Summary

This paper aims at providing an overview of the importance of capacity building within the sustainable sanitation sector, highlighting the existing gaps regarding capacity development and continuing an agenda on how one can contribute towards effective capacity building to achieve the sustainable development goals in relation to sustainable sanitation. Based on a workshop at SuSanAs Working Group 1 meeting during the Stockholm Water Week 2016, this paper serves as an orientation for actors within the area of capacity development and will be beneficial to those who are planning and building capacities of individuals and organizations in the sanitation sector as well as in interrelated sectors.

The paper contributes to the discussion on how SuSanA can respond more to comprehensive and integrated sustainable development linked to the Agenda 2030 and targets on putting SuSanAs new Vision 2030 into practice.

Key messages

- Capacity building initiatives need to be implemented at a large scale considering the time constraints till 2030, observing the fact that varying contexts imply unique solutions. Therefore, multiple local stakeholders and educational institutions need to be brought on board, as they play significant roles in the development processes.
- There is need to assess WASH strategies, plans and projects as well as sanitation-related institutions at national level to identify existing capacity gaps within each country, disaggregated in terms of specific professions and skills required. This can be a basis for quantifying existing gaps at a global level.
- To center capacity development initiatives around the specific needs of beneficiaries they have to be adjusted to existing projects and efforts made in order to have post-implementation capacity building and technical assistance in addition to monitoring.
- To measure the effectiveness of capacity building initiatives properly, there is need to carry out long term evaluation and monitoring activities, anchored within existing local programs and intended at measuring outcomes in relation to implemented changes within local institutions. Those activities should be done in addition to post-workshop evaluations.

Background

Looking back to over 15 years of attempting the Millennium Development Goals, much progress has been made in providing access to sanitation and water globally, particularly towards halving the global population without access to safe water and basic sanitation by 2015 (WHO and UNICEF, 2015b). With the Sustainable Development Goals (SDGs), we now have even more ambitious targets, including not only universal access to water and sanitation but also the holistic management of water resources and ecosystems (WHO and UNICEF, 2015a). Achieving the SDGs will undoubtedly require a lot of effort and the participation of multiple stakeholders.

There is increasing discussion on the quantity of effort needed to achieve the targets of SDG6 by 2030. Estimated by the World Bank, about US$ 112 billion capital investments are needed annually to meet SDG 6.1 and 6.2 (Hutton and Varughese, 2016). A well-known key issue is the number of professionals required to keep the water and sanitation sector running. Studies by the International Water Association (IWA) have estimated, that there is a global deficit of at least 1 million jobs annually to achieve SDG 6, including workers from different backgrounds (Bergkamp, 2016). In several countries,
even the baseline status of the human resource capacity in the water and sanitation sector is not known.

The lack of jobs highlighted above is directly related to the need for capacity development, not only for individuals but also for institutions within the sector to provide sustainable water and sanitation services. Many institutions, particularly in low and middle income countries, are not only understaffed but insufficiently educated to meet the requirements of service provision in their community (Bergkamp, 2016; WWAP, 2016). Insufficient capacity across disciplines related to sanitation is one of the most significant barriers to sustainable service provision. The limited technical human resource capacity of NGOs and governmental field staff is a critical obstacle to the attempt of achieving the Sustainable Development Goals (SDGs). There is an immediate need to develop more professional, hands-on capacity building programs tailored to the knowledge and skills required to deliver sanitation programming in developing countries.

The need for increased and effective capacity development to reach the post-2015 agenda is explicitly addressed within SDG 6a; “By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programs, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies” (UN Water, 2015). As one of the biggest networks within the sanitation sector, the Sustainable Sanitation Alliance unifies different stakeholders, including organizations, institutions, beneficiaries and other individuals. Achieving this effectively will involve the cooperation of all actors across the field, delivering contribution together.

