Accelerating WASH in Ethiopia
BEST PRACTICES FROM THE 2011 - 2015 WASH PROGRAMME
In Ethiopia the number of people with access to safe water has improved over the past 10 years. The country has reached the Millennium Development Goal on water: 57% of the population has improved access to clean drinking water. At the same time, almost three-quarter of all residents in Ethiopia do not have access to improved sanitation. They share overcrowded pit latrines or practice open defecation. The lack of safe drinking water, hygiene and sanitation facilities is strongly influencing the wellbeing and health of the Ethiopian people.

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 Ethiopia**

It is our mission as WASH Alliance Ethiopia to change mind-sets 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 Ethiopia**

As a result of our work in Ethiopia between 2011 and 2015, 98,596 people use improved sanitation facilities and 96,826 use improved water resources. The outcome for sanitation has been reached mainly through the combined efforts in Community Led Total Sanitation (CLTS), hygiene & sanitation education and Eco-san technology demonstrations. The large number of people with access to improved drinking water were mainly realised by establishing and training water committees in the local communities. Over a period of 5 years we have reduced the costs per person to get access to WASH from €50 to €25.

**Sharing knowledge**

We believe that sharing knowledge, expertise and lessons learned lie at the foundation of realising sustainable access to WASH services for everyone in Ethiopia. It is for this purpose that we have developed this WASH Alliance Ethiopia 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.

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Together, we will Accelerate WASH in Ethiopia.

Tamene Chaka, 
Country Coordinator WASH Alliance Ethiopia

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The WASH Alliance International is a multinational consortium working together with NGOs, communities, private sectors, micro-finance institution and public sector in eight countries in Africa and Asia. In 2011, six Dutch NGOs formed the WASH Alliance.

**Vision and Mission**

As WASH Alliance we envision a world where all people have access to sustainable water and sanitation services that they can afford, and where all people can live under hygienic living conditions to improve their health, dignity and economic living standard.

**Ethiopia WASH Alliance (EWA)**

The Ethiopia WASH Alliance (EWA) is a consortium of eight NGOs and private organizations working on the enhancement of the wellbeing of people living in rural, pastoral and urban areas of the country. EWA partners are Action for Development (AFD), Amref Health Africa Ethiopia, Arsi Negele Municipality, Development Expertise Center (DEC), Dire Dawa Municipality, Helvetas Intercooperation Ethiopia, Horn of Africa Regional Environment Centre & Network (HoAREC&N), Kearn Consulting, Modjo Municipality, Metameta Ethiopia (MM), Plan International Ethiopia (PIE) and WASH Movement Ethiopia in Water Aid Ethiopia. EWA’s partners are operating in 33 districts in Afar, Oromia, Amhara and Tigrai Regional States and Dire Dawa City Administration and National Level.

**Programme Priorities**

EWA has elaborated the strategy for the period 2015-2020 based on a critical review and reflection with members, and relevant stakeholders.

The main pillars in the current strategy are:

1. Improved access to and use of safe water supply
2. Improved sanitation and hygiene practices
3. Improved livelihood of the communities through use of water supply for multiple purposes greater integration with other sectors
4. Improved dialogue, policy initiatives and change of practices.

EWA aims to provide full coverage with sustainable WASH services for all in the areas where we work. To realize sustainable access to WASH services for all, we need to drastically change the way we approach this challenge. We contribute to a shift from a hardware construction approach towards a sustainable service delivery and sector development approach. EWA, therefore, works on creating systems for sustainable and affordable WASH services through our FIETS and WASH Business Model approaches. Financial, Institutional, Environmental, Technological and Social Sustainability (FIETS) is the underlining approach for the programme cycle of EWA and member organizations. The WASH business model (diamond model) approach creates sanitation as a business with the involvement of relevant stakeholders of government, households, Private Sectors (Small & Medium sized Enterprises, SMEs), Micro-finance Institutions (MFIs) and NGOs.

