Assessment of the Conrad N. Hilton Foundation's Strategy for Sustainable Safe Water Access and Strategic Objectives

REPORT FOR THE CONRAD N. HILTON FOUNDATION

The Water Institute at the University of North Carolina at Chapel Hill
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Contents

Acronyms and Abbreviations

CQI	Continuous Quality Improvement
DALY	Disability Adjusted Life Year
DHS	Demographic and Health Survey
DIMES	District Information and Management System – Ghana
DRI	Desert Research Institute
E. coli	*Escherichia coli*
FLOW	Field Level Operations Watch
GLAAS	Global Analysis and Assessment of Sanitation and Drinking-Water
IRC	Formerly the International Reference Center for Community Water Supply
JMP	Joint Monitoring Program
L	Liters
MEL	Monitoring, Evaluation and Learning
MERL	Monitoring, Evaluation, Resolution and Learning
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
MWA-EP	Millennium Water Alliance – Ethiopia Program
NGO	Non-governmental Organization
ODF	Open Defecation Free
PIMS	Post – Implementation Monitoring System
PMG	Program Management Group
PN-AEPA	National Programme for Water Supply and Sanitation
PPP	Public Private Partnership
QAS	Quality Adjusted Service
SMART	Specific, measurable, attainable, realistic, and time-bound
SMARTer	SMS texting to monitor water, sanitation and hygiene systems
SDG	Sustainable Development Goal
SMS	Short Message Service
SSS	Sustainable Services at Scale
SO	Strategic Objective
SWA	Sanitation and Water for All
SWN	Safe Water Network
SWSD	Safe Water Service Delivery
UNC	The University of North Carolina – Chapel Hill
UNICEF	The United Nations Children's Fund
UV	Ultraviolet
WaSH	Water and Sanitation, Hygiene
WaSH-BAT	Water and Sanitation, Hygiene – Bottleneck Analysis Tool
WaSH MEL	Water and Sanitation, Hygiene Monitoring, Evaluation and Learning
WHO	World Health Organization
WI	Water Institute
WQ	Water Quality
WSA	Water and Sanitation for Africa
WV	World Vision

Executive Summary

The Water Institute (WI) at The University of North Carolina at Chapel Hill was requested to assess the Conrad N. Hilton Foundation's Sustainable Access to Safe Water Strategy and its Strategic Objectives (SOs). This assessment was part of a larger monitoring, evaluation and learning (MEL) program developed by the Water Institute and supported by the Hilton Foundation.

This report is an assessment of the Sustainable Access to Safe Water Strategy and its SOs as well as an evaluation of what the strategy set out to do and how well its objectives were accomplished.

The assessment began with a thorough review of documents such as grant proposals, progress reports, peer-reviewed literature, and, when available and applicable, final reports and monitoring data. Other sources informing the assessment included nationally representative surveys and censuses, such as the Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS), site visits, targeted assessments, and interviews with key informants.

The Hilton Foundation's Strategy for Sustainable Safe Water Access can be found here: (https://www.hiltonfoundation.org/priorities/water/our-approach) (Conrad N. Hilton Foundation, 2015). The strategy evolved extensively during the assessment period, and we updated our methodology to adapt to changing targets. The current strategy comprises six SOs as well as several cross-cutting themes and MEL.

This report includes recommendations that will help the Hilton Foundation continue to strengthen and scale its impact and maintain its leadership through its investment in water projects and partnerships. The recommendations are derived from the findings of this assessment, combined with knowledge of the changing global and regional WaSH context. The assessment and recommendations are timely as the Hilton Foundation works towards developing a new strategy and objectives.

Background

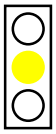
The Hilton Foundation has extensive experience and expertise in philanthropic investment in water projects and has currently invested over $130 million in grant awards. For over two decades the Foundation has been investing in water projects in countries in Sub Saharan Africa (Ghana, Burkina Faso, Mali, Niger, and Ethiopia) as well as India and Mexico. In 2010, the Foundation began shifting from mostly providing access to water in target countries to a broader strategy that included six SOs with an expanded focus on sustainability, scalability, the enabling environment and knowledge sharing. The development and adoption of the new strategy and the SOs reflect the Foundation's commitment to adapting to the needs of a changing world and the changing landscape of the WaSH sector. By being adaptive and expanding its strategy the Foundation has positioned itself as a leader in WaSH philanthropy.

Strategic Objectives

The Conrad N. Hilton Foundation and its grantees have made substantial progress towards the six SOs outlined in its Sustainable Access to Safe Water Strategy. Excellent progress has been made toward achieving two of the SOs, with adequate progress made toward achieving three and poor progress on one. The Hilton Foundation has made progress in evolving from simply supporting access to water to a more integrated approach that includes households, communities, and the enabling environment.

In the following sections we review performance on each SO.

SO1: Sustainable safe water access (at the source and point-of-use) for at least 1 million people through scalable, appropriate and incentive-based approaches



This SO tracks the quality of water services beneficiaries receive in three dimensions: (a) access to enough water; (b) sustainable water service; (c) water that is safe for drinking.

Overall, the Hilton Foundation's Portfolio met stated access targets, and shows good progress on sustainability. Water safety is good at most, but not all sources; water safety is poor at the household level due to contamination during storage and use.

Highlights

- Access. Hilton Foundation grantees report serving 1.9 million beneficiaries from the beginning of 2011 to the end of 2015. This is likely overstated by 25 to 50%, but even a conservative revision suggests that these efforts reached 1.3-1.4 million people by the end of 2015 (at a cost of approximately $30 for each new beneficiary reached).
- Sustainability. Few grantees monitor sustainability, but data collected by selected grantees show high levels of sustainability. Several grantees are adopting new tools to measure and improve sustainability.
- Water Safety. Monitoring data and research suggest that while most Hilton Foundation sources are safe, over 75% of beneficiaries are drinking unsafe water due to contamination at the household level. This issue is a global problem, and represents a major opportunity for the Hilton Foundation to exercise leadership in the sector through its WaSH programs, which include projects to protect and measure household water quality.

Recommendations

Require that grantees commit to improving and monitoring sustainability and household water quality. Require that grantees report beneficiary numbers based on direct monitoring. Continue to invest heavily in those partners delivering the greatest return with respect to beneficiaries served. Provide clear guidance documents for grantees on the operational definitions of key terms in this SO, and the corresponding expectations for achieving and verifying targets.

SO2: Increased percentage of functioning water systems to at least 90% in the Foundation program areas

This SO tracks progress towards increasing the percentage of systems providing water at any given time and establishes ambitious new standards for the WaSH sector. While handpump functionality in sub-Saharan Africa currently averages 64% (RWSN, 2012), this SO sets 90% functionality as the benchmark for Foundation programs.

Hilton Foundation grantees are making good progress towards achieving this target, and ongoing WaSH quality improvement projects should help grantees attain the ambitious portfolio-wide target of 90%.

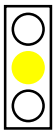
Highlights

- Hilton Foundation grantees have constructed over 4,135 communal water sources since 2011, of which 80% are estimated to be functional at any given time.
- Several grantees have plans to increase their functionality rates through Hilton Foundation-funded Continuous Quality Improvement projects.
- Only four of eight implementation grantees measure functionality as of this writing.

Recommendations

Require grantees to commit to improving and monitoring functionality. Exercise sector leadership in calling for a benchmark of 90% functionality, and share tools and methods for achieving excellence in this area. Define the post-implementation time-period during which functionality rates will be maintained, and set ambitious but achievable targets for the functionality of infrastructure implemented by other actors in grantees' project areas.

SO3: Increased funding to the WASH sector in the target countries through advocacy to significantly reduce the MDG funding target gap



Throughout the Hilton Foundation portfolio, advocacy efforts have rarely focused on persuading national governments to spend more money on WaSH policy. Most grantees have instead sought to raise awareness about issues having to do with implementation, chiefly by disseminating project lessons learned. Some efforts have aimed for audiences outside target countries as well, including advocacy directed toward the United States government and philanthropic foundations.

Highlights

- Three grantees are engaged in financial advocacy while fifteen are engaged in implementation advocacy efforts.
- Only two grantees focus advocacy efforts toward national governments in targeted countries, suggesting a possible gap in the overall portfolio.
- Grantee reporting on advocacy is limited and the indicators selected by grantees to measure their advocacy outputs and outcomes are rarely specific, measurable, attainable, realistic or time-bound (SMART).

Recommendations

To improve implementation advocacy, grantees need to extract lessons objectively from experiences, both positive and negative, for dissemination to the WaSH sector. To expand financial advocacy, the Hilton Foundation portfolio needs to include well-designed advocacy goals with clear objectives and metrics to measure and report impact.

SO4: Wide acceptance of a common WASH Index to better monitor impact

A common index could synthesize dimensions of WaSH into a single score in order to inform the decisions of policy makers, planners, and donors; assess progress; and rank countries and projects by performance – all of which would help clarify how to make the best use of available resources. The Hilton Foundation asked the Water Institute to lead the effort to develop a WaSH Index.

Highlights

- With support from the Hilton Foundation, The Water Institute developed a WaSH Performance Index to examine how quickly countries are improving both access to, and equity in, improved water and sanitation relative to best-in-class performance. Through think tank events and presentations at WaSH conferences, WaSH sector stakeholders, Hilton Foundation grantees, and WaSH sector leaders have endorsed the WaSH Performance Index as a valuable and important contribution in the Sustainable Development Goal era. More effective promotion of the Index is necessary, however, for it to influence policymaking more widely.
- High-performing countries in the 2015 rankings included El Salvador, Niger, Egypt, Maldives, and Pakistan. Low-performing countries were those that showed stagnation or decline in recent

years compared to their peers, such as the Dominican Republic, the Gambia, Ghana, Samoa, and Timor-Leste. Figure 1 shows WaSH index scores by country.

- The WASH Performance Index can provide national policy makers with a new instrument to inform investment decisions and identify aspects of water and sanitation access and equity in need of targeted improvement.

Recommendations

Promotion of the Index amongst grantees, philanthropic foundations, and the larger WaSH sector will be necessary for wide acceptance of the WaSH Index.

