The Global Sanitation Fund (GSF) Programme in Nepal is financed by the Water Supply and Sanitation Collaborative Council (WSSCC) and implemented by UN Habitat Nepal. This evaluation seeks to provide a summative and a formative forward-looking analysis of the Programme. The analysis is framed around the Organisation for Economic Co-operation and Development’s Development Assistance Committee (OECD DAC) evaluation criteria of relevance, efficiency, effectiveness, and sustainability. The methods and techniques of the evaluation have been customized to the specific evolution of the GSF-supported programme in view of the current stage of Nepal’s sanitation status. A mixed methods approach has been adopted focusing on the referencing and triangulation of quantitative data from a variety of programme and national documents, qualified through a series of primary sources.

The Programme has been relevant, efficient, effective and sustainable. The willingness of the local governments to assume responsibility for the national sanitation campaign to eradicate open defecation and clear lines of accountability are hallmarks of this success. Working through the local governments and within the national framework has significantly lowered the costs of engagement in the country and increased the sustainability of the GSF programme interventions. The GSF programme could be further strengthened by developing a single technology option for rural and urban settings and addressing documented shortfalls in preventing the exposure of children to faecal ingestion. Moving forward, the GSF programme in Nepal may opt to increase its engagement with the private sector on the delivery of safely managed sanitation services and/or broaden the focus of its local government-led campaign to secure ODF status wherein sanitation may be a sub-component.
RELEVANCE

Over the period from 2011 - 2019, the GSF programme in Nepal contributed to 667 (or 22%) of the 3,039 Village Development Committees (VDCs) (out of 3,372) that achieved Open Defecation Free (ODF) status over this period. Within these ODF jurisdictions, this amounts to a contribution by the GSF programme of just over 3.5 million people (or 31%) of the 11.6 million new people accessing improved sanitation since 2011.

Two successive WSSCC outcome surveys in 2016 and 2018 indicate that all members in 92% of households in ODF declared areas all continue to use latrines on all occasions. According to the 2016 WSSCC outcome survey in the GSF Programme areas, 85% of the latrines were maintained in at least a satisfactory manner and hygienically operated with only minor variations in the state of latrines constructed in the old, intermediate and newly declared ODF areas.
EFFICIENCY

The value for money (VfM) study undertaken by Oxford Policy Management (OPM) in 2015/16 benchmarked the efficiency of various GSF country programmes concluding that

- the GSF programmes appear to be generally more cost-effective at achieving ODF status, as compared to other similar donor programmes.
- the Nepal programme was more efficient across all the cost efficiency comparators than the average for the other GSF country programmes where data was available.

The OPM VfM study concluded that the cost per person served with improved sanitation and hygiene services in Nepal ranged from US$ 8 - 10. With the cost per person reached in Nepal nearly halving over the period from 2014 to 2018, the average cost over the life of the GSF programme is less than US$ 6 per person changing to use an improved sanitation and handwashing facility.

The reduction in costs is a culmination of:

- The natural spread of the fixed costs incurred during the start-up phase
- The reliance on materials and skills developed (and paid for) in the earlier phase of the programme
- A reduction in the lag (and the associated sunk costs) between the development of systems, the engagement and training of implementing partners, the mobilization of communities and the declaration of ODF status
- The higher population densities in the Terai with the lower baseline sanitation coverage rates requiring a large number of improved latrines within relatively short distances.

Ultimately, it is important to assess whether the commitment of public finance to sanitation has not just resulted in the construction of toilets but in their sustained presence and use. The 2016 (& 2018) outcome survey indicated that 2.8% (& 5.1%) of households in ODF declared areas had no latrine and 5.4% (& 3.2%) of households with latrines reported that one or more family members sometimes practiced open defecation. Applying this to the cost efficiency data, suggests a cost effectiveness of US$ 6.26 capital investment per person leveraging the sustained access and use of an improved sanitation facility costing between US$ 100 - 200.

