

Investing in effective technologies for sustainable WASH services

A wide range of conventional and innovative water, sanitation and hygiene (WASH) technologies are available to the sector agencies and communities. Cheap and affordable solutions for achieving sustainable WASH services are within reach, yet few have been implemented successfully.

The sector is hesitant to take up new innovative technologies while conventional ones fail to deliver a sustainable service under many conditions. To address this, WASHTech is developing a systematic and robust Technology Assessment Framework (TAF) in an action-based research approach.

The TAF helps the user decide if a WASH technology is sustainable and applicable - or not - in the specific context of the user. The framework also indicates risks and supportive factors that may affect the technology introduction process in the user's chosen context.

Target users of the TAF are national and local governments, donors, NGOs, Research & Development institutions, private sector enterprises and universities.



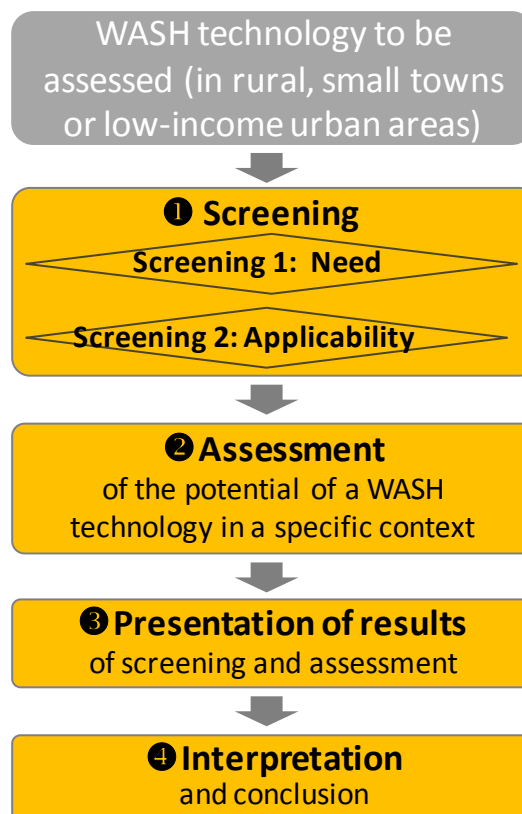
How to use the TAF

The TAF guides users through a transparent stepwise process. Data from the field is also needed to apply the TAF. The results are generated through a workshop-based process that involves all relevant stakeholders.

The TAF Process in 4 steps

The framework is accompanied by a manual that provides the user with clear guidance for the TAF application and recommendations about what approach to take to guide the introduction of approved technologies.

The TAF Process in 4 steps

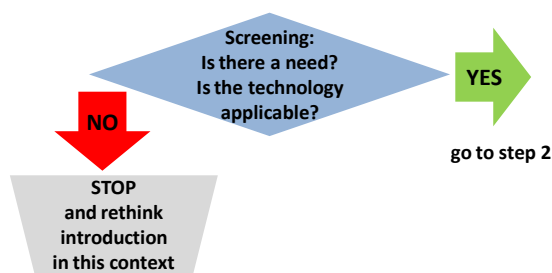


Steps in TAF assessment

Step 1: Screening

Goal: To reject WASH technologies that are found to be unsuitable in the user's specific context.

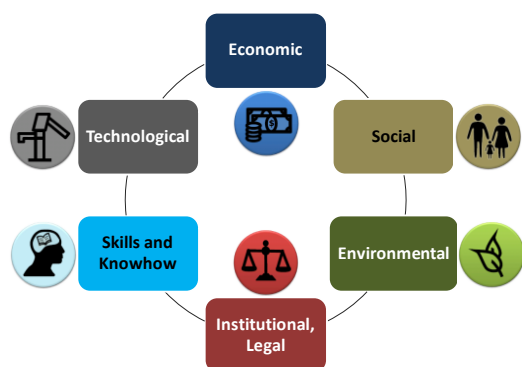
The Screening is based on a simple-to-use questionnaire, see below.



