

Football for Water, Sanitation, and Hygiene Phase 2 End of Programme Report





Executive summary

The Football for Water, Sanitation, and Hygiene (F4WASH) programme was launched on World Water Day 2012 with the signing of the contract between the Netherlands Ministry of Foreign Affairs and the Royal Netherlands Football Association (KNVB) as public-private partnership programme lead. The initial programme was planned for four years (2012 – 2016). After the midterm evaluation, it was decided to split the programme in Phase 1 (2012-2016) and Phase 2 (2017-2019). Aqua for All was chosen as consortium lead for Phase 2.

This end of programme report was produced by Aqua for All, which was the lead agency in Phase 2. It gives an account of Phase 2 activities and results. The results and activities of Phase 1 were reported by KNVB. Nevertheless, Phase 1 results were included in the beneficiary matrix (Table 3) to show the aggregated programme results.

The F4WASH programme was regarded a bold and innovative initiative from the beginning. Its scope went beyond other water, sanitation, and hygiene in schools (WinS) programmes because of its integrated approach. With a unique focus on play-based behaviour change and sustainability, F4WASH successfully integrated sustainability and activities impacting water, sanitation, and hygiene (WASH), and health in one programme. A Theory of Change was jointly developed for Phase 2 (Annex 1). This was based on the lessons learned from Phase 1 and aimed at creating sustainable access to WinS and sustainable hygiene behaviour in school children and their families.

Summary of achievements by key learning areas

Next to a Theory of Change, F4WASH was developed alongside four key learning areas that are explained in Chapter 2 and the country-specific sections (Chapters 6, 7 and 8). These learning areas focus on sustainable WASH in Schools (WinS) and were developed over time following the programme's ongoing learning strategy. These key learning areas were:

- Sustain and expand behaviour change.
- Focus on a sustainability approach towards operation and maintenance (O&M).
- Enhancement of local ownership.
- Ensure institutionalization and embedding.

It was found that the main ingredient for sustainable WASH is adequate behaviour (hygiene and use of the facilities). Sustainable WinS requires commitment to the right habits at all levels, which proved to be a challenge in the sector. Significant positive change was achieved regarding the habits of pupils and their families, and in the commitment of the authorities and school management. The online monitoring system provided parties with transparent reporting and data management on sustainability indicators.

At national government level, there was a change in perspective towards its role in providing access to WinS and its responsibility for financing it structurally. There was also willingness to improve sustainability monitoring and align indicators accordingly. At a financial level, stronger government leadership and allocation of dedicated financial resources for WinS remain needed to support the sustainability of the F4WASH services in schools. In Kenya and Ghana, partners and governments are looking to scale part of the approach in a national strategy and curriculum to include life skill education in all schools.

Finally, the Proof of Concept study (Chapter 4) demonstrated that F4WASH Phase 2 schools were outperforming schools in the other groups on health, hygiene behaviour, community outreach, and menstrual hygiene management indicators. These findings showed that the F4WASH approach

adds value by bridging the gap between hygiene education and behaviour change. This led to improved health and school performance and attendance, especially for girls. Football (or any sport) based life skill education has proven to contribute to bridging the gap between knowledge and practice in achieving sustainable hygiene behaviour.

Summary of programme results

Since 2012, F4WASH reached 736,370 pupils, their families, and communities. In Phase 2, 128,727 pupils and 3,117 teachers benefitted from the complete F4WASH package at their schools. In addition, 168,815 community beneficiaries were reached, and 252,563 pupils from Phase 1 schools participated in consolidation activities.

The following dashboards give an overview of the results of Phase 2 per country:

Kenya: https://footballforwater.akvolumen.org/s/skzvFE9yU6A
 Ghana: https://footballforwater.akvolumen.org/s/kDn6rGR4in4
 Mozambique: https://footballforwater.akvolumen.org/s/kDn6rGR4in4

Table 1. Summarized results F4WASH

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Total beneficiaries reached in Phase 2 (excluding consolidation schools)		300,659
Total beneficiaries reached in Phase 2 (including consolidation schools)		553,222
TOTAL F4WASH PROGRAMME (2012-2019)	Total	Total
TOTAL I TWASTI FROGRAMME (2012-2013)	(schools)	(beneficiaries)
Total schools and beneficiaries (pupils & teachers)	749	477,655
Total community members reached with hygiene awareness	749	258,715
TOTAL BENEFICIARIES REACHED BY F4WASH SINCE 2012	749	736,370



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Abbreviations

BTGP Beyond the Goalpost
BOM Boards of management
CapEx Capital expenditure

CREATA Centre for Regeneration and Empowerment of Africa through Africa
DGIS Netherlands Directorate-general of Development Cooperation

F4WASH Football for Water, Sanitation and Hygiene

GES Ghana Education Service

KYFA Kisumu Youth Football Association
MHM Menstrual hygiene management
MSRC Mobile school report card
O&M Operation and maintenance

OpEx Operating expenditure

PMEL Planning, monitoring, evaluation, and learning

SHEP School Health Education Programme SMC School management committee

TYSA Transforming Young Stars of Africa (Football partner)

WASH Water, sanitation, and hygiene

WinS WASH in schools

1. Introduction

During Phase 1, the water, sanitation, and hygiene (WASH) sector achieved great success in meeting the Millennium Development Goal 7 (MDG 7) – globally halving the number of people without improved access. The Sustainable Development Goal for water and sanitation (SDG 6) challenges to work towards inclusive and sustainable WASH. These goals were at the base of the development of Football for WASH (F4WASH) Phase 2.

The experience from MDG 7 shows that the solution to WASH-related challenges does not only lie in providing the WASH facilities for the 2,6 billion people that cannot access them. It must be also ensured that these facilities and services continue to work. Local systems must be developed to provide and maintain WASH services to achieve sustainability. The creation of such systems can be led by local or national governments while making the most of the skills of the private sector and civil society organisations that provide and maintain these services.

There is a difference between improved access to WASH facilities and improved health. It is estimated that one billion people are still consuming unsafe water despite improved infrastructures. Improved WASH infrastructures should be combined with improved hygiene behaviour to get the desired health impact and to sustain services at the right level. Hence, the unique cooperation with the *KNVB WorldCoaches*. The life skills programme from the Royal Netherlands Football Association (KNVB) indicates that sport is a good entry point for promoting life skills and healthy lifestyles through behaviour change in the area of hygiene.



Based on these principles, F4WASH combined the provision of (improved) school WASH infrastructure with creating local capacity and systems to manage and maintain those services sustainably *and* to tackle hygiene behaviour through football and WASH life skills training. As such, the programme built in strategies to address pre-conditions for success, such as the physiological needs – access to water and sanitation-, as well as strategies to successfully address other individual or collective motivations and needs.

In the proposal for Phase 1, the F4WASH solution was described as:

"To provide a unique Dutch cooperation between – on the one hand – the 'WASH' sector and – on the other hand – the world of football, with the ultimate goal of improving access to WASH infrastructure and to ensure the practice of hygiene behaviour in children, in (mainly) public primary schools in Mozambique, Kenya and Ghana".

Over the course of eight years, F4WASH implemented integrated football and WASH solutions at schools in Ghana, Kenya, and Mozambique.

The **Mission** is to reach approximately 750,000 pupils (boys and girls) and their family members with the Football for Water, Sanitation and Hygiene Partnership, including WASH infrastructure (technical and social) and football-based behaviour change education in primary schools in Kenya, Mozambique and Ghana, between the years 2012-2018, including their outreach to communities.

The **Vision** of the programme is that integrated WASH Solutions for schools will lead to a decrease in WASH-related diseases of children (boys and girls) and their families. The increased number of healthy children will perform better in school and develop life skills through football, which will improve living conditions and contribute to the economic development of their regions.

This end of programme report presents the results and impact of F4WASH Phase 2 (2017-2019), guided by the Theory of Change, contributing to a decrease in WASH-related diseases among children and their families. Consequently, school attendance and performance improved. This shows how the life skills approach benefits pupils beyond school into the future. The cumulative Annual Report 2016 reflects on the Phase 1 of the programme.

In Phase 2, F4WASH consisted of a consortium of organisations based in the Netherlands, which worked through local and national football and WASH implementing partners (Table 2). In turn, implementing partners collaborated actively with relevant in-country stakeholders.

Table 2. Consortium and direct implementing partners - Phase 2

Consortium	Ghana	Kenya	Mozambique	Roles and responsibilities
Aqua for All	Country advisor, WASH Health	Country advisor, Orange Link	Ì	Consortium lead (Programme management, PMEL, and sustainability)
UNICEF NL	UNICEF Ghana	UNICEF Kenya		Programme lead and WASH implementation
	GES/SHEP	County ministries		Education, public health, water, and sanitation
VEI	GWCL		FACE, FUSP	WASH implementation
	The Salvation Army Ghana	Dunea NV, Amref Kenya		WASH implementation
KNVB	Beyond the Goalpost	Orange Link	ProSport	Football coordination and implementation
		CREATA, KYFA, TYSA		Football implementation
Akvo		Akvo Kenya		Monitoring and evaluation technical support

2. The Football for Water, Sanitation and Hygiene Programme

2.1 Background and development

F4WASH was launched on World Water Day 2012 with the signing of the contract between the Netherlands Ministry of Foreign Affairs and the Royal Netherlands Football Association (KNVB) as public-private partnership (PPP) programme lead. Besides KNVB, the consortium partners were UNICEF, Vitens Evides International (VEI), Simavi, Akvo and Aqua for All. The programme had the overall objective to ensure that all targeted school children practice sustainable and good hygienic behaviour at school and consequently at home and in their communities. From the beginning, F4WASH was considered a bold and innovative initiative, with a larger scope than other WASH in Schools (WinS) programmes because of its integrated approach. F4WASH aimed at bridging the gap between water, sanitation, and hygiene (WASH) at schools and the actual behaviour change of children, which is a challenge of the WinS sector worldwide. F4WASH successfully integrated activities aiming at sustainable access to WASH and improved health in one programme because of its unique focus on play-based behaviour change and sustainability. The initial 4-year programme (2012-2016) was implemented in Ghana, Kenya, and Mozambique. Afterwards, it was adapted and extended until 2019.

A mid-term review and a best practice study took place in 2014. Both studies indicated that the basic concept worked, but finetuning was needed to strengthen the model. The reports recommended improving the learning strategy and increasing local ownership of game-change. Interventions would become more sustainable if the programme would mainstream its best practices into local policies and processes. Consequently, F4WASH adjusted its Theory of Change and governance. F4WASH Phase 2 was implemented from 2017 to September 2019. The backbone of Phase 2 was its adjusted Theory of Change (see Annex 1) and these key issues:

- Sustaining and expanding behaviour change with a series of integrated F4WASH life skills training at schools and in the community.
- Enhancing local ownership of any "game-change" taking place. This meant having local programmes with local partners and reacting to local needs and opportunities.
- Sustainable operation and maintenance (O&M) of WASH and sports facilities. This should be achieved through continuous monitoring of the functionality, sound cost recovery plans, and the private sector's involvement and collaboration.
- Ensuring institutionalisation and embedding of the interventions in national systems, local communities, and other processes. Local stakeholders must relate to and improve standards, procedures, and regulations of WinS.

Phase 2 started with delays due to extreme droughts and flooding in Kenya and unforeseen hurdles in administrative processes (bureaucracy) due to national elections in Ghana and Kenya. In 2018, the implementation timeline was extended until the end of September 2019.

In mid-2019, the Netherlands Ministry of Foreign Affairs commissioned an external evaluation of the programme (2012-2019) to assess the effectiveness of its approach, its relevance to its current policy 'Investing in Global Prospects", and the sustainability and impact of the programme. Results showed that the programme succeeded in creating the conditions for sustained services at schools, whereas the capacities to ensure sustained services – of governments and schools – are not solid enough. Stronger government leadership and allocation of financial resources to WASH at schools are required to achieve sustainability of F4WASH services in schools. To scale the

programme, the evaluation recommends developing country-specific strategies for mainstreaming sustainable WASH at schools as well as policies supporting F4WASH holistic approach.

2.2 The F4WASH approach

F4WASH has a unique approach combining sports and games to engage pupils, teachers, and communities to improve their health and hygiene behaviour. At the same time, it addresses the roles and responsibilities of key stakeholders in maintaining the facilities beyond the project implementation. Through capacity development, innovative (operations and maintenance) models, advocacy, and appropriate local materials, it enhances the sustainability of the facilities and the commitment of key local stakeholders to safe water and sanitation in schools.

Schools with safe and clean water, sanitation, and hygiene facilities provide a physical environment that stimulates proper hygienic behaviour and can significantly improve the health and wellbeing of pupils and teachers *if* the facilities are used and maintained well. This requires focusing on the hygiene behaviour of the pupils and teachers, and continuous maintenance of the facilities. Local communities and authorities' commitment are crucial for this.

The F4WASH approach includes these key focus areas:

- Sustain and expand behaviour change
- Gender and inclusiveness
- Local ownership
- Innovation for sustainability
- Embedding and institutionalisation
- Innovations in learning and development

2.3 Sustain and expand behaviour change

Evidence shows that sport is a good entry point for promoting life skills and healthy lifestyles. It increases self-esteem and provides opportunities for development; it gives people, regardless of ability, improved physical health and encourages better academic performance. Sports can even foster active citizenship, social inclusion, and leadership. Since humans are creatures of habit, understanding and influencing people's behaviour are challenging.

Football brings fun, fitness and discipline, which accelerates children's motivation and memory retention. Therefore, the programme trained (physical education) teachers in schools as WorldCoaches and developed a life skills approach supported by football. The coaches are role models. They demonstrate good hygiene practices and inform, motivate, and inspire the children to practice good hygiene, too. The team spirit of sports helps children to retain new hygiene practices they have learned as a team. As a result, children take on new daily habits, like using latrines and washing their hands.

Next to school WorldCoaches, the programme also trained community WorldCoaches during Phase 2. This was done for 2 reasons. First, to ensure community commitment and awareness on hygiene education and second, to mitigate the effects of the national obligatory teacher transfers, were some school-WorldCoaches are transferred to other schools. Community coaches can in those cases guarantee the continuity of hygiene education in schools and communities.

The programme's life skill approach created a butterfly effect as children brought the message of good hygiene to their peers, families, and the community was involved in football events.

2.4 Gender and inclusiveness

F4WASH actively sought to involve and empower women and girls by training female teachers as WorldCoaches, providing changing rooms and menstrual hygiene facilities for girls, and addressing issues, such as girls' confidence, attendance, and taboos on menstrual hygiene. In general, the approach aimed at strengthening the position, self-confidence, football participation, menstrual hygiene behaviour and school attendance of girls and boys. Gender balance at schools was monitored, for example, among WorldCoaches, school management committees, community representation and WASH committees. Results show significant improvements in this respect.

The Ghana Education Services organised schools' football competitions in three age categories: under '12' boys (U12), under 14 boys' (U14) and under 14 girls' (U14). Girls under 12 years old (U12) were excluded. Football competitions for primary school girls (between ages 4 to 12) were not developed and lack resources. F4WASH improved girls' participation in football games especially among girls U12. WorldCoaches formed U12 girls' teams and trained them in football and life skills. F4WASH football competitions include this U12 age category, which was a significant step to eliminate age (and gender) discrimination in the most popular sport in Ghana.



