

# GLOBAL SANITATION FUND - OUTCOME SURVEY BRIEF

## Global Sanitation Fund Nigeria Programme (Rural Sanitation and Hygiene Promotion in Nigeria (RUSHPIN) programme)

April 2019

### OBJECTIVE

In April 2019, an independent programme outcome survey was conducted to measure key sanitation and hygiene indicators of the Rural Sanitation and Hygiene Promotion in Nigeria (RUSHPIN) programme.

#### The specific objectives of the survey were:

- To provide statistically reliable data on key sanitation and hygiene outcomes of the RUSHPIN programme in households and public facilities
- To measure whether Open Defecation Free (ODF) status has been sustained among previously verified communities
- To assess the programme integration of equity and non-discrimination and the needs of marginal and vulnerable households/populations
- To describe emerging indicators of programmatic effect, including behavioural norms, habits, and satisfaction with available sanitation services

The survey data have been collected during May 2019

### METHODS/SAMPLING

The survey instruments used for the exercise including the study protocols, tools, analysis protocols, and reporting guidelines were provided by WSSCC in collaboration with the University of Buffalo (UB). The tools were customized to local context, pre-tested, enumerators trained and used with technical guidance and support of the EA, WSSCC and UB throughout the survey duration. The survey will be cross-sectional, with a multi-stage cluster sampling approach<sup>1</sup>. The target population comprises all households and individuals living in communities where the GSF program has been initiated. Because the effects of the intervention are expected to reach community-wide, including into extra-household settings, data collection will also include assessment of schools and health facilities in all selected communities.

The sample size estimation was developed in order to allow sufficient power to provide reliable point estimate for key outcomes of interest for each of the top-level administrative sub-units (state, region, district, etc.) within the program. Since availability of prior empirical data to guide estimates is limited, we worked with the most conservative assumption, i.e., 50% outcome prevalence. The descriptive reporting of household-level survey data is then based on weighted analyses. Additional unweighted analyses have been performed to capture more information at the individual level and for some observations, though less likely to provide accurate programme-level estimates.

### CONTEXT



The GSF-supported Rural Sanitation and Hygiene Promotion in Nigeria (RUSHPIN) programme started in 2012 and is executed by United Purpose Nigeria with the Programme Coordination Mechanism being chaired by the Federal Ministry of Water Resources, Department of Water Quality Control and Sanitation. The programme covers six Local Government Areas (LGAs) in Cross River and Benue states. An additional six LGAs in these states are targeted through counterpart funding from the Government of Nigeria. Through joint implementation by state and LGA WASH bodies, as well as civil society organizations, RUSHPIN is intended to be a catalyst for achieving sustainable sanitation for all in targeted states. **NATIONAL ODF Criteria:** 1. Universal coverage of basic sanitation at household level; 2. No sign of open defecation around farmlands, bushes, water points, valleys, play fields, rivers, around water sources, etc. 3. Evidence of Continued Latrine Use.

**Table 1: sample allocation based on the multi-stage sampling strategy in the outcome survey, 2019<sup>2</sup>**

Strata	Total	Selected	Method
Primary Sampling Unit	2321	90 villages (78 from GSF programming area, and 12 in non-intervention area)	PPS (Probability proportional to size)
Households	/	1440 households (1248 from GSF programming area, and 192 in non-intervention area)	Simple random
Structured Observation	/	360 (312 from GSF programming area, and 48 in non-intervention area)	Systematic random sampling and cluster sampling
Health/school Facilities	Any present	90/90 (For both schools and health facilities, 78 from GSF programming area, and 12 in non-intervention area)	Purposive

<sup>1</sup> WSSCC GSF Outcome Survey Protocol and Analysis guide (<https://rebrand.ly/09wqau>)

<sup>2</sup> This initial sampling may slightly differ from the final sampling due to data cleaning and availability of respondent

## KEY FINDINGS<sup>3</sup>

**Access to WASH services:** Overall, only less than 1% of the households surveyed defecate in the open, indicating that the practice is close to be eradicated in the programme area. In the area of intervention, 51% of the households uses safely managed services while only 12% share improved latrine facilities. On a different note, about 33% still use unimproved latrine facilities. Overall, more than half of the households in the survey area, about 60%, gets water from an improved source, while 40% still have unimproved sources or no water access. On handwashing access, about 42% had a handwashing facility on premises with soap and water, 32% of households had no service, and about 26% had access to a limited handwashing facility (without soap or water).