Step 2: Assessment

Goal: to comprehensively assess the applicability of a specific WASH technology in the user's specific context to contribute to a sustainable WASH service delivery.

The TAF assessment considers **18 indicators**, which are developed based on 6 sustainability dimensions and three particular stakeholders' perspectives. The six sustainability dimensions applied in the TAF cover the areas:



The three particular perspectives include:

- **User/Buyer**
- **Producer/Provider**
- **Regulator/Investor/Facilitator/Supervisor**

By introducing the three perspectives, the TAF puts particular emphasis on perspectives and roles of key actors in the WASH technology introduction process and forces TAF user to consider these roles and perspectives in the assessment accordingly.

For each indicator a specific questionnaire has been developed. The answers to the questions will be collected in the field, which are from the users/buyers, from the provider/producer, and from the regulator/facilitator/supervisor. That implies that data has to be collected at local/district and user community levels.

The scoring follows the traffic light system. An additional score (?) can be used if aspects are not fully clear yet and have to be followed up. Each of the 18 TAF questions is given a score based on discussions in the (TAF) technology validation workshop where a selected group representing the three perspectives (user/buyer-producer/provider-regulator/facilitator).

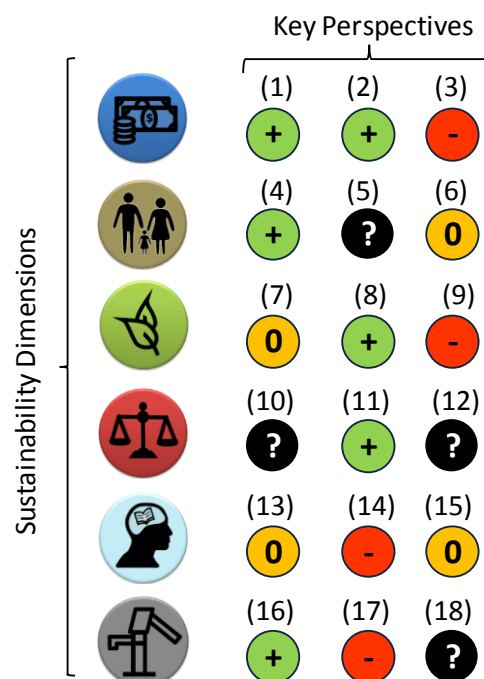
Step 3: Presentation of results

Goal: To present results of the TAF application process, in particular of the screening and assessment, providing a graphic profile.

The results of the screening (step 1) are documented in the screening questionnaire. The scores for all 18 indicators given in the assessment (step 2) are presented in a graphical profile.

Through this presentation the scores can easily be interpreted for each of the six dimensions and for the different key stakeholders. For example, areas of risk can be defined (the red scores) and mitigation measures be discussed.

Example of a graphic profile



Step 4: Interpretation

Goal: To interpret the results and to reach an agreed conclusion about the applicability of the technology in this context and on linkages to the appropriate introduction of an approved technology.

The conclusion will be generated in the (TAF) technology validation workshop group based on the results from the four-step process of the TAF application. Through the involvement of all key stakeholders in the entire process of TAF application, a high level of understanding within the sector and its actors should be generated which supports the acceptance of the results of the technology assessment in the wider sector.

The TAF is designed as a decision making tool. The conclusion based on the TAF does not directly lead to a selection of technologies, but it might become the tool to build up the basis for an informed decision.

The TAF is currently under development and being tested together with sector stakeholders in Burkina Faso, Ghana, and Uganda. A final version will be available by 2013.

WASHTech Consortium consists of the following organisations: IRC International Water and Sanitation Centre, WaterAid UK, WaterAid Uganda, WaterAid Ghana, WaterAid Burkina Faso, TREND, KNUST, WSA, Cranfield University, NETWAS Uganda, Skat Foundation.

This document has been produced by Skat (May 2012). For more information visit <http://washtechafrika.wordpress.com/> or contact André Olschewski (Skat Foundation) andre.olschewski@skat.ch

