Connect International



Final report

Desk review and mapping of IRW's WASH programme effectiveness and sustainability (2017-2021)

Islamic Relief Worldwide

Connect International
t.deveer@connectinternational.nl
+31654934290
www.connectinternational.nl

Contents

Basic details

Consultancy organisation

This assignment was executed by Foundation Connect International (no other partners). Foundation Connect International is a development aid organization and a non-profit consultancy bureau. Our Vision is that vulnerable people in developing countries (the target group) will have sufficient access to affordable facilities and services they need to structurally meet their basic needs, develop themselves further, set up businesses and plan their families. We work according to three lines:

1) Water and sanitation programmes. Through our local partner organizations whom we train, guide (with our own people stationed on site) and finance, we help poor people to improve their water and sanitation facilities. Since our erection in 1997 we have implemented hundreds of water and sanitation programmes, mainly in rural areas, in Kenya, Tanzania, Malawi, Zambia, Mozambique and the Philippines as part of our:
   a. community development approach in which people prioritize and decide which interventions they will implement, while doing everything they can do, within reasonable limits, themselves in the programmes,
   b. low-cost WASH business development approach in which local businesses are capacitated to produce and service low-cost WASH (high ánd low-tech) solutions for (groups of) private households (including hollow-fibre water filters, roof water catchment systems, locally produced boreholes with rope pumps, etc.),
   c. Community WASH programmes, including assistance to communities to realise public piped water systems, public boreholes with hand pumps and household toilets.
2) Rural, peri-urban, emergency and rehabilitation WASH consultancies in developing countries. This provides Connect International income, enables us to effectively assist other organizations with our knowledge and infrastructure (in terms of our local and expatriate experts and the approaches, methods, guidelines and algorithms we developed), increases our own learning and helps us to improve and expand our network and sector knowledge. We are currently in the process of developing a more formalized network of high-performance local WASH consultancy bureaus we already work with (with the aim to expand also to other countries and continents) in which Connect International will fulfil the function of international umbrella.
3) Cash transfer advocacy. A cash transfer means donating money to poor people. In our cash transfer development process concept this would entail 12-15 Euro per adult per month, to supplement people's income by 25 to 35%. It is proven in large cash transfer programmes in many developing and middle-income countries (reaching millions of households) that cash transfers are very effective. People structurally overcome the worst poverty, increase their resilience against shocks, set up small businesses,

modernize their agriculture, send their children to school, plan their families better, and, because their spending increases, boost local economies. The effects are optimized and increased if such cash transfers are combined with reinforcement of national programmes for female education, local business development and family planning.

This report is part of our work line 2.

Consultant

The Consultant of Connect International who executed this assignment (no other Consultants were involved), is Mr. Tom de Veer.

Consultancy period

The review (this assignment) was undertaken from 1 February 2022 to 6 April 2022.

Acknowledgements

The Consultant wishes to acknowledge the fine collaboration with and support by the headquarters of Islamic Relief Worldwide, in particular with Mr. Mohammad MirBashiri who actively supported the works, ensured contacts and appointments with IRW stakeholders and staff, fed back on ideas and suggestions and so forth and did so in a very pleasant and helpful way. Also, the very fruitful and pleasant feedback by WASH staff of several of the IR country organisations is highly appreciated!

Abbreviations

Bh	Borehole
CapEx	Capital Expenditure
CapManEx	Capital Maintenance Expenditure
CBM	Community Based Management
CHAST	Children's Hygiene and Sanitation Training
CLTS	Community Led Total Sanitation
CSO	Civil Society Organization
FGD	Focus Group Discussion
GDPR	General Data Protection Regulation
GPS	Global Positioning System
GWC	Global WASH Cluster
IDP	Internally Displaced Person
IRW	Islamic Relief Worldwide
JMP	Joint Monitoring Programme
KAPP	Knowledge, Attitude, Practice, Perception
Lppd	Litres per person per day
MEAL	Monitoring, Evaluation, Accountability and Learning
NGO	Non-Governmental Organisation
O&M	Operation and Maintenance
OECD-DAC	Organisation for European Cooperation and Development-Development Assistance Committee
OpEx	Operational Expenditure
PHAST	Participatory Hygiene and Sanitation Transformation
ToR	Terms of Reference
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Emergency Fund
VIP	Ventilated Improved Pit latrine
WASH	Water, Sanitation and Hygiene
WHO	World Health Organisation

Terminology

L3 / I7	In this report, referral is made to literature sources listed in Annex 7 (e.g., L3 means the third document in the list) and to the notes of the interviews with respondents (e.g., I7 means the 7th interview held; the interviews are anonymous to comply with GDPR regulations).
CapEx	Capital Expenditure. Initial capital investment cost of water systems. The capital invested in constructing fixed assets such as concrete structures, pumps and pipes. It includes the first time the system is built, extension of the system, enhancement and augmentation. CapEx software includes one-off work with stakeholders prior to construction or implementation, extension, enhancement and augmentation. (L8)
CapManEx	Capital Maintenance Expenditure. Capital maintenance (major repairs and rehabilitation) expenditure. Expenditure on asset renewal, replacement and rehabilitation costs, based upon serviceability and risk criteria. Capital maintenance expenditure is typically more 'lumpy', with infrequent but relatively large items of expenditure, than OpEx. Revenue streams to meet these costs are critical to avoid the failures that follow haphazard or non-existent rehabilitation. (L8)
CHAST	CHAST is an approach to promote personal hygiene amongst children and employs involving a range of exercises and educational games to teach children about the linkages between personal hygiene and health. The approach is based on the premise that hygiene practices are largely acquired during childhood and therefore it is much easier to change children's habits than adults. (From the final narrative report for the Sudan 020_002176 programme).
Effectiveness	The extent to which a programme attains functionality, quality, utilization, access and coverage of realised outputs. Adapted from L9.
Impact	The positive and negative changes that are attributable to a development intervention, directly or indirectly, intended or unintended. When evaluating the impact of a programme, it is useful to consider the following questions: • What has happened as a result of the programme? • What real difference has the activity made to the rightsholders? • How many people have been affected? Adapted from L9.

OpEx	Operational Expenditure. Operations and minor maintenance expenditure. Expenditure on minor repairs, labour, fuel, chemicals, materials, regular purchases for operation and/or small maintenance, etc. (L8)
Stand-alone	The term 'Stand-alone' is used to indicate water system having one location only where water is provided by the system. Examples are boreholes with hand pumps and boreholes with mechanical pumps that only supply water next or very near tot eh borehole.
Sustainability	Sustainability is concerned with the question whether the benefits of an activity are likely to continue in the long run. Sustainability can be divided in the FIETS criteria: Financial sustainability, Institutional sustainability, Environmental sustainability, Technical sustainability and Social sustainability. Adapted from L9.

Short summary

Context

The objective of the assignment covered by this report, is to review IRW's WASH programmes since January 2017 and ensure that IRW will be able to utilise the information to inform its programme, policy, advocacy and planning towards achieving its strategic objectives in the WASH sector.

Methodology

Review methodologies included: literature review, semi-structured interviews, discussions and meetings with selected stakeholders. Findings were stored and structured in Excel, used to answer the review questions (RQs) and formulate conclusions and recommendations. Deliverables: Inception report (**deliverable 1**), final review report (**deliverable 2; this report**), discussion with key IRW stakeholders (**deliverable 3**).

Findings RQ1 - How well were the interventions executed?

Outputs. Mainly outputs and rightsholders numbers were reported (they were often in line with the planning), hardly any specifics on characteristics, quality and/or functionality of WASH outputs, nor on quality of activities. Water quality information was found in 31% of the endline reports but always only in general terms. IR WASH staff explained that programme activities and outputs are structurally monitored by own expert staff though. WASH outputs always covered the needs well and the outputs fitted well to the circumstances. There are doubts though about the hygiene awareness creation efforts. These are often few time short events, which is usually insufficient for structural behaviour change, especially if rightsholders do not have access to facilities/items needed to practice the behaviours (IRW programmes often covered such facilities and items though). It was also not reported to what extent rightsholders were properly covered by the outputs and whether there were other people, not covered, equally in need of the outputs, and the reasons for not covering them.

MEAL. Two third of the programmes executed baseline studies, including technical investigations, household surveys, FGDs, self-assessments, village walks and/or interviews. Endline studies mainly reported numbers of outputs and numbers of rightsholders (+ their livestock) per output type. Only few reports contained information on quality of activities and outputs, water qualities, standards and specifics of rightsholders' access to WASH facilities and services, nor on how monitoring was done and organised. IR country WASH staff indicated they structurally check the quality of activities and the quality and functionality of finalized outputs and sometimes even monitor outputs beyond the programme. It is only not reported. Verification of data is difficult. IRW recently started to work with a library of WASH indicators but it still has shortcomings (see further on).

Approaches. General development approaches used were participation of rightsholders and participation of local government and other local parties. Community development,

self-help and demand driven approaches were not applied. Water approaches included community based management (CBM) and construction by companies. Water utility and self-supply(+) approaches were not applied. Toilet approaches included Community Led Total Sanitation, self-construction with material and/or expertise support, construction by companies (by 72% of the toilet interventions!), market-led approaches. Hygiene approaches included distribution of hygiene kits, awareness creation among household and school rightsholders, assist schools to develop menstrual hygiene capacity (3%), assist health centres to develop WASH and hygiene plans (3%).

Cross-cutting themes. Quite a lot of focus was on safety/protection and gender, and some on conflict-sensitivity, elderly and disabled, and integration with other sectors. Other themes (e.g., environment, climate change, DRR and resilience mainstreaming, policy influencing and capacity building of government bodies) were hardly covered.

Findings RQ2 - How well will the benefits last?

The information was limited. Sustainability potentials scored higher if factors that increase the chance of sustainability were found (e.g. stable soils where pit latrines are constructed, participation by rightsholders, absence of negligence of O&M of rehabilitated facilities, longer terms training and awareness campaigns, water scarcity, guaranteed follow up beyond the programme period, working with local staff and stakeholder parties like local government, locally based IR country office, etc.).

Findings RQ3 - How did the rightsholders benefit?

Impacts. WASH impacts were not measured and it is not necessary to do so, because in line with the Minimum Evaluation Procedure, WASH facilities and services have a positive impact if they function properly and are properly and sufficiently used.

Outcomes. Information was limited. Aspects such as water quantities, water collection times, water qualities, access safety and proximity, affordability of water, etc. were hardly specified, despite the recent introduction of the Indikit library of WASH indicators[1]. The Consultant developed 'best guess' outcome/access ladders. Focus was on assisting rightsholders to climb up the water access ladder, mostly from unimproved (98%) to basic water access (67%), while targeted schools and health centres did even better in this respect. Mostly only limited water management level was achieved (67%) because often WASH committees were trained once or few times while there was no proper safety net. Toilet access was improved to basic (60%) and limited (40%) level, while in schools,

[1] The Consultant found the following shortcomings of INDIKIT:
1) It does not indicate which indicators are most important and how they should be measured.
2) Several indicators are general and there are often no standards attached to the indicators.
3) For many indicators, referral is made to international guidelines (e.g. WHO). Fieldworkers often do not have access to these guidelines or do not have time and expertise to extract from these guidelines the indicators and standards they need.
4) It does not provide guidance on how data should be processed, structured and analysed.

The Consultant therefore recommends that IRW develops a specific MEAL system for WASH programs (see the recommendations further on).

toilet access reached the safe level and in health centres basic level. Hand wash facilities realized in schools yielded safe access, and in school compounds basic access. Many programmes tried to improve hygiene practice through awareness raising events, claimed to reach basic hygiene practice level, but with reality probably less positive due to the many challenges involved with improving hygiene practice.

(Some) best practices in IRW WASH programmes:

- Involvement by IR South Sudan of local government staff in hygiene promotion beyond the programme and with proper methodologies (PHAST and CHAST).
- Sustainable CBM model for O&M, repairs and replacements by IR Somalia.
- Structural presence in areas of IR country organisations in specific areas.
- Proper MEAL system of IR Niger.
- In a drought prone area, IR Sudan collects run-off water in the rainy season, which percolates and recharges the aquifer tapped by nearby constructed hand pumps and mini water yards, providing water for humans and livestock in the dry season.
- IR Pakistan has an integrated WASH approach, including climate sensitive WASH programs and aspects of Climate Change Adaptation in all its WASH programmes.

(Some) best outcome practices in the sector:

- Emergency – development nexus, shifting to development modus within 6 months.
- Designing and introducing toilets through provision of materials, tools and expertise enabling rightsholders to construct optimal toilets for their circumstances.
- CBM safety net through long-term support to stakeholder parties.
- Water utility pilots by NGOs in rural areas.
- MEAL@MORE. Proper MEAL system of the Ugandan Water Project.

Conclusions

Most WASH interventions were executed quite well. Reports contained little information though. IR WASH staff often claimed that the quality of activities and outputs is safeguarded, but verifiable proof was not available. Also, the sustainability of outputs and outcomes was not always optimal, despite good efforts. Outcome information was scarce.

Attempts to safeguard sustainability are often undertaken but not always successful. Many IR country organisations continue to monitor outputs realized and provide assistance beyond the programme, but not always properly structured, while if resources are low at a certain point, it cannot fulfil this last resort safety net role anymore.

The reviewed programmes always covered high priority needs and effectuated high benefits for and with the rightsholders. This can be seen in the *'best guess'* WASH ladders in this report, mostly developed with limited information though.

Recommendations

Improve the sustainability of water facilities further through the introduction of improved CBM with a solid safety net and rural water utility pilots.

Improve the sustainability of toilet facilities further. Abandon the CLTS principle that rightsholders have to construct toilets fully themselves. Support materials and tools, while rightsholders further do all they can reasonably do to construct proper toilets.

Improve, integrate and globalise MEAL. A global, well applied MEAL system with a proper database system will enhance early detection of problems, and improve account-ability and learning and will increase institutional memory. It is recommended to introduce the online database system mWater or its multi-sector sister system Solstice. In this online database, standard surveys can be built (that can be accustomed each time to the circumstances) that cover the most important WASH outcome indicators and their related standards (with in the surveyes embedded the standards per country) and that also provide guidance on how to measure the indicators. The Consultant is part of an international network of local consultancy bureaus that have done a lot of work on such systems for programmes and organisations. The Consultant offers that he and this network can assist IRW to develop such a MEAL WASH system.

Improve rightsholder participation further by putting rightsholders even more in the driving seat by introducing more demand-driven and self-prioritization approaches.

Introduce distance verification. Require contact details of key rightsholders and other key informants for distance checking of the correctness of information in reports and obtaining additional information. Also, require that reports inform how to access the database in which an IR country organisation has stored its programme data.

Executive summary

Context

The objective of Islamic Relief Worldwide (IRW) of the review covered by this report, is to review IRW's WASH programmes since January 2017, including extent, nature, key results (outcome, impact & sustainability), best practices and learnings from the programmes, review and describe sector best practices, promising and scalable innovations or evidence-based solutions already being scaled, trends and evidence of what works related to WASH programming and approaches in fragile, low- and middle-income countries, and ensure that IRW will be able to utilise the information to inform its programme, policy, advocacy and planning towards achieving its strategic objectives in the WASH sector. The Consultant recommended to: (a) also assess indicators like improved access, safety, quality, affordability, continuity etc. for realized WASH facilities and services, through a refined version of the JMP ladders[2] in combination with qualitative information, and (b) develop a review matrix for IRW's information needs, based on feasible review questions and methodologies, and omit the questions on costs.

Methodology

Review methodologies included: literature review, semi-structured interviews and FGDs, discussions and meetings with purposely selected stakeholders. Findings were stored and structured in an Excel file. The information was synthesised in an iterative and cumulative process, and used to answer the review questions (RQs) in the review matrix, summarize and structure them for different types and sizes of IRW's WASH interventions, and formulate the related conclusions and recommendations. Deliverables include: Inception report (**deliverable 1**), final review report (**deliverable 2; this report**) and a final discussion with key stakeholders at IRW (**deliverable 3**).

Findings for RQ1 - How well were the interventions executed?

Outputs. In 15% of the reviewed endline reports, realized programme outputs were sufficiently characterized. 9% of the endline reports presented some tangible information regarding the quality and/or functionality of WASH outputs realized. Also, none of the endline reports provided information regarding the quality of the activities that realize the outputs. Water quality information was found in 31% of the endline reports but always

[2] JMP is an initiative of WHO and UNICEF to collect WASH data, often used to benchmark and compare WASH service levels across countries, mainly for official reporting on corresponding global SDG indicators related to drinking water, sanitation and hygiene.

only in general terms (e.g. that water quality was tested in a laboratory, that Arsenic levels were OK, etc.). IR country WASH staff explained that programme activities and outputs are monitored by own expert staff, often using indicator checklists. The need for WASH outputs was always high and outputs fitted well to the circumstances. There are doubts though about the hygiene awareness and promotion activities. These are often few time short events, which is usually insufficient for structural behaviour change, especially if rightsholders do not have access to facilities/items needed to practice the behaviours (IRW programmes often also covered such facilities and items though). Almost all reviewed endline reports provided proper information on numbers of outputs realized and numbers of rightsholders per realized output type, and these were often in line with or exceeded the planning. However, it was not reported to what extent rightsholders were properly covered by the outputs and whether there were other people, not covered, equally in need of the outputs, and the reasons for not covering them.

MEAL. Two third of the programmes executed baseline studies, including technical investigations, household surveys, FGDs, self-assessments, village walks (e.g., women prioritizing locations for water points) and/or interviews. Endline studies mainly reported numbers of outputs realized (91% of the reports) and numbers of rightsholders (and where relevant their livestock) per output type (74% of the reports). Only few reports contained information on quality of activities and outputs, standards and specifics of rightsholders' access to WASH facilities and services, nor on how monitoring was done and organised. IR country WASH staff indicated though that they do check the quality of activities (e.g., during drilling works usually an IR engineer is on site full time!) and the quality and functionality of finalized outputs in structured ways (using checklists with specific indicators and standards). They claimed they sometimes even continue to monitor outputs beyond the programme period. It is only not reported. Many WASH outcome indicators are not measured at all though. Information on the characteristics, quality, suitability and proper application of the MEAL system was found in 35% of the endline reports. Verification of data is difficult. Although locations (including sometimes GPS data) and names of local government and other key stakeholder parties are usually available in endline reports, no links to original data and databases were found, nor contact details of local key informants.

IRW recently started with a library of WASH indicators which IRW encourages all country teams to use (IRW Indikit WASH Indicators; L11). These are well developed but incomplete indicators with limited explanations, no indications which ones to use in which situation and how to structure, analyse, use and report the indicator data (see also further on).

