



Social



1 – Demand for the technology



User, buyer

Why is this indicator relevant?

Target users must express a real need or demand for the services provided by a technology if management challenges are going to be overcome in the future. Cultural taboos can cause users to reject a technology. If users feel a technology is inferior, they may reject it. If users are unwilling to invest in a technology or pay for its operation and maintenance, prospects for sustainability will be undermined.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 1.1	What water related issues and needs are there in this community/area and how do users think this technology might address these?	An understanding of user expectations for a technology helps to form a picture of what demand they may have for it.
GQ 1.2	Which technologies (if any) are currently used to address water related issues and needs in this community/area?	It is useful to understand if other technologies are already addressing water related needs and whether the new technology is needed.
GQ 1.3	Within the target region could there be cultural or religious reasons why this new technology may not be acceptable to people? Would all parts of the community be allowed to use the technology and benefit from the service it offers or would some be excluded?	Cultural and social acceptance is essential for sustainable uptake. If a technology is viewed as inferior for any reason, it may not be accepted. Inclusive, equitable service levels should be a high priority.
GQ 1.4	Are users interested in this new technology at all? If yes, how much would they be willing to invest as capital cost (CapEx)? Have they contributed to the CapEx of any other technology before?	The full capital cost of this technology and its introduction needs to be worked out BEFORE putting this question to users, so that an informed discussion can take place!
GQ 1.5	Would users be willing to carry out regular upkeep activities and to pay for O&M (OpEx) and for major repairs (Cap ManEx) on a regular basis? How much would they be willing to pay? Have they contributed to the OpEx and CapManEx of any other service before?	The full O&M cost of this technology, as well as the cost of major rehabilitation, needs to be worked out BEFORE putting this question to users so that an informed discussion can take place!
Scoring Question SQ 1	Are potential target users interested in the services the new technology can provide to the extent that they would be willing to pay for CapEx, OpEx and CapManEx?	Score for indicator 1



Social



2 – The need for promotion of the technology and market research

Producer, provider

Why is this indicator relevant?

Without strong promotion, technologies, providers and supply chains will often not be known to users and buyers. Good promotion is essential for scalability. Ongoing market research must be carried out by producers and providers if technologies are going to continue to meet users' needs. Poor user feedback mechanisms can mean that design problems are not acted upon, affecting sustainability.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 2.1	Have target users heard about this new technology before? Do they know it from other places and know what service it could potentially provide?	People generally only consider investing in a technology if they know it exists and understand what service level it can provide.
GQ 2.2	Is there a likely chance that there will be any subsidies for this technology? (from government, donors, others)?	Subsidies can stimulate demand for a technology and help to raise awareness of the services it provides.
GQ 2.3	How do producers/providers understand what demand and expectations exist for their technology and any user problems with it? How do they update this information?	Market research and follow up are essential if producers and providers are going to continue to meet user needs and demands. Design flaws must be acted upon.
GQ 2.4	Who will promote this technology at the national and local level? How do potential new users find out about this new technology?	Good promotion is essential for scalability. It requires dedicated skills and funding.
GQ 2.5	According to the producers, which media are most appropriate for promotion of this water technology? (e.g. TV, radio, drama, demonstration site, other)	Promotion has to be directed at the target audience using the most suitable media.
GQ 2.6	How do the producers/providers consider the needs for the technology to be accessible to the poor and excluded groups in product development? Do they target all groups in the user population with promotion? If not, which groups are excluded and why?	Technologies need to be accessible to poor and marginalized groups if they are to meet user needs.
Scoring Question SQ 2	Do the producers have resources and effective mechanisms in place to do targeted market research, promotion, product development and follow up as needed?	Score for indicator 2



Social



Regulator, investor, facilitator

3 – The need for behaviour change and social marketing

Why is this indicator relevant?

