



Promoting Hand Hygiene Through Innovations and Small Businesses in Ghana

Summary

Less than 50% of Ghanaians practice safe hand hygiene in Ghana (MICS 2017/18). As a result, the potential impact of disease outbreaks like cholera puts the lives of the populations at risk. As a component of its Sanitation Marketing (SanMark) programme, UNICEF Ghana, in recent years, - has been partnering with various state agencies and civil society organisations to identify and support private innovators and small businesses engaged in the production and supply of hand hygiene related facilities and materials. The support includes (i) establishment of local supply chains for hand hygiene products and (ii) promotion of innovation in partnership with private sector entities. Through the interventions, it has been learnt that a number of Ghanaian youth are innovative and are capable of seizing opportunities in disasters and other emergency situations to innovate solutions. It has also been learnt that even though several hand hygiene-related small businesses exist, they lack the capacity to expand. UNICEF will continue to partner with state agencies and CSOs to support and promote innovation and small businesses in hand hygiene.

Introduction

Since the early 2000s, practitioners in Ghana's Water, Sanitation, and Hygiene (WASH) Sector, have highlighted hygiene promotion in their programmes. Hygiene promotion mainly focused on handwashing with soap at critical times. Spearheaded mainly by the Community Water and Sanitation Agency (CWSA), and keenly supported by development partners and CSOs through mass media and community outreach programmes, handwashing with soap has been promoted as a major component of every WASH intervention. The sustained advocacy for integration of hygiene in water projects culminated

in the National Water Policy (2008) setting a policy objective to maximize health benefits through integration of water, sanitation, and hygiene education interventions, and ensure that all water supply projects have budgets allocated to sanitation delivery and hygiene education. By 2011, a National Handwashing Strategy had also been developed.

These national efforts paid off, albeit slowly, as the latest Multiple Indicator Cluster Survey (MICS, 2017/2018) report indicates that 48% of Ghana's population had access to handwashing facilities. This shows steady progress from 11.9% in 2011 (MICS, 2011) and 20.9% in 2014 (DHS, 2014).

KEY POINTS

- Less than 50% of Ghanaians practiced safe hand hygiene as of 2018.
- The outbreak of COVID-19 has revealed the gaps in hand hygiene promotion in Ghana, while it has at the same time unveiled creativity and innovativeness in Ghanaians to respond to emergencies.
- UNICEF support for hand hygiene focuses on establishment of local supply chains and promotion of private sector innovations.
- It has been learnt that continuous support for private innovators and businesses in hand hygiene products can contribute effectively to improvement in hand hygiene practice and health in Ghana.

The outbreak of the global COVID-19 pandemic in 2020, however, revealed a huge gap especially in the production and supply of facilities for effective hand hygiene practice. It was after the outbreak that institutions, shops, markets, lorry stations, healthcare facilities etc. were all chasing handwashing facilities, and some of them enforcing the practice as a condition for entry into the various services and institutions. In most areas, water supply became a major hindrance to the call for intensified handwashing even after the President had ordered free supply of water nationwide to prevent the spread of COVID-19.

The momentum for handwashing created as a result of this pandemic has no doubt given Ghana the opportunity to build on previous and on-going efforts and make hand hygiene a social norm in this crisis period and also during the recovery and post recovery periods. This means making sustainable hand hygiene products and services such as improved handwashing facilities, regular supply of water, soap, and hand sanitizers available and always accessible to all. Thus, a multi-faceted approach including mobilizing the

private sector, civil society organisations, academia, donors, traditional and religious leaders etc. is required.

BOX 1.

COVID 19 EXPOSED MAJOR HAND HYGIENE GAPS

The outbreak of the global COVID-19 pandemic in 2020, however, revealed a huge gap especially in the production and supply of facilities for effective hand hygiene. It was after the outbreak that institutions, shops, markets, lorry stations, healthcare facilities etc. were all chasing handwashing facilities

In response to this challenge, the Government of Ghana needs to review the national handwashing strategy originally developed in 2011, to broaden and incorporate all the emerging issues in hand hygiene in the country. UNICEF has accordingly been partnering with various government institutions to explore ways to promote and entrench a sustained culture of hand hygiene through the GoG-UNICEF WASH Programme.

