Introduction

In Ghana, more than 90% of people have access to safe water, but it is projected that by the end of 2015 only 15% of people have access to improved sanitation. Dependency on unsafe water sources is higher in rural areas. Due to drinking contaminated water, diarrheal disease is the third most commonly reported illness at health centers across the country, and 25% of all deaths in children under the age of five are attributed to diarrhea. In addition to a lack of sanitation infrastructure, some cultural beliefs and views encourage people in rural areas not to use latrines. This, despite the fact that in recent years almost nine tenths of the WASH sector expenditure was directed towards urban areas in Ghana.

To address this challenge, we need to drastically change the way we approach WASH. Traditional solutions, focused on building infrastructure, are not sustainable and cannot meet the needs of a growing population.

WASH Alliance Ghana
It is our mission as WASH Alliance Ghana to change mindsets and create systems for sustainable and affordable WASH services that can accelerate. This is the only way to adapt to fast population growth. A guiding principle in our work is therefore facilitating the development of a system in which all stakeholders, such as businesses, governments, citizens and NGOs work effectively together.

Our work in Ghana
As a result of our work in Ghana between 2011 and 2015, 189,266 people use improved sanitation facilities and 87,464 use improved water resources. We were able to deliver these results through strategically combining awareness raising on the importance of WASH, developing multi-stakeholder platforms and creating a working sanitation market.

Strengthening the WASH sector through training and capacity building, private sector development and policy influencing have been other focus areas in our work.

Sharing knowledge
We believe that sharing knowledge, expertise and lessons learned lies at the foundation of realising sustainable access to WASH services for everyone in Ghana. It is for this purpose that we have developed this WASH Alliance Ghana Best Practices publication. We hope it will inspire others to change their WASH approach and start building systems for sustainable and affordable WASH services that can accelerate.

Acknowledgements
The contents of this booklet was made possible by the kind support and cooperation of members of the Ghana WASH Alliance (GWA) namely, WUZDA, New Energy, Urbanet, INTAGRAD, Presby Water, AFORD, SimliAid, GYAM, CLIP and UDS (Faculty of Agric Engineering). I would like to extend my sincere thanks to all of them.

The GWA and its members have implemented several initiatives, which have impacted the communities we serve. Such as, Sanitation credit scheme, water kiosk, composting, RWHT and handwashing facilities to schools to promote good hygiene practices. Similarly, some initiatives such as the Black soldier fly Larvae for poultry feed has reached tipping point and is expected to impact the poultry market by reducing cost of feed.

The success of the above initiatives would not have been possible without the assistance of members of the WASH Alliance International (WAI). The GWA is indeed grateful to DGIS for the MFS-II programme through which SIMAVI, RUAF, WASTE, ICCO, RAIN
and AKVO have given tremendous support us.

As country coordinator, I would like to express my special gratitude and thanks to the following Government agencies; Community water and sanitation agency (CWSA), Regional Environmental Health Unit (REHU) and the Ghana water company limited for their continuous collaboration and cooperation.

Finally, my sincere thanks goes to members of the GWA and colleagues in WAI secretariat who have in diverse ways contributed to the documentation of this booklet of GWA Best Practices.

Together, we will Accelerate WASH in Ghana.

Awudu Zakaria,
Country Coordinator WASH Alliance Ghana

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TOWARDS ODF COMMUNITIES, THROUGH IMPROVED LATRINE CONSTRUCTION

The challenge
Open defecation (OD) is a normal practice in most Ghanaian communities. The incidence of open defecation has become a health menace due to high prevalence of diseases in the communities. Child mortality and maternal health issues are still high. Following the introduction of Community Led Total Sanitation (CLTS), AFORD’s community sensitization efforts on good hygiene practices have resulted in households demanding improved latrines. Since 2011, AFORD has facilitated households to construct improved latrines.