There may be very weak demand from users for the water service level provided by this technology without substantial change to their perceptions, attitudes and behaviours. This requires strong community mobilisation, social marketing and integration/alignment with existing traditions and incentives, for example linking improved water supplies to productive livelihood water use.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 3.1	How do communities and service providers currently address water supply issues in the target area? What are common behaviors, and practices?	This question sets the scene for follow up questions on the need for behaviour change and social marketing.
GQ 3.2	Are changes to the perceptions, attitudes and behaviours of target users required to stimulate demand for affordable and cost effective water services using this new technology?	If this is the case, then the need for substantial behaviour change must be met with skills and resources to achieve it.
GQ 3.3	Are changes to the perceptions and attitudes of regulators, investors and facilitators necessary to stimulate demand for affordable and cost effective water services using this new technology?	Wrong perceptions / attitudes of the regulator, investor, facilitator regarding this technology or target groups can inhibit its scalability and sustainability.
GQ 3.4	Do providers and facilitators have the necessary skills and resources to bring about changes to users' perceptions, attitudes and behaviours required for sustainable uptake of this new water technology?	If providers and facilitators do not have the necessary skills and resources to bring about changes, a technology may be rejected.
GQ 3.5	Are users in the target area involved in choosing technologies, introduction processes and cost models? Who decides what technologies should be deployed? Politicians, technocrats, local government, NGOs or users?	Technology choice is often top-down with insufficient involvement of those who are affected by the choice of that technology. If this is the case, the need for essential behaviour changes might get neglected.
Scoring Question SQ 3	Is the introduction of this new technology possible without any behavioural changes? Do providers and facilitators have the necessary skills and resources to bring about changes to perceptions, attitudes and behaviours for this new technology to be sustainable and scalable?	Score for indicator 3



Economic



4 – Affordability



User, buyer

Why is this indicator relevant?

If users cannot afford to buy this water technology, scalability will not be possible without subsidy. If users cannot afford to pay for the operation and maintenance costs (including the cost of major rehabilitation), sustainable service levels will be highly unlikely without permanent external financial assistance.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 4.1	What do people pay now for 20 l of water using existing technologies? Is this sufficient to cover OpEx, CapManEx and full capital cost for system renewal at the end of design life?	This gives an indication of whether current tariffs really reflect the true cost of any existing services.
GQ 4.2	Could users afford to pay for the full capital cost required for this new water technology (CapEx)? What contribution could users make to CapEx in cash and in kind as a percentage of the overall CapEx?	The full capital cost of this technology needs to be worked out BEFORE putting this question to users!
GQ 4.3	Could users afford to pay for the full cost of operation and maintenance (OpEx) required for this new water technology? What percentage of total annual OpEx are they currently paying for?	The full operational cost of this technology needs to be worked out BEFORE putting this question to users so that an informed discussion can take place!
GQ 4.3	Can users afford to pay the costs for major repairs (CapManEx) required for this water new technology?	CapManEx (see comments above). All technologies require maintenance no matter what producers may claim.
GQ 4.5	What is the estimated average cash income per family per month among the target group in this region?	Users may be unwilling to disclose this information. Try to guess by asking about other expenses, such as school fees and healthcare.
GQ 4.6	Will poor households who cannot pay for the hardware excluded from applying this new water technology? Are there shared improved water sources that they are allowed to use?	Gives an indication of whether affordability is a barrier to access for poor households.
GQ 4.7	Does this new water technology offer potential economic benefits for the user, for example allowing productive use of water?	Income generated through use of the technology could help to pay for its CapEx, and its OpEx and CapManEx.
Scoring Question SQ 4	Is the amount of money that users should pay to cover CapEx, OpEx and CapManEx of this new technology affordable for them on a long term basis?	Score for indicator 4 - The amount should not exceed 3-5% of household budget. If only affordable with subsidies, the score should be yellow. The score is red if subsidies cannot be assured on long term basis.

	Economic
	5 – Profitability
	Producer, provider

Why is this indicator relevant?