Description of intervention

Focusing on the two main strategic objectives of establishing local supply chains for hand hygiene products and promoting related innovations in partnership with private sector entities, UNICEF has supported the Government of Ghana to undertake several interventions, some of which have been described below:

Establishment of local supply chains

Fabrication and distribution of group handwashing equipment with GRATIS

GRATIS Foundation is a technology transfer, training and manufacturing organization operating in Ghana. The UNICEF-GoG WASH programme selected 52 schools in the Greater Accra and 60

Schools in the Upper East Regions to be supported with Water, Sanitation and Hygiene (WASH) equipment in 2020. The equipment included group handwashing facilities and Veronica Buckets. GRATIS was commissioned by the GoG-UNICEF WASH Programme to undertake design, fabrication, distribution, installation of and training on the handwashing facilities. The 'special' Group Handwashing facility was subsequently developed. It was very simple, consisting of two valves: one for opening all the ten drip points and the other for a single handwashing outlet. These facilities induced improved handwashing behaviours not only as a measure to minimize the spread of COVID-19 but as a means of inculcating the habit of handwashing in children.

Figure 1: School children of Gbedema Primary in Builsa South district, Upper East Region of Ghana, practicing Handwashing with facilities provided



Strengthening the Capacity of Businesses and Artisans in production of Handwashing Facilities

UNICEF initiated and is supporting the government initiative to strengthen the capacity of businesses and artisans in local production of handwashing facilities and supplies. The initiative fits into the overall objective of the Market Based Sanitation (SanMark) programme. In this regard, some 82 micro, small and medium-sized enterprises (MSMEs) were supported in the

production of soap and handwashing facilities in collaboration with the Ghana Enterprises Agency (GEA). This programme was initiated in response to the increased demand for hand hygiene products in the wake of the COVID-19 pandemic.

The programme was also designed in collaboration with a CSO partner, Rural Water Development Programme (RWDP). The project is funded by Global Affairs Canada, Government of Japan, and the Embassy of the Kingdom of the Netherlands. In addition to enhancing handwashing practice through the initiative, the project provides livelihood opportunities especially for women through production and sale of soap and hand sanitizers.

Figure 2: Welders in a handwashing fabrication training in Yendi Municipality, Northern Region, Ghana



Figure 3: Trained soap-makers in Kadjebi district, Oti Region, Ghana, displaying their wares



Promotion of private innovations Hand Hygiene Technology Challenge with KNUST

The COVID-19 pandemic triggered numerous private sector innovations in handwashing devices in response to the demand. These innovations contributed immensely to making handwashing devices more accessible during the peak of the pandemic in 2020 and 2021. However, gaps still exist. New innovations mostly targeted institutions and only a few were designed for household use. In addition, prices of facilities were high and therefore out of reach for many households. There were also operation and maintenance challenges and lack of after-sales services to ensure sustainability of hand hygiene service delivery. There was therefore the need to support more private sector innovative interventions to improve hand hygiene technology, material supplies and hygiene behaviour.

The GoG-UNICEF WASH programme therefore organized a Hand Hygiene Technology Challenge (HTC) in 2021, as a follow-up to a Sanitation Technology Challenge it organized in 2015 in collaboration with the Kwame Nkrumah University of Science and Technology (KNUST), the TREND Group and the Ghana Enterprises Agency (GEA).

Objectives of the hand hygiene challenge

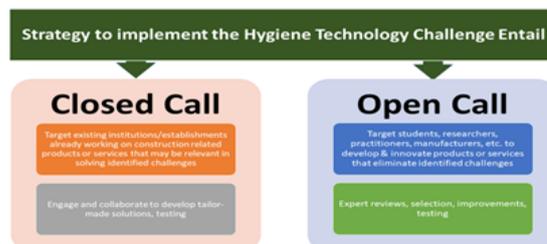
The Hand Hygiene Technology Challenge sought to make hygiene habitual and its products accessible and it focused on creating useful knowledge that would promote sanitation and hygiene entrepreneurship. More specifically, the HTC sought to:

- Replicate and upscale the adoption of effective hygiene products;
- Introduce new and innovative hygiene technologies and products to bridge the affordability and functionality gaps;

- Support mass production and establishment of supply chains in partnership with the GEA.

