

Making Sanitation and Hygiene a Human Security Issue: The case of Nyamagabe District, Rwanda

Date Published: September 2021

Authors: Maurice Kwizera, Lambert Karangwa, Jeannette Murekatete, Gilbert Rukundo Mutabaruka, Jean Paul Mbarushimana, Tariya Yusuf, Inbar Hanna Yaffe, Bonaventure Uwamahoro, Kabayiza Lambert, Mujawayezu Prisca, Kayiranga Callixte, Twagiramungu Venuste, Nishimwe Alcade and Habimana Thaddée

Sanitation Learning Hub Case Study

Photo credit: Inbar Hanna Yaffe (2020)

This case study was developed to inform subsequent research and analysis of local government leadership and prioritisation of sanitation and hygiene (S&H) in East Africa. Consolidated learning from across the three countries involved can be found in the [Sanitation Learning Hub \(SLH\) Learning Brief: Strengthening sub-national systems for area-wide sanitation and hygiene.](#)



Introduction

From late 2020 to early 2021, the Sanitation Learning Hub (SLH) collaborated with local government actors and development partners from three sub-national areas to explore ways of increasing local government leadership and prioritisation of sanitation and hygiene (S&H) to drive progress towards area-wide S&H. For some time, local government leadership has been recognised as key to ensuring sustainability and scale and it is an important component of the emerging use of systems strengthening approaches in the S&H sector. It is hoped that this work will provide practical experiences to contribute to this thinking.

Case studies were developed to capture local government and development partners' experiences supporting sub-national governments increase their leadership and prioritisation of S&H in Siaya County (Kenya, with UNICEF), Nyamagabe District (Rwanda, with WaterAid) and Moyo District (Uganda, with WSSCC), all of which have seen progress in recent years. The cases were then explored through three online workshops with staff from the local governments, central government ministries and development partners involved to review experiences and identify levers and blockages to change. This document presents key findings from this process.



Credit: Jason Florio

Why focus on sub-national systems strengthening?

To progress from scattered open defecation free (ODF) villages to safely managed sanitation in high-burden countries at scale, governments need to take the lead, display political leadership, and match commitments with the necessary human and financial resources (World Bank Group et al. 2019). Following widespread decentralisation reforms, including across Africa (Cabral 2011), responsibility for S&H often sits with sub-national governments. Recent years have seen an increase in commitments towards achieving total sanitation and ODF status from sub-national governments in a number of countries across the world. However, of the 62 countries with over 5 per cent open defecation, only 18 are on track to be ODF (UNICEF 2018). If we are to reach Sustainable Development Goal (SDG) 6.2, we need to drastically pick up the pace.

From late 2020 to early 2021, the SLH collaborated with local government actors and development partners from three sub-national areas to explore ways of increasing local government leadership and prioritisation of S&H to drive progress towards area-wide S&H. For some time, local government leadership has been recognised as key to ensuring sustainability and scale, it is an important component of the emerging use of systems strengthening approaches in the sanitation sector. It is hoped that this work will provide practical experiences to contribute to this thinking.

Three case studies were developed to capture local government and development partners' experiences supporting sub-national governments increase their leadership and prioritisation of S&H in Siaya County (Kenya), Nyamagabe District (Rwanda),

and Moyo District (Uganda), all of which have seen progress in recent years. The development partners involved were UNICEF in Kenya, WaterAid in Rwanda, and WSSCC/ Uganda Sanitation Fund in Uganda. The cases were then analysed through three online workshops facilitated with staff from the local governments, central government ministries and development partners involved to explore them in further detail, review experiences and identify levers and blockages to change. Lessons from the workshops are documented in the SLH learning brief mentioned above.

This is the case study developed by Nyamagabe District and WaterAid documenting their experiences and reflections from working together to increase prioritisation of S&H in Nyamagabe District, Rwanda.

1. Methods

This case study was developed to document WaterAid and Nyamagabe District's experiences relating to the overarching research question: what influenced the local government to increase their leadership and/or prioritisation of sanitation and hygiene?

SLH developed a case study development guide that included a suggested case study development process as well as a case study template with examples of questions to consider in each section. Most significant change (MSC) and outcome harvesting (OH) approaches were used to develop the case study: MSC as a means of first identifying a positive change(s) seen in selected local governments' prioritisation and leadership around S&H, and then OH to work back from these to unpack what may have contributed to the change(s).