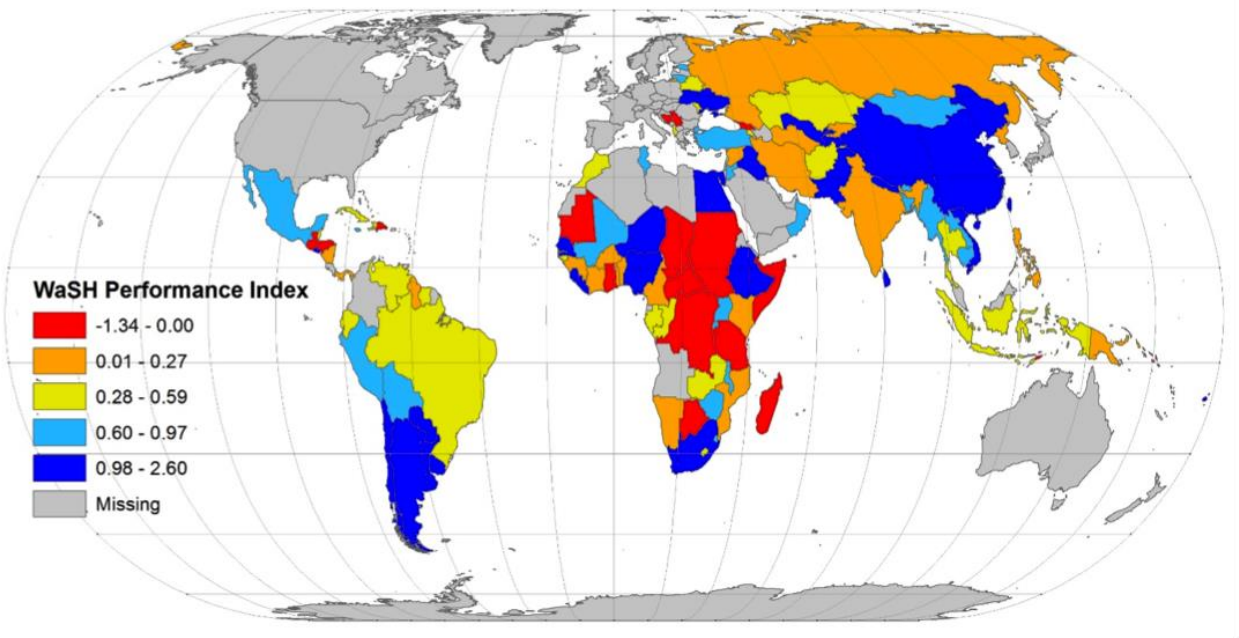
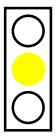


Figure 1: WaSH Performance Index values by country. High scores indicate better performance on the WaSH Performance Index.

SO5: Adoption of coordination and harmonization practices in the WASH sector by all actors

Hilton Foundation grantees have gradually but significantly increased activities devoted to this objective, which emphasizes the importance of working in concert with governments to implement WaSH policy. Coordination may also be sought between grantees, and beyond grantees with the larger WaSH sector, with particular effort invested in establishing agreement on core WaSH indicators with the sector at large. Coordination and harmonization practices have been neglected in the sector as a whole (including among some Hilton Foundation grantees), presenting an opportunity for Foundation leadership in this space.



Highlights

- Most grantees host and participate in national and international events designed for knowledge sharing.
- Some grantees are beginning to align projects with government policies as well as participating in national-level working groups in collaboration with government ministries.

- Coordination beyond grantees with the larger WaSH sector is not well represented in the portfolio. This objective offers a new direction for the Hilton Foundation with great potential for establishing leadership.
- Progress on this SO is difficult to measure. Partners often report engaging in activities which may include coordination and harmonization practices or alignment with government policies, but provide limited compelling evidence about their efficacy.

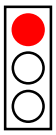
Recommendations

Require grantees to incorporate coordination and harmonization practices into relevant project objectives. Support development of measurable process indicators for all three domains of coordination and harmonization practices to improve and measure these practices. Grantees should track progress toward and report on efforts to align practices using these indicators.

SO6: National capacity to develop and maintain effective information systems for guiding WASH interventions

In many countries WaSH information systems are not well established and databases are often fragmented and outdated. Building the capacity to develop and maintain effective information systems would provide opportunities for governments to make more informed decisions about deploying resources, aligning actors from various levels of government, managing partnerships, and maintaining inventories of water point assets.

Highlights



- The first grants that contribute to this SO have now been awarded. The first two seek to build national capacity as part of infrastructure implementation projects. The third is to develop and pilot an analytics platform with input from government.
- Next steps include developing a framework to measure progress and continued investment in partnerships to support governments in effectively adopting and using ICTs and national databases.

Recommendations

Support grantees that propose to develop national capacity through training and partnerships with government as part of the Hilton Foundation's portfolio. Require grantees to report project results through national information systems where they exist. Facilitate connections between ICT tool and platform development organizations and governments.

Additional Implementation Activities

WaSH in non-household settings such as schools, health care facilities, and workplaces is an important component of reaching universal access for all. Girls, disabled children, and young children are particularly vulnerable in schools – where there may not be gender-separated toilets or accessible toilets and drinking water stations. Health care facilities contain vulnerable populations, such as the immunocompromised, pregnant mothers, and babies where they can be exposed to infections from inadequate WaSH.

Multiple use services (MUS) considers users' water needs beyond drinking, to water for cooking, bathing and cleaning and for livelihood activities such as farming, livestock, and income generation.

Highlights

- Five grantees have contributed to a number of non-household WaSH projects and interventions through their water grants. These outputs have not been captured under any SO
- One grantee has incorporated training on MUS into their projects.

Recommendations

Incorporate WaSH in non-household settings into SO1 by adding the word "universal" to the beginning of the SO wording. WaSH in non-household settings should also be captured in the information system work of SO6. MUS can be considered a coordination practice, and should be supported through SO5.

Cross-cutting themes

The WaSH landscape is changing, and challenges to sustainable access to safe water have evolved since the Hilton Foundation developed its strategy in 2010. During the MDG period, the easiest to reach populations are likely to have gained access to water and sanitation, leaving a higher proportion of the hardest-to-reach populations without access. The Hilton Foundation makes reaching these populations a core tenant of their strategy, however, this goal is not clearly captured in any of the SOs. In addition, lack of clarity and definition on who the Foundation wants to reach has resulted in too much room for interpretation by grantees, and thus measuring and monitoring progress towards impacting these populations is inconsistent.

The Foundation's strategy currently emphasizes targeting "water-stressed regions of Africa, Mexico and India" (Conrad N. Hilton Foundation, 2010). While India and Mexico are experiencing physical water stress, the African countries where the Hilton Foundation works experience economic, rather than physical water stress. This geographic targeting is not captured in any of the SOs. In addition, some of these physically or economically water-stressed regions may experience other extreme events such as floods that are also problematic for water security and access to water. Resilience is needed for communities in both physically and economically water stressed areas to endure these types of extreme events.

MEL and Integration

Measuring progress and performance towards accomplishing the Foundation's overall strategy and strategic objectives, and taking action to continuously improve that performance, requires effective MEL. Traditional monitoring consists of collecting data for the purpose of reporting and grant proposals, and is not an efficient use of resources if the goal is to track and improve performance, and to learn from and share knowledge. Effective monitoring is based on properly selected core indicators, and requires rigorous data collection and analysis, as well as effective sharing of information and lessons. The data and results then need to be translated into action to improve grantee performance. The MEL project has provided a way to quantify and measure progress through establishing validated core indicators, using robust, fit-for-purpose tools and methods for gathering data on these indicators, effectively analyzing the data, and looking beyond simple averages and trends to discern the underlying correlations and causal factors. More formal integration of MEL in the Foundation's water program is recommended in order to effectively monitor, evaluate and learn in order to improve performance and impact of the Foundation's investment in water.

Recommendations

The overall strategy and strategic objectives adopted in 2010 by the Hilton Foundation were helpful in charting a better way of targeting investments in water projects and partnerships to increase impact.

The WI recommends that the Hilton Foundation refine and shorten its overall strategy so that it is easy to understand and clear in purpose, providing a bigger picture statement about what the Foundation aims to accomplish through its water projects. The six strategic objectives articulated in the strategy document are the means by which the Hilton Foundation frames expectations for how the strategy will be accomplished. The WI recommends refining the current SOs and creating a supporting guidance document for each SO that explains and outlines the objectives of the SO and how grantees will contribute to achieving the SO. The documents can also provide guidance on implementation and be used by the Hilton Foundation to balance the portfolio by specifying areas where projects are needed, and others which are oversubscribed.

The Hilton Foundation makes reaching the "poorest and hardest-to-reach" populations and water-stressed a core tenet of their strategy (Conrad N. Hilton Foundation, 2010). The WI recommends that both of these goals are incorporated into specific SOs. The Hilton Foundation should continue to focus on water-stressed regions and adopt language around improving "water security" in their strategy.

The Hilton Foundation has also been funding valuable work that does not directly contribute to its current SOs, mostly in the form of access to water in non-household settings (schools and health care facilities predominately). This work contributes meaningfully to the post-2015 Sustainable Development Goal (SDG) of achieving universal access, as interpreted by the WHO-UNICEF Joint Monitoring Programme (JMP) (WHO/UNICEF, 2015). For this reason, we recommend that the Foundation either incorporate wording on non-household settings into SO1 or add a new SO for this work.

The Hilton Foundation is committed to being a learning organization. It is in a unique position to lead the sector in this area because it has already prioritized MEL, ahead of other WaSH organizations and sector leaders. The Hilton Foundation would benefit from a documented learning strategy that can be shared with the wider WaSH sector to help prioritize knowledge sharing and a focus on improvement. The learning strategy can be integrated into future water grants with similar expectations for measuring and monitoring as each of the SOs. Progress and performance towards accomplishing the overall goals and objectives of the Foundation cannot be accomplished without high-quality MEL. The WI recommends a formal integration of WaSH MEL into the Foundation's grant proposals and reporting requirements.

Finally, the WI recommends that the Hilton Foundation use data and evidence to guide future selection of grantees and projects with the understanding that improvement is the ultimate goal, not perfection.

Conclusions

The Hilton Foundation's adoption of a new strategy in 2010 was a bold step. The strategy was successful in steering the Foundation and its grantees from providing access to water through drilling boreholes towards a broader strategy of sustainable access to safe water. Over the past five years, the Hilton Foundation has made good progress towards achieving the six SOs, including providing access to water for over 1 million people. Clearly articulating the SOs and providing further clarification on each will help grantees achieve the Foundation's goals and objectives. Selecting partners based on performance and supporting projects that are aligned with the Hilton Foundation's strategy and strategic objectives will lead to a more balanced portfolio. Continuing to integrate MEL into the water program to track and improve impact will result in a leading water program and set a new standard in the WaSH sector and philanthropy for sustainable safe water.

Introduction

The Water Institute (WI) at The University of North Carolina at Chapel Hill was requested to assess the Conrad N. Hilton Foundation's Sustainable Access to Safe Water Strategy and its Strategic Objectives (SOs). This assessment was part of a larger monitoring, evaluation and learning (MEL) program developed by the Water Institute and supported by the Hilton Foundation.

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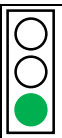
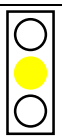
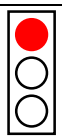
Methods

Our evaluation of grantees is based on grantee monitoring and evaluation data where available; key informant interviews; and grantee proposals and reports. For implementation grantees who have already implemented advanced WaSH M&E in target countries, assessments benefitted both from their reports and from monitoring data collected. For grantees who have yet to adopt advanced M&E,

assessment results are based on their own reports and existing monitoring practices and data (generally less reliable and informative).

We analyzed implementation performance collectively across all grantees, looking at the SOs one-by-one. See Table 1 for evaluation criteria for each SO. We also analyzed the additional implementation items, but did not assign traffic light scores, as there were not sufficient data available.