Approaches. General development approaches found in IR WASH programmes include: ***participation of rightsholders*** (usually with a strong gender focus), and ***participation of local government and other local parties*** in different parts of the programme cycle. General development approaches not found include: community development approach in which an organisation assists the community to tackle its self-assessed highest priority

problems, self-help approach in which all phases of the project cycle are implemented as much as possible by the rightsholders themselves, and demand driven approach in which a programme assists communities that take sufficient action. Water approaches found include: ***community based management (CBM)*** (applied by 76% of the water interventions, usually with a gender focus) and ***construction by companies*** (applied by 100% of the water interventions). Water approaches not found include: water utility approach and self-supply(+) approaches. Toilet approaches found include: ***Community Led Total Sanitation (CLTS)*** (applied by 22% of the toilet interventions), ***self-construction with material and/or expertise support*** (applied by 22% of the toilet interventions[3]), ***construction by companies*** (by 72% of the toilet interventions), ***market-led*** (by 11% of the toilet interventions). Hygiene approaches found include: ***distribution of hygiene kits*** (in 33% of the relevant interventions), ***PHAST*** and **CHAST** (6%), ***door-to-door sensitization*** (appr. 20%), ***mass hygiene promotion*** (9%), ***community or group awareness raising and action sessions*** (42%; similar for schools: 15%), ***forming + training health & hygiene clubs in schools*** (15%), ***training school teachers in hygiene*** (9%), ***assist schools to develop menstrual hygiene capacity*** (3%), ***assist health centres to develop WASH and hygiene plans*** (3%).

Cross-cutting themes *(red is bad, orange is medium, green is good).*

Cross-cutting theme – how well it was covered by the programme (1 = very poor/bad, 10 = very well/good)	Average score for the indicator	% programmes for which in-formation was found on the indicator	% programmes for which the indicator score was satisfactory
Safety / protection	7	59%	75%
Gender focus in the programme activities	7	85%	72%
Gender in terms of % of the target group being female (1 = <30% of target group is female, 10 = >= 50% of the target group is female)	10	100%	100%
Environmental protection and risk considerations	5	38%	46%
Conflict-sensitivity	6	53%	56%
DRR, climate change or resilience mainstreaming	4	26%	22%
Older people, people with disabilities	5	68%	57%
Faith and faith leaders	3	47%	31%
Integration with wider programmes and result areas related to e.g., livelihood (irrigation), education, nutrition etc.	6	62%	71%
Policy influencing activities at national or local levels.	3	38%	23%
Capacity building of relevant technical departments or bodies of government on relevant WASH areas	3	38%	31%

Findings RQ2 - How well will the benefits last?

(Expected) life-time/duration of the results, outcomes and impacts. The information was limited. For the sustainability potential of outputs intuitive scores were

[3] Through this approach three toilet types can cover almost all circumstances in rural areas (simple improved pit latrine, Fossa Alterna double pit latrine, pour flush double pit toilet).

provided (average on scale 1 – 10: 6, lowest 3 and highest 8). Sustainability potential of outputs scored higher when it was found that:

- pits of pit latrines can easily and cheaply be realized,
- rightsholders constructed toilets fully or partly themselves,
- the need for rehabilitation of WASH facilities was not caused by negligence or an otherwise poorly functioning O&M system,
- trainings and promotional events for rightsholders and implementing/O&M stakeholders were provided over a long period of time, also beyond the programme period,
- a proper monitoring, support and safety net mechanism is in place for the O&M, repairs and finally replacement of WASH facilities and services.
- water is very scarce,
- the quality and robustness of WASH facilities and services are high,
- paid and employed (usually by local government) staff were involved and are likely to follow up beyond the programme period,
- WASH facilities and services are easy and cheap to sustain.

Characteristics of the interventions that enhanced sustainability.

Sustainability enhancement strategy	% programmes that applied the strategy
Working with local staff and stakeholders	62%
High level of participation of rightsholders during preparation and implementation	47%
High level of participation of rightsholders in O&M and management of the realized results	65%
Intensive involvement of local government	56%
High quality construction	6%
Handover to actors assigned in camps for O&M of the facilities	3%
Beyond programme support by the IR country organisation	15%
No information found on sustainability enhancement	9%

Some endline reports mentioned that IR offices were structurally based in an area which enhances sustainability (embedded, easier to continue monitoring and provide input).

Findings RQ3 - How did the rightsholders benefit?

Impacts. WASH impacts were not measured in the reviewed programmes. They are difficult to measure and it is not necessary to do so, because research has proven that WASH facilities and services have an impact in terms of improved WASH related health, reduced burdens, improved comfort, safety, etc. if they function properly and are properly and sufficiently used (called the Minimum Evaluation Procedure).

Outcomes. Information on access to WASH facilities and services was limited mainly to numbers of rightsholders per output type, but aspects such as water quantities available to rightsholders and their animals, water collection times, water qualities, safety of access to the water points, affordability of the water, proximity of latrines to houses, etc. were hardly specified, despite the recent introduction by IRW of the Indikit library of

WASH indicators[4]. If not all key access criteria are sufficiently fulfilled, a rightsholder may not benefit much from realised WASH facilities or services. A lot of assumptions had to be made to try and score outcomes in 'best guess' outcome/access ladders. The focus was clearly on households, and ***the IRW WASH programmes helped most rightsholders to climb up the water access ladder from unimproved water access (98%) to basic water access (67%)***, while targeted schools and health centres did even better in this respect. Mostly only limited water management was achieved (67%) because ***many IRW WASH programmes only trained and guided community WASH committees once or few times while there was little evidence of a properly functioning support and safety net for these committees***. ***Toilet access was improved mainly to basic (60%) and limited (40%) level*** while in schools, toilet access reached the safe level and in health centres toilet access was improved to basic level. Hand wash access concerned facilities at public toilets while in schools they were realized near the school toilets either in the schools (safe access) or in the school compounds (basic access). The programmes attempted to improve hygiene practice through all kinds of hygiene promotion and awareness raising trainings, campaigns and sessions, possibly reaching basic hygiene practice (assumed at 52%) but with reality probably less positive, due to the challenges of improving hygiene behaviours.

(Some) best practices in IRW WASH programmes:

- Involvement by IR South Sudan of local government staff in hygiene promotion beyond the programme and with proper methodologies (PHAST and CHAST).
- Sustainable CBM model for O&M, repairs and replacements by IR Somalia.
- Structural presence in areas of IR country organisations in specific areas.
- MEAL@BEST as IR Niger monitored aspects of quality of activities, numbers, quality and functionality of outputs, and key baseline and endline outcome indicators.
- In a drought prone area, IR Sudan collects run-off water in the rainy season, which percolates and recharges the aquifer tapped by nearby constructed hand pumps and mini water yards, providing water for humans and livestock in the dry season.
- Integrated WASH approach in Pakistan. IR Pakistan has communicated that climate sensitive WASH programs and aspects of Climate Change Adaptation have been part and parcel of all programs of IR Pakistan.

(Some) best outcome practices in the sector:

[4] The Consultant found the following shortcomings of INDIKIT:
1) It does not indicate which indicators are most important and how they should be measured.
2) Several indicators are general and there are often no standards attached to the indicators.
3) For many indicators, referral is made to international guidelines (e.g. WHO). Fieldworkers often do not have access to these guidelines or do not have time and expertise to extract from these guidelines the indicators and standards they need.
4) It does not provide guidance on how data should be processed, structured and analysed.

The Consultant therefore recommends that IRW develops a specific MEAL system for WASH programs (see the recommendations further on).

⇒ **Emergency – development nexus,** shifting to development modus always within 6 months after the start of the emergency (e.g., no more water trucking after 6 months).

⇒ **Designing and introducing toilets through** provision of materials, tools and expertise enabling rightsholders to construct optimal toilets for their circumstances.

⇒ **CBM safety net** through support to stakeholder parties that have the potential to fulfil the role of safety net for water committees in rural communities.

⇒ **Water utilities.** Pilots exist (e.g., in Uganda) that introduce, in collaboration with the local and national government, some kind of rural water utilities in rural areas.

⇒ **MEAL@MORE.** Proper monitoring of programme activities and realized outputs as practiced by the Ugandan Water Project.

⇒

⇒

Conclusions

Most WASH interventions were executed quite well with mostly quite good quality of the facilities and activities and through approaches that fitted mostly quite well to the circumstances. However, most endline reports contained too little information to be sure about this. Interviews with WASH staff of different IR country organisations revealed that the quality of the activities and outputs is often well safeguarded. Nevertheless, verifiable proof was not available. Also, the sustainability of outputs and related outcomes was not always optimal, although good efforts were made. Information on outcomes was scarce.

Attempts to safeguard sustainability are often undertaken but not always successful. Many IR country organisations remain involved beyond the programme period, trying to continue to monitor the outputs realized and providing assistance when needed. However, this is not always properly structured (through informed agreements), while if the resources of the IR country organisations are low at a certain point, it will not be able to fulfil this last resort safety net role anymore.

The reviewed programmes always covered high priority needs of the rightsholders and high benefits for the rightsholders were achieved. This can be found back in the ('best guess') WASH ladders in this report, developed on the basis of the often limited information in the reviewed endline reports.

Recommendations

1. **Improve the sustainability of water facilities further** through the introduction of improved CBM with a solid safety net and rural water utility pilots.
2. **Improve the sustainability of toilet facilities further.** Abandon the CLTS principle that rightsholders have to construct toilets fully themselves. Apply the approach with which a programme supports materials and tools, while rightsholders further do all they can reasonably do to construct highly sustainable standalone toilets.

3. **Improve, integrate and globalise MEAL.** A global, well applied MEAL system with a proper database system will enhance early detection of problems, and improve accountability and learning at all levels and will increase the institutional memory at all these levels. It is recommended to introduce the online database system mWater in this respect, or its multi-sector sister system Solstice. In this online database, standard surveys can be built (that can be accustomed each time to the circumstances) that cover the most important WASH outcome indicators and their related (international and/or national) standards and that also provide guidance on how to measure the indicators. The database system subsequently is programmed to produce easy to understand graphs, tables and even reports for different users in the organization (and donor) chain[5]. The Consultant is part of an international network of local consultancy bureaus that have done a lot of work on such online WASH database systems for programmes and organisations. The Consultant offers that he and this network can assist IRW to develop such a MEAL WASH system.
4. **Improve rightsholder participation further** by putting rightsholders even more in the driving seat by introducing more demand-driven and self-prioritization approaches.
5. **Introduce distance verification.** Require contact details of key rightsholders and other key informants to be presented in endline reports, so they can be contacted at distance, to check the correctness of information in reports and obtain additional information. As long as no global database system is in use, require that the link to the database in which an IR country organisation has stored its programme data is provided in the endline reports, so that verification and checks can be executed.

[5] Please refer to the example endline report provided to IRW by the Consultant as an add on to the assignment. It shows that online surveys with proper indicators and also descriptions how and when to measure them, is one thing, but that also the data need to be structured and presented properly in order to allow for easy analysis and use. An online database system like mWater can be programmed to do so for specific sureyes developed. This for instance yields automatically generated WASH ladders (see the example report) and other key overviews.

1. Context

1.1 Background

Islamic Relief Worldwide (IRW) wishes to obtain a detailed account of its current and recent activities in WASH interventions (2017 – 2021) in order to identify the range of outcomes targeted and achieved, sustainability of completed actions, any indicative impact, highlight internal and external best practice and learning and provide a baseline which will be used to improve IRW WASH interventions in the future.

The consultancy goals as formulated in the ToR include:

1. Islamic Relief will be informed of the extent, nature, key results (effectiveness at the outcome level/indicative impact & sustainability), best practices and learnings derived from its work in and around WASH since January 2017.
2. Islamic Relief will be provided with an overview of sector best practices, promising and scale able innovations or evidence-based solutions already being scaled, trends and evidence of what works related to WASH programming and approaches in fragile, low- and middle-income countries in which IRW works.
3. Islamic Relief will be able to utilise this information to inform its programme, policy, advocacy and planning towards achieving its strategic objectives in the WASH sector.

The ToR stated that a robust methodology was to be proposed, to properly map:

⇒ the WASH strategies and approaches used, and the programme result chains (yielding information on the numbers of programmes that reduced diarrhoea and other water-borne diseases, improved access to safe, clean drinking water, increased access to improved sanitation, and increased access to hygiene awareness),

⇒ the range of WASH components and features in IRW programmes,

⇒ the approaches to sustainability of interventions and investments,

⇒ resilience, protection and inclusion and other cross-cutting themes,

⇒ WASH intervention MEAL mechanism and systems,

⇒ the potentially highest impact WASH programmes,

while considering that for many programmes the evaluation reports and other imperative information are limited.

The objective of the assignment as in the Tor is to conduct a participatory review of:

1. IRW's WASH programmes since January 2017, including extent, nature, key results (effectiveness at the outcome level/indicative impact & sustainability), best practices and learnings from the programmes[6],

[6] According to the ToR 36 IRW WASH programmes are to be be reviewed. This reports covers 34 reviewed IRW WASH programmes because that is the number of IRW WASH programmes for which the Consultant has received endline reports.

2. sector best practices, promising and scalable innovations or evidence-based solutions already being scaled, trends and evidence of what works related to WASH programming and approaches in fragile, low- and middle-income countries, and ensure that IRW will be able to utilise this information to inform its programme, policy, advocacy and planning towards achieving its strategic objectives in the WASH sector.

In the offer, the Consultant commented on the ToR as follows:

1. Beside numbers of rightsholders and types and numbers of outputs realised, information is needed on indicators like improved access, safety, quality, affordability, continuity etc. of and to WASH facilities and services to which a programme contributed. Such wide range of information can well be presented in a refined version of the JMP ladders[7] but it is unknown whether the programme information will be enough for this. Alternatively, qualitative data, obtained for instance through semi-structured interviews can be used. It was proposed to develop the main indicators, review questions and presentation format in the Inception report.
2. Interview results were proposed to be presented in GDPR compliant ways.
3. A longer Inception phase was proposed without delaying the final date of the assignment.
4. It was proposed to do the assignment in a digital way, hence without any field visits.
5. It was proposed to reduce and restructure the questions in Annex 1 of the ToR and develop a review matrix which will yield tangible and useful results fulfilling IRW's information needs as much as possible, based on review questions and methodologies that are feasible and doable in the limited time available.
6. It was proposed to omit the questions in Annex 1 that focus on costs as costs are difficult to properly assess and a cost assessment, if done on the basis of too limited information may easily lead to improper conclusions.

[7] JMP is an initiative of WHO and UNICEF to collect WASH data, often used to benchmark and compare WASH service levels across countries, mainly for official reporting on corresponding global SDG indicators related to drinking water, sanitation and hygiene. Connect International has designed more detailed and refined WASH ladders that are suitable for review of WASH programmes and programmes. For instance, we developed a household water access ladder, a community water systems ladder, a community water management ladder, a household toilet access ladder, a household hygiene access ladder and a household hygiene practice ladder. As an example, the household water access ladder is, largely like the JMP water ladder, divided in safe, basic, limited and unimproved water access, each of these rankings underlain by different criteria (measured through indicators presented in Annex 5). However, where JMP assesses in its water access ladder one main water source used during all seasons, roundtrip time (including queuing time) (or ≤ 1km) and whether the household indicates it has sufficient water quantity for drinking at all times when needed, the Connect International ladder assesses the two main water sources people access, roundtrip time (including queuing time), whether the household indicates it has sufficient water quantity at all times when needed, water safety for drinking, affordability and safety of access of water, all for different seasons and for different purposes (drinking and other household purposes).

2. Approach and methodologies

2.1 Methodologies

The assignment was highly participatory, reviewing IRW's WASH efforts through intensive collaboration with purposely selected WASH staff of IRW country organisations and IRW HQs. The Consultant provided key structured information (obtained from literature review, interviews, discussions, meetings and workshops with a broad range of purposely selected stakeholders) to the IRW stakeholders on a regular basis, requesting feedback, ideas and wishes with regard to specific parts of the information and structured draft insights by the Consultant. During the process, some informal digital focus group discussions and meetings were also be facilitated by the Consultant with small groups of key stakeholders. This was all underlain by intensive review of relevant literature, notably WASH programme documents of IRW (mainly final narrative reports), and by the Consultant's own knowledge, especially with regard to WASH standards, best practices, indicators, review matrices, logframes and theories of change, as well as his practical experience in WASH programmes, WASH programme design, formulation, reviews and evaluations.

Questions and checklists for the semi-structured interviews with key stakeholders (see Annex 4) were based on the review questions in the review matrix (see next paragraph).

To analyse all collected information, all relevant findings were structured per research question (RQ), per subject under each RQ and per information source (literature, stakeholder types), and put in a findings template in an Excel file. The information was synthesised in an iterative and cumulative process, including consolidation of qualitative and quantitative information, cross-checks between different information sources, identification of gaps in the information and comparisons of (cross-checked) information from the different information sources. This was used to answer the review questions, summarize and structure them for different types and sizes of IRW's WASH interventions, and formulate the related conclusions and recommendations.

During the first part of the assignment, the Consultant developed the Inception report (IR) in the way and with the contents described before (**deliverable 1**). During the 'Review phase' of the assignment, in which most literature was reviewed and most interviews, meetings and discussions were conducted, a draft and finally a narrative (final review) report was produced by the Consultant following the format and contents described in the ToR (**deliverable 2; this report**). Finally, the results will be presented (digitally) by the Consultant to key stakeholders of IRW, including a final discussion with these stakeholders. We refer to this meeting as **deliverable 3**.

2.2 Review matrix

In line with the former paragraphs, the offer and the ToR, a review matrix has been developed, structured along the OECD/DAC criteria (see below table). The review questions and sub-topics are based on and cover all questions in the ToR (see Annex 1) with exception of the questions regarding the costs of the programmes as argued in the Inception Report and accepted by IRW. The RQs have been structured along the lines of the OECD-DAC evaluation criteria.