Within this framework, teams produced research plans to develop their case studies before conducting literature reviews, interviews and focus group discussions as necessary to inform and draft their case studies. SLH provided tailored support to each case study development team throughout this phase based on demand. For most, this involved reviewing research plans, interview guides and draft case studies.

This case study was compiled by a WaterAid Rwanda team, with the cooperation of Nyamagabe District. The data in the case study was based on national, sub-national, and organisational documents and knowledge. A series of interviews was conducted by WaterAid. All interviews were based on the case study questions provided by the Sanitation Learning Hub. The details of the case study development team, and the list of interviewees, is provided in Annex A.

The structure of the case study reflects the MSC/OH approach taken: following a background section providing context on the local government area, we explain the most significant change in the local government's prioritisation of S&H. The next section outlines activities that may have contributed to this change, followed by a look at some associated successes and challenges. The final section discusses lessons learned and recommendations that can be distilled from these experiences.

2. Background

Nyamagabe District is in the southern province of Rwanda. The population of the district is 341,491, with 313 inhabitants per km² (Rwanda Fourth Population and Housing Census [PHC4] Thematic Report, 2012). Nyamagabe's population

represents 13.2 per cent of the Southern Province's population and 3.2 per cent of Rwanda's population (District Profile: Nyamagabe, 2012). In Nyamagabe, 92.7 per cent of the population live in rural areas, making it the third most rural district in the southern province (after Nyaruguru [98 per cent rural] and Gisagara [98.4 per cent rural]) and the 12th most rural district out of Rwanda's 30 districts (PHC4, 2012). As of 2014, 41.5 per cent of the district population lived under the poverty line while 13 per cent lived under extreme poverty conditions (Household living conditions survey [EICV4], 2014).

Figure 1: Map of Rwanda



Source: Nmakuru (2010) *Map of Rwanda from CIA World Factbook, with Province Boundaries and Names Added*, public domain (accessed 23 September 2021)

In Rwanda, provinces are made up of districts. Districts are further divided into sectors, cells, and villages. Nyamagabe District is made up of 17 sectors, 90 cells, and 536 villages. Local governments are decentralised, with individual, institutional, and collective sanitation and hygiene (S&H) targets set centrally by the Rwanda government in a five-year plan and implemented through an annual plan by the district council. Plans are enforced by the district S&H task force. The S&H target for Nyamagabe District was 100 per cent access to improved sanitation facilities, and to be 100 per cent open-defecation free (ODF) by 2020. In Nyamagabe, all 536 villages are ODF. Around 66 per cent of the district population use improved toilets (flush toilets, or pit latrines with solid slabs), not shared with other households (National Institute of Statistics [NISR], 2018).

Roles and responsibilities of S&H stakeholders

National government: The Rwandese National Sanitation Policy of 2016 recognises the place of S&H in preventive health care and as a prerequisite and indicator for socio-economic development. The national government, through the Ministry of Infrastructure is responsible for developing the national sanitation policy and targets. Sanitation targets are provided for individual or household sanitation, institutional sanitation, and collective sanitation. The ministry is equally responsible for human resource capacity development, coordination, and the mobilisation of donors and partners.

Southern Province: The province is responsible for coordination, communication, monitoring, and providing direction on national policies.

District units: According to the implementation strategy of the 2016 National Sanitation Policy Implementation Strategy (NSPIS), the responsibility for meeting S&H targets, and the enforcement of S&H regulations, lies with the district. The district implements sanitation and hygiene plans, supervises S&H promotion activities, and supports communities to implement S&H activities while ensuring sustainability. The district Mayor and executive committee coordinate all parties and set a clear implementation plan and priorities for S&H, based on the national targets. Units in the district, have responsibilities for different aspects of water, sanitation and hygiene (WASH). The district health unit is responsible for meeting S&H targets. The health unit is also responsible for health plans and its steering committee reports to the District Health Management Team. The district's education unit is responsible for planning and executing WASH activities and facilities in schools, while the infrastructure unit is accountable for providing WASH infrastructure, including public toilets.

Local community: The Rwandan NSPIS puts the responsibility for individual S&H in the hands of the user or household. The approach taken to implement the policy is the Community Based Environmental Health Promotion Programme (CBEHPP). The Rwandese Ministry of Health has overall responsibility for designing and supervising the implementation of CBEHPP. The CBEHPP is implemented through community health clubs in the village, coordinated by the head of the village and supported by the community health workers (CHW) and the Community Environmental Health Officers (CEHO). The programme creates demand for sanitation services and provides a continuous vehicle for promoting and sustaining sanitation and hygiene behaviour change.