If producers do not raise sufficient revenues to cover the cost of market introduction, promotion, technology development, supply chain development and after sales support, their technologies may fail to be scalable or sustainable. In some cases, subsidies will be needed and may be provided by third parties, e.g. NGOs or governments, to enable the producer to create sufficient turnover and revenues.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 5.1	How much will it cost to produce a single unit of this technology? What is a realistic price to sell one unit of the technology on the local market? What is the designed life time of the product? What are the recurrent costs for minor repair (OpEx) and major repair (CapManEx) to be expected??	Estimate the total annual fixed costs, the total annual variable costs, add the two together, and divide by the number of units that the seller anticipates will be sold in one year. Add unit production cost, profit and transport. This information should be obtained from the producer/provider BEFORE using the TAF.
GQ 5.2	Is this new technology sold on other markets outside the region? If so, what is the price converted in local currency for a single unit of this technology sold for on local markets? This should include delivery and installation.	Use Excel based Cost Tool
GQ 5.3	Is there good, profitable market potential for this new technology in this region or even in the country?	Does the producer expect substantial, profitable sales in the region or beyond?
GQ 5.4	Is the technology fully developed (ready to use), or is substantial funding still needed for further development to get this technology ready to sell?	Gives some information on the stage of development of the technology.
GQ 5.5	Are there other 'comparable' technologies (substitutes) that perform the same function available on the local market and what is their sale price?	Answer gives an indication of the level of competition on the market.
GQ 5.6	What support could be available for promotion and development of this technology from other actors, for example through bank loans or grants?	Gives an idea of what other actors will support in promotion and product development (triangulate answer with GQ for indicator 18).
Scoring Question SQ 5	Is there a likely chance that the producer/provider can generate sufficient revenues from sales to cover costs of product development, promotion, supply chain development and after-sales support?	Score for indicator 5



Economic



6 – Supportive financial mechanisms

Regulator, investor, facilitator

Why is this indicator relevant?

Supportive financial mechanisms such as subsidies very much assist uptake by poor communities but do not guarantee sustainability or scalability as they may not be in place for long periods or at scale.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 6.1	Are subsidies required for CapEx (minor repair), OpEx (major repair) or CapManEx (replacing the old/non-functioning unit with a new unit)?	If yes, how much is required?
GQ 6.2	Who is going to provide these subsidies?	Government subsidy is indicative of government commitment to support the technology or service provided by the technology.
GQ 6.3	Are there rules and preconditions applied for subsidizing this particular water technology? If so, please give details.	If subsidies are given, clear rules will be needed.
GQ 6.4	Are viable financial mechanisms in place in this region which allow potential buyers to purchase this technology, e.g. revolving funds, saving cooperatives, bank loans, microfinance?	Affordable financial mechanisms might be the only way to allow poorer households to purchase some of the technologies, e.g. using SACCO schemes or revolving funds.
Scoring Question SQ 6	Will subsidies or supportive funding be available for this technology?	Score for indicator 6



Environmental



7 – Potential negative impacts on the environment or user

User, buyer

Why is this indicator relevant?

The use of the technology could have negative impacts on the local environment or for the user, for example, over-abstraction of groundwater, pollution created by unsafe disposal of brines from water treatment units or noise.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 7.1	Do users know how this new technology works and how to manage it?	If users are not aware of how to use the technology, they may not be aware of risks associated with its use.
GQ 7.2	Are the users aware of any restrictions on the use of this technology?	Indicates if users are aware of any operating restrictions. One example could be limits on pumping or complete bans on using the technology.
GQ 7.3	Do users see any potential risk for their health or environment if they or others in the community would use this new technology?	Possible risks could include, for instance, consumption of contaminated water if filters are not backwashed properly, injury from components of the technology or overabstraction of groundwater.
GQ 7.4	Is there a mechanism to inform users of risks and restrictions associated with use of this technology?	If users are not aware of risks or restrictions, the potential for negative impacts will be higher.
Scoring Question SQ 7	Is there any indication that there might be a risk that negative impacts could result from the use of this new technology?	Score for indicator 7 Scoring rule: if there is no risk, use score “green”.



