provision of credit for sanitation purchases for businesses and customers; the Clean Green Pakistan Movement and growing sector coordination also hold potential for innovation in low-cost sanitation designs as well as to strengthen supply chain relationships.

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# Introduction

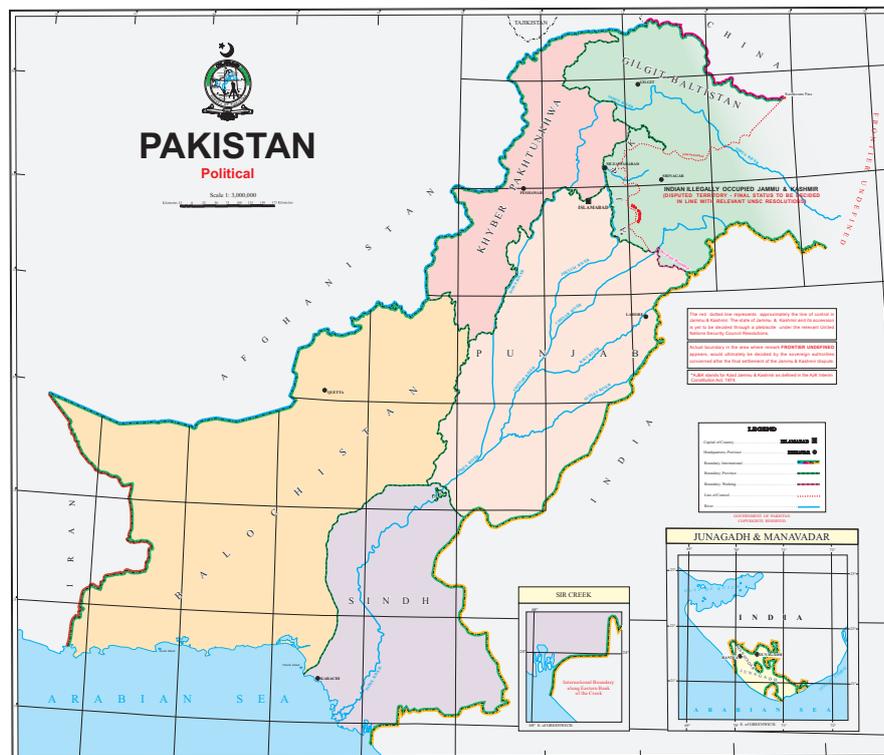
This brief provides an assessment of the demand side, supply side, and enabling environment of the sanitation market in Pakistan. It concludes with a series of recommendations for catalytic market systems changes.

Pakistan is the second largest country in South Asia, with a population of about 207.8 million people (Pakistan Bureau of Statistics, 2019), and a growth rate of 2% (World Bank, 2018). The rural/urban composition has not changed greatly in the past few decades – with about 64% currently living in rural areas (World Bank, 2018). Pakistan is made up of four provinces – Balochistan, Sindh, Punjab, and Khyber Pakhtunkhwa, which recently merged with the Federally Administered Tribal Area – and three federal territories; Gilgit Baltistan and the disputed territories of Azad Jammu and Kashmir (Figure 1). Pakistan has endured a great deal of instability post-independence. It has seen decades of strife between its political parties and the military (with intermittent periods of martial law), been locked in regional conflicts with its neighbours (especially India and Afghanistan), and faced several deadly attacks by religious extremists (BBC, 2019).

Between 2010 and 2017 the annual rate of GDP growth increased from 1.6% to 5.7%, and although other economic indicators have also improved, Pakistan's income inequality has stagnated since 1990. For example, Pakistan's GINI index has barely shifted since 1990 (World Bank, 2018). The portion of the population living below the poverty line has decreased since 2000. The poverty headcount ratio has also decreased significantly in the past few decades, with just 4% living at or under US\$1.90 a day (World Bank, 2017). That said, poverty still affects a significant number of households in Pakistan, especially in rural areas (almost half of households live in the lowest-income quartile) and to some extent in urban areas (almost one-fifth live in the lowest-income quartile) (World Bank, nd).

Life expectancy has climbed slowly over the last few decades and has now reached 66 years (World Bank, 2018). A key explanatory factor for the low life expectancy in Pakistan is in part the prevalence of diarrheal diseases, which ranks in the top five leading causes of death in Pakistan (CDC, 2014).

Figure 1: Map of Pakistan



Source: surveyofpakistan.gov.pk

# Methodology

In the context of a world with 4.5 billion people without access to safely managed sanitation (WHO & UNICEF 2019), one of the key programming approaches employed by UNICEF in its global WASH strategy (2016-2030) is building sustainable markets for water, sanitation and hygiene goods and services which balance demand and supply.

UNICEF contracted Oxford Policy Management to conduct an assessment of the sanitation markets in Bangladesh, Nepal and Pakistan, to improve their understanding of the product and market landscape, to inform UNICEF's market-led approach for improving the supply of appropriate sanitation for communities in the long term. This brief is drawn on the report of the market assessment for Pakistan.

The methodology includes a number of steps:

## Step 1: An inception phase

The inception phase is necessary to understand the priority focus areas for the assessment.

## Step 2: Mapping the market system

Mapping the market system involves studying the demand-side; supply landscape and product assessment; as well as to analyse product and supplier data.