Table 1 Review matrix

RQ No	Review question (RQ)	Sub-topics	Information sources	Data collection methods
Effectiveness - Have the IRW WASH interventions achieved their expected results?				
1	How well were the interventions executed, what outputs were realised, what quality do they have and how well do they cover the target population?	• Characteristics, functionality, suitability, quality (indicator scores vs standards), nrs and coverage of outputs. • MEAL mechanisms and systems used, including baseline, monitoring, end line and beyond programme surveillance, reports, indicators applied and measured during works and for the finalized results, and standards used. • Approaches and strategies applied for the execution of the interventions and for enhancing the impacts sustainability of the intervention results. • Cross-cutting themes, including resilience, protection, inclusion and other cross-cutting themes.	• Intervention reports • Interview notes • FGD notes	• Literature review • Semi-structured interviews • Focus group discussions
Sustainability - Did the benefits of the IRW interventions last?				
2	How long, to what extent and in what form will (or may) the programme benefits last?	• (Expected) life-time/duration of the results, outcomes and impacts. • Characteristics of the interventions that have enhanced or reduced the sustainability of the intervention results, outcomes and impacts.	• Intervention reports. • Other relevant literature. • Interview notes • FGD notes	• Literature review • Semi-structured interviews • Focus group discussions
Impact/outcome - What difference did the IRW WASH interventions make?				
3	How did the rightsholder populations benefit from the IRW WASH interventions?	• If information is available, impact of improved WASH related health, school attendance and working days. • Numbers and percentages of rightsholders with improved access to and use of WASH facilities and services (water quality, distance to facility, safety of facility, access + access safety, affordability) (baseline – end line). • Highest outcome programmes of IRW and their characteristics (reasons for the high outcomes especially) • Best outcome practices in the sector (WASH programming and approaches in fragile, low- and middle-income countries in which IR works)	• Intervention reports • Interview notes • FGD notes	• Literature review • Semi-structured interviews • Focus group discussions

3. Findings RQ1 - How well were the interventions executed?

Full review question: How well were the interventions executed, what outputs were realised, what quality do they have and how well do they cover the target population?

3.1 Outputs

Full sub-topic: Characteristics, functionality, suitability, quality (indicator scores versus standards), numbers and coverage of outputs.

3.1.1 Output characteristics

Characterization of outputs means a description of the outputs in such a way that the reader has a sufficient understanding of the type and characteristics of the output. For instance, a toilet type characterized as 'latrines' is an insufficient characterization, while a description like 'Pour flush toilet connected to two closed pits that can be emptied in rotation' is. It was found that only in 15% of the programme final narrative reports, the outputs were more or less sufficiently characterized. In 74% of the reports reviewed, the outputs were properly but insufficiently characterized. For example, an indication like 'mechanized borehole' is in actual fact right if it concerns a borehole with a mechanical pump, but it is insufficient to know exactly what type of water system it is (e.g., a borehole with a solar pump connected to a minigrid, or a stand-alone borehole with a solar pump and a raised water tank, or a borehole with an engine driven (e.g., diesel) pump either stand alone or connected to a piped system, etc.).

For example, for the WASH programmes in Bangladesh and Pakistan the Consultant assumed that the toilets are probably flush toilet types (based on the background information that the rightsholders are Muslims) while the reports did not describe that. It was also often unclear how many compartments the reported public toilets have, whether toilet compartments were separated in male and female compartments, etc.

3.1.2 Functionality and quality of finalized outputs

Only 9% of the endline narrative reports of the reviewed programmes presented tangible information regarding the quality of realized outputs, and of these reports the information on output quality aspects was only partial. None of the reports presented any output quality or functionality indicators and data per indicator. Water quality information was provided by 31% of the endline reports and in these reports, this was in almost all cases only in general terms. For instance, in one of the Somalia programme reports it was found that at least salinity, TDS and probably bacteriological quality were tested, but the Consultant did not find any water quality data in the report. In many endline reports a statement was made that water quality was tested. Some times in addition it was stated that the tests

were conducted in a laboratory. But in these reports n further information was provided on the actual parameters, the standards, the types of tests conducted and the results.

Quality indicators for toilets should cover such aspects as robustness of the pit, slab and superstructure, privacy of the toilet, availability of water (in case of flush systems), etc. all to be reported against quality standards for these issues. In only a few endline reports some of these indicators were covered though (usually a statement that the toilets provided proper privacy to women).

From the interviews with WASH staff of IR country organisations, it was found that information about quality and functionality of WASH facilities, water quality and other quality aspects of finalized outputs is often available in the IR country organisations. These data are however, in most cases not or insufficiently reported and/or not stored and/or structured properly. It is also believed that water quality is not always sufficiently tested, although the Consultant found little hard evidence on this. Some of the interviews revealed that water quality was tested and evaluated against WHO and/or national standards (also stated in some endline reports) and sometimes that also all tests for the water systems as required by authorities were executed (as in the case of the 5 reviewed WASH programmes in Somalia). However, again the data were not reported (at least not in the reports that were available to the Consultant) and the water parameters that were tested were only partially described.

3.1.3 Suitability of outputs

In most cases, the choice of outputs was based on an assessment of the needs of the rightsholders. Although these were usually not full and open self-assessments in which rightsholders could prioritize any need they felt important, it was clear that always the need for the selected outputs was high. It is also believed that the types of outputs selected by the WASH programmes fitted well to the circumstances in most cases. For instance, very deep boreholes with solar systems in Somalia where people do not have money for fuel and drinkable groundwater is situated in very deep aquifers, pour flush toilets for Muslim rightsholders in rural areas of Bangladesh and Pakistan (as assumed from the rather unclear descriptions in related reports) and even the almost too nice school toilets in two programmes in Tunisia (following the 'Friendly schools' approach in refurbishment of IR Tunisia), are examples of suitable outputs.

However, the Consultant has doubts about the suitability of many of the hygiene awareness and promotion activities/outputs. These were often one or few time events which is usually unsuitable for structural hygiene behaviour change, especially if rightsholders are not assisted to be able to practice the learnt behaviours (e.g., if hand washing with soap is promoted where people cannot afford to buy soap; reference is made to KAPP surveys in this regard: see footnote 2 in paragraph 4.2 and L10). From the descriptions in the reports, it was impossible though, to determine to what extent the promotional and awareness

raising events were or were not suitable. A few programmes for this reason included a focus on pupils in schools as young people are more likely to improve behaviours as a result of hygiene promotion, especially if the hygiene messages are promoted during many sessions and with a proper methodology. For instance, reviewed programmes of IR Tunisia (002774 and 020_002924), IR Sudan (050_000523) and IR South Sudan (050_000388) applied the CHAST method specifically for pupils, mostly during quite many sessions over a longer period of time (6 months). If this was done by local government staff (e.g., community hygiene promotors as was probably the case in the South Sudan programme), trained to do so by the programme (whether this was done was not fully clear from the text in the endline reports), and if this was combined with helping people to get access to the facilities or services needed to be able to practice the behaviours, this would be a best practice. Reason: it is then likely that also after the end of the programme these local government staff will continue to convey the hygiene messages at least once in a while to these students while they are able to access the facilities and services they need to practice what they learnt.

3.1.4 Quality of the activities realizing outputs

None of the reviewed WASH programme reports contained information about the quality of the activities executed to realize the programme outputs. For example, quality indicators for the construction or rehabilitation of water systems should cover such aspects as types, quality and pressure classes of pipes used (e.g. WASH staff of IR Somalia stated that for riser pipes in deep boreholes GI pipes class C were used, information which was not available in the endline reports), borehole design versus borehole realised (final underground borehole structures were presented in a few reports though), hand pump type, quality and type of materials used in concrete, the mixtures (e.g. 1:2:3 mixture of parts cement, gravel and sand as often applied), how well the concrete was mixed and cured, etc. Similar for toilets and hygiene awareness creation activities (e.g., whether the trainer was experienced in the subject, whether the local language was used in promotional material and whether the information was easy to understand, fitted to the local circumstances, etc.).

From the interviews with WASH staff of IR country organisations it was found that the quality of materials against proper standards are often taken up in BoQs and checked/controlled by expert staff, and that the quality of activities was often monitored based on standard checklists per type of activity. The findings were not or hardly reported though. In some cases, referral was made to BoQs, but the actual activity and material quality control system as exercised by the IR country organisation in its WASH programmes, the data obtained through the application of these systems and the measures taken based on the monitoring findings, were hardly described in any of the endline reports reviewed. It is in this respect acknowledged that it is virtually impossible to report all data of all activity and material quality issues involved, but more elaborate

descriptions of the checks and indicators used is possible, while for instance checklists used can be presented in an Annex. See also the paragraph on MEAL aspects.

3.1.5 Numbers of outputs realised

Table 2 Numbers of water systems realised by reviewed IRW WASH programmes

WATER SYSTEMS REALISED	Mechanically pumped piped water system with impro-ved source		Gravity piped water system with improved source		Stand-alone bh with mechanical pump + tapstand(s)		Stand-alone bh with hand pump		Water provision by truck or cart	Surface water	
	Rehab	*New*	*Rehab*	*New*	*Rehab*	*New*	*Rehab*	*New*	*Delivery*	*Rehab*	*New*
Households	6	8	0	10	16	120	171	872	4	0	9
Schools	0	6	0	0	0	0	6	3	0	0	0
Health centres	0	4	0	0	0	0	3	0	1	0	0
Totals	**6**	**18**	**0**	**10**	**16**	**120**	**180**	**875**	**5**	**0**	**9**
% programmes that realised the output	**3%**	**15%**	**0%**	**3%**	**6%**	**24%**	**12%**	**24%**	**12%**	**0%**	**6%**

The above overview shows that **mostly stand-alone boreholes with hand pumps and mechanical (often solar powered) pumps have been realised**, both in terms of numbers of water systems constructed and/or rehabilitated and percentage of programmes that constructed/rehabilitated these water systems. It can also be seen that the main focus of all programmes was on new construction and much less on rehabilitation of water systems. The focus of the programmes was also clearly on households and much less on schools and health centres. The tanker-trucking realised was for emergency water supply to IDPs (4 programmes) and drought affected persons (1 programme). The programmes that focused on surface water facilities, constructed large dams (1 programme) and small reservoirs (berkads; 1 programme). The piped water systems were mainly mechanized (usually solar driven) systems with raised water tanks, pipes and public tapstands (kiosks) where water is sold.

Table 3 Numbers of water items realised by reviewed IRW WASH programmes

WATER ITEMS REALISED	Public water treatment solution	Small (HH) water treatment solution	Individual connectio n to piped water system	Small (HH) water container (5 – 25 L)	Small water storage tank (1-10 m3)	large water storage tank (10-100 m3)	Professio-nal equipment and items for water systems	Water point tool box
WASH outputs for households	37	186.000	234	19.960	150	0	28	225
WASH outputs for schools	17	0	0	0	3	3	0	3
WASH outputs for health centres	0	0	2	0	0	0	0	0
Totals	**54**	**186.000**	**236**	**19.960**	**153**	**3**	**28**	**228**
# Programmes that realised the output	**9%**	**3%**	**3%**	**6%**	**6%**	**4%**	**6%**	**12%**

The main water item was water purification chemical (coagulation powder and chlorine) distributed in IDP camps in Ethiopia (1 programme) to 5.442 households (27.210 persons)

(above presented as a small water treatment solution). The public water treatment solution for households comprised small iron removal boxes on borehole platforms realised by a programme in Bangladesh to reduce iron content in the water. It was unclear though whether these filters were only installed at 30 boreholes or at all boreholes that were realised. The public water treatment solution for schools comprised the rehabilitation of desalination plants in 17 schools in Gaza.

Poor rightsholders in Lebanon who suffered in the explosion in its harbour some years back, were assisted, among others, with individual connections to the town water supply system (1 programme). Small household water containers were distributed to IDPs and refugees in Syria and Sudan respectively (2 programmes). Furthermore, 3 large water storage tanks in schools, required because the piped water systems to the schools do not always supply water, were implemented in a IRW programme in Tunisia (including chlorine addition and bulb valves).

Professional equipment and items were purchased by 2 large programmes in Somalia for the realization of deep boreholes (including water testing equipment, borehole camera's etc., plus a drilling rig and a car per each programme). Water point tool boxes were supplied to water system caretakers by a programme in Bangladesh (for boreholes with hand pumps in villages and schools), a programme in Pakistan (for mechanically pumped piped water systems) and programmes in Mali and Niger. It is clear also for the water items that the focus of the programmes was on households.

Table 4 Numbers of toilet systems realised by reviewed IRW WASH programmes

TOILET SYSTEMS REALISED	Improved pit latrine*		VIP latrine		(Pour) flush toilet with septic tank that can be emptied		(Pour) flush toilet connected to sewer		(Pour) flush toilet connected to open drain or open pit		(Pour) flush toilet connected to closed pit that can be emptied		Traditional pit latrine**		Eco-san / double pit latrine	
	Rehab	*New*	*Rehab*	*New*	*Rehab*	*New*	*Rehab*	*New*	*Rehab*	*New*	*Rehab*	*New*	*Rehab*	*New*	*Rehab*	*New*
WASH outputs for households	19	107	0	0	135	0	12	96	0	535	0	860	0	2.624	0	0
WASH outputs for schools	0	5	0	22	379	12	6	8	0	0	0	0	0	0	6	12
WASH outputs for health centres	0	3	0	5	0	0	0	0	0	0	0	0	0	0	1	5
Totals	**19**	**115**	**0**	**27**	**514**	**12**	**18**	**104**	**0**	**535**	**0**	**860**	**0**	**2.624**	**7**	**17**
# Programmes that realised the output	**6%**	**11%**	**0%**	**6%**	**6%**	**6%**	**6%**	**6%**	**0**	**3%**	**0%**	**9%**	**0%**	**9%**	**3%**	**6%**

* *An improved pit latrine consists of a pit, reinforced concrete platform, and a reasonable to good superstructure.*

** *A traditional pit latrine consists of a pit, platform with logs, and a simple or no superstructure.*

The above shows that IRW WASH programmes that included toilets, focused on different types of (pour) flush toilets, especially in Pakistan, Bangladesh and Tunisia, where people practice anal cleansing with water (in households these are systems connected to pits that can be emptied, while in public institutions, notably schools and health centres, these

toilets are mostly connected to septic tanks or sewers). In the IRW WASH programmes in Africa, mainly traditional pit latrines are realised through CLTS approaches (self-construction of toilets by household after awareness creation by the programme).

Toilet items included toilet cleaning and/or maintenance sets (distributed by 2 programmes in targeted schools in Tunisia) and latrine digging tools distributed to households in a CLTS programme in South Sudan.

Hygiene facilities for households included the construction of laundry facilities near water sources (1 programme in Sudan). Hygiene facilities that were realized by IRW programmes in schools and health centres included hand wash facilities (in health centres and schools by 2 programmes in Pakistan) and provisions for menstrual hygiene (e.g., menstrual hygiene friendly wash rooms) in middle/high schools (2 programmes in Pakistan) and health centres (by 1 programme in Pakistan).

Hygiene items for households included soap (mainly for laundry) to IDPs in Ethiopia and households in South Sudan, cleaning materials for camp management and cleaning teams in IDP and refugee camps in Syria and Sudan respectively, and hygiene kits (9 programmes). Hygiene items distributed to schools, included hygiene kits (5 programmes in Tunisia, Bangladesh, Pakistan and Gaza; 2 programmes provided hygiene materials focused on MHM to the schools, 2 programmes provided hygiene items to the pupils, of which one for adolescent girls, containing also menstrual hygiene materials; the programme in Gaza provided soap and hand sanitizers for girls also to combat Covid-19). One programme (in Pakistan) distributed hygiene kits to health centres.

In addition to water, toilet and hygiene systems and items, most programmes also realised and/or facilitated WASH capacity building and awareness raising events, including trainings (of WASH committees, caretakers, water technicians, health promotors, etc.), WASH awareness raising events in households (door-to-door), villages and schools, WASH actions plans, WASH (e.g., cleaning) campaigns, and formation and training of school WASH clubs.

3.1.6 Coverage of outputs

Almost all IRW WASH programme reports that were reviewed provided proper and complete information on numbers of outputs realized and numbers of rightsholders per realized output type. The numbers of rightsholders covered with the output types in all cases were in line with the planned target rightsholders of the programm3es. However, two issues were not described in any of the reports:

1) To what extent the rightsholders were all equally and properly covered by the outputs.
2) Whether there were other people, not targeted by the programmes, in the programme areas equally in need of the outputs and the reasons for not covering them with the programmes and their outputs.

3.2 MEAL mechanisms and systems

Full sub-topic: MEAL mechanisms and systems used, including baseline, monitoring, end line and beyond programme surveillance, reports, indicators applied and measured during works and for the finalized results, and standards used.

3.2.1 Reports

Table 5 Percentage of programmes for which report types were found

Report type	% programmes for which the report type was found
Baseline report covering WASH facilities and services and the access of targeted rightsholders to them	3%
Proposal	38%
Endline narrative report	97%
Progress reports	53%
Monitoring and evaluation report(s)	0 - 3%

For two third of the programmes, it was found that baseline studies were executed which focused on the WASH infrastructures and services already in place (probably this was done in all programmes, but the reports often did not or only have very limited information on this aspect). This comprised technical investigation of especially public WASH infrastructures (mainly water systems) and partly household surveys, focus group discussions and/or interviews. However, only for 30% of the programmes it was found that baseline studies covered information about the outcome level (rightsholders' access to WASH, which is usually obtained through HH surveys), while the information was in these cases often limited to numbers of rightsholders with access in general to WASH facilities, without specifying this further (e.g., in terms of water quality, access safety, affordability of the water, privacy and proximity of toilets, etc.). Hardly any baseline reports were found during the review though.

The endline studies usually focused on numbers of outputs realized and numbers of rightsholders (and where relevant their livestock) per output type. In some cases, also the level of rightsholders' and other stakeholders' (e.g., involved local government parties) satisfaction with the programme results was determined, but the reporting on this was always in general terms (e.g., '*all rightsholders were highly satisfied with the water points realized*'). From the interview with WASH staff of IR Somalia it became clear that they also check the functionality of the realized water systems after completion and keep doing so beyond the programme period, especially for the more remote water systems, on a quarterly basis, which can be regarded as a best practice. Also IR Tunisia, communicated that they have a quality procedure with the contractor, with a first check and approval after the finishing of the works executed, and a second and final check and approval 1 year later, with the contractor responsible for any restoring or maintaining of found

shortcomings in the finalized WASH outputs.The results of the endline studies were reported in the final narrative (endline) reports of the WASH programmes implemented. For almost all reviewed programmes such endline reports were found.

Table 6 Percentage of programmes with unclarities in the endline reports

What was unclear in the reports studied	% programmes for which the unclarity was found
No or insufficient explanation of abbreviations and terms used	21%
Unclear how many project locations (villages, schools, etc.)	32%
Unclear what the actual numbers of beneficiaries are	29%
Unclear what the actual outputs are	15%
Unclear or incorrect structure (e.g., mixing activities, outputs or outcomes)	9%
Unclear which organisation(s) financed and/or implemented the programme	6%

The endline reports, especially the information which was not in them, gave the impression that the expertise required to monitor and safeguard the quality of WASH works and outputs is insufficiently available in the IRW country organisations. It was also found that often works are contracted out to consultants, companies, or to local water and sanitation government departments, etc. which encompasses a danger, because the IRW country organisation is responsible for the programme results. If expertise is hired, without that expertise being available in the core team of the organisation, a programme can be successful, but the organisation will in such cases not be able to verify the proper execution of the works (e.g., if a contracted expert does a poor job, will the organisation then be able to timely detect this?). However, from the interview with WASH staff in Somalia it became clear that the works executed by contracted companies to construct water points were constantly (daily) monitored by engineers employed by IR Somalia, while also afterwards monitoring continued, at least to some extent[8]. More importantly, the WASH staff indicated that IR Somalia continues to assist by fulfilling a monitoring and final safety net function for each water system it constructed or rehabilitated, which, in case no other parties can fulfil this role, is a must in the context of the SDGs and therewith is to be regarded a best practice! In line with the above (as expertise is available and IR country organisations do try their best to monitor and safeguard the quality of the programme activities), for most of the reviewed IRW WASH programmes, it is believed that the quality of the activities was quite good. However, the information was not specified in the endline reports, nor were the MEAL systems as applied by own staff of the organisation described.

