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Sustainability in Practice: Experiences from Rural Water and Sanitation Services in West Africa

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Academic Editor: Christian Zurbrugg

Received: 16 January 2017; Accepted: 3 March 2017; Published: 9 March 2017

Abstract: Sustainability in water and sanitation, understood as the durability of services with a set of agreed characteristics over time, is a major challenge, particularly in rural areas of Sub-Saharan Africa. This fundamental issue must be addressed if the Sustainable Development Goals for universal access to water and sanitation are to be achieved. Major international organizations and Non-Governmental Organizations (NGOs) need to work alongside governments to improve sustainability. This paper describes the framework for sustainability programming developed by UNICEF, which is based on a collaborative and iterative learning and adaptive approach, underpinned by regular sustainability spot checks that inform a wider national sustainability agreement. The paper details the results of application of this framework in eight West African countries over the period 2013–2015. Results show the usefulness of the framework in identifying sustainability challenges and acting upon them. However, the continuous adaptation of programs is challenging for governments and international organizations. At the same time, structural aspects that threaten sustainability (e.g., lack of capacity) cannot be addressed in the short term. Further cycles of application of the framework will continue to provide evidence on the successes and limitations of the approach and inform its evolution into a stable country led-framework.

Keywords: sustainability; WASH; services; framework; sustainability check; sustainability compact; UNICEF; West Africa; Central Africa

1. Introduction

The Sustainable Development Goals, agreed on in September 2015, include a commitment to provide universal access to sanitation and drinking water services by 2030. Targets 6.1 and 6.2 on drinking water and sanitation will measure safely managed services, which includes closing the sanitation loop to include treatment and reuse, and making safe drinking water available when needed [1]. This is a significant policy change that increases the level of ambition beyond the basic access previously measured in the Millennium Development Goals, agreed between 2000 and 2015. In the international development arena, sustainability of water and sanitation and hygiene (WASH) services refers to the durability of services over time. In other words, sustainability is understood as the continued provision of a service with certain agreed characteristics over time [2].

The focus on sustainability is a very welcome response to the growing recognition that newly delivered WASH services too often fail to provide continuing benefits to their users. Data from 20 countries show that 35–40 percent of hand pumps in Sub-Saharan Africa are not functional [3]. Analysis of large-scale Water Point Mapping Data in seven Sub-Saharan countries showed between

16 percent and 43 percent of non-functionality; in four countries where data was depicted over time, data shows that at after only one year functionality has dropped to 75 percent [4]. These rates of failure concur with other findings made in the same region [5,6] but also globally [7,8]. In the field of sanitation and hygiene, most of the currently used approaches based on triggering a collective response to achieve total sanitation at community level face two challenges; first, a high proportion of triggered communities do not achieve the Open Defecation Status [9]; and, secondly, for those that do, the issue of slippage (when communities revert to defecating in the open), remains a high risk in some interventions [10].

In parallel with the growing evidence on low sustainability, there has been a growing body of research on the main factors affecting sustainability of rural water supply and sanitation in the past decade [11–13]. Even if significant progress has been made in better understanding the importance of factors such as revenue collection [14], community demand [15], community participation [16] and gender considerations [17] in keeping services flowing, there is no general agreement on which factors are more important for sustainability and how they relate to each other. Elements commonly seen as beneficial to the long-term sustainability of WASH service, such as community management [18], or community financing [19], may not prove essential, or even positive, for lasting services in some cases. In addition, complexity is being acknowledged. Some authors identify as many as 25 factors affecting sustainability of rural water supply [20]. However, there is little systematic evidence of whether the demand driven community based approach is fully effective [21].

Two elements come out from these discussions: (i) since sustainability is a complex issue that plays out differently in different settings, the context is key: strategies adopted in one place might not be appropriate in another setting; (ii) soft governance issues dealing with institutions, roles and regulations, and the capacity to implement agreed rules remain essential for continuous delivery of services, as shown in multi country studies for different services [22,23].

Against this background, international organizations active in the area of WASH have developed their own frameworks (e.g., [24]) and numerous assessment tools for this purpose; a recent review found 25 clearly defined and usable tools targeted at sustainability assessments, and over 200 more in circulation [25]. Platforms have been put in place to enable WASH actors to share knowledge [26], and a WASH Sustainability Charter has been developed.

This study explains the approach developed by UNICEF to achieve lasting change in WASH, and its application in eight countries of West Africa. The originality of this approach is that it is not limited to an assessment tool, but it is focused on the whole cycle of understanding, planning, acting, monitoring and adapting the priorities for increased sustainability. It is aimed to be an operational framework.

