# GUIDANCE NOTE 9

## Monitoring and Evaluation

## How do we measure sanitation marketing progress?

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In this Guidance Note, you will learn:

- Common indicators for measuring progress in Sanitation Marketing
- How to design monitoring frameworks and data collection tools
- Practical tips for integrating SanMark monitoring into existing sanitation programme monitoring

Sanitation Marketing (SanMark) aims to achieve improved sanitation for all by 1) increasing household investment in and sustained usage of improved latrines, and 2) increasing market availability of affordable, desirable improved latrine products and services. SanMark focuses on reaching low-income households currently underserved by markets. In this Guidance Note, we present key indicators to measure progress towards achieving SanMark's two goals, and offer advice on data collection tools and frameworks. We also offer practical tips for integrating some of SanMark's new indicators into existing sanitation programme monitoring.

## 1. Measuring SanMark progress

There are two essential 'units of analysis' for measuring progress in SanMark:

- Households/Communities: For core access and behavioral outcomes, the household is the primary unit of analysis. As in most other sanitation interventions, the goal is to ensure that all households are using appropriate and sustainable sanitation services. Tracking access and behavioral outcomes in SanMark involves measuring changes in household improved latrine purchase, construction, and usage. Measuring these outcomes will not necessarily require creating new monitoring indicators or frameworks. However, intermediate demand-side indicators related to product/service awareness, access to local supply, satisfaction, and intention to purchase may require additional action and resources to measure over time.

- Businesses: SanMark adds a new dimension to sanitation programming by explicitly focusing on strengthening private sector supply of household sanitation services. Tracking changes to businesses within the sanitation supply chain will help us understand how the private sector is expanding supply and responding to new demand. Business-level tracking helps us identify and address continued supply-side barriers and understand market trends.

A third layer of analysis is the market enabling environment. Understanding and monitoring the roles of market facilitators, and in particular the local government (see GN6: Enabling Environment), can help us to assess the sustainability of SanMark interventions and when external support can be phased out. These elements are more difficult to measure, but are nonetheless crucial to understanding long-term viability of the public and private sectors in sanitation service delivery.

UNICEF's Monitoring Results for Equity Systems (MoRES) and the related WASH-BAT (Bottleneck Analysis Tool) provide a useful framework for assessing bottlenecks and ensuring that sanitation activities are reaching those most in need (see Resources below for links to MoRES and WASH-BAT guidance). Sections 2 – 5 below present typical SanMark objectives and indicators within this framework, and highlight where these can be incorporated into existing sanitation programme monitoring mechanisms. The key program outcomes are essential and must be tracked. However, it is not necessary to track every indicator for each SanMark objective: indicators should be selected from the menu based on your program and market context, budget, partners and other factors.

## 2. Monitoring SanMark Outcomes

To measure household access and behavioural outcome indicators, monitoring efforts should build on existing outcome monitoring mechanisms, including MICS and DHS surveys.

### Table 1: Outcome Indicators

| Program Outcome: Increase in improved latrine uptake and usage among target populations | | |
|---|---|---|
| **What are we trying to measure?** | **Indicators** | **Mechanisms** |
| How are SanMark interventions accelerating access to improved sanitation services?<br><br><br>Who can access improved services? Are interventions increasing access and use for the poor and poorest? | • # and % of households using improved sanitation facility<br>• # and % of identified poor households accessing an improved latrine (can be expressed as % of all households with access, or % of all identified poor households)<br>• % increase in improved latrine coverage<br>• # of 100% improved coverage and usage communities | MICS, DHS<br><br><br>Can be incorporated into CATS monitoring and WASH sustainability checks |

In many countries, UNICEF is supporting CATS monitoring capacity and systems at community, sub-national and national levels (see, for example, Thomas and Bevan 2013). Most CATS monitoring mechanisms record both the number of household latrines and the percentage latrine coverage within a community, as well as overall ODF status. For SanMark, it is also important to monitor whether latrines are 'unimproved' or 'improved'. In the Indonesia Ministry of Health STBM program supported by WSP, for example, natural leaders and sanitation committees measure progress towards ODF and also track the type of latrine ('improved' or 'unimproved') and whether the poor are gaining access using a color-coded system on a community map. This data is uploaded monthly by district

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government staff using a phone-based text messaging system and is made available in real time on the Ministry's website (see web link in Resources).