These approaches have resulted in bringing structural change on the ground. Access to improved WASH services to schools has brought a change in enhancing students’ enrolment, increased access to and use of safe and clean water from nearby sources and reduce waterborne diseases, school WASH clubs have also highly motivated students in keeping school compounds clean and students use improved toilets in their compound. WASH and
Climate Change Adaptation are linked through the watershed rehabilitation, by means of 3R (Retention, Re-charge and Re-use) and RWH (Rain Water Harvesting) measures, which improved communities to use springs for household consumption and productive purposes. The WASH Business Model approach (Diamond model) has brought business oriented urban WASH services, improved urban sanitation through credit facility and use of waste for productive purposes. Integrated approaches for multiple benefits have been achieved by ecological sanitation (ecosan) constructions, which improved environmental hygiene and sanitation and made possible the preparation of compost from the human faeces. This is used for vegetable gardening and increases income generation and the construction of low cost technology hand dug wells that benefit the communities through access to and use of safe and clean water. The amount of time saved to fetch water from long distances and women’s burden can be used for other purposes.

As a result of the Ethiopian WASH Alliance Programme of the last five years (2011-2015) 98,596 people around the working areas use improved sanitation facilities and 96,826 people here use improved water sources. EWA has reduced the costs per person to get access to WASH from €50 to €25.
Manual water technology improving the life of women and their families

Access to safe water supply and sanitation services and sanitation and hygiene practices in the project districts of Adam Tulu Jido Kombolcha, Dugda and Arsi Negele were low and there was an urgent and pressing need to address these issues. Use of water from unprotected sources, lack of improved sanitation facilities, low hygiene practices and low levels of awareness in the communities, resulted in water borne diseases in the project areas. Women and girls spend considerable time and effort on their search for water. Within this WASH project, Horn of Africa Regional Environment Centre & Network (HoAREC&N) and partners addressed these problems through construction of eco-sanitation, VIP latrines and manual well drilling and awareness creation. The aggregated results of these were sustained use of latrines, access to safe drinking water and promotion of best practices in the realms of sanitation and hygiene.

Activities
The project areas have proven underground water reserves that could be utilized for household use and irrigation in a sustainable manner. In this case, the high cost of wells to gain access to the groundwater has remained the principal limiting factor, and there is an opportunity to promote low-cost drilling hand dug well technologies and techniques using local labour and hardware. Improved hand dug wells, eco-san technology and VIP latrines have been constructed in the project areas. Training of households and community leaders on-site on how to drill wells, community and institutional capacity building on planning and management of water resources, establish and revitalize WASHCO at Kebele levels (the lowest administrative level) and awareness creation through campaign and IEC materials have been given in the project areas.

Change on the ground
Mrs. Fetale Qabato, 60, has nine children - five girls and four boys. Like many housewives in the area, she looked after her children and took care of the household chores. Life was not easy for many women living here. In addition to taking care of the family, they had to travel on foot daily for one hour to fetch water. Along the way, they often faced many misfortunes. The relatively richer people used donkey carts, but this was expensive for many women like Fetale. But now, thanks to this project, Fetale and her fellow villagers are relieved from their burdens. In these areas, community awareness on sanitation and hygiene occurred a little earlier, while the communities’ institutional capacity to provide and manage water and sanitation facilities was limited. Waterborne diseases were not uncommon either. All these were common problems that directly and indirectly impacted on the life of Fetale and her fellow villagers.

“It was a horrible rainy season,” recalls Fetale, “I don’t forget to forget the pain I went through when I, carrying a jerrycan full of water, slipped and fell on the muddy road.”

When she was too tired, she sometimes had to pay for a cart service that would bring her water. A onetime service for a 20 litre jerrycan could cost 4 birr, which is too much to afford for a family like hers. She and her family often resorted in drinking unclean pond water nearby. Apparently, diarrhoea and other water borne diseases frequently affected them.

Today, after building hand pumps, Fetale’s water related problems are becoming a thing of the past. She uses a clean water source located just a few meters from her yard for drinking, cooking, showering and laundry. The water has significantly improved the quality of her life that she even plans to do something extra—something she had never thought earlier. “After this, I will have additional time to properly take care of my children and engage in business to earn additional income”, said the resolute Fetale.
Making waste profitable and improving sanitation conditions

The town of Arsi Negele has waste management problems, which arose due to urbanization, high population growth, lack of technical and financial capacity to manage waste, low awareness levels in the communities to manage waste and lack of coordination in the sector. The urban residents dispose wastes in the drainage canals. Most of the urban families depend on the production of local alcoholic beverages (Areke, which is produced from wheat) and animal rearing as a livelihood. The waste products are disposed in the town in an inappropriate way. The right and the left bank of the rivers in town are generally occupied by farming, housing, quarry activities and waste disposal.

