SHF Investment Case Methodology Notes

Available resources:

Total resources assumed to be raised by the SHF is US\$ 2 billion for the five-year period 2021 to 2025. Of this amount US\$ 1.2 billion (60%) is assumed to be invested in household sanitation. This is equivalent to US\$ 240 million a year invested by the SHF in household sanitation. Resources are also assumed to be invested in school WASH (10%), sanitation and hygiene in health care facilities (10%), and menstrual health and hygiene (10%). In each of these investment areas 5% will be set aside for systems strengthening activities. The balance, 10%, will be invested in supporting innovations and meeting administrative costs.

Allocation of resources to countries:

By embodying the 'Leave No One Behind' strategic vision of the fund, the purpose of the SHF allocation approach is to align funding available to those countries hardest hit by sanitation and hygiene challenges and with least economic capacity. This is guided by the SHF allocation and prioritization policy which ensures that the available resources are distributed across countries in a transparent and rational manner. An allocation-based approach also improves the predictability of SHF funding for countries. The allocation is based on a mathematical formula approved by the SHF Steering Committee and applied to the total funding available to derive an initial country allocation which may be adjusted on the basis of objective criteria. The formula is a function of country income (GNI per capita) and the population without access to basic sanitation.

COVID-19 fast-tracking:

The Fund intends to support urgent scale-up of investment in the national COVID-19 preparedness, prevention and response plans and thereby help build long-term resilience against future waves of infections and similar future threats. Once the SHF is resourced, it will look to fast-track portions of the funds allocated to countries so that these can be rapidly invested to scale-up hygiene interventions that will act as a barrier to the spread of COVID-19.

1. Household-Based Sanitation & Hygiene Interventions

Objectives:

A modelling exercise was conducted to determine to what extent the SHF would bend the current negative trend of access to basic sanitation, i.e. the potential impact on reducing the population without access to at least basic sanitation in the 46 SHF supported countries.

Estimates for Household Basic Sanitation & Hygiene Interventions:

Unit costs for the 46 SHF supported countries were obtained by reference to the Sanitation and Water for All (SWA) modelling tool which formed the basis for the projections.¹

Allocation of Resources for Household Sanitation & Hygiene Interventions:

The SHF will promote the principles of Leave no one behind. It also supports country ownership. Consequently, eventual investments will be influenced by country priorities. However, the SHF will wish to ensure that those most left behind are prioritized. For impact modelling purposes the following assumptions were made on how funds assigned to household sanitation will be invested:



From the available funding, 95% of resources are expected to be spent on household sanitation and hygiene, and 5% are expected to be spent on systems strengthening.

Hutton,G., Varughese, M.C., 2016. The costs of meeting the 2030 sustainable development goal targets on drinking water sanitation, and hygiene. The World Bank, Working Paper, Report No. 103172. https://documents.worldbank.org/en/publication/documents-reports/ documentdetail/415441467988938343/the-costs-of-meeting-the-2030-sustainable-development-goal-targets-on-drinking-watersanitation-and-hygiene

Assumptions and Limitations:

(a) While the SWA tool includes unit costs for the various sanitation components by country these are not based on country by country determinations. It is understood that unit costs were based on estimations and assumptions using comparable countries. This approach was necessitated by data gaps. (b) Given inherent uncertainties in accuracy, unit costs are not appropriate to make country specific projections. Instead, they are used for projections across the whole cohort of the SHF countries. (c) The unit costs in the tool were inflated by 5% per year to make them more current given the report was published in 2016 and reflected estimated unit costs in 2015. Getting revised unit costs is part of the SHF learning agenda. (d) Funding from the SHF is assumed to leverage a similar amount of funding from national or local government resources. The total funding amount will be applied to invest in basic sanitation for unserved populations. (e) Funding from the SHF and funds leveraged will pay for software capital expenditure and 50% of hardware capital expenditure (for which unit costs were derived as explained above). A modelling assumption is that on average across countries the balance of 50% capital expenditure hardware will be met by consumers who will also bear the costs of maintenance. It is recognised that the mode of investment, co-financing and consumer subsidies will vary between countries also dependent on country circumstances and legislation.

2. Sanitation & Hygiene Interventions at Schools

Objectives:

The objective of this modelling exercise was to determine the potential impact of bringing WASH and better menstrual health and hygiene to students at schools in the 46 SHF supported countries.