Environmental



8 – Potential for local production of product and spares

Producer, provider

Why is this indicator relevant?

Local production of the technology or spares might lead to income generation but might need specific inputs which are difficult to provide on a constant basis.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 8.1	Is this new water technology or any of its major components currently being produced in the country or even locally?	Technologies dependent on imports from foreign producers risk enforcement of high import taxes, poor quality control and unreliable supply lines. Local production saves on transport costs.
GQ 8.2	Does the process used to produce this new water technology potentially harm the environment in any way?	Potential negative impacts could include disposal of harmful chemicals used in production or clearance of large areas of vegetation.
GQ 8.3	Is production of this new technology or spares possible locally in terms of skills/capacities and availability of workshops?	Indicates if there is potential to create income or employment through local production with the added benefit of lower fuel consumption/pollution.
Scoring Question SQ 8	Is a local production of this new technology possible at national or local level? Is there a likely chance that production of this new technology at national level would impact negatively on the environment?	Score for indicator 8



Environmental



9 – Potential for negative impacts of scaling up

Regulator, investor, facilitator

Why is this indicator relevant?

If a technology is scaled up for use in multiple districts, there could be impacts on the environment and natural resources at a regional level. Such impacts might include widespread groundwater depletion or widespread pollution. If the performance of the technology is vulnerable to environmental factors (e.g. variable rainfall or surface water contamination), this will be another risk if the technology is used at scale.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 9.1	Could this technology offer benefits over other technologies through lower fuel consumption or lower use of raw materials whilst providing the same levels of service?	Substantial reductions in fuel consumption or natural resources may bring environmental benefits.
GQ 9.2	Does the technology have the capacity to perform under varied climatic conditions, for example, heavy cloud cover, high temperatures, low or high relative humidities, drought, floods, or earthquakes?	Service levels may be seriously affected for days or even weeks if the technology does not have the capacity to perform under variable conditions.
GQ 9.3	Is there a government body responsible for monitoring the impact of technologies like this on the environment?	Localized use of the technology may not have significant environmental impacts, but if it is used at scale, cumulative impacts may occur.
GQ 9.4	Are agencies or organizations at district or national level actively monitoring environmental impacts that may result from the use of this new technology, such as pollution or groundwater depletion?	A lack of monitoring by responsible agencies may mean that environmental problems go unchecked.
GQ 9.5	Are these monitoring agencies/organizations sufficiently resourced with staff, equipment, funding and skills to effectively monitor any impacts and enforce corrective measures?	Institutions with sufficient skills, staff, equipment and funding must be in place to monitor environmental impacts and enforce corrective measures if environmental risks are going to be adequately managed.
Scoring Question SQ 9	Is this technology able to perform under varying conditions and are any agencies actively monitoring environmental impacts of this technology with a remit to enforce corrective action?	Score for indicator 9 Scoring rule: if technology can perform under variable conditions and an agency is monitoring its impacts, use score “green”.



Legal, institutional, organisational



10 – Legal structures for management of technology and accountability

User, buyer

Why is this indicator relevant?