### Step 2.1 Demand-side study

The demand-side study collects information on:

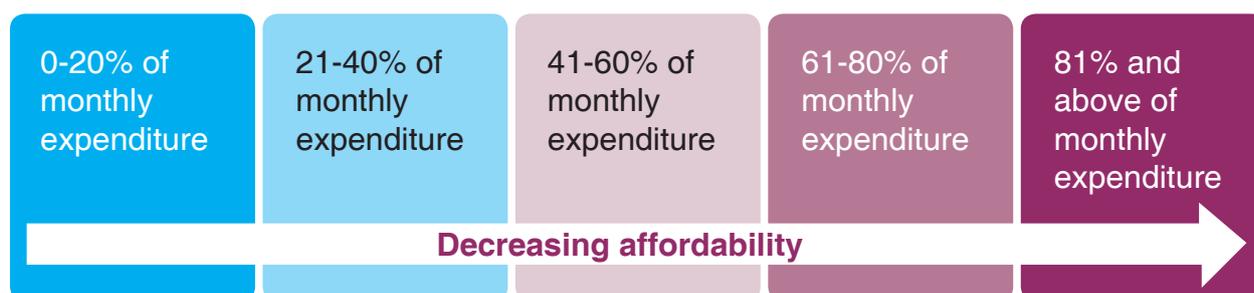
- Levels of demand (current and potential) for sanitation products and services amongst certain groups of the population (e.g. based on income or geographic location);
- Preferences for different types of toilet amongst different types of customer (e.g. rural or urban, geographic location and different income groups);
- Barriers to accessing the sanitation market for low-income groups; and
- Affordability of certain toilet designs.

Secondary data can be collected from sanitation programmes, sector reports, and peer-reviewed literature. Insights on the demand-side market dynamics can also be collected as part of the investigation into supply landscape and product assessment and the wider enabling environment affecting sanitation markets.

**Toilet costs:** The possible cost drivers inherent in the construction of typical toilet designs for household toilets can be assessed using costing information for materials, labour, and, to the extent possible, other cost drivers such as transportation from upstream supply chains to markets and vending points, profit margins, and transaction costs along the supply chain. Costs for labour can be collected in the form of daily rates of skilled and unskilled labour.

**Affordability:** OPM developed an affordability model to better understand the financial constraints faced by householders (particularly low-income and middle-income householders). The affordability model considers monthly consumption data disaggregated by income quartiles (derived from the Global Consumption Database) against the upfront cost of constructing a toilet. The model also considers other factors affecting affordability including household savings, remittances, and willingness to pay (WTP).

**Figure 2: Affordability framework**



Source: Authors

In attempting to quantify demand, the Joint Monitoring Programme's (JMP) data on access to sanitation provides information on the number of people currently accessing a range of sanitation facilities. Existing studies and assumptions can be used to estimate the number of people who demand a sanitation facility that differs from the one they currently have access to.

For this exercise it is also important to consider two stages of demand. First, the level of potential demand, which can be considered as the number of people whose current sanitation facility is considered inadequate. Of course, every individual will have their own opinion of what they consider to be adequate, based on their knowledge and view of the importance of sanitation, in comparison to other areas of their life.

Using the JMP definitions, the customer groups includes: 1) those practicing open defecation, who can be considered as potential first-time users of a sanitation facility; and 2) those accessing an unimproved facility who can be considered as potential demand for an improved facility (unimproved and limited sanitation access under JMP terminology).

The second stage of demand is actual demand, defined as those people who have expressed a willingness and capability to improve their access to sanitation. A number of conditions need to be in place to support the conversion of this potential demand to actual demand. These include a dissatisfaction with current sanitation access, a knowledge of sanitation products and designs, access to sanitation-related products, materials and services, a willingness to pay for these, and an ability to afford them.

Existing surveys of WTP and user needs can be used to understand levels of actual demand framed around different customer profiles. Where feasible, WTP figures related to actual demand can be scaled up to estimate regional actual demand (within a country) or scaled up to the national level.

### Step 2.2 Supply landscape and product assessment

The aim of the supply-side study is to:

- Identify the actors involved in sanitation supply chains;
- Understand the roles of these actors, the scope of their work, their motivations, incentives, and challenges;
- Understand the type, volume, and nature of sanitation products and services available;
- Identify constraints in the market, particularly to improving access for low-income customers;
- Compile a database of suppliers and their products/services; and
- Compile a list of stakeholders who could be considered as invitees to the industry consultation.

### Step 2.3 Product and supplier data

Collect information on products and suppliers by tapping into known networks following a snowball approach to identify new suppliers.

### Step 3: Identifying constraints

Following completion of the mapping exercise of the market system, the main market constraints are identified. The focus here is constraints as they pertain to lower-income households accessing better sanitation facilities. The analysis focused on understanding what is preventing and or discouraging the supply side from offering appropriate, quality sanitation solutions at affordable prices.

### Step 4: Provision of recommendations for catalytic market systems changes.

Having identified the main constraints, in this step the constraints are prioritized in the order in which they can be tackled, and recommendations provided in line with the main components on the market analysis: demand side, supply side, and enabling environment.

### Step 5: Validate findings, collate new insights, and begin action planning for improving sanitation markets

National industry consultation meeting is held in order to validate findings, collate new insights, and begin action planning for improving sanitation markets. This includes a prior step of helping to identify the main stakeholders to be invited.



# Results

## 1 The demand side of the market

This section outlines types of sanitation facilities, demand characteristics, toilet costs, willingness to pay for sanitation as well as affordability. This section also outlines financing and quantifying demand for sanitation.