AFORD’s Intervention
Community artisans received training on different models of improved household latrine construction. AFORD supported households with aggregate for a fee, with households providing labour and local materials, the artisans construct latrines, also for a fee. Since artisans received training from AFORD, the fee charged is affordable for households. This scheme is helping households to own improved latrines and to keep their environment safe. The communities have stopped open defecation and those without latrines are practicing dig and bury.

Result
Between the period of 2011-2015, a strategy to get chiefs and opinion leaders to take the lead in owning household latrines has yielded significant interest from community members to start their own construction. As seen in the case of Dunyin and Parishe communities with a combined population of about 600 people, 40 households have constructed their own household latrine with technical support from AFORD whilst over 100 households have constructed various models of slabs awaiting superstructure construction.

ONE OF THE MOST IMPORTANT RESULTS FROM THE PROJECT IS THAT IT PREVENTS WOMEN FROM HAVING TO WALK LONG DISTANCES TO GET WATER.

AFORD
AFORD Foundation (Aid for Development) is a local non-governmental organisation operating in the northern region of Ghana, with its headquarters in Tamale. AFORD was founded in 1996 and registered in 1997. AFORD is dedicated to assisting poor and deprived communities and vulnerable groups i.e. women and children, to improve their standard of living through their own initiatives and efforts. As a founding Member of the Ghana WASH Alliance, AFORD has supported communities in six districts of the NR to find innovative, practical, and sustainable ways to apply knowledge and improve their health as a catalyst for growth and development of their livelihoods. In order to achieve its mission, AFORD is in partnership organizations such as, SIMD, Oxfam-GB, TreeAid, Ghana AIDS Commission.

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Presby Water Project, over the past five years of implementation of the Northern Region WASH Programme, has identified three key best practices worth sharing with partners in development. These three best practices are shared hereunder for other partners and stakeholders in the WASH sector to learn and emulate.

A. Sanitation Credit and Artisan Training Models

An enhancement of community level knowledge and adoption of WASH issues saw a tremendous turnaround by the introduction of a sanitation credit and artisan training in nine communities in the Central Gonja district. These two models demonstrate the complementarity of development projects and the entrenchment of the FIETS principles adopted by the WASH Alliance as a panacea to sustainable WASH for all.

The need for continuous education and value proposition witnessed by “doing by example” is one of the many examples showcased by Presby Water project. These sanitation credit and Artisan training models were developed to enhance the acceleration of WASH in communities. The sanitation credit model, together with training of community based artisans in Ghana, complements the Community Led Total Sanitation (CLTS) process, which is a blueprint of government WASH intervention in rural areas. The experiences gained from implementing these two models in selected communities leaves no doubt in our minds that attaining Open Defecation Free (ODF) is not achievable without incorporating these models in the process. To demonstrate the assertion above, for instance, saw nine communities triggered on WASH, out of the nine (9) communities triggered, household latrines construction has been higher in communities where the sanitation credits were introduced and members trained community based artisans. A total of eighty households in four communities received the sanitation credit and artisan training which led to them putting up household latrines. The remaining five communities, although triggered on WASH issues, did not receive the sanitation credit and artisan based training, and here only 10 households put up latrines.

On the next page, different types of household latrines are put up by communities in the Central Gonja District of Northern region of Ghana.

B. Rain Water Harvesting Tanks

The Central Gonja district is one of the newly created districts in Ghana, which still lacks many social and economic amenities, with water being very scarce, which affects the entire district and is even worse in rural communities. The underground water is hard to tap which leaves communities only with available surface water, many of whose sources dry up during the dry season.

The introduction of the Rain Water Harvest Tanks (RWHT) technology has been very useful to schools in the operational area, that is, Central Gonja District, where potable water is very scarce. The RHWT initiative therefore serves schools throughout the six (6) months dry season period of the year. Before provision of RWHTs, pupils relied on dam water for drinking, but after the provision of RWHTs, they gained access to clean drinking water.

In terms of sustainability, studies have shown that the average life span of the poly tank is 15 years and that of the Ferro-cement is 50 years, given that normal standards are met.

With regards to cost effectiveness, the cost for a 1,500 litre Ferro-Cement tank is about GHC1,000 as against that of a 1,000 litre poly tank, which is GHC600.