Development partners: The role of the non-governmental organisations (NGOs) working in S&H is to support changes through systems strengthening and the implementation of various WASH activities. The partners assist the district leadership with planning, policymaking, monitoring, technical support, and financing, as well as through construction of WASH infrastructure and direct implementation of the CBEHPP. They work with district staff at different levels to improve the communities' capacity for S&H. For example, WaterAid has supported the printing of CBEHPP training tools and conducted training for District Environmental Health Officers to increase their capacity for implementing the programme.

3. The most significant changes identified in the local government's prioritisation of S&H

Nyamagabe District has seen significantly increased levels of political commitment towards S&H in recent years, contributing to the district becoming ODF in 2020. This has been demonstrated through the following changes, which have been observed at the district level in recent years:

Increased S&H planning: In the Fiscal Year 2018/2019, the district launched its first WASH investment plan with an elaborate S&H component. The five-year plan for 2020–2024 outlines targets and strategies for achieving basic access to WASH services. Prior to the development of this plan, the district had no formal S&H plan. The WASH investment plan has been incorporated into the District Development Strategic Plan (DDSP), which provides targets across all developmental areas and forms the basis for district developmental planning. Prior to the development of the WASH investment plan, the DDSP did not include WASH targets.

Improved coordination of S&H activities: In 2016, the district established a Human Security Issues Taskforce to coordinate S&H implementation and other human security issues, including human settlements and nutrition. The task force at district level is made up of the Mayor, a military representative, representatives from women and youth groups, and members of other development organisations, enabling coordination across district, sector, cell, village, and community health club (CHC) levels. Coordination meetings are held quarterly. The task force is responsible for evaluating the progress of implementation at district level, ensuring that monitoring reports are updated regularly, and setting new targets and areas of focus for different sectors. A similar task force exists at sector, cell, and village levels.

The district also convenes a Joint Action Development Forum (JADF) to coordinate NGOs in the district. The JADF is a platform composed of NGOs working at the district level. The JADF has a sub-committee responsible for coordinating WASH activities.

Improved quality of S&H implementation: To improve the quality of implementation, the district also increased training and supervision for staff implementing the CBEHPP. The CBEHPP training tools are delivered through CHCs in each village, with CHWs and CEHOs providing training to CHC members. CHC members in turn support vulnerable households to build toilets to ensure no one is left behind under Rwanda's traditional concept of umuganda (community work).

Regular monitoring of S&H progress: Nyamagabe has invested significantly in improving S&H monitoring by conducting district profiling assessments as a baseline of human security issues in the district. The baseline is quantitative and qualitative. Households are assigned to a category on the district sanitation ladder, ranging from households practising open defecation to households with improved sanitation services.

Progress in achieving S&H targets is monitored weekly at sector level and reported monthly to the district situation room, which compiles monthly achievements and sets new targets. Through the Human Security Issues Taskforce, local leadership regularly engages with S&H monitoring data, which is used to inform planning.

Households latrines are constructed mainly through community participation (a home-grown solution also referred to as umuganda). CHCs sensitise households and persuade them to construct or improve latrines. Vulnerable and poor households receive support from development partners, communities, and the district to construct latrines.

Diverse district stakeholder engagement: The district units most commonly involved with S&H are health, education, and infrastructure. However, in Nyamagabe, additional units have added their commitment to S&H, suggesting more widespread commitment to the cause. This includes the district business unit, which is allocating staff time to support the administration of a revolving fund for S&H for the first time.

4. What contributed to these changes?

Increased prioritisation of S&H by Nyamagabe District has been influenced by several factors, including:

The definition of S&H as a human security issue: The national government decided in 2016 to define S&H as a human security issue in coherence with the set of SDG targets in 2016. With S&H as a national security issue, targets were set at the national level in a five-year National Strategy Transformation (NST1) plan. Targets were passed down to districts, which took responsibility for achieving them. The plan was also accompanied by a national management information system (MIS) for monitoring human security issues, and taskforces at different levels to oversee implementation of plans to achieve them. This national agenda therefore increased district prioritisation of S&H in Nyamagabe, and informed the structures created to implement improvements.