### Sanitation in Pakistan

In 2010 floods caused catastrophic damage across Pakistan. In the aftermath, the Government of Pakistan developed the Pakistan Approach to Total Sanitation (PATS) as a country specific strategy to scale up sanitation programmes. UNICEF, UN-Habitat, WSP-World Bank, Plan International and WaterAid – along with local and national partner organisations – promoted the concept of Sanitation Marts (SanMart) in rural areas of Pakistan. The SanMart concept owed its origin to the realisation that uptake of latrine solutions in less affluent sections of society could be promoted through working with specific segments of the supply chain. The promotion of rural SanMarts aims to stimulate local entrepreneurs to establish a sanitation business. The rural SanMart concept is promoted under wider sanitation marketing efforts that are widely found in Pakistan under the Pakistan Approach for Total Sanitation (PATS) programme, as well as others (UNICEF and the Rural Support Programme Network, 2015).

In addition to behavioural factors, the absence of latrines in rural and peri-urban areas was also a

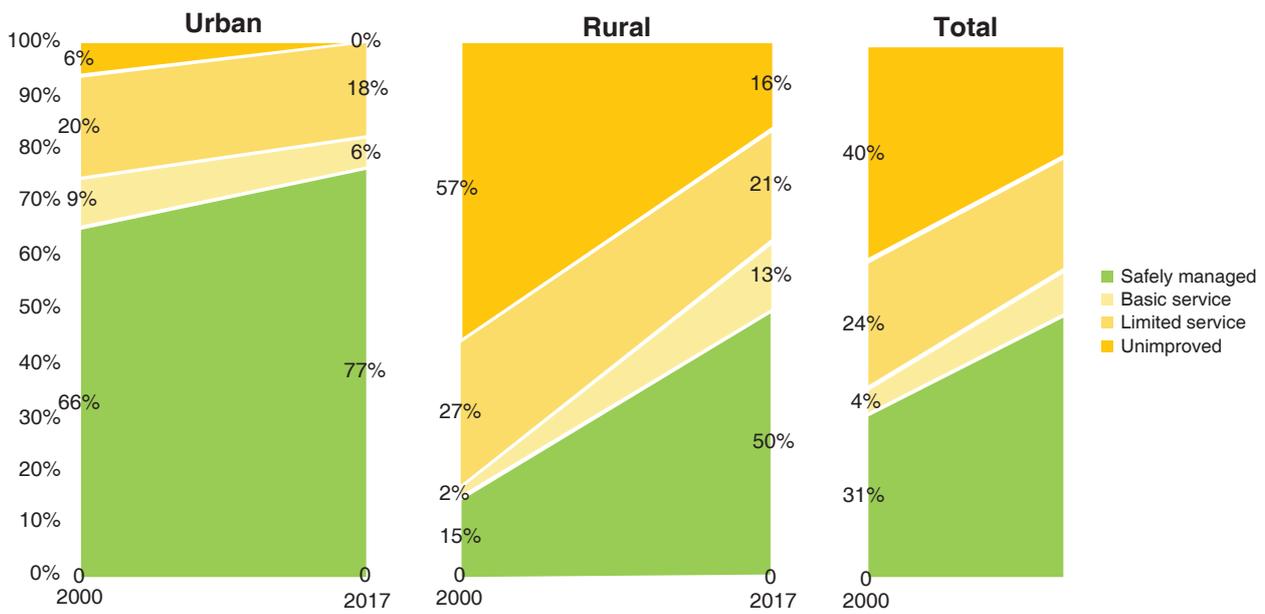
result of burdensome costs associated with such solutions. It was realised that cutting down on some of the key costs related to installation of latrines (bulk transport, locally trained labour, and innovative designs, for example) could lead to more and more people opting for latrine construction in their household. These SanMart approaches were piloted and refined in the aftermath of the large-scale floods of 2010/11 and have now come to be an established strategy both among development partners as well as government agencies as a vehicle to achieve open defecation free (ODF) status. A significant reduction in the prevalence of Open Defecation (OD) shows the growth and future potential of sanitation products in the country (Government of Pakistan, 2011).

The most recent data from the JMP show that Pakistan made significant improvements between 2000 and 2017, reducing the percentage of people practising OD from 40% to 10% (WHO & UNICEF, 2019) (Figure 3). More recently, in 2017/18, the Government of Pakistan (GoP) conducted a Demographic and Health Survey (PDHS), which reports that OD is practised by 12.5% of the population (NIPS and ICF, 2019).



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**Figure 3: Sanitation trends in Pakistan, 2000–2017 (WHO & UNICEF, 2019)**



### Types of sanitation facilities

The prevalence of flush/pour-flush toilets is on the rise in Pakistan. The Pakistan Social And Living Standards Measurement (PSLM) 2014/15 showed that 73% of households were using a flush toilet, compared to 71% in 2012/13. The Pakistan Demographic and Health Survey (PDHS) reports that in 2017/18 around 82% of households were using some form of flush toilet, be that improved, unimproved or shared (limited service). Both surveys show that flush toilets are more common in urban areas, at 97% according to PSLM in 2014/15

and 98% in 2017/18 according to the Pakistan Demographic and Health Surveys (DHS) data. The current market for flush/pour-flush toilets varies by province in Pakistan but is on the rise overall. In Pakistan, such toilets either drain into a public sewerage system, into a septic system, an open drain, or, more commonly, into a pit, which can either be located directly under the toilet or off-set from the toilet. Latrines can also be single pit or twin pit, where once one pit is filled it is sealed off to decompose and waste is re-directed to the second pit (Figure 4).

**Figure 4: Example of toilet products used in toilet construction in Pakistan**



Commonly available toilet materials at rural SanMart in Punjab



WC fixed into substructure

For lower-income households, there are also dry raised latrines (where the faecal waste is taken away by a sanitation worker). The Pakistan Social And Living Standards Measurement 2014/15 reports that 13% of households were using a non-flush facility in 2014/15 (PSLM, 2015), whereas the PDHS shows this to be 5.6% in 2017/18, suggesting a movement away from non-flush facilities (NIPS and ICF, 2019).