76% of the reviewed endline reports contained information about outputs in place before the IRW programme started. ***35% of the reviewed endline reports described (partly) how MEAL activities were executed and covered***, e.g. whether and how informal and/or formal monitoring was done, which indicators and standards were used, which

[8] IR Tunisia communicated they also have a full time consultant monitoring and monthly reporting on Wash activities implemented by contractors.

water quality tests were executed, when and where, which surveillance systems were used (e.g., baseline surveys, technical investigations, end line surveys, etc., although often some referral was made to such systems but in general terms, e.g. that a baseline had been executed but without providing specific information about the results of it).

91% of the reviewed endline reports presented the numbers of outputs realised. Very few of the reviewed endline reports covered proper information regarding the quality of the works done and materials used, the quality and functionality of the outputs realised (including water quality of water systems realised), standards used, access of rightsholders to outputs realised (outcome indicators) and the functionality of outputs beyond the programme period.

3.2.2 WASH standards

Table 7 Endline reports covering WASH standards for design and implementation

WASH STANDARDS	Water quality standards	Technical standards for water system construction	Technical standards for toilet construction	Technical standards for hygiene facilities	Standards for par-ticipation and capacity building
% Relevant endline reports with exhaustive information	0%	0%	0%	0%	0%
% Relevant endline reports with some useful but insufficient information	55%	15%	0%	0%	23%
% Relevant endline reports with poor/inadequate information	14%	7%	5%	4%	0%
% Relevant endline reports with no information	31%	78%	95%	96%	77%

In reviewed endline reports that contained information on standards, usually general referral was made to technical standards like SPHERE, WHO and/or national standards. Water quality standards were sometimes covering specific parameters, but they were never specified in actual contamination levels measured nor were the maximum allowable levels specified[9]. Some reports presented national or international standards used for the maximum number of pupils per toilet compartment (e.g. national standards were specified to be 50 pupils per toilet compartment but the actual values were not provided). Other reports mentioned the minimum amount of water that should be available per person per day (e.g., in the endline report of a WASH programme in Ethiopia, where it was stated that

[9] Examples:
- In endline reports of IR Bangladesh it was stated that the borehole water contained acceptable Iron and Arsenic levels, but not what the actual measured values were and not what the actual standards were).
- In separate communication, IR Pakistan indicated that it determines water quality in all its WASH interventions through internal water quality analysis and also through independent water quality labs, specially PCRWR labs, following national water quality standards in conjunction with WHO Standards. The information on water quality in the endline reports of IR Pakistan was limited though (e.g., stating in the endline report of programme 020_002845 that it was planned to do water quality mapping in 75 water sources while this was actually realized in 80 water sources, but not indicating which testst were done, what the measured values were and against which standards they were assessed).

in line with SPHERE standards people should have at least 7,5 Lppd, but the actual amounts available to the people were not reported). From the interviews feedback was though that standards have been used by at least several (and possibly most) programmes, especially with regard to water pipe materials and water quality aspects. However, in the endline reports that were reviewed, this information was not provided.

3.2.3 Data verification

It was found that it is not easily possible for the reader of the reviewed endline reports to verify the correctness and completeness of the data and information. The reports do not provide access to databases with key data which could shed more light on what has been accomplished and how, nor are contact details of local key informants presented in the reports. Other important information required for verification was often available, including location indications (names of locations and sometimes the related GPS data) and names of local government and other key stakeholder parties.

3.2.4 WASH indicators

Table 8 Percentage of programmes of which the final reports properly cover indicator groups

	% programmes for which information was found on the indicator group	
Indicator group	**Extensive and correct information found**	**Some and/or not fully correct info found**
# rightsholders per realized output type	74%	26%
# and types of outputs in place before programme start	76%	-
# outputs realized by the programme	91%	9%
Functionality of outputs realized	0%	21%
Output characteristics	15%	80%
Quality of outputs	0%	9%
Output sustainability	9%	33%
Key outcome indicators	3%	24%
Water quality of realized water systems	0%	31%
Outcome sustainability	3%	18%
Impact indicators	0%	3%

Beside numbers of outputs realised and numbers of rightsholders per output type (mostly correctly and fully reported), and information about WASH facilities and services in place before the programme started, hardly any other key WASH indicators were covered. This does not mean that these indicators were not measured and the information about them was not used, as this is unknown from the information available in the final programme reports. It means at least that the information about most key WASH indicators that should be available, was not available in the reviewed final and progress reports, and possibly that this information was not collected and/or used by all or part of the programmes reviewed. During interviews with WASH officers of several IRW country organisations the feedback on this aspect was that quality of outputs and the works that realized the outputs

were monitored through checklists by expert staff of the IR organisations in some programmes and that sometimes they continue doing so beyond the programme period. However, outcome indicators are not or only partially measured. It was unclear why the information collected is not presented in the endline reports.

It was also found, that since several months IRW works with a library of WASH indicators which IRW encourages all country teams to use (IRW Indikit WASH Indicators; L11). The Consultant found that these are in most cases well developed indicators, although not always covering all aspects of WASH. For example, the indicator question about the type of water system used by rightsholders includes as standard answers 'piped water/public tap' and assumes such systems provide safe water, but if the source is unprotected and contaminated, such a system will not provide safe water. Also, the types in the list are too limited. With regard to water quality, main referral is made to biological contamination (faecal coliform) while it is not worked out which tests can be used to measure this parameter. The explanations regarding other important water quality parameters and the involved tests, standards etc. is limited to general referral to WHO, SPHERE and Global WASH Cluster literature. For the fieldworker, this is insufficient guidance as it leaves him/her in the dark to what is exactly expected while he/she may and probably will not have the time and/or expertise to go through all the literature, contact local government, etc., to find out which tests are required, then obtain these tests and learn how to execute them or find a laboratory to execute the tests. These are merely two examples of shortcomings of the indicators which are a very good start though and provide a good overview of indicators that may be required. Another shortcoming of the library, is that it is difficult for field staff to determine from the many indicators which they should measure in the context of their WASAH programme. Furthermore, the indicator list does not contain indicators that are to be used for monitoring of WASH implementation works and for finalized WASH facilities and services (this last part is covered in the list with indicators covering rightsholders' satisfaction with WASH facilities and services, but with indicators that require measuring quality, functionality and utilization aspects of WASH systems, for which per WASH system specific indicators are required). A last, but may be even most important, shortcoming is that once indicators are measured, the data should be stored in a database and then structured, analysed, used and reported upon. These aspects are not covered by the list of indicators and the Consultant has not found evidence of this being covered properly anywhere else in the IRW system.

3.2.6 Monitoring

In the reviewed reports it was often not very clear how and what monitoring was done during the programme. The Consultant had to read through the different parts of the reports and make up the puzzle of what monitoring had most probably been done. Furthermore, it was hardly described how monitoring was done. Nevertheless, a general idea was finally obtained per programme (see the below table). More importantly, the

interview with WASH staff of IR Somalia revealed that during the WASH programmes, they had engineers on the drilling sites continuously controlling the works through documented checklists custom made for monitoring the works at hand (although these checklists were not seen by the Consultant). IR Somalia staff also revealed that they controlled materials against proper BoQs, etc. This clarified that in the programmes in Somalia and probably also in other programmes the monitoring encompassed much more than was described in the endline reports. Communication from some other IR country organisations (e.g. IR Tunisia) point out similar ways of working.

Table 9 Percentage of programme endline reports in which monitoring types were found

Monitoring focus	Monitoring type	% programme endline reports in which the type was found
Outputs and output activities	Outputs in place before the start of the programme	76%
	Informal monitoring during the programme (based on their expertise, no structural recording of data)	25%
	Official structured recording of functionality of outputs realized and numbers of users up to a few months after completion	21%
	Recording of numbers of outputs realized	97%
	Coming back periodically and measure functionality indicators with regard to the intervention results	0%
	No monitoring of outputs and output activities	0%
Outcomes	Baseline and end line investigations focused on WASH outcomes (part of key indicators covered)	38%
	Baseline and end line investigations focused on WASH outcomes (all or most key indicators covered)	3%
	Monitoring of numbers of beneficiaries per output type	82%
	Baseline and end line investigations focused on WASH outcomes and impacts	0%
	End line investigations focused on WASH outcomes	6%
	Coming back periodically and measure outcome indicators (e.g., through household surveys)	0%
	No monitoring of outcomes	26%

The above table confirms again that the endline reports mainly focused on the monitoring done to determine numbers of outputs before the programme, outputs realized by the programme and numbers of rightsholders per output type. However, also some data were found in part of the endline reports revealing that also baseline studies had been done (with referral to baseline surveys, hydrogeological tests, etc.) and endline studies (with referral to data about how rightsholders had improved their lives, although this was often presented through case studies). There was no information on whether and how monitoring was done beyond the programme period. IR Tunisia communicated they work with KAP surveys in their school WASH programmes and a 'three star approach' which basically comprises a WASH ladders for schools with three rankings (star 1 is the lowest ranking, although this probably still coincides with the basic ranking in the WASH ladders used in this review report, and star 3 the best ranking).

3.2.7 Use of information

Most of the reviewed endline reports focus on the outputs and numbers of rightsholders per output type. However, it is clear that a lot more information was available. At least programmes based themselves on clear insight in the WASH facilities and services targeted rightsholders had access to before the programme started while also a lot of technical information was collected, depending on the type of programme (e.g., for groundwater points hydro-geological surveys were executed) and based on the information designs were made and numbers of different types of outputs required. Also, the information from rightsholders was often used, usually with regard to preferred sites of water points and tapstands or kiosks. Important also is that the programmes intensively consulted local government and other key local parties about needs of rightsholders, preferred locations for the realization of outputs, overviews of what other parties did, do and were going to do, etc. This was done upfront, before the start of the programmes and also during the programmes. Hence, it was found that information the programmes had available was well and intensively used. The main issue was the question whether all required information was collected, reported and subsequently used (information that is not collected can also not be used), mainly with regard to the broader needs and priorities of rightsholders (although probably mostly taken into account to some extent, while WASH is almost always high on the priority list of people anyway), the WASH access people had before and after the programme (as to further finetune and design the programme activities, target areas and rightsholders, although most programmes covered bits and parts of this and some did quite well in this respect, and to evaluate and account for the extent to which rightsholders improved their WASH access as planned).

3.3 Approaches

Full sub-topic: Approaches applied for the execution of the interventions and for enhancing the impacts and sustainability of the intervention results.

3.3.1 Developmental approaches

Underlying specific WASH approaches are general developmental approaches. In the IRW WASH programmes the main general developmental approach included:

- **Participation of rightsholders.** Experience has learnt that rightsholder participation often improves the effectiveness, utilization and sustainability of programme outputs, increases the feeling of responsibility and ownership among rightsholders, and often also reduces costs. In emergency interventions rightsholder participation may have a positive psychological effect on people who are often traumatized, enabling them to take their lives back in their own hands to some extent by letting them decide on crucial aspects of the aid provided to them and implement the works and manage the results fully or partly themselves. Therefore,

participation of rightsholders is generally considered as something positive in WASH programmes. The main ways of rightsholder participation identified in the IRW WASH programmes reviewed included:

- Rightsholder consultation in the preparation phase (e.g., preferred sites for tapstands)
- Priority identification by rightsholders in the preparation phase
- Rightsholder contributions in the preparation phase (e.g., availing land where pipes and other water infrastructures need to be placed)
- Rightsholder labour contributions in the implementation phase
- Rightsholder responsibility for simple O&M tasks and financial management of realized water systems (CBM approach; see further on)

The participation of rightsholders was scored by the Consultant ranging from 2 to 8 based on the endline reports of reviewed programmes, with an average of 6 (in general, the more of the above forms of participation found in the endline reports, the higher the scoring by the Consultant). It should be noted though that rightsholder participation is not always required in all parts of the project cycle. For instance, in Tunisia, the toilet facilities in schools were rehabilitated by contracted companies. It was purely a technical exercise in which participation of rightsholders (in this case pupils and teachers) was not needed nor appropriate.

- **Participation of local government and other local parties**. Involving local parties (often local government) in all parts of the programme cycle and after a programme has ended is crucial for sustainability and embedding the programme results in the government context and systems. See also the paragraphs on specific WASH approaches. The collaboration of local (and in cases also national) government was scored per programme by the Consultant. The scores ranged from 4 to 8 with an average of 7. The main ways of collaboration with especially local government parties, as found in the endline reports, included:
  - advising (e.g., on selection of target areas) and providing information, guidelines and standards in the preparation phase (probably this also included the provision of permits for programme works although no information was found on this in the reviewed endline reports),
  - execution of (or participation in) needs assessments, priority setting, etc.,
  - involvement in implementation (e.g., sensitization of and consulting of rightsholders, monitoring of implementation works, providing trainings to rightsholders and other stakeholders, etc.),
  - assist with the coordination with other parties,
  - development of plans (e.g., district disaster plans, although it was nowhere described to what extent such plans were subsequently really implemented and with which resources),
  - participation in trainings provided by the programme

- monitoring and supporting WASH committees to sustain especially public WASH facilities (safety net and sometimes replacement, additional training and guidance of the committees), as described in more detail in the following paragraphs covering the specific WASH approaches found.

Some other main general developmental approaches that were not found in the IRW WASH programmes include:

- **Community development approach** – the involved community self-assesses its problems and prioritizes its needs. The programme assists he community with what comes out of the self-assessment, also if it is not water, sanitation or hygiene. Usually also other developmental aspects are included, e.g., assistance to community members to erect credit and saving groups, self-action groups which discuss and prioritize self-actions, etc. where such groups are supported by the programme, e.g., through community coaches, community health workers etc. who are either employed by local or district government (most ideal for sustainability reasons) or by the programme.
- **Self-help approach** - all phases of the project cycle are implemented as much as possible by the rightsholders themselves, e.g. rightsholders prioritize a gravity piped water system, decide where the taps, water tank etc. will be located in consultation with technical experts provided by the programme, and do all digging and construction works themselves under guidance of experts provided by the programme which also usually provides the materials that rightsholders cannot provide themselves such as the pipes, cement, taps etc.
- **Demand driven approach** – a programme assists those communities that take sufficient action in terms of application for assistance and execution of works agreed to be done by the rightsholders. E.g., if a piped water system is to be constructed, all digging by rightsholders (with an expert to guide them) needs to be ready and proper quality water and sand for construction works need to be collected and on site, before the programme will provide other materials, expert guidance, etc. Also, all implementation works are to be executed as much as possible by rightsholders (under guidance of experts of the programme) and if they don't, the programme is scaled down or stopped at least for some time (until the community can convince the programme it will perform better, which may in such cases, lead for instance to the community replacing the project committee members or even the village leadership).

3.3.2 Water approaches

Roughly 15% of the programmes that covered water included both rehabilitation and new construction of water systems, while for the other programmes with water works two third focused on new construction only and one third on rehabilitation. Almost all works to

rehabilitate or construct water systems were executed by contracted companies. During preparation of the programmes, which included different technical studies depending on the type of water systems involved, and usually some level of baseline studies (see former paragraph), often the rightsholders were consulted, especially with regard to the preferred locations for pumps and tapstands. Specific approaches applied by the IRM WASH programmes that included water, comprise:

- **Community Based Management (CBM).** 76% of the reviewed programmes that worked on water systems had a CBM approach. This means that they focused on strengthening the rightsholder communities to operate and maintain the water systems realised by the programme (usually implemented or rehabilitated by contracted companies) beyond the programme period. This was in all reviewed programmes that implemented this approach done by forming and/or training WASH committees to execute the O&M of the constructed or rehabilitated water systems. In some programmes this was done by the IR country organisation, in others it was contracted out to other parties, usually the local Water District Department (or equivalent). Major shortcomings detected in most of these programmes included:
  - The training of the WASH committees often comprised one or few time events which is not enough to create sustainable committees.
  - In most cases other parties (often local government) and staff working for them, had agreed with the programme / IRW country organisation to continue to regularly monitor and provide support and guidance to the WASH committees or other parties responsible for the O&M of realized WASH facilities or services in the long-term. This encompassed monitoring of and support to parties responsible for O&M and functionality of the WASH systems and services under the responsibility of these parties. This would include regular visits to and guidance and sometimes training of these parties, and safety netting by regular monitoring, sometimes regular preventive larger maintenance, and repairing or replacing (parts of) the WASH systems when needed and where this is beyond the capacity of the party responsible for O&M. The IRW country organisations in this respect assume or at least do not proof or make it likely in the endline reports that if a local government or another organisation had agreed to fulfil this safety net and support role, it will indeed live up to it. However, there often was no guarantee that this will happen. Even if this role is contractually agreed with an organisation, it does not automatically mean that this organisation will live up to this agreed role. In some circumstances, a contract with a serious organistaion (e.g. probably the Ministry of Education in the case of the IR Tunisia programmes) will be sufficient, but this was not properly described and made likely in the endline reports, while still some regular monitoring by the IR country organisation should then be in place to verify whether this is really happening (e.g. in Tunisia, if it is believed that the Ministry of Education can and does live up to its supportive and safety net role for WASH in schools, why then are

there schools in Tunisia where the WASH facilities are in a bad state and need replacement or rehabilitation?).

- The reviewed final reports of IRW WASH programmes did not describe any functionality for longer-term monitoring by and support of the IRW country organisation or another party (final safety net role). There was no indication of a functionality to regularly control whether and how the above support role of the involved local party (usually local government) is fulfilled beyond the programme period. The reports also did not describe any functionality to assist and rectify things where the above support role of the involved local party is not fulfilled properly. Fortunately, from the interview with WASH staff of IR Somalia it was understood that ***IR Somalia fulfils a final safety net role for the water systems it realized/rehabilitated. It also assists local and national government with equipment and materials for large maintenance, repairs and replacements (best practice)***. A question is how long IR Somalia will be able to continue to fulfil this role properly. Especially as it is expanding the numbers of water systems it realizes/rehabilitates.
- None of the reviewed IRW WASH programme reports described the other parts of the value chain(s) for sustaining water systems realized by the programmes. For instance, the skills available for the different required tasks, availability of area mechanics, availability and prices of spare parts, other (preventive) maintenance systems, etc.
- No information was found on the business case of water points realized. In order to structure things properly it is required to agree clearly with each WASH committee which operation, maintenance and small repair tasks they will need to finance with the income from the water payments. For this, it is required to know how much money can be generated from the water payments by water users and what the expected costs for different tasks (in O&M, repairs and replacement) are per time they are needed and per year (or even several years), split up in OpEx, CapEx and CapManEx costs. Once these insights are available the tasks and the involved costs can be contractually divided over the WASH committees, the local parties committing to support the communities and the IRW country organisation (or other party willing and capable to fulfil this role). Without these insights it is not properly possible to agree on the different roles and develop contracts or other types of agreements with the different parties involved. This then will probably lead to problems with covering he costs of O&M, repairs or replacements of the water systems somewhere in time.