**Sustainability:** Out of the 1.166 households previously declared ODF, 66 % continue to have access to improved sanitation facilities with 61% of the households having access to safely managed sanitation in Cross River State and 45% in Benue State.

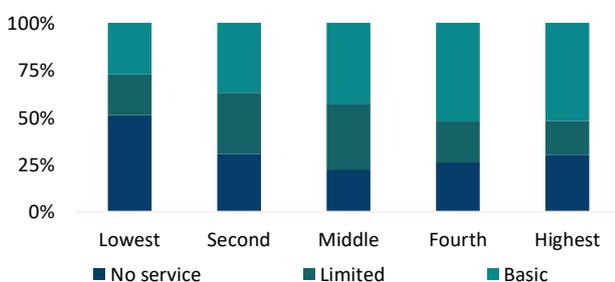
**EQND:** Results show a high level of reported access to latrines across the various categories of household members. Most households have a toilet facility that household members usually use.

## Access to Handwashing Facilities

Regarding the access to handwashing facilities, 42% has access to a basic service (washing facility with soap and water) in the intervention area, with higher access emerging in Cross River State. Overall, 26% has limited handwashing facilities and 32% of the households still has no handwashing facility.

Wealth seems to be an influencing factor in the access to handwashing facilities, although its impact is smaller when compared to sanitation access. Most of the households having an improved handwashing facility are concentrated in the middle, fourth and highest wealth quintile, while 51% of the households in the lowest wealth quintile still have no access to a handwashing facility. As well, education does not seem to be a major factor of influence, although it can be noted that a higher percentage of households with the highest levels of education has access to improved (limited + basic) handwashing services (80%) when compared to households with no education (63%).

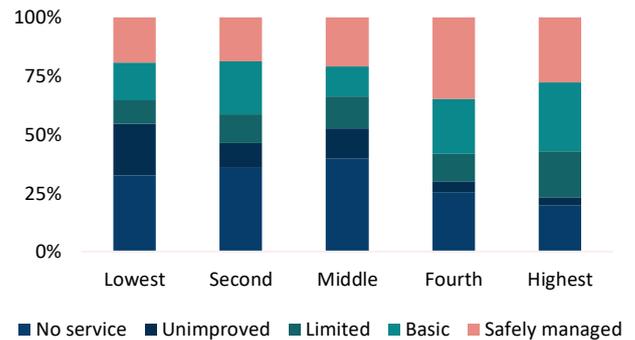
Figure 2: Access to handwashing by wealth quintile



## Access to Water

In the zone of intervention, 14% of households has access to safely managed water services and 20% has access to basic water services while 26% of households has access to limited services. Still, around 11% has access to unimproved services and 29% of households has no access to drinking water services or relies on surface water as their main source of drinking water. Better access to safely managed services is present in Benue State (16%) when comparing with Cross River State (12%) where, however, a higher percentage reports access to basic water sources (29% vs 15%).

Figure 1: Access to water sources by wealth quintile



## Access to Sanitation Facilities

Results show that less than 1% of households practice open defecation. 66% of the households in the area of intervention uses improved sanitation facilities with 51% having access to safely managed sanitation services, 4% using basic sanitation facilities and 12% using limited latrine facilities shared between two or more households. Still, 33% uses unimproved facilities. Levels of improved sanitation change across states with better access present in Cross River State, especially with regard to safely managed sanitation. Household having access to improved water sources have a better access to improved sanitation (73%) compared to household with access to unimproved water sources (57%). Furthermore, access to sanitation seems to increase along with the wealth quantiles: the higher the wealth quintile the better the access.

Figure 3: Access to sanitation facilities by wealth quintile



<sup>3</sup> Only post-intervention results are shown in this brief due to lack of reliability of pre-intervention dataset.