The PDHS data from 2018 shows that 69.5% of households were accessing an improved facility, compared to 30.5% accessing an unimproved facility. This differs between urban and rural areas. In urban areas, 87.7% have access to an improved sanitation facility, whereas in rural areas 58.1% of people do (NIPS and ICF, 2019).

The key components for such a design are bricks and mortar for the pit lining, cement for the slab and

floor and a ceramic squat pan or flush seat and PVC pipes. Most of these are available in building material stores and marketplaces in most places except the most remote hilly and desert communities. Ceramic toilet products are the desired choice for customers in Pakistan. There is no established market for plastic pan products (for e.g., SatoPan). Households from income groups above the poorest of the poor and up to the middle class are faced with numerous products at different price points. The wide price point variation in pans, seats, and slab products available on the market in Pakistan indicates a great variety in quality. Recently, many ceramic/seat products have been entering the market from China. Customers typically view an imported pan/seat as 'better' than domestically produced products and assume higher quality from imported products, but in reality, the products coming in from China are of variable quality.



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## Demand characteristics

While the low-income customer is the focus of this market assessment, customers seeking sanitation solutions can be split into three broad customer segments. First, there is the upper segment, which is developing a latrine solution as part of overall house construction activity and is happy to target a high-end market solution at the higher price range (Pakistan Rupee (PKR) 12,000–25,000). This segment is followed by the middle-income group, which may be approaching a latrine solution either as part of house construction or may be constructing a toilet for the first time. This category of users typically ends up making a compromise between cost and quality and will settle for a latrine solution ranging between PKR 5,000-12,000. The third segment is most relevant for ODF status and represents the rural population with few resources and space to invest in sanitation solutions. A challenge for sanitation markets in Pakistan is to come up with a supply chain model that can cater to middle and lower-income groups' needs for household sanitation solutions that are affordable and desirable, especially in rural Pakistan. Increased demand for sanitary products in general is linked to Pakistan's booming construction and housing sector.

## Toilet costs

The analysis costs of the following latrine options: the PATS demo toilet (including superstructure US\$264) or excluding the brick superstructure (US\$111), the ventilated brick-lined direct pit latrine used in PATS (US\$33); the pour-flush off-set lined pit latrine used in PATS (US\$50) and the pour-flush latrine with septic tank used in PATS (US\$77).

The total cost of a toilet can be disaggregated into different cost drivers. For the demand side of the market, cost drivers that the household is likely to be affected by include the cost of transportation, storage/display, profit margins, haulage and storage costs, and the costs of skilled and unskilled labour involved in the construction of toilets in Pakistan.

The cost of skilled labour for low-cost latrine designs ranges from US\$5-8 and is primarily driven by design considerations in the construction of the lining of the pit (with bricks and mortar, for example), the fixing of the pan and siphon, and in the construction of the superstructure (low-cost bamboo superstructure vs. brick and mortar superstructure). The cost of unskilled labour is variable due to contributions from the household but can reach as high as US\$10. Low-income households will typically off-set the cost by contributing their own labour, especially for pit digging. Households may pay a skilled mason to procure the general construction materials for their toilet (which will include the cost of transport to the household). The lowest-income households tend to procure all the essential materials (pans, pipes, etc.) for the construction of a toilet/latrine from local building material stores and markets, as well as the actual toilet products themselves (seat/pans and pipes), thereby offsetting any costs applied to the household by local masons who would otherwise purchase and transport the materials on their behalf.

Imported products involve customs duties and be subject sales tax on top of duty paid, which ultimately drives up the cost that a customer will pay once that product reaches the market in Pakistan. Products when imported into Pakistan will typically be subject to 10.09% customs duty plus 17% sales tax (export. gov, 2019). However, sanitary ware products that are less expensive and an attractive option for middle and low-income earners that are imported to Pakistan in bulk containers are subject to less customs duties under the China-Pakistan Economic Corridor trade agreements- however importers are reportedly keen for these duties to be lowered.

## Willingness To Pay

Data were collected through a literature review. The data on WTP is limited and mixed and only available for urban areas. A WTP study of 600 households conducted in 45 urban union councils of Peshawar shows that a majority of households are willing to pay for quality sanitation services, including sewage disposal and solid waste management

(Muhammad et al., 2014). This study concluded that urban households in Peshawar were willing to pay PKR220 (US\$1.50) per month, although household income, education, size, and occupancy affected WTP. Another study done in an urban area (the city of Jacobabad) shows that half were not willing to pay for sanitation, and this was mainly due to their indifference toward the benefits of sanitation (UN-Habitat, 2016). The Government of Pakistan promotes subsidies for the most vulnerable households to enable them to be able to afford a latrine. This has had unintended effects on more well-off households who were seen to be disincentivised to invest their own money in a latrine. This was found to be the case in UNICEF's Sanitation Programme at Scale in Pakistan (SPSP) Phase 1 in 2013 to 2014 (UNICEF, 2014).