2. Materials and Methods

2.1. UNICEF Framework for Sustainability

UNICEF has been measuring the sustainability of programming outcomes in some countries through Sustainability Checks for nearly a decade. The first attempts mainly measured functionality indicators for rural water supply [27], but the Checks have been evolving to increasingly look at how to lead to more sustainable services and to raise the profile of sustainability in the national agenda. Based on these initial learnings, UNICEF developed a Sustainability Framework, composed of three main components:

- (1) Develop a common understanding about the weaknesses and barriers to sustainability in the sector. A bottleneck analysis helps identifying the aspects that are hindering sustainability within the sector [28].
- (2) Based on the identified barriers, agree on priority actions with the government. To this end, Sustainability Compacts, which are agreements signed between UNICEF and national governments, set out government commitments to ensure that services are functioning for a minimum of 10 years and specifying UNICEF's role in supporting this effort.

- (3) Regular monitoring, through Sustainability Checks, which are studies carried out by third parties to monitor implementation of the Sustainability Compacts and assess sustainability of services, behaviours and use of services. They are aimed to be conducted annually or every second year. The Sustainability Framework was introduced in the Accelerating Sanitation and Water for All (ASWA) Program, a partnership program between the Netherlands Minister of Foreign Trade and for Development Cooperation (DGIS) and UNICEF. Signed in December 2012, the program aims to enhance the lives of more than 5 million people across nine countries in West and Central Africa—Benin, Central African Republic (CAR), Côte d’Ivoire, Ghana, Guinea, Liberia, Mali, Mauritania, Niger and Sierra Leone through the provision of safe water and sanitation. In order to make the framework more actionable and enhance accountability, two more components were added:
- (4) Action Plans, technical working documents aimed at operationalizing the Sustainability Compacts. For each of the commitments stated in the Compact, the document provides a status of progress and the details of the activities planned in the next three years for their achievement.
- (5) A joint Management Response to the Sustainability Check from the government and UNICEF (generally signed at the Ministerial and Representative levels, respectively), providing feedback on the necessary course corrections and improvements in programming.

The link between these components is presented in Figure 1. The Bottleneck Analysis Tool identifies bottlenecks to sustainability; the priorities to remove these bottlenecks are then agreed upon and recorded in a Sustainability Compact, which becomes operational through an Action Plan; later on, regular Sustainability Checks monitor progress on sustainability, and provide feedback on the analysis for corrective actions, through Management Responses.



Figure 1. Sustainability Framework in UNICEF water, sanitation and hygiene (WASH) programming in West Africa.

2.2. Case Study

This paper analyzes the application of the sustainability framework in West Africa. It takes stock of the progress made in the implementation of the first loop of this framework in eight countries of West and Central Africa, analyses opportunities and challenges, and assesses how the feedback loop is working in practice. It reviews Sustainability Compacts, together with related Action Plans, Sustainability Check documents and their Management responses in Benin, Central African Republic, Côte d’Ivoire, Ghana, Guinea, Mali, Mauritania, and Sierra Leone. The findings also include interviews with UNICEF WASH staff in Benin, Côte d’Ivoire, Ghana, and Mali regarding the process of development of the commitments of the Sustainability Compacts. In addition, the analyses of the implementation of the Sustainability Compacts included in the Sustainability Check reports have also fed the analysis. Not all documents were available for all countries at the time of analysis, as presented in Table 1. The relevant content of the documents (bottlenecks, commitments, recommendation, etc.) was codified in a database for subsequent analysis.

Table 1. List of countries and documents available for analysis at the date of the study.

Country	Sustainability Compact	Action Plan	Sustainability Check	Management Response
Benin	Yes	Yes	Yes	Yes
Central African Republic	Yes	Yes	No	No
Côte d'Ivoire	Yes	Yes	Yes	No
Ghana	Yes	Yes	Yes	No
Guinea *	Yes	No	No	No
Mali	Yes	Yes	Yes	Yes
Mauritania	Yes	Yes	Yes	Yes
Sierra Leone *	Yes	No	No	No

* Ebola affected countries.

3. Results

This section is divided by subheadings. The main components and results of each of the components of the sustainability framework of Figure 1 are described. The implementation processes for the sustainability framework is also presented.