Table 1: Evaluation criteria for each SO

	 **Good to Excellent progress**	 **Adequate to Sub-par progress**	 **Poor or nonexistent progress**
SO1: Sustainable	Grantee data or pilot data showed minimal decline in functionality of systems over time (ideally less than 10% decrease over 10 years)	Data showing intermediate sustainability (10-25% decrease in functionality over 10 years) or; No grantee data on functionality or sustainability; technology and management systems in place that are likely to produce sustainable outcomes, based on our analysis of other grantees' data.	Data showing poor sustainability (more than 25% decrease in functionality over 10 years) or; No grantee data on functionality or sustainability; technology and management systems in place that are unlikely to produce sustainable outcomes, based on our analysis of other grantees' data.
SO1: Safe Water	Grantee data or pilot data showed at least 90% of sources producing safe water; at least 80% of beneficiaries drinking safe water at household level	Grantee data or pilot data showed 75-90% of sources producing safe water; 60-80% of beneficiaries drinking safe water at household level or; No water quality data, but use of technology likely to achieve adequate water safety at source and household level	Grantee data or pilot data showed fewer than 75% of sources producing safe water or fewer than 60% of beneficiaries drinking safe water at household level or; No water quality data, but use of technology unlikely to achieve adequate water safety at source or household level
SO1: 1 million people	Credible grantee data indicating at least 37,000 beneficiaries received sustained improved water service per $ 1 million invested	Credible grantee data indicating at least 25,000 beneficiaries received sustained improved water service per $ 1 million invested or; questionable grantee data which, after factoring in uncertainty, suggests that at least 25,000 beneficiaries received sustained improved water service per $ 1 million invested.	Credible grantee data indicating that fewer than 25,000 beneficiaries received sustained improved water service per $ 1 million invested or; questionable grantee data which, after factoring in uncertainty, suggests that fewer than 25,000 beneficiaries received sustained improved water service per $ 1 million invested.
SO1: Overall	If each component of the SO is scored as follows: Green = 2; Yellow = 1; Red = 0, the average of all three components is between 1.5	If each component of the SO is scored as follows: Green = 2; Yellow = 1; Red = 0, the average of all three components is between 0.5	f each component of the SO is scored as follows: Green = 2; Yellow = 1; Red = 0, the average of all three

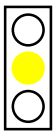
	and two (average of all 3 scores is green)	and 1.5 (average of all 3 scores is yellow)	components is less than 0.5 (average of all 3 scores is red)
SO2	Credible grantee data or pilot data showed functionality of systems is 90% or better; or is above 75% and shows signs of being capable of reaching 90% given existing improvement projects	Credible grantee data or pilot data showed functionality of systems is 75-90% and does not show signs of being capable of reaching 90% given existing improvement projects or; no credible data and national average functionality between 70-90%	Credible grantee data or pilot data showed functionality of systems is below 75% or; no credible data and national average functionality below 75%
SO3	Grantee had project objectives related to advocacy and met objectives toward implementation and/or financial advocacy	Grantee had project objectives related to advocacy but did not meet all objectives	Grantee had project objectives related to advocacy and did not report outputs or outcomes or did not target efforts toward implementation and/or financial advocacy as outlined in the SO
SO4	Index concept developed with broad sector buy-in. On track to deliver the WaSH Index by May 2015	Index concept developed with some sector buy-in OR NOT on track to deliver the WaSH Index by May 2015	Index not achievable OR limited to no sector support for the WaSH Index
SO5	Grantee had project objectives and reported activities for at least 2 of 3 types of coordination and harmonization practices	Grantee had project objectives and reported activities for one type of coordination and harmonization practice	Grantee did not have a project objective linked to coordination and harmonization practices.
SO6	Grantee has a project objective in log-frame directly related to improving national capacity for information systems, and lists specific activities and outputs that will help achieve this objective	Grantee has a project objective in log-frame which supports national capacity for information systems, but does not provide information on specific activities or outputs to achieve this objective. Or grantee is partially aligned with the objective and has some supporting evidence of partial progress.	An implementing grantee that does not have a project objective related to SO4, and SO4 falls within their mission statement

Strategic Objectives

The Conrad N. Hilton Foundation and its grantees have made substantial progress towards the six strategic objectives outlined in its Sustainable Access to Safe Water Strategy. Excellent progress has been made toward achieving two of the strategic objectives, with adequate progress made toward achieving three and poor progress on one. The Hilton Foundation has made progress in evolving from simply supporting access to water to a more integrated approach that includes households, communities, and the enabling environment.

The Hilton Foundation's Sustainable Access to Safe Water Strategy contains six SOs. In the following sections we review performance on each SO.

Strategic Objective 1: Sustainable safe water access (at the source and point-of-use) for at least 1 million people through scalable, appropriate and incentive-based approaches



I) SO Overview

Description of Strategic Objective

Access to adequate supplies of safe water is critical to human health and development (Howard and Bartram 2003). In order to deliver lasting benefits to users, it is essential that this access be continuous and sustained throughout the year (Hunter et al. 2009) and over time (Montgomery and Elimelech 2007). Recognizing the importance of continuous and sustained access to adequate quantities of safe water for consumption and other uses, The Conrad N. Hilton Foundation has made this a core SO of its Sustainable Safe Water Strategy. Specifically, the Hilton Foundation has set a goal of providing sustainable safe water access to at least 1 million people by 2015.

The quality of services beneficiaries receive can be described in terms of three broad dimensions: (a) access to enough water; (b) sustainable water service; and (c) water that is safe for drinking. Briefly, our assessment considers **access** to be sufficient when people can obtain adequate quantities of water for consumption and domestic use (at least 20 L/person/day) from a working source located within 500 meters of their residence. **Safe water** is that which meets WHO guidelines for drinking water quality at both the source and the point of use (i.e. users collect safe water from a borehole, tap, or other source, and also consume safe water in their homes). **Sustainability** is more challenging to define; systems can be said to be sustainable when they provide continuous service throughout the year and continue to function at high rates for ten years or more after implementation. For systems less than 10 years old, we can measure service continuity and attempt to assess factors affecting sustainability based on what is known from recent studies in the same region. One key factor linked to sustainability in many studies is the presence of an active WaSH committee. For the purpose of this report, we define an active WaSH committee as one that has met within the past year.

This strategic objective is formulated differently than the others in that it is specific about means as well as ends. It insists that sustainable safe water access should be achieved through "scalable, appropriate and incentive-based approaches," wording which expresses a vision for this objective, but which is problematic in terms of setting measurable benchmarks for performance and outcomes on SO1. For instance, it is difficult to *objectively* assess the extent to which approaches are scalable and appropriate, except by pointing to results such as scale and uptake rates achieved. To say that approaches should be "incentive-based" is useful for shaping the design of an activity, but when it comes to measuring progress, the concept is unclear and difficult to quantify. Moreover, this stipulation seems inconsistent with the Foundation's overall WaSH strategy of supporting organizations that deliver safe water to the world's poorest populations through a variety of models, whether "market-based" or philanthropic.

For these reasons, it may be most informative to assess the performance of grantees and the Conrad N. Hilton Foundation's WaSH portfolio in terms of delivering the outcome of interest (sustainable safe water access), and to note separately the extent to which approaches can and do achieve substantial scale, implement technology that seems appropriate to the problem at hand, and include incentives (beyond the basic desire of users to have access to safe water).

Description of Portfolio Progress to Date

The Conrad N. Hilton Foundation's Implementation grantees have provided access to water to a reported 1.9 million users between the beginning of 2011 and the end of 2015 through a variety of approaches. These include drilling and installing boreholes, piped schemes, and hand-dug wells, as well as the establishment of water treatment systems with vending kiosks, the rehabilitation of nonfunctional water systems, the implementation of rainwater harvesting and water resources management programs. In addition, enabling environment grantees have worked to support and evaluate this work and link it to the efforts of local government. Knowledge, learning, and improvement grantees have provided technical support and tools to implementation grantees, and advocacy grantees have worked to raise the profile of WaSH issues among other donors and government agencies in the United States.

The vast majority (96%) of reported safe water beneficiaries receiving water services over the past three years come from four of the Foundation's eight implementation grantees, with the largest two organizations accounting for 81% of communal water sources. Approximately 68% of reported beneficiaries are located in four countries of West Africa: Ghana, Burkina Faso, Niger, and Mali, with recent work in these countries building upon the Foundation's work in this area as part of its West African Water Initiative.

It should be noted that in each case where comparison was possible, reported numbers of beneficiaries from grantee progress reports appeared to be higher than the monitoring data indicated, often by 50% or more. This may be due to the common practice among some implementers of assuming that the number of beneficiaries per installed water point in each country is equal to the government-mandated maximum number of users per waterpoint, if such a national standard exists (e.g., assuming 300 users for each borehole implemented in Ghana, 350 in Niger and Mali, etc.). Logically, this practice is problematic, since the maximum standard represents an upper limit to the allowable number of users per borehole, and the average number of users per improved community water point (ICWP) should always be lower than the standard. Empirical survey data collected by some Hilton Foundation grantees show approximately 200-300 users per ICWP in Ghana, on average, approximately 300 per ICWP in Burkina Faso, and slightly over 400 in Ethiopia. In cases where grantees have estimated 500 or more users per ICWP in these contexts, these estimates are likely to be overestimations. Documented examples can be found among grantee work examined during this assessment in which the number of beneficiaries cited in a given community substantially exceeds the community's total population.

This overestimation is a portfolio-wide phenomenon (and indeed, may be a sector-wide phenomenon), although some grantees appear to overestimate more than others. Our projection (based on primary monitoring data or, when these were not available, on extrapolations from monitoring data) is that the reported portfolio-wide figure of 1.9 million beneficiaries reached during the period in question overestimates actual access rates by 25-50%, putting the likely true figure at 1.3-1.4 million beneficiaries. Even so, this more modest estimate still puts the impact of the Hilton Foundation portfolio as having reached more than 1.3 million people over the assessment period.

To enhance the sustainability of the WaSH services they provide, many grantees train local WaSH committees to manage and maintain water systems after implementation. The capacity of available human resources are often targeted in these efforts. For example, area mechanics or other technical support personnel are often targets of training outreach efforts, creating a bank of resources communities can call upon. In addition, some implementers distribute toolkits to committees and/or

mechanics. Overall, investments in WaSH committees have been found to be important for waterpoint sustainability in many settings Fisher et al. 2015).

Few grantees currently measure sustainability, but ongoing work to monitor and improve in this area should enable other grantees to report on this in the near future. Strikingly, these interventions may improve the functionality of water sources implemented in the same communities by organizations not receiving funding from the Hilton Foundation, which would magnify the Foundation's impact beyond the estimated 1.4 million direct beneficiaries.