Strategy for the challenge:

Figure 4: Calls for entry into the hand hygiene challenge



Challenge process:

Figure 5: Processes involved in the hand hygiene challenge

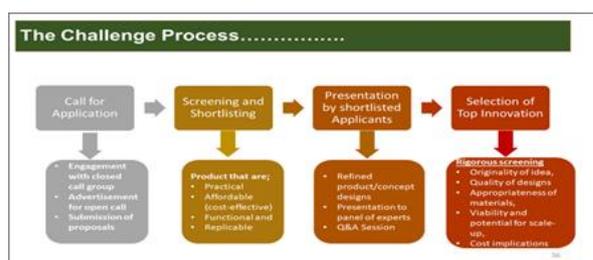


Table 1: Selection criteria, process, and post selection activities

| Selection Process | Selection Criteria | Post-Selection Activities |
|--|--|---|
| <ul style="list-style-type: none"> • Screening and shortlisting • Presentation by shortlisted applicants • Selection of top 5 innovations for award | <ul style="list-style-type: none"> • Originality of idea, • Quality of design, • Appropriateness of materials, • Viability and potential for scale-up, • Cost implications. | <ul style="list-style-type: none"> • Workshops for model building, • Support product utilization, monitoring and documentation, • Support mass production of selected products, • Establishment of supply chains and business models with the GEA |

The Akoben Hand Hygiene Fair and Seminar

The GoG-UNICEF WASH programme organized a two-day Hand Hygiene Fair in August 2021 for manufacturers of sanitation and hand-hygiene products and facilities to showcase and sell their innovations, as the fight against the coronavirus disease (COVID-19) raged on. The Ghana Enterprises Agency (GEA), in collaboration with

the Ministry of Sanitation and Water Resources (MSWR), UNICEF partnered to organize fair.

Alongside the Akoben Hand Hygiene Fair was a seminar with the objective to create a platform for information sharing on the Hand Hygiene for All (HH4A) initiative and the role of the private sector; to identify hand hygiene business opportunities and challenges and build consensus on the way forward; and to initiate a process towards establishing a Private Sector Platform for Hand Hygiene.

This maiden hand hygiene seminar for private sector engagement revealed several business opportunities in hand hygiene, ranging from manufacturing to distribution. This, however, requires the right enabling environment to thrive. Government and partners expressed commitment, and CSOs expressed willingness to support.

Compilation of a compendium

Another way that UNICEF has demonstrated commitment to promotion of private innovation and investment in hand hygiene in Ghana is the

Figure 6: Frontpage design of the Compendium



collaboration with the Community Water and Sanitation Agency (CWSA) and the Ghana Enterprises Agency (GEA) to compile a compendium of hand hygiene facilities, most of whose manufacture had been triggered by the need to respond swiftly to the fight against COVID-19. The Compendium has photographs, profiles of the innovators, usage, and detailed description of about 24 different hand washing facilities, most of which were innovated in Ghana.

Preliminary outcomes

The GoG-UNICEF project interventions in hand hygiene in recent years have generated encouraging outcomes and have begun to chart the path for similar interventions in the country.

The **collaboration with GRATIS** has resulted in the design and manufacture of the Special Group Handwashing facility, several of which have been distributed to 110 schools in two regions, and which have provided access to improved hand washing facility for children from those schools.

Strengthening the Capacity of Businesses and Artisans in production of Handwashing Facilities with GEA

resulted in a total of 32 metal welding artisans and 50 members of Village Savings and Loan Associations (VSLA) being identified and trained to produce handwashing devices and soap respectively. They went through hands-on technical and business enhancement training (using the Kaizen approach) on production of various types of handwashing devices and soap. With support from the various district assemblies, GEA led the selection of trainees and subsequently trained them on entrepreneurship development. GEA continues to provide Business Development Services (BDS) to the trainees, including on-the-job coaching and mentoring, to those who decided to seize the opportunity to grow a business out of the training.

The Hand Hygiene Technology Challenge with KNUST resulted in innovation of various handwashing facility designs including foot

operated taps, multiple tap products, bucket/container designs, valves or tap fitted designs, stands, and wastewater disposal systems, most of which have been applied in the field and providing access to improved handwashing facilities to households and institutions.