C. Handwashing Tanks: Polytank versus Ferro-Cement Tanks

Over the years, partners in the WASH sector resorted to using the polyethylene tank (mostly 1,000 liters capacity), as hand washing tank which were provided as part of Institutional latrines. Most poly tanks degrade over time with exposure to sun despite having UV inhibitors added to the plastic.

For the sake of sustainability and cost effectiveness, Presby Water has developed a Ferro-Cement tank technology (1,500 liters capacity) for hand washing at Institutional Latrines instead of the usual 1,000 liters poly tank.

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Community Led Total Sanitation (CLTS) was introduced as the national policy for sanitation implementation in the country to be used to end open defecation. However, due to low-income levels in rural communities, this initiative reduced the acceleration to attainment of full latrine coverage. After studying the situation, INTAGRAD introduced a sanitation credit scheme with a unique feature of supporting women in income generating activities.

**Innovation**

The main goal of the INTAGRAD sanitation credit scheme is to operate a Micro Finance Scheme to improve water delivery, sanitation, hygiene and food security for both rural and urban poor communities in Northern Ghana. The project aims to improve the economic situation of women and vulnerable groups, and thus to enable them to regain their rightful position and contribute their quota in an atmosphere of peace and recognition towards societal development. The sanitation credit scheme allows INTAGRAD to disburse and recover credit as well as facilitating the construction of household toilet and other sanitation related activities. The interest charge on credit is used as an overhead to cover the cost of operating the scheme. The microfinance model facilitates targeted households with the construction of quality sanitation facilities at their own costs. The credit provided enable households/communities to purchase latrine components and to also include loans for income generating activities such as rice processing, shea butter processing, groundnut oil extraction and petty trading in farm produce help them to repay the total loan. The training and education component of the model provides the opportunity for INTAGRAD to constantly keep in touch with the community groups and build their capacity to engage with duty bearers including the District Assemblies for better WASH services.

**Achievements**

Since its inception in 2012, the scheme has recorded over 500 households in 20 communities which now have improve latrines and over 600 households have improved their liquid waste management through construction of soakaways in their houses. There has also been improvement in the capacity in business management and entrepreneurship of more than 625 women in 20 communities through our capacity building programmes.
Over the years, communities in peri-urban areas of the Tamale metropolis have had challenges in accessing safe water for drinking and other economic activities. In the absence of pipe borne water, most target communities were consuming surface water containing pollutants. WUZDA embarked on advocacy to educate communities on the need to consume safe and treated water. This resulted in the initiation of the water kiosk project which links communities where the Ghana water company pipelines pass through to the urban centres. The unique feature of the system is that a storage tank (35,000 litres) is provided to serve as a stop gap measure during breakdown or when the taps are not flowing.

Intervention
WUZDA has supported two communities Nyeshee and Kapkagyili in setting up water kiosk facilities. This was achieved through community sensitisation, which triggered communities to demand safe and treated water at the district assembly. WUZDA then facilitated and trained a community selected 11-member management board (6 females), which approached the officials of Ghana Water company to start the project.

The 11-member board employs a vendor to collect revenue from sale of the water to community members at a fee fixed by the board, taking into consideration income levels and bills from the water company. WUZDA provides the pipelines and storage tanks as a form of credit whilst community members provide labour. Revenue generated is used to settle Ghana water company bills and some portion is used to defray the cost of WUZDA support over a 3-year period.

Achievements
A total of more than 2000 people are being served through the water kiosk system from the two communities. Nearly 50% of the credit facility has been repaid so far. Another key achievement, over two years of operation, has seen the management of the system bear the cost of operations and maintenance without resorting to financial assistance from elsewhere. This, we believe, is the way to ensure sustainability. The communities are currently saving towards setting up a similar system to cater for people living at a distance from the facilities through resources generated from the revenue of water sales.
A quiz competition was organized between two schools under the Rotary School WASH Adoption Project in the Sagnarigu District in the Northern Region of Ghana. The quiz competition was organized to achieve two key results. Firstly, the competition helped to assess the level of understanding of SHEP Club members and the communities on issues of Water, Sanitation and hygiene, their knowledge, practice and status of good water, sanitation and hygiene in their schools and communities. Secondly, to ensure that the school children become change agents/ambassadors of WASH in their respective homes and communities.