In terms of water safety, many grantees conduct water quality testing at the time that a new water system is constructed or rehabilitated. However, few grantees conduct ongoing water quality testing at the source, and almost none test at the household level. Several grantees undertook projects such as the distribution of water treatment sachets or filters to improve household water quality, but in nearly all cases these were short-lived and/or small-scale efforts. No grantees have yet undertaken efforts to improve household water quality at a program-wide level, either. Available water quality monitoring data suggest that the majority of water sources implemented by grantees provide safe water (meeting basic national and WHO guidelines for chemical contaminants of concern and microbial safety), but that most households served by these water sources consume unsafe water, due in large part to secondary contamination during storage and transport.

Cost-effective implementation

Grantees vary greatly in the number of new water sources implemented for each $100,000 invested by the Foundation. It should be noted that grantees implement water sources of different types in different settings, with vastly different challenges and underlying water coverage rates. Furthermore, not all types of water systems reportedly serve the same numbers of people. However, grantees' estimates of numbers of beneficiaries per water system are likely inaccurate, and credible data on users per water system are not available for many grantees. A critical review of the data that are available suggests that, on average, water sources implemented by Hilton Foundation grantees serve approximately 200 to 400 people.

While sources in some settings with lower underlying coverage rates (such as rural Ethiopia) may tend to serve more new users than sources in other settings with higher coverage rates; however, there is relatively little evidence that dramatic differences exist in the number of users per water source between grantees.

While the amount of water – and its relative safety – each user consumes from sources implemented by Hilton Foundation grantees may vary from one grantee and setting to another, data collected to date suggest that most people are consuming relatively comparable quantities of water, on the order of 20 liters/person/day, and that this is usually unsafe water if stored in the home. So it is not unreasonable to view the number of sources implemented per $100,000 of Foundation investment; this indicator is made more crude by the fact that most grantees combine Hilton Foundation funding with funds from other sources to implement their program activities, and thus the actual cost of program activities reported as being funded by the Conrad N. Hilton Foundation likely exceeds the Hilton Foundation funds invested

In the future, collecting high-quality monitoring data on the number of users each grantee serves, the quantity and quality of water (and other WaSH services) those users receive will enable more precise

calculations of value-for-money. It should also be noted that most implementation grantees provide sanitation and hygiene services as well, and the value of these should also be considered. Reviewing grantees' performance with respect to value-for-money is useful for grant-making purposes, but perhaps more importantly, such an analysis could enable grantees to identify improvement opportunities, and increase the cost-effectiveness of future WaSH activities.

II) Assessment of Progress on this SO

Assessment of Portfolio Performance on this SO

The Hilton Foundation's Portfolio is broadly on-track to reach its access goals. Partners reported reaching 1.9 million beneficiaries. Although these estimates may be high, more conservative estimates put the number of beneficiaries served at approximately 1.3-1.4 million, even after adjusting for possible inaccuracies in beneficiary estimates. Most grantees report delivering adequate quantities of water to users, but only a few grantees have monitoring data to support these claims. These data suggest that many beneficiaries reached by those grantees are receiving 20 L/person/day or more, but a substantial fraction of users may still fall short of this target. Similarly, only two grantees have data on distance to source, but these suggest that most beneficiaries are within 500 meters of an improved water source.

Sustainability data are scarce among the current portfolio: only one grantee has credible data on the performance of its systems after 10 years, and these data suggest very high levels of sustainability. Specifically, monitoring data from this grantee's Ghana programs show no significant decrease in functionality for systems 5, 10, or 20 years old vs. systems constructed within the last year. These results suggest excellent sustainability for this grantee's community water systems in Ghana. Another grantee lacked data on older systems, but conducted a recent study showing no significant decrease in functionality for water systems that were 5 years old vs. those constructed within the last year, suggesting excellent sustainability for this grantee as well.

Overall, the available monitoring data from those grantees engaged in WaSH MEL pilot, monitoring, and assessment activities suggest that while portfolio sustainability may be good, significant opportunities for improvement still remain. Ongoing work is underway with selected grantees to strengthen WaSH committees and further increase sustainability, building upon already good progress in this area. One key area for improvement is the need for additional grantees to collect and report reliable data on sustainability and functionality using a new set of core indicators developed for Hilton Foundation grantees.

Water Safety data are also scarce among the current portfolio: Only four out of eight implementation grantees have credible data on stored water quality for beneficiary households, and these data suggest that household water quality is quite poor. While other grantees have no data on stored household water, recent meta-analyses published in the literature suggest that all grantees who provide communal water supplies, even if those supplies are safe, likely have beneficiaries who are drinking contaminated water in the majority of households. Projects are currently underway with selected pilot grantees to protect and improve stored household water quality, and these represent a major opportunity for The Conrad N. Hilton Foundation to exercise leadership on one of the most important challenges currently facing the sector.

Overall, the Hilton Foundation portfolio has demonstrated intermediate progress on SO1, with excellent progress on providing access, and good progress on sustainability, but little progress on water safety. Thus, it is fair to say that Hilton Foundation grantees are currently providing relatively sustainable access to water. Available data indicate that grantees are providing safe water at many sources. However,

available data suggest that the water available from a substantial proportion of Hilton-Foundation sources does not currently meet WHO standards for *E. coli*, and further improvement in this area remains a priority. Furthermore, available evidence suggests that the water stored in the households of most of the Hilton Foundation's WaSH beneficiaries is unsafe, becoming contaminated with *E. coli* before it is consumed in the home. This is a common problem throughout the global WaSH sector, and additional efforts to protect the safety of stored household water are needed by all Hilton Foundation grantees. Ongoing Continuous Quality Improvement projects aimed at improving monitoring and implementation are already moving to address these challenges, and have the potential to set new benchmarks for sustainability and water safety for the WaSH sector, enhancing Hilton Foundation grantee performance on SO1, as well as The Hilton Foundation's sector leadership role.

III) Looking Forward

Future Portfolio Outlook on this SO

The Water Institute will continue to support grantees in using MEL tools and CQI methods to identify and implement effective improvements to increase sustainability and water safety. Pilot grantees will implement and scale these improvements, and disseminate them to other Hilton Foundation grantees as well, in an attempt to raise portfolio-wide performance. One grantee is already actively working on implementing a program-wide strategy to improve water point sustainability and household water quality, and many other grantees are showing interest in doing likewise. Thus, it is anticipated that in the future, most grantees will substantially improve their performance on SO1, leading to greatly increased benefits to the beneficiaries and communities they serve.

Opportunities for Improvement on this SO

Currently, SO1 underpins much of The Conrad N. Hilton Foundation's safe water strategy. The SO's language on outcomes "Sustainable safe water access," is relatively clear. However, creating portfolio-wide definitions of these terms would be extremely useful. This could be accomplished in a guideline document clarifying the expectations for achieving and verifying targets in relation to this SO.

While grantees are performing well in terms of expanding access to improved water sources, many may not be achieving their full potential with respect to the sustainability of these sources and the safety of water consumed at the household level. Furthermore, few partners are monitoring these outcomes. In order to drive effective improvement in these areas and deliver on the objective of sustainable safe water access, The Hilton Foundation should require that grantees commit to improving and monitoring intervention sustainability and household water quality in their project areas.

Furthermore, to the extent that the number of individuals reached is of interest to The Hilton Foundation, The Foundation should require that grantees report beneficiary numbers based on direct monitoring, and not rely on inaccurate estimates of beneficiary numbers.

Furthermore, available monitoring data suggest that some grantees are delivering far more value-for-money than others with respect to providing continuous access to safe water to the greatest numbers of beneficiaries. In order to more efficiently achieve its desired outcomes, The Hilton Foundation should continue to invest heavily in those partners delivering the greatest return on investment with respect to beneficiaries served and the quality and continuity of services delivered.

In addition, the target of reaching one million people should perhaps be revised upward in future funding cycles, as one million beneficiaries have already been reached by the end of 2015 with current grantee approaches and portfolio allocations. With more targeted investments at comparable levels,

and with planned improvements in implementation and monitoring, it would be reasonable to reach an additional 2 million beneficiaries by the end of 2020. Furthermore, future objectives could emphasize improving service quality for those with inadequate access, as well as increasing the numbers of individuals with nominal coverage, in alignment with Sustainable Development Goals and targets. The Conrad N. Hilton Foundation's ongoing work on measuring and improving water quality and sustainability has the potential to improve the quality of water services for millions, and to set new benchmarks in these areas for the broader WaSH sector, with potentially massive knock-on effects.

Finally, the language in the SO that specifies "scalable, appropriate and incentive-based approaches" may not be well suited to a high-level SO, as these terms seem to specify particular tactics, rather than define the SO to be achieved. While scalability, appropriateness, and incentive-based approaches are certainly desirable in many contexts, they appear to reduce the focus of SO1 on concrete and measurable outcomes, and may serve the Foundation better as broad language in its strategy for sustainable safe water access, rather than as specific components of this SO.

IV) Conclusions

Overall, The Hilton Foundation's Portfolio has provided additional water services to approximately 1.4 million beneficiaries. In many cases these services appear to be highly sustainable, although some challenges remain. However, over 75% of Hilton Foundation beneficiaries are likely drinking water that fails to meet national and international microbial water quality standards. Work is already underway to improve the sustainability and safety of water services delivered by several grantees, as part of The Hilton Foundation's WaSH MEL project, as well as through individual grantee initiatives. As this work moves forward, it is anticipated that other grantees may adopt and expand upon these efforts, bringing the entire Hilton Foundation portfolio closer to achieving its goals under SO1. Furthermore, this work has the potential to focus the attention of the broader WaSH sector on key challenges for the post-2015 era, improving sustainability and water quality while continuing to target the poorest of the poor. If work by Hilton Foundation grantees in these areas can be disseminated and successfully scaled and replicated by other sector players, including governments and NGOs, the potential knock-on effects on sustainable safe water access are massive.

Strategic Objective 2: Increased percentage of functioning water systems to at least 90% in the Foundation program areas

This SO tracks progress towards increasing the percentage of systems providing water at any given time. This target sets an ambitious new standard for the sector. Handpump functionality in sub-Saharan Africa averages 64%, and 90% functionality represent best-in-class performance.

I) SO Overview

Description of the Strategic Objective

This SO tracks progress towards increasing the percentage of systems providing water at any given time. This ambitious target is off the top of the scale with respect to typical handpump functionality in sub-Saharan Africa, which averages 64% (Rural Water Supply Network 2009). The Hilton Foundation's target of 90% functionality represents best-in-class performance, and sets a new benchmark for the sector.

Safe drinking water and basic sanitation are critical to human health and development. In sub-Saharan Africa, where 325 million people still lack access to safe water (WHO/UNICEF 2014), the majority of those who enjoy nominal safe water access rely on boreholes with manual handpumps (Sansom and

Koestler 2009). The total number of such boreholes in Africa is unknown, but it is estimated that as many as 60,000 new handpumps are installed each year (idem). Studies have found that 30-50% of boreholes with handpumps in rural sub-Saharan Africa are not functional at any given time (Rural Water Supply Network 2009). Functionality can also be a challenge for piped supplies and other water sources implemented in sub-Saharan Africa, and these challenges also affect water points in other developing country settings as well. Water point functionality depends on many different factors including mechanical, financial, management, and other factors. In the case of groundwater sources such as wells, springs, and boreholes, geological and environmental factors affect functionality, as does rainfall and other meteorological factors.