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**Box 1: Monitoring access to improved latrines within CATS**

Monitoring systems should not divert attention from ODF achievement by focusing narrowly on latrine type and construction.

Although data on household latrine ownership is typically collected during CATS participatory mapping, this will not usually distinguish between 'improved' and 'unimproved' latrines. Participatory mapping may also include identification of poorer households within a community. It may be best not to collect data on improved access during the triggering process itself, since this might detract from the momentum of the community process and households may not know whether their latrine meets 'improved' criteria.

If improved coverage and poverty data is not already collected, consider adapting your CATS monitoring frameworks to collect this data during the action plan implementation stage. During follow-up visits, government or other implementing partners can undertake a more detailed assessment of latrine type using national or JMP criteria. This data can form the baseline for household-level improved coverage, usage and equity monitoring, which can then be tracked by community sanitation committees, government or other implementing partners (see GN10: SanMark and CATS).

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Figure 1: Example of mapping tool used by the Benin Ministry of Health to record each existing improved household latrine (complete circle with black dot) at baseline, each sanitation promotional house visit (line), and start (partial circle) and end (complete circle with red dot) of each new improved household latrine construction (see WSP 2011).

## 3. Monitoring the Market Enabling Environment

Measuring changes to the sanitation market enabling environment is vital but difficult to do in practice, since many of the suggested market facilitation indicators are qualitative in nature. Measurement will typically involve subjective evaluations, ranking, or scoring of key market facilitation actors against agreed roles and functions (see GN6). In addition to WASH-BAT, a number of WASH enabling environment frameworks are already used around the world to support national sector strengthening and planning1. Where possible, monitoring of market facilitation should build on and/or feed into these broader enabling environment assessments. For example, data on businesses and consumers gleaned from SanMark programmes can be used to assess service delivery improvements within WASH-BAT. In Malawi, Water for People is experimenting with a ranking system that asks partners to rank changes to the 'market ecosystem' over time (see Sparkman 2013).

### Table 2: MARKET ENABLING ENVIRONMENT*

| Program Objective: Increase ability to facilitate and regulate the sanitation market | | |
|---|---|---|
| **What are we trying to measure?** | **Indicators** | **Mechanisms** |
| Are national and sub-national governments increasing capacity to monitor, facilitate and regulate new markets?<br><br>How do government and other partners support businesses to expand services to low-income households?<br><br>Is external technical support to government and the private sector demand-driven? Is there an exit strategy? | • Active private sector development program for rural sanitation and hygiene supported by government regulations, laws, financing and incentive systems#<br>• # of national government and districts/province guidelines and benchmarking to private businesses to regulate quality standards and fair pricing#<br>• Type, extent and quality of business development services, including skills development and incentives, offered by public institutions#<br>• Quality and extent of government market facilitation mechanisms implemented in practice<br>• % local government budget allocated to CATS/SanMark activities<br>• # districts/provinces requesting SanMark technical support<br>• # and type of exposure visits to demonstrate SanMark activities<br>• # of government staff trained to deliver SanMark market facilitation and monitoring | Can feed into WASH-BAT and other enabling environment frameworks |

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1These include the Country Status Overview (CSO) tool in Africa, the Global Level Assessment and Analysis of Drinking Water and Sanitation (GLAAS), the Service Delivery Assessment in East Asian countries, the Service Delivery Pathways in India, and the MAPAS in Latin America and the Caribbean.

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* Note: This Guidance Note focuses on sanitation market facilitation as a sub-set of broader enabling environment activities. See GN6: Enabling Environment and UNICEF MORES and WASH-BAT resources below for further discussion.

# Adapted from existing WASH-BAT indicators.

## 4. Supply-side Monitoring

SanMark programs intervene in new ways on the supply side, so additional monitoring tools are needed to track the impact of these interventions. Supply-side and business-level indicators can be measured by undertaking two primary tasks: sales monitoring and business profile monitoring.