To organize the competition, letters were sent to the competing schools, indicating the date, time, venue and areas that the questions will cover. Three participants were selected to represent each school by their SHEP teachers. The SHEP clubs were also asked to select members to recite poems and dramatize plays on WASH issues to serve as entertainment and education for the audience. Some local community members were invited to the ceremony. During the competition itself, schools were given equal time and opportunities to answer questions on WASH. At the end of the quiz the winning school was given an award for taking part in the competition and to serve as a morale booster. Pupils who were selected to recite poems and dramatize plays on WASH were also given the opportunity to educate the audience present and a winner was adjudged by a panel. The scores were in three parts; the competition amongst the pupils, the community knowledge and status on WASH, especially sanitation and hygiene, in the school. All the scores were brought together to determine the winner. Awards were then given to the winning school.

**A change in Behaviour of school pupils towards their environment after the quiz competition**

Change at Ground Level

Due to the scoring system that included the communities and the general school knowledge and status in WASH, SHEP club members undertook community outreach to sensitize and educate the community to enhance their knowledge and practice to win more points. The communities responded and took up the challenge tremendously and improved WASH in their communities. At the end of the competition, students were more empowered to become WASH ambassadors and they took it upon themselves to keep their schools and communities clean and also to advocate for their right to good water and sanitation as in the case of Mahad Talia Primary and JHS. In the case of Mahad Talia Primary and JHS, the new six seater latrine constructed for the schools was been used and littered by community members. The SHEP members together with their Headteacher worked with a community Chief constructing their own household latrines. The competition, the message and the score strategy quickened the communities’ drive to become ODF.

**NEW ENERGY**

The Ghana WASH Alliance is partnering with New Energy, a local NGO founded in 1994 with a view to improve an environment of socio-economic prosperity where all people live in dignity by working in partnership with local communities and other stakeholders to increase and improve access to social services, infrastructure and other development opportunities to the underserved in Ghana. This is done across three broad thematic areas such as Water, Sanitation and Hygiene (WASH), Energy and Environment and Sustainable Livelihoods. To achieve its mission, New Energy works with the following partners; SIMAVI, WaterAid, UNICEF, WFP, UNDP, Oxfam, PHILLIPS, Ghana Energy Commission.
INCREASING ACCESS TO IMPROVED HOUSEHOLD LATRINES, THE SANIMART WAY

Sanitation market (SANIMART) aims at providing options of various household latrine models and their associated costs to enable households make informed decisions about which type of latrines best suit their needs. SANIMART is also a complementary effort to Community Led Total Sanitation (CLTS) programmes aimed at ensuring sustainability in the attainment of an open defecation free (ODF) society.

GYAM’s Intervention

Since 2014, GYAM has been implementing CLTS in four communities, namely Sung, Kaptung, Gbaliga and Bagurugu communities, all in the Karaga district. As part of the CLTS process, GYAM in collaboration with 6 artisans has set up SANIMART training at Sung community, which serves as the centre of surrounding communities. SANIMART displays various models of improved latrines, lists the materials required for each model as well as contacts of the various artisans.

Sung SANIMART is strategically located at the community market square, where members of the community have access to a guide who explains cost options available to interested clients and helps them arrive at the most cost effective latrine model, taking into consideration income levels and household size.

When a client decides on a latrine model, the available contact details of the artisans are used to set up and initiate the process of constructing the chosen model. The Sung SANIMART has been patronised by surrounding communities especially on market days and this has resulted in the artisans extending their expertise to cover other nearby communities.

Results

The Sung community has embraced the SANIMART concept and many more households have constructed improved latrines and are using them. Other households have started their latrines whilst others are still saving towards their chosen models.