In order to evaluate grantees' performance in this area, it is necessary to define what is meant by functionality. We can define functionality to mean that water is available from a source at the time of a monitoring visit. Thus, functionality across many sources can be expressed as the percent of sources functional at the time of the visit. Because a source yielding only a few drops is, for all intents and purposes, unusable, we can further define functionality as a source from which water is available at the time of the visit, and from which a typical user could collect 20 liters within 20 minutes (i.e. flow rate of 1 L/min for flowing sources, or ability to fill a 20 L container within 20 minutes for open wells, etc.

Based on earlier work, we can recognize that functionality is an equilibrium between failure and repair. Rather than some sources functioning without interruption for many years, while others break down and remain nonfunctional, waterpoint functionality is characterized by regular breakdowns and repairs. These repairs can require hours or years to be made, depending on management, resources, expertise, and external support, among other factors (Fisher et al. 2015). Thus, in order to increase functionality, grantees must reduce the frequency of breakdowns, increase the rate of repairs, or both.

Description of Portfolio Progress to Date

The Conrad N. Hilton Foundation's Implementation grantees have achieved varying levels of functionality in their water programs. These are the result of the programs implemented, as well as the settings in which water points are installed and rehabilitated. It can be extremely challenging to achieve high levels of water point functionality in settings where the hydrogeology is unfavorable, rainfall is low, populations are poor, few skilled mechanics are available, and government does not provide effective post-implementation support. By contrast, functionality may be excellent in areas where groundwater is plentiful and easy to extract, income and education levels are high, and skilled technicians and government support personnel are plentiful and easy to access. While all Hilton Foundation implementation grantees specialize in targeting the poorest of the poor in water-stressed countries, it is not fair or meaningful to compare functionality rates across different geographic regions, even within the same country, much less between different countries with differing enabling environments and levels of external support. Thus, while SO2 establishes a common benchmark for waterpoint functionality (90%), it should be recognized that this benchmark may be much more difficult to achieve in some settings than in others.

II) Assessment of Progress on this SO

Assessment of Portfolio Performance on this SO

The Hilton Foundation Portfolio has not yet reached its goal of 90% functionality, but grantees are making good progress in this area. Some implementation grantees lack adequate monitoring data to assess functionality, but these grantees account for a minority of the water systems constructed with

Hilton Foundation funding since 2011. In the absence of reliable monitoring data, we must assume that functionality rates for these grantees are typical of national averages in the countries in which they operate. Those grantees currently tracking functionality account for 77% of new systems, and have reported functionality rates ranging from 60%-100%. It is encouraging to note that the two largest grantees, accounting for 81% of estimated beneficiaries, currently have functionality rates of 80% and higher. Thus, while the portfolio has not yet reached 90% functionality overall, this target is within reach in the next five years.

III) Looking Forward

Future Portfolio Outlook on this SO

As the WaSH MEL pilots move forward, pilot grantees will identify effective improvement packages to increase their progress towards SO2. Pilot grantees will implement and scale these improvements, and disseminate them to other Hilton Foundation grantees as well, in an attempt to raise portfolio-wide performance. Several grantees are actively working to improve water point functionality. It is anticipated that within the next five years, most grantees will achieve 85-90% water system functionality, leading to greatly increased benefits to the beneficiaries and communities they serve.

Opportunities for Improvement on this SO

Currently, SO2 is understood as setting 90% functionality targets for all water systems implemented by Hilton Foundation grantees. However, the actual SO language suggests that the 90% target should apply to all areas in which they work. While it may not be reasonable to expect Foundation grantees to increase the functionality of systems they did not construct to the ambitious 90% standard (particularly in cases where government or other NGOs may not have constructed water systems properly), it is useful to specify concrete functionality targets for systems constructed, both by Hilton Foundation grantees and other systems present in the areas in which grantees work. Furthermore, it is reasonable to set a time period over which these functionality rates will be assessed, so as to avoid creating an unlimited liability for Hilton Foundation grantees. If Hilton Foundation grantees seek to maintain a 90% functionality rate for all systems they implement over a period of ten years, and an 80% or 85% functionality rate for all water systems in the communities in which they operate over the same period, SO2 can be understood as setting ambitious but realizable targets for Hilton Foundation grantees, with lasting benefits for all the residents of the communities in which these grantees are working. The involvement of local and national governments may be critical in realizing these targets over time.

Future targets should be designed with the realization that, the higher the target, the more difficult each additional percentage point increase becomes. Once the Hilton Foundation's portfolio achieves 90% functionality, 92-93% might be a worthy next target, and so on. Although 100% functionality is desirable, this is unlikely to ever be achieved, due to the difficulty of maintaining service in the poorest and hardest to reach communities in the world. However, if all grantees can regularly achieve functionality levels above 90%, this will represent an unprecedented achievement in the WaSH sector, and could lead to learnings that could benefit governments and other non-Hilton Foundation grantees as well.

Currently, half of The Hilton Foundation's implementation partners do not monitor or report on water source functionality, to our knowledge, and without such monitoring data, improvement can be difficult. It would be useful for The Hilton Foundation to require grantees to commit to improving and monitoring functionality in all of their water projects. Furthermore, it would be helpful for The Hilton Foundation to

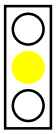
exercise sector leadership in calling for a sector-wide benchmark of 90% functionality over a 10-year post-implementation timeframe, and to share tools and methods for achieving excellence in this area.

IV) Conclusions

Overall, it is estimated that over 80% of the 4,135 water sources that Hilton Foundation grantees reportedly constructed during the most recent grant period are functioning, and grantees are taking critical steps toward increasing this rate further. Recent studies of Hilton-Foundation funded water points constructed by World Vision in the Greater Afram Plains over the last two decades show similar functionality rates, with no significant decrease in functionality for older systems.

While the current Hilton Foundation portfolio performance represents a dramatic improvement over the estimated 64% functionality rate for studied handpumps in sub-Saharan Africa, substantial opportunities for improvement remain. Work is already underway through the WaSH MEL pilots to improve the functionality of key grantees' water systems. As this work moves forward, it is anticipated that other grantees may adopt and expand upon these efforts, bringing the entire Hilton Foundation's portfolio closer to achieving its goals under SO2.

Strategic Objective 3: Increased funding to the WASH sector in the target countries through advocacy to significantly reduce the MDG funding target gap



I) SO Overview

Description of the Strategic Objective

This SO considers: grantee involvement in advocacy efforts; whether grantee advocacy efforts affect national-level funding such as funding from national governments (i.e. financial advocacy); and whether grantee advocacy efforts contribute to improvements in WaSH implementation (i.e. implementation advocacy). We examined implementation advocacy because there was a substantial amount of partner activity in this area.

Increased national government investment in WaSH is important to achieve universal access to basic water and sanitation (World Health Organization, 2012). Appropriately targeted advocacy is a mechanism that may lead to increased WaSH funding in national government budgets. Theory of change models suggest that funding, improvements in investment decisions, and greater impact in WaSH can be achieved through national government stakeholders and increasing the political priority of WaSH in national policy agendas (Sanitation and Water for All, 2015). Advocacy mechanisms to increase political priority for WaSH should be supported by a clear and appropriate evidence base, strong country processes, and strong sector collaboration toward common goals (Sanitation and Water for All, 2015). Advocacy for increased WaSH funding would be most effective if efforts were focused toward finance ministers who control budgets. Finance ministers respond best to simple, compelling evidence-based arguments that explain why investments in WaSH will yield greater benefits over alternative development investments (Sanitation and Water for All, 2015).

Advocacy is also an important process to improve implementation practice among WaSH sector actors. By sharing and advocating evidence on best practice, the WaSH sector can collectively improve service delivery to increase human health and development outcomes. Robust monitoring, evaluation and

learning from the Hilton Foundation grantee projects (over 24 years of implementation experience) can contribute more broadly to improving the WaSH sector's implementation practice.

SO3 recognizes the importance of national government funding to improve the WaSH situation since national governments account for a majority of investment in WaSH (Bain, Luyendijk, & Bartram, 2013). Hilton Foundation grantees who use evidence for improvement to advocate for increased funding may yield far greater returns on investments from Hilton Foundation grants. Effective advocacy of best practice WaSH implementation can help to obtain greater value from existing investments and ensure safe and sustainable water services in the future.

Description of Portfolio Progress to Date

While many grantees have activities related to implementation advocacy, very few focus their advocacy efforts specifically toward having national governments increase funding in WaSH. We determined whether grantees are involved in advocacy efforts based on grantee documents submitted to the Hilton Foundation. Documents included progress report analyses, grantee progress reports, and final grantee reports. Advocacy efforts conducted by grantees that were not reported in progress reports were not necessarily captured in this assessment. All documents were text searched for advocacy and related terms such as "knowledge management," "research," "capacity building" and "dissemination." We assessed grantee involvement in overall advocacy based on their submitted documents and assessed their impacts and activities associated with implementation advocacy and financial advocacy.

II) Assessment of Progress on this SO

Assessment of Portfolio Performance on this SO

- *Partner advocacy efforts*: according to grant applications and log frames, 15 of 16 grantees are engaged in implementation advocacy efforts. Of the 16, nine reported advocacy outcomes in progress reports, five achieved partial outcomes, and one did not achieve outcomes.
- Three grantees engage in financial advocacy.
- Indicators used by grantees to measure outputs and outcomes for advocacy are rarely specific, measurable, attainable, realistic, or time-bound. While many grantees claim to be involved in advocacy, it is difficult to assess progress using indicators that do not produce reliable measures for comparison and assessment.
- *Partner advocacy affecting implementation in the WaSH sector*: Nine grantees have produced advocacy documentation to improve implementation in the WaSH sector. However, the efforts are not consistent nor always based on robust MEL exercises.
- *Partner advocacy affecting national funding for the WaSH sector*: Three grantees reported involvement in increasing funding to the sector but only two are focused on national governments in Hilton Foundation targeted countries. This appears to be a substantial gap in the overall Hilton Foundation portfolio.

III) Looking Forward

Future Portfolio Outlook on this SO

Partners need to extract lessons from experiences, both positive and negative, for dissemination to the WaSH sector. The Hilton Foundation portfolio needs to include well designed advocacy efforts with clear

objectives and robust metrics to measure impact. Increasing advocacy efforts geared to target national-level funding would allow the Hilton Foundation to exercise leadership in the WaSH sector and leverage greater influence in the priority countries where its grantees work. It is unclear to what extent, or what percentage of effort, grantees should be devoting their time and resources to advocacy efforts. Clear guidance from the Foundation, and clear indicators may help to measure the quality of advocacy activities and measure the extent to which they lead to change in WaSH.