## Structured observations

Structured observations allow direct measurements of the sanitation and hygiene behaviour of selected household members during critical moments (defecation, handwashing, etc.). Out of 655 events of defecation and latrine use, 17% of households practised open defecation. Among under 5 years old children (116 events), 55% have been observed practising open defecation. Out of 3,479 events, results show low prevalence of handwashing with water and any type of soap across all parameters examined for observed persons. Results for percentage of observed persons that washed their hands with water and ash are even lower across all observed events. For the events of defecation / toilet use 62% were followed by handwashing with 32% of handwashing with water only, 20% with water and any type of soap and 10% with water and ash / mud. 38% of the events were followed by no handwashing at all. Furthermore, out of 154 breastfeeding events observed, 79% were not preceded by any kind of handwashing behaviour showing a higher risk of infants' exposure to food- and water borne pathogens in the survey area. Overall, more than half (59%) of the children under the age of 5 did not wash their hands after defecation or toilet use with only around 16% washing their hands with water/ash or any other type of soap.

## Social norms – hygiene and sanitation

The score for social norms is obtained with the cross-tabulation of two types of indicators: empirical expectations (social evidence of the behaviour) and normative expectations (community pressure to engage in the behaviour).

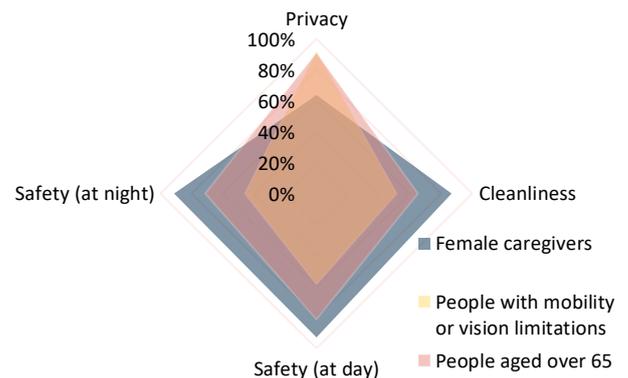
**Sanitation:** In previously verified ODF villages, around 87% of respondents seemed to have strong social norms in relation to sanitation. 61% of them had very well-established social norms with particularly strong empirical expectations. Only less than 1% seemed to have poorly established social norms on latrine use.

**Hygiene:** In previously verified ODF villages, around 71% respondents seemed to have strong social norms in relation to hygienic behaviours. In particular, 39% had well-established social norms. Only 5% seems to have poorly established social norms reporting that neighbours mostly don't practice handwashing as other people don't care about the behaviour. Overall, empirical expectations seem to have a stronger impact on the strength of social norms related to sanitation than for handwashing. On a different note, the social pressure to engage in the behaviour seems to have a heavier influence on social norms on handwashing.

## Satisfaction

On the criteria of preserving their cleanliness and feeling of security during the day, women have shared high levels of satisfaction in all districts especially with regard to cleanliness and safety. With regard to people with limited mobility / vision and people over 65-year-old, higher levels of satisfaction for privacy emerge. On a different note, people with limited mobility/vision seem to be less satisfied about the cleanliness and safety of the sanitation facility

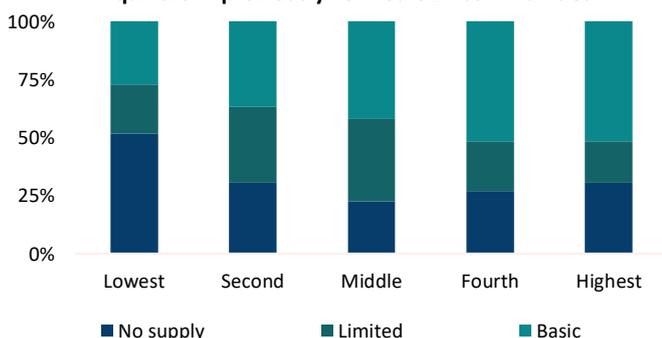
**Figure 4: Female caregiver/disabled/elderly people's satisfaction with sanitation facilities in following dimensions**