Environmental problems become particularly serious when there’s a rapid expansion of urban population and waste disposal with little or no consideration for the environmental implications. Arsi Negele town has faced sanitation problems. To overcome this problem, the municipality designed a project with WASTE to use the waste for productive purpose and make it a business in order to improve urban sanitation through construction of toilets and solid waste collections.

Activities
A group of SMEs was trained on the collection and treatment of solid and liquid waste and was collecting wastes and making compost in Arsi Negele. Carts are provided to the SMEs to transport solid and liquid wastes to the compost site. In the area, there is a demonstration site where vegetables are growing on two plots of land: one with compost and the other without compost, which helped the communities to be aware of the added value of waste. Loan facilities for households and SMEs have facilitated the municipality to construct toilets and collect wastes from the town and convert it into compost.

Change on the ground
The outcome is visible with vast difference, as the vegetables with compost have grown with much better quality. The SMEs are using this demonstration site for the purpose of promoting the use of compost. They are showing this demonstration site to the communities to improve their understanding and awareness. The group has prepared different hollow areas for compost making which they are going to sell to the surrounding communities.

An encouraging sign of change has been seen in Arsi Negele, with better awareness of reuse of solid and liquid waste for compost and better agricultural yield. In the near future, the practice will be diffused to the communities resulting in better yielding of products and improved sanitation.

Lessons learned
The project has shown progress in urban sanitation improvement and brought important lessons during the implementation of the project. These lessons include:

• Improving the waste management practices of the town
• Enhance awareness levels of the stakeholders and consider waste as a resource and a business opportunity
• Create employment opportunities for the youths particularly
• Access to credit for SMEs is increased
• Improve coordination amongst different stakeholders and linking them to work together

Partner: Arsi Negele Municipality
Arsi Negele town is located in the central rift valley of Ethiopia and 230 km away from Addis Ababa. It consists of three kebeles and the population is mostly dependent on animal fattening and distillation of local alcohol, “Areke”. Arsi Negele Municipality has departments of house management, sanitation & beautification, community data base service, human resource, community mobilization and basic infrastructure development. The Sanitation and Beautification department operates on activities of community mobilization on beautification and sanitation services, collecting and disposing solid and liquid waste, planting different types of trees that are used for beautification of the town, providing abattoir service to the town, developing green areas at the different parts of the town, management of disposal sites and awareness creation on sanitation and hygiene towards the community.
Environmental degradation and sanitation problems are seriously challenging the Dire Dawa town. Growing population pressure has led to deterioration of urban infrastructures and increased inappropriate waste disposal. This situation has resulted in significant sanitation problems in the town, due to absence of sanitation facilities in public areas and at household level. It is estimated that sanitation coverage of Dire Dawa town is 76%, and 20% of the households are without sanitation facility. Dire Dawa Urban WASH Programme is designed by the town administration and WASTE to improve urban sanitation through credit facilities with the involvement and participation of households, service providers, financial institutions and the government authority. These relevant stakeholders work together for the promotion of sustainable use of wastes, by converting it to valuable products. SMEs are linked to finance schemes for their business plan and collect wastes from households and process the waste materials into compost and other products. The role of WASTE is to support the implementation of this activity by SMEs through credit facility.