Sanitation facilities at schools included facilities for children with disabilities. However, the partners recognised that sport activities could be made more accessible for these children. This could be a next step in the development of the approach. We did see disadvantaged, often non-school going, children being attracted and reached by the football events and the WorldCoaches leading to increased school enrolment in the F4WASH communities.

The adoption and use of washrooms and changing rooms to improve privacy was encouraged. All football-related life skills' activities (including menstrual hygiene management education) are targeted to boys and girls and are led by both male and female WorldCoaches. Women's football has become very popular worldwide and is therefore an important vehicle to provide equal opportunities in sports. After the intervention, pupils started performing better in school and girls attended school more regularly. In Ghana, the national women's football team played a key role in the programme to act as role models and to motivate girls to do sports and develop their life skills.

Key menstrual hygiene management (MHM) results (from survey data)

- In Kenya, MHM improved significantly in quality of the facilities provided and quality of education given. The number of schools without MHM facilities decreased from 21 to 1 school during Phase 2.
- There was a significant decrease in pupils' absenteeism. In Kenya. Girls' absenteeism was reduced by more than 50%.
- In Ghana, the presence of facilities for sanitary napkins increased and the privacy levels for girls improved. Schools without girls' absenteeism due to menstruation, increased from 12% to 76%.
- In Mozambique, where there were practically no menstrual hygiene management facilities at baseline, 24 of 44 schools have access to menstrual hygiene services (=54,5% of girls) This is an increase of at least 30%.

2.5 Local ownership

The 2014 mid-term review recommended developing a joint school/community strategy to tackle the challenges related to the abuse of school facilities by community members. Engaging community leaders as community coaches could limit the abuse of school services and increase the number of options for selecting WorldCoaches. The joint school/community strategy is not limited to school outreach:

- It shifts school selection to those in surrounding communities that already have WASH.
- In schools with facilities built through F4WASH, it is possible to negotiate with other
 partners to mobilise support for WASH in these communities, e.g. community-led total
 sanitation programmes. In this way, school and community improvements are better
 integrated.

Community coaches also participated in the WorldCoaches training. This increased the sustainable embedding of football and WASH knowledge within the community and extends F4WASH's impact beyond the schools and school activities. These community coaches partnered with school WorldCoaches to keep motivating and teaching children during and after school hours.

Phase 2 monitoring data shows that community outreach activities impacted on behaviour and access to WASH in the communities. One indirect outcome was the improved access to handwashing and sanitation facilities at home. Additionally, the community was involved in income generating activities for WASH.

2.6 Innovations for sustainability

F4WASH recognises that most schools lack funding to cover costs for operations and maintenance (O&M) of WASH facilities. The programme looked for creative ways to overcome the challenges that limited the ability of school management or WinS programmes to guarantee sustainable O&M.

Schools receive a capitation grant or per-pupil budget to cover their costs. These grants are usually very tight and used to cover basic education costs, such as books, teacher salaries, and office supplies. Before fee-free education policies were introduced, parents contributed to covering costs for extra services, such as WASH, or were levied to contribute for specific services. Since these policies were implemented it was forbidden to ask for additional parent contributions leading to an even larger financial burden for schools.

Another challenge for sustainable WinS was school governance. In Ghana, Kenya and Mozambique, the government is the owner of the school infrastructure and responsible for construction (capital expenditure or CapEx) while schools are responsible for operating the facilities (operating expenditure or OpEx). Several departments are involved in WASH funding for schools: The Ministries of Water and Sanitation are generally responsible for providing CapEx, while local or regional authorities and the Ministry of Education are responsible for supporting OpEx. In general, authorities are aware of these incongruencies, but they do not see any options to align.

Since 2013, the programme encouraged school staff to find solutions for their financial problems. They were challenged to bring up suggestions for income generation and cost recovery to support O&M. The idea was to use schools' assets, like the physical building, location, skills, facilities, energy, land, or water, to get additional resources. The programme organised training and workshops on sustainable innovation and cost recovery with local stakeholders. Many schools were encouraged to operate as entrepreneurs. Activities included selling the overcapacity of water to the community, renting out the football facilities, selling the yield of school gardens at local markets, collecting, and selling waste, and providing access to sanitation facilities against pay-per-use. Some schools succeeded in attracting additional resources, but in general, this was not enough to cover their O&M expenses. Usually, these activities were perceived as an additional burden to the workload of school staff. Schools also reported to lack the knowledge, resources, and time to repair and maintain WASH facilities.

The evaluations in 2015 and 2016 showed that entrepreneurship is neither the core business nor the ambition of schools and school staff. School staff lacked time and skills to operate as a business. However, community and local business entrepreneurs could play a crucial role in the development of income generation activities for schools. The programme tried to find alternative ways to safeguard the investments in facilities and capacities for at least ten years. This included validating and redesigning income generating models into draft business models to bring additional revenue. Under the motto 'let schools be schools, let children be children, and let entrepreneurs be entrepreneurs', business models for a water and cyber kiosk at schools operated by an entrepreneur were piloted. This way, school assets and programme investments might create shared value for the school, the community, and the entrepreneur.

These business models had the potential to work, but they required scaling up beyond the scope of the current programme. They also needed ongoing lobby and advocacy to arrange ownership and profit shares, and a tailor-made capacity building programme for relevant stakeholders. In Kenya and Ghana, UNICEF and the ministries are interested in continuing with these ideas.

2.7 Embedding and institutionalization

The programme engaged in policy dialogues and offered capacity building opportunities to key stakeholders in order to promote sustainable O&M of WinS and show the added value of play-based learning. These capacity building activities were carried out before schools were selected to participate in F4WASH. The first step was to urge community leaders, parent teacher associations, and school management to address WASH challenges in schools. Ongoing WASH practices and commitment to future WASH were jointly assessed. Since 2017, the programme also piloted with self-assessments of schools demonstrating commitment to the programme objectives.

In follow-up sessions, the programme assessed key stakeholders' capacities and development of tools and methods. This was done my means od; facility management planning work sessions, monitoring trainings for quality assurance officers or school health officers by Akvo, quarterly review and learning meetings for local partners, and the workshops on hygiene and health for local

and regional officers and school staff. During these activities, action plans were drafted by key stakeholders in and around to the schools. Actions plans included signing Memoranda of Understanding to clarify roles and responsibilities and developing sustainability plans for O&M.

UNICEF and VEI, as local programme leads, convened or attended high-level meetings for national policy development. VEI and the Ghana Water Company Limited (GWCL) addressed the importance of safe drinking water and sound water management. School Health Education Programme (SHEP) and Ghana Education Services (GES) added WASH indicators in education monitoring information systems (EMIS) and training local officers in hygiene and health education. UNICEF Kenya highlighted the importance of MHM and life skills education at the highest national levels and led the development of improved official standards and guidelines for WinS. UNICEF Ghana and GES succeeded in adding the cost recovery planning & risk assessment tool into the official GES Facility Management Planning Tool for school WASH.

In 2019, the programme convened various high-level meetings to assess bottlenecks for WASH in schools in standing national policies. In Ghana bottleneck analysis were done with all publicIn Kenya, it involved ministries, such as the Ministry of Education, Science and Technology, the Ministry of Health and the Ministry of Water and Sanitation. Through the ongoing lobby and advocacy activities of the programme, these ministries started to adapt their policies and strategies, and to allocate more budget for WASH hardware to the Ministry of Education and Ministry of Water. These ministries even started to train key government staff in sustainability monitoring of WASH in schools, including hygiene behaviour.

2.8 Innovations in learning and development

F4WASH had an elaborate programme for planning, monitoring, evaluation, and learning (PMEL). Akvo trained local partners in real-time simple data monitoring, communication, and analysis. Aqua for All led the interventions for sustainable innovation and cost recovery. SNV and Shape Your World were contracted to induce continuous learning and innovation within the project cycle, implementation, and approach.

The 2014 mid-term review recommended developing an elaborate learning strategy at county level. Consequently, the local programme leads (UNICEF, VEI and TSA), football partners, and the country advisors developed a learning agenda that matched with their specific needs and contexts. Learning activities touched upon several topics, such as MHM education in schools, health education, purchasing sustainable hardware, process management review, life skills education, transparent monitoring, cost recovery and facility management planning, business models in schools, and water quality monitoring. Akvo and Aqua for All supported this flexible learning programme to foster alignment and sustainability at local level. The local partners defined the process and organised their own learning. In mid-2018, an international learning event was organised. These learning activities raised awareness of the added value of (online) monitoring of WASH indicators in schools. Chapter 4 elaborates further on the learning agenda.

3. Overall programme results

This chapter gives an overview of the programme results, followed by a more in-depth analysis of the achievements and results collected through the internal monitoring system. The country-specific sections (Chapters 6, 7 and 8) include additional information and the logframes per country programme.

Overall, the programme achieved its objectives of positively impacting the lives of almost 740,000 beneficiaries in 749 schools and their surrounding communities. These beneficiaries included pupils, their families, teachers, and community members. The aggregated data indicates a substantial improvement of the access to facilities and daily maintenance of the facilities. It also shows that almost all children got access to handwashing facilities and menstrual hygiene management (MHM) facilities. Table 4 gives an overview of the aggregated results of F4WASH (Phase 1 and 2).

The percentage of schools with an operation and maintenance (O&M) plan and a financial cost recovery plan substantially increased.

- 94% of schools have an O&M plan and 48% of schools included a detailed cost recovery plan for O&M for ten years.
- The use and adoption of F4WASH O&M and cost recovery plan tools for sustainability increased significantly but was in most cases still insufficient to ensure full cost recovery.

3.1 F4WASH result tables

Table 3 is the programme's beneficiary matrix representing cumulative results of Phase 1 and 2 combined. Table 4 gives an overview of the Phase 2 results compared to the targets set up in the proposal (2017-2019).

Phase 2 implemented two types of interventions:

- Consolidation activities in some schools that participated in Phase 1 to sustain the results
- Activities in new schools to reach additional beneficiaries

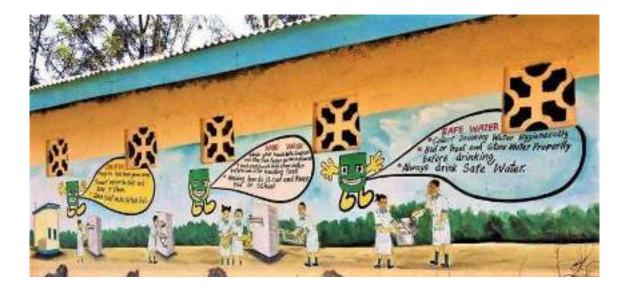


Table 3. Beneficiary matrix - Football for WASH

В	eneficiary	matrix - Football for \	WASH			
Football for WASH Phase 1 (2012-2016)	Schools with WASH	Beneficiaries of water and sanitation	Schools with life skills education	Beneficiaries of life skills education, and hygiene		
Kenya	165	117,194	169	119,893		
Mozambique	160	138,659	160	138,659		
Ghana	223	81,739	223	81,739		
Total pupils reached in Phase 1	548	337,592	552	340,291		
Total teacher/staff beneficiaries	5,520					
Total community beneficiaries Total beneficiaries in Phase 1	89,900 435,711					
Football for WASH Phase 1 (2017-2019)	Schools with WASH	Beneficiaries of water and sanitation	Schools with life skills education	Beneficiaries of life skills, education, and hygiene	Phase 2 Consolidation (Phase 1 schools)	Phase 2 Consolidation (Phase 1 beneficiaries)
Kenya	95	73,587	95	73,587	75	49,106
Mozambique	10	22,338	10	22,338	34	108,225
Ghana	92	32,802	92	32,802	230	95,232
Total pupils reached in Phase 2	197	128,727	197	128,727	339	252,563
Total teacher/staff beneficiaries	3,117					
Total community beneficiaries	168,815					
Total reached beneficiaries Phase 2 (excluding consolidation schools)	300,659					
Total reached beneficiaries Phase 2 (including consolidation schools)	553,222					
TOTAL FOOTBALL FOR WASH PROGRAMME (2012-2019)	Totals (schools)	Totals (beneficiaries)				
Total schools and beneficiaries (pupils & teachers)	749	477,655				
Total community members reached with hygiene awareness	749	258,715				
Total beneficiaries reached by F4WASH since 2012	749	736,370				

Table 4. Overview of programme targets vs programme results

		untry		Gha					Kenya			Mozambique	TOTAL
•	Partner name	WASH	Total	UNICEF	TSA	VEI	Total		UNICEF		Dunea	VEI	TOTAL F4WASH Phase 2
		Football			BTGP			CREATA	KYFA	TYSA	KYFA	ProSport	#
		#Schools	230	188		42	77	18	47	12		34	341
70	Consolidation	#Pupils	95,232	81,600		13,632	45,000	11,660	23,500	9,840		88,587	228,819
Planned		#WorldCoaches	570	480		90	125	54	47	24		90	785
Pla		#Schools	70	50	20		95	32	29	29	5	10	175
	New	#Pupils	22,740	12,500	10,240		73,284	20,947	18,094	32,107	2,136	22,821	118,845
		#WorldCoaches	210	150	60		285	96	87	87	15	40	535
	All beneficiaries Phase 2	#Schools	300	238	20	42	172	50	76	41	5	44	516
		#Pupils	117,972	94,100	10,240	13,632	118,284	32,607	41,594	41,947	2,136	111,408	347,664
		#WorldCoaches	780	630	60	90	410	150	134	111	15	130	1,320
		#Schools	230	188		42	75	18	45	12		34	339
	Consolidation	#Pupils	95,232	81,600		13,632	49,106	12,279	26,343	10,484		108,225	252,563
		#WorldCoaches	522	392		130	113	54	43	16		100	735
ţ		#Schools	92	65	27		95	32	29	29	5	10	197
Results	New	#Pupils	32,802	23,386	9,416		73,587	22,753	17,987	31,053	1,794	22,338	128,727
ď		#WorldCoaches	244	171	73		287	106	91	75	15	35	566
	All	#Schools	322	253	27	42	170	50	74	41	5	44	536
	beneficiaries	#Pupils	128,034	104,986	9,416	13,632	122,693	35,032	44,330	41,537	1,794	130,563	381,290
	Phase 2	#WorldCoaches	766	563	73	130	400	160	134	91	15	135	1,301

3.2 Summary of results according to the Theory of Change

The Theory of Change (See Annex 1) was specifically developed for Phase 2 based on the lessons learned from the mid-term evaluation. We have monitored our activities according to it. The results summarized below are shown per component of the Theory of Change. They are also available in the dashboards mentioned in the "Executive summary".

3.1.1 Intermediate outcome: Functional and safe WASH facilities are in place

Kenva

- Access to sanitation facilities substantially improved by rehabilitating the existing
 infrastructure and building new one. However, the compliance with the pupil stance ratio of
 1:50 remains a challenge. This is because of an increased school enrolment and local
 agreements that put schools and local authorities in charge of rehabilitating existing facilities
 that were not considered.
- Data shows large improvement of daily maintenance of water and the sanitation facilities. The number of schools without reported breakdowns in water facilities doubled. In the case of sanitation facilities, this figure increased by factor 4.
- Water availability improved by 15% on average. The average number of days without drinking water per month reduced by more than 50%.
- The number of schools with water quality testing increased from 27 to 42. Water tested in 41 schools matched with the national standards. In 26 schools, a mandatory Water Safety Plan was developed. 34 schools did not take any action regarding water quality.
- Handwashing: All pupils improved their access to handwashing facilities. However, compliance with full standards pupil/station ratio; water availability, and soap is limited. The availability of the components separately improved significantly, especially on availability of soap or ash.
- Garbage collection and disposal of liquid waste did not show strong improvements.