If services are to deliver optimal benefits and be sustainable, the roles and responsibilities of users, local governments, NGOs, external support agencies, private service providers and national government must be clear. Responsibilities for financing, management and external support must be clearly set out and understood. Institutions must be in place to fulfil roles. Legislation should enable roles and responsibilities to be acted out.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 10.1	Who is responsible for carrying out O&M on technologies that already exist in the area?	Users, local governments, NGOs, external support agencies, private service providers and national government may all have roles to play.
GQ 10.2	Is the level of O&M carried out on the present water system/service sufficient to keep this technology running in the long term? Is preventative maintenance presently carried out for the current technology?	Effective preventative maintenance can help prevent expensive breakages from taking place, reducing management costs. Triangulation with indicator 4.
GQ 10.3	What system for management and for O& M seems to be reasonable and appropriate to operate and manage the new technology on the long term?	Community management alone is rarely sufficient to result in ongoing maintenance. Assistance from external authorities is required.
GQ 10.4	Could the current management system for existing technologies be used and would it be adequate for the new technology?	If the current system is not working or there is a lack of external support for communities new management models may have to be devised.
GQ 10.5	What is the likelihood that the O&M regime required to keep this new technology system/service working will be possible within the current regulatory and legal framework?	Are there any legal or institutional barriers to getting the necessary support for O&M from outside the community?
Scoring Question SQ 10	Can the required O&M structure for this technology realistically be managed by the water user group only? If not, are local government institutions or utilities willing or able to provide users with technical, management and financial support for O&M in the long term within existing legal frameworks?	Score for indicator 10



Legal, institutional, organisational



11 – Legal regulation and requirements for registration of producers

Producer, provider

Why is this indicator relevant?

Registration of producers/providers and effective monitoring of their activities by regulatory authorities enhances quality assurance. It may also help to raise awareness of standard prices for technologies and services.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 11.1	Is it possible for the producer or provider of this new technology (or of spare parts) to operate legally without being registered or certified?	In some countries, producers or providers of technologies and services need to be registered with government agencies. Is this the case in your country?
GQ 11.2	Are there clear and specific government rules/laws for registration of producers or providers of this new technology?	Licences may be required to produce or supply technologies.
GQ 11.3	Are there clear guidelines for producers and providers on how to get registered?	Clear, well publicized procedures for registration help to ensure that producers/providers are aware of what they need to do to operate legally.
GQ 11.4	Which institution has a specific mandate to regulate the quality of this new technology and the service it supplies? Does this institution really regulate the quality of this technology? Who can be held accountable if production or installation quality is poor?	Do producers/providers know who is responsible for regulating the quality of their technologies and services?
GQ 11.5	How do producers/providers ensure that their technologies and spares comply with production standards?	What quality controls do producers/providers have in place themselves?
GQ 11.6	Is there a process for government validation of this technology, and is it transparent?	Are there vested interests known around validation and procurement of technology?
Scoring Question SQ 11	Is regulation of producers/providers and of the quality of technologies/spares they deliver transparent, enforced and effective?	Score for indicator 11



Legal, institutional, organisational



12 – Alignment with national strategies and validation procedures

Regulator, investor, facilitator

Why is this indicator relevant?

Technologies introduced should be aligned with national standards if they are to get support from government institutions. Support from government institutions is important to achieve scalability and sustainability.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 12.1	Is the new technology known in the sector and to the authorities at national and at district level? Do national standards exist for water technology with the intended purpose of the new technology? If so, does this new technology comply with these standards?	If the technology is not in line with any national policies or standards, a strong case will have to be made for it to get approval from the government or the Bureau of Standards.
GQ 12.2	What is the national process for getting this new technology validated and approved?	Ask regulator/investor/facilitator to describe this process. This is usually a national issue.
GQ 12.3	Can the design of this new technology be altered to suit local conditions, or is it rigid due to patents?	This is an important issue which is often neglected: is the technology patented or public domain?
GQ 12.4	Which institution has a specific mandate to regulate the quality of this technology and the service it supplies? Does this institution really regulate the quality of this technology? Who can be held accountable if quality is poor?	This question has purposefully been asked twice to allow triangulation with the answer provided by the producer/provider under indicator 11.
GQ 12.5	Are there rules or guidelines which define which O&M structure is most appropriate for this new water technology in this context? If so based on these rules which structure should be applied for this technology?	Which are the rules that define O&M structures?
GQ 12.6	Does this control agency have sufficient capacity and resources to follow up quality control and to enforce regulation?	Are there any examples of this agency exercising its authority in relation to similar technologies?
Scoring Question SQ 12	Is this new technology aligned with national standards and strategies, and is it in compliance with national quality standards? Are there sufficient capacities in place at national and local level to exercise quality control of this new technology?	Score for indicator 12



Skills and knowledge

13 – Skill set of user or operator to manage technology including O&M



User, buyer

Why is this indicator relevant?