**Affordability**

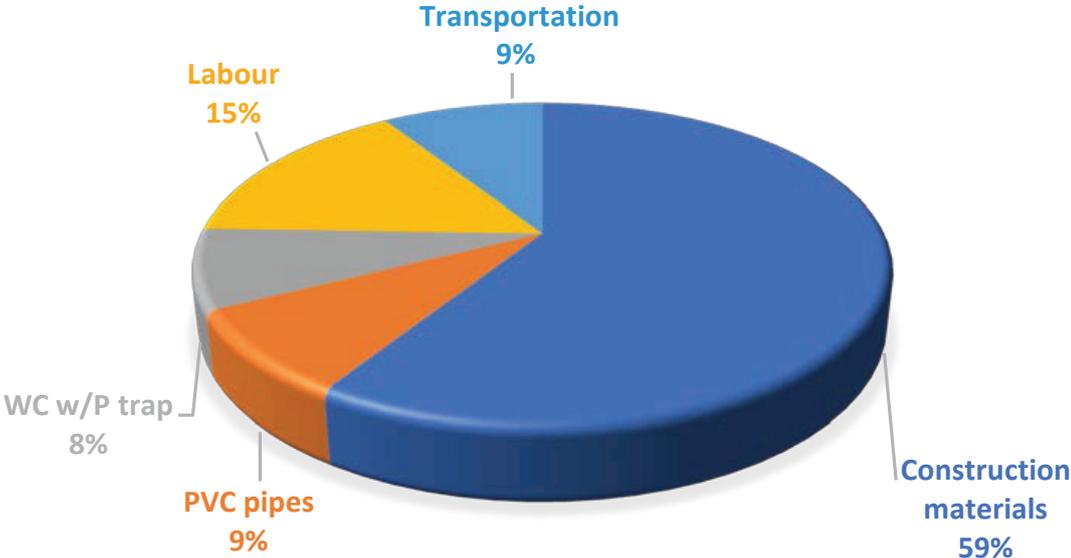
OPM developed an affordability model to better understand the financial constraints faced by householders (particularly low-income and middle-income householders). The affordability analysis shows that most of the more standardized toilet designs (e.g. the PATS demo toilet with brick superstructure) do not meet stated “affordability criteria” for most households, presuming no direct or indirect subsidy. Only the ventilated brick-lined direct pit latrine used in PATS was found to meet affordability criteria for most households.

The analysis shows that middle- and highest-income groups can largely afford all toilet types. The lowest-income group is unlikely to purchase a toilet design including a septic tank when faced with the total upfront costs but is more likely to be able to afford the low-income designs developed by UNICEF. If a household would like to construct a superstructure with walls made out of bricks and mortar and include a door and roof made out GI sheeting, this can cost approximately US\$153. Whilst this may not be affordable for the lowest-income groups, it may be affordable for those low-income households with a small loan or savings.

**Financing households**

PATS implies that much of the onus is placed on households to finance sanitation themselves. PATS also promotes cost sharing for sanitation. There is high demand for household toilets, but there is often a mismatch between the cost of toilets promoted and affordability in the poorer segments of the population. Many people would like to upgrade to a better toilet option but do not have sufficient funds to achieve this. The Government of Pakistan has in the past provided subsidies to lower-income households. Donor-funded sanitation programmes have also experimented with offering subsidies to low-income households for sanitation, as in, for example, the Qatar Charity/UNICEF programme in Punjab (Figure 5).

*Figure 5: Cost breakdown of Qatar Charity/UNICEF demo latrine*



According to Pakistan's National Sanitation Policy, the budget for targeted subsidies for the rural poor is part of the overall allocation for public sector development plans. Provincial and local governments also make similar allocations through their annual development plans. Allocations are also made by the Pakistan Poverty Alleviation Fund and other community support organisations for sanitation-related projects. Financing low-income households in Pakistan for key development needs is typically provided through Rural Support Programmes (RSP) – an MFI. The typical interest rate from MFIs and microfinance banks is a strong deterrent for low-income households, currently standing at around 35%. Informal loans are also quite common in Pakistan. For a typical low-income household, a more likely source of finance would be an informal loan from family or close friends. There is, however, no data on the size of the market for informal loans for household sanitation.

## Quantifying demand

The potential market size includes those ending OD as well as reaching all potential first-time toilet customers with durable household toilet solutions. This can be estimated based on households paying the full cost of toilet construction, with many low-income households contributing their own

labour and procure the construction materials for toilet construction, as well as the pans and pipes themselves.

If all households currently practicing OD purchased the cheapest toilet design, this would represent a market value of US\$100 million.

If all households currently accessing an unimproved or shared facility upgraded to a pour-flush off-set latrine, this would represent a market value of US\$430 million. In terms of the components for this latter design, this would represent a market value for the PVC pipes of US\$155 million, for the common construction materials of US\$548 million and for ceramic WCs of US\$77.5 million.

For higher-end options (pour-flush latrine to septic tank and pour-flush lined pit latrines, various superstructure materials), the potential market value is in the range of US\$614 million (US\$472.5 million in rural areas) up to US\$2.2 billion (US\$1.6 billion in rural areas).

These market estimates do not take into account affordability challenges that would particularly constrain the market for low-income customers, especially in rural areas where poverty is most acute.



## 2 The Supply Side of the Market

The section reviews new technologies and emptying services, the key supply-side actors, constraints faced by businesses in Pakistan and financing options.

### New technologies

The market for sanitation products lacks options that are durable, low-cost and attractive to low-income consumers. Pakistan's weak protection of intellectual property rights disincentives the private sector from responding to the need for more innovative, low-cost household toilet and superstructure designs.

### Key supply-side actors

Large manufacturers generally produce higher-end sanitary products while smaller-scale manufacturers produce a combination of medium to low-cost products, but of mixed standards of quality. Both categories of sanitary supplies are taken up by distributors (typically on credit) and then supplied to individual shops in urban/ rural areas in dedicated

sanitation marts or through outlets which sell sanitary products among a mix of other merchandise (Figure 6 and 7). These include pans, water seals, siphon, squat, sand box, slabs, rings, PVC pipes, and steel. For latrine construction, skilled masons and unskilled labour are used and in many cases, the household also contributes, especially to digging the pits or procuring construction materials and pans and pipes.