Ghana

- 98% (30,206) of targeted pupils have access to adequate and functioning sanitation facilities at the endline measurement, compared to 63% (19,392) of pupils at the baseline.
- Access to sanitation facilities substantially improved by rehabilitating existing infrastructure
 and building new facilities. Despite targeting the pupil stance ratio of 1:50, the standard was
 not reached for 45% of the pupils. This is because of increased school enrolment and local
 agreements between the schools and government authorities. These agreements led to
 spreading the programme investments over more schools than initially planned.
- 80% (26,153) of targeted pupils had access to functioning water facilities at the endline, compared to 17% (5,600) of pupils at the baseline.
- The availability of water for pupils at schools increased from 61% at the baseline to 95% at the endline.
- The percentage of schools doing water quality testing increased significantly to 83% at the endline. Water tested in these schools were within national standards.
- Handwashing: 91% of pupils had access to functioning handwashing facilities at the endline compared to 46% at the baseline.
- The percentage of schools with soap and/or ash available increased significantly to 91% at the endline compared to 43% at the baseline.
- The percentage of schools with safe sludge disposal increased from 60% at the baseline to 96% at the endline.
- Menstrual hygiene management facilities improved slightly during the programme, but less than expected. However, the facilities for sanitary napkins and the privacy for girls to sanitize increased.

Mozambique

- 52,893 girls and 63,328 boys got access to adequate school sanitation facilities. (Pupil stance ratio of 1:50 is reached for only 22,821 new pupils. Schools operate in shifts in Mozambique, meaning more pupils can use the facilities per day than in the other countries.)
- 47,693 girls and 57,889 boys have access to adequate school handwashing facilities
- 71,015 pupils have regular access to soap/ash
- 43,198 pupils have incidental access to soap/ash
- 24 of 44 schools have access to menstrual hygiene management facilities (54,5% of girls)
- 100% of schools have access to a water facility within 100 m of the school
- 84% of schools have access to a functional water facility at the time of measurement
- 34 schools (77%) have access to a football field. 29 schools have access to a football field during school hours. 10 schools do not have access to a football field.

3.1.2 Intermediate outcome: Managed, maintained and financed facilities

Kenya

- The percentage of schools with an operation and maintenance (O&M) plan and a financial cost recovery plan increased from 37% to 47%.
- 94% of schools have an O&M plan and 48% of schools included a detailed cost recovery plan.
- The use and adoption of F4WASH O&M and cost recovery plan for sustainability increased significantly. Unfortunately, 75% of schools do not have enough resources to cover O&M costs.

Ghana

- 89% of schools reported no breakdowns of water facilities at the endline, compared to 68% at the baseline.
- 87% of schools have reported no breakdowns of sanitation facilities at the endline, compared to 78% at the baseline.
- The percentage of schools with an O&M plan (including a cost recovery plan) for WASH and football facilities increased from 17% at the baseline to 98% at the endline. The percentage of schools with a memorandum of understanding with WASH stakeholders increased from 43% to 99%
- 63% of SMC's are gender balanced at the endline, compared to 36% at the baseline.

Mozambique

- 100% of schools have a memorandum of understanding for O&M of the facilities for ten years.
- 100% of schools have functional school management committee.
- 79,5% (80%) have gender balanced school management committee. To be considered gender-balanced, the committee should be comprised by 25% or more women.

3.1.3 Intermediate outcome: Children and community are organised with increased knowledge and awareness of hygienic behaviour

Kenva

- The number of pupils receiving WASH and life skills education monthly increased by factor 5.
- Cleanliness of new and existing sanitation facilities (100%) scored either "good" or "acceptable".
 This is similar for cleanliness of schoolgrounds. 36% of schools scored "good" to "excellent" at the endline, compared to 8% at the baseline.
- The number of schools without menstrual hygiene management (MHM) facilities decreased from 21 to 1.
- Access to handwashing and sanitation at home and the surrounding community increased significantly. At the baseline, over 50% of pupils from 14 schools had access to handwashing

facilities at home. At the endline, over 50% of pupils from 46 schools had access to handwashing facilities. At the baseline, 50 schools had over 50% of pupils with access to adequate sanitation facilities at home. At the endline, 85 schools had over 50% of pupils with access to adequate sanitation facilities at home.

57,280 people were additionally reached with hygiene awareness messages.

Ghana

- Although all schools give monthly life skills or hygiene education, the number of pupils reached decreased slightly. At the baseline, only in-class hygiene education was given. At the endline, its included football-led life skills education (or "in-field education").
- Handwashing behaviour improved considerably. At the baseline, 7% of schools reported that over 50% of their pupils wash their hands at random measurement, and no school reported more than 75% of pupils washing their hands. At the endline, 81% of schools reported more than 50% of pupils washing their hands at random measurement, and 44% of schools report more than 75% of pupils washing their hands at random measurement.
- Cleanliness of existing sanitation facilities: 87% schools scored either "good" or "acceptable".
- Cleanliness of new sanitation facilities: 90% schools scored either "good" or "acceptable".
- Cleanliness of schoolgrounds: 75% of schools scored "excellent" or "good" at the endline, compared to 34% at the baseline. At the endline, 100% of schools scored either "excellent", good" or "acceptable".
- 44,521 community members were reached additionally with hygiene awareness messages.
- There was a strong increase in access to handwashing and sanitation facilities at home. This shows the positive extended effect of the F4WASH approach on the community.
- The number of schools with more than 75% of pupils with access to handwashing and sanitation facilities increased by 25% on average.
- At the baseline, only 7% of schools had more than 50% of pupils with access to handwashing facilities at home. At the endline, this had increased to 67%.
- At the baseline, only 8% of schools had more than 50% of pupils with access to adequate sanitation facilities at home. At the endline, this increased to 56%.

Mozambique

- All schools have an active school health, hygiene, or WASH club.
- 30% of schools reported having a female WorldCoach 30% for new schools and 32% for consolidated schools. However, 41 female coaches were trained at 44 schools and 12 female coaches trained in the community.
- 103,034 pupils receive WASH life skills education monthly.
- Cleanliness of sanitation facilities: 50% of schools scored "acceptable" or "excellent".
- 54% of schools did not show signs of open defecation.
- In 22 out of 44 schools (50%), 75% to 100% of the pupils have access to safe sanitation at home. In 14 schools, this figure is between 50% and 75%. In 8 schools, access is below 50%.
- In 51% of schools (23 out of 44 in total), 75% to 100% of the pupils have access to safe water at home. In 16 schools, this coverage is between 50% and 75%. In five schools, it is below 50%.

3.1.4 Long-term outcomes: School performance and attendance

Kenya

- There was a considerable decrease in absenteeism. Absenteeism for girls decreased by more than 50%. In the case of boys, this figure was slightly lower, but still significant.
- There was a slight increase in the average official testing score. However, it was not significant.

Ghana

- There was an increase in absenteeism, evenly distributed between girls and boys. The reason might have been that the endline survey was measured in the wet season while the baseline was measured in the dry season.
- The percentage of schools without reported girls' absenteeism due to menstruation, increased from 12% to 76%.
- There was a significant increase in the average official testing score from 36.12 to 59.28 during the programme implementation period.



4. Learning, innovation, and development

4.1 Proof of Concept study

The Proof of Concept study aimed at verifying the effectiveness of F4WASH while the internal monitoring systems and surveys focused more on the execution of the interventions on output and outcome level. The Proof of Concept study was a feasible, objective instrument to gather evidence on the effectiveness of the programme's integrated approach with a focus on children's behaviour change and sustainability compared to regular WinS programmes. It was conducted by independent researchers.

4.1.1 Process and methodological notes

Kantar Public was contracted to do an impact evaluation of the F4WASH programme in Kenya. This report analyses and compares endline information (collected in May 2019) with baseline data (collected in July 2017).

Initially, the report should have been ready in 2018. Due to delays in Kenya, the deadline was postponed with approval of DGIS. Aqua for All received a first report in June 2019. After a thorough review, it became clear that the endline survey had not sampled the right schools in the control group and Phase 1 school group. Therefore, it was impossible to get rigorous conclusions and answer the main research question. Kantar Public could correct this mistake by going back into the field to redo the endline survey, but this required at least € 40,000 in additional funding and extending the research period. In addition, the funding period had already ended by the time this request was received.

Aqua for All and the F4WASH consortium partners lost confidence in the research and in the understanding of its objectives by Kantar Public. Besides, it became clear that it was difficult to distinguish F4WASH and non-F4WASH schools because some control schools have adopted similar activities. Hence, Kantar Public was asked to finalise the report using valid data only. This meant that schools in the control group were partially left out of the research. The report was handed over in March 2020. It showed the F4WASH approach had significant positive impact. Notwithstanding, the research cannot make a firm statement on F4WASH added value compared to regular WinS approaches. However, it does confirm that the programme is effective, based on pre-determined indicators, and will add value when implementing the concept.

4.1.2 Summary of the findings

This section presents a summary of the findings of the Proof of Concept report. More information and figures can be found in the full report, which was shared in March 2020 with all stakeholders, including DGIS. In general, the programme showed a better access to functional facilities, such as toilets, water, handwashing, and football facilities. When compared to the schools in the control group, this increase is significantly higher in most cases, except for "access to water". This result is supported by the considerable decrease in open defaecation in F4WASH Phase 2 schools, compared to the control group. Pupils participating in Phase 2 reported that school toilet facilities are better than those at home. This change took place over time and compared to control groups and is statistically significant.

Other key findings are:

• Knowledge on hygiene is only slightly better in the intervention groups. This was expected as hygiene education is given at all surveyed schools, including those in control groups. However,

children participating in F4WASH Phase 2 were statistically more likely to report learning about hygiene, health and cleanliness, at the endline. This is supported by several indicators comparing baseline data to endline results.

- One key finding was the increase of girls' attendance, which was significantly higher for F4WASH schools than for control schools. Indicators on menstrual hygiene management (MHM) showed statistically significant better access, use and understanding of MHM facilities at Phase 2 schools. This shows the positive effect of F4WASH focus on girls' attendance and performance. As a result, the number of WASH and sports clubs and the levels of pupils' "confidence" and "discipline" increased substantially. The 2019 F4WASH endline survey showed improved pupil ECT and BECE scores (these are national tests for Kenya and Ghana on pupil performance), which proves the positive effect on attitude and the application of knowledge acquired. This supports F4WASH claims regarding behaviour change.
- Observed positive behaviour change in pupils was statistically significant for all F4WASH schools on the following indicators: better hygiene, more confident, more ambitious, better school performance, improved health and not idling. This led to a greater use of handwashing facilities at home, which suggests an extended effect on the community. Regularity in handwashing with soap grew among parents after intervention and compared to the control group. Parents were also more willing to improve their sanitation facilities at home.
- Impact on health: the reduction of diarrhoea cases was significant for school-aged children participating in Phase 2, but not for those participating in Phase 1. Reported cases of cough, cold and influenza in the previous month (before measurement) decreased between baseline and endline, and when compared to the control group.
- The study shows the effects of the financial sustainability approach for schools developed in Phase 1. This did not lead to more income generation but to a shift in budgeting for WASH and sports. The full cost recovery for WASH O&M remains a challenge.

In a nutshell, the Proof of Concept study showed that schools participating in F4WASH Phase 2 are outperforming other schools in terms of health, hygiene behaviour, community outreach and MHM indicators. Based on these findings, it can be concluded that the F4WASH approach adds value to bridge the gap between hygiene education and behaviour change. This leads to improved health and school performance, especially for girls.

4.2 PME activities in 2019

Since the beginning, F4WASH all stakeholders acknowledged the importance of information and communication technology for sustainable development. Akvo contributed to the programme's monitoring and evaluation with technical solutions and support. WASH and football partners used Akvo's Flow for field data collection and Akvo's Really Simple Reporting for activity reporting.

Besides the baseline and endline surveys, two other surveys were done using Akvo Flow. The functionality survey checked on the status of installed facilities and the progress survey monitored programme progress. The progress survey started at the end of 2018 and finished in early 2019. In early 2019, a functionality survey was conducted to know the status of the water, sanitation, and football facilities of Phase 1 schools. Survey training and a refresher training on data collection were given in Kenya and Ghana. In Mozambique, the endline survey for Phase 1 was recently done and therefore additional surveys were not necessary.

In Ghana, the functionality survey results were discussed with the Ghana Education Service (GES) and School Health Education Programme (SHEP) to follow-up at GES district level. However, internal data analysis was corrupted because of data quality, as some responses in the data set contradicted with others.



Akvo Lumen analysed and showed data regularly with to the consortium partners using dynamic dashboards. Several graphs and charts were created to easily communicate on progress and functionality. These analyses were used in the learning programme trajectory in Ghana and Kenya and discussed in regional team meetings. This method for analysing and presenting monitoring data facilitated discussion, programme steering, and encouraged corrective measures.

By the end of the programme, the partners in Kenya and Ghana had a refresher training to interpret the survey used for baseline and endline data collection. This aimed at ensuring good quality endline data collection by having a common understanding of the survey questions among all partners collecting field data. Upon request of the Kenyan partners, this refresher course also included training on Akvo Flow.

By November 2019, endline data collection was finalised in Kenya, Ghana, and Mozambique. The data was analysed together with the country leads and partners. Akvo Lumen dashboards were set up per country to show programme results. These dashboards showing results linked to the F4WASH Theory of Change are available through these links:

- Kenya: https://footballforwater.akvolumen.org/s/skzvFE9yU6A
- Ghana: https://footballforwater.akvolumen.org/s/LkiXiWyiNPE
- Mozambique: https://footballforwater.akvolumen.org/s/kDn6rGR4in4

4.3 Learning programme in Kenya

In Kenya, the learning agenda aimed at sharing lessons learned among stakeholders at different levels. Learning and sharing activities were organised at school and community levels:

- Pupils and communities' members were organised in peer-to-peer groups that discussed several topics on health, hygiene and proper use of water and sanitation facilities, and life skills.
 This increased their knowledge and awareness on hygienic behaviour and their motivation to practice good hygienic behaviour.
- Through real-time data, using Akvo dashboards, the schools' board of management (BoM), WorldCoaches, and football and WASH implementing partners analysed the data and developed action plans when corrections were made. Members of the school BoMs learned to interpret data outcomes in relation to the F4WASH indicator on sustainability and their responsibilities to ensure O&M pitfalls are addressed. In general, all stakeholders learned that the data gathered is more useful for them: Not only can they use this data for reporting to donors, but also to understand what worked and what did not, and which improved approaches are the best for improving the quality of the F4WASH deliverables.
- The partners learned methods to observe and report on behaviour change. WorldCoaches also learned how to measure WASH behaviour through a football game tool. Teachers became more aware of their role in facilitating the pupils' hygienic behaviour change.

The learning agenda also consisted of regular exchange meetings: inter-county and intra-county workshops that brought together head teachers, WorldCoaches and implementing partners. They were by a F4WASH country advisor. In addition, intra-county workshops were organised and facilitated by the implementing partners for all head teachers, BoMs, football, and WASH partners. During these meetings, action plans were agreed and were to be discussed and checked upon in a follow-up meeting.