Technologies might need specific skills for management, operation and maintenance. For some users, specific training is needed to ensure proper use. Follow-up training of users should be available if skills are to be retained and updated.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 13.1	Is the new technology more complex to operate and maintain than other existing technologies aimed at solving the water issue in this area?	Bringing a technology with more complex management requirements may not be useful.
GQ 13.2	Do users, caretakers or mechanics think they have the necessary technical capacities to carry out O&M of this new water technology?	If minor repairs are needed, can they be carried out by users, buyers, caretakers or local mechanics?
GQ 13.3	Who would be responsible for organizing and providing the necessary upfront training on O&M and management? Are sufficient capacities and resources in place to carry out initial and follow-up training?	Follow-up training is important as people move on and skills are lost.
Scoring Question SQ 13	Based on the current level of skills and capacity within the target user group, will users, caretakers or local mechanics be able to manage the new technology and to provide O&M on a regular basis?	Score for indicator 13



Skills and knowledge



14 – Level of technical and business skills



Producer, provider

Why is this indicator relevant?

Producers and providers need specific technical and business skills to ensure that they will continue to provide pre- and after-sales services at competitive yet profitable rates.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 14.1	Does the producer/provider of this new technology have sufficient business, technical and promotion skills to operate competitively and profitably in the market?	Specific skills are needed for technology introduction; triangulate answer with answer to indicators 2 and 5.
GQ 14.2	Does the producer/provider need external support to define and develop these competences?	Who can provide support to bridge the skills gap?
GQ 14.3	Is there a local training provider who can provide business, technical and promotion skills at local level?	Is support available locally?
GQ 14.4	Does the producer/provider have adequate skills and resources available for after-sales service for this new water technology?	After-sales services may be needed as well as supply chains for spares.
Scoring Question SQ 14	Does the producer/provider of this technology have sufficient technical and business skills to introduce this new technology in the target area using a cost model that ensures competitive, affordable rates but also profitability?	Score for indicator 14




Skills and knowledge

15 – Sector capacity for validation, introduction of technologies and follow up

Regulator, investor, facilitator

Why is this indicator relevant?

The sector must possess sufficient capacities to introduce new technologies, for example, the capacity to coordinate actors, to document and share experiences, and the capacity to carry out quality regulation, monitoring and evaluation, to carry out applied research and to provide back-up technical support.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 15.1	Do the national and local/district water sector actors have sufficient capacity to coordinate the activities of different actors who could be involved in the process of technology introduction?	Does government or civil society possess adequate coordination capabilities?
GQ 15.2	Do sufficient institutional capacities and financial resources exist at national level to provide technical advice and follow-up for the introduction of this technology?	Focus is put here on capacities and resources at national level for technical advice and to do follow-up technology introduction.
GQ 15.3	Do sufficient institutional capacities and financial resources exist at district level to provide technical advice and follow-up for the introduction of this technology? (can also be a local NGO)	Specific focus is put here on capacities and resources at district level for technical advice and to do follow-up technology introduction.
GQ 15.4	Do sufficient institutional capacities and financial resources exist at national and local level which allow management, coordination, M&E and documentation of the introduction process for this new technology?	Focus is put here on capacity at national level for planning and managing an introduction process.
GQ 15.5	How and where can potential buyers access non-biased information about existing and this new technologies of this type?	If a technology is to be scalable, it is important that potential buyers can access detailed information about it.
Scoring Question SQ 15	Are current capacities and financial resources sufficient at national and district level to provide adequate technical advice and support for the introduction of this new technology, including coordination, management, M&E, market research and follow-up?	Score for indicator 15



Technological



16 – Reliability of technology and user satisfaction



User, buyer

Why is this indicator relevant?