IV) Conclusions

Overall, advocacy activities appear to have been limited by resources and capacity. The Hilton Foundation grantees focused advocacy toward funding sources based in the United States and less so on national sources of WaSH funding and national governments. Advocacy grantees are not collecting data nor measuring changes in WaSH funding at any level other than in the United States (and the impact on U.S. funding is not actually reported). Most grantees are engaging in advocacy efforts in terms of disseminating lessons learned from their respective projects but more work is needed to distribute clear, concise best practices. Increasing investments in advocacy at the national level to increase national level funding would allow the Hilton Foundation to exercise leadership in the WaSH sector and leverage greater influence in the priority countries where grantees work.

Strategic Objective 4: Wide acceptance of a common WaSH Index to better monitor impact

I) SO Overview

Water, sanitation, and hygiene are important for human health and development. They feature prominently in human development policy, most recently in the Sustainable Development Goals. Water and sanitation are also recognized as human rights. The principle of progressive realization of human rights requires that each government take steps “to the maximum of its available resources with a view to achieving progressively the full realization of the rights.”

New tools are necessary to monitor and evaluate country performance on WaSH and ensure that these essential rights become enacted and support human flourishing in the world. Analytical tools such as the Disability Adjusted Life Year (DALY) metric and the Human Development Index (HDI) have made a tremendous impact on the international health and development sectors by allowing for comparison across space, time, and different contexts to encourage comparison; assisting in setting priorities; identifying disadvantaged groups; and providing a comparable measure for evaluation, planning, and mobilization of resources. These tools use common indicators and reporting approaches that make this comparison possible and enable different health and development practitioners to work towards common goals.

Through broad WaSH sector consultation and with the support of the Hilton Foundation, the Water Institute led the development of a WaSH Performance Index which can be measured at the international level (Cronk, Luh, Meier, & Bartram, 2015).

II) Progress to Date

Through a series of think tank workshops and presentations to date, the Water Institute engaged a broad array of WaSH sector leaders and Hilton Foundation grantees in the development process of the

WaSH Performance Index. Consultations have included colleagues from PLAN International, Sanitation and Water for All (SWA), WHO, UNICEF, World Bank, World Vision, water.org, IRC, and the Joint Monitoring Programme, among others. The Index was launched in May 2015.

III) Assessment of Progress on this SO

- With support from the Hilton Foundation, The Water Institute developed a WaSH Performance Index to examine how quickly countries are improving both access to, and equity in, improved water and sanitation relative to best-in-class performance. Through think tank events and presentations at WaSH conferences, WaSH sector stakeholders, Hilton Foundation grantees, and key sector leaders have endorsed the WaSH Performance Index as a valuable and important contribution in the Sustainable Development Goal era.
- High-performing countries in the 2015 rankings were those that achieved significant improvement in recent years compared to their peers. These included El Salvador, Niger, Egypt, Maldives, and Pakistan. Low-performing countries were those that showed stagnation or decline in recent years compared to their peers, such as the Dominican Republic, the Gambia, Ghana, Samoa, and Timor-Leste (Cronk et al., 2015). Figure 2 shows WaSH index scores by country.
- The WASH Performance Index provides national policy makers with a new instrument to inform investment decisions and identify aspects of water and sanitation access and equity in need of targeted improvement (Luh, Cronk, & Bartram, 2016).
- Data comparable over space and time are required to calculate the Index. The JMP data are the only high quality, consistent and reliable data available over space and time. Without JMP data, the Index would not have been possible. At present, there are no global data sets on functionality or water quality. It is important to note that JMP is thinking about how to collect data on water safety and functionality.

IV) Conclusions

The Index informs finance ministers, donors, practitioners, and investors on the types of investments to make – for example, in infrastructure, governance or both. The Hilton Foundation should support the Water Institute and grantees to promote and use the index by WaSH sector actors. For wide acceptance

of the WaSH Performance Index, the Hilton Foundation needs to advocate among philanthropic and foundation colleagues for its uptake and use, as asserted by this SO.

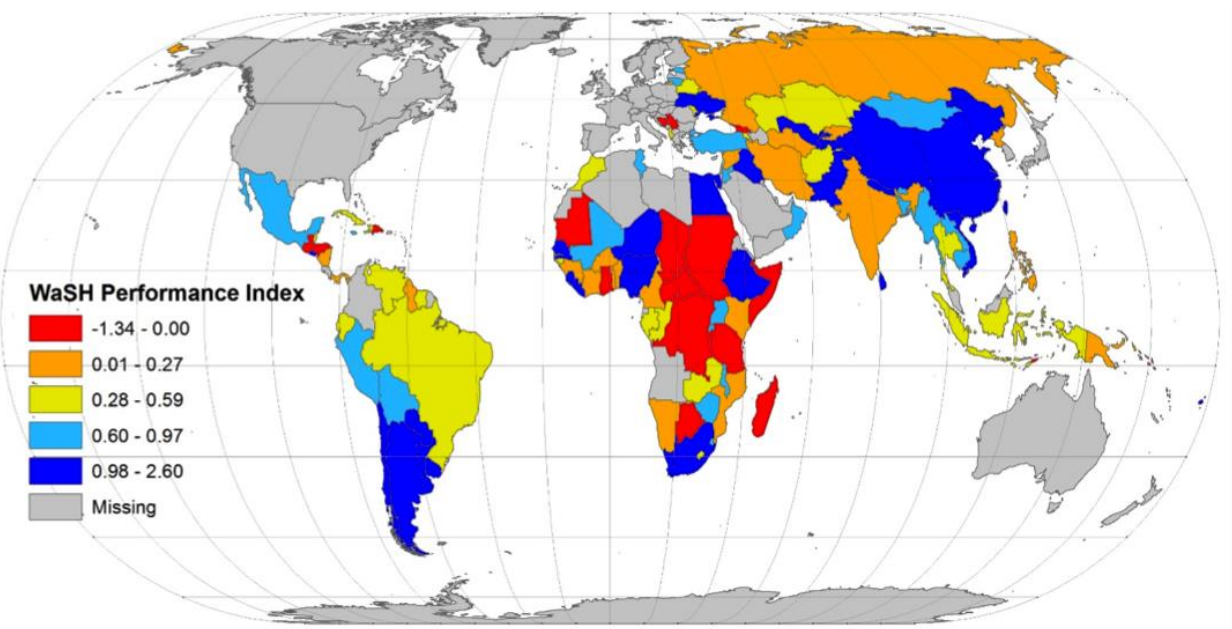
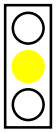


Figure 2: WaSH Performance Index values by country. High scores indicate better performance on the WaSH Performance Index.

Strategic Objective 5: Adoption of coordination and harmonization practices in the WASH sector by all actors



The focus of this SO is on coordinating and harmonizing practices between Hilton Foundation grantees and governments around WaSH policy and implementation. Coordination may also occur among Hilton Foundation grantees, and beyond grantees with the larger WaSH sector, particularly around harmonizing key WaSH indicators.

I) SO Overview

Significance of the Strategic Objective

SO5 is the adoption of coordination and harmonization practices in the WaSH sector by all actors. Coordination and harmonization are critically important for the WaSH sector. A lack of planning in the sector has led to multiple projects in some areas, while others are left behind. Furthermore, isolated projects with implementers that are only in a community for a short time are less likely to be sustainable due to a range of issues such as lack of post construction support and weak supply chains. On the other hand, a large number of projects in an area, or a string of failed projects can leave communities disillusioned or overwhelmed by the number of different interventions available.

Adopting coordination and harmonization practices does not mean that all WaSH sector actors need to or should take the same approach. Indeed the Hilton Foundation funds a range of grantees managing diverse activities, from micro-finance to market-based approaches to traditional well-drilling to education through theater.

The spirit of this SO is that actors adopt specific practices that allow for coordination and harmonization, particularly among Foundation grantees and between grantees and government bodies (of every level). As countries such as Ethiopia are adopting nation-wide WaSH strategies, grantees can coordinate and harmonize by aligning their work to these strategies. This requires that grantees understand the policies that make up these strategies, and think about how to best operationalize them through analysis of gaps and bottlenecks. Where governments have not yet adopted coordinated WaSH strategies, other actors can provide input and resources to increase coordination.

Grantees cans also benefit by aligning strategies and activities among one another. This kind of coordination requires particular approaches to knowledge management and the sharing of learnings that may not be elements of conventional KM programs. Commonly, knowledge management in WaSH focuses on disseminating the results of various projects, with much less attention paid to learning from this produced knowledge. Those who want information in the sector may now suffer from an overload of produced learnings, with little guidance as to how to select or implement winning approaches. Thus one coordination and harmonization practice includes incorporating the give and take of knowledge production and learning. If many sector actors are all trying to disseminate their own findings or approach to government, government can be left confused and overwhelmed rather than able to effectively act on this knowledge.

Active sharing of current implementation projects by NGOs with government, and between NGOs, is therefore a critical need. And corollary benefits emerge: KM focused on harmonization among all stakeholders should result in more targeted distribution of resources throughout a country, long-term sustainability, and improved maintenance to allow for faster water system repair and higher rates of sustainable access to water.

A final domain for this SO is coordination and harmonization beyond grantees to the larger WaSH sector. This area of SO5 is a novel vision with great potential. Activity which extends beyond grantees has the potential to have a pronounced effect beyond the Hilton Foundation's goal of one million beneficiaries.

Description of Portfolio Progress to Date

Partner activities related to SO5 involve either sharing learning, helping to establish national or district WaSH plans, or aligning themselves with these plans. A few grantees reach further. Most Hilton Foundation grantees are working explicitly with local or national governments in order to build their capacity and to contribute to or facilitate coordination. However, measuring overall progress toward SO5 is limited by the indicators (or lack thereof) used by grantees in their proposals and progress reports.

II) Assessment of Progress on this SO

Assessment of Portfolio Performance on this SO

Many of the Hilton Foundation grantees explicitly support objectives that respond to the aims of SO5. This rhetorical support is rarely backed up with structured procedures of assessment, however. A lack of reporting on or measurable indicators for outputs, outcomes, and impacts, makes it difficult to assess the overall performance of the Hilton Foundation's performance on this SO.

For the purposes of our assessment, we concluded that "adequate progress" was made if grantees include work in one domain of this SO in their project objectives and some mention of activities toward their objectives in a progress report. If grantees list two or three coordination and harmonization domains in their project objectives and mention activities related to these objectives in a progress report, we assumed they made good progress. Grantees that do not address this SO in their project objectives are assumed to have poor or non-existent progress.

The overall portfolio is given a score of adequate progress. Developing metrics of coordination and harmonization will allow for a more rigorous assessment of this SO, which may in fact reveal that the performance on this SO is better than currently imagined.

III) Looking Forward

Future Portfolio Outlook on SO 5

Among Hilton Foundation grantees, and in the WaSH sector more broadly, there is a general consensus on the importance of coordination and harmonization. The primary practice Hilton Foundation grantees can and are adopting is to align themselves with government strategies where they exist, and to enable the creation of these strategies where they are lacking. The outlook for the portfolio looks good for this practice according to grantees' objectives, but monitoring and quantification of the actions, outputs and outcomes related to these practices is necessary to judge whether the portfolio is moving forward.