### Table 3: SUPPLY

| Program Objective: Improve market supply of affordable, desirable products | | |
|---|---|---|
| **What are we trying to measure?** | **Indicators** | **Mechanisms** |
| How well do products and services meet the needs of low-income consumers?<br><br>Are supply chain businesses increasing availability of products and services to low-income households? | • # of new latrine sales reported by all program-supported businesses (cumulative)<br>• Average # of new sales per business (per month)<br>• Average # of villages reached by businesses, and geographic area covered<br>• Average # of sales per village | Typically requires developing new sales tracking mechanisms |
| How financially sustainable and viable are sanitation business activities? What is the likelihood that activities will continue over time?<br><br>What are characteristics of high-performing businesses? What are incentives for businesses to enter and expand sanitation service provision? | • # and type of consumer-driven design improvements to product/service offering<br>• % decrease in costs of new product/ service offerings from baseline products<br>• # of businesses offering new products/ services<br>• # of businesses receiving training<br>• Average % increase in latrine sales revenue per program-supported business<br>• Sanitation sales as % of overall business activity (change from baseline)<br>• Cash and resource investment by businesses in latrine-related business activities (equipment, tools, vehicles, stock, staff)<br>• # of new loans, average loan size and repayment rates for sanitation business lines<br>• Quality and extent of changes to linkages between supply chain actors<br>• Local SME 'multiplier effects': estimates of local economic returns from revenue generated by latrine sales, employment impacts (number of new jobs created), etc | Typically requires developing new business monitoring mechanisms<br><br>Supply-side data should feed into WASH-BAT service delivery monitoring and be integrated with outcome and demand data |

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*Tracking Sales:* Sales monitoring tracks the number of new latrine facilities sold or constructed (or other services provided) by each partner business. Tracking and mapping sales trends can:

- Provide insights into the effectiveness of demand creation and promotional activities.
- Help the program understanding impacts of external factors such as seasonal demand, transport, and labour availability. This can be used in program planning and budgeting, and to guide businesses on production and/or stock management.
- Identify geographical areas that are being neglected by businesses due to low profitability or other constraints.
- Help the program identify and assess critical success factors of high-performing businesses that can be used to refine the selection process and business support.
- Motivate and incentivise businesses through healthy competition, e.g. by reporting regularly collected sales data and rewarding high achievers.

For an individual small business, sales monitoring is a simple first step towards improving business management. Depending on the size and nature of the business, the program will need to adapt user-friendly monitoring tools. For smaller businesses such as masons, for whom literacy and numeracy may be an issue, consider picture-based tracking tools with simple tallies, or verbal reporting at a regular (monthly or bi-monthly) meeting. For literate and numerate small businesses, consider paper-based tools, such as a sales record books and purchase orders. In Cambodia, SanMark programs working with concrete producers have developed simple sales record books, with a carbon copy for each page that can be torn from the book and collected by program staff for further data entry.

If you are working with larger scale manufacturers, importers or wholesalers, they will likely have their own (electronic) systems. In this case, you will need to work with the firms to get a the relevant data you need for program reporting. For at-scale programs, ITC tools such as text messaging systems present a potential opportunity, although to date there is little experience with phone-based sanitation business monitoring.

Sales data that is collected at business level will need to be collated and entered into a SanMark program sales monitoring database. It is best if sales data can be entered alongside village-level outcome data in a single database to enable cross-checking and more detailed analysis of trends. Simple, easy-to-use databases and software are usually the most efficient and effective for sales data monitoring. Business-level sales monitoring can be done by local government, NGO partners, or business development service providers, depending on roles and capacities within your SanMark program.

*Business Profile Monitoring:* Business profiles capture key data about partner businesses and how their operations evolve over time. Business profiling should be done at the start of program engagement, as a part of the business selection process (see GN4: Private Sector Development). Use a simple survey tool to collect basic details of each business, including: name, location, current product/service offering (including prices), average monthly sanitation sales; average revenue from sanitation; current equipment and tools; number of staff; and other basic details. The profile can also record up-front investments that the business makes (e.g. in new tools and equipment) at the start of program engagement.

Updating business profiles (e.g. annually) can help the program track changes in revenue and profits, business investments, and geographic expansion over time. For example, the WaterSHED Cambodia program uses business profiles to track changes and benchmark individual businesses within the network, and provides regular on-line updates of business performance (see web link in Resources). In Malawi, Water for People uses business profile monitoring to assess business model viability, and determine what programmatic strategy changes are needed (Sparkman 2013).