- **Construction by companies.** All water systems and services in the reviewed programmes were constructed/rehabilitated/delivered by companies. Usually, the rightsholders were involved to some extent, e.g., by selecting preferred sites for public

WASH facilities (mainly tapstands and hand pumps) and sometimes in implementation (e.g., paving access ways to water system locations).

Water system approaches that were not found during the review, include:

- **Water utility approach.** Instead of a CBM approach it is finally best practice to professionalize and bring water systems under the responsibility of an organisation fully specialized in the operation, maintenance, repair and replacement of water systems. Most developing countries already have water utilities in urban areas where these are often somehow capable to sustain the water systems, mainly because of the high population density and the dependence of the urban population son these water systems. However, in rural areas these utilities cannot operate fully commercial because the costs are higher due to larger distances between water points, other types of water systems in rural areas and the much lower population densities while also often the capacity (and often willingness) to pay for water among rural populations is lower, while often people in rural areas also tend to refer to alternative water sources when possible to avoid having to pay for water and/or having to walk to the water points if these are further away than alternative (though often contaminated) water sources. Large part of this challenge could be covered if rural water utilities (or urban water utilities extending their business into adjacent rural areas) would be structurally compensated for the gap in finance between water user payments and the actual costs. In addition, strong governance of these utilities would be required and external monitoring in order to ensure their proper functioning. (See L12).
- **Self-supply(+) approaches** – *Self supply* encompasses the realization of water related systems, e.g., a slow sand water filter, fully by rightsholders themselves. Programmes can train and assist rightsholders to do so. *Self-supply+* encompasses the sales to and also often the (partial) production and/or assembly of low-cost water facilities for rightsholders (e.g., hand drilled boreholes equipped with locally produced rope pumps), sometimes fully commercial and sometimes subsidized (often by local companies or local NGOs). Self-supply(+ WASH facilities and items are usually suitable for households and groups of households, especially in remote areas where the placement of conventional WASH facilities would be too expensive versus the number of rightsholders and/or the water yields, where the conventional WASH systems in place are intermittent and where WASH systems are (also) used for productive reasons (e.g., small-scale irrigation of vegetable gardens with rope pumps on hand dug or hand drilled wells). WASH programmes can train, guide and assist parties active in the self-supply+ value chains. This can best be done by setting up structural centres that provide this support and also function as a final safety net for these WASH facilities and items (such centres are called SMART Centres; see e.g., L13). Often WASH programmes and SMART Centres also assist rightsholders to obtain affordable micro

credits to buy the self-supply(+) WASH facilities and items or the materials to produce these themselves.

3.3.3 Toilet approaches

The approaches used for the realization and/or rehabilitation of toilets were diverse. An approach based on self-construction by rightsholders is CLTS (see the description of this approach below). CLTS was implemented by four of the 34 reviewed WASH programmes (two in Pakistan, one in Sudan and one partially in South Sudan). The two programmes in Pakistan also campaigned in villages that had been certified open defection free (ODF) but had fallen back (meaning that at least part of the rightsholder households had started open defection again). Four of the reviewed IRW programmes (in Bangladesh, Somalia, Pakistan and Indonesia) assisted rightsholders with the construction of their toilets (e.g., by providing required but expensive materials, such as cement, and/or expert labour). 13 of the 34 reviewed IRW WASH programmes, constructed toilets for the rightsholders, usually by contracted companies (4 programmes did so for individual rightsholder households, mostly in IDP and refugee camps, 5 for schools, 4 for health centres).

Table 10 Endline reports covering toilet approaches

TOILET APPROACHES	*Construction and/or rehabilitation of toilets*			
	partly by beneficiaries and partly by the project	*by beneficiaries (CLTS)*	*by the project (e.g., through contractors)*	*through market-led sanitation*
% IRW WASH programmes for which the use of the approach was reported	4	4	13	2
% relevant endline reports which indicated the use of the approach	22%	22%	72%	11%

Community Led Total Sanitation (CLTS). This approach entails the sensitization of rightsholders during a number of sessions, so they become motivated to construct their own latrines, usually of self-collected local materials. Programmes sometimes use own staff to sensitize rightsholders, but for sustainability reasons it is better to train field staff of local government (e.g., community health workers) to sensitize rightsholders (assuming and hoping they will continue to do so, at least partly, after the programme has ended). This approach was part of a few of the programmes reviewed. It is often regarded as a very positive approach where rightsholders make their own decisions and implement their own toilets which subsequently they are therefore assumed to properly maintain (and replace with new latrines when the pit is full) as well. Villages which through CLTS have achieved that all inhabitants own and use a toilet, are declared and certified 'open defecation free' (ODF), usually by the programme that implemented the CLTS approach together with local authorities. Practice however, has learnt that quite often households fall back to old behaviours (e.g., open defecation) if they find it difficult to for instance

make a new toilet, especially where the traditional latrines usually constructed by people collapse due to flooding, unstable underground (which may cause pits to collapse) and/or other reasons. A major problem is that often the latrines constructed by people are not appropriate for the local circumstances, because people do not have the required materials for and/or lack expertise for more appropriate designs. Therefore, practice is that often latrines realized as a result of CLTS efforts collapse or disintegrate otherwise.

Market-led sanitation may work well if people are motivated and are capable to invest their money in toilets (either money they have readily available or money obtained through loans or micro credits). Construction of toilets fully by contracted companies usually works best in public institutions. In camps for IDPs or refugees and in poor rural villages a combined approach is often most appropriate where masons and rightsholders together develop optimal designs for the toilets in the specific circumstances and the programme assists the rightsholders with the materials and expertise required for these designs which the rightsholders do not possess or are capable to obtain while the rightsholders provide all expertise and materials that they reasonably can provide[10]. Alternatively, where the purchase power of rightsholders is better, materials and expertise may be offered against commercial or subsidized rates to the rightsholders (partial or full marked-led approach). In rural areas, where sewage systems and even pit emptying by trucks are often not an option, stand-alone toilet systems are needed. Three toilet systems that together are ideally suitable for almost all circumstances, each covering different circumstances in different rural areas, but that will usually need assistance by programmes in order to enable rightsholders to implement them, include the improved pit latrine, the Fossa Alterna double pit latrine and the pour flush double pit toilet (see Annex 6).

3.3.4 Hygiene approaches

The IRW WASH programmes applied the following hygiene approaches (in brackets the percentage of reviewed programmes found to have implemented the approach):

- **Distribution of hygiene kits (33%).** In the (often emergency) programmes that distributed hygiene kits, the contents of the kits were often discussed beforehand, mainly with women, to ensure that they contained the items needed by rightsholder

[10] E.g., in a refugee camp in Sudan an organisation developed a HH latrine by starting to dig a hole at the market place in the camp. Eahc tiem people came to look and the staff of the organisation asked them to give feedback on what they though should be doen to make a good latrine. The staff were referred to a mason refugee who had constructed a latrine for his family. The staff discovered that the mason had made a pit with a lining of mud, straw and donkey dung and that this was a good, very solid way to make the pit. The mason adviced to inform people about this design, require that people make such lined pits themselves, then provide those who had done it properly with a large concrete slab (consisting of 3 spearate parts to enable manual lifting) and then let people build the superstructure also themselves and provide them a large bar of soap when they had properly finished the latrine. People could get digging materials from the programme. This is only possible though if the required local materials can indeed be found.

households (this can be considered as good practice!). Also, in schools sometimes hygiene kits were distributed, mainly containing cleaning tools for toilets. The household hygiene kits often contained items such as soap for washing of persons, clothes etc. but also menstrual hygiene materials (often disposable hygiene pads, as it was argued that women fed back that non-disposable pads were difficult to clean) and other hygiene items required. Although the kits were highly appropriate and required to assist households to improve their personal and household hygiene, a major issue with the hygiene kits is the question what happens when the items are finished. In none of the reviewed endline reports of WASH programmes that distributed hygiene kits, information was found that shed proper light to this question.

- **PHAST (6%).** PHAST empowers communities to improve hygiene behaviours, preventing diarrhoeal diseases, and encouraging community management of water and sanitation facilities through a participatory approach to community learning and planning. It was found in the endline reports of two programmes, one in Sudan, the other in South Sudan, both among host populations and IDPs.
- **CHAST (6%).** CHAST raises hygiene awareness among children. It was implemented by IR programmes in Sudan, South Sudan, and especially also in Tunisia (in more than 300 schools!), both among host populations and IDPs.
- **Household (door-to-door) sensitization (appr. 20%).** Households are approached with hygiene messages individually.
- **Mass hygiene promotion events (9%).** These are promotional activities to large crowds, e.g., at public markets.
- **Community or group hygiene promotion and awareness raising and action sessions (42%).** Hygiene is promoted (usually during one or a few sessions) to groups of rightsholders. In some cases, this was combined with action, e.g., cleaning of the public areas in a village with the idea that the rightsholders continue to do so on a regular basis afterwards. The same was done in schools with focus on clean classrooms, toilets and school compounds (by 15% of all programmes).
- **Forming and training health & hygiene clubs in schools (15%).** Training pupils to set up and run health & hygiene clubs that raise awareness among fellow students and sometimes also among community members through different activities.
- **Training school teachers in regard to hygiene (9%).** Teachers are trained to educate their students on hygiene.
- **Assistance to schools to develop menstrual hygiene capacity (3%).** Schools assisted to construct menstrual hygiene facilities (e.g., shower rooms).
- **Assistance to health centres to develop WASH and hygiene plans (3%).**

3.4 Cross-cutting themes

Full sub-topic: Cross-cutting themes, including resilience, protection, inclusion and other cross-cutting themes.

The scores for cross-cutting themes are summarized below. The scores could not be based on data from objective indicators on the involved issues, because mostly only textual explanations were available. Therefore, the Consultant determined scores he felt fitted best to his understanding of the descriptions.

Table 11 Cross-cutting themes

Cross-cutting theme – how well it was covered by the programme (1 = very poor/bad, 10 = very well/good)	Average score for the indicator	% programmes for which information was found on the indicator	% programmes for which the indicator score was satisfactory
Safety / protection	7	59%	75%
Gender focus in the programme activities	7	85%	72%
Gender in terms of % of the target group being female (1 = <30% of target group is female, 10 = >= 50% of the target group is female)	10	100%	100%
Environmental protection and risk considerations	5	38%	46%
Conflict-sensitivity	6	53%	56%
DRR, climate change or resilience mainstreaming	4	26%	22%
Older people, people with disabilities	5	68%	57%
Faith and faith leaders	3	47%	31%
Integration with wider programmes and result areas related to e.g., livelihood (irrigation), education, nutrition etc.	6	62%	71%
Policy influencing activities at national or local levels.	3	38%	23%
Capacity building of relevant technical departments or bodies of government on relevant WASH areas	3	38%	31%

Safety and protection issues were described in slightly more than half of the reports reviewed. They were mostly described in general terms and mostly related to dangers for women in regard to water collection.

Gender was a clear focus and covered extensively in most endline reports. The focus in programme activities was on women and the role they play in WASH (e.g., by targeting female headed households, focusing on hygiene practices for women and their specific roles in WASH, and menstrual hygiene awareness, items and infrastructure among rightsholder households, and in schools and health centres). In regard to numbers or percentages of women targeted, several reports claimed to target women in terms of female headed households. However, the gender statistics usually showed that if all rightsholders are taken into consideration, the gender balance was in most cases around 50/50 women/men. Where no gender statistics were found in the endline report, it was assumed that the gender balance among the target population was 50/50 (as is the case in most villages, schools, etc.).

Environmental protection and risk considerations, conflict sensitivity and integration of DRR, climate change or resilience mainstreaming were mentioned in roughly a quarter of

the reviewed endline reports, but in such general terms that no solid conclusion could be based on the descriptions. Therefore, the Consultant concluded that the actual attention the reviewed WASH programmes paid to these aspects was limited, being aware this is an assumption.

Vulnerable people were often mentioned as a focus of the programme, but furthermore little information was provided on how this was done. The Consultant therewith concluded that the actual focus on vulnerable people has been limited in some programmes, but it is clear that most programmes paid at least some tangible attention to these rightsholder groups, not only by mentioning them in the endline reports.

In most programmes a service delivery approach was implemented rather than a rights-based approach. *In a service delivery approach, once a water system has been constructed, the service is maintained indefinitely through a planned process of low-intensity administration and management, with occasional capital intensive interventions to upgrade the service level and to replace the hardware at the end of its designed lifetime*. (L17). *A rights-based approach focuses on a systemic change that will guarantee that WASH services are delivered equitably and sustainably. It places importance on processes that promote both the responsiveness and accountability of the duty-bearers to deliver and the empowerment of the rights-holders to hold the duty bearers accountable, especially regarding the commitment to 'addressing inequalities as well as tackling the underlying causes of these inequalities'* (L6). The IRW WASH programmes often do cover rights-based aspects, including the training of rightsholders and often inclusion of facilities, services and strategies focused on vulnerable and handicapped persons and households, but no evidence was found as to rightsholders being empowered to claim their right on WASH and hold IRW accountable to its WASH efforts, for instance. Introducing a rights-based approach to WASH can be tricky though. In many areas in developing countries, local politicians and other influencers set up people against the government and NGOs with the claim that people have the right to WASH access and should therefore not be paying for WASH facilities and services, which may, if allowed, undermine the sustainability of WASH facilities and services.

Faith and faith leaders were sometimes mentioned but hardly anywhere did it play a leading role. It was sometimes stated that no differentiation was made between religions of targeted rightsholders and sometimes that faith leaders (of different religions) assisted in WASH awareness creation among rightsholders.

The environment was regularly mentioned, but usually in relation to the cleaning of public and household spaces, solid and other wastes, etc. However, in for instance hardly any of the reviewed endline reports for IRW programmes that focused on groundwater development a description was provided of the aquifer capacity and the consequences of the programme activities for the aquifers.

Conflict-sensitivity was sometimes addressed. Several programmes covered the subject in trainings (e.g., for water committees). In one endline report of a reviewed IR programme in Kosovo, it was stated that attention was paid to how rightsholders were selected in order to prevent conflict between those who were and who were not selected as programme rightsholders. In Somalia, also with regard to livestock taking water from deep boreholes realized by IR Somalia programmes, endline reports stated that conflict-sensitivity was communicated with rightsholders and that conflict was stopped on this aspect.

4. Findings RQ2 - How well will the benefits last?

Full review question: How long, to what extent and in what form will (or may) the programme benefits last?

4.1 (Expected) life-time/duration of the results, outcomes and impacts

Full sub-topic: (Expected) life-time/duration of the outputs, outcomes and impacts. The focus is on non-emergency programmes.

Table 12 Sustainability potential scores (scale 1 – 10; 1 = very poor, 10 = very good)

Sustainability type	Average score	Lowest score	Highest score	% programmes for which info was found on the sustainability type
Sustainability of outputs	6	3	8	41%
Sustainability of outcomes	NI	NI	NI	0%
Sustainability of impacts	NI	NI	NI	0%

The information found in the reviewed endline reports on sustainability, quality and robustness of WASH infrastructure realised or effectuated, and other aspects of importance for a long life duration of outputs, outcomes and impacts, was limited[11]. The above scores for output sustainability potential were determined largely intuitively by the Consultant based on sustainability descriptions in the reviewed endline reports (no quantitative information on sustainability indicators was found).

Main aspects found in the endline reports that were used to determine the output sustainability potential scores included:

- Toilets. If pit latrines are realized (by the programme of by the rightsholders after sensitization by the programme) and new pits can easily and cheaply be realized, the chance of sustainability of the toilets was considered high.
- Toilets. If rightsholders constructed toilets themselves the chance of sustainability of the toilets was scored higher than if they were constructed by the programme, though not very much (because it is known that if people want and need toilets, they will sustain them even if they did not construct the toilets themselves and vice versa).
- Water systems. If they were rehabilitated and it was not described why they needed rehabilitation and/or what the programme did to ensure that the causes for the deterioration of the water systems before the programme were resolved, the chance of sustainability was scored low.

[11] Probably more information is available on sustainability in some IR country organisations. For instance, IR Pakistan communicated separately with the Consultant that a recent study suggests that more than 70% of the outputs of IR Pakistan's interventions are intact a few year after their realization and handing over to the authorities, community organizations and line departments.

- The sustainability of the effects of trainings, sensitization and promotional events that were provided only few times or only during a limited period of time without a mechanism put in place for proper follow up in the longer (beyond programme) term, was given a low sustainability potential score.
- Where no solid information about a proper monitoring, support and safety net mechanism for the O&M (and finally replacement) of especially water systems was provided, a low sustainability potential score for the outputs was given. A problem was that often there was some description of an agreement with local government parties or other local bodies (sometimes set up by the programme) to provide such support and safety net, but it was never sure to what extent these were solid agreements based on proper assessment of the capacities of these parties (in terms of finance needed and available to cover the financial gaps of O&M costs that cannot be covered from water user payments, staff/expertise, transport means, etc.) and their commitment to really properly fulfil this role in the longer term. Also, the sustainability potential score depended on the extent to which information showed that other parts of the value chain were in place (e.g., area mechanics, spare parts availability and affordability, strength of the community WASH committees, water payment system in place, water prices, etc.). In most cases no or little information was available on these aspects though. In some reports it was stated that the IR country organisation would follow up beyond the program period and provide support if required which then resulted in a higher sustainability potential score, especially where interviewed WASH staff of IR country organisations confirmed that they really did so in proper ways.
- Where it was obvious that the rightsholders needed the water very badly and/or had no or little alternative water sources (even if polluted), the sustainability potential of the water systems was scored higher. If also livestock depend on the water supply the sustainability potential score was raised further, because the motivation among water users will be higher to sustain the water systems and pay for the water.
- Where the information (often from the photographs in the reports) indicated a high robustness of WASH facilities the sustainability potential score was raised.
- Where stakeholders involved in O&M were properly trained during at least several (ideally quite short) trainings and longer-term follow up by for instance a local government parties of these trainings was secured, the sustainability potential score was raised, but where trainings were provided once or a few times, it was assumed that this would be insufficient to effectuate a sustainable result.
- Where paid and employed (usually by local government) health and hygiene promotors were involved and were likely to follow up on trainings, sensitization and promotion, the sustainability potential score was raised.
- WASH systems that are easy and cheap to sustain were given a higher sustainability potential score (e.g., gravity piped systems are usually much easier and cheaper to

operate and maintain than mechanically pumped system, even if they are solar pumps, which in actual fact often have a lot of sustainability challenges with lack of or expensive spare parts, lack of expertise to repair the systems when needed, etc.).