Challenges and learnings

Head teachers and/or BOM did not have access to the Akvo dashboard, so they could not learn directly about the F4WASH progress and act immediately, if required. They were dependent on the communication and updates from the implementing partners. This delayed tracking the achieved and non-achieved outcomes in real-time. There were pilots for using the tools by schools but the structure and costs of the Akvo system made this unsustainable. Instead, the focus was on integrating these indicators into the national monitoring systems. The follow-up of this activity was planned for Phase 3.

An additional pilot in Kenya and Ghana encouraged WorldCoaches to use the behaviour change monitoring game tool, which is a short monitoring survey on the football component. However, using Akvo tools did not add much value and therefore the pilot was discontinued. This made it difficult to maintain a learning curve linked to the field because the tool was not digital. Feedback was only possible through progress reporting.

Training on cost recovery planning was scheduled before the programme implementation started, but it was provided during the implementation due to delays. The cost recovery planning tool can be used and adjusted by partners and schools. Head teachers found the tool very complicated and time-consuming to complete. It was clear that schools needed more support to develop their business plans for financing O&M for WASH. This could be tackled by using co-creation approaches. The follow-up was planned for Phase 3.

Finally, the current memoranda of understanding need to be standardised with relevant content and clearer pronouncement. Although they were improved during the programme, their standardisation must be done in cooperation with governments and other stakeholders.

4.4 Learning programme in Ghana

In Ghana, the learning agenda focused on training and exchange at national level between the implementing partners and government authorities. The implementing partners also had other sources of learning through their internal processes and by participating in two sector-wide advocacy and learning events.

Hygiene behaviour change measurement

A systematic documentation of hygiene behaviour change measurements was introduced during Phase 2. It was also used to document the activities carried out by the WorldCoaches. WorldCoaches received training on the method and template to be completed during and after each session with the pupils. The analysis of the results allowed tracking the effect of the training activities and whether pupils show proper behaviour. The template was included in the WorldCoaches' monitoring and reporting manual. The forms were shared among WorldCoaches and the coordinator through a WhatsApp group. However, regular documentation was challenging because of paper shortage for printing copies and challenges regarding online administration.

After each training session, the WorldCoaches shared feedback on how filling in the template helped them to reflect on the activities, enabled them to assess progress made with imparting life skills, and served as evidence of the work done.



Lessons learned

Based on the unmet and undesirable outcomes as well as hindsight, it is necessary to ensure that all partners plan and develop the agreed implementation guidelines within the national WinS policy framework. This will require a partners' orientation session to develop a joint and detailed implementation plan. This plan should set up and clarify the roles of partners and stakeholders and define a harmonized approach to execute sustainable WinS.

National Stocktaking Forum on Sanitation

The work of F4WASH in Ghana was presented during the National Stocktaking Forum on Sanitation, which was held in Kumasi from 14 to 18 July 2019. Stephen Ntow (national programme coordinator) and Hilda Addah (Beyond the Goalpost) gave a joint presentation on F4WASH. At the end of the event, it was agreed to share data on schools that were disconnected by the water utility GWCL and to join advocacy initiatives to create enabling environments for WinS.

Mole Conference

A similar presentation was made at the national WASH advocacy forum "Mole Conference" at Ho in the Volta Region from 4 to 8 November 2019. F4WASH sponsored a delegation of ten members representing different implementing partners. The key recommendations and lessons shared by F4WASH were included in the final document compiled by the conference organisers.

Advocacy and policy influencing

- Mobilise NGOs/CSOs to share best practices and adopt the F4WASH approach in Ghana.
- F4WASH was asked to join the Coalition for NGOs in Water and Sanitation (CONIWAS) to advocate at national level and share information with the network.
- Many sector actors started inquiring about F4WASH after hearing about the programme and its unique approach at the various national learning platforms.

Knowledge management should be integrated into the programme for supporting learning and scale up, and for improving sector learning on WinS. This includes:

- Coordinating documentation of primary data and lessons learned on WinS.
- Developing a comprehensive plan for literature search and review of relevant publications.
- Preparing guidelines and tracking relevant materials to develop WinS data map and information.
- Identifying and using existing and appropriate platforms for sharing lessons learned.
- Planning and developing platforms, including the media, for disseminating and learning of sustainable outputs and/or outcomes of WinS.



5 Programme management

5.1 Consortium management

In 2012, F4WASH started as a public-private partnership between the Royal Netherlands Football Association (KNVB), UNICEF, VEI, Simavi, Akvo and Aqua for All. By 2017, Simavi left F4WASH due to changes in its organisational strategy, moving away from hardware construction to focusing on capacity building. The Salvation Army joined as partner in Ghana in 2017, and Dunea in Kenya in 2018.

KNVB led the consortium until 2016 (Phase 1). From 2017 until 2019, Aqua for All was the lead agency for Phase 2. In Phase 1, a decentralised governance model was developed, in which local partners aligned strategies and activities, but followed the guidance of the Netherlands counterparts.

In Phase 2, the decentralised governance model adopted a stronger focus on developing local public-private partnerships aligning football and WASH partners. Local governments got a more prominent role in the programme. In Ghana and Kenya, country advisors were recruited to represent Aqua for All, to coordinate local programmes and to guide the learning and exchange activities.



5.2 Developing Phase 3

Phase 2 included the development of a financial strategy to scale up the F4WASH approach (Phase 3). Consultants were hired to identify potential grant structures for innovation, and new business models. The Phase 2 evaluation end report recommends developing country specific strategies that address the roles and responsibilities of the local authorities to ensure sustainable WinS. It also suggests gathering and disseminating the programme's knowledge and experiences among sector players with the ambition to replicate the F4WASH approach at a larger scale. In 2019, the programme started to develop such country specific strategies along these recommendations. With UNICEF Ghana and UNICEF Kenya in a leading role, the programme aligned strategies with national, regional, and local authorities and other key sector stakeholders. Through new partnerships, the programme aimed to facilitate embedding the key elements of the F4WASH

approach into the national systems and policies for WASH at schools and to ensure monitoring on WASH sustainability over ten years. The programme partners successfully obtained endorsements of ministries and larger WASH programmes to collaborate in a third phase. They promised to allocate a total leverage budget of over €42 million to high-quality WASH interventions according to the F4WASH approach. DGIS asked for All to submit a funding proposal for Phase 3, but in February 2020 DGIS informed the consortium that financial support will not be continued.

5.3 Coordination in Kenya

In 2017, UNICEF Kenya successfully engaged the county governments of the three counties in which the F4WASH was implemented. The county governments became implementing partners of WASH hardware. In line with their own policies on access to WASH facilities in schools, they coordinated and implemented the construction of safe drinking water facilities and latrines. They worked closely with the implementing football partners to engage local community leaders and school management. During the programme, they also coordinated government activities for WASH at schools (through the County Integrated Development Programmes) and informed on the programme's added value at national ministries' level. Consequently, the new WASH standards for schools and guidelines were drafted together with UNICEF. In 2019, they were launched at F4WASH schools by three national line ministries (Water, Health, Education). These ministries indicated a new challenge: to find a comprehensive way to monitor WASH in schools. F4WASH partners and the Ministry of Education started exchanging ideas on how to cooperate to integrate WinS indicators into the education monitoring information system.

Furthermore, UNICEF Kenya noticed changes in school curricula. The new competency-based curriculum used the same sources as the WorldCoaches' life skills approach. Due to these developments, UNICEF Kenya decided to mainstream the F4WASH approach into all the WinS activities that it funded.

These developments coincided with the End of Phase Evaluation process. Its report recommended to continue with the F4WASH integrated approach to WinS through country specific strategies, and to keep embedding sustainable WinS strategies into national policies and budgets. In August 2019, field visits were organised to develop and organise the next phase after the Netherlands Ministry of Foreign Affairs (DGIS) informed Aqua for All on potential funding for a Phase 3.

In October 2019, the field visit to Kenya led to a strong partnership between UNICEF Kenya (WASH and education team), the Ministry of Education (primary education and quality assurance), the Ministry of Water and the Ministry of Public Health. The objective of Phase 3's strategy in Kenya would be to mainstream the WinS approach of F4WASH into policies and standards. It would also support the Ministry of Education to coordinate WinS interventions and projects locally.

5.4 Coordination in Ghana

In Ghana, the Ministry of Education and the Ministry of Sanitation and Water Resources are responsible for providing WASH in schools. School selection and budget allocation to schools are done by the District Assemblies (MMDA). Health education is provided through the School Health Education Programme (SHEP) of the Ghana Education Service (GES). This variety of institutions involved and responsible for school WASH programmes, and their lack of alignment affected the decision-making processes regarding implementation and school selection.

Over the years, the programme succeeded to achieve internal alignment. To coordinate the programme implementation and align stakeholders, the Country Advisor Ghana frequently

convened the programme leads (UNICEF Ghana, VEI/Ghana Water Company Ltd and The Salvation Army Ghana) and the Ministry of Education through the (SHEP) of GES. Involving SHEP and GES was useful in terms of institutional ownership and to create common understanding of how the F4WASH Theory of Change would work. As a result, F4WASH indicators and the cost recovery planning approach were integrated into the mandatory Facility Management Planning manual and guidelines provided by GES. GES also requested F4WASH to train SHEP officials in health and life skills education. More details of this relationship are mentioned in section 4.4.

In 2019, while designing a potential Phase 3, the Ghana authorities involved in WinS showed interest in partnering with the programme to develop a national, integrated WinS policy framework. They worked together to mainstream monitoring tools into the official GES monitoring mechanisms, such as ESCOM and the education monitoring information system. Furthermore, it was decided to collaborate with other stakeholders in WASH at schools to improve the quality improvement of WinS interventions, implementation, and monitoring.



5.5 Communications

The communications strategy in Phase 2 was drastically different compared to Phase 1. The focus shifted from communicating to Dutch donors to communicating with local stakeholders. This resulted in a radical change in communications' roles and responsibilities from the public-private partnership lead into the local programme leads. Targets and approaches towards communications were integrated into local programmes. The consortium lead agency, Aqua for All, had a supporting role in communications instead of a leading one. Notwithstanding, corporate communications remained in the hands of the consortium lead agency. Local communications efforts are described in section 5.5.2.

Over the years, several communications plans were written, materials were produced, and presentations were given to country teams. Despite these efforts, getting alignment was very difficult, especially from (local partners):

- Communications materials were shared with all parties. They were asked to actively use them for events, presentations, etc.
- The Kenyan (2017) and Ghanaian teams (2018) received presentations on key messages, target audiences, branding, writing style, among others.
- Photography briefings were provided. Partners were requested to share updates using the Akvo system, but they shared photos on their own social media channels because the online system was not user-friendly, or they preferred posting on social media. Akvo provided training on posting and sharing updates, but there was hardly any follow up.

In addition, most local partners preferred calling the programme 'Football for WASH", instead of the original name "Football for Water", on their social media because this name resonated better in their country, even though they were requested to use F4WASH. Consequently, it was very difficult to follow their posts and to build a social media community.

In general, the international partners had their own agendas and shared their 'own' news, using their own branding. They barely shared or communicated on F4WASH.

Partners mentioned that they had many success stories from the programme but lack the ability to communicate properly. In 2018, a copy writer was hired to interview local ambassadors and programme champions to write short articles on F4WASH best practices. These stories were shared on the website and social media channels. Looking back, it would have been better to hire a communications expert for Kenya and Ghana, but this was the best alternative given the limited budget available.

5.5.1 Communications activities and channels

F4WASH used primarily online channels for communicating on the programme. The main channels were:

- Website (https://footballforwater.org/) with links to Akvo RSR updates (https://rsr.akvo.org/en/project/834/).
- Social media
 - o Facebook page (https://www.facebook.com/FootballForWater): 991 followers
 - o Twitter (https://twitter.com/Football4Water): 628 followers
 - o YouTube (https://www.youtube.com/user/Footballforwater): 12 subscribers
 - Flickr (<u>https://www.flickr.com/photos/footballforwater</u>), 58,851 views; 8 followers,
 774 photos. It was created in 2013, but not updated since 2015.

Facebook was by far the most popular social channel; posts were liked and shared very often. The consortium lead agency was active on Facebook and Twitter.

Example of a Facebook post

Happy faces at the launch of the Football for WASH project at Adongo Primary School in Kenya. Children are educated in life skills; toilets & drinking water services are being constructed and WorldCoach Johan Neeskens took care of the kick-off and awarded the prices.

Proud of this collaboration with <u>Dunea</u>, <u>Amref Flying Doctors</u>
NL, Aqua for All, <u>Ministerie van Buitenlandse Zaken</u>, <u>KNVB</u>, <u>KNVB</u>
WorldCoaches



Several communications materials were produced for the programme:

- Short films on F4WASH activities: In total, 27 videos produced and distributed through YouTube. Views ranged from 7 to 294 views.
- A F4WASH promotional video was made in Phase 2. It is available at: https://www.facebook.com/FootballForWater/videos/2350730141861542/
- Other materials include:
 - o Fact sheets on the programme activities in Kenya and Ghana
 - o The Theory of Change poster
 - o New Power Point templates, including icons
 - Photography briefings

There were not any international events organised during Phase 2. Most events were organised locally. Country consortia organised their own events on Menstrual Hygiene Day (28 May), Global Handwashing Day (15 October) and World Toilet Day (19 November), among others. The launch of F4WASH in Homa Bay County, Kenya, on 11 April 2019 was a very important event.

5.5.2 Communications per country

Local programmes were responsible for F4WASH Phase 2 communications activities. In these countries, several international days were observed sharing advocacy messages.

Kenya

Menstrual Hygiene Day (28 May) was celebrated nationally in Kisumu and Kajiado counties in 2018 and 2019 with the presence of over 1,000 school children and the counties' first ladies as menstrual hygiene management (MHM) champions. In Migori and Trans Nzoia, there were county-wide activities with F4WASH support. These celebrations brought government representatives, development partners and private sector actors together with school children to help break the silence on MHM and advocate for more action to address challenges that girls face with menstruation. An opinion editorial authored by the UNICEF Representative and Cabinet Secretary of the Ministry of Health was published in a major national newspaper, with substantial social media coverage on the day. A video on MHM was also produced and circulated on social media to create awareness.

A paper on football as a catalyst for improving WASH services in schools in Kenya was presented at the WEDC international conference in Nakuru in Kenya. It received positive feedback supporting the replication of this experience. A WASH Field Note (2018) 'UNICEF's F4WASH Programme in Kenya' was published and disseminated through UNICEF SharePoint and the Government of Kenya WinS Technical Working Group to raise awareness of the F4WASH project.

Ghana

Posters and billboards were installed at schools by F4WASH partner – Beyond the Goalpost that played a crucial role developing communications materials. The involvement of Parents Teacher Associations (PTA) and school management committees (SMC) in facilities management planning facilitated communications on WASH. The SMC membership includes stakeholders outside of the school and PTA, such as local assembly members, opinion leaders and traditional leaders. For post-project communications, a videographer was engaged to produce short audio-visual stories on F4WASH.