Sanitation products (mass-produced ceramic and PVC-based products) are manufactured and procured in production hubs which include Gujranwala, Lahore (Punjab), Karachi (Sindh and Balochistan) and Peshawar (Khyber Pakhtunkhwa province). More sanitation products (especially pans) are being imported from China.

Figure 6: Supply chain map: Pour-flush latrine (low-cost for low-income households)

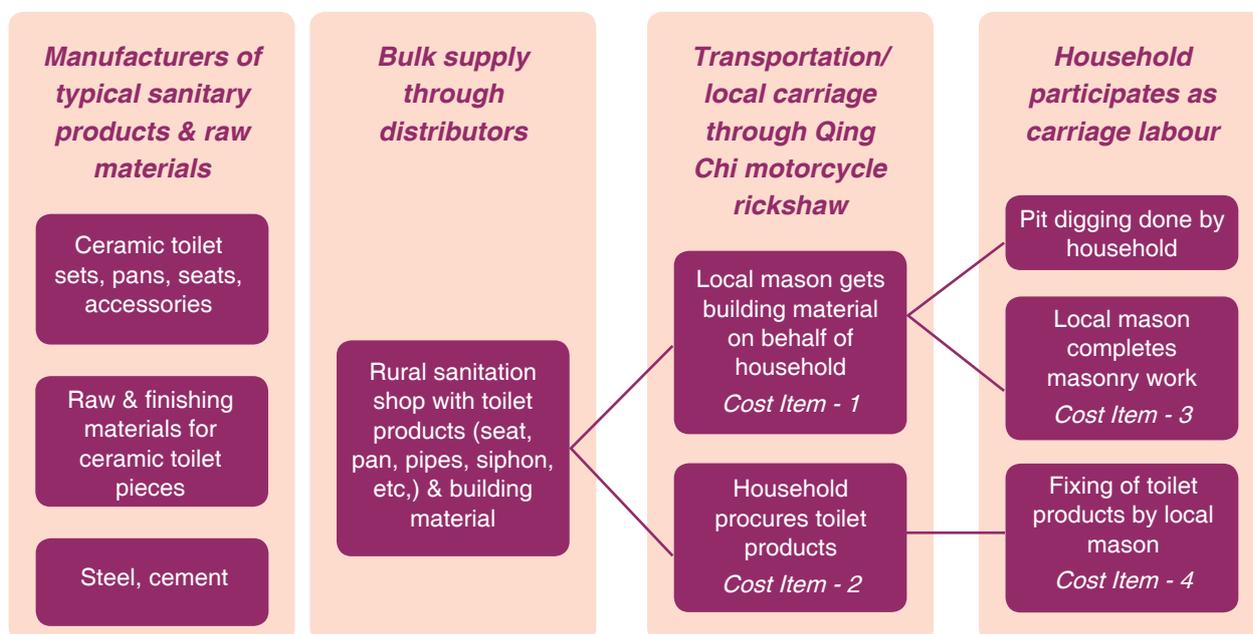
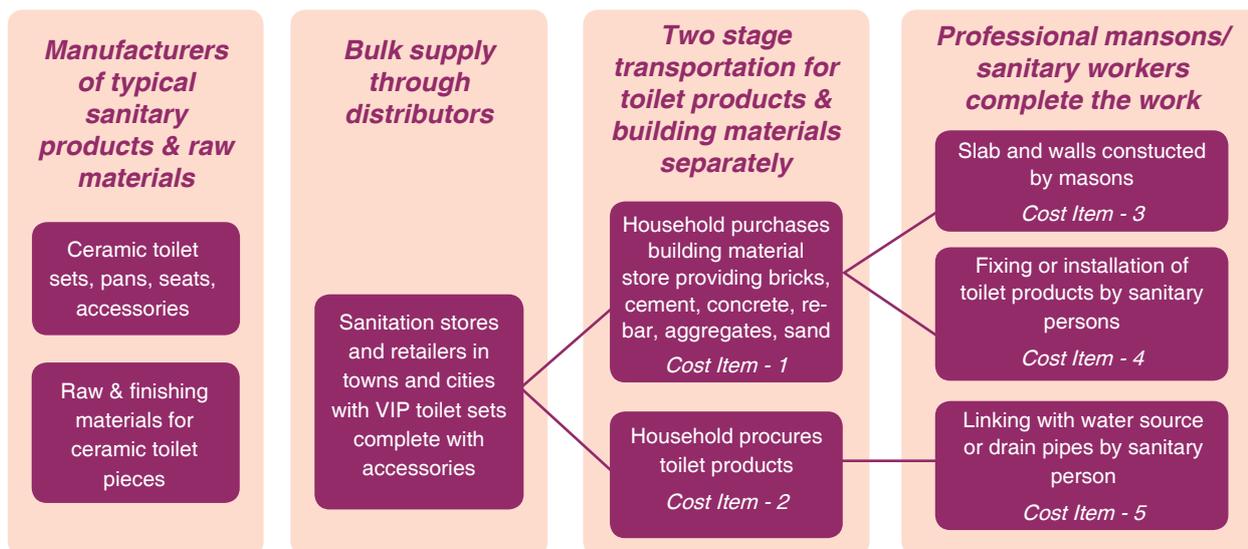


Figure 7: Supply chain map: VIP latrine (low-cost for the poorest of the poor)



### Constraints faced by sanitation businesses in Pakistan

Constraints reported in Jhang, Gujranwala, Khyber Pakhtunkhwa and elsewhere include: limited access to finance for sanitation manufacturers, unreliable demand for sanitation products, information gaps between the sanitation manufacturers and distributors, strong international competition of low-cost imports from China, higher taxes on the industry, and limited protection of intellectual property. These constraints are discussed below:

**Lack of low-cost and innovative sanitary products with:** low-cost solutions are imported from China. Local manufacturers of mass-produced sanitation products such as ceramic pans and seats face competition from cheap and mixed-quality imports. There is a lack of appropriate research and development strategies.