Activities
Initially, an inception meeting was conducted for sanitation stakeholders drawn from health, agriculture, water and sewage, humanitarian non-governmental organization like ADMAS and focal persons of Dire Dawa city administration to familiarize them with the programme goal and objectives. The municipality initiated the involvement of health extension workers, water offices, SMEs and ADMAS in identification of households that have no access to toilet facilities, mobilization, and awareness creation on hygienic usage of latrine facilities among households. Negotiations took place on microfinance and facilitation of credit scheme for the construction of facilities (and the demonstration of a model latrine by ADMAS) were very important. This helped to mobilize the community to construct their own latrine facility. Also, this initiated households to take a loan from MFIs to build their own latrines, which enabled them to overcome sanitation and hygiene problems. The Urban WASH Programme in Dire Dawa town has shown urban sanitation improvement through credit facility with the involvement of relevant stakeholders. The following changes on the ground could be observed:

- Communities started to construct their own latrine facilities
- The project has brought a new finance-driven approach to sanitation intervention
- SMEs are capacitated to scale up their business
- The project has generated a new dimension of credit system for the microfinance

Lessons learned
The implementation of the Urban WASH Programme, with the aim to improve sanitation through credit facilities, gave us important lessons to accelerate the project. The lessons include:

- People were expecting and depending on the government to build their own latrine at earlier times, but now this dependency syndrome has been reduced by teaching the community to construct their own toilet facility with their own means (i.e accessing credit from MFIs to build their own latrine).
- Improved awareness through accessibility of credit for sanitation among MFIs and scale up to other financial institutions. This is a new credit product for sanitation as a business.
- Use of waste to urban agriculture has improved sanitation and has increased economical benefits.
- Create job opportunities for urban youth.
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Water for Production

West Hararghe is at the crossroad between cultural and agro-ecological zones. The favourable climate of the highlands quickly harshens as the slopes flatten towards Afar and the Somali region. Its specific conditions made West Hararghe and especially Masala Woreda a producer of top quality coffee and khat (local plant). The proximity to the Arabian Peninsula helped building trade routes and cultural connections. Nevertheless, the rugged terrain poses a challenge in regards of water access. The valleys are blessed by abundance of water in the form of perennial springs and rivers. On the other hand the communities situated on higher locations had to rely on water resources outside their village or to ingeniously manage the only source of water available: rainwater.

Activities

The closest source of perennial water is four hours away from Kufanzik community, in Masala Woreda. A water harvesting pond was constructed to retain the water that is abundant during the rainy season. The pond location was determined by the presence of highly impermeable clay (called Faaroo in Afan Oromo) and by suitable topography. The pond is situated on a ridge and the water is conveyed from the road that winds along the ridge crest through a series of gentle hilltops. In the beginning the relatively small pond was adequate to provide water to the whole community and its livestock. Throughout the years, the pond was expanded in diameter and depth to accommodate the needs of the growing community. The pond rarely dries up. While constructing the pond for the communities to access water, MetaMeta provided awareness creation on sanitation and hygiene, training on protection of the water source and management and maintenance of the structure. Also they established a water committee to manage the pond for operational and maintenance purpose.

Change on the ground

Water access and use

Three communities for a total of around 200 households can access the pond daily. Each family has right to two Jerry cans of water per day and the water is used to satisfy all household needs. Only in case of special events, such as weddings and funerals, the users can obtain extra water. Only who routinely contributes to the maintenance of the structure has automatic access rights.

The rules that regulate access have changed over time. Nowadays, water cannot be used for livestock watering and there is strict access time to the pond in order to control unregulated withdrawal. The guardian of the pond guarantees access for four hours every morning. Elders and people with health issues can get special permissions.

Management and Maintenance

The management of the pond is in the hands of the community through a management team, composed by nine members. The management team takes decisions regarding operation and maintenance. It also decides upon penalties and exceptions. Maintenance during the dry season implies digging up sediments from the reservoir, strengthening the embankment and filling the gaps in the vegetative fence. During the wet season, management operations go together with scheme operations. Each runoff pulse is managed singularly and its water is either collected or flushed out, according to the quality of the water and/or the level reached in the reservoir. The first runoff water of the season is used to clean the canals and is not collected due to its poor quality.

The embankment grass is kept short throughout the year and the cut material is sold on the market. The earnings are used to cover maintenance costs. To ensure higher water quality three precautions are deployed. First, the early rains runoff is not collected but used to flush debris and garbage out of the canals. Second, no animals can access the perimeter of the reservoir and people need to take off their shoes before fetching the water. Third, the grass on the embankment not only stabilizes the structure, but also helps filtering the incoming runoff water. Fourth, a flocculent is added to the reservoir twice per season to reduce the amount of particles suspended in the water.