3.1. Bottleneck Analysis

The first step in the framework is the identification of bottlenecks that prevent the sector from progressing. This process is based on different sector-related processes and tools. In six out of the eight cases included in this analysis, the Sustainability Compact refers to a Bottleneck Analysis, while some are also aligned with existing country commitments to the High Level Meeting of the Sanitation and Water for All (SWA) partnership [29], or with the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) [30], and Country Status Overview (CSO) processes [31]. In several cases, there was no report of the analyses with the results. However, each Sustainability Compact document includes at least some information about the background to the commitments. A total of 83 bottlenecks were recorded in the Sustainability Compact documents. They were classified according to the core WASH governance functions for service delivery. These functions are identified as the main tasks that the responsible institution for water in a country (e.g., Ministry of Water) should undertake in cooperation with other stakeholders to develop an effective sector. The core water governance functions vary from country to country, depending on the context and the level of development of the sector. In the context of WASH in a country with medium to low level of access to services, the following core WASH governance functions have been defined [32]: policy and law making; coordination; capacity development for the different institutions; planning; budgeting; monitoring and learning; financing; service delivery arrangements (modalities for property and management regimes, contracts, etc.); and regulation and accountability mechanisms. These core functions are undertaken in a wider national context, where other institutional factors also play out. Aspects such as decentralization policies, social norms, or fiscal policies set the general boundaries within which the WASH sector can act and are not easily influenced by the water line ministry. Additionally, the institutional factors are also dependent on structural conditions of a country, such as geography, history or demography. The representation of how the water sector relates to the broader national context is summarized in Figure 2. Given this classification, the bottlenecks and commitments in the Sustainability Compacts have been categorized following this structure (Figure 3).

Most bottlenecks identified were related to service delivery arrangements, which can be understood as a lack of sufficient clarity or completeness on the service management models and how to implement them. Lack of capacity occupies the second position, mentioned both for national and subnational levels.

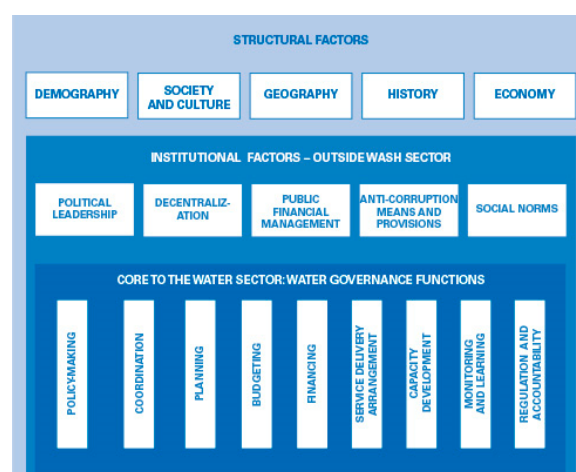


Figure 2. The core WASH governance functions in relation to the wider national context [32].

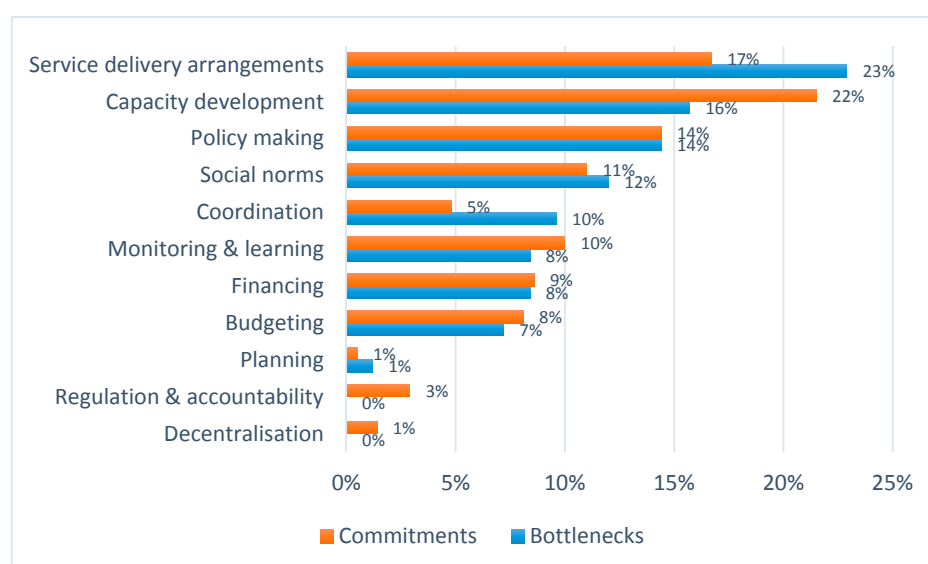


Figure 3. Percentage of bottlenecks and commitments in the Sustainability Compacts.

3.2. Sustainability Compacts and Action Plans

The Sustainability Compact is an agreement between UNICEF and the Government that describes the commitments to sustainability. The number of signatory ministries depends on the country. In general, these are sectoral ministries (such as Water, Health or Education) directly linked to water and sanitation. In most cases, other line ministries such as Local Administration or Finance, despite their crucial role in the sustainability of WASH services that are not signatories to the Compacts. In principle, other external support agencies and national stakeholders could subscribe to the commitments outlined in the document, and support sustainability initiatives in the country within the framework of an expanded version of the Compacts. However, so far, no partners beyond UNICEF and the Governments have signed the Compacts.