In the past, SuSanA has played an important lobbying role in order to highlight the importance of sustainability issues in sanitation, particularly in the context of the MDGs. We can build on this track record and prepare each working group to make a significant contribution towards achieving the post-2015 agenda. Within this attempt, the SuSanA working group on capacity development (WG1) focuses on fast-tracking the development of the necessary human resource and capacity at local, national and global levels.

For WG1, the operational definition for capacity development is “the collective actions of groups of individuals, organizations and societies, that possess a collection of specific abilities, which enable them to manage their affairs successfully” as stated in the SuSanA factsheet on capacity development for sustainable sanitation (Spuhler et al., 2012). For that matter, the process of building capacity can be expressed in many forms. Most capacity building is done by training, which can be targeted towards participants looking to improve their knowledge and skills to perform their implementation work. Besides that, forming trainers and providing knowledge to increase the capacity of institutions can be used to support these measures.

Considering the demands highlighted, members and partners of SuSanA, who are involved in WG1, have engaged in a continuing dialogue about central questions:

• How capacity gaps/needs can be assessed?
• How to build capacity at large scale in the WASH sector while maintaining quality?
• Which aspects are important to frame capacity building effectively?
• How can we measure impact and effectiveness of training programs and initiatives?

This dialogue has taken place in the SuSanA Forum and within a series of topic-related meetings in the context of topic-related events 2016, like the WEDC conference and the Stockholm World Water Week. This position paper is a result of these ongoing processes.

**How can we assess capacity gaps/needs?**

So far, assessments have been made regarding to the size of the workforce required to achieve the water and sanitation targets in the SDGs. However, there is still need to bring these attempts to a local level, where necessary action can be taken to fill the gaps in human resource and capacity. It is for this reason that new approaches need to be taken in assessing human resource and capacity at every level and also in jurisdiction.

Concerning human resource gaps, clear definitions and distinction of terms used in the WASH sector have to be made, especially to non-technical actors. Considering that, it is difficult to get the right person for a particular task/job. Therefore, the distinction between professionals and roles needs to be made clearer to the public.

At the national level, keen observations of national institutions and their work could reveal capacity gaps. The presence or absence as well as the quality of plans, strategies, targets and indicators, regulations and standards for WASH at the national level can reflect the existing capacity gaps. Regarding community level, open forums and mapping the roles of individuals and sector stakeholders involving their capacities can enable the identification of capacity gaps. Relating to project level, analyzing the results of implemented projects can point out gaps in capacity, especially considering factors like the choice of technologies, the locations chosen for WASH facilities and the functionality of the installed facilities over time. In this respect, any failure ideally reflects capacity gaps.

It is important to recognize, that capacity building must include not only technical skills, but also non-technical skills, containing community engagement best practices, financing and demand creation among others. In many instances, these non-technical skills allow and enable the scaling up of technology implementation and therefore should not be overlooked in any assessment of capacity gaps or needs.
Contribution of SuSanA WG1:

The SuSanA network and in particular SuSanA Working Group 1 will collect information on potential gaps, that practitioners could potentially encounter within the scope of their work. In addition, WG1 will provide a catalogue, where stakeholders can find tools, materials and other resources, that help to fill these gaps, for example through an online database on existing training programs, tools and/or materials in the field of sustainable sanitation. An attempt at this has been done via the SuSanA forum and the 13th factsheets on sustainable sanitation, in which a number of institutions providing training on sustainable sanitation were listed (Spuhler et al., 2012). Building upon these previous activities, more widespread effort will be made to include institutions and programs, which are not already involved.

How can we build capacity at scale while maintaining quality?

Considering the continuous demand for qualified and competent professionals to enable timely progress towards the SDGs, it is obvious, that there is an urgency to quickly scale up capacity-building initiatives and activities. Not losing quality within this progress is challenging. In this context, “quality” refers to capacity building, which appropriately meets the needs of beneficiaries. Some of the key challenges in this quest include funding to support capacity building activities and the identification of resource persons at large scale.