Signing of Imihigo (performance contract) with district: To monitor the attainment of human security issues, his excellency Paul Kagame, the President of Republic of Rwanda, signed an annual district performance contract with district Mayors to guarantee accountability and ownership of the different development targets, including S&H. The Mayor in turn cascaded targets to the different sectors and signed a performance contract with the Executive Secretary of each sector, who together represent the sector taskforce. The imihigo, or performance contract, is based on a pre-colonial tradition where individuals or communities promise to complete certain tasks. The imihigo is publicly displayed at the district headquarters. As Nyamagabe District was identified as a low-performing district in terms of S&H, these performance contracts put pressure on the district to improve the situation locally to meet national targets and their contractual commitments.

Establishment of a situation room to monitor human security issues: To monitor progress in addressing human security issues, including S&H, the district established the situation room. The situation room uses data collected to assess the weekly progress of implementation of human security issues locally, including access to household latrines. All S&H monitoring data is displayed visually in the situation room and updated regularly. This provides the district with information on areas that need more attention, budget, and visits, allowing monitoring committees to pay more attention to areas making the least progress and supporting quality implementation. While this was established as part of the commitment to improved monitoring, it also contributes to boosting political will, with district leaders visiting the situation room to see progress on a regular basis and the mayor paying personal visits to areas making the least progress based on analysis of data in the situation room.

Support for S&H coordination meetings: WaterAid Rwanda funded various forums and meetings led by the district, such as social commission meetings, a strategy workshop on ending open defecation, general assemblies, field visits on WASH infrastructure constructed by different district partners, meetings with partners aimed at increasing WASH financing, and joint planning to avoid duplication or concentration of interventions in specific parts of the district.

Capacity development: The JADF members play a big role in developing district capacity, particularly in ODF planning, and training on the ODF triggering and verification processes.

Targeted grant funding: WaterAid gained grant funding to work with Nyamagabe

District to establish a revolving fund for S&H, using the existing Umurenge Savings and Credit Cooperative Organisations (SACCOs), which were established in 2008 under the Rwanda Cooperative agency to boost rural savings and provide Rwandans with loans to improve their earnings and enhance their livelihoods (Rwandan Cooperative Agency, 2021). The CHCs are linked to the Village Savings and Loan Associations to create S&H projects. Such projects are submitted to SACCOs, who provide loans from the revolving fund. About 71M (about US\$ 70,000) was initially committed to the revolving fund, which is administered by the district business unity, with WaterAid training SACCO staff across the district on WASH promotion and sanitation finance and marketing. This project gained buy-in from part of the district government not usually involved with S&H, broadening the range of district stakeholders with an interest in and commitment to improving S&H.

5. Successes

WaterAid staff domiciled in district health unity: Two WaterAid staff members have offices within the district health unity and provide mentoring support on a regular basis. This has proved valuable in providing visibility, developing formal and informal relationships, and allowing for quick implementation of activities.

Strong accountability of district government to national government: Strong links between the district and national government supported by robust institutional and legal frameworks have helped to ensure that the district works hard to meet targets set at a national level, with local leaders held to account if these are not met.

Use of existing structures to improve S&H: Nyamagabe have successfully used existing and familiar traditional structures and customs to improve S&H, including umuganda, imihigo and Umurenge SACCO. The revolving fund established in the Umurenge SACCO for sanitation and hygiene was the first of its kind in Rwanda. Some districts across Rwanda are attempting to replicate a similar model.

Addressing sanitation and hygiene challenges alongside other developmental issues: The district taskforce supports the implementation of activities across different sectors as human security issues. This allows for more effective utilisation of human and material resources.

6. Challenges

Expenditure in S&H does not match commitments: While the district is committed to prioritising S&H, financial commitment has in some cases not been accompanied by adequate disbursement to implement the activities planned. Actual figures of S&H expenditure are not available, but the 2020 WASH investment plan reports decreasing financial allocation to WASH from 2015 to 2019. Actual expenditure for S&H is usually a function of total funds received by the district. Funds received are sometimes not enough to cover budgetary allocations across all sectors. In such cases more resources are allocated to more pressing district needs. Sanitation- and hygiene-related issues are often not at the top of the priority ladder. The aim of the WASH investment plan is to reverse this trend.