## 5. Demand-side Monitoring

Baseline and periodic household surveys and focus groups are used in SanMark to track changes in household awareness and access to new products and services, intention to purchase, level of investment and customer satisfaction (see Table 1). This type of survey can be done using a random sample of households, rather than as part of the more detailed CATS baseline. Periodic monitoring of some indicators may be appropriate during WASH sustainability checks. Tracking these indicators can:

- Help programs assess the effectiveness of promotional messages and activities.
- Provide feedback to inform improvements in the product and service offering.
- Track changes in overall market size in terms of new household demand.

### Table 4: DEMAND

| Program Objective: Increase consumer demand for and investment in improved sanitation | | |
|---|---|---|
| **What are we trying to measure?** | **Indicators** | **Mechanisms** |
| How are SanMark interventions increasing household awareness, intention and motivation to invest in sanitation improvements?<br><br>How effective and sustainable are demand-creation and promotional activities?<br><br>How are financial barriers to investment being addressed through the market and/or complimentary financing mechanisms? | • % of households (HHs) having purchased improved products/services (new constructions and/or upgrading existing facilities)<br>• % of HHs having fully installed new facilities<br>• % of HHs demonstrating proper use of new products/services<br>• % HHs recalling key behaviour change and product information messages (inc. costs, businesses, sales points)<br>• % of HHs intending to purchase (e.g. in next 12 months)<br>• % of HHs satisfied with new latrine facilities<br>• Average total HH investment in new latrine facilities, including products, services, transport (can be expressed as % of average household income/consumption for each segment)<br>• # of promotional events conducted/ # of villages receiving promotional activities<br>• # of participants attending promotional events<br>• # of new sanitation promoters trained<br>• # of MFIs offering sanitation consumer loans<br>• # of new loans, average loan size and repayment rates for sanitation consumer loans<br>• # of poor HHs accessing improved products through alternative financing mechanisms | May require baseline and periodic surveying of a sample of households<br><br><br>Can be incorporated into WASH sustainability checks |

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Household surveys will be one of the critical ways to measure how well the poor and poorest can participate in the new sanitation market (this can also be captured through community mapping, as indicated above). At baseline, household surveys can use reliable poverty classification systems (e.g. national ID systems) where these exists, or develop standard poverty and vulnerability indicators to allow the program to disaggregate outcomes by wealth quintile and for vulnerable groups (see GN8: Equity in Sanitation Marketing). Periodic focus groups with households in the bottom two wealth quintiles can help the program understand if SanMark interventions are reaching them, and what can be done to develop more specific strategies to reach this segment.

## 6. Practical tips for UNICEF

UNICEF is committed to building government capacity at every level to track progress towards sanitation for all. In most countries, the first and foremost way this will be done is by measuring progress towards open defecation free communities, as well as supporting national level surveys such as MICS and DHS (which feed into JMP data). As you begin to consider SanMark as a progression of CATS work, here are some tips for expanding your monitoring frameworks:

**Tip 1: Build on and harmonize with existing monitoring efforts:** Monitoring household access and behavioural outcomes should be part of broader efforts to improve and systematize community-level monitoring systems, particularly at post-triggering and post-ODF stages of the CATS process. Avoid duplicating efforts: if different agencies are supporting implementation of SanMark and CATS, UNICEF can support the development of a common national framework and procedures. Consider how community-level data will be fed into the government's regional and national databases. This may include exploring the role that ITC tools such as mobile phones might play in monitoring systems.

**Tip 2: Budget and plan for development of a sales and business database.** Since market supply-side and business monitoring may be a fairly new area, consider recruiting technical input from small business development service providers to help design and test sales and business monitoring tools at the start of your SanMark program. This can be done as part of business development and training activities (see GN4). On-going collection of sales monitoring data can be done by local government staff or other partners. However, it is probably best to avoid the use of natural leaders or CATS facilitators in this sort of supply-side monitoring, which happens at a much wider geographic scale and requires specific business development skills.  Where possible, consider entering SanMark supply-side data (e.g. on sales) into existing central databases to enable trend and spatial analysis.