COST EFFICIENCY (ASSUMED OUTCOME)

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EFFECTIVENESS

The GSF programme in Nepal appears set to reach and/or surpass the quantitative programme targets for WSSCC Strategic Plan (2017-2020) Key Performance Indicators (KPI) 1, 2 and 3. Progress data on the achievements from the 6,588 communities in the 707 rural and 19 urban wards in the 19 target Districts collated through 116 grants with 55 implementing partners over the period from October 2010 – July 2019 indicate that the GSF programme has delivered 100% of the target to reach 3.56 million people with new access to improved sanitation facilities. This corresponds to roughly 85% of the targets for the number of new people living in an ODF environment and accessing handwashing facilities with soap and water. With the extension of the programme through to June 2020, this means that delivering the project targets for the population accessing an ODF environment and hand washing services will necessarily require the target for those accessing improved sanitation facilities to be exceeded.

**KPI 1**

- **# of people living in ODF environments following national criteria**
  - **Target:** 6,008,554
  - **Progress:** 5,186,087 (86%)

**KPI 2**

- **# people with access to an improved sanitation facility (JMP: limited, basic and safely managed sanitation service levels)**
  - **Target:** 3,556,586
  - **Progress:** 3,561,334 (100.1%)

**KPI 3**

- **# of people with access to a handwashing facility on premises with water and soap (JMP: basic hygiene service level)**
  - **Target:** 4,379,090
  - **Progress:** 3,653,793 (83%)

**KPI 4**

- **% of households in previously verified ODF communities that have access to an improved sanitation facility (JMP: limited, basic and safety managed service)**
  - **Target:** 80%
  - **Progress:** 86.8%

**KPI 5**

- **% of households in previously verified ODF communities that have access to a handwashing facility on premises with water and soap (JMP: basic hygiene service level)**
  - **Target:** 80%
  - **Progress:** 77.2%
The GSF programme in Nepal also appears to be meeting the sustainability of access targets established by KPI 4 and 5\(^1\). According to the WSSCC outcome surveys, the sustained access to improved sanitation facilities in ODF declared areas ranges from 90.3% in 2016 to 86.8% in 2018. This exceeds the target of 80% access to improved sanitation in previously declared ODF target areas.

According to the WSSCC outcome surveys, access to basic handwashing services in previously ODF declared areas ranges from 72.9% in 2016 to 77.2% in 2018. This is slightly below the target 80% access to basic handwashing facilities in previously declared ODF target areas.

**SUSTAINABILITY**

Sustainability for the WSSCC has behavioural, social, technical, financial, institutional and environmental dimensions.

**Behavioural Sustainability:** for WSSCC refers to the extent which new or changed behaviours are engrained to the point that they become the norm and/or become habitual. Slippage has been interrogated here as the proxy for behavioural sustainability. If this is defined as the practice of open defecation by one or more family members amongst households with a latrine in an ODF declared village then this was only 5.4% for the GSF programme in 2016 and 3.2% in 2018.

**Social Sustainability:** for WSSCC refers to the ability of a social system, to function at a defined level of social well-being. Access to basic sanitation services for all people, all the time, everywhere has been taken as the proxy for social sustainability. The WSSCC 2018 outcome study found that access to at least limited sanitation facilities in schools and health centres was 98.9% and 94.3% respectively. Access to at least limited hygiene facilities in schools and health centres was 96.7% and 94.3% respectively. This is a tribute to the extent that schools (Ministry of Education) and health centres (Ministry of Health) have been involved in the sanitation programme.

**Institutional Sustainability:** is associated with the strength of the relationships responsible for the demand, supply and regulation of safely managed sanitation services. The unambiguous delegation of the responsibility to municipalities to plan and lead, design and align, coordinate and monitor the elimination of open defecation; along with the support for the central government to evaluate, validate and declare open defecation municipalities, districts and provinces has been associated

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\(^1\) The targets for KPI 4 and 5 were set by WSSCC and are not part of the government target for the GSF programme
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with a high degree of institutional sustainability.