Absence of a digital monitoring and data analysis system: The situation room has proved successful in providing visual real-time data for decision making. Data is, however, collected, and sometimes kept, manually. There are inadequate resources and capacity for digital data collection, analysis, and reporting. There is a need to automate the data collection system to save time, and to reduce errors and the cost of data entry.

District's topography and climate affecting access and sustainability of sanitation services: The topography of Nyamagabe District, like the rest of Rwanda, is very hilly. Valleys and streams can separate villages. The topography of the region limits access to services and infrastructures and increases the cost of sanitation services. Monitoring committees do not often have access to such villages and spend more for monitoring and behavioural change campaigns in these areas. Frequent floods and soil erosion destroy household toilets and makes maintenance expensive. The district recently evacuated households from high flood prone areas. This means that investment made for toilet construction in such communities is lost.

7. Lessons learned and recommendations

The lessons learned from the process of reprioritising S&H in Nyamagabe District, and further recommendations.

The national government, districts, and communities must show commitment and ownership to achieve ODF status, move households up the sanitation

ladder, and ensure post-ODF sustainability. The lessons learned from Nyamagabe District's process are:

- 1. National leadership and clear S&H targets:** The clear targets set by the national government combined with a district level implementation plan proved highly effective. The commitment from national leadership alongside ownership by communities and households increased Nyamagabe District's prioritisation of S&H and led Nyamagabe District towards ODF status.
- 2. Integrated approach to implementing S&H programmes:** Developmental needs including S&H are addressed and monitored together as human security issues. This allows for holistic planning and more effective use of resources in the district
- 3. Nationally led accountability mechanisms:** The national government, through the district performance contracts, ensured regular monitoring and held the district to account with respect to targets. This proved highly effective in ensuring follow up.
- 4. Invest in community-based behavioural change campaigns:** The CBEHPP approach uses community-based structures to create a demand for S&H services at district level. This approach fostered local accountability and ownership. Behavioural change is needed to reach ODF status and to improve access to S&H in communities. In the Rwandan context, the CBEHPP leads to high accountability and ownership at all levels.
- 5. Embed development partner staff within district WASH departments:** This has proved highly effective in establishing both formal and informal relationships and ensuring that NGO staff provide mentoring services. They are always just one step away to provide support and reach decisions.
- 6. Regular monitoring and data collection:** Regular visits by joint monitoring committees to track progress and encourage community action is effective in creating change. Information from regular community visits by joint monitoring committees was displayed in the situation room. This provided a visual representation of progress allowing monitoring committees to pay more attention to areas making the least progress. However, data should be collected based on indicators from the national MIS and kept in digital formats to allow for analysis and decision making. Reliable data is essential to make results-based decisions across all levels of local and national government and helps to coordinate the cross-sectoral effort and to appropriate budget allocation and resource mobilisation.

7. **Multi stakeholder coordination and action committees:** A district-level coordination plan involving regulatory bodies from all administrative levels and development partners can lead to better prioritisation of S&H. Development partners should, however, ensure that districts lead the process, own it, and set priorities.

8. References

The Republic of Rwanda (2013) [*Economic Development and Poverty Reduction Strategy II \(EDPRS 2\)*](#) Rwanda: The Republic of Rwanda (accessed 6 August 2021)

Ministry of Finance and Economic Planning [MINECOFIN] (2019) [*7 Years Government Programme: National Strategy for Transformation \(NST1\) 2017 – 2024*](#). Rwanda: MINECOFIN (accessed 6 September 2021)

Ministry of Infrastructure [MININFRA] (2016) [*National Sanitation Policy*](#). Rwanda: MININFRA (accessed 6 August 2021)

Ministry of Infrastructure [MININFRA] (2016) [*National Sanitation Policy Implementation Strategy*](#). Rwanda: MININFRA (accessed 6 September 2021)

National Institute of Statistics of Rwanda [NISR], Ministry of Health [MOH], and ICF International (2015) [*Demographic and Health Survey 2014/2015 - Final report*](#). Rwanda: NISR, MOH, and ICF International (accessed 6 August 2021)

National Institute of Statistics of Rwanda [NISR] (2018) [*EICV5 Presentation*](#) in *Fifth Integrated Household Living Conditions Survey 2016/17, Official Dissemination December 2018 Census 5*, Rwanda: NISR (accessed 6 August 2021)