BOX 2.

THE PEOPLE ARE READY TO INNOVATE

The country is ... endowed with young people ready to explore opportunities in situations like medical emergencies (such as COVID-19) and innovate income-yielding solutions

The Akoben Hand Hygiene Fair and Seminar provided private hand hygiene innovators the platform to exhibit and demonstrate their products in public to begin the process of business development. The seminar added another dimension to discuss a way forward with these innovations and the roles that different actors including government, development partners and CSOs could play to promote these hand hygiene businesses and products.

The **Compilation of the compendium** in collaboration with CWSA has contributed to product visibility in that it provides detailed information on some of the available hand washing products innovated in Ghana and details of their manufacturers. It can link prospective buyers/users to the producers, support the expansion of the hand hygiene business and ultimately contribute to improved practice of hand hygiene and health in Ghana.

Lessons learned

The outbreak of the COVID-19 global pandemic alone is enough lesson that Ghana needs to

quickly find ways to innovate, increase production, supply and use of hand hygiene facilities and materials. As part of the GoG-UNICEF WASH interventions during the outbreak, it was realized that for people to respond faster to the need to practice appropriate hand hygiene, availability of the appropriate facilities and materials especially for special categories of people and institutions are critical but quite limited in the country.

Another major lesson from the interventions is that there are local institutions capable of supporting artisans and small businesses with technical and business capacity development. For instance, while GRATIS proved to be very capable of supporting welders to learn about how to manufacture customized handwashing facilities, Rural Water and Development Programme (RWDP) also proved to be capable of mobilizing artisans and small businesses and facilitating capacity building sessions. The Ghana Enterprises Agency (GEA) has also proved to be capable of assisting and guiding small businesses in business expansion and promotion of services.

The country is also endowed with young people ready to explore opportunities in situations like medical emergencies (such as COVID-19) and innovate income-yielding solutions. When compiling the Compendium of hand hygiene facilities, it was observed that many of the hand washing facilities listed were innovated in response to the COVID-19 emergency. In a similar fashion, it was learnt that several small businesses ventured into the production of liquid soap and hand sanitizers.

At the Hand Hygiene Technology Fair, the over 70 exhibitors demonstrated that people are willing to explore opportunities to promote and expand their hand hygiene businesses. This willingness was also demonstrated during deliberations at the Hand Hygiene Seminar.

Another lesson is that people genuinely need support in capacity strengthening for business development and affordable and sustainable

business financing models. Even though the welders, soap-makers, and other related small businesses can innovate, most of them are hardly able to grow beyond the micro trading level on their own. Most of them can in fact become real sustainable businesses only through capacity support from external agencies including government and other development partners.

BOX 3.

THERE IS NEED TO SUPPORT BUSINESS DEVELOPMENT

... people genuinely need support in capacity strengthening for business development and affordable and sustainable business financing models.

Next steps

UNICEF will continue to partner with District offices of GEA to support the local producers and artisans through business development services to formalize their businesses and build their capacities to be able to access credit from financial service providers to expand their businesses. In addition, they will be supported technically on product marketing that target individual / household and institutional needs as well as facilitate linkages with potential markets. UNICEF support will also target expansion of skills to cover maintenance of hand hygiene facilities, while the programme explores the possibility of establishing soap-making artisan teams at the district level to enhance supply chain development.

BOX 4.

UNICEF WILL SUPPORT BUSINESS DEVELOPMENT

UNICEF will continue to partner with District offices of GEA to support the local producers and artisans through business development services to formalize their businesses and build their capacities to be able to access credit from financial service providers to expand their businesses

UNICEF will also continue to collaborate with the GEA to make further interventions including creation of a directory and a platform of private sector hand hygiene actors. There will also be more capacity building programmes on business and/or product registration/patenting, as well as product finishing, branding, packaging, and promotion. The compendium will also continuously be updated to provide practitioners and users information on more emerging hand hygiene facilities.

References

Ghana Statistical Service (2011 & 2018): Multiple Indicator Cluster Survey.

Ghana Statistical Service (2014): Demographic and Health Survey.

World Health Organization (2017): Global Health Observatory data repository/Ghana.