5.6 Finance F4WASH Phase 2

Financial reports and audited accounts have been handed in separately. Hereby is the summary of Phase 2 financial report. In the period between 2017 and 2019, F4WASH Phase 2 spent a total amount of €8,229,025. This amount was divided over different work packages as follows:

WORK PACKAGE	WASH	FOOTBALL	CONSORTIUM	TOTAL
CONS COACH	-	784.224	-	784.224
CONS (W)INFRS	3.448.486	246.763	-	3.695.249
CONS LIFSK	477.809	1	-	477.809
CONS COMZU	-	112.340	-	112.340
CONS PME	53.328	1	1.799.631	1.852.959
CONS PRMAN	-	350.422		350.422
CONS SUST	700.465	206.233		906.698
CONS PME OTHERS		49.324		49.324
	4.680.088	1.749.306	1.799.631	8.229.025

In total, 55% of the expenditure was financed by the Netherlands Ministry of Foreign Affairs. Consortium partners contributed for the remaining 45% as follows:

Table 5: Contribution per consortium partner

Consortium partner	Contribution
UNICEF	2,498,555
KNVB	253,461
The Salvation Army	263,039
VEI	386.484
Dunea	50,000
Akvo	47,000
Aqua for All	173,400
Ministry of Foreign Affairs	4,557,086
Total	8,229,025

The Netherlands Ministry of Foreign Affairs granted in total € 4,643,069 to F4WASH. The remaining subsidy (€ 85,983) will be used to finalise and hand over the programme in 2020.

6 Country programmes in Ghana

6.1 Context

During Phase 2, two new programmes were executed, which were led by UNICEF and The Salvation Army Ghana. Beyond the Goalpost (the Ghanaian Football partner) implemented the football activities for all programmes. In addition, VEI carried out consolidation activities in some F4WASH Phase 1 schools during Phase 2.

During Phase 1, there were challenges regarding the coordination of the planning of WASH delivery in schools at district level. Therefore, Phase 2 focused on building government agencies' ownership. As a result, the implementation was led by agencies, such as district assemblies, the Community Water and Sanitation Agency (CWSA), and the School Health Education Programme (SHEP) of the Ghana Education Service (GES). This was a huge change compared to Phase 1, when government agencies were only informed, except for a few meetings at inception.

With the introduction of the new free Senior High School Programme in September 2017, public and political scrutiny on fee-free basic education increased. This environment discouraged the implementation of several cost recovery measures, particularly contributions from PTAs, which risked WASH services sustainability to a large extent, at least for the short and medium term. This was not anticipated during the project planning and inception.

UNICEF and some development partners - F4WASH, World Vision Ghana, WaterAid and the Coalition for NGOs in Water and Sanitation (CONIWAS) - are advocating to increase resources for Wins. With UNICEF, F4WASH and other partners' support, a sector dialogue on the needs of cost recovery for WASH at schools was initiated with sector lead players like the Ministry of Education and GES. During Phase 1, the metropolitan, municipal and district assemblies were engaged only the inception and handover phases, whilst in Phase 2 they became programme partners to deliver WASH hardware.

6.2 Highlights

Prior to 2012, when F4WASH started, there was not any WorldCoaches programme in Ghana. After six years, there now is a group of highly skilled co-instructors in Ghana who can train WorldCoaches on life skills beyond the F4WASH programme. Beyond the Goalpost, a WorldCoaches' partner, is acknowledged by other organisations as a key development partner.

F4WASH popularised girls' football games in communities where girls are excluded either by tradition and/or religion. This was achieved by engaging the communities to debunk myths around girls' football. Girls aged under 12 (U12) were included in the programme even though the regular GES basic school competitions do not recognise this group. Beyond the Goalpost keeps advocating for inclusion of girls U12.

The community WorldCoaches, introduced in Phase 2, played a key role in community outreach activities. They led campaigns against open defecation and formed vigilante groups in areas close to schools to stop open defecation.

Training of teachers as WorldCoaches gave their teaching methods a more child-centred and play-based approach in several subjects besides sports. Beyond the Goalpost formed an alliance with the national women's soccer team (The Black Queens). Some players became positive role models

for hygiene behaviour and football of all pupils. By using women's football champions, the hygiene and development message to girls was strengthened.

Improved WASH indicators were integrated into the mobile school report card (MSRC) programme of the GES to support integrated monitoring. The MSRC is an android-based monitoring and information system that is updated each school term (three times a year) and includes an online dashboard. Initially, the MSRC was piloted in two F4WASH programme districts, Tamale and Ledzokuku Krowor. UNICEF envisages to rolled out this approach nationally with the support from GES.

With funding from F4WASH and DGIS, UNICEF Ghana developed the first water safety plan's guidelines and templates for schools. Studies commissioned by UNICEF showed that the F4WASH approach succeed in creating sustainable hygienic behaviour of school children and on improved operation and maintenance for the sustainability of schools' WASH infrastructure in the long term.

Success stories

- Pilots on plastic waste collection and reuse were implemented in Ashaiman, Osu and Kotobabi school clusters. These pilots were initiated by the WorldCoaches to raise awareness through training of waste separation and the reuse of plastic waste. Some schools used plastic waste to make benches, bags, and tippy taps, while other schools piloted partnerships with other projects to collect and sell plastic waste to generate income.
- The quality of handwashing facilities in Greater Accra Region was not satisfactory. This
 complaint was forwarded to UNICEF, which instructed the supplier to liaise with municipal
 SHEP coordinators to visit schools and make repairs. Since the schools noticed the benefits
 of such facilities, most facilities were replaced by schools using their own resources.
 Replacements were also possible because the handwashing option provided was low-cost
 and made from the materials that could be sourced locally.

6.3 Results

The indicators' log frame for Ghana (Table 6) presents the results, that are based on collected data using surveys and programme reporting.

Table 6 Result log frame Phase 2 schools - Ghana

Indicator log frame: Ghana Phase 2					
Reference to Theory of Change	neory of Nr Targets - Phase 2 Ghana		Results: UNICEF	Results: TSA	Total results: Ghana
Functional and safe WASH and Football facilities are in place	1		 access to improved sanitation and handwashing facilities, of which: 15,222 pupils and 549 teachers have access according to the minimum standard for sanitation 16.983 pupils and 593 teachers have access according to the minimum standard for handwashing 	access to improved sanitation and handwashing facilities, of which: 934 pupils and 357 teachers have access according to the minimum standard for sanitation 4,034 pupils and 231 teachers have access according to the minimum standard for handwashing 67% of the schools have access to menstrual hygiene management	 32,802 pupils and 1.246 teachers have access to improved sanitation and handwashing facilities, of which: 16,156 pupils and 906 teachers have access according to the minimum standard for sanitation 21,017 pupils and 824 teachers have access according to the minimum standard for handwashing 71% of the schools have access to menstrual hygiene management options (menstrual hygiene education not included)
l and safe W	2		17,683 pupils and 594 teachers have adequate access to safe drinking water	8,474 pupils and 396 teachers have adequate access to safe drinking water	26,157 pupils and 990 teachers have adequate access to safe drinking water
Functiona	3	100% of the schools have adequate football (sports) fields and materials available that can be used on a weekly basis for training	100% of the schools have access to an adequate sports field within 1 km	100% of the schools have access to an adequate sports field within 1 km	100% of the schools have access to an adequate sports field within 1 km
Properly managed, maintained and financed WASH and football facilities (demonstrated stakeholder involvement)	4	have an annual cost-recovery plan	and for 95% of the schools a budget for maintenance and replacements for 10	place and for 81% of the schools a	99% of the schools have a FMP in place and for 91% of the schools a budget for maintenance and replacements for 10 years is included

	5	100% of the schools (SMCs/ BOMs) have a complete and signed a MoU defining roles and responsibilities in management of all WASH and football facilities for at least 10 years	98% of the schools have a signed MoU	100% of the schools have a signed MoU	99% of the schools have a signed MoU
	6	school management committee	SMC/BOM in place, 80% is gender-balanced; and 97% have a PTA	SMC/BOM in place, 30% is gender-	96% of the schools have a functional SMC/BOM in place, 63% is gender balanced and 97% have a PTA representative
organised in ve increased on hygienic	7	100% of the schools have an active school health, hygiene, or WASH club (or related institute) distributing knowledge of hygiene to pupils		100% of the schools have an active WASH club	100% of the schools have an active WASH club
Children and community are organised in peer-to-peer groups and have increased knowledge and awareness on hygienic behaviour	8		WorldCoaches and 51% of the schools	WorldCoaches, 94% have 1 to 3 male	100% of the schools have at least 2 WorldCoaches, 96% have 1 to 3 male coaches and 46% of the schools have 1 or 2 female coaches
Childre peer-t. know	9	12,500 pupils of the pupils receive WASH life skills education on a monthly basis		4,876 pupils receive monthly WASH life skills education	23,382 pupils receive monthly WASH life skills education
Increased motivation to practice of good hygienic behaviour	10		category of 51-75% that practice handwashing with soap/ash at random unexpected measurement (observation) Increase from 0% to 53% of the pupils in category 76-100% that practice	pupils in category of 51-75% that practice handwashing with soap/ash at random unexpected measurement (observation) Increase from 0% to 13% of the pupils in category 76-100% that practice	Increase from 0% to 41% of the pupils in category 76-100% that practice handwashing with soap/ash at random unexpected

		11		excellent on cleanliness of school grounds	or excellent on cleanliness of school grounds	100% of the schools score acceptable or excellent on cleanliness of school grounds 100% of the schools score acceptable or excellent on cleanliness for the new sanitation
	11	(indication on proper use)	excellent on cleanliness for the new	or excellent on cleanliness for the new sanitation facilities, and 7 schools	facilities, and 12 schools (13%) score unacceptable for the old sanitation facilities	
			Improved awareness on hygiene,	Increase from 4% to 48% of the pupils in	Increase from 13% to 21% of the	Increase from 7% to 40% of the pupils in
	Long-term outcome and impact indicators (Indirect indicators are there to measure assumptions in Theory of Change)			category of 51-75% that have access to handwashing with soap/ash at home	pupils in category of 51-75% that have access to handwashing with soap/ash at home	category of 51-75% that have access to handwashing with soap/ash at home
	\$			Increase from 0% to 29% of the pupils in		Increase from 0% to 23% of the pupils in
	; eorj			category 76-100% that have access to		category 76-100% that have access to
	tors			handwashing with soap/ash at home	in category 76-100% that have access	handwashing with soap/ash at home
	dica s in			Increase from EV to 200/ of the numils in	to handwashing with soap/ash at	Increase from COV to 220V of the numile in
	inc	12		Increase from 5% to 29% of the pupils in category of 51-75% that have access to a	nome	Increase from 6% to 33% of the pupils in category of 51-75% that have access to a toilet
	impact assump			toilet at home or within compound	Increase from 8% to 42% of the pupils in category of 51-75% that have access	
	pu Je					Increase from 2% to 20% of the pupils in
	ne a			category 76-100% that have access to a	compound	category 76-100% that have access to a toilet
	con			toilet at home or within compound	Percentage of pupils in sategory 76	at home or within compound
	out e to				Percentage of pupils in category 76- 100% with access to a toilet at home or	
	rm				within compound remained 0	
	g-te			Girls' absenteeism increased from 8% to	1 1	Average girls' absenteeism remained 9%
	Lon		the schools	10%	to 7%	Average boys' absenteeism remained 11%
	icat	13	Improved attendance of pupils	Boys' absenteeism dropped from 10% to	Boys' absenteeism dropped from 12%	
	t ina		(boys/girls) at the schools	12%	to 10%	
	ireci		. , ,	Average BECE score 66 (baseline 46)	Average BECE score 60 (baseline 89)	Average BECE score 64 (baseline 61)
	pul)	14	and performance of pupils in school			

Due to proper assessments of needs in schools, UNICEF maximized the use of resources by rehabilitating existing toilets instead of building new ones, wherever possible. This saved significant costs in the construction budget line, which was used to add another 15 schools with a full WASH package.

Menstrual hygiene management (MHM) was included into behaviour change communications delivered by school-based health coordinators. This was done by distributing hard copies of the MHM information, education, and communication package for Phase 2 schools (new schools) and consolidated Phase I schools.

Football fields and handwashing have become interlinked. In general, it was observed that children wash their hands at critical moments and children appeared cleaner and healthier.

Traditionally, schools only had one school-based health coordinator leading health education. By training two WorldCoaches, there is more attention on health and hygiene education at schools. Their work is guided by a common action plan for football and WASH at schools.

Local football partner Beyond the Goalpost trained district physical education coordinators from beneficiary districts. These officers supervise the physical education teachers in these districts. The objective was to effectively engage and supervise the work of school and community WorldCoaches and physical education teachers, which is part of the sustainability process as mentioned in the programme's Theory of Change (see Annex 1). They are called the Coaches' Coach. Through hygiene promotion campaigns and outreach by community health workers and community WorldCoaches, community members improved their hygiene practices. Besides, school boards of management were sensitised and informed on F4WASH.

In total, 230 schools participating in Phase 1 had consolidated during Phase 2, reaching 92,232 pupils who were already targeted in Phase 1. Consolidation activities were carried out by Phase 1 WASH partners, VEI and UNICEF Ghana. These consolidation activities included:

- Small repairs and corrections to Phase 1 WASH facilities at UNICEF and VEI schools
- Additional handwashing facilities (Veronica Buckets) were supplied
- WorldCoaches refresher trainings

6.4 Sustainability

Financial sustainability

There is ongoing research on cost recovery planning and income generating business models for WinS initiated under F4WASH. This research would identify some practical ways for financing operations and maintenance of WinS, which will be put into consideration to the Ministry of Education and GES. One key issue identified was the expensive water bills in urban schools, which was referred to the parliamentary select committee on water and sanitation for their scrutiny. The discussion centres on having discounted rates for public schools instead of commercial rates.

Institutional sustainability

Th implementation model with district assemblies, the Community Water and Sanitation Agency and SHEP in the lead, revealed weaknesses regarding the coordination of planning and delivery of WASH in schools at district level.

WorldCoaches transfers from their schools by District Education Services remain a challenge because schools were left without WorldCoaches. To limit the effects of this situation, the implementing partners and the District Education Service invited one community coach for each

school to attend the course. Consequently, if a teacher was transferred to another school, the community coach will guarantee the continuation of the activities in coordination with the school authorities.

The sustainability of the programme and its deliverables goes beyond the active commitment of the school's stakeholders to depend on the community support to schools. Communities that accept ownership of their schools, hold the school management accountable and support the schools tend to record a higher impact rate than communities that do not get along with the school management. Therefore, it is critical to obtain community and stakeholders engagement, define the roles and responsibilities of community members and key stakeholders, and involve them in the implementation process' decision-making.



Environmental sustainability

Environmental sustainability is a standard indicator for hardware. International and national guidelines and quality standards are followed when building toilets. This ensures safe sanitation, waste collection and re-use, and managing environmental impact. In Ghana, the awareness of waste separation and the reuse of plastic waste was raised in Ashaiman. Additionally, attention for environmental sanitation and cleanliness of the school compounds grew in F4WASH schools.

Technical sustainability

Using appropriate technology has much attention in Ghana, especially in urban areas. Low-maintenance, easy to clean, low cost and robust (vandal proof) infrastructure was promoted to avoid break-downs due to vandalism or lack of funding. While flush toilets are popular in Ghana, water to flush toilets is often not available or very expensive, so schools cannot afford it. Therefore, F4WASH promotes the use of poor flush in urban areas, such as bio-fill toilets, and dry toilets for rural areas. This reduces the use and spillage of water via flush toilets and makes it affordable for

schools. Schools pay commercial rates for water. Some lobby activities have started to make it possible for schools to pay public rates.