The 83 identified bottlenecks have led to a large number of commitments (209) detailed in the in the Sustainability Compacts. At a general level, bottlenecks and commitments belong to the same categories. However, a closer look shows that the connection between the commitments and the bottlenecks are not always straightforward. Several factors contribute to this. In the Compact documents, bottlenecks are described in general terms (e.g., limited monitoring), to which there

are different possible solutions. As the bottlenecks are rather complex, there is no simple theory of change that links each commitment to a bottleneck or vice versa. In addition, many commitments are rather specific (e.g., development of a strategy; increase of budget by X percent), in order to allow for monitoring of their implementation.

In six out of the eight cases, the signature of a Compact was followed by the development of an Action Plan, intending to make it operational. The Action plans take the form of tables. For each of the commitments stated in the Compact, the document provides a status of progress, indicators (in some cases) and a list of activities planned in the next three years for their achievement. The Action Plans are technical working documents, presented in Word or Excel (Microsoft Corporation, Redmond, WA, US)). They are not signed, making it difficult to assess the level of ownership and government commitment to the actions outlined in the documents.

The Action Plans indicate that activities towards the fulfilment of 74 percent of the commitments started at the time of the review. The level of progress in implementation differs across countries and the types of activities.

3.3. Sustainability Checks

Sustainability Checks provide a snapshot of the current status of sustainability of services in the cases analyzed. All five Sustainability Checks available at the time of this review (Benin, Côte d'Ivoire, Ghana, Mali and Mauritania) were the first attempt to assess the sustainability of activities conducted in countries participating in the Partnership to Accelerate Sanitation and Water for All (ASWA), and were focused on the geographical area of intervention of the program.

The following are the main findings of the Sustainability Checks undertaken in the five countries. All of them were carried out right after the finalization of works. Hence, a high level of sustainability is expected. The results presented here focus on the key factors identified as critical to sustainability in the future, and that require additional interventions and corrective actions by partners. While the content of the individual Sustainability Checks is very detailed, a brief summary is provided to illustrate the type of elements addressed in the Management Responses.

3.3.1. Water Supply

The vast majority of completed water points were functional at the time of the checks in all countries, with percentages above 90 percent. However, technical, institutional and financial challenges emerge from the Sustainability Checks, posing threats to future sustainability of the new and rehabilitated water facilities. Technical challenges identified were related to maintenance of water facilities and included low availability of technicians at community level and the relatively long times needed to access technical support and spare parts. Institutional issues include the low capacities of water management committees for basic repairs and a lack of information about local technicians able to provide repair services. In some instances, unclear roles of national and district authorities in the project follow up and support, and poor institutional coordination are also of concern. Water supply services could face issues related to inadequate financing to meet ongoing operating costs and long-term capital replacement costs due to tariffs that do not ensure adequate cost recovery.

3.3.2. Sanitation

The main aim of the sanitation component of the program is to achieve an Open Defecation Free (ODF) status. Declining use of latrines was measured through post-ODF slippage, which varied from 8.8 percent in Ghana to 24 percent in Mauritania and in Mali (Figure 4). In Côte d'Ivoire, 1438 villages had been declared ODF, but the Sustainability Check did not clearly determine how many had remained so. However, 85.6 percent of households surveyed in Côte d'Ivoire were determined to have at least one latrine.

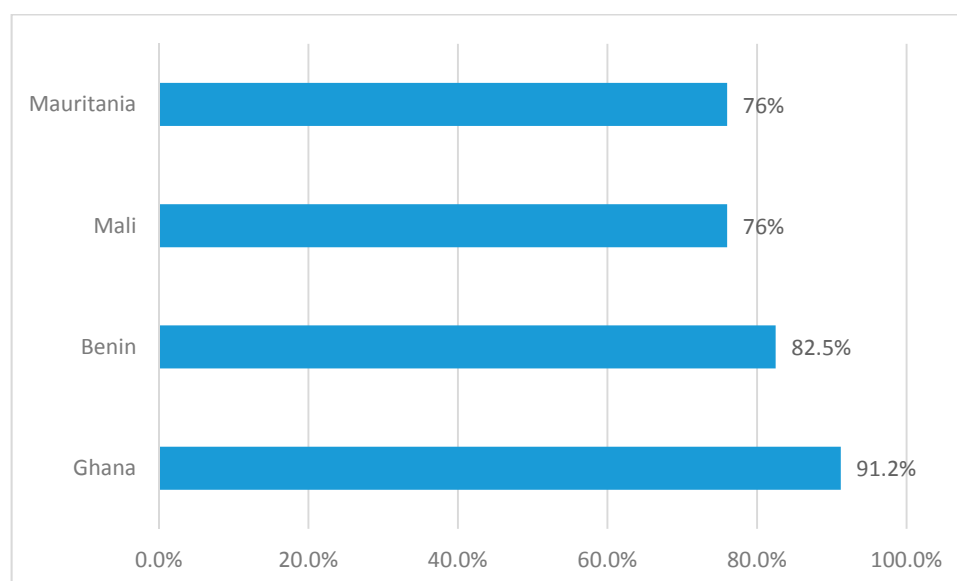


Figure 4. Percentage of Open Defecation Free (ODF) certified communities that still met the ODF criteria.