Lessons learned

The implementation of the project in the area has provided lessons that help to scale up the project in similar areas:

- The structure is referred to as the “mother of all ponds”, since it was fruit of trials and local innovation and it stimulated the construction of similar ponds in other communities along the mountain ridge. Nowadays more than 15 ponds of the same kind are in use.
- The traditional management systems and bylaws that regulate its use are an example of good local governance.
- The Woreda – following the same technical principles – has built a big water harvesting pond.
- The lack of an effective management team, rules and maintenance has led to overuse and mismanagement. The established water management committee has trained to protect the water source, manage and maintain.

www.wash-alliance.org
MetaMeta is a group of companies that is established to deliver socially relevant but commercially viable services. At present the group consists of: MetaMeta Research, MetaMeta Communications and MetaMeta Management. MetaMeta is headquartered in the Netherlands, but registered a branch in Ethiopia in March 2007.

MetaMeta Research facilitates policy discussion, supported by stakeholder engagement and applied research on water and natural resource management. MetaMeta Research has also adopted four themes – groundwater management, spate irrigation, urban water management and natural resources governance. The aim is to bring the practical ‘how to’ knowledge on such topics further by dissemination and training. MetaMeta Management supports the management of complex Programmes and the implementation of policies. It has developed a suite of instruments for Programme management, called ‘Meta-Frame’. MetaMeta Communications tries to bridge the gap between knowledge suppliers and practitioners, through a range of services in capacity building, training and communications. It is constantly developing new format ideas such as books, technical cartoons, folding snippets and water games. Also, it operates on supporting water education and communication as well as recently broadcasted videos on water.
The EWA programme called ‘WASH Creating Business Opportunities’ was implemented in three Afar zones in Ethiopia. Lack of accessibility of WASH facilities, low awareness levels in the community, lack of sustainability of WASH schemes, lack of skilled man power and low coordination from the relevant stakeholders have increased WASH problems in the project area. Based on the assessment, some problems were identified and the WASH Alliance project proposed a new approach for the area: a WASH business model (diamond model). This approach was developed to address WASH challenges through creating WASH business opportunities.

Activities
The WASH business approach mainly focuses on designing WASH facilities in a way that they can generate income by themselves and ensuring active involvement of stakeholders in executing their predefined roles. The first WASH facilities (public latrines, showers and hand washing points) were piloted in the Awash town bus station. These facilities are managed by organized youths who are trained by Amref and provide WASH services to travellers and the surrounding community of the bus station. This design and mode of management help the community to get access to sustainable WASH services, and help the youth creating a source of income out of this daily life improvement. In addition, trees were planted in the compound of the bus station to improve the area view and the ecosystem. Currently, this service is being expanded in the area and there are plans to add other types of services in another area of the town.

Based on the experience from the Awash bus station, the same business model approach is replicated in another marketplace in Awash town and at public places in the Ambaba district and Woror town. Importantly to note, the second and third WASH facilities were co-funded by the organized youths themselves and the government. This shows the business approach is accepted and mainstreamed in government plans.

Change on the ground
WASH creating business opportunities using WASH business model approach has brought significant change on the ground:

- More than 6,000 people benefited from the sustainable WASH service and a total of 80 youth members were involved and benefited from the facilities. Moreover, indirect benefits of job opportunities are created for masonry workers, plumbers, shoe polishers, soap suppliers and daily workers due to the construction of WASH facilities.
- Environmental sustainability and sanitation have improved in the bus station due to planting of trees in the station, which improved environmental conservation and the absence of waste disposal (i.e. free from being a waste disposal site.)
- Empowering youths and women groups to manage the facilities and improve decision-making skills and power. For example, the WASH facilities that are situated in the Ambaba district and Woror town, are mainly managed by the women groups who are living with HIV/AIDS.
- Introduction and sharing of this new approach to other actors working in Afar and also to Amref, created new insights, knowledge and skills to be scaled up in the future.