GRATIS Foundation (2020): Report on fabrication, installation, distribution of group hand washing equipment and Veronica Bucket for selected schools in the Greater Accra and Upper East Regions of Ghana.

UNICEF Ghana (2021): Private Sector Engagement in Hand Hygiene Hand Hygiene Seminar report.

UNICEF Ghana (2021): A Compendium of Handwashing Facility Innovations in Ghana: Information on innovations.

Rural Water and Development Programme Ghana (2020): Report on rapid and detailed WASH assessment in selected schools and health facilities in Ghana.

Rural Water and Development Programme Ghana (2020): Report on practical and business management (KAIZEN) training workshop for selected welders on how to fabricate different types of hand washing facilities that can be used at households and institutional levels.

UNICEF/KNUST/TREND/GEA: The Sanitation and Hygiene Technology Challenge: The Closed Call (PowerPoint Presentation).

Photo Credits

©UNICEF/UN200111/Kassim

Acknowledgements

UNICEF Ghana would like to acknowledge the leadership of the Ministry of Sanitation and Water Resources, Ministry of Local Government, Decentralization and Rural Development, and Ministry of Trade and Industry, as well as management and staff of the respective state agencies including the Ghana Enterprises Agency, GRATIS, and the Community Water and Sanitation Agency. UNICEF again acknowledges the support of CSOs especially Rural Water Development Programme. Special thanks also go to the Global Affairs of Canada, one of the donors, for their financial support for this programme. Special mention is also made of artisans, innovators and entrepreneurs in hand hygiene, the UNICEF Ghana WASH Team, as well as all key stakeholders in Ghana's WASH sector for their wonderful inputs and contribution of ideas and suggestions.

About the Authors

The author, Emmanuel Addai, is a Communication and Knowledge Management Expert with 20 years' experience in writing extensively on WASH issues in Ghana, having worked for international development organizations and also undertaken consultancy assignments on various projects supported by UNICEF, the World Bank, USAID among others.

About the Series

UNICEF's water, sanitation and hygiene (WASH) country teams work inclusively with governments, civil society partners and donors, to improve WASH services for children and adolescents, and the families and caregivers who support them. UNICEF works in over 100 countries worldwide to improve water and sanitation services, as well as basic hygiene practices. This publication is part of the UNICEF WASH Learning Series, designed to contribute to knowledge of good practice across UNICEF's WASH programming. In this series:

Discussion Papers explore the significance of new and emerging topics with limited evidence or understanding, and the options for action and further exploration.

Fact Sheets summarize the most important knowledge on a topic in few pages in the form of graphics, tables and bullet points, serving as a briefing for staff on a topical issue.

Field Notes share innovations in UNICEF's WASH programming, detailing its experiences implementing these innovations in the field.

Guidelines describe a specific methodology for WASH programming, research or evaluation, drawing on substantive evidence, and based on UNICEF's and partners' experiences in the field.

Reference Guides present systematic reviews on topics with a developed evidence base or they compile different case studies to indicate the range of experience associated with a specific topic.

Technical Papers present the result of more in-depth research and evaluations, advancing WASH knowledge and theory of change on a key topic.

WASH Diaries explore the personal dimensions of users of WASH services, and remind us why a good standard of water, sanitation and hygiene is important for all to enjoy. Through personal reflections, this series also offers an opportunity for tapping into the rich reservoir of tacit knowledge of UNICEF's WASH staff in bringing results for children.

WASH Results show with solid evidence how UNICEF is achieving the goals outlined in Country Programme Documents, Regional Organizational Management Plans, and the Global Strategic Plan or WASH Strategy, and contributes to our understanding of the WASH theory of change or theory of action.

COVID-19 WASH Responses compile lessons learned on UNICEF's COVID-19 response and how to ensure continuity of WASH services and supplies during and after the pandemic.

Readers are encouraged to quote from this publication but UNICEF requests due acknowledgement. You can learn more about UNICEF's work on WASH here: <https://www.unicef.org/wash/>

www.unicef.org/wash

© United Nations Children's Fund (UNICEF)

The statements in this publication are the views of the authors and do not necessarily reflect the policies or the views of UNICEF.

United Nations Children's Fund
3 United Nations Plaza, New York, NY 10017, USA

For more information, please contact: WASH@unicef.org