Estimates for Sanitation & Hygiene Interventions at Schools:

Building on data from Bangladesh, the unit cost estimates used as part of this modelling exercise are based on assumptions of costs to achieve a basic service level for both water and sanitation facilities in schools, including disposal and menstrual hygiene management, of US\$ 10 per student for capital expenditure.² From the available funding for sanitation and hygiene in schools, 95% of resources are expected to be spent on school-based interventions, and 5% are expected to be spent on systems strengthening.

 Snehalatha, M., Fonseca, C., Rahman, M., Uddin, R., Ahmed, M., Sharif, A.J., 2015. School WASH programmes in Bangladesh: How much does it cost? Applying the Life-Cycle Costs Approach in selected Upazilas. IRC and BRAC WASH. https://www.ircwash.org/sites/default/files/lcca_ methodologyreport_school_wash_clean.pdf

Assumptions and Limitations:

(a) Unit cost data from Bangladesh is generalized to the 46 countries. As part of its learning agenda, SHF aims at collecting additional and more precise country data. (b) The unit cost estimates have not been adjusted for inflation. (c) In addition to the assumed costs to achieve a basic service level for water and sanitation facilities in schools of US\$ 10 per student for capital expenditure, an additional US\$ 1.4 per year per student is estimated to be needed for recurrent costs. It is assumed that the recurrent costs will be borne from domestic resources. (d) The estimates are dependent upon SHF assumptions regarding leverage of additional funding from domestic sources and other investors.

3. Menstrual Health & Hygiene Interventions

Objectives:

The objective of this modelling exercise was to determine the potential impact of menstrual health and hygiene interventions in the 46 SHF supported countries.

Estimates for Menstrual Health and Hygiene Interventions:

Unit costs for the 46 SHF supported countries are based on multiple sources.³ Costs include program costs from the perspective of a government program or healthcare payer providing these interventions. Included are costs for training nurses to deliver educational interventions, three hours of instructions to groups of 22 students, and other direct program costs. Not included are government administrative costs.

Access to reusable sanitary pads (1 year)	Access to disposable sanitary pads (1 year)	Access to menstrual cups (10 years)	Access to tampons (1 year)	Puberty education and soap (3-hour session with 22 students)
US\$5/student	US\$22.42/student	US\$9.93/student (10 year one time investment)	US\$14.95/student	US\$4.19/student

 Babagoli, M.A., Benshaul-Tolonen, A., Zulaika, G., Nyothach, E., Oduor, C., Obor, D., Mason, L., Kerubo, E., Ngere, I., Laserson, K.F., Edwards, R.T., Phillips-Howard, P.A., 2020. The cost-benefit and cost-effectiveness of providing menstrual cups and sanitary pads to schoolgirls in rural Kenya. Article & supplementary appendix. CDEP-CGEG WP No. 87. House, S., Mahon, T., Cavill, S., 2012. Menstrual hygiene matters. A resource for improving menstrual hygiene around the world. WaterAid. Tellier, S., Hyttel, M., 2018. Menstrual Health Management in East and Southern Africa: a review paper, WoMena/United Nations Population Fund (UNFPA). van Eijk, A.M., Zulaika, G., Lenchner, M., Mason, L., Sivakami, M., Nyothach, E., Unger, H., Laserson, K., Phillips-Howard, P.A., 2019. Menstrual cup use, leakage, acceptability, safety, and availability: a systematic review and meta-analysis. Article & supplementary appendix. Lancet Public Health; published online July 16. http://dx.doi. org/10.1016/S2468-2667(19)30111-2.

Allocation of Resources for Menstrual Health and Hygiene Interventions:

For impact modelling purposes the following assumptions were made on how funds assigned to menstrual health and hygiene will be invested: 55% of funds will be invested into menstrual health and hygiene education for girls and boys in secondary school in rural areas, 40% of funds will be invested into menstrual products for girls in secondary school in rural areas, and 5% of funds will be spent on systems strengthening. Among the menstrual health and hygiene products, 50% investment is expected to go into reusable pads, 25% into disposable pads, 12.5% into menstrual cups, 12.5% into tampons.

Assumptions and Limitations:

(a) The cost estimates are for one year except for menstrual cups, which can last up to 10 years. (b) The estimates assume accuracy of the population and school enrollment data. (c) The estimates assume comparable secondary school enrollment rates for girls in urban and rural areas. (d) The estimates also assume accuracy of the unit cost estimates and their applicability from a limited number of countries to broader regions. As part of its learning agenda, the SHF aims at collecting additional and more precise country data. (d) The unit costs estimates have not been adjusted for inflation. (e) The estimates are dependent upon SHF assumptions regarding leverage of additional funding from domestic sources and other investors.