A core element in this effort is to involve multiple stakeholders (e.g. NGOs, donors, government agencies/ministries, private sector, academia). However, narrowing the wide range of stakeholders down to the most important or influential actors is difficult in certain instances. It is necessary to know the knowledge gaps, priorities and plans of different stakeholders and their motivations. Nevertheless, training providers are key players that need to be included in any attempt of building capacity.

The focus on quality highlights the critical decision-making related to its context. Tailoring capacity building programs to the local context is very crucial to the success of scaling up processes. In general, implementation is difficult due to the large diversity of customized training required to achieve the WASH SDGs. Recent innovations, like Massive Open Online Courses (MOOCs), could be important tools in building capacity at a larger scale. Nevertheless customized training only appears to be sustainable when attempts are tailored in local contexts (Bergkamp, 2016). This fact points out the important role of local institutions in the progress of capacity building initiatives. Efforts should be made in order to improve the ability of these actors to identify capacity gaps and develop necessary training and programs. By increasing capacity of local institutions, we can deliver customized training at local level, supporting efforts across the globe simultaneously.

Regarding educational programs, it is important to connect relevant content to the sustainable development goals. By this means trainees are introduced to a holistic picture of the 2030 agenda, catching inspiration on how one can contribute as an individual within their respective profession. Beneficiaries, who already gained positive experiences regarding to training programs, should also be involved in building new initiatives.

There is also need to engage young people, increase their awareness of the sustainable development agenda and get them involved in the sanitation sector. Young people are easily adaptable to new technology and social media approaches, which makes it easy to reach out to large numbers more effectively. Moreover to strategically shape our future, efforts and investments should be made to equip the next generation of sanitation practitioners so as to make a worthwhile contribution to sustainable sanitation.

Contribution of SuSanA WG1:

As a network of over 280 organizations and more than 7300 individual members scattered around the world, SuSanA is in a unique position to provide knowledge through their platform. This includes sharing best practices in scaling up as well as failures and challenges within capacity building initiatives. SuSanA can also be a connector for various complementary groups or stakeholders engaged in scaling up capacity building initiatives around the globe.

SuSanA WG1 will support the identification, documentation and dissemination of best practices in scaling-up capacity building initiatives. Regular WG1 meetings (online and face-to-face) allow peer learning among members and enhance exchange about challenges and successes related to improving human capacities within the sanitation sector.

How can we shape capacity building effectively?

For capacity building to be effective, activities have to be designed according to the needs of beneficiaries. Most important for this cause is the setting of clear targets and investments should be made to equip the next generation of sanitation practitioners so as to make a worthwhile contribution to sustainable sanitation.

Processing capacity development activities centred around participants requires emphasis on establishing learning processes and action plans, which can be integrated into professional lives. Therefore, the adjustment of ongoing capacity development programs and project implementations is essential in order to set correlations between people and their occupation. For instance, instead of setting up new programs for sanitation professionals, it might be more effective to encourage collaborations with local universities or institutes to ensure high quality education on a local level continuously.
The effectiveness of education can be enforced by introducing experiential and interactive training, focusing on local demands. Regarding this, the use of professional development plans and mentorship schemes could be valuable. To promote motivation, certificates are a necessary tool of recognition.

Due to the broad variety of different contexts facing sanitation, it’s very important to enable professionals to create adjusted solutions. This approach also includes the knowledge of trial and error methods as a fundamental technique on how to learn from failure. Beyond that, potential people within the community need to be identified and supported in their attempt of engaging and contributing to a sustainable development.

In summary, delivering capacity building activities should be coordinated by creating partnerships between various stakeholders, sharing knowledge and managing it effectively, decentralizing training activities and integrating training between various sectors.