Social sustainability

F4WASH Ghana implemented facilities for girls' MHM and for children with disabilities to improve the school attendance of vulnerable groups. All programme activities aimed at achieving gender balance. This is monitored and actively pursued in, for example, management committees, WorldCoaches trainings, school WASH clubs, community, and parent representation. The goal is to involve the whole community, local public sector, school, and children reaching behaviour change in all targeted audiences.

6.5 Challenges and lessons learned

Information provided by schools during the planning phase on the number of seats available for teachers and pupils did not match with the actual use. This resulted in building fewer seats than required to comply to the pupil/stance ratio. However, the national minimum standard of 50 pupils or less per cubicle was reached in most schools.

Sports disciplines under the GES module did not include WASH components. The programme recommends embedding WASH principles into other sports, besides football. This would enlarge the programme's scope and reach by creating larger platforms for change. Embedding WASH principles into GES competitions as promoted in F4WASH competitions would increase the programme's impact. Linking health and sports should be mainstreamed.

The head teachers of the beneficiary school select the teachers for the WorldCoaches training. Head teachers often select teachers they like or have close relation with, irrespective of their interest and skills in sports. As a result, some WorldCoaches were neither committed nor passionate about their roles, but only acted because they were told to do so. This negatively impacted the programme by missing more competent individuals willing to do the work with passion. Another challenge was the transfer of WorldCoaches from their schools after receiving training. Due to a national policy of transferring teachers and school staff regularly, WorldCoaches were also transferred, sometimes within a few months after their training. Recruiting of community coaches to address this issue did not turn as expected because most community coaches have not received any formal education. They could not be enrolled since the WorldCoaches training is usually in English. The programme also struggled to attract more women as school WorldCoaches because physical education and especially football coaches are mainly men. However, there is a big improvement in the number of female coaches throughout the Ghana programme.

According to recent UNICEF research on the effectiveness of hygiene education through play and sports, the schools within the F4WASH programme were generally demonstrating a higher level of handwashing practices among children. However, the endline data suggested a lower percentage than what was expected. UNICEF Ghana believes this can be solved by effective monitoring and will recommend municipal SHEP coordinators to intensify monitoring, especially among the younger children.

Water supply reliability for piped water in Accra was lower than estimated at the programme inception. Although most schools had pre-existing storage or additional storage capacity, low water pressure and interruption in supply still pose challenges for using toilet facilities effectively. There is ongoing discussion with the authorities on the most appropriate technology, like non-flush or poor flush toilets. Politicians often put pressure to build flush toilets. In the Bongo district, fluoride was detected in several boreholes drilled, which made water unsuitable for consumption.

The GES is hesitant to endorse the implementation of some cost-recovery models because of the political focus on fee-free education. Innovative ways to address the concerns of the GES and provide tools to generate funding have been developed, but these are small income generating activities with a limited impact on cost-recovery.

Unfortunately, UNICEF Ghana did not take up its leading role successfully. This was eventually the reason behind not aligning activities in the field, leading to delays. Beyond the Goalpost filled this gap by taking over the practical coordination of the interventions. The procurement process for WASH hardware was another reason for delay. Construction is a time-consuming and plan-driven process. Therefore, scoping, validating, and finalizing WASH hardware implementation can demand significant time and efforts. Field information must be translated into bid documentation. Since UNICEF implements programmes through government institutions to build institutional capacity and ownership, this engagement means additional time spent because of the bureaucratic processes. In contrast, construction work under any department of SHEP, that overlooks the activities of WorldCoaches and school-based health coordinators, took less time because it was managed by a single department.



7 Country programme in Kenya

7.1 Context

The county governments of Kisumu, Trans Nzoia and Migori (departments of water, public health, education, and sports) and local football partners KYFA, TYSA, CREATA (operating under Orange link) are the local F4WASH implementing partners in Kenya. UNICEF Kenya was the programme lead in cooperation with Orange Link and its local partners. Besides the main programme, Dunea executed a separate F4WASH programme in Homa Bay with Orange Link and Amref Kenya.

The general elections in August and October 2017 contributed to delay the implementation. Due to political restrictions in West Kenya, partners could not start their activities until the unrest stopped. Many schools were used as polling stations and after the elections, officials in the county governments were changed. Due to this staff change the programme had to be (re-)introduced to the new members and the request for cooperation and signing the memoranda of understanding was postponed.

Kenya has faced increased drought since 2014. The most recent one (2018/2019) affected many F4WASH schools. Water availability at schools was affected by the drought since Phase 1, despite improvement of facilities, because water levels have decreased in West Kenya in general.

7.2 Highlights

In 2018, UNICEF Kenya and the Government of Kenya developed standards and guidelines for WASH infrastructure in pre-primary and primary schools. These guidelines were launched at F4WASH schools to showcase their implementation. F4WASH is anchored within school health activities under the responsibility of the Ministry of Education and the Ministry of Health.

UNICEF Kenya, supported by UNICEF Netherlands, noticed that the new competency-based curriculum and the WorldCoaches life skills approach were based on the same sources. Consequently, UNICEF Kenya decided to mainstream the F4WASH approach into all the WinS activities that it funded. This major achievement of F4WASH will lead to continue the approach.

In addition, F4WASH sustainability indicators are now being integrated in the existing education monitoring system of the government, called EMIS. UNICEF Kenya also trained Quality Assurance Officers in WinS monitoring to ensure sustainable monitoring of WinS in the future.

It is remarkable what UNICEF Kenya achieved more than what was anticipated regarding government and stakeholder commitment. Besides, the Ministry of Education has allocated budget for CapEx of WASH facilities in schools and the Ministry of Water has more attention for sustainable O&M for WinS.

In Q4 2018, Aqua for all, Dunea, Homa Bay Government, Homawassco, Amref Health Africa and F4WASH Kenya team agreed on a public-private partnership. This agreement included developing a decentralised water service delivery model for domestic water supply and WASH in schools, in combination with the F4WASH life skills approach. F4WASH funded the WorldCoaches component and the other partners financed WASH infrastructure. This new partnership piloted various cost recovery schemes. Under WaterWorX, the local government was engaged in sustainable water management. Aqua for All brought its knowledge and expertise in safe water enterprises and looked for locate private operated water kiosks in F4WASH schools. AMREF Health, implementing

partner, and DUNEA aligned the best hygiene practices from another WinS programme with the WorldCoaches approach.

In practice, it was very difficult to work in a new region without solid knowledge of the local political situation. This led to poor commitment at local level. Furthermore, the selected schools were too remote. Water kiosks are hardly viable without a market. This pilot was successfully launched in April 2019. Johan Neeskens, WorldCoach Ambassador, and the CEO of Dunea festively opened the WASH facilities with a football match.



Menstrual hygiene management (MHM) guidelines were developed by UNICEF Kenya and the Ministry of Education, which resulted in a MHM manual that is currently being accredited by KICD. This will continue contributing to improving MHM at all schools in the country.

Some income generation business models were piloted in Kenya, such as the cybercafé model. In Migori and Trans Nzoia, the water kiosks model was piloted. In both cases, the models used school assets in combination with community demands for water and cyber services. These models were tested in partnership with the county governments as they aligned with the Ministry of Education's ambitions to improve digital literacy. It is expected that these initiatives would generate income to maintain WASH and football facilities at schools.

In Migori county, a sunflower oil producing project was also piloted. This project is an extension of the Phase 1 pilots on testing urine fertilizers done by Creata and Kamida, Creata's commercial branch, in cooperation with Leaf Wageningen Research Institute. Based on these experiences, Creata began a new, scaled pilot using urine from schools to fertilize sunflower farms and tree seedlings that are for sale in and around the communities. As expected, this new business does not break even at the moment. Aqua for All will keep following the results of this pilot in the coming year. Lessons learned from Phase 2 show that more scale is required to break-even. This requires involving all 50 schools in Migori, which goes beyond the scale of the current programme. The Migori project is an innovative spin-off of F4WASH.

Since most pilots of these business models have only started, it is too early to draw conclusions. Nevertheless, it can be concluded that specific capacities, such as entrepreneurial skills and mindset and expertise on scale, must be developed to make these approaches successful. On a positive note, the government, school, and community became open to continue developing such models to generate income to maintain WASH facilities.



The F4WASH approach had spin-offs to other schools and communities. Some WorldCoaches used their training skills and WASH knowledge to organise events in their communities. One excellent example is the "Under 14 football leagues" (U14) that was organised for three years by coaches Ken Opande and Whycliffe Misee from West Kanyamkago in Uriri (Migori).

The WorldCoaches approach to life skills development focusses on children aged under 14 years (U14). It has generated growing interest from politicians, who usually only consider adult sports tournaments. They now realise the importance of targeting children U14, which led to include them in their sports tournaments. There is more awareness of the values that sports bring to the community and the need to participate in sport, with or without financial gain.

School- based sports competitions organised through the Ministry of Education are dominated by WorldCoaches in the F4WASH counties. WorldCoaches became instrumental to organising all types of sports because they are recognised for their skills in the sporting arena. The best pupils participating in the WorldCoaches programme have received high school scholarships. Next to it, community WorldCoaches were employed as coaches in schools and in local football clubs, and some school based WorldCoaches were promoted to (deputy) head teacher of their schools.

7.3 Results

The final indicator log frame for Kenya (Table 7) show the results based on data collected through surveys and programme reporting.

Table 7. Result log frame - Phase 2 schools

Indicator Log frame: Kenya Phase 2						
Reference to Theory of Change	Nr	Targets - Phase 2 Kenya	Results: UNICEF (89 schools surveyed)	Results: Homa Bay (5 schools surveyed)	Total results Kenya	
Punctional and safe WASH and football facilities are in place but safe wash and football facilities are in place	1	teachers have access to adequate sanitation facilities 26,700* pupils and teachers have access to functional handwashing facilities with flowing water soap and/or ash 100% of targeted girls have access to improved menstrual hygiene facilities	access to improved sanitation and handwashing facilities, of which: • 30,539 pupils and 1.551 teachers have access according to the minimum standard for sanitation • 19,666 pupils and 450 teachers have access according to the minimum standard for handwashing 100%*** of the schools have access to menstrual hygiene management options (menstrual hygiene education not included) 27,257 pupils and teachers have adequate	access according to the minimum standard for handwashing 100% of the schools have access to menstrual hygiene management options	access to improved sanitation and handwashing facilities, of which: • 32.252 pupils and 1.614 teachers have access according to the minimum standard for sanitation • 20.634 pupils and 490 teachers have access according to the minimum standard for handwashing 100% of the schools have access to menstrual hygiene management options (menstrual hygiene education not included)	
	2	of safe drinking water per day per person	access to sale drillning water	access to sale utiliking water	access to sale utiliking water	
	3	100% of the schools have adequate football (sports) fields and materials available that can be used on a weekly basis for training		100% of the schools have access to adequate sports field within 1 km	97% of the schools have access to adequate sports field within 1 km	
Properly managed, maintained, and financed WASH and football facilities (demonstrated	4	have an annual cost-recovery plan	and for 27% of the schools a budget for year maintenance and replacements for	100% of the schools have O&M plan in place, but these do not include a budget for maintenance and replacements for 10 years	and for 26% of the schools a budget for	

	5	100% of the schools (SMCs/ BOMs) have a complete and signed a MoU defining roles and responsibilities in management of all WASH and football facilities for at least 10 years	100% of the schools have a signed MoU	100% of the schools have a signed MoU	100% of the schools have a signed MoU
	6		100% of the schools have a functional SMC/BOM in place, are gender-balanced and have a PTA representative		
organised in e increased on hygienic	7		100% of the schools have an active WASH club (but 1 school does not have a trained teacher in the WASH club)		100% of the schools have an active WASH club (but 1 school does not have a trained teacher in the WASH club)
Children and community are organised in peer to peer groups and have increased knowledge and awareness on hygienic behaviour	8	100% schools have at least one trained active female and male world coach at school and/or in community	99% of the schools have at least one male WorldCoach	100% of the schools have 2 or more WorldCoaches 100% of the schools have at least one male WorldCoach 100% of the schools have at least one female WorldCoach	WorldCoaches 99% of the schools have at least one male WorldCoach
Childr peer	9	46.700* pupils of the pupils receive WASH life skills education on a monthly basis	30,323	1,872	32,195
Increased motivation to practice of good hygienic	10	At least 80% of children show	category of 51-75% and 76-100% that practice handwashing with soap/ash at		practice proper handwashing behaviour at critical times (Number of pupils that in category of 51-75% and 76-100% that practice handwashing with soap/ash at

	11	or excellent in the assessment of cleanliness of sanitation facilities		cleanliness of school grounds 100% of the schools score acceptable on cleanliness for the old and the new	
Long-term outcome and impact indicators (Indirect indicators are there to measure assumptions in Theory of Change)	12	and access to sanitation of	category 76-100% that have access to handwashing with soap/ash at home Increase from 27% to 31% of the pupils in category of 51-75% that have access to a toilet at home or within compound Increase from 26% to 64% of the pupils in	category of 51-75% that have access to handwashing with soap/ash at home 0% of the pupils in category 76-100% that have access to handwashing with soap/ash at home for both baseline and endline Decrease from 43% to 7% of the pupils in category of 51-75% that have access to a toilet at home or within compound 0% of the pupils in category 76-100% with	category 76-100% that have access to
Long-term	13	the schools	Girls' absenteeism dropped from 21% to 10% Boys' absenteeism dropped from 16% to 11%	Girls' absenteeism dropped from 17% to 4% Boys' absenteeism dropped from 15% to 4%	Girls' absenteeism dropped from 21% to 10% Boys' absenteeism dropped from 16% to 11%
	14	Improved enrolment attendance and performance of pupils in schools		232 (baseline 229)	241 (baseline 250)

^{*} UNICEF's original target was 25,000, if 500 pupils per school (and targeting 50 schools). However, the school population was higher; on average of 800 pupils per school (teachers not included). Homa Bay was added in 2018, with an average 340 pupils per school (1,700 in total; teachers not included)

^{**} UNICEF's original target was 45,000, if 500 pupils per school. However, the school population in the 90 schools was higher with an average of 800 pupils per school (72,000 in total; teachers not included). Homa Bay was added in 2018, with average 340 pupils per school (1,700 in total; teachers not included)

^{***} Targets of 100% are set as the consortium strives to reach 100% of targets in all schools. Based on lesson's learned, expected results will range between 80% and 100% in practice. Minimum of 80% is set by implementing partners

Originally, UNICEF Kenya set as targets to reach 25,000 pupils with access to WASH infrastructure and 45,000 pupils with hygiene education. These targets were based on an average of 500 pupils per school and under the assumption that only 50 schools required WASH infrastructure. However, after the inception phase, it was found that school enrolment was much higher (800 pupils on average). In addition, the county governments had allocated additional budget for hardware coupled to F4WASH making it possible for the programme to reach a higher number of pupils with improved access to water and sanitation facilities and hygiene education. UNICEF Kenya provided 84 water additional storage tanks with a capacity of 10,000 litres to improve daily water availability because schools could store water during the dry season.

Sanitary facilities were designed to be child-friendly and gender sensitive. They included toilet facilities for children with disabilities and a washing room for girls as part of MHM. Menstrual hygiene education for boys and girls was given priority together with the distribution of reusable sanitary pads for 6,000 girls considered as "most vulnerable".

The programme aimed at meeting the universal standard for pupil/ stance ratio of 1:50 (Kenya has a stricter ratio: 1:25/1:30), but this standard was only achieved by half of the schools. The main reason is that schools and local authorities were supposed to rehabilitate existing facilities. However, authorities decided to distribute their resources differently. Probably driven by political and ethical considerations, resources were spread to increase reach instead of focus.