Lessons learned
The implementation of the project through a WASH business model approach has taught us important lessons:

- Designing the WASH scheme in a way that it can generate a scheme vital for sustainability
- It is possible to create economic opportunities for unemployed youths, focused on WASH service delivery
- The FIETS sustainability strategy is powerful and should be implemented in all services
- The involvement of different stakeholders and executing their defined roles is very important in the use of the WASH business model approach in WASH facilities
- WASH business model (diamond model) can be established in a place like in Afar
Rainwater harvesting in water stress areas for multiple use services of water

The presence of low coverage of WASH in the project areas and limited access and utilization of water and public health services pose serious health risks in many areas of the Borana low land districts. It was revealed that shortage of water has observed to be a problem not only in drought times but also in the normal season in 10 of the 14 Peasant Associations (PA) of the Dugda Dawa district. Only 29.1% of the total population of more than 100,000 people living in the district has access to potable water. The coverage of potable water in rural kebeles (PAs) was below 22.4%. In comparison, this rural access to safe water coverage is nearly 3 times below the national average.

When drought occurs in the district, it aggravates the problem of water shortage both for humans and livestock, women and girls travelled for long distances (at minimum for 6 hours) to fetch water for domestic use from unprotected and contaminated sources, and the student drop-out rate increases significantly. Fetching water affects the health of women and children and affects livelihood of the community.

AFD and RAIN have designed a project to reduce these problems.

Activities
AFD has build rainwater harvesting structures of sand dams, rock catchments, roof catchment, Birkas, open pond through filtration systems, spring capping and distribution systems with sanitation facilities, and finally bore- and deep wells including solar powered ones. The water schemes constructed under rainwater harvesting including sand dams, Birkas, paved ground catchment (cisterns) and rock catchments. The construction of solar powered technology has pumped water from these schemes and has enabled the communities to access water for human and livestock consumption. Awareness creation and training has given and improved sanitation and hygiene practices. Training has been given to caretakers and water management committees for operation and maintenance.

Change on the ground
- Due to AFD and the involvement of other actors, the water coverage for Dugda Dawa and Miyo districts increased to 38% and 42% respectively.
- AFD was able to increase access to WASH facilities for 95,870 people (45,630 of which are women) and 60,982 livestock heads.

Lessons learned
The implementation of the project through the construction of rainwater harvesting structures in the water stress areas of the district brought interesting lessons:
- Some of the constructed schemes such as ground catchments and spring capping may be capital intensive at the beginning. However, from the perspective of design periods and the quality in designing & construction, the schemes are sustainable, so that they serve the community up to 30-50 years without significant operational and maintenance cost needs. The introduction of the existing practice with improved technology has enhanced the community to easily learn and initiate for expansion of the schemes, particularly ground catchments. Moreover, the introduced water schemes don’t require complicated techniques, spare parts and maintenance costs and only demand minor maintenance work by locally trained caretakers and water management committees.
- In implementing the water schemes, particularly in case of Birka and sand dams, the potential involvement of and expansion by different NGOs and private partners were observed. The different RWH schemes are also in line with the government plan especially for its climate adaptability.
- Involvement of local communities was practically observed in planning, implementation and monitoring of the intervention. It supported community sustainable access to improved, safe and adequate water for multiple purposes. AFD work in WASH includes enhancing multiple use of water for domestic use, livestock watering and irrigation as the area where it works is characterized by moisture stress and experiencing frequently occurring drought and water stress.

Partner: AFD
AFD is an Ethiopian Residents Charity (ADF) that has been implementing various development and rehabilitation Programmes in the drought prone areas of southern Ethiopia. AFD was constituted as a national NGO in 1997 in order to complement the self-development initiatives of pastoral and other rural communities in the dry lands of Ethiopia through undertaking programmes in livelihoods and resilience building, water and natural resource management, capacity building, mainstreaming of gender, HIV/AIDS, and climate change adaptation. AFD is working collaboratively with organizations of government and non-government. The organization has an organizational structure to scale up and scope of its Programme operations as well as its geographic span. It has one technical and two support departments.
Empowering students by SLSSH

The limited number and type of water sources in rural areas of Liben-Chukala district has lead the inhabitants to walk two hours long distances to fetch water from rivers or ponds. Low availability of WASH facilities and lack of sanitation and hygiene skills in the schools were observed. Those primary schools hosting from 600-1,500 students have only a latrine with only 2-4 holes. These latrines are not only limited in number, but also unfriendly for small children and children with disabilities. There are no hand wash facilities at the toilets either.