Different Sustainability Checks agree on key factors that influenced slippage in the various countries. The quality of hardware is one of them. The Sustainability Checks in Côte d'Ivoire, Benin and Ghana, in particular, highlighted the possibility of future challenges linked to the use of non-durable construction materials. Four out of the five reports mention poor quality of post-ODF follow-up and support as a limiting factor. Issues included low capacities of local monitoring committees (e.g., 44.7 percent of Ivoirian Committees found their training unsatisfactory). A related issue coming out of the work in Benin and Côte d'Ivoire is that the local authorities' involvement in the programme implementation seems to have been limited and that they were only marginally involved in the sustainability monitoring effort. The quality of the triggering effort is also raised as an issue that could potentially undermine efforts to achieve a high level of sustainability. Limited local sanitation market options for toilet construction prevents access to affordable improved latrine models.

3.3.3. Handwashing and Hygiene Promotion

The Sustainability Checks show that there is still some way to go towards complete uptake of behaviour change elements such as hand-washing. Despite the sensitisation campaigns, the presence of information material at the local level and increased knowledge about hand-washing, critical hand-washing practices are not yet widely adopted. For example, the percentage of latrines with a functional hand-washing facility with water and a cleansing agent next to it, and showing evidence of use, was only 32.8 percent in Benin. The checks also showed that persons with access to a functioning hand-washing facility were not necessarily using them. In addition, persons having access to a hand-washing facility close to the latrine in Ghana was 32.5 percent and 65.9 percent in Benin declared that they used it, while, in Mali, the percentage was 86 percent.

The Sustainability Checks showed a stronger correlation between hand hygiene and ODF status than with affordability or accessibility of cleansing material. For example, in Mali, 65 percent of those who do not use hand-washing facilities live in communities that did not remain ODF, compared with 5 percent of households in communities that have remained ODF.

3.3.4. WASH in Schools

Latrine and water point functionality were consistently high (over 80 percent) in the four countries that were implementing WASH in Schools interventions (Figure 5). Despite encouraging functionality of physical infrastructure, the Sustainability Checks indicate that the initial uptake of the behaviour

change elements is still in need of additional work. There was no soap or ash by the hand-washing facilities in 62.5 percent of schools visited in Benin. The situation is similar for Mauritania, with only 40 percent of schools having a hand-washing facility with soap and water next to the latrine. In Mali, 68 percent of schools were not practicing hand-washing with soap, and, in Ghana, nine out of 14 schools visited were in the same situation.

The Sustainability Checks identified common problems across the range of issues associated to the entire life-cycle of WASH services in schools, consisting of both the hardware (quality of construction or building materials adapted to use in institutions) and software (capacity building for the maintenance of equipment, management arrangements, institutional support, financial planning for operation and maintenance and purchase of hygiene inputs) required to provide and sustain an adequate level of access to water and sanitation.

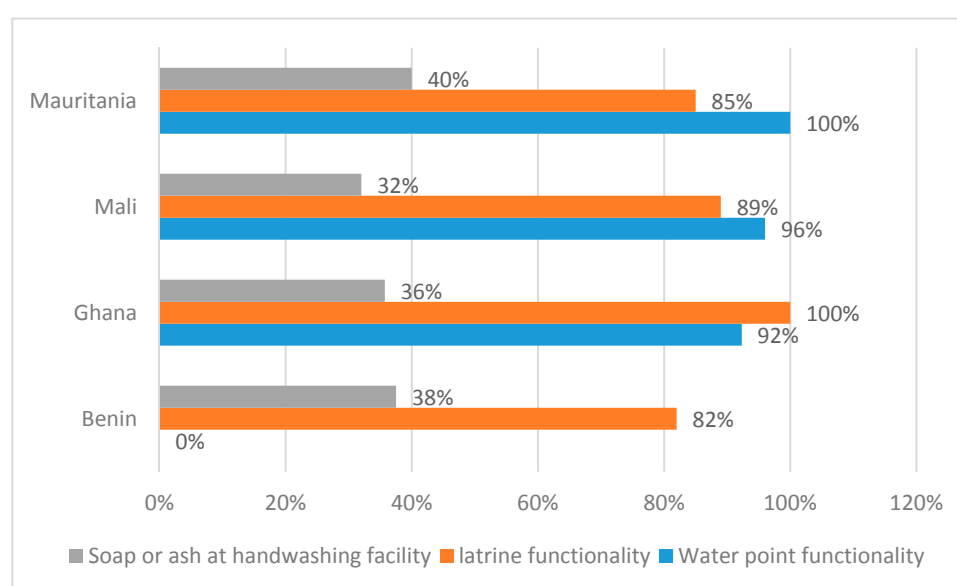


Figure 5. Sustainability results of WASH in schools.