GHANA YOUNG ARTISANS MOVEMENT

Ghana Young Artisans Movement (GYAM) is a Non-Governmental Organization operating in Northern Region of Ghana. GYAM seeks to combat homelessness by empowering the young with vocational skills, so as to become self-supportive and by supporting rural communities to enhance their socio-economic standard of living.

GYAM was founded in 1994 by young graduates from the country’s Polytechnics and Vocational Training institutions in the Northern Region. The formation of the organization resulted from the growing rate of unemployment in the Northern Region amongst the young with or without any formal education. GYAM works to alleviate this problem on two fronts, first with it’s Vocational Skills Training Program which provides self-employable skills to socially deprived young people, and secondly through it’s community development programs in rural water and sanitation projects which enhance the social wellbeing of deprived communities with social infrastructure development, income generation skills for the vulnerable such as young, women and children.

GYAM has its head office in Tamale with well-trained network of artisans.

GYAM has been promoting good water, sanitation and hygiene in selected communities in Karaga district. It has in the past provided skills training for over 500 young people on various models such as seamstresses, carpenters, masons, and catering. On WASH service delivery, it has provided Institutional latrines, Hand Dug Wells and rain water harvesting tanks (RWHT) for selected communities and schools in the district. Since the challenges faced by communities and schools are multi-dimensional, GYAM has adopted a collaborative and comprehensive approach to it’s interventions through the involvement of key stakeholders in WASH service delivery. These includes local government structures, community based groupings to ensure successful implementation and sustainability of interventions.
The world has entered the urban millennium according to the former UN Secretary General Kofi Anan changing the dynamics of society, economically, socially, culturally, politically and environmentally. Population growth and urbanization processes in general in the Tamale metropolis one of the fast growing cities in Ghana are leading to significant demands in the supply of quality water and food. At the same token, the generation of wastewater in the city is in its highest pedestal in the wake of computing use of quality water for both domestic and food production. A drip irrigation project was design with the aim to make safe use of wastewater for irrigation of vegetables in a safe manner. This was increase access to water for irrigation all year round and increase the incomes of poor urban families but also through that reduce pressure on fresh water hitherto used by farmers for lack of alternative to produce vegetables. This initiative was supported by ICCO-Cooperation and the Ghana WASH Alliance.

Urbanet initiative
28 poor urban farmers (12 women and 16 men) were identified and selected through participatory discussions at the project community and supported to establish a drip system to make use of the wastewater largely coming from bathrooms and kitchens from a near-by military barracks with a centralized collection point. The farmers with the facilitation of URBANET lobbied and negotiated with the traditional who allocated 1.2 acre of land to them to cultivate vegetables and to earn income to support their families.

A drip system was then installed which allowed the farmers to use the wastewater for irrigation of the field in a safe manner to avoid contamination whilst making water available for their irrigation. The farmers were also trained on safe production practices using wastewater.

Reflections on lessons and outcomes
The project has significantly resulted in an increased access to water for irrigation by about 28 farm families with an average family size of 8 people. The use of fresh water for irrigation has also significantly reduced and has made more water available for domestic use. Farmers have improved their knowledge on safe agronomic practices through the trainings organized. Income levels of the target farm families are gradually improving because there are able to produce all year round as a result of their ability to use the wastewater through the drip system.

URBANET
URBANET is local non-governmental and not for profit organization with a vision of ensuring sustainable livelihood for all in northern Ghana. URBANET provides a wide range of solutions in food and nutrition security with an emphasis on creating the nexus of food and nutrition security to WASH in the northern regions of Ghana. The organization has been in operation since 2005, partnering with ActionAid International, International Water Management Institute, RUAF Foundation, International Institute for Tropical Agriculture, Care International, and the World Food Programme in the provision of food and nutrition services to communities in the region.
The WASH Alliance International is a multi-national consortium of over 100 partners worldwide. We work together with local NGOs, governments and businesses to make sure everyone on this planet has sustainable access to water and sanitation.

For more information: www.wash-alliance.org