WASH in Schools aims to make a visible impact on the health and hygiene of children through improvement in their health and hygiene practices, and those of their families and the communities. The promotion of personal hygiene and environmental sanitation within schools can help children to adopt good habits during the formative years of their childhood. School WASH may initiate students in a process, leading from improved health in schools to improved health in households, and eventually to improved health in communities. In this process, the implementing organizations could play the role of catalyst.

Activities
Student-Led School Sanitation and Hygiene (SLSSH) is a student hygiene and school sanitation programme designed with the approach that students take the lead in the process of implementation. It is the students that initiate and lead change processes by establishing their own committees and setting their own bylaws to improve their school compound sanitation and students hygiene. Hence, in the targeted primary schools, activities like establishing SLSSH clubs, SLSSH Ambassadors selection, assigning focal teachers and establishment of overall committees, activities related to structural development and renovations and various capacity development trainings and target schools triggering were undertaken. The major objective of the project is to assure a child-friendly school environment through personal hygiene and school compound sanitation intervention to contribute to the improvement of quality education by harvesting rainwater.

Lessons learned
In the process of implementing SLSSH project DEC has learned various lessons:

- Linking SLSSH ambassadors with health extension workers can easily scale up the best lessons learned in the school.
- Integration of water, sanitation and hygiene practices in the schools helped to actuate meaningful changes.
- Coordination and strong collaboration among concerned government offices at district and school level, DEC, partners and communities have made significant contributions to the implementation of the project with respect to sanitation and hygiene as well as environmental protection.
- Frequent awareness creation events and mobilizations were carried out on various topics related to sanitation, hygiene and environmental protection to enhance the awareness level of target communities.
- Empowering students in SLSSH project have improved sanitation & hygiene practices in the schools and helped to enhance awareness level of school communities.
- Strong partnership and synergy made the project implementation efficient. Therefore, the alliance building and cooperation have made a significant contribution to successful implementation of the WASH project.

Partner: DEC
Development Expertise Centre (DEC) is a Child-Focused, Education Centred, non-profit, local Civil Society Organization (CSO) established in 2007 and re-registered as Ethiopian Residence Charity Organization in 2009. The objective of its establishment is to contribute towards the agenda of Ethiopian government to end poverty through integrated, decentralized and sustainable interventions.

DEC has been significantly contributing towards its four thematic areas, namely: Education, Early Childhood Care and Development, Sexual and Reproductive Health and Food Security and Entrepreneurship. It operates in Afar, Amhara, Oromiya Regional states and Addis Ababa City administration, and has registered remarkable results in changing the lives of the poor to the better. DEC developed the capacity of partner organizations, improved quality of primary education in the project intervention areas by improving teachers’ skills on ICT application for improved teaching, learning, introducing active learning methods in the teaching-learning process and enhancing the capacity of stakeholders and raising the awareness level of schools and surrounding communities on WASH in schools.

DEC aspires to see all underprivileged children properly fostered. Hence, it facilitates child-focused comprehensive development interventions to create a safe and conducive environment to fulfill the best interest of the children.
Improving sanitation through credit facilities

Modjo is one of the fastest growing towns in industrial sectors of Tannery, Textiles and Flower business. Population pressure in urban areas challenges the town administrations in providing services and basic infrastructural facilities. There are limitations of social service facilities in Modjo Town. These problems include a lack of educational and health facilities, poor sanitation and bad liquid waste systems and solid waste management. Sanitation infrastructure services are limited and there were only seven public toilet blocks located at different market places and bus stations. The municipality does not have any area-based containers for the collection of solid waste and trucks for liquid waste. Solid waste is dumped on an open site and there is no sanitary landfill site. The town municipality and WASTE developed a project called the Modjo Town Municipality Sanitation Support project. The project has used the WASH business model (diamond approach), which encompasses the involvement of relevant stakeholders within governments, households, SMEs, MFIs and NGOs to improve waste management problems through creating credit facility.