**No quality standards for sanitation products with:** lack of any clear guidelines and standards for the sanitation products.



**Lack of trained/ skilled human resource according to market needs:** the formal institutes do not offer training on the required skill-set of sanitation industry. The local private sector often lack the skills to provide toilets at quality and price points that meet customer preferences.

**Materials for construction of toilets:** ceramic products (i.e. WC/pan), pipes, P-trap, tap, cement, concrete, sand, brick and iron rods may need to be imported in certain areas. High transportation cost of sanitation products in remote areas as well as security clearance, high rent and hilly areas are other reasons for a lack of materials.

**Availability of Rural SanMarts and masons:** rural SanMarts have a limited reach and masons with the necessary skills for building quality toilets are in short supply in many areas. SanMart owners are subject to fluctuating demand that typically follows the harvest season. Moreover, they may struggle to keep prices down for their customers. The SanMart business model would benefit from a diversification of products and service to potential household toilet customers.

**Information on the sanitation market:** manufacturers and distributors do not always have adequate information on the sanitation market nor the necessary contacts to ensure that the right products with specified quality are available for local businesses.

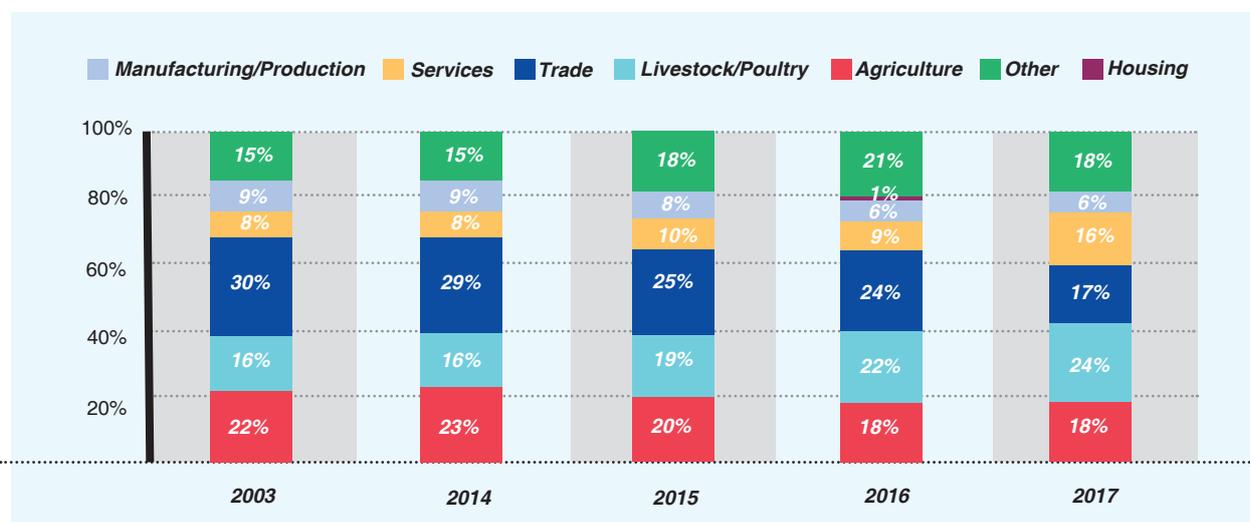
**Other factors include:** a complex value chain, imbalance of trade for local manufacturers, high

duty taxes on machinery, no quality standards, no standard pricing mechanism for sanitation products. The proposed way forward is a reduction in the tax base, introducing and complying with quality standards, appropriate price mechanisms, strengthening distribution and overcoming transportation costs, use of recycling materials, etc.

## Financing businesses

Formal financing for businesses from commercial banks is only an option for the upstream supply chain actors, such as large-scale manufacturers. Entrepreneurs and small-scale supply chain actors are more likely to take a loan from an informal creditor or family and friends, often due to religious and social factors. Poor access to finance for small business owners and entrepreneurs is a major constraint to growing their business. SanMarts are relatively successful in some areas but lack access to finance to expand their businesses and range of services. Key to the SanMart business model is keeping costs down and the experience thus far has shown that individual SanMart owners cannot buy in bulk and this results in more expensive products as individual SanMart owners will need to absorb the profit margins sought from the supply chain (distributors, transporters, manufacturers and importers). Loan products in rural areas for water and sanitation are much rarer than for income generating activities, but some Rural Support Programmes are providing microfinance loans for water and sanitation in rural communities (Figure 8).

**Figure 8: Active borrowers from MFIs by sector (2017)**



Source: Pakistan Microfinance Network, 2017

## The Enabling Environment in Pakistan

# 3

This section provides an outline of the key actors influencing the enabling environment in Pakistan, it summarises sector policy and strategy, regulations and standards, reviews experience in sanitation marketing, promotion and campaigns as well as the use of public-private partnerships (PPPs) for sanitation.

### The key actors influencing the enabling environment

There are three tiers of government in Pakistan's federal republic structure, i.e. the national, provincial, and local levels of government. Starting at the federal level, WASH sits primarily under the Ministry of Climate Change (MoCC). The MoCC spearheads the Clean Green Pakistan Movement which aims to galvanize progress on liquid waste management; solid waste management, total sanitation and hygiene, safe drinking water, and reforestation in Pakistan. In 2011 provincial governments were constitutionally mandated to carry out policy and administrative functions for sanitation. It is at the local government level where the responsibility for water and sanitation sits (CLFG, 2018).