**Contribution of SuSanA WG1:**

SuSanA WG1 is well placed in the position of advocating training programs, building them around the participants and beneficiaries. Allocating over 280 profiles of sanitation related partners on the webpage, SuSanA offers an excellent tool to connect organizations and provide matchmaking between sanitation actors. SuSanA WG1 will work further on using its position to support local organizations, universities and vocational institutes in various contexts as well as to enhance their capacity to pro-actively undertake and effectively carry out local capacity building initiatives which serve community’s needs.

WG1 will put more focus on improving and increasing vocational training considering the need across the globe. At the moment, many training courses and programs concentrate on policy and planning aspects, which tends to widen the gap in terms of people with hands-on technical skills. In addition, WG1 members will collaborate to do global assessments to identify different technical trainings and materials, but also existing gaps within them. Collaborating with other working groups and SuSanA members, WG1 will try to refine data to fill these gaps.

WG1, supported by the SuSanA network and the SuSanA secretariat, also aims on making relevant information and resources available broadly to support the local stakeholders around the world. That will be done through improving and expanding the resource offers (e.g. library, training materials, conference materials) at the SuSanA webpage based on the principles of open-source.

**How can we measure the impact and effectiveness of training?**

Measuring the impact of capacity building initiatives is essential in order to assess the fulfilment of its objectives and to form future activities. In some cases, participants are unable to use acquired skills. This appears in consequence of different reasons, ranging from migration to the change of job among others, and often leads to the loss of skills. It is therefore crucial to come up with various indicators that can be used to measure the impact and effectiveness of training.

The overall results of educational training can be measured and observed through changes in the project outcomes. Methods that could be used to measure results include are formal impact assessments or performance measurement, observations on organizational and institutional changes as well as behaviours of participants or the evolution of capacity needs.

Behaviour could be measured through observing post training practices and applications, such as implementation of skills, ability to apply new tools or observing the participants ability to train others. This requires following up with participants or using workshop assessments. However, the impact of training needs to be evaluated over time to ensure long term impact. This requires large funds which unfortunately today are hardly provided by existing funding schemes. To enhance sustainability of sanitation capacity development in the long term, the design of capacity development interventions needs to include a post evaluation on a regular basis, monitoring whether the interventions were effective or not.

In many cases, capacity building activities are done only while building infrastructure, but not afterwards. To ensure long term sustainability of projects, it is important to have on-going post-implementation capacity building and technical assistance in addition to monitoring.

As mentioned previously, it is reasonable to anchor capacity development initiatives in national institutions to avoid short-term activities. Following this, the focus needs to be placed on educating trainers and providing toolkits, raising the ability of institutions to build capacity in the local context.

**Contribution of SuSanA WG1:**

SuSanA is an excellent platform for members to share experience on capacity development and encourage impact studies. It is also an excellent platform to collect or jointly develop training-of-trainers toolkits and training material for local institutions to be used (e.g. the SSWM Toolbox: www.sswm.info) Moreover, SuSanA WG1 will also actively share indicators for measuring the effectiveness of capacity development and engage members in the discussions around them. Further, SuSanA WG1 will encourage SuSanA partner organizations to develop mechanisms and tools to ensure long
term monitoring of capacity building initiative results. Webinars with brainstorming sessions are one of the tools that will be used by WG 1 to understand the monitoring activities other organizations are involved in.

**Conclusions**

By promoting and facilitating the development of capacities for both, individuals and organizations, SuSanA supporting actors of the sanitation sector worldwide at the attempt of achieving the SDGs. We have to increasingly attract and retain professionals to work in the sustainable sanitation sector by creating inclusive education programs and work environments. Equally important will be to ensure the competence of local organizations and institutions by supporting necessary resources and capacity to develop the expertise of professionals for implementing sustainable sanitation service provision in their communities and beyond. Approaches need to be effective and have to provide ways of measuring the impact of capacity building long term. That way, various efforts can meet the desired outcomes, targeting at existing gaps and needs. As SuSanA WG1, we invite all relevant stakeholders to engage in this ongoing discussion to work together towards having individuals and organizations well equipped for the task at hand – achieving the SDGs.

**References**