**Environmental Sustainability:** for WSSCC refers to the integration and sustainable management of water and waste(-water) flows and resources. From a GSF programme perspective, environmental sustainability will require that the latrine pits pose minimal risk to the integrity of the groundwater. While risks of faecal contamination through the groundwater are low, the major environmental risks are posed by the failure to manage the influence of faecal effluent on the surface water.

**Technical Sustainability:** for WSSCC refers to the ability of a given system or technology to be used and/or to function for long periods of time. While the GSF programme has succeeded in the almost universal extension of access to improved offset pour flush latrines, the failure of the leaching facility undermines the safety of many sanitation systems. This has led to the premature filling of pits / tanks and the unsafe emptying / transport and disposal of faecal effluent.

**Financial sustainability:** refers to the generation of the revenues necessary to cover the full costs to safely manage the containment, emptying, transport, treatment and disposal of faecal sludge and effluent. While there appears to be a high willingness of households and local governments (municipalities) to pay for higher quality sanitation services, the lack of capacity in the market to respond with a commensurate quality of service undermines the financial sustainability of the sector.

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**CONCLUSION**

The major challenge for the GSF programme in Nepal and the sector at large lies in addressing the shortfall in technical knowledge associated with the universal installation of a single technology option for rural and urban settings. The failure of the standard design of twin offset alternating pits (in rural areas) and septic tanks (in urban areas) to manage the effluent in all topographical conditions can constitute a significant faecal exposure risk in some situations. The other challenge for the GSF programme lies in addressing the shortfall in practical knowledge associated with a failure to prioritize the prevention of the exposure of children to faecal ingestion.

**RECOMMENDATIONS**

In the short term, the Department of Water Supply and Sewerage Management (DWSSM) and GSF fund commitment to the testing and implementation of the Total Sanitation Guidelines needs to continue to be supported. While the total sanitation approach lacks the elegant simplicity of the national movement to eradicate open defecation, it does present the clearest ‘government-led’ way forward for the sector for now.

In the medium term, there is a need to create a bridge from the Total Sanitation Guidelines to the Ministry of Water Supply and WSSCC priority to address the ‘safely managed sanitation’ challenge posed by SDG 6.2 in rural, peri-urban and urban areas.

• In rural areas, the prioritizing of twin alternating offset pit latrines would benefit from a greater understanding of the principles underpinning this technology to ensure that it is always installed in a manner that enables the contents to be ‘safely managed’.
  • In peri-urban areas, the prioritizing of septic tanks and faecal sludge disposal sites would benefit from a deeper understanding of the high inefficiencies and risks associated with the installation of septic tanks without leach pits that currently operate as holding tanks.
  • In urban areas, the prioritizing of networked wastewater systems would benefit from a nuanced approach that maximizes the opportunities of the existing separation of blackwater and greywater within households (i.e. considers condominial sewers, low cost gravity systems and combined storm water sewers).

With the deadline for the declaration of national ODF status rapidly closing, the GSF
programme in Nepal is at a crossroad. While the next steps for the sanitation sector will most likely be market driven, the next steps for a national campaign approach may not lie within sanitation sector. In the long term, this will mean that the GSF programme will either need to:

• Switch its capacity mix, skill set and implementing partners to engage with the private sector (masons and pit emptiers, plumbers and drillers, builders and hardware suppliers, systems designers and micro-financiers) on the delivery of safely managed sanitation services. This will need to encompass the provision of quality sanitation, solid waste, drinking water and drainage infrastructure within and the willingness to pay by households. This will also need to be accompanied by stronger engagement with local and central government systems to regulate the quality of sanitation services (i.e. building codes, design standards, ability to pay).

• Switch the focus from the ‘local government’ led campaign to secure ODF status to another campaign wherein sanitation may be a sub-component. This could entail campaigns for 100% attendance in school (where schools must have sanitation facilities), or campaigns to reduce chronic undernutrition (stunting) in children under five (where WASH is a key component), or campaigns to achieve clean or ‘litter free’ status (where solid and liquid waste are components).