3.4. The Management Responses

The Sustainability Check reports made extensive recommendations on how to address weaknesses found, including different recommendations on the future implementation of the Sustainability Compact. Some recommendations are made to stakeholders (Local Government, NGOs, etc.) that are not part of the Sustainability review process. In some cases, recommendations directed to a stakeholder exceeds their capacity to implement it. Some reports distinguish between short-medium and long term recommendations, but not all.

At the time of writing, the three available Management Response Plans responded to the recommendations presented in the Sustainability Checks by providing a written record of what actions were planned in response to the Sustainability Check and what was actually being done or already accomplished. The Management Responses are signed documents (by a representative of UNICEF and the Government) that have the form of a table, including the actions to be taken under each Recommendation, responsible partner, date of conclusion, status of implementation, and supporting documents. This format will facilitate follow up in the future.

The key recommendations from the three Sustainability Check reports taken up in the Management Reports focus on five areas:

- Inadequate institutional support post-ODF—all three Management Responses develop action points in response to recommendations on issues raised by the fragile sustainability of ODF status. Measures include regulatory responses, set up of monitoring system, improving the ODF

- certification system (Benin) and development of a strategy for the follow-up support (Mali). In Mauritania, the recommendations include the need for a better post-certification monitoring and support, as well as the development and implementation of a sanitation marketing strategy.
- Poor technical durability—the quality of construction work is the focus of attention in Benin, mostly with regard to the safety and durability of latrines, including in schools. In Mali, local initiatives are encouraged for conducting WASH maintenance in schools.
 - Inadequate capacities—responding to the need for increased capacities for the maintenance of equipment to avoid system breakdowns, and a strategy is being developed in Mali to build the capacities of local authorities to monitor and manage water-points. Training is also planned for stakeholders in schools in design, monitoring and evaluation of school projects.
 - Lack of coordination of multiple actors in the sector—the recommendation acted on in Benin deals with sector programme coordination and harmonization of activities. In Mauritania, regular coordination meetings are planned to respond to the need for increased coordination in the WASH sector.
 - Financing challenges for WASH in schools—two Management Responses agree with the recommendation on the need for securing sustainable sources of funding to meet operational costs of WASH in schools. In Mali, livelihoods projects and collective savings schemes will be put in place to support women to contribute to school WASH inputs, while advocacy work is planned to take place in Mauritania.

3.5. Implementation Processes

Sustainability Compacts were signed relatively quickly. Five were signed during the inception period within eight months of the project start. The Compact for the Central African Republic took considerably longer (24.5 months) due to the humanitarian crisis in the country. The signature of the Compact in Ghana also took a relatively long time (19.5 months) partly because of the additional consultations required to align it with other global commitments for the Sanitation and Water for All partnership. The adoption of the Action Plans, by contrast, came on average 18.8 months after the establishment of the Compact, indicating that the decision to put in place an Action Plan was taken relatively late.

The one-year inception phase of the project, taken together with the low response to an initial tender, and the additional time taken for a second round of tendering in Côte d'Ivoire, Ghana, Mali and Mauritania meant that the first five Sustainability Checks and three Management Responses only became available in the last quarter of Year 3 of the project. Two Management Responses were still outstanding at that date but have since been delivered. On average, the overall implementation time for the Sustainability Checks (tendering and field work) was 11.2 months.

The average costs of the Sustainability Checks were \$61,339 USD, with extreme values at \$25,000 and \$95,500. These costs do not differ much from others reported in similar sustainability studies [33]. The large spread reflects the different scopes of work as well as the fact that a mixture of national and international firms was contracted, due to limited response to a regional tender for services [34]. The cost in all five countries has been met entirely by the project despite a stipulation that governments would be meeting 10 percent of the first checks and, thereafter, progressively increasing their financial responsibility for the implementation. At the same time, government partners are indicating that it will be difficult to transfer these levels of cost to government budgets, particularly in the cases where the Sustainability Checks are restricted to the geographical scope of the project areas and when services of third parties are procured outside their respective country systems.

The first three management responses (Benin, Mali and Mauritania) were developed relatively early (within two months of receiving the final Sustainability Checks reports). The other two (Côte d'Ivoire and Ghana) took considerably longer and are not part of this assessment.

4. Discussion

This section briefly discusses the results and particularly how the different components of the Framework contribute to a more sustainable programming.

The Sustainability Compacts have helped increasing awareness for sustainability in the WASH sector within the countries at the government level. In other words, the sustainability discussion has been brought to the table. However, the Compacts were in their formulation clearly driven by the ASWA Program. As a consequence, there was limited participation and buy-in of other stakeholders. A further issue is that the Compacts are very much a national level instrument as it does not involve local government. This further compounds the problem of ownership and buy-in.