**Tip 3: Budget and plan to measure equity.** Whether through community mapping or household surveys, the impact of sanitation interventions – including CATS and SanMark – on the lives of the poor must be tracked. Access and usage by wealth quintile or other poverty classification system should be measured over time to ensure that gains made in achieving ODF are not lost and that the poor are not left on the bottom rung of the sanitation ladder. Tracking equity will involve extra steps and resources, so budget additional resources for baseline and follow-up monitoring. This includes building equity monitoring into WASH sustainability checks.

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## Resources for Further Reading

- Thomas, Ann and Bevan, Jane. (2013). Developing and monitoring protocol for the elimination of open defecation in Sub-Saharan Africa. http://www.irc.nl/page/79374
- UNICEF (2013). Briefing Note: Enhanced Programming and Results through Monitoring Results for Equity Systems (MoRES).
- http://www.intranet.unicef.org/dpp/MoRE.nsf/79273ed1bd5ad0cd85257059005a0cd3/03918b3e735c6ee285257ae0005cf397?OpenDocument
- UNICEF (2012). Water, Sanitation and Hygiene Bottleneck Analysis Tool (WASH-BAT) User Manual and Tool
- Sparkman, David. (2013) From Beneficiaries to Businesses to the Big Picture: Monitoring for Sustainability in Market-based Approaches to Sanitation. http://www.irc.nl/page/79373
- WSP (2011). Managing the Flow of Monitoring Information to Improve Rural Sanitation in East Java. WSP Working Paper prepared by Nilanjana Mukherjee, Djoko Wartono and Amin Robiarto. http://www.wsp.org/sites/wsp.org/files/publications/WSP-Monitoring-Information-TSSM.pdf
- WSP (2010). Case Study on Sustainability of Rural Sanitation Marketing in Vietnam. WSP Technical Working Paper prepared by Christine Sijbesma, Truong Xuan Truong, and Jacqueline Devine.
- WSP (2011) Sanitation Marketing at Scale: Experience from Rural Benin. WSP Field Note. Prepared by Beth Scott, Mimi Jenkins and Gabriel Kpinsoton. http://www.wsp.org/sites/wsp.org/files/publications/wsp-benin-sanitation-marketing.pdf

### Websites

- IRC Symposium 2013: Monitoring Sustainable WASH Service Delivery. Conference Papers and Proceedings: http://www.irc.nl/page/72969
- WSP Enabling Environment Assessments and Tools: http://www.wsp.org/global-initiatives/publications-and-tools-0
- STBM (Sanitasi Total Berbasis Masyarakat) Indonesia on-line monitoring database: http://stbm-indonesia.org/monev/
- WaterSHED Cambodia on-line business profiles: www.watershedasia.org/sanitation-marketing/sanitation-enterprise-profiles/

### About the UNICEF Sanitation Marketing Learning Series

This Guidance Note is part of the UNICEF Sanitation Marketing Learning Series, a learning initiative designed by the University of California Davis (UCD) to improve Sanitation Marketing knowledge and practice within UNICEF. The Learning Series is delivered by Mimi Jenkins (UCD and London School of Hygiene and Tropical Medicine), Danielle Pedi (Consultant, WASH Catalyst), Jeff Chapin (Consultant, IDEO), and Mike Rios (17 Triggers Behavior Change Lab).

The ten Guidance Notes in the Series are available for download here: http://uni.cf/Xo2o2l

1. *Situation Analysis – How do I know if SanMark will work in my country?*
2. *Consumer Behavior – How can we understand sanitation consumers in target markets?*
3. *Sanitation Supply Chains and Business Models – How can we improve market systems?*
4. *Private Sector development - How do we improve capacity of local sanitation businesses?*
5. *Getting the Product 'Right' – How do we design affordable, desirable latrines that businesses can profitably produce and sell?*
6. *Enabling Environment – What roles and functions are needed in the new market?*
7. *Demand Promotion and Marketing – How do we reach rural target markets in san mark?*
8. *Equity in Sanitation Marketing - How can we support the market to reach the poorest?*
9. *Monitoring and Evaluation – How do we measure sanitation marketing progress?*
10. *Sanitation Marketing and CATS – How do we link approaches?*

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