While all grantees are making efforts to share learnings, they also need to share data with governments and each other about implementation activities and plans for enhanced coordination. This sharing is less explicit in grantees' proposals, although most list government and other NGO collaborators, so this practice is likely to be ingrained, at least to some extent. It is particularly important to make explicit the relationships between NGOs and governments on backstopping projects so that maintenance expectations are clear. Finally, grantees and other actors need to coordinate their vast quantities of learnings, rather than simply focusing on disseminating as widely as possible.

Opportunities for Improvement on SO 5

Coordination and harmonization practices are means for improvement in the WaSH sector rather than ends in and of themselves. Partners could improve overall project impact through incorporation of these practices into all activities and objectives.

Hilton Foundation grantees, in their eagerness to disseminate exciting new knowledge or learnings, may interpret harmonization as the dissemination and take-up of their own ideas by others. Thus everyone is trying to harmonize, yet progress is slow. In part this is due to the fact that NGOs in particular and other actors in general must always be seen to be innovating to succeed and these innovations must be (or appear to be) sustainable or scalable to campaign for continued funding. Finding success will also require managing the tension between being new and innovative in some areas, while adopting successful models in other areas. Adoption of a clear learning strategy by the Hilton Foundation would enable progress toward this SO.

As more countries adopt WaSH policies or strategies, either at the national or local level, grantees can increase long-term project impacts by aligning their work with these strategies. Where policies are not in place, grantees can support governments to develop and implement strategies. In this supporting

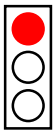
role, grantees should be careful to allow government actors to lead the process for maximum ownership and long-term success. When assisting governments in policy development, it is important that Hilton Foundation grantees simultaneously coordinate among themselves in order to avoid sending mixed messages. In addition, we suggest that the wording of this SO move beyond coordination and harmonization, to also encouraging cooperation and collaboration between Hilton Foundation grantees, and between Hilton Foundation grantees and the larger WaSH sector.

Finally, coordination practices that reach beyond Hilton Foundation grantees have the potential for large-scale impact on the WaSH sector. The Hilton Foundation should strategically target investments in this area at new and emerging areas of the field. Success may involve higher risk proposals with the potential for challenging business as usual in large sections of the WaSH sector. Developing a standard set of indicators that can be used across the sector has the potential to establish the Hilton Foundation's leadership in this area.

IV) Conclusions

SO5 is critical piece of not only the Hilton Foundation's sustainable safe water strategy but a more effective WaSH sector. From their proposals, grantees are eager to contribute to this SO. In particular, grantees are trying to work effectively with government and several are explicitly aligning themselves with government strategies. From progress reports and proposal log-frames, it appears that grantees are somewhat unclear on how to operationalize coordination and harmonization practices. The Hilton Foundation has an opportunity to guide grantees to integrate coordination and harmonization practices in all project objectives, contributing to SO5, all of the other SOs and the Hilton Foundation's Sustainable Safe Water Strategy as a whole. Adoption of a learning strategy will help advance progress on this SO, as well as informing the Sustainable Safe Water Strategy moving forward.

Strategic Objective 6: National capacity to develop and maintain effective information systems for guiding WaSH interventions



This SO calls for expanding the capacity of national, district and local level government officials to manage and use information and to efficiently deploy information and communication technology (ICT). Partnership with governments on developing and improving information systems and establishing inventories of water point assets is an essential component.

I) SO Overview

Significance of the Strategic Objective

To improve access to WaSH, governments need to know which facilities are where, whether they are working, and whether they are producing safe water, as well as how to use this information to guide policy. SO6 is forward thinking and ahead of its time in recognizing the importance of data-driven WaSH interventions at a nation-wide level.

National capacity to develop and maintain effective information systems for storing and processing WaSH data helps countries and governments at multiple levels, allowing for the development of national plans for the sector. This plan can include areas to target, underlying goals such as universal access and government priorities. Creation of a national strategy allows governments to coordinate WaSH activities within a country, and harmonize the activities of NGOs and other implementers with

this strategy. When governments have an established information system, they are in a position to influence the methodologies NGOs and implementers use for monitoring, with the potential to contribute to a coherent WaSH information system which can maintain data integrity across projects or other organizational boundaries. Monitoring and evaluation can thus move from a project centered activity, to a national activity.

Success on this objective depends on coordination between Hilton Foundation grantees and government policies and needs. Building capacity, designing information systems, and collecting water point inventories must be done in close collaboration with government to achieve true progress. As more countries adapt national WaSH strategies and water policies at all levels of government which include provisions for information systems, grantees need to identify how to best operationalize these policies. Gap and bottleneck analysis may be helpful in identifying areas where Hilton Foundation grantees can contribute most productively to SO5.

In short, a national information system would provide the potential to improve the level of WaSH services nation-wide, dramatically magnifying the impact of the Hilton Foundation's WaSH portfolio. In addition, SO6 would allow for country-wide data to influence SO4, and allow governments to push toward coordination and harmonization in the WaSH sector. SO6 is clearly not only an objective in and of itself, but a potential asset to several other SOs and thus the Foundation's strategy overall.

Description of Portfolio Progress to Date

While many grantees have activities related to capacity building at some level (community, district, region or national levels), and some grantees have objectives related to information systems and monitoring and evaluation, very few of the grantees have joined together these two components of SO6 in their project objectives. Even fewer have been able to show demonstrable progress. The ability to report on progress is hampered by a lack of widely-accepted indicators to reflect improvement in this area, so even if some grantees are working actively toward SO6, and even making significant strides, such successes may not be clearly discernable. When grantees are more effectively able to measure progress toward SO6, in terms of activities, outputs and outcomes, the steps necessary for improvement will become clearer, too.

The last part of the SO underscores the chief ends of ICT improvements: these are "for guiding WaSH interventions." This language has appeared more frequently in grantees' project objectives and activities, though usually in the context of encouraging governments to use grantee data to guide WaSH interventions rather than empowering governments to collect their own data for the same uses. When grantees hand governments datasets, they are unlikely to be used, particularly if capacity for using data to guide WaSH interventions is low in government.

Our focus on assessing this SO is thus on national capacity to develop and maintain effective information systems rather than mere data collection.

II) Assessment of Progress on this SO

Assessment of Portfolio Performance on this SO

The Hilton Foundation has chosen to move into new space with this SO and as a result progress has been slow. There is, however, evidence that the portfolio is beginning to make progress on this SO. The

first grants that contribute to this SO have now been awarded. The first grants that contribute to this SO have now been awarded. The first two seek to build national capacity as part of infrastructure implementation projects. The third is to develop and pilot an analytics platform with input from government. With momentum building, the Hilton Foundation has an opportunity to achieve greater performance on this SO in the future.

III) Looking Forward

Future Portfolio Outlook on this SO

SO6 is an essential part of the path to creating self-sustaining national WaSH systems. Building national capacity to develop and maintain information systems is essential for allowing governments to make data driven plans that can guide WaSH interventions across the sector for a given country. These plans can help target areas of greatest need, harmonize the sector in a country and reduce duplication of effort, and allow governments to then track progress and set goals.

This SO is forward thinking and ahead of its time. The first grants that contribute to this SO have now been awarded; however, other grantees seem unaware, at least in the past, of the existence of this SO and its relevance to their work. As more countries adapt national WaSH strategies and water policies at all levels of government which include provisions for information systems, grantees need to identify how to best operationalize these policies. Gap and bottleneck analysis based on policies and stated government needs may be helpful in identifying areas where Hilton Foundation grantees can contribute most productively to SO5.

This SO could be strengthened further by incorporating capacity for understanding the data in national information systems. Capacity to develop and maintain large databases does not necessarily equate to ability to use this data to guide WaSH interventions and to create country-wide plans. Adding the words ", understand data/information, and use them effectively to improve WaSH services" might add clarity here.

Opportunities for Improvement on this SO

There are clear next steps for this SO. The first is to develop a framework to measure progress. Because this is ahead of its time, those grantees who are moving into this area are not yet measuring their outputs and outcomes. Developing standardized measurable indicators will allow grantees to track performance which can be used to drive improvement on this SO. In addition, the Hilton Foundation can both contribute to this SO and measure progress on it by supporting grantees to report project results through national information systems where they exist.

In order to make progress on this SO, grantees need to strike a balance between grantees building capacity for the information system, and grantees completely designing the system and then turning it over to a government. Developing a new information system is a time consuming and expensive process if done well. If grantees only build capacity, there may not be time or resources available to get over the initial development hurdle.

On the other hand, if grantees develop the system on their own, or even with some input from government, there is a tendency for grantees to do all the technical work leaving government without a sense of ownership or the technical skills to fix bugs or add data fields to the system in the future. We

anticipate that a fully participatory process with equal involvement from grantees and government is likely to have the best outcomes. We suggest that capacity building by doing, rather than abstract training in information systems will have the greatest impact for this SO.

IV) Conclusions

Increasing national capacity for developing and maintaining information systems to guide WaSH interventions is a large piece of enabling governments to sustainability plan and coordinate activities in the WaSH sector. Without information, governments cannot effectively plan, and without this capacity, they will remain dependent on other actors to share piecemeal data about the state of the sector. Although WaSH information systems are not well established in most countries, Health Information Systems (HIS) and Educational Management Information Systems (EMIS) are prevalent in both developed and developing countries, indicating precedents for national capacity for developing and maintaining these types of systems (AbouZahr & Boerma, 2005; Guzman, 2003; Hamminger, 2008).

The Hilton Foundation has an opportunity to be a sector leader in the area of national capacity for WaSH systems. While many grantees have integrated language on capacity building and/or data sharing into their project objectives, few have explicitly integrated SO6 into their most recent proposals or project objectives. The Hilton Foundation should continue to prioritize this SO and help grantees incorporate it into their project objectives. In addition, measurable indicators for outputs and outcomes also need to be developed to enable grantees and the Hilton Foundation to clearly measure progress on this objective. Finally the Foundation can help to facilitate connections between ICT tool and platform development organizations and governments.

Additional Implementation Activities

Increasing access to WaSH in schools and health facilities

Description of the issue

WaSH in non-household settings such as schools, health care facilities, and workplaces are an important part of the Sustainable Development Goals. Girls, disabled children, and young children are particularly vulnerable in schools – where there may not be gender separated toilets or accessible toilets and drinking water stations. Health care facilities contain vulnerable populations, such as the immunocompromised, pregnant mothers, and babies where they can be exposed to infections from inadequate WaSH. Universal access to WaSH in these settings is incorporated in the language of the Sustainable Development Goals.

Description of Portfolio Progress to Date

The Conrad N. Hilton Foundation's Implementation grantees have contributed to a number of non-household WaSH projects and interventions through their water grants. These efforts have been achieved by five implementation grantees. Outputs and outcomes have been reported differently for each grantee which leads to a lack of comparability.

Recommendations for Future Portfolio

- Increasing investments in WaSH in non-household settings will make the Hilton Foundation an "early adopter" donor for WaSH in these settings.