Products have to fulfil the expectations of users. If expectations are not met in relation to performance, design life, quality and ease of O&M a technology may be rejected, or users may not be willing to pay for it. If this technology enhances social status, this may also improve the willingness of users to pay for it.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 16.1	Are users satisfied with the level of service provided by other water technologies in the area?	Helps to understand what users might be looking for in a new technology.
GQ 16.2	What do users expect from this new technology?	Helps to understand what users might be looking for in a new technology.
GQ 16.3	Is the new technology designed to adequately meet these expectations?	Helps to understand if users are likely to be satisfied with the new technology.
GQ 16.4	What needs to be in place for this new technology to deliver an acceptable level of service to users?	
GQ 16.5	What potential vulnerabilities does this technology have that may impact on service levels and user satisfaction?	Seeks to understand if there are any obvious reasons why the technology will not work well in the area.
Scoring Question SQ 16	Considering current service levels provided by other technologies, is there a likely chance that the new technology might meet or exceed user expectation and be of interest for the all user groups?	Score for indicator 16



Technological



17 – Viable supply chains for technology, spares and services

Producer, provider

Why is this indicator relevant?

Viable supply chains are required for a technology to be scalable and be used on a sustained basis. Supply chains can also enhance the feedback from users to suppliers.

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 17.1	How would this technology and spares physically be delivered to users/buyers? Would anyone else be involved in delivery other than the producer/provider?	Details of who is responsible for construction are also useful.
GQ 17.2	What is the design life of this technology if used according to the instructions? Which part or parts need replacement within a year of operation?	Users should be aware of when components need to be replaced.
GQ 17.3	Is there a supply chain in place for other technologies that could be used to provide spares for this one?	Does a supply chain seem viable and sustainable currently?
GQ 17.4	In the area of the target communities, are retailers and supply chains already in place for other technologies, which could become the supply chain for this technology too?	What options exist for the distribution of spares?
GQ 17.5	Have users been involved in the development of this water technology?	Usually, the early involvement of target users helps to improve a technology significantly.
GQ 17.6	How could user feedback be properly captured, and ideas documented on the need for further product development?	Capturing feedback is essential, but often, no mechanism is in place to do it.
Scoring Question SQ 17	Is there potential to set up a viable supply chain for this technology and spares in this target region, and is there any mechanism for follow-up with users after technology introduction?	Score for indicator 17



Technological



18 – Support mechanisms for upscaling technology

Regulator, investor, facilitator

Why is this indicator relevant?

The development and introduction of technologies requires a lot of financial resources over a long period when there are hardly any revenues. Many initiatives don't manage to cross this "Valley of Death".

Scenario: Water – New – General

GQ	Guiding Question	Explanation
GQ 18.1	Are there artisans, entrepreneurs or contractors at local or national level with capacities and financial resources that could be interested in supporting the development, introduction and scaling up of this technology?	Supportive conditions leading to a vibrant local private sector will help to support introduction.
GQ 18.2	Are there government-led programmes or financial mechanisms in place which support the producer in the development and introduction of a water technology similar to this new technology, e.g. a fund for WASH or water technology innovation?	Introduction of a technology can be boosted if it is integrated in government programmes, e.g. a specific water project or an innovation programme. Government can exempt specific products from taxes.
GQ 18.3	Are there third parties, e.g. development partners, knowledge networks or INGOs with sufficient long-term funding who could take up and support the development, piloting and introduction of this new technology?	Development partners are important actors to support innovation and research in WASH Technology introduction. The question is more of a general nature than specific for this water technology.
Scoring Question SQ 18	What is the level of supportive structures for new water technologies, in particular for funding further innovation and development to bridge the 'Valley of Death' and to pass the tipping point (see see TIP Guide)?	Score for indicator 18