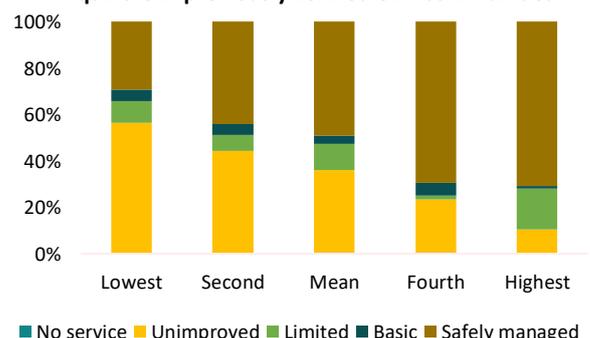
## Sustainability of ODF

Out of the 1.166 households in villages previously declared ODF, 66 % still has access to improved sanitation facilities with 61% of the households having access to safely managed sanitation in Cross River State and 45% in Benue State. Across wealth quintiles, levels of access to sanitation facilities are still unequal. With regard to handwashing behaviour, out of 1,171 households surveyed, 42% was found to have access to basic handwashing facilities with respectively 56% in Cross River State and 34% in Benue State. ODF sustainability was assessed by comparing the ODF status in the survey against the declared ODF status. In previously ODF verified villages, 64% of them had not sign of open defecation in and around the community. Observed evidence of continued latrine use was found in 92% of the 79 villages where the assessment took place. However, in less than 3% of these ODF villages a universal coverage of improved sanitation facilities has been observed.

**Figure 5: Access to handwashing facilities by wealth quintile in previously verified ODF communities**



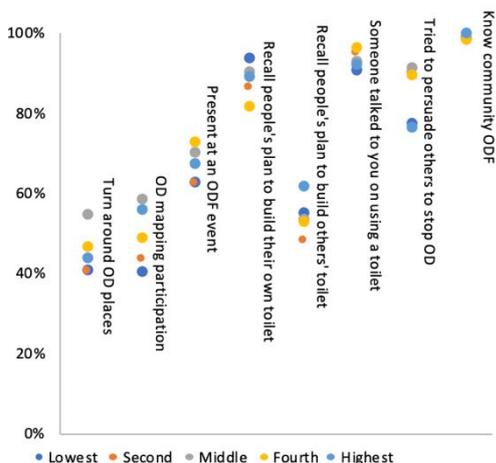
**Figure 6: Access to sanitation facilities by wealth quintile in previously verified ODF communities**



## Exposure to Programme Activities

Overall, high levels of exposure to programme activities were recorded similarly in Benue and Cross river states. 97% of the households have participated in one or more programme activities. There is no strong sex difference in the overall exposure to programme activities (98% for males and 91% for women). However, looking across the different programme activities shows slightly different results between male and female respondents with generally higher levels of participation for men. There is no obvious correlation between wealth quantile and participation to programme activities although more respondents (55%) in the middle wealth quintile reported participating in transect walks as compared to respondents from other wealth quintiles.

**Figure 7: Comparison in level of activity exposure across wealth quintiles**



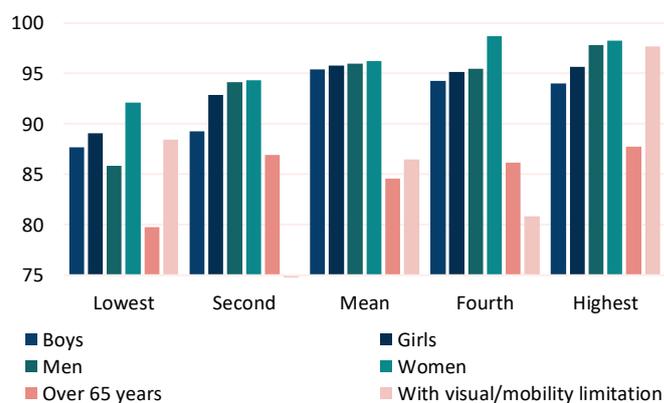
## Equity and non-discrimination

Results show a high level of reported access to latrines across the various categories of household members. Most households have a toilet facility that household members usually use.