National Institute of Statistics of Rwanda [NISR], Ministry of Finance and Economic Planning [MINECOFIN] (2012) [*The Fourth Rwanda Population and Housing Census \[RPHC4\]*](#). Rwanda: MINECOFIN (accessed 6 August 2021)

UNICEF and World Health Organization (2015) [*Progress on Sanitation and Drinking Water: 2015 Update and MDG Assessment*](#). Geneva: Joint Monitoring Program (accessed 6 August 2021)

Southern Province, Nyamagabe District (2018) [*Nyamagabe Development Strategy 2018–2024*](#). Rwanda: Southern Province, Nyamagabe District (unpublished)

9. Annex

Interviewees	
Description	Category
A woman running a household in the community, CHC member	Village
A man running a household in the community, CHW	Village
A man running a household in the community, Village council member	Village
A teacher in primary school, SHC, MHM	School
A teacher in primary school, SHC	School
A teacher in secondary school, SHC, MHM	School
A student in primary school, male	School
A student in primary school, female	School
Environmental health officer, hospital	Sector
M&E officer, health centre	Sector
SACCO manager/loan officer	Sector
Health unity director	District
Health unity officer	District
Business development unity officer	District
Education unity director	District
JADF officer	District
One Stop Station director (infrastructure)	District
Vice Mayor for Social Affairs	District

Compiled by:

Maurice Kwizera – Country Director – WaterAid Rwanda
Lambert Karangwa - Senior WASH Expert, WaterAid Rwanda
Jean Paul Mbarushimana – Head of Programs, WaterAid Rwanda
Jeannette Murekatete - Project Manager, WaterAid Rwanda
Gilbert Rukundo - School WASH Officer, WaterAid Rwanda
Tariya Yusuf - Programme Support Advisor Sanitation, WaterAid UK
Inbar Hanna Yaffe - Case Study focal point, Programme Intern WaterAid Rwanda
Bonaventure Uwamahoro- Mayor, Nyamagabe district
Lambert Kabayiza - Vice Mayor Economic affairs, Nyamagabe District
Prisca Mujawweye - Vice Mayor- social affairs, Nyamagabe District
Kayiranga Callixte - District Director of Health, Nyamagabe District
Venuste Twagirumungu - District Health Promotion Officer, Nyamagabe District
Alcade Nishimwe – Investment Promotion and Financial services – Nyamagabe district

 /SanLearningHub

 @SanLearningHub

 @SanLearningHub

Correct citation: Kwizera, M., Karangwa, L., Murekatete, J., Rukundo Mutabaruka, G., Mbarushimana, J.P., Yusuf, T., Hanna Yaffe, I., Uwamahoro, B., Lambert, K., Prisca, M., Callixte, K., Venuste, T., Alcade, N., and Thaddée, H. (2021) *Making Sanitation and Hygiene a Human Security Issue: The case of Nyamagabe District, Rwanda*, A Sanitation Learning Hub Case Study. The Sanitation Learning Hub, Brighton: IDS. DOI: [10.19088/SLH.2021.017](https://doi.org/10.19088/SLH.2021.017)

First published in 2021

© Institute of Development Studies 2021

Some rights reserved – see copyright license for details.

ISBN 978-1-78118-843-9

For further information please contact:

Sanitation Learning Hub, Institute of Development Studies,
University of Sussex, Brighton, BN1 9RE

Tel: +44 (0)1273 606261

Email: SLH@ids.ac.uk

Web: <https://sanitationlearninghub.org>

This series is licensed under the Creative Commons Attribution-Non-Commercial-NoDerivs 3.0 Unported License (<http://creativecommons.org/licenses/by-nc-nd/3.0/>).

Attribution: You must attribute the work in the manner specified by the author or licensor.

Non-commercial: You may not use this work for commercial purposes No Derivative Works: You may not alter, transfer, or build on this work

Users are welcome to copy, distribute, display, translate or perform this work without written permission. For any reuse or distribution, you must make clear to others the licence terms of this work. If you use the work, we ask that you reference the SLH website and send a copy of the work or a link to its use online to the following address: Sanitation Learning Hub, Institute of Development Studies, University of Sussex, Brighton, BN1 9RE, UK (SLH@ids.ac.uk).

This document has been financed by the Swedish International Development Cooperation Agency, Sida. Sida does not necessarily share the views expressed in this material. Grants from UNICEF and the Sanitation and Hygiene Fund also contributed to this work. Responsibility for its contents rests entirely with the authors.