- For emergency programmes the sustainability aspect was not regarded so important. However, in some cases a temporary WASH service (e.g., water trucking) was provided where it was clear that beyond the programme period the need for water trucking would still exist. This was remarked as a shortcoming if the programme did not have a proper strategy on how to resolve this. Simply describing that hopefully other aid organizations will take over, is of course not sufficient.

4.2 Characteristics of the interventions that enhanced sustainability

Full sub-topic: Characteristics of the interventions that have enhanced the sustainability of the intervention results, outcomes and impacts.

Table 13 How the sustainability of intervention outputs and outcomes was enhanced as described in reviewed WASH programme endline reports

Sustainability enhancement strategy	% programmes that applied the strategy
Working with local staff and stakeholders	62%
High level of participation of rightsholders during preparation and implementation	47%
High level of participation of rightsholders in O&M and management of the realized results	65%
Intensive involvement of local government	56%
High quality construction	6%
Handover to actors assigned in camps for O&M of the facilities	3%
Beyond programme support by the IR country organisation	15%
No information found on sustainability enhancement	9%

In almost two third of the endline reports it was described that the programme was implemented by local IR country staff and other local stakeholders. Probably this percentage should be higher, but in other reports this information was not provided.

Participation of rightsholders during preparation and implementation of a programme was reported in 47% of the endline reports which would be higher if the endline reports had provided information on this aspect. Participation in these phases of the programme cycle can form an important basis for later sustainability. If it is done properly, it increases the feeling of pride, ownership and responsibility while it also increases the chance that designs of WASH facilities, siting of WASH facilities and even approaches of how to implement programme activities fit to the wishes, needs, ideas, insights and capacities of rightsholders, which again often increases the chance for sustainability.

Participation in the O&M of WASH intervention results was described as a strategy in 65% of the endline reports. This encompasses the CBM approach with WASH committees responsible for the O&M of water systems, but also household latrines that are to be sustained by the rightsholders. In regard to sustaining the results of hygiene promotion

interventions, this means that rightsholders continue to practice what they learnt. As stated before, there are doubts to what extent this strategy can be successful without additional external inputs, by for instance local government, aid programmes, etc., even if it is combined with for instance participation of rightsholders in the preparation and implementation phase of a programme.

In regard to the above, in more than half the endline reports it was described that local government (and/or other local parties/bodies) were involved in the programme. This was often during preparation and implementation. Often also referral was made to handing over of the responsibility for O&M to local authorities and/or to the rightsholder communities. However, little information was found on whether and how these stakeholder parties have the capacity and motivation to fulfil this role. Furthermore, it was often reported that a programme trained water committees, caretakers and/or water technicians once or twice, but this is not enough. Guidance and support in the longer run are required on clearly documented aspects that have been properly investigated and agreed on beforehand with the rightsholders (e.g., who pays which costs, which O&M tasks are to be executed by the community, which support tasks, preventive maintenance, repairs and within which timeframe can rightsholders count on form the local government). As described before, the interview with staff of IR Somalia revealed that both the local government and IR Somalia remain involved in the WASH facilities (deep boreholes with solar pumps) basically indefinitely. However, no evidence was found on a structured approach in this regard, in terms of clear agreements with all involved parties about their roles and financial contributions, based on in-depth assessment of the capacities of these parties (community – local government – IR country organisation) in terms of finance, transport, human resources, etc.

A few endline reports stated that the IR country organisation continued to monitor some aspects beyond the programme period, like the numbers of human and animal water users at realised water points during 3 months in a programme of IR Somalia. More important, the interview with IR Somalia staff revealed that they continue to support involved local governments and communities to sustain the water systems realized or rehabilitated through IR Somalia programmes in the longer-term. They do so by monitoring (especially in remote areas this is done quarterly), sometimes provision of spare parts and tools to local and national government and by functioning on an ongoing basis as a final safety net with local government requesting IR Somalia to come in and support whenever they do not have the capacity for it, or when the own monitoring shows that support is required. This is a strong approach but makes it necessary that the IR country office continues to raise funding for this role indefinitely while it can also lead to other stakeholder parties withdrawing from their responsibilities counting on IR Somalia support.

Sometimes sensitization and rightsholder consultation was done by community mobilizers (e.g., community health workers) employed by local authorities. Ideally, this would also include longer-term involvement of the IR country organisation, to monitor, guide and

when needed refresh and support such staff and their employers. The Consultant believes it usually does not make sense to erect new bodies to fulfil such roles (as was done by some IR programmes), unless there will be long-term support of such bodies. For instance, to assume that sustainability of WASH systems and WASH awareness can be safeguarded by newly erected entities, e.g. Local Advisory Groups (LAGs) that were formed and trained by the reviewed IR school programmes in Tunisia, will probably only be successful if these bodies are supported by the IR country organisation over a period of say 10 years or if they are properly and regularly monitored and supported by organisations that are structurally embedded in society (e.g. a governmental body). However, in the enldine reports no information was found on secured monitoring, guidance and support of such newly erected organisational structures.

Several endline reports mentioned that WASH programmes were executed by their local offices in the area and one report even mentioned that they were structurally based in the area which enables them to come back and monitor sustainability of the programme WASH results and were as such they are able to provide input if the sustainability of former programme results or outcomes is threatened. This is a proper way to enhance sustainability, which if done well makes it possible to continue monitoring the results and continue to provide input in former programmes to safeguard sustainability, i.e., if in general terms the programme has implemented sustainability infrastructure (e.g., through solid agreements with and support to district water departments, assistance with the erection of rural utilities, etc.).

As stated before, most reports mentioned that collaboration was sought with local government and sometimes regional bodies and/or district or regional level bodies that were formed or enhanced by the programme, often with representatives of the rightsholders. Sometimes it was also reported that agreements were made on how such entities and bodies agreed to be involved in the longer run, in regard to the programme results. Often also the WASH programmes provided trainings to these entities. However, for as far as the information was available, the trainings were mostly one time or few time events of short duration and the agreements were possibly not documented. Because also the quality of outputs realised by the WASH programmes has not been reported, it is not possible to make estimates of the sustainability of the programme outputs.

In the same time, also from feedback by WASH staff of IRW country organisations, beyond what is described in the endline reports, much more has been accomplished in terms of safeguarding the quality of works and outputs and the longer term sustainability of the programme results, outcomes and impacts.

The usefulness of many of the hygiene promotion activities is doubted by the Consultant. School clubs may or may not survive in the longer run, which usually depends on the teachers involved, who should however after being trained for it, also be guided and (re) motivated from time to time beyond the programme period. As far as the Consultant was able to get information from the reports, none of the programmes studied had a proper

solution for this. Some programmes requested local health government departments to do so but without any solid guarantee that they will really do so. One or few time hygiene awareness creation events for households is usually limited while it is also important to know where the obstacles are for people to practice desired hygiene behaviours (use a KAPP survey[12] to find out: is a desired behaviour not practiced because of lack of Knowledge or Attitude, or due to limited or no Practical means to do so, or due to wrong Perceptions?)[13].

[12] A Knowledge, Attitude and Practices (KAP) survey is a quantitative method (predefined questions formatted in standardized questionnaires) that provides access to quantitative and qualitative information. KAP surveys reveal misconceptions or misunderstandings that may represent obstacles to programme activities and potential barriers to behavior change. A KAP survey essentially records an "opinion" and is based on the "declarative" (i.e., statements). In other words, the KAP survey reveals what was said, but there may be considerable gaps between what is said and what is done. See further L10. The Consultant has added to the KAP method a fourth component (the last P), which stands for Perception, because Perception is often decisive for people's behavior more than the other KAP components.

[13] One programme was planning to do KAP surveys in schools on hygiene behaviors which is good as an attempt to determine whether pupils really practise the hygiene behaviors taught to them. However, it cannot be proven whether good hygiene behaviors is a result of the hygiene campaigns or whether students already practised these behaviors before (because no baseline KP surveys have been done) and also it is not possible to proof or make likely to what extent improved behaviors are sustainable in the long run (which may be possible for the students reached but less likely for new students to come). Better would be to train and guide the teachers on hygiene education among their students and also try to get it incorporated in the national curriculum of the country. Training the hygiene clubs is also an attempt to incorporate hygiene attention structurally within schools, but unknown how long these clubs will last if not actively encouraged by the schools. Enhancing cleaning campaigns was somehow monitored as it was stated that such cleaning campaigns became a habit in the schools.

5. Findings RQ3 - How did the rightsholders benefit?

Full review question: How did the rightsholder populations benefit from the IRW WASH interventions?

5.1 Impacts

Full sub-topic: If information is available, impact of improved WASH related health, school attendance and working days.

WASH impacts are difficult to measure and even if they are measured it is difficult to determine to what extent they can be attributed to the programme. Fortunately, it is not really necessary to do so. It has been proven through research programmes that WASH facilities and services have an impact in terms of improved WASH related health, reduced burdens and improved comfort, safety, etc. if such facilities function properly and are properly and sufficiently used. This means that if it can be proven that a programme improved WASH facilities and services compared to the baseline situation, and these are properly utilized (outcomes), it is safe to assume that there is positive WASH impact. This is called the *Minimum Evaluation Procedure* (MEP) (L2). The impacts related to hygiene promotion, can often be questioned, especially if they are one or a few time events. It is difficult to change people's behaviours and providing people with hygiene knowledge is usually not enough. The problem is often more related to attitudes, practices and/or perceptions of people that are usually not changed by increase in knowledge. Practice can be enhanced (if the knowledge, attitude and perceptions are there), by assisting people to get access to WASH facilities and services needed to practice the behaviour, rather than promoting the behaviour. In other words, the impact caused by hygiene promotion is often limited because often people do not utilize the hygiene promotion messages sufficiently to adapt their hygiene behaviours, which, as argued above, will then also not lead to impact.

The reviewed endline reports did not contain tangible (measured) information on impacts. This is also not required. An assessment of the functionality of outputs and their utilization is enough to make impact plausible, aspects that are covered in other parts of this report.

In general, it is clear that water is extremely important for people and their animals to be able to survive and be healthy. Toilets and hygiene facilities and items are also imperative for health and also provide especially women and girls safe, comfortable, dignified sanitation where such toilets are of proper quality, and nearby people's houses, pupils school classes and clients in health centres, and provide sufficient privacy. Also, the emphasis of some programmes on menstrual health was important in this respect and should be considered a best practice for all toilet efforts by IRW WASH programmes.

For a school WASH programme in Tunisia (020_002774), the added value in terms of impact gains was somewhat doubtful, although the improvements realised were clear, good and especially also beautiful. However, the toilets that were already in place before the start of the programme, were as far as could be seen from the photos not unsuitable for hygienic use, although it is unsure whether they were functional and whether the programme has expanded the number of toilets to fulfil the national toilet standard for schools (1:50) better. If that is the case, the impact will be higher, especially in terms of comfort for the students, menstrual health and school attendance of especially girl pupils. However, the final report did not contain the information required to determine this.

5.2 Outcomes

Full sub-topic: Numbers and percentages of rightsholders with improved access to and use of WASH facilities and services (water quality, distance to facility, safety of facility, access + access safety, affordability) (baseline – end line).

Information to determine to what extent the WASH programmes have increased access of rightsholders to WASH facilities and services, was limited. Almost all reviewed endline reports presented numbers of rightsholders with access to WASH facilities realised by the programmes, but how good the access is (e.g., for realized water systems, criteria are to be used like water quantities available to rightsholders and their animals, water collection times, water qualities, safety of access to the water points, and affordability of the water) was not or hardly specified (see Annex 5). If one or more of such access criteria are not sufficiently fulfilled, a rightsholder may not benefit much from realised WASH facilities or services. For instance, a rightsholder may in terms of proximity, safety, water quantity and quality, etc. have access to a water system, but this will be of limited benefit to this rightsholder if the water is unaffordable to him/her because the price for the water is too high.

Also, for other topics (notably water management, toilet access, hygiene access and hygiene practice) different criteria (to be measured through related indicators) are required to determine to what extent people really have proper access. Annex 5 presents the low percentages of reviewed WASH programme endline reports containing information regarding the access indicators used in WASH programmes by the Consultant for all these topics. The same low percentages were found for similar access and practice indicators in schools and health centres where the IRW WASH programmes intervened.

Therefore, to review what WASH programmes achieved in terms of WASH access and practice (WASH outcomes) on the basis of the information in the endline reports, the Consultant had to add pieces of information together (e.g., also derived from photos and case stories in the reports) and, in addition, had to make many assumptions, in order to develop the access and practice overviews (e.g. if an endline report provided the number of water systems and it was clear these are improved water sources, located not too far

from the rightsholders, the Consultant assumed that other access criteria are sufficiently fulfilled, while there was often no information underlying this assumption).

On the next page, the WASH access ladders the Consultant has determined for the reviewed IRW WASH programmes are presented. The above shortcomings (lack of information regarding the different access criteria) should be taken into account though, meaning that the reality on the ground may be different from what is presented. It is therefore best to view the ladder rankings as a 'best guess', based on the limited information the Consultant had available. For an introduction to the WASH ladders used by the Consultant, see footnote 1 in paragraph 1.1 of this report.

For the water access ladder, it can be seen that the focus clearly was on households, that most information was found on realized water access and that indeed ***the IRW WASH programmes helped most rightsholders to climb up the water access ladder from unimproved water access (98%) to basic water access (67%)***, while the targeted schools and health centres did even better in this respect. It can also be seen that the planning for basic access among households was higher (86%). The difference can be explained by some programmes not getting further than limited water access level. This was for instance due to water trucking which, because the water quality was not fully secured, was scored by the Consultant as limited water access, and programmes that constructed surface water reservoirs (berkads in Somalia and large reservoirs in Pakistan) which improved water quantities but due to their poor water quality and distance from at least part of the rightsholders (assumed) were ranked as unimproved water access (because most of these programmes did not target schools or health centres, this issue was not found for schools and health centres). It should be added that especially programmes in Asia often added water purification plants to the water systems to ensure proper water quality.

With regard to water management the main observation is that mostly only limited water management was achieved (67%). This is based on the finding that ***many of the reviewed IRW WASH programmes only trained and guided community WASH committees once or few times while there was often too little evidence of a properly functioning support and safety net for these committees***.

Toilet access was improved among rightsholders from unimproved (100%, assumed) to mainly basic (60%) and partly limited (40%) levels while in schools toilet access was already at safe level in two schools (in Tunisia) but with deteriorating facilities that were rehabilitated and therewith also reached safe access. In one school (in Bangladesh) the toilet access was improved to limited access level only because the ratio pupils/toilet compartment was still far too high. In health centres toilet access was improved to basic level.

Hand wash access concerned facilities at public toilets further than 60 m away from people's houses, while in schools they were realized near the school toilets either in the schools (safe access s level) or in the school compounds (basic access level).

Hygiene practice mainly concerned the efforts of the IRW WASH programmes to improve people's hygiene behaviours through all kinds of hygiene promotion and awareness raising trainings, campaigns and sessions. Because the endline reports quite often claimed that improved hygiene was realized, most ranking is at basic hygiene practice (52%) and in one case even safe ranking (20%). The reality is probably less positive though, due to the challenges involved with improving hygiene behaviours as described before in this report.

Table 14 IRW WASH programme outcomes summarized in access and practice ladders for the reviewed IRW programmes*

Topic	Ranking	Households				Schools				Health Centres			
		Baseline	*Planned*	*Realized*	*# pro-grammes with info*	*Baseline*	*Planned*	*Realized*	*# pro-grammes with info*	*Baseline*	*Planned*	*Realized*	*# pro-grammes with info*
WATER ACCESS	Safe	0%	7%	9%	**27**	0%	19%	18%	**11**	0%	0%	0%	**5**
	Basic	2%	86%	67%		0%	80%	80%		0%	100%	100%	
	Limited	0%	3%	17%		0%	1%	2%		0%	0%	0%	
	Unimproved	98%	5%	8%		100%	0%	0%		100%	0%	0%	
	# progr with info	***19***	***20***	***24***		***8***	***11***	***11***		***2***	***5***	***4***	
WATER MANAGEMENT	Safe	0%	0%	0%	**12**	0%	0%	0%	**1**	NI	NI	NI	**0**
	Basic	0%	100%	33%		0%	100%	0%		NI	NI	NI	
	Limited	0%	0%	67%		0%	0%	100%		NI	NI	NI	
	Unimproved	100%	0%	0%		0%	0%	0%		NI	NI	NI	
	# progr. with info	***8***	***9***	***12***		***1***	***1***	***1***		**0**	**0**	**0**	
TOILET ACCESS	Safe	0%	0%	0%	**11**	67%	59%	75%	**5**	NI	NI	NI	**0**
	Basic	0%	80%	60%		0%	41%	0%		NI	NI	NI	
	Limited	0%	17%	40%		0%	0%	25%		NI	NI	NI	
	Unimproved	100%	3%	0%		33%	0%	0%		NI	NI	NI	
	# progr. with info	***5***	***10***	***10***		***3***	***5***	***4***		***0***	***0***	***0***	
HYGIENE ACCESS	Safe	NI	0%	0%	**3**	0%	38%	40%	**5**	NI	NI	NI	**0**
	Basic	NI	34%	0%		0%	62%	40%		NI	NI	NI	
	Limited	NI	33%	100%		0%	0%	25%		NI	NI	NI	
	Unimproved	NI	34%	0%		100%	0%	0%		NI	NI	NI	
	# progr. with info	***0***	***2***	***3***		***1***	***5***	***5***		***0***	***0***	***0***	
HYGIENE PRACTICE	Safe	0%	13%	0%	**9**	0%	0%	0%	**3**	NI	NI	NI	**0**
	Basic	0%	87%	48%		0%	100%	67%		NI	NI	NI	
	Limited	0%	0%	52%		0%	0%	33%		NI	NI	NI	
	Unimproved	100%	0%	0%		100%	0%	0%		NI	NI	NI	
	# progr. with info	***5***	***7***	***7***		***2***	***3***	***3***		***0***	***0***	***0***	

* In the overview, a percentage in a ranking category for a programme phase (baseline, planned or realized) means the average percentage of the rightsholders of an average reviewed programme that falls within that ranking category and programme phase. E.g., in the water access ladder an average reviewed programme realized that 67% of the rightsholders achieved basic access. For a description of the ladder rankings (safe, basic, limited, unimproved) and the underlying indicators used by the Consultant for each of the ladders, see Annex 5. It should be noted once again, that because of the very limited information found in the endline reports, the figures in the above overview and the underlying figures out of which they are composed, are based on quite some assumptions. It should also be noted that these ladders provide information about the WASH access and practice situation at the moment the information was collected, but do not say anything about the sustainability of the achievements.