Multiple use services (MUS)

Partners have leveraged their water grants from the Hilton Foundation to achieve additional objectives, such as multiple use services (MUS). MUS is an approach that considers users' water needs beyond drinking, to include water for livelihood activities such as farming, livestock, and income generation; in addition to domestic activities such as cooking, bathing and cleaning. MUS contributes to improved health, development, and equity.

Recommendations for Future Portfolio

More work is needed to measure outcomes and impact of MUS projects and determine how the value added by these activities compares to that added by water for drinking and domestic uses.

Cross-cutting themes

The WaSH landscape is changing, and challenges to sustainable access to safe water have evolved since the Hilton Foundation developed their strategy in 2010. According to the 2015 JMP update, 221 million gained access to an improved source of water since 2010, and approximately 200 million gained access to improved sanitation (WHO/UNICEF, 2010, 2015b). While the MDGs focused on halving the population without access to water and sanitation, the SDGs emphasize access for everyone. Target 6.1 calls on the global community to "achieve [by 2030] universal and equitable access to safe and affordable drinking water for all" (UN General Assembly, 2015). During the MDG period, the easiest to reach populations are likely to have gained access to water and sanitation, leaving a higher proportion of the hardest-to-reach populations without access.

The Hilton Foundation makes reaching these populations a core tenet of their strategy, which seeks to "prioritize the poorest and hardest-to-reach populations" (Conrad N. Hilton Foundation, 2010). This goal is not clearly captured in any of the SOs, however. In addition, the strategy also mentions disadvantaged, vulnerable, ultra-poor, impoverished, and poor populations. Lack of clarity and definition on who the Foundation wants to reach has resulted in too much room for interpretation by each grantee and thus measuring and monitoring progress towards impacting these populations is inconsistent.

The Foundation's strategy currently emphasizes targeting "water-stressed regions of Africa, Mexico and India" (Conrad N. Hilton Foundation, 2010). Water stress can have both physical and economic components. The World Resources Institute measures physical water scarcity through the ratio of total water withdrawals to total renewable supply. According to this metric, India and Mexico are experiencing high water stress. However, Burkina Faso, Ghana, Niger, Mali and Ethiopia are not experiencing water stress (Gassert, Reig, Luo, & Maddocks, 2013). According to the World Water Development Report 4, northern India, Burkina Faso, Ghana, Niger, Mali and Ethiopia are experiencing economic water stress, with "human, institutional, and financial capital limit access to water even though water in nature is available locally to meet human demands" (UNESCO, 2012). This geographic targeting is not captured in any of the SOs.

Some of these physically or economically water-stressed regions may experience other extreme events such as floods that are also problematic for water security and access to water. For example, India faced massive and deadly floods in 2015, including the usually drought-prone state of Gujarat. In 2012, Mali, Niger and Burkina Faso experienced heavy rain and flooding. Areas not considered physically water-

stressed may experience droughts and severe water shortages. Ethiopia is currently facing the worst drought in 50 years, triggered by El Nino. Resilience is needed for communities in both physically and economically water stressed areas to endure these types of extreme events.

MEL and Integration

The Hilton Foundation's WaSH MEL project developed a core set of set of WaSH indicators to measure and identify opportunities for improvement. In addition, the necessary tools (household, water point, community and sanitary inspection surveys) were designed to enable all organizations working in WaSH (not limited to the Hilton Foundation) to collect data across all WaSH projects using the same set of indicators. A mobile water quality test kit was also developed and used in the field to assess water quality at the source and at the household. These tools and methods were designed so that individuals, organizations, and governments can monitor performance and progress on the Hilton Foundation's SOs, and use the resulting data to drive improvement. The Water Institute piloted and validated the use of these indicators, tools, and methods with several Hilton Foundation grantees through WaSH MEL pilot projects in three countries, and through assessment activities in a fourth country as well. This work demonstrated the suitability of these tools and methods for monitoring grantees' WaSH activities. The Water Institute also introduced continuous quality improvement methods (CQI) to select Hilton Foundation grantees to pilot rapid improvement cycles and target specific opportunities for improving WaSH services. These methods are based on industrial quality improvement approaches such as Lean and Six Sigma, but have never before been applied in the WaSH sector. The successful application of WaSH CQI methods to improving grantees' performance in pilot countries represents an important step towards sector leadership in this area.

Building upon the successful application of WaSH MEL monitoring and CQI methods with the Hilton Foundation's pilot grantees, there is an opportunity to refine these methods and roll them out to additional Hilton Foundation grantees in the future. This would enable these grantees to reliably track and improve their performance. Reliable monitoring would also allow the Hilton Foundation to more effectively identify and reward top performing implementation grantees in its portfolio. In order to effectively roll out the WaSH MEL methods, it will also be important for the Hilton Foundation to provide greater clarity on its strategic objectives for partners, and the specific indicators and criteria by which progress on those SOs will be tracked in future funding cycles.

Measuring progress and performance of all grantees against each strategic objective can be achieved if clarity related to the expectations on how grantees are expected to monitor, evaluate and learn from data is provided from the start of each project and grant. Requiring consistent and high quality monitoring and improvement activities and action is highly recommended going forward as part of WaSH MEL integration.

Highlights

- Developed cutting edge MEL toolkit including core indicators, surveys (household, water point, community, sanitary inspection), field water quality test kit, over 11,000 surveys conducted
- Proven success and impact in CQI pilots and improving household drinking water quality and safety. As a result of applying CQI in Northern Ghana, "A statistically significant reduction in microbial contamination of stored household drinking water has been observed in

households with safe storage containers and a statistically significant reduction in reported diarrhea has been observed in households with safe storage containers."
- Field studies conducted on water quality in Ghana, Ethiopia, Burkina Faso
- Online MEL training course and Virtual Learning Center, over 100 graduates from 51 countries
- Scaling CQI to the wider WaSH sector to 6 countries starting in 2016

Recommendations

- Require all grantees to conduct high quality monitoring using harmonized core indicators, in coordination with the WI.
- Require all implementing grantees to conduct water quality tests not only at the source, but also at the household level, on a continuous basis in coordination with the WI
- Develop a learning strategy as part of the Foundation's overall strategy with clear expectations for grantees and invest in grantees that contribute towards the strategy and then demonstrate a commitment to improve.
- Implement continuous quality improvement methods, where appropriate, to maximize grantee performance.
- Use monitoring data and key performance indicators to target investments towards top-performing grantees.

Overall Recommendations

The overall strategy and strategic objectives adopted in 2010 by the Hilton Foundation were helpful in charting a better way of targeting investments in water projects and partnerships to increase impact. However, there are opportunities to improve the strategy. The WI recommends that the Hilton Foundation refine and shorten its overall strategy so that it is easy to understand and clear in purpose, providing a bigger picture statement about what the Foundation aims to accomplish through its water projects.

The six strategic objectives articulated in the strategy document are the means by which the Hilton Foundation frames expectations for how the strategy will be accomplished. These strategic objectives should set ambitious targets to support the overall strategy, but also need to be simple and specific to help grantees navigate and operationalize the overall strategy and goals. The WI recommends refining the current SOs and creating a supporting guidance document for each SO that explains and outlines the objectives for each SO. In addition, each document could clearly define measurable indicators, expectations for how progress and performance will be tracked for the SO and how grantees will contribute to achieving the SO. The documents can also provide guidance on implementation. With the adoption of the SDGs, the benchmark for access is now "close to home" (WHO/UNICEF, 2015a). The Hilton Foundation could use the working-document for SO1 to emphasize rural piped supplies and other approaches which provide on-plot access to water. Finally, a refined strategy and objectives can be used by the Hilton Foundation to balance the portfolio by specifying areas where projects are needed, and others which are oversubscribed.

The Hilton Foundation makes reaching the "poorest and hardest-to-reach" populations a core tenet of their strategy (Conrad N. Hilton Foundation, 2010). However, this goal is not clearly captured in any of the SOs. The WI recommends including an explicit focus on the poorest and hardest-to-reach

populations in SO1. The Hilton Foundation can also include this goal in SO6; specifying that national information systems may be used to capture information on the socioeconomic status of populations.

Since climate change and extreme weather events have and will continue to influence access to water, the WI recommends that the Hilton Foundation continue to focus on water-stressed regions, but that they also adopt language around improving "water security" in their strategy. In addition, the WI recommends that a focus on targeting water-stressed regions and improving water security be integrated into SO1 to influence grantee programming, and SO4, to influence the activities of local and national governments.

The Hilton Foundation has also been funding valuable work that does not directly contribute to its current SOs, mostly in the form of access to water in non-household settings (schools and health care facilities predominately). This work contributes meaningfully to the post-2015 Sustainable Development Goal of achieving universal access, as interpreted by the JMP (WHO/UNICEF, 2015a). For this reason, the WI recommends that the Foundation either incorporate wording on non-household settings into SO1 or add a new SO for this work.

The Hilton Foundation is committed to being a learning organization. It is in a unique position to lead the sector in this area because it has already prioritized MEL, ahead of other WaSH organizations and sector leaders. The Hilton Foundation would benefit from a documented learning strategy that can be shared with the wider WaSH sector to help prioritize knowledge sharing and a focus on improvement. The support of the online MEL course is one way in which the Foundation has led the way in raising the bar on learning. The learning strategy can be integrated into future water grants with similar expectations for measuring and monitoring each of the SOs. Support from the Hilton Foundation would be partly conditional on learning activities and associated outcomes included in proposals and work plans.

Progress and performance towards accomplishing the overall goals and objectives of the Foundation cannot be accomplished without high-quality MEL. The WI recommends a formal integration of WaSH MEL into the Foundation's grant proposals and grantee reporting requirements. The WI recommends that all grantees and projects be required to monitor the Hilton Foundation's core WaSH MEL indicators and use robust tools and methods including water quality testing to collect data. Analysis will focus on identifying opportunities to improve the performance of existing projects. Clear MEL expectations, activities and goals can be written in to each grant and financial support for achieving improvement through high quality MEL can be designated in each grant.

Finally, the WI recommends that the Hilton Foundation use data and evidence to guide future selection of grantees and projects with the understanding that improvement is the ultimate goal, not perfection. Evidence-based decision making, along with clarity and consistency around performance expectations, will build a successful WaSH program and lead the way in achieving not only the Hilton Foundation's goals and objectives, but also helping make the world a healthier and safer place on the road to achieving universal and equitable access to safe and affordable drinking water for all.

Conclusions

The Hilton Foundation's adoption of a new strategy in 2010 was a bold step. The strategy was successful in steering the Foundation and its grantees from providing access to water through drilling boreholes towards a broader strategy of sustainable access to safe water. Over the past five years, the Hilton

Foundation has made good progress towards achieving the six SOs, including providing access to water for over 1 million people. Clearly articulating the SOs and providing further clarification on each will help grantees achieve the Foundation's goals and objectives. Selecting partners based on performance and projects based on gaps will help strengthen and balance the portfolio. Continuing to integrate MEL into the water program to track and improve impact will result in a leading water program and set a new standard in the WaSH sector and philanthropy. Most of all, people across the world will have access to safer water and benefit from better health.

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