In terms of behavioural change, great progress was made regarding cleanliness of sanitation facilities and school environment, and handwashing behaviour, in general. Absenteeism dropped considerable especially among girls. This can be attributed to the improved facilities, including menstrual hygiene management facilities, and life skills training.

In the case of the Homa Bay programme, the results are closer to the set targets for pupil/stance ratio standards. The data showed a remarkable improvement of the pupils' handwashing behaviour. Notwithstanding, the spill-over effect to the communities with pupils acting as change agents did not happen. One reason could be that the Homa Bay programme was implemented later, so it would take longer before seeing any effects on the community.

The main activity to consolidate Phase 1 schools was the WorldCoaches' refresher training in 77 schools. This was especially important for schools where WorldCoaches were transferred and where re-activation of learning was required. Regular refresher training for WorldCoaches is needed in all schools and communities to maintain the WorldCoaches approach.

In addition, UNICEF Kenya carried out WASH rehabilitation activities in ten Phase 1 schools. Table 8 gives an overview of these rehabilitation activities.

Table 8 - Rehabilitation activities: Number of Phase 1 schools and school children

County	Number of schools - Phase 1	Girls	Boys	Total
Kisumu	2	341	415	756
Trans Nzoia	4	1,382	1,313	2,695
Migori	4	1,340	1,254	2,594
Total	10	3,063	2,982	6,045

Success stories in Migory County

- "They (the pupils) no longer see cleaning the toilet as a punishment but as a responsibility", said a teacher from Rapogi mixed school on the success of the programme.
- A head teacher of Saka Primary said "Population inaniua", which is literally translated as "high increase in population is killing me". The teacher attributes the higher enrolment to the better toilets and football games. Organised football using good uniforms makes the school more attractive. Parents also noticed that some students have received sponsorship to high school due to their improved football skills. They therefore want their children to join schools with good football facilities, so their children might become eligible for a sports' sponsorship.
- Anindo Primary school joined the F4W in 2014. Since then, academic performance has improved every year. They also have the best football team in Awendo Zone.

Success stories in Kisumu County

- Kuoyo Kaila Primary School did not have access to reliable water sources or enough sanitation facilities. After three WorldCoaches were trained in WASH life skills activities, they created F4WASH/health clubs' teams, initially with 60 pupils. In two years, the number of members increased to 320. The pupils promote good hygiene practices actively, also at home. Health workers reported that more toilets are built at home.
- Mbeme primary school is in the slums of Manyatta in Kisumu. Before the F4W interventions, open defecation was practiced around the school and neighbourhood. The WorldCoaches and school management jointly developed an action plan to improve the situation. Three football teams (boys, girls, and community) were formed. The boys and girls reached out to the school while the community club informed and monitored the community. Now Mbeme School and the neighbouring community is open defecation free and the number of cases of WASH-related illness reduced. At the same time, girls' absenteeism drastically decreased while the mean score of the national testing exams for public primary schools, which increased from 259.4 in 2017 to 287.5 in 2019. School enrolment has also increased.

Success stories in Trans-Nzoia County

- The main change is having more pupil-friendly teachers. They were trained as WorldCoaches especially on integrating football and life skills. Pupils say that teachers are friendlier. They have many interactions in the pitch, using fun games, and during the WASH clubs' life skills sessions. Girls feel more comfortable to approach teachers for sanitary pads during their menstrual cycles.
- At Amuka Primary School, a very committed WorldCoach also teaches children music to support promoting WASH messages.

7.4 Sustainability

Financial sustainability

The boards of Management from all 90 schools were trained on developing realistic annual cost recovery plans or facility management plans. This included estimating costs and income for operation and maintenance for the coming ten years, including a saving plan for larger maintenance and replacement of the facilities. In Kenya, income generating activities were executed as part of the programme. Nevertheless, the gap between costs and income remains high and schools are not able to bridge this gap alone.

Institutional sustainability

Local ownership and expertise were important components. All boards of management members from 90 schools (450 individuals) were trained and supported to develop action plans on operation and maintenance of WASH facilities. All schools signed a memorandum of understanding, which outlined the roles of the school management to sustainably operate and maintain WASH facilities. The county education office agreed on involving curriculum support officers and quality assurance officers to monitor the status of the provided WASH and football facilities and the proper use of free primary education grants for their maintenance. In addition, a two-day workshop for county directors of education and county quality assurance officers was organised in Kisumu. Participants belonged to F4WASH counties and others. They learned about the school WASH programme and came up with action plan to ensure the sustainability of existing and new WASH facilities through effective monitoring by county quality assurance officers. UNICEF Kenya and Aqua for All facilitated the training on the cost recovery plan tool for representatives of the 90 schools. The schools developed a cost recovery plan and a facility management plan for operation and maintenance of football and WASH facilities.



Environmental sustainability

Environmental sustainability is a standard programme indicator for hardware. International and national guidelines on environmental regulations are followed to build toilets. This ensures safe sanitation, waste collection and re-use, and adequate environmental impact management.

Drought and locus plaques influenced this programme beyond its scope of control. F4WASH used rainwater harvesting and storage tanks to partially mitigate the effects of dry seasons and regular droughts, and to diversify water sources for schools. There were positive results regarding liquid and solid waste management. Cleanliness of schoolgrounds and facilities improved significantly between the baseline and the endline.

Technical sustainability

Amref Kenya trained 15 artisans in Homa Bay area on basic WASH construction skills because this expertise was barely found in the area. The five-day training focused on interpreting designs, theoretical and practical construction skills, and maintenance of facilities. All trained artisans were involved in all stages of construction and operations and maintenance. Therefore, sustainability of the facilities was been included in their expertise. The trained artisans were also involved in government efforts to promote and replicate similar sanitation facilities. The artisans got additional income by charging a small service fee to the community, making it possible to keep up their technical expertise up to date.

Social sustainability

F4WASH Kenya built menstrual hygiene facilities for girls and children with disabilities, which contributed to improved school attendance of these vulnerable groups. All programme activities aimed at achieving gender balance in management committees, WorldCoaches training, school WASH clubs, and community and parent representation. The goal is to involve the entire community, local public sector, and school and children to achieve behaviour change. In Kenya,

not only was training on MHM given to girls, but also to boys and the community to tackle the taboo and make it a discussion topic for everyone.

7.5 Challenges and lessons learned

Building an effective partnership is time-consuming; it takes time and effort to make new partners and their field staff familiar with F4WASH methods and tools. An eight-month implementation period proved too short to implement the programme and promote proper healthy behaviour that could be sustained over time.

Delay in the construction of WASH infrastructure was caused by lengthy procurement procedures of county governments and delay in disbursements to the contractors. In turn, contractors did not complete the construction of sanitation and water facilities within the agreed period. This was tackled by enforcing contract deadlines and replacing non-performing contractors by UNICEF Kenya in cooperation with government institutions. Besides, contractors were trained to improve their construction quality. A quality assurance engineering firm was hired to support supervision.

Football and WASH programme components were not implemented in parallel. The football component was delivered earlier than WASH infrastructure affecting the programme implementation, especially for handwashing as schools started buying their own handwashing facilities to support behaviour.

County commitment and contribution was a key success factor. Leveraging county government resources was crucial to strengthen ownership and create a genuine partnership to ensure future replication and sustainability. The yearly work plan of the county water department now takes into consideration the number of schools in need of water supply, instead of only the community and commercial needs. While in some schools, the contribution for building WASH facilities was challenging; in other schools, head teachers, BOM and WASH focal teachers managed to mobilise in-kind contributions such as stones, sands, bricks, and water. Some schools went the extra mile to install water tanks and rainwater harvesting roof catchment systems using the school budget or mobilising funds from the local "Constituencies Development Fund". In Trans Nzoia county, a secondary school managed to build sanitation facilities for boys and girls by replicating the F4WASH design used in the primary schools.

Community WorldCoaches had a crucial role as community entry point and to organise community sensitisation activities and tournaments. Community contribution and participation were critical to create ownership and sustainability of the new WASH facilities. School provided its contribution before the construction project started to avoid delays.

Inter-sectoral coordination between education, public health, sports, and water sectors in planning and executing interventions aimed at accelerating WASH for schools' implementation rates. It also ensured building quality WASH facilities. The Ministry of Education's involvement was critical for retaining the teachers trained as WorldCoach.

Acquiring life skills requires learning by practice. Without safe and proper WASH facilities, the transfer of behaviour change becomes difficult. The WorldCoaches became WASH coordinators within the schools and monitored the construction of WASH facilities. By doing this, they felt ownership and took pride in it.

8 Country programme in Mozambique

8.1 Context

At the end of Phase 1, UNICEF Mozambique did not continue with F4WASH as their approach was difficult to match with the F4WASH Theory of Change. This posed challenges for the sustainability of the joint interventions because of the centralised governance setting of WinS in Mozambique. VEI and the KNVB continued running the programme in Mozambique in a lighter version. For Phase, 2 VEI set up a partnership with the Frisian Urban Sanitation Programme for implementing F4WASH activities to consolidate and mainstream the programme. FACE and KNVB continued working with football partner ProSport on life skills education. In 2018, ten new schools were included on request of the local government and based on the positive partnership established in Phase 1, which included signing of a MOU between F4WASH and all relevant national ministries.

Mozambique was hit by the cyclone Idai, which landed on 14 March 2019 in Beira. It caused at least 1,300 casualties and over US\$ 773 million in damages. A state of emergency was declared. The newly constructed F4WASH infrastructure in Beira Chimoia (ten schools) and in Phase 1 schools in Beira, Chimoia, Manica and Gondola (34 schools) were severely damaged. In Beira, all toilet blocks lost their roof sheets, front walls fell, and septic tanks were filled up due to the extreme rainfall. Toilet doors taps and water tower tanks were stolen as school guards could not work during and right after the storm. In Chimoia, Manica and Gondola the damage was less severe, but 40% of the toilet blocks lost their roof sheets and all septic tanks were full. More than 131,000 school children and people in the surrounding communities were at risk due to a cholera outbreak. Unaffected schools were used as shelter or distribution centres for emergency supplies. On 27 March, a rapid damage inventory was done. Based on this assessment, an additional funding proposal was submitted to VEI, Aqua for All and Wetterskip Fryslan. From 10 April to 26 June, FACE rehabilitated the infrastructure and organised hygiene awareness raising activities through inter-school football matches and games promoting hygiene education.

Images of the damages caused by cyclone IDAI to WASH facilities in Chimoio, Manica and Gondola, Mozambique









8.2 Highlights

The activities in Mozambique were implemented together with district governments. An MoU was signed with the local government and by the schools, clarifying roles and responsibilities. Support was given to schools to increase financial sustainability by finding options to recover the costs for operations and maintenance of facilities. This and an awareness programme to train WorldCoaches and health teachers with sanitation groups per school contributed to local embedding and ownership by the local government.

Combining life skills training with football activities worked very well. There was a shift in the mindset of the pupils: they now see cleaning activities of football fields or sanitation facilities differently as they realise the benefits of playing in a clean and safe space. Pupils clean the school on their own initiative as part of their daily routine and show improved handwashing behaviour. The F4WASH life skills programme also introduced new methods to ensure children's retention in the training sessions. On Saturdays, children aged 10 to 12 fill the fields with sport activities instead of taking refuge in tobacco and alcohol.

8.3 Results

Phase 1 managed to reach 77,298 children in 34 schools in Chimoio, Gondola, Manica and Beira. Phase 2, which started in 2017, aimed at ensuring sustainability of the work done in Phase 1. Due to the increased school enrolment more facilities and trainings were needed to keep up the standards and repairs had to be made due to the cyclone.

In Phase 2, a total of 22,821 new pupils have been reached with the full F4WASH approach and 89,300 Phase 1 pupils were reached with consolidation activities. Table 9 shows all results for Mozambique in detail.

Table 9. Log frame Phase 2 schools - Mozambique

Reference to Theory of Change	Nr	Targets	Results December 2019
Functional and safe WASH and football facilities are in place	1	(Phase 1) (boys/girls) and teachers have access to adequate sanitation facilities 22,821 new pupils and 89,300 old pupils (Phase 1) and teachers have access to	52,893 girls and 63,328 boys have access to adequat sanitation facilities at the school (116,221 total pupils) 47,693 girls and 57,889 boys have access to adequat handwashing facilities at the school 71,015 pupils always have access to soap/ash 43,198 pupils sometimes have access to soap/ash 24 of 44 schools have access to menstrual hygiene (=54,5% of girls) ** Pupil stance ratio is reached for only 22,821 pupils Schools operate in shifts in Mozambique
nal and safe W	2	22,821 new pupils and 89,300 old pupils and teachers have adequate access to at least 5 litres of safe drinking water per day per person.	100% of schools have access to a water facility within 100 r
Functio	3		34 schools (77%) have access to a football field. 29 school have access to a football field during school hours. 1
Properly managed, maintained, and financed WASH and football facilities (demonstrated stakeholder involvement)	4	100% of the schools (SMCs/ BOMs) have an annual cost-recovery plan (CRP) or facility management plan (FMP) estimating costs and income of and for O&M including a saving plan for larger maintenance and replacement for 10 years	* No data in Mozambique on cost recovery plan for 10 years a this is centrally arranged. All schools have been trained of funding O&M
ed, maintained, ed; ilities (demonst involvement)	5	100% of the schools (SMCs/ BOMs) have a complete and signed a MoU defining roles and responsibilities in management of all WASH and football facilities for at least 10 years	100% of schools have an MOU in place for operation ar maintenance of the facilities for 10 years.
Properly manage and football fa	6	management committee (SMC) or Board of Management (BOM) and at least 80% of	79,5% (80%) have a gender-balanced SMC (25% or mo
nity are er groups owledge /gienic	7	100% of the schools have an active school health, hygiene, or WASH club (or related institute) distributing knowledge of hygiene to pupils	100% of the schools have an active school health, hygien or WASH club in the school
Children and community are organised in peer-to-peer groups and have increased knowledge and awareness on hygienic behaviour	8	100% schools have at least one trained active female and male world coach at school and/or in community	135 WorldCoaches were trained at school and community An estimated 30% of schools have reported to have female WorldCoach at the school. 30% for new schools ar 32% for consolidated schools *However, 41 female coaches were trained in 44 schools.

	9	22,821 new pupils and 89,300 pupils receive WASH life skills education on a monthly basis.	103,034 pupils receive WASH life skills education on a monthly basis.
ed on to good iic	10	At least 80% of children show handwashing behaviour of WASH facilities.	No data available
Increased motivation to practice of good hygienic behaviour	11	100% of schools score acceptable or excellent in the assessment of cleanliness of sanitation facilities and general school grounds (indication on proper use)	50% of schools score acceptable or excellent on cleanliness of sanitation facilities. 54% of schools show no signs of open defecation.
Long-term outcome and impact indicators (Indirect indicators are there to measure assumptions in Theory of Change)	12	Improved awareness on hygiene, and access to sanitation of parents and families due to influence of pupils.	In 22 schools out of 44 total (=50%) 75%-100% of pupils have access to safe sanitation at home. In 14 schools, the coverage is between 50% and 75%. In 8 schools, the coverage is below 50%. In 23 schools out of 44 in total (=51%), 75%-100% of pupils have access to safe water at home. In 16 schools, the coverage is between 50% and 75%. In 5 schools, coverage is below 50%.
Long-term outcome (Indirect indicators assumptions in	13	Improved attendance of pupils (boys/girls) at the schools	*** In Mozambique, no data was collected on attendance in comparison with baseline
	14	Improved performance of pupils in school	*** In Mozambique, no data was collected on performance

^{***} Targets of 100% are set as the consortium strives to reach 100% of targets in all schools. Based on lessons learned, the expected results will range in practice between 80% and 100%. The implementing partner set 80% as minimum.