5.3 Best practice IRW WASH programmes

Full sub-topic: Highest outcome programmes of IRW and their characteristics (reasons for the high outcomes especially).

5.3.1 Involvement by IR South Sudan of local government staff in hygiene promotion with proper methodologies

In South Sudan, Community Hygiene Promotors (CHPs) of the local government (and probably also teachers) were trained by the IR South Sudan WASH programme to sensitize communities regarding hygiene through PHAST and CHAST methods. They were assumed by the Consultant to continue working with the rightsholders also after the programme ended. This best practice would be even stronger if IR South Sudan would follow up on the promotional activities by CHPs and teachers beyond the programme period for several years on a regular basis by monitoring the activities by these stakeholders, provision to these stakeholders of regular refresher trainings and workshops and having clear agreements with local governments and schools regarding their ongoing efforts in this respect based on the resources they can really mobilise for this purpose (in terms of human resources, transport, etc.). To fulfil this follow up role, IR South Sudan needs to propose extra budget in its WASH proposals as a beyond programme follow up budget line and sensitize its donors about the need for it.

5.3.2 Sustainable CBM model for O&M, repairs and replacements

IR Somalia WASH programmes focus on deep boreholes (sometimes 300 m or even deeper) with solar pumps. As water is a huge need among the targeted rightsholders living in an arid environment, these are highly relevant interventions, providing water for the rightsholders and their livestock, often as the sole proper water system in a whole area of many square kilometres. Therefore, also the motivation of involved local stakeholder parties (notably communities and local governments) is very high to pay for and sustain these systems. The question was how the sustainability of the water systems is secured as this was not described in the endline reports of these programmes. An interview with IR Somalia WASH staff revealed that they use a layered CBM based O&M model. The first layer comprises community water committees (the CBM layer), trained by the IR Somalia programmes, who take care of the daily operation and minor maintenance work and with rightsholders paying for the water they take for themselves and their animals. The second layer is the local government which assists the communities with repairs and larger maintenance if needed. In case the local government can't do the required works, usually due to limited resources and/or expertise, the third layer, IR Somalia, is called which has secured budget and experts for assistance in such cases. IR Somalia develops proposals for rehabilitation of boreholes to pay for this 'beyond programme' service. IR Somalia also capacitates local government (and national government?) by providing them materials and tools for repairs and replacements of the water systems. IR Somalia engineers also monitor

the remote boreholes four times a year and during these visits also executes preventive maintenance and repairs when needed. IR Somalia staff claimed that as a result, up to date all the successful boreholes IR Somalia realized in the past ten years or so are still in function today! Water quality tests as required by the government for boreholes are done by a laboratory applying WHO standards. Sometimes salinity is on the high side, but rightsholders often use roof water for drinking, while the borehole water is used for other household purposes and especially to water livestock which is more resistant to salinity (especially goats). Some weak points in this best practice are:

- Local government and IR Somalia need to continue to search for funding to pay for the costs of fulfilling their roles in this model all the time which makes it a vulnerable business case. The more water systems IR Somalia realizes and tries to continue to assist, the more this will be a challenge.
- Communities and local government may call for IR Somalia assistance even when they do have the resources to solve certain problems themselves, to spare costs and be able to divert the spared money to other purposes. IR Sudan uses a different approach, where it monitors WASH facilities that were realized by IR Sudan programmes whenever they are nearby for new programmes. They however, do not repair anything but if they find dysfunctional boreholes/hand pumps or other dysfunctional WASH systems, they inform the local authorities about it. They also attend sector meetings in different states report in these meeting if they have found dysfunctional boreholes or latrines. This may however, not suffice to overcome large problems.
- The model is not sufficiently underlain by a tripartite agreement which indicates very clearly which works are to be done and paid for by each of the three stakeholder parties (this is an assumption as the Consultant did not find details regarding the agreements between these parties).
- Salinity is often high which has health consequences such as high blood pressure.
- In the future boreholes may fall dry due to excessive use combined with climate change.

Several other programmes also had interesting CBM based models with support levels. For example, the WASH programme in Niger (020_003101)[14].

[14] The community gives 70% of the water user payments to the municipality of a nearby town and 30% goes to the water committee (having a bank account), on basis of a MoU with the municipality. The municipality is responsible for larger maintenance and repair works. However, questions remain regarding: (a) the availability and affordability of spare parts and technical expertise for larger repairs, (b) the extent to which water user payments cover the costs of O&M, repairs and even replacement, and if not, from which resoruces the gaps will be filled, (c) who controls the finances both at the water committee and at the municipality, (d) whether IR Niger, the hydraulic department and the municipality can fulfil their role in the longer-term. Hence, the value chain has probably not been assessed sufficiently which may cause problems in the future. Also, the dependence on the Doutchi Hydraulic service during implementation was very high. The report states that a technician was hired to monitor the works. Although it is good to contract one party for execution of works and contract another party to monitor and control the quality of the works, IR Niger may not be able to monitor the monitor and as such really safeguard quality.

5.3.3 Structural presence in areas

IR country organisations often have structural presence in certain areas in their countries. This enables them to follow up on earlier programme results and provide timely assistance if needed without much additional costs involved. They may need some extra budget for it though. A major advantage of structural local presence is the local network and embedding in local society which makes it possible to achieve more in cheaper ways and less time. So having structural presence in a few strategic areas in the country, is a best practice.

5.3.4 MEAL@BEST

A WASH programme by IR Niger (020_003101) monitored the quality of activities, numbers, quality and functionality of finalized outputs, and measured several key baseline and endline outcome indicators. Not all indicators were measured and only part of the measured values of indicators were reported, but it was relatively good and better than what was found in other endline reports. It should be stated once again though, that apart from the endline and other reports, it was found through the interviews with WASH staff of several IR country organisations, that a lot of unreported MEAL activities are carried out, often in structured ways and by proper experts who are on site.

5.3.5 Feeding aquifers with runoff water in Sudan

In a drought prone area, IR Sudan collects run-off water in the rainy season, which percolates into the ground and recharges the aquifer tapped by nearby constructed hand pumps and mini water yards, providing water for humans and livestock in the dry season.

5.3.6 Integrated WASH approach in Pakistan

The third pillar of IR Pakistan's country strategy 2017 – 2021 is about Integrated Water Resource Management, including water conservation, water governance, economic use of water, rain water harvesting, Balochistan water recharge program, and inclusive and resilient WASH projects. A total of 1.2 million people have been reached under this pillar. Climate sensitive WASH programs and aspects of Climate Change Adaptation have been part and parcel of all programs of IR Pakistan.

5.4 Best outcome practices in the sector

Full sub-topic: Best outcome practices in the sector (WASH programming and approaches in fragile, low- and middle-income countries in which IR works)

⇒ **Emergency – development nexus.** For emergency situations: shift into development modus always within 6 months after the start of the emergency (e.g., no more water trucking after 6 months).

⇒ **Designing and introducing toilets.** If a programme provides the materials rightsholders can't afford (e.g., cement and reinforcement bars for the slab), the required expertise (to guide rightsholders on how to construct the toilets), and if needed the required tools for constructing the toilets (provided either on a loan basis or donated as a tool set to for instance the whole village or group of rightsholders), toilets can be designed and introduced that are most optimal for the circumstances (see also sub-paragraph 3.3.3). In this approach, rightsholders do all they reasonably can do and the programme helps them with those aspects for which they do not have the resources and capacity. The focus is on assisting rightsholders to build a strong and sustainable sub-structure while the superstructure is left to the rightsholders themselves to be built with own (often local) materials. Such toilets are often better and more sustainable than the simple pit latrines that are usually realized by rightsholders when a CLTS approach is applied (where rightsholders have to build their toilets fully themselves, almost always only with local materials, which often results in quite poor structures which cannot be properly cleaned and often suffer from collapsing pits, etc.). The final designs are developed through construction of several pilot toilet designs together with the rightsholders with the rightsholders having a final say in the design to be introduced (which may differ per area and even per village). Sustainable designs, most suitable for rural areas where there are no sewers or septic tank emptying services, include improved pit latrines with a strong and durable reinforced concrete slab with sufficient overlap over the ground (for stable soils and where there is enough space), twin pit toilets (e.g., Fossa Alterna, for unstable, rocky and high groundwater soils and wherever people are ready to use pit contents in agriculture), and pour flush toilets connected (e.g. with two pits behind the compartment, either sunk in the ground, in relatively soft soils without high groundwater tables, or raised above it where the ground is hard or rocky and/or where groundwater is at shallow depth), that can be emptied in rotation (suitable where anal cleansing is realised and water is available). Where in rural areas, where stand-alone types of toilets are the only solution, people are not used to emptying pits and using the contents in their fields, where improved pit latrines are not suitable (e.g., due to rocky ground or high groundwater tables) and/or where there are other clear reasons not to go for improved pit or pour flush latrines, a programme may also choose to heavily promote double pit latrines raised above ground. This may even be against the initial will of people, but will then require a long-term effort of promoting the raised double pit latrine and working with trend setters who start with the toilet and explain about their experiences to other rightsholders on a regular basis. The reason to do so, is that in such a case, if finally successful, targeted rightsholders will have a fully sustainable toilet solution and the chance is high the technology will spread to adjacent areas.

⇒ **CBM safety net.** This can be done by identifying the stakeholder parties that are equipped at least to some extent and motivated to fulfil the role of safety net and

support them, if needed, to build the longer-term capacity and motivation to execute this role properly in the long run. It is usually best to try and work with existing organisational structures (most chance for sustainability) such as typically district water departments. However, if these structures are unlikely to function properly in the long run, other solutions will have to be found or the programme should be redesigned entirely (e.g., by trying to introduce a parallel organisational structure, but this will then need to be capacitated over a long time while also problems may be encountered by districts opposing such structures, etc.). Proper agreements are required and a safety net for the safety net is often also needed. See earlier remarks on this aspect in this report.

⇒ **Water utilities.** Pilots exist (e.g., in Uganda) that introduce, in collaboration with the local and national government, some kind of rural water utilities in rural areas. It is also possible to assist urban water utilities to expand towards rural areas and take up rural water systems under their wings. This requires a long term approach and should only be done if it is a separate programme with the goal to implement such a structure. In the long run it is believed that water systems in most rural areas in low and middle income countries will be covered by water utilities (as is the case in almost all rich countries and many middle income countries). However, because water systems in rural areas in especially low-income countries cannot be fully financially sustained with water user payments, a water utility set up in rural areas in these countries can only be successful if the water utility is provided longer-term funding security by external sources (e.g., national government and/or external donors who contractually agree to do so), The external funding will cover the part of the costs of rural water systems that cannot be expected to be paid by the water users (blended finance). This will also require longer-term support in terms of management, technical trainings etc. In addition, it will require a semi-commercial set up with strong governance which has the power to and will replace the management of the water utility (or impose other strong measures as required) if performance is insufficient. Local governments (e.g., district water departments) can and should in such a set-up fulfil the role of regulator (monitor and control the performance of the water utility and ensure that required action is taken if performance is insufficient). Further information on this model can be obtained from L7.

⇒ **MEAL@MORE.** Proper monitoring of programme activities and realized outputs as for instance also advocated in WASH Cost documents of IRC (see L15). An example is the Ugandan Water Project which works with an ongoing monitoring system for which the data are stored and structured in mWater, focused mainly on boreholes with hand pumps in rural areas (see L16).

6. Conclusions

This chapter reflects on and concludes about the extent to which the issues covered by the review objective have been achieved. The review objective and related questions as in Annex 1 of the ToR, including feedback on these in the Inception report altogether led to the formulation of the review questions. Therefore, these conclusions reflect on the review questions and conclude how the IRW WASH programmes perform in regard to these questions.

6.1 Findings for RQ1 - How well were the interventions executed?

Most WASH interventions were executed quite well. Most probably, the quality of the facilities and activities was relatively high and the approaches used mostly fitted reasonably well to the circumstances. However, the Consultant could not be sure mostly about this conclusion, because most endline reports contained too little information to do so. Fortunately, the interviews with WASH staff of different IR country organisations revealed that in most cases a lot more information was collected during the programmes and even afterwards, with which the quality of the activities and outputs was safeguarded. Nevertheless, verifiable proof for this was often not available. Other main points for attention include: sustainability of outputs and the related outcomes was not always optimal, although good efforts are made (see next paragraph), and sometimes the participation of rightsholders is not yet fully optimal, although also in this respect the IR WASH programmes make great efforts.

6.2 Findings RQ2 - How well will the benefits last?

Sustainability was often quite well safeguarded. Many IR country organisations continue to be involved to some extent beyond the programme period, trying to monitor the outputs realized and assisting when needed, some in terms of advice and raising awareness among rightsholders and local government parties, some by assisting with materials, repairs, etc. when other stakeholder parties can really not do it. A major weakness though, is that this way of working is vulnerable, because it depends on the resources the IR country organisation happens to have. This means that if the resources are low at a certain point, the IR country organisation will not be able to fulfil this last resort safety net role properly anymore. Also, other IR country organisations do not offer this 'beyond programme' service while not always other aspects of sustainability were covered (e.g., not always was a proper agreement made with the local government to monitor and provide support to the communities, and/or not a proper assessment was made to what extent such local government parties are able to provide such assistance).

6.3 Findings RQ3 - How did the rightsholders benefit?

Although the approaches applied by the IR WASH programmes did not put the rightsholders fully in the driving seat, it is undoubtedly clear that the programmes always covered high (and highest) priority needs of the rightsholders. Because of the often quite high quality of works and the attempts to facilitate participation of the rightsholders in many parts of the programme cycle, often including the design phase, high benefits for the rightsholders were achieved. This can be found back in the WASH ladders developed on the basis of the information found in the reviewed endline reports (which, due to the limited information in most endline reports, should be regarded as 'best guesses' though). These ladders reflect the levels of access that rightsholders have gained through the programme support regarding different WASH aspects (water access ladder, water management ladder, toilet access ladder, hygiene access ladder and hygiene practice ladder). For water and sanitation, mostly basic access level was achieved. For school sanitation even safe access level was achieved by some programmes. However, for hygiene ladders mostly limited access/practice level was achieved due to the limitations of the awareness and training efforts as well as the limited hygiene facilities and items distributed (which was not enough to lift the level further up) by most of the programmes that included these aspects.

7. Recommendations

1. **Improve the sustainability of water facilities further.** Through the interviews the Consultant learnt that IR country organisations usually assist rightsholder communities to have a relation with the relevant local government for support when needed while many IR organisations on their term keep assisting local government to fulfil this role. However, sustainability is not sufficiently secured everywhere while in the countries that do actively continue to support local government and/or rightsholder communities, it may become increasingly difficult to continue doing so in the long run, especially if the numbers of WASH systems realized through programmes of these organisations increase over time and/or funding found to provide this support reduces. There are basically two options to further secure the sustainability of water facilities and services:

   - ***Improved CBM with a safety net.*** This includes more and longer-term training and guidance of WASH committees + a safety net composed of a solid agreement between local government and rightsholder communities, based on the capacities of both parties + a final support and safety net role by the IR country office (officially agreed between the involved local government institutions/departments and the IR country organisation, for a period of 10 years or more, depending on the developments)[15]. In addition, where the final safety net is to be provided by the IR country organisation for public WASH facilities constructed or rehabilitated by IRW WASH programmes, a lobby should be executed among the donors of such programmes to standardly allow extra budget in WASH programme proposals to cover the expenses for this role.
   - ***Pilots with the introduction of rural water utilities*** by IR country organisations, especially where these organisations are very active and/or invest a lot of money in WASH. This should be done together with local and national government and may be done together with existing utilities in programme areas if appropriate and if there is commitment for it among these utilities. Part of this may be a lobby campaign in the international arena (among relevant international donors and key international bodies) for the piloting and development of rural or combined urban/rural (regional) water utilities that receive ongoing external funding to

[15] Hence, there must be longer-term involvement of the IR country organisation and this should be officially agreed. This is opposite to what was done by IR Somalia which reported that the local government (PSAWEN) will take full responsibility (laid down in the Letter of Approval between IR Somalia and PSAWEN) and that *'Islamic Relief Somalia will have no liabilities for further repairing and maintenance or any losses or damages*'. Furthermore, it states that it was agreed that the government line ministries will have to provide support where the water committees cannot handle problems (e.g., when rehabilitation is required). Interestingly, in practice IR Somalia does remain involved and continues to monitor at least the most remote water points it constructed, while it assists local and national government with materials and equipment required for repairs. One step further would be to also take up this role in the agreement documents. Another issue in this regard is that the focus should be on preventive maintenance (cheaper and less down time).

structurally fill the financial gap between water user payments and funds required for full life-cycle sustainability of public WASH systems in rural areas.

To optimize the above options, the roles of each party should be clearly documented and agreed on between the involved parties (communities, local government, IR country organisation) and be based on the financial and other capacities of each of these parties. In addition, in both options ideally there should be a governance umbrella that can intervene in case one or more parties underperform in regard to their agreed role(s). It should be laid down in documented agreements or statutes that the governance umbrella has certain powers to intervene. This will be a challenge (e.g., if staff or even the management of a local Water authority are underperforming in regard to their agreed roles and tasks, will the local government then allow the umbrella governance to replace these staff and/or managers?).

2. **Improve the sustainability of toilet facilities further.** Abandon the CLTS principle that rightsholders have to construct their toilets fully themselves. Apply the approach with which the programme supports materials and tools, while rightsholders further do all they can reasonably do to construct highly sustainable standalone toilets (based on three main designs for improved pit latrines, double pit latrines and pour flush toilets, introduced through local pilots in villages or groups of rightsholders and with input in the final design by the rightsholders). For public institutions and spaces, the above approach can often also be used (e.g., parents of pupils digging the pits for the school latrines), especially where relatively simple toilet designs are common. Where more sophisticated toilets are common for public institutions and places, the toilets are to be constructed by contractors (as is done by most IR WASH programmes). In case of highly vulnerable rightsholders, toilets may need to be constructed by contractors or, better, other rightsholders assist these vulnerable rightsholders with constructing their toilets.