Activities
The project has undergone different activities in order to improve sanitation in the town and use the waste for productive purpose. The initiatives include:
- Providing awareness creation for key stakeholders on the diamond business approach and sanitation business.
- Providing Community Led Total Sanitation and Health training for HEWs and households.
- Identifying and selecting household applicants who need private and group toilets.
- Identifying, selecting and training MSEs who work on sanitation business (solid waste collectors, manage public toilets).
- Preparing their business plan for process of the loan, process the loan in collaboration with MFI.
- Build household toilets and follow up the construction and assure the construction is run according to the design and BOQ.
- MSEs are collecting wastes from households and construct public toilets.

Change on the ground
The implementation of the project in Modjo town has brought important changes at ground level:
- Awareness creation - both in the community and the governmental body - increases their knowledge on sanitation business.
- By CLTSH training over 200 households are triggered to protect their health and environments.
- Improved sanitation: households are taking the loan and construct qualified private and group toilets.
- Local business development: job opportunities are created for those MSEs that construct the toilets.

Lessons learned
The project has provided the following lessons.
- Loan experiences are increased and changed from the community - for the purpose of sanitation.
- The municipality pays more attention to the sanitation sector and allocates the necessary budget to work together.

Partner: Modjo Town Municipality
Modjo is a medium sized town and consists of two kebeles with a population estimated over 50,000 people. Modjo town is located at east direction and 40 km away from Addis Ababa. The Modjo town municipality has duties and responsibilities to administer the town. The administration has departments of health office, municipality, MSEs office, TVET and Sanitation and greenery sub owner office. This office is responsible for establishing a sustainable sanitation system by provision of improved public toilets, by mobilizing, strengthening and establishing private enterprises and by generating income from sanitation services and products. This increases sanitation coverage in mojo town administration, creates technical support for MSEs who work on sanitation business (solid waste collectors, manage public toilets) and helps constructing public toilets and greenery areas that certify the MSEs and the community for management.
The Tigray Regions faced a serious problem of water stress, lack of accessibility of safe water and food insecurity. The community was collecting water from unprotected water sources - a major cause of waterborne diseases and poor health in areas with severe water scarcity. Women collected water from far distances and took even more time to fetch drinking water. There are sanitation and hygiene problems in the project area, as there is water shortage.

The Beles SUNRise Project (BSP) team developed an innovative solution to overcome the severe drinking-water constraints prevailing in many parts of the region: the rapidly growing number of houses with corrugated iron sheet roofs provide a reliable opportunity for roof-water harvesting for household drinking-water supply. The Kalamino Cistern has been constructed in Tigray Regions for households with severe drinking-water supply constraints.

Activities

- Roof-water is collected in a slid-open PVC pipe attached to the corrugated iron sheet roof. A first splash discharge outlet allows users to discharge dirty roof-water for a short while after rainfall starts. The outlet is then closed manually, and clean roof-water is collected in the cistern.

The project provides two weeks practical training on the construction of the Kalamino Cistern roof-water harvesting system to young men and women from project communities. Normally six Community Technicians are trained per project community. A pair of trained Community Technicians is equipped with the required molds and tools. Cistern construction is carried out by the technicians on contract basis. Construction is regularly supervised by project experts. A pair of trained technicians can construct 4-6 Kalamino Cisterns per month. Users receive training on operation and management of the system, and are organized into Water Sanitation & Hygiene Committees (WASHCOs). Water quality sampling and periodic chlorination is arranged by the District Water Resource Development Office. Beneficiary households pay an average monthly water fee of USD 0.5 (ETB 10) which is used for maintenance costs.

Change on the ground

The Beles SUNRise Project (BSP) with the construction of Cistern at household level has brought significant change on the ground:

- Significantly improved household drinking water supply and family hygiene.
- Reduced workload for women and female children.
- Enhanced household climate resilience.
- Skill development.
- Institutional capacity development.
- Creation of local job opportunities.

Lessons learned

The construction of cisterns at household level in the project area provided us with the following lessons learned:

- Reduce and save time for women to fetch water from long distances, since they are able to collect water at their home.
- Construction of cistern at household level develops a sense of ownership in the beneficiaries.
- Cistern technology is appropriate in water stress areas to collect rain water at household roof catchment and thereby improve accessibility of water for the household.
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