Observations

WorldCoaches and teachers observed the following behaviour changes among pupils:

- After training, children organised themselves to wash their hands and drink water
- Children developed teamwork spirit and responsibility. They can replace coaches in the case of delays
- Improvements in technical football skills (passing, shooting, driving, etc.)
- More respectful ways to express themselves within the group
- Children developed fair play and solidarity spirit among the group.
- Children started explaining their peers about WASH and its integration at the school health club

Success Stories

- WorldCoach Samuel Baltazar from Consito school reported: "None of my athletes had
 cholera problems after cyclone Idai because they put into practice the skills they learned.
 All children have better physical hygiene; their bodies and clothes are cleaner, not only
 when they do sports."
- Another WorldCoach says: "I graduated as WorldCoach in 2016. Since then, I have been training girls and none of them got pregnant."
- WorldCoaches Martins and Carlitos from EPC Sovin, Sofala, Nhamtanda district, gave training on Tuesdays and Thursdays. The community appreciated their work and dedication. When it set up a football team, they were asked to train it in the school field.
- WorldCoach Manuel, from EPC Malitene in Tete, Angonia district, mentions that one day
 before the training session the athletes went to ask for buckets and cleaned the latrines
 on their own initiative as they found they were dirty. Subsequently, he was praised by the
 school board because of this action by his students.
- EPC Malitene holds an inter-school tournament with Dziede and Guebuza schools. Football
 competitions are linked to games on WASH for children. Prizes are balls bought by schools'
 directors. In Vila, schools participate in a U15 municipal championship for boys and girls
 between May and September that includes various neighbourhoods. The championship
 organised by the District Service for Education, Youth and Technology runs from January
 to July.
- EPC Malitene in Angonia (Tete) uses alternative materials for training sessions and competitions. They produced 150 cones with pet bottles, which was the idea of a 6th grade student.
- To discourage children from going out at night, WorldCoaches told the pupils that whoever
 was found on the street would not be allowed to participate in the planned exchange visits.
 This reduced the risk of substance abuse, early marriage, teenage pregnancy.

8.4 Sustainability

When the facilities were ready, they were handed over to the schools that are responsible for operations and maintenance. During kick-off meetings, schools received a detailed list of activities and items to be purchased to keep the facilities in good conditions. The advantage of the toilet blocks' design is that blocks are robust and maintenance costs are low. School management and school boards got training on the funds they can use for the operations and maintenance, such as direct funds from the government and parental/community contributions. The district services of education have the task to facilitate and supervise the schools. Experience showed that regular monitoring and interactive training with all schools contributed to solving many day-to-day issues.

Water quality and quantity

The Mozambican Water Company FIPAG oversees the monitoring of drinking water. To make sure enough quantity of drinking water at schools, water reservoirs were constructed. The septic tanks of school toilets were sealed to avoid any contact with ground water. The municipality was responsible for the emptying septic tanks and hired specialised companies for this purpose. The sludge was disposed either at the wastewater treatment plant (Beira and Chimoio) or at drying beds on the municipal landfill. These measures minimised the impact on water quality.

Financial sustainability

All schools were connected to FIPAG's water distribution network. Based on the schools' financial plans, the monthly water bills were paid by the district or provincial education departments. Schools could use funds received from the Ministry of Education for purchasing cleaning materials and small maintenance works. Parental contribution provided alternative funds for maintenance works. The operation and maintenance costs of the toilet blocks are low, and the system does not use water for flushing. To control water use (and costs) by children for handwashing, Veronica buckets are provided that can be used even when the regular water source is not available.

Institutional sustainability

Institutional sustainability is included in the roles and responsibilities of the different stakeholders. They are captured in a memorandum of understanding signed by:

- The municipality: As the formal owner of the school infrastructure, it takes the responsibility for emptying of the septic tanks and does regular monitoring.
- The District Service of Education is the main implementing partner for activities. It is responsible for the integrated school management and the formal employer of the school directors. It is critical for distributing funding, paying water bills, monitoring, and training.
- The school management is the daily operator of school toilets and water system. It was trained on planning and budgeting.

Environmental sustainability

To prevent pollution, the school sanitation system is closed to avoid contact with the environment. Bins are provided for waste collection. Depending on the municipality's collection service, the waste is either taken to the municipal landfill or buried and burned on site which is, unfortunately, a common practice in Mozambique.

Technological sustainability

VEI/FUSP provided three designs of pupil sanitation and water facilities depending on the size of the school and female/male ratio. The design of the toilet blocks is robust, easy to clean and accessible to anyone. The toilets were built in a central and visible location to facilitate supervision. Local materials were used making it easy and cheap to maintain. The system does not use water for flushing, which reduces operational costs. The vent pipes are protected from vandalism by building a brick structure around them and lights are installed to facilitate control of the toilet blocks during the night.

Social sustainability

The toilet blocks were much appreciated by the students and the school staff. The toilets were very well used, reducing completely open defaecation around the schools. There are separate facilities for boys and girls and the toilets are accessible to children with disabilities. The school community and parents were also trained on the importance of WASH and basic hygiene. The toilet blocks for girls have one bigger compartment with a drainage where water is provided.

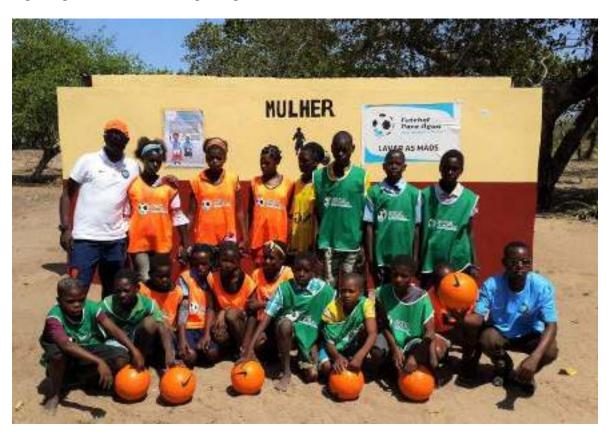
8.5 Challenges and lessons learned

In Phase 2, the strategy focussed on embedding the approach in the local systems to bridge the gap between national policy and local practice. Sustainability of the interventions remained a challenge, also regarding proper hygiene education. To mitigate this, FACE hired school sanitation activists who visited all schools at least bi-weekly for monitoring and implementing activities with school health clubs to communicate on proper WASH. School health teachers were responsible for setting up, training and assisting school health clubs, but in practice they lacked enough time in their schedule to do this; Hence, more staff should be trained in the future.

Other factors hampering the sustainability of educational and hardware interventions were:

- People constantly change from position. Every year, new school directors, new health teachers, new cleaning staff, new technicians and the management and the district service of education needed training on school hygiene and sanitation.
- Mozambique still ranks in the top 10 of world's poorest countries. In general, there were
 not enough governmental funds and means available to support and invest in the public
 facilities needed in the country. Over the last years, Mozambique's economy suffered from
 some huge loan scandals, which increased the problems.
- At the same time, population increases rapidly, which urges for expansion of facilities.
- Schools and district services of education must be very creative to keep the schools running and the facilities maintained. They need constant support and monitoring to keep sanitation on the agenda.

Not all the selected WorldCoaches were suitable for the programme and it was difficult to find sufficient female coaches. Part of the problem was the limited pool of potential WorldCoaches as they were selected by the schools and many did not have any physical education or health background, unlike the coaches in Kenya and Ghana. Another issue was the regular transfer of teachers between schools without any system set in place to replace them with other trained WorldCoaches. Because the WorldCoach position is voluntary and without renumeration, it is difficult to retain them. Including more community coaches, especially community members who had a real potential in sport and life skill training, would broaden the coaching pool. Finally, there is still stigma on girls participating in sport activities as well as distrust of parents and caretakers regarding male coaches working with girls, which will take more time to overcome.



9 Conclusion

From 2012 to 2019, F4WASH successfully reached 740,000 school children, staff, and community members in 749 schools with access to safe WASH and football facilities and with football-led hygiene and life skills education. Stakeholders, such as the government, private sector, and civil society, were mobilised to ensure sustainability of the facilities and the achieved behaviour change.

The results of the mid-term review and Phase 1 showed that it is critical to keep proper alignment between football and WASH implementation. This improved in Phase 2 among implementing partners, but the lesson learned was that such partnerships with public setting take more time to establish and align. Government procedures were lengthier than anticipated, which delayed the start of the construction of WASH facilities. As a result, hygiene activities were interrupted as the WASH facilities were not in place. This was not anticipated at the start of the programme. Besides this, elections caused considerable implementation delays in Kenya, and to a lesser extent in Ghana. Despite these challenges, Phase 2 was implemented according to plan and with positive results.

Whereas there were initial high expectations to collaborate with (local) private actors for funding and engaging business-minded capacities, it did not sufficiently happen. To the contrary, the government showed interest to take the initiative further, and the sustainability of the approach was primarily found in integrating the model into local systems.

The outcomes of the programme show that this innovative model has the potential to provide a sustainable solution for WinS. The model also proves to add value in achieving the desired behaviour change required for health impact. The urgent need for an effective methodology on hygienic behaviour change, like F4WASH, was exposed again by the COVID-19 crisis. This pandemic also put the programme approach to the test with positive results so far. The Ghana government tweeted that F4WASH schools were found to be better equipped to ensure proper hygiene and handwashing behaviour to face COVID-19.

Looking back at eight years of pioneering, piloting, learning, and developing the F4WASH programme and approach, the team is proud of what has been achieved by all stakeholders. The approach was first tested in three different countries in 2012. Nowadays, it is at the point that the Kenyan government is eager to integrate and mainstream critical elements of the model into their curriculum and national WinS policy. In turn, the Ghana government is exploring something similar. The team was very motivated to take the programme to the next level to embed the model in the local systems in Kenya and Ghana during a Phase 3. The team is still convinced – based on the programme outcomes, proof of concept and end of phase evaluation – that this innovative model gives a sustainable solution for WinS, although it requires perseverance, time and courage of partners, funders, investors, governments and other stakeholders to move along this path.

Finally, on behalf of the F4WASH consortium, its partners, stakeholders and, especially the pupils, their families and communities, the programme coordination team would like to express its gratitude to DGIS for trusting and funding this innovative programme. For eight years, the team had the opportunity to learn and develop the approach whilst improving the lives of more than 740,000 people. The positive impact will continue even after Phase 2 comes to an end, through our committed partners, WorldCoaches, public and private stakeholders and, above all, through the serviced schools, their children, and communities.

ANNEX 1. F4WASH Theory of Change

According to its Theory of Change (see Figure 2), the F4WASH final outcome is: "All children practice sustainable and good hygienic behaviour at school". To reach this ambition, the Theory of Change is built on three integrated pillars:

- 1. Ensuring e (availability of) well-placed WASH and football facilities at schools, with quality products and proper monitoring systems for insight in functionality, operations, and maintenance.
- 2. Improve the enabling environment that can ensure that schools have sufficient resources to guarantee functionality, operations and maintenance on football and WASH facilities.
- 3. Empower, organise, and inform schools and motivate school children and their community for sustainable WASH and the importance of hygienic behaviour.

These cross-cutting elements in the Theory of Change are critical for building a locally owned and sustainable programme.

1) Sustainability

Sustainability lies at the heart of F4WASH Phase 2. Without a proper vision and strategy, as well as a clear and firm agreement on sustainability, the programme cannot deliver lasting and durable results. Therefore, the consortium takes the FIETS Framework into account in all steps throughout the Theory of Change. The FIETS framework leads the consortium in assessing all steps on Financial, Institutional, Environmental, Technical and Social Sustainability.

To ensure proper involvement of all stakeholders (a condition for sustainability), the programme implementation only starts after a memorandum of understanding has been signed- to clarify, validate and agree on the implementation roles and rules by all stakeholders. The memorandum of understanding identifies how the schools and communities will benefit from the programme and spells out the roles, responsibilities, and accountability of all local stakeholders. It describes all aspects that lead to sustainability of the outcomes, O&M and capacity building, such as: the Purpose of the programme; Outputs of the programme, including capacity strengthening components; Roles and responsibilities of each stakeholder (both local stakeholders as well as implementing partners); Description of specific programme components such as construction/renovation of WASH facilities and football/ sports facilities; life skills training; embedding football activities in school health programme; Operation & Maintenance, M&E; Cost Recovery Plans for continued F4WASH interventions in consecutive years; and budgeting.

2) Institutionalization and embedding

It is of vital importance that the F4WASH programme links to national systems that are already in place, as it must pertain to and/or improve national standards, procedures, and regulations as much as possible. F4WASH will not only ensure embedding in local systems but will also align the programme with recognized standards in the WASH sector. As said above, the programme implementation only starts after a memorandum of understanding has been signed. As such, the MoU provides a basis for local government parties to incorporate the selected schools in the districts planning and budgeting system and will also be signed by the School Management Committee (SMC) and the Parents Teacher Association (PTA). Hence, the memorandum of understanding represents local ownership with district authorities, school management and community engagement.

From the side of football, the programme delivers sports, healthy behaviours and WASH life skills which will be embedded in the district school system and linked to a network of community WorldCoaches. At the end of the programme, both hygiene behaviour change interventions and operation and maintenance of WASH and football/sports facilities will be fully institutionalized and embedded by local stakeholders and integrated in the budgeting process.

3) Selection processes

The selection of schools will be done in full consultation with the national and local governments and other relevant stakeholders, and the selected schools will be among the national priority schools that need WASH. To safeguard our impact in the wider communities around the schools, existing, or ongoing Community Led Total Sanitation (or other sanitation promotion/campaigns) is a precondition for F4WASH to start in a school. Community involvement is a prerequisite for a sustainable programme. Access to water in the communities as pre-condition is to be considered too. It is important to mention that schools that participate are clustered (fall within a certain boundary) that allows for low-cost exchange of sports activities among schools, and that the selected schools must have been introduced to the F4WASH programme, from where School Management Committees, Parents and Teachers Associations and local authorities have agreed to participate actively. Ergo, we will focus on areas where all relevant authorities who take part in F4WASH have planned for the F4WASH programme and have together made a cost recovery plan to implement F4WASH, based on a signed memorandum of understanding.

4) Gender sensitivity

F4WASH is a programme that is not only gender sensitive, but actively seeks to involve and empower girls. The first phase of the programme has shown some challenges (e.g. less female teachers involved in WorldCoaches trainings, not sufficient girls' changing rooms), but at the same time has proven to successfully address local issues with girls' confidence and hygiene (e.g. less taboo on menstrual hygiene and higher school attendance by girls). In the second phase of the programme the consortium aims to build on these best practices and continues to emphasize the strengthening of the position, self-confidence, football participation, and menstrual hygiene behaviour and school attendance of girls. All the programmes interventions will be demand-driven and needs based, being sensitive to local and cultural incentives and with a specific focus on girls and women as change agents. There are going to be facilities separate for boys and girls, female and male WorldCoaches and the programme continues to focus on the position of girls also in the training.