The majority of the commitments set out in the Compacts relate to governance matters at the sector level. As a result, the identified bottlenecks (and commitments) might duplicate the ones included in other processes (Sanitation and Water for All Commitments, AfricaSan, etc.). Having the same aspects addressed in various fora is not necessarily a disadvantage, but, in those cases, there is a need to harmonize implementation and follow up, and make sure the Sustainability Compacts add value to other sector processes. In that regard, Sustainability Compacts enhance the enabling environment and sector effectiveness as a whole, but might overlook other aspects that can more directly improve sustainability, at the service delivery level, in the short to medium term. This weakness can be addressed to some extent through the field analysis and feedback provided by the Sustainability Checks.

The Action Plans are necessary and useful documents to operationalize the Compacts. They provide a set of activities that can operationalize the more formal and general commitments included therein. However, their endorsement and ownership by the parties need to be ensured as part of the Compact itself, and not reduce them to stand-alone technical working documents. Action Plans can also help ensure that the Compacts are a collective endeavor, with allocated responsibilities to all parties (beyond the government), as a way to show mutual accountability.

The Sustainability Checks can provide insights on what elements should be given priority in the Sustainability Compact, as they are based on information coming from the assessment of the situation in the field. They provide feedback based on the situation in the communities analyzed and complement the a priori identification of bottlenecks through a sector bottleneck analysis workshop. Hence, the feedback provided by the Sustainability Checks can help to keep Sustainability Compacts relevant and evolving.

Findings of the Sustainability Checks underline the necessary inter-dependence between the two processes. The sustainability of WASH improvements measured at the community level relies on the existence of supportive policies, actions and capacities at the national and subnational government levels. The five Sustainability Checks included in this analysis highlight this inter-dependence between different levels of government, evaluate current impacts of the gaps at national and district levels and estimate that they represent significant risk to the sustainability of WASH results in the long term. However, the recommendations provided in the Sustainability Checks should be directly based on the evidence found, avoiding the generation of long lists of recommendations that cannot be realistically addressed.

Regarding the findings for the specific programs, the results for water supply and sanitation largely fall within expected patterns. Functionality of water supplies is very high, as they pertain to recently finalized construction; challenges related to limited capacity, low tariff collection at community level, and difficulties to access spare parts are common for the sustainability of rural water services within the sub-region [18,35]. As regards sanitation, a certain level of post ODF certification slippage was detected, and was to be expected, according to general experience with the methodology [36]. The level of post ODF monitoring and support, and better involvement of local authorities are key aspects to ensure the sustainability of changes [13], and have been taken up in the management responses. Sustainable behaviour change in handwashing remains a challenge overall, particularly in terms of turning the occasional behaviour of handwashing into a regular practice after critical daily

activities for good hygiene [37]. With regard to WASH in schools, the lack of influence of the water sector in education, together with the limited resources compared to the needs that the education sector face, make the financing and maintenance of basic services in these schools an important challenge ahead, as shown in global studies [38]. Activities aimed to address these weaknesses have been agreed in the Management Responses, as described above.

The Management Response proves to be a promising mechanism to put the recommendations of the Sustainability Checks into action. They are signed agreements with activities and timeline that can be easily followed up. Management Responses needed to prioritize among a significant number of recommendations formulated by the Sustainability Checks. These serve to validate the bottleneck analysis, and provide feedback on progress towards implementing the Sustainability Compacts and the Action plans. Many of the recommendations taken up in the Management Responses have to do with improving the quality of implementation and immediate post-construction support to sustainability. They are operational recommendations tackling immediate challenges to be resolved in programme implementation. This is an important aspect of the framework, as the ultimate aim of monitoring sustainability is to identify and deal with threats to sustainability before they jeopardize the provision of services. The Management Responses address, to a lesser extent, problems of structural nature (such as the lack of human and technical capacity of local governments to provide continuous support to communities, or the financing mechanisms for major maintenance). Even if these factors are essential for the future sustainability of services, they cannot be fully addressed in the short to medium term and might need additional initiatives. The feedback loop of this process is represented in Figure 6.