72% of respondents with a vision or mobility disability are comfortable to use the latrine. 66% reported that they can use the latrine every time they need to while 50% are using bucket that is emptied into a latrine if they cannot use the latrine and only 4% dig and bury it or defecate on the floor (5%).

93% of over 65 years old respondents are comfortable to use the latrine. 93% reported that they can use the latrine every time they need while 32% reported that they are using bucket that is emptied into a latrine, and 17% is using another family's toilet if the latrine is not available.

**Figure 8: Reported intra-household distribution of access to latrines (%)**

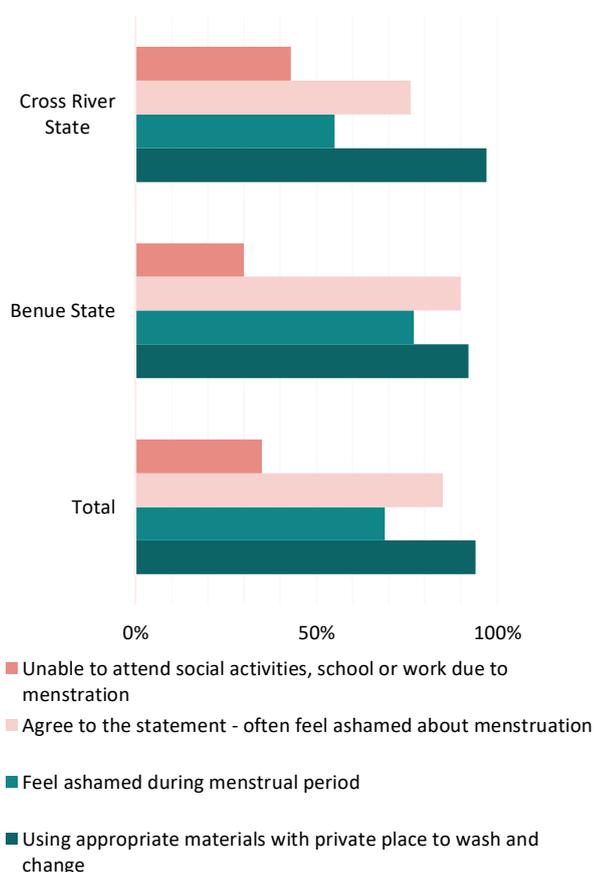


## Menstrual Hygiene Management (MHM)

Questions were included to assess perception and stigma about MHM to serve as a baseline for GSF to go forward.

- Appropriate materials with private place to wash and change:** At home, 95% of women reported to be using pads or cloth or cotton available to manage menstrual period. 94% use appropriate menstrual hygiene materials with private place to change and wash at home. 97% has enough water and 96% have enough lighting to respectively wash and dry the materials, while 99% of women also reported materials are easy to access. Furthermore, 99% feel safe while using the facility at home and 98% have enough privacy. Among the 15-49 years old female respondents, the majority uses disposable pads (58%). 94% reported to feel comfortable with the material available, that the material is affordable and protective against leaks.
- MHM related awareness and stigma:** Overall, 51% of respondents were not aware of the first time when they got their menstruation period, 48% were aware and out of them 86% were prepared to manage the first period. 85% of women and girls often feel ashamed about menstruation while 69% feel ashamed during menstrual period.
- Exclusion of activities during menstruation:** Results show that 35% of respondents did not participate in social activities, school, or work due to their last mensuration in the last 12 months. More respondents from Benue state reported not participating in social activities. As well, respondents having a higher education level reported higher levels of exclusion.

**Figure 9: Menstrual hygiene indicators**



## Schools

**Sanitation:** Observations were made at 49 toilets in 28 schools. 89% of schools had toilets facilities for students. However, only 24% had access to basic sanitation services. In the observed schools, latrines located within the building were 48%, while 51% of the latrines were constructed outside of the buildings but within the premises of the schools. Single sex toilets were available for majority of the schools (89%) with toilet facilities for students. However, none of the toilets was modified or designated for students with disabilities. There were 42% of schools who reported toilet tissue as anal cleansing materials available to students, 32% use paper and 10% use water only with 16% using no cleansing material. 52% of the school toilets are reported to be cleaned 2-4 times a week, 42% once per day and 6% once per week. All schools reported that pupils can use toilets at all time during school day and that there is at least one toilet that was modified for people with disabilities.