Pakistan should be praised for its strong political commitment to ending OD. However, since the devolution of the mandate for sanitation service provision moved down to the local government level, a capacity gap has emerged as a key constraint. Overlapping roles and responsibilities from provincial government down to the local government department has resulted in poor coordination and limited accountability in fulfilling their role.

Pakistan spent 0.22% of its GDP on WASH in 2018, up from 0.16% in 2012-13. Clearly, financing the sanitation sector in Pakistan must be strengthened and new opportunities for financing pursued to close the financing gap.

### Sector policy and strategy

The key sanitation policies guiding the implementation of sanitation in Pakistan are the National Environment Policy (NEP, 2005) and the National Sanitation Policy (NSP, 2006).

The NEP provides the overarching framework guiding policy and planning to prevent environmental degradation across a range of issues. Most relevant to sanitation, the NEP provides a guiding framework for policing and planning to prevent contamination of freshwater resources and reduce the risks caused by improper waste management (GoP, 2005).

The NSP acts as the overarching framework providing policy guidelines that seek to stimulate and support sanitation coverage in Pakistan. It is focused on promoting the safe disposal of excreta away from houses and workplaces through the use of hygienic latrines. The NSP is the driving force of ODF Pakistan and the promotion of health and improved hygiene practices in the country. It is the guiding policy document for federal government, provincial governments, federally administered territories, local governments and development authorities. It is in reference to the NSP that provincial governments formulate sanitation strategies and plans, whereby they are implemented at the local government level (GoP, 2006).

Key to the roadmap for Pakistan's WASH sector over the next 2 years will be aligning efforts and strategies with the Government of Pakistan's Clean Green Pakistan Movement. A key next step will be for all provincial governments to develop WASH master plans, which should emphasize an equity focus and integrate the results of the WASH Bottleneck Analysis Tool (WASH BAT) exercises conducted as part of the provincial Joint Sector Reviews.

## Regulation and standards

Pakistan has two key organisations with mandates relating to regulation and standards:

- Pakistan's Intellectual Property Organization (IPO) is mandated with developing and upgrading the country's intellectual property infrastructure and coordinating enforcement of intellectual property rights. The IPO has been praised for its public awareness campaigns but criticised for poor enforcement of breaches in intellectual property rights (Office of the United States Trade Representative, 2019).
- Pakistan's Standards and Quality Control Authority (PSQCA) is mandated to act as the formal quality inspection agency of all imported and exported products in Pakistan (PSQCA, n.d.). Ensuring that the same quality standards are applied to imported products (as domestically produced products) is part of their mandate.

As trade intensifies between Pakistan and China, there will be a growing opportunity for the PSQCA to play a stronger role in systematic quality monitoring of different sanitation products available on the market in Pakistan, such as pans.

## Marketing, promotion, and campaigns

Rural sanitation programmes in Pakistan have focused on sanitation supply chains in recent years due to the increase in demand for sanitation services. PATS is the driving force for stimulating both demand for, and supply of, sanitation in Pakistan, particularly in rural areas. PATS endorses several models including community-led total sanitation, school-led total sanitation, component sharing, sanitation marketing and disaster response. It is backed by strong political will and increasing budget allocations. Behavioural change promotion is typically implemented through Information, Education, and Communication (IEC) and mass media campaigns.

## Experience of PPPs

PPPs in Pakistan are becoming a cornerstone of large-scale infrastructure delivery, particularly in the sectors of power, telecoms and ports. The success of PPPs in these sectors is underpinned by steady demand for those services leading to reduced risks for return on investment. The SanMart model, under the PATS approach, is an example of a PPP in Pakistan that is being promoted in rural settings. However, due to inconsistent demand and limited market knowledge for household sanitation, to date, PPPs are an underdeveloped option for household sanitation service provision in Pakistan (UNESCAP, 2016).



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# Recommendations

Specific recommendations for market shaping in Pakistan are provided below.

## Recommendations for the demand side of the market

**Recommendation 1:** Support access to finance for household sanitation. Low-income segments are still less likely to be able to access a loan, especially for non-income generating purposes.

**Recommendation 2:** Strengthen national and local political commitment to attaining and sustaining ODF and supporting demand for more improved household sanitation services.

## Recommendations for the supply side of the market

**Recommendation 3:** Develop the capacity of local private sector actors to meet demand for sanitation products and services, especially in rural areas where OD persists. Stronger linkages with wider supply chain actors and wider uptake of bulk procurement strategies are needed to reduce prices paid by low-income customers and ensure sustainable profit margins for SanMart entrepreneurs.

**Recommendation 4:** Establish stronger links between local mass producers of sanitation products, distributors, and local private sector actors. Protect national production capacity to provide sanitation components such as pans, PVC pipes, steel, cement, etc.

**Recommendation 5:** Develop affordable and appropriate toilet options for areas with water shortages and that are prone to flooding. Often the sanitation options designed for such areas are too expensive, do not function properly or there is a market gap for inclusive toilet designs suitable for people with disabilities in water scarce or flood-prone conditions.

## Recommendations for the enabling environment

**Recommendation 6:** Improve access to sanitation financing for customers and local private sector actors. Local SanMarts need access to finance to expand their business as this is one of their main constraints.

**Recommendation 7:** Prioritise public expenditure on sanitation and diversify sector financing sources to include more grants, NGO funds and collection of tariffs and taxes to meet the SDG commitments to end OD and achieve universal coverage of at least basic sanitation as well as coverage of safely managed services.

**Recommendation 8:** Continue to support learning, coordination, and dialogue regarding sanitation in the WASH sector.

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