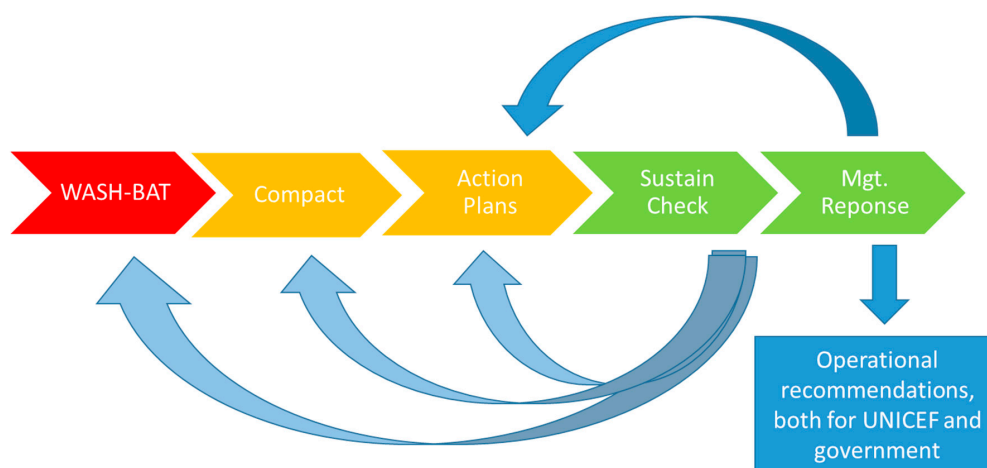


Figure 6. Feedback mechanism within the sustainability framework.

The sustainability effort should be owned nationally. To that end, Sustainability Checks should ideally become part of the national sector monitoring. At the same time, experience shows that national sector information systems require time to become robust, and that costs might be prohibitive for some countries, at least in the short run. In the countries where these systems are weak, Sustainability Checks might need to be funded by an alliance of partners and governments interested in WASH sustainability for the short term. In the meantime, the terminology related to sustainability-related studies will need to be harmonized, since the scope of what is called a Sustainability Check varies from comprehensive assessments, to more field-based tests. If the Sustainability Checks are to be conducted regularly, and their financing mainly drawn from domestic resources, their scope and ambition will need to be adjusted to national capacities. In order for the process to become aligned with national priorities, the results of regular Sustainability Checks and the assessment of implementation of the Sustainability Compacts should become a chapter of the annual water sector report, to be discussed in the Joint Water Sector Review meetings, leading to corrective actions for broader issues that can require joint efforts from all stakeholders.

5. Conclusions

The Sustainability Framework presented in this paper provides a useful approach to make the quest for sustainability of rural water and sanitation services a continuous process. However, its application in West Africa has faced some challenges. Sustainability Compacts have been a good entry point to discuss sustainability, but the process needs to be sector-wide to be able to generate a bigger impact. This requires openness to the outcome of these sector wide discussions, as this does not necessarily need to be a Sustainability Compact. Some countries might decide to develop a Sustainability Strategy, a National Plan or a different policy instrument, as experiences in other countries are showing. The Sustainability Checks have helped to show the fragility of underlying factors for the sustainability of interventions. Evidence suggests that significantly greater efforts need to be put in the immediate period after new infrastructures are in place, focusing on how to establish a functional service delivery framework in each setting. This requires an important shift in programming, both for international organizations and donors. It will involve higher costs and longer periods of implementation, and a programmatic focus that balances resources between the construction of infrastructure and the establishment of services, with additional efforts to improve institutional capacity and the monitoring of sustainability. This process is already ongoing through the agreed set of actions included in the Management Responses and offers promising experiences for future learning.

The progress in the implementation of this framework is being reviewed on a yearly basis, together with the national governments and key stakeholders concerned, aiming to achieve full ownership and alignment with national processes after project completion at the end of 2017.

This and other experiences are informing the development of UNICEF Sustainability Framework, which describes sustainability as an iterative process, based on regular monitoring that informs on key challenges and triggers mechanisms to address them both at operational and strategic levels. Sustainability is a long journey, complex and context dependent, which requires flexibility to adapt programs to the sustainability challenges detected.

Successive iterations of this framework in these and other countries will provide additional learnings on how to move sustainability in WASH from an aspiration to a daily undertaking for all stakeholders involved in rural water and sanitation services.

Acknowledgments: The authors would like to thank the governments and UNICEF country offices in Benin, Central African Republic, Côte d'Ivoire, Ghana, Guinea, Mali, Mauritania, and Sierra Leone for their collaboration in making the study possible. The Accelerating Sanitation and Water for All (ASWA) Program is financed by the Netherlands Minister of Foreign Trade and for Development Cooperation (DGIS). This study is part of the "Accountability for Sustainability" Partnership between UNICEF and the Water Governance Facility, a collaboration between the United Nations Development Programme (UNDP) and the Stockholm International Water Institute (SIWI). This program funded the costs for having an Open Access paper.

Author Contributions: Cecilia Scharp, Kelly A. Naylor and Dawda Jawara conceived the study; Hélène LeDeunff and Alejandro Jiménez performed the study; Kelly A. Naylor, Dawda Jawara, Hélène LeDeunff, Alejandro Jiménez and Cecilia Scharp analyzed the data; and Alejandro Jiménez, Dawda Jawara, Hélène LeDeunff, Kelly A. Naylor and Cecilia Scharp wrote the paper.

Conflicts of Interest: The authors declare no conflict of interest.

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