**Hand hygiene:** Observations were made at 15 handwashing stations in 28 schools. No basic handwashing facilities were available in in the surveyed schools and only 37% had limited handwashing services while 62% had no hygiene services. As observed, 21 % of the schools surveyed had handwashing station located near the boys' toilet while girls had only 14%. 29% of the stations were located outside the school premises and 71% were observed within the school premises. Relatedly, 47% of the stations had water available of which, only 27% had soap available, no ash was observed in any of the stations at the time of survey. Accessibility and safety for differently able persons (visual/mobility limitations) were relatively low with respect to the number of persons with such needs.

**Menstrual hygiene management (MHM):** Observations were made at 35 schools. 43% of the surveyed public schools reported that they had provided education regarding MHM with percentages increasing along with grade level. Nevertheless, more than half of the school (57%) had no teaching material/resources and in 26% of the cases materials existed but were not shown. Only 3% of the schools had MHM materials available at school and a separate place for women to change and wash MHM aside from latrines. 17% had detergent or soaps to clean sanitary clothes but none had designated place for drying sanitary clothes.

## Health facilities

**Water:** The main sources of water supply at surveyed health facilities were protected well (30%) and tube well/borehole (30%), most (62%) of which were on the premises of the health institution and 35% within 500m. Only 3% of surveyed health facilities reported that there was no water provided at the health facility. The JMP Water Ladder Status assessment indicated that 70%, 11% and 20% of health facilities had basic, limited and no water service status, respectively.

**Sanitation:** Observations were made at 94 toilets in 31 health facilities. With JMP sanitation ladder status assessment, only 9% had access to basic sanitation services, 87% had access to limited services and 3% had no sanitation services. Out of the observations it was found that most of the toilets were located within the health facility building (72%) while 28% were outside the building but on premises. 74% of the toilets were for general use with a higher percentage of sanitation services dedicated to women (18% compared to 7% for men). A majority of the facilities were flush/pour-flush toilets and 83% of toilets were found clean. Most of the observed toilets had intact roof that provides shelter (88%), 83% of the toilets had closable door that locks from the inside. Accessibility and safety for persons with visual/mobility limitations was good as 96% had access to clear path from building to toilet and 56% had a door wide enough for the wheelchair. In addition, in 67% of the healthcare facilities toilets were cleaned at least once a day.

**Hand hygiene:** Observations were made at 44 handwashing stations in 21 health facilities. With JMP sanitation ladder status assessment, none of the facilities had access to basic handwashing facilities, 38% had access to limited handwashing services and 62% had no services available. Out of the observations, more than 70% of the washing points had water and in 66% soap was also available. Most of the handwashing facilities were located within the building or outside the building but within premises. Furthermore, 77% and 54% of the healthcare facilities had a place where staff and patients could wash their hands respectively. In terms of access, it was reported that 93% had access to facilities through a clear path.

## Limitations of the study

- Most data were self-reported, and respondents may thus have over- or underestimated some of their statements. However, for the indicators most likely to yield extreme values (such as cost-related items), the analysis focused on median values and provided the interquartile range, the standard deviation and/or the confidence interval.
- A social desirability bias may be observed for some of the habits, social norms and use indicators. Values are to be considered carefully, with data collected from actual structured observations (more objective and representative).
- For numerous levels of disaggregation, some of the presented results may have lost some statistical power. Most of the time, when this type of situation occurred, the analysis also provided the number of observations or frequency of observations for the reader to be aware of the denominator.
- For certain indicators discrepancies have been observed between the final report and the quality check performed by WSSCC with its academic partner. Recomputed figures have then been reported when discrepancies happened.

Collaborators: University at Buffalo, United Purpose Nigeria, SKILL BROKERS Limited, WSSCC