3. **Improve, integrate and globalise MEAL.** It was found that endline reports often contain limited information and that the information is scattered throughout long texts. This makes it difficult for the reader to apprehend and understand what the actual key information is and to what extent the programme has been successful. Through the interviews it was fund though that usually a lot more information is available and also used to ensure a successful programme (e.g., on pre and post programme water quality, characteristics of WASH facilities realized, etc. but often less so on specific outcome criteria and output quality aspects). Furthermore, it was found that most IR country offices use simple database systems such as Excel or simply textual reporting in Word files, and that there is no global structure yet for this in IRW. The result is that key data are not all and/or not fully measured and/or stored and structured, cannot easily be found and are often not reported. The limitations in the MEAL systems may also have implications for the works on the ground: if insufficient monitoring is done, there is insufficient guarantee of the quality of the works and insufficient insight in the

actual results and outcomes of the works. Although in general the impression was that the quality of programme outputs is reasonable to good (due to lack of information, this is largely an assumption though), it is also believed that there is actual danger of worse outputs and outcomes than possible, delays and bottlenecks as a result of improper reaction on bottlenecks due to insufficient monitoring information, etc. If criteria and indicators are included in a proper database and data collection system, field staff are guided, motivated and pressed to measure these indicators in structured ways in each WASH programme and enter the gathered data in the databases (interestingly, experience is that field staff like to do so a lot). This will lead to early detection of problems, improved accountability and better learning, both at field, national and global levels and will also increase the institutional memory at all these levels. It is therefore recommended, to develop a global MEAL system for all aspects of WASH programmes to be used by IRW and all its country organisations. It is recommended to use the online database system mWater for this purpose. mWater is a state of the art online database specialized in WASH programmes and WASH systems and services in developing countries. It is largely funded by big donors and therefore for free for its users. Above all, it is a comprehensive and very easy to use database system, data can be entered through SMART phones, tablets etc. both off and online, it has libraries of WASH indicators, has a high level security system, has top of the game functionalities, etc. The Consultant recommends mWater to IRW because it is highly suitable as a complete MEAL system for IRW and all its country organisations. The Consultant has a lot of experience with mWater and therefore offers his services to develop IRW's MEAL system in mWater. In case IRW wishes to use the database for all its programmes, also other than WASH programmes, it can choose for Solstice which is the same database as mWater, only suited for all sectors. Reference is made to the example endline report the Consultant developed for IRW of which all tables can be generated automatically with mWater (or Solstice) if the involved data are uploaded in this database. Even if a global MEAL system and global database is not introduced by IRW, it can use this example report to guide the IR country organisations on how to improve their reporting on WASH programmes.

4. **Improve the participation of rightsholders further.** Quite good approaches and methods are already applied by IR country organisations for participation of rightsholders. However, participation may be improved further by putting rightsholders even more in the driving seat by introducing demand-driven and self-prioritization approaches further.

5. **Introduce distance verification.** Verification of reported WASH programme results by the IRW HQs and internal and external evaluators, can be cost-effectively realized at distance as follows:
   - Require that contact details of key rightsholders and other key informants (e.g., WASH staff of involved local government parties) are presented in an Annex in each

endline report, including their telephone numbers. They can then easily be contacted, without having to visit the programme area, to check the correctness of information in the reports and obtain additional information (e.g., whether and how a WASH system functions and is utilized in the period when the call is made).

- As long as no global database system is in use (see the second recommendation in this chapter) require that the link to the database in which all collected programme data are stored and structured, is provided, so that verification of the data is possible and checks can be executed to what extent all data needed are present/available and to what extent the information in the endline report coincides with the data in the database.

Annex 1 Terms of Reference of the review

A 1.1 Islamic relief Worldwide

Islamic Relief is an international aid and development charity, which aims to alleviate the suffering of the world's poorest people. It is an independent Non-Governmental Organisation (NGO) founded in the UK in 1984.

As well as responding to disasters and emergencies, Islamic Relief promotes sustainable economic and social development by working with local communities – regardless of race, religion or gender.

Our vision:

Inspired by our Islamic faith and guided by our values, we envisage a caring world where communities are empowered, social obligations are fulfilled and people respond as one to the suffering of others.

Our mission:

Exemplifying our Islamic values, we will mobilise resources, build partnerships, and develop local capacity, as we work to:

Enable communities to mitigate the effect of disasters, prepare for their occurrence and respond by providing relief, protection and recovery.

Promote integrated development and environmental custodianship with a focus on sustainable livelihoods.

Support the marginalised and vulnerable to voice their needs and address root causes of poverty.

We allocate these resources regardless of race, political affiliation, gender or belief, and without expecting anything in return.

Islamic Relief Worldwide (IRW) has consultative status with the UN Economic and Social Council, and is a signatory to the International Red Cross and Red Crescent Code of Conduct. IRW is committed to the Sustainable Development Goals (SDGs) through raising awareness of the issues that affect poor communities and through its work on the ground. Islamic Relief are one of only 14 charities that have fulfilled the criteria and have become members of the Disasters Emergency Committee (www.dec.org.uk)

IRW endeavours to work closely with local communities, focussing on capacity-building and empowerment to help them achieve development without dependency.

Please see our website for more information http://www.islamic-relief.org/

A 1.2 programme background

In 2020, 2.3 billion people lived in water stressed countries – with 2 billion people (equal to 26%) of the world's population lacking safely managed drinking water. 3.6 billion people (equal to 46%) of the world's population lacked safely managed sanitation and 2.3 billion people (29%) lacking basic hygiene.

829,000 people die each year from diarrhoea as a result of unsafe drinking water, sanitation and hand hygiene. Safe drinking-water, sanitation and hygiene is crucial to human health and well-being. Safe WASH is not only a prerequisite to health, but contributes to livelihoods, school attendance and dignity and helps to create resilient communities living in healthy environments.

Drinking unsafe water impairs health through illnesses such as diarrhoea, and untreated excreta contaminates ground waters and surface waters used for drinking-water, irrigation, bathing and household purposes. Chemical contamination of water continues to pose a health burden, whether natural in origin such as arsenic and fluoride, or anthropogenic such as nitrate.

Safe and sufficient WASH plays a key role in preventing numerous NTDs such as trachoma, soil-transmitted helminths and schistosomiasis. Diarrhoeal deaths as a result of inadequate WASH were reduced by half during the Millennium Development Goal (MDG) period (1990–2015), with the significant progress on water and sanitation provision playing a key role. SDG 6 of the 2030 Global Goals sets the target achieving universal and equitable access to safe and affordable drinking water for all and achieving access to adequate and equitable sanitation and hygiene for all – including an end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations. It also sets the target of supporting and strengthening the participation of local communities in improving water and sanitation management.

Evidence suggests that improving service levels towards safely managed drinking-water or sanitation such as regulated piped water or connections to sewers with wastewater treatment can dramatically improve health by reducing diarrhoeal disease deaths.

However, according to the 2021 UN SDG report, 129 countries are currently off-track from achieving sustainably managed water resources by 2030 and would need to double the current rate of progress meet the SDG 6 targets.

During the last 5 years, WASH specific programmes accounted for 7% of total global programme expenditure at Islamic Relief Worldwide. However, if including all programmes which included a WASH component then this increases to around 23% of global programming expenditure. Whilst WASH isn't listed as a strategic priority in the current IRW global strategy, however it is evident that it's an important part of our global programming and complements many multi-sectoral activities.

A 1.3 Objectives of the evaluation

The aim of this consultancy is to provide a detailed account of Islamic Relief's current and recent activities in Water, Sanitation and Hygiene (WASH) interventions in order to identify the range of outcomes targeted and achieved, sustainability of completed actions, any indicative impact, highlight internal and external best practice and learning and provide a baseline which will be used to improve our WASH interventions in the future.

This consultancy will involve document reviews, emailing, online meetings, distributing and analysing the results of surveys, and other means of eliciting data concerning Islamic Relief's current and recent activities in WASH interventions. The resulting reports will inform programme, policy and advocacy developers, regional and country coordinators and country officers to support situation analyses, funding, planning, implementation, monitoring and evaluation of WASH related programmes and programmes throughout the organisation.

Consultancy Goals;

1. Islamic Relief will be informed of the extent, nature, key results (effectiveness at the outcome level/indicative impact & sustainability), best practices and learnings derived from its work in and around WASH since January 2017.

2. Islamic Relief will be provided with an overview of sector best practices, promising and scale able innovations or evidence-based solutions already being scaled, trends and

evidence of what works related to WASH programming and approaches in fragile, low and middle income countries in which IR works.

3. Islamic Relief will be able to utilise this information to inform its programme, policy, advocacy and planning towards achieving its strategic objectives in the WASH sector.

A 1.4 methodology and approach

Consultants are invited to propose the specific methodology as part of this call. In general, it is envisaged this desk review and mapping will involve literature and document reviews, virtual meetings, internal and external KIIs, distributing and analysing the results of questionnaires, and other means of eliciting data concerning Islamic Relief's current and recent activities in WASH interventions.

- Please refer to annex 1 for the specific scope of assignment highlighting key questions this desk review seeks to answer and suggested final report outline.
- The Consultant is expected to propose a suitably robust methodology through which areas highlighted in annex 1 will be most readily extracted, analysed, synthesised and reported back on, within a 4 week consultancy time period, to provide a detailed understanding of the current status, approaches, gaps and potential opportunities in further developing IRW's WASH programming globally.
- The proposal should also consider that most programmes will not have evaluation reports and may lack other baseline and end line data; whilst other programmes are ongoing and may not have final reports. Under such situation, the Consultant should consider and propose a suitable methodology which can be used to determine programme details (from proposals and narrative reports) and provide indicative, relevant and credible findings and recommendations.

Policy Framework

The Consultant will be expected to work within and abide by Islamic Relief's policy frameworks on communications, information management etc. and will be obliged to sign an agreement assuring the confidentiality of data and information utilised and collected in pursuance of the consultancy. The Consultant will be sensitive and compliant to any requirements of GDPR.

The report will be produced for internal audience but may be edited and adapted for external publication by IRW for wider communication and learning purposes.

A 1.5 required competencies

Required competencies of the Consultant would be:

- Will have either significant technical and/or practical field-based or relevant academic experience of the WASH sector in the context of international development and humanitarian settings and be able to us this knowledge to construct effective enquiries and provide practical recommendations.
- Have a broad understanding and experience of conducting evaluations, outcome and impact assessments, value for money analysis, reviews using a variety of methodologies, including conducting desk and literature reviews and studies.
- Must have experience in rapidly accessing and managing large bodies of diverse data, and extracting relevant information from them and drawing appropriate conclusions and recommendations.
- Possess strong qualitative and quantitative research skills.
- Will write informatively and succinctly in English.
- Respect the values of Islamic Relief.

The chosen evaluation team will be supported by IRW Programme Quality (PQ) team and the IRW Regional team.

A 1.6 Project outputs

Deliverables for this assignment are:

1. Written inception report and detailed work plan agreed with Programme Impact and Learning Manager within one week of commencement, setting out timelines, sampling and analytical framework, detailed methodology, relevant technical standards to be used, draft survey and interview questions, draft proposed report structure etc.

2. Narrative report, not exceeding 32 pages describing the extent, nature, effectiveness, value for money analysis, sustainability, best practices and learnings derived from our work around WASH since 2017 as well as external best practices, approaches and evidence of what works and currently being scaled up. The report should have the following sections:

a) Title of Report: **Desk Review & Mapping of IRW Global WASH Programme Effectiveness and Sustainability (2017-2021)**

b) Consultancy organisation and any partner names.

c) Name of person who compiled the report including summary of role/contribution of others in the team.

d) Period during which the review was undertaken.

e) Acknowledgements.

f) Abbreviations.

g) Table of contents.

h) Executive summary (not exceeding 3 pages).

i) Main report – max 32 pages – (please see indicative layout in annex 1 below – Consultant is invited to propose most suitable report structure layout).

j) Annexes

- Terms of reference for the review.
- Profile of the review team members.
- Review schedule.
- Persons participating in the review – with appropriate consent for names to be published or specific names should be anonymised highlighting just role, organisation and gender.
- Documents consulted during the desk review.
- Data base on MS Excel format of all programmes and programmes examined, analysis framework and data used for analysis, including country, PIN number, name, brief description, dates, budget, donor.
- Anonymised copy of field data collected during the review.
- Additional key overview tables, graphs or charts etc. created and used to support analysis inform findings.
- Bibliography.

3. The Consultant will be required to regularly communicate with the IRW international office and provide feedback on and answer questions about the findings from the desk review. This should include an initial presentation of the draft report by the Consultant via Microsoft Teams or Zoom.

4. The Consultant will lead a presentation and sharing workshop up to 90 minutes with IRW (programme quality MEAL team, head of region, desk coordinators and officers, technical advisors).

The work plan, inception report, draft report, final report, presentation, etc., and communication language must be in English.

A 1.7 Timetable and reporting information

The programme is expected to run for a maximum of **20 working days**, starting by the **31st January 2022** and ending before the **31st of March 2022.**

Date	Description	Responsibility
6th January 2022	Tender live date	IRW
18th January 2022	Final date for submission of bid	Consultant
18th – 21st January 2022	Proposals considered, short-listing and follow up enquiries completed	IRW
24th – 31st January 2022	Consultant interviews and final selection (+ signing contracts)	IRW
1st February 2022	Meeting with the Consultant and agree on a methodology, sampling, plan of action, working schedule	IRW
10th February 2022	Submission of Inception Report (at least 7 days before commencing the evaluation)	Consultant
11th February – 25th February 2022	Desk Review	Consultant
4th March 2022	Submission of the first draft to IRW for comments	Consultant
9th March 2022	Initial Presentation of Findings	Consultant
14th March 2022	IRW responses to draft report	IRW
18th March 2022	Final report submitted to IRW	Consultant
21st – 25th March (TBC)	Final Presentation * 2 with IR key stakeholders	Consultant

Reporting information:

Contract duration: Duration to be specified by the Consultant (max 20 days)

Direct report: Programme Impact & Learning Manager

Job Title: Consultant: Desk Review & Mapping of IRW WASH Programme

A 1.8 Outcomes and Impact

The Consultant will communicate in the first instance with and will forward deliverables to the IRW Programme Quality team.

A 1.9 Accountability

The Consultant will be responsible for conducting the activities and delivering the outputs set out in these terms of reference and will coordinate all activities with and through the Programme Impact & Learning Manager. The Programme Impact & Learning Manager is responsible for facilitating access to all relevant and available documents (proposals, donor reports and evaluation reports) and wider staff necessary for the Consultant to conduct these activities and deliver the outputs.

A 1.10 Proposal to tender and costing

Consultants (single or teams) interested in carrying out this work must:

a) Submit a proposal/bid, including the following;

i. Detailed cover letter/proposal outlining a methodology and approach briefing note

ii. CV or outline of relevant skills and experience possessed by the Consultant who will be carrying out the tasks and any other personnel who will work on the programme

iii. Example (s) of relevant work done

iv. The financial proposal including the consultancy daily rate, please refer to appendix 2

v. Expenses policy of the tendering Consultant. Incurred expenses will not be included but will be agreed in advance of any contract signed

vi. Be able to complete the programme within the timeframe stated above

Vii. be able to demonstrate experience of humanitarian review for similar work

A 1.11 payment Terms and conditions

Payment will be made in accordance with the deliverables and deadlines as follows:

- 40% of the total amount – submission of the inception report
- 30% of the total amount – submission of the first draft of the evaluation report
- 30% of the total amount – submission of the final report including all outputs and attachments mentioned above

We can be flexible with payment terms, invoices are normally paid on net payment terms of 28 days from the time of the invoice date.

A 1.12 Additional information and conditions of contract

During the consultancy period,

IRW will only cover:

- The costs and expenses associated with in-country, work-related transportation for the Consultant and the assessment team
- International and local travel for the Consultant and the local team
- Accommodation while in the field
- Training venues
- Consultancy fees

IRW will not cover:

- Tax obligations as required by the country in which he/she will file income tax
- Any pre/post assignment medical costs. These should be covered by the Consultant
- Medical and travel insurance arrangements and costs. These should be covered by the Consultant

A 1.13 consultancy contract

This will be for an initial period that is to be specified by the Consultant commencing from 31st January 2022 (or earlier). The selected candidate is expected to work from their home/office and be reporting to the Programme Impact & Learning Manager or team member designated for this study.

The terms upon which the Consultant will be engaged are as per the consultancy agreement. The invoice is to be submitted at the end of the month and will be paid on net payment terms 28 days though we can be flexible.

All potential applicants must fill in the table beneath in **Appendix 2** to help collate key data pertaining to this tender. The applicant must be clear about other expenses being claimed in relation to this consultancy and these must be specified clearly.

For this consultancy all applicants are required to submit a covering letter with a company profile(s) and CVs of all Consultants including the lead Consultant(s).

A proposal including, planned activities, methodology, deliverables, timeline, references and cost proposal (including expenses) are expected.

Other relevant supporting documents should be included as the Consultants sees fit.

A 1.14 Tender dates and contact details

All proposals are required to be submitted by **Tuesday 18th January 2022 at 1.00pm UK time** pursuant to the attached guidelines for submitting a quotation and these be returned to tendering@irworldwide.org

For any issues relating to the tender or its contents please email directly to tendering@irworldwide.org

Following submission, IRW may engage in further discussion with applicants concerning tenders in order to ensure mutual understanding and an optimal agreement.

Quotations must include the following information for assessment purposes.

1. Financial proposal including payment terms (as mentioned above), please refer to appendix
2. Best value for money including a full break down of costs including taxes, expenses and any VAT and the ability to complete the programme on time
3. References (two are preferred)
4. Technical competency for this role
5. Demonstrable experience of developing a similar programme

Note: The criteria are subject to change.

A 1.15 Framework agreements

Islamic Relief Worldwide may enter into framework agreements with suppliers/Consultants who can support us in similar evaluations in the future. We therefore request those interested companies/Consultants to fill in the table below and return this with the schedule 1 beneath with their proposal before the above deadline.

Company name	Day rate for 1 year	Day rate for 2 years	Preferred duration (1 or 2 years)	Earliest start date	Can sign an agreement (yes or no)

Islamic Relief Worldwide is not under any obligations to enter into framework agreements with prospective and potential suppliers/Consultants and it is at the discretion of the evaluation committee to proceed with this option.

A 1.16 Appendix 1

Desk Review & Mapping of IRW WASH Programme Outcomes and Impact

1) Data relating to items 1 – 14 below will be provided to the Consultant by IRW. Consultant will be required to present this information in an appropriate manner including using graphs/charts and any narrative commentary to summarise and provide any observations:

Mapping number of programmes:

1. What is the total number ongoing and closed WASH programmes across IRW between the periods of 1st January 2017 to 31st December 2021?
2. How many ongoing programmes are there?
3. How many have closed in the last 1 year?

Mapping value, duration, location and donors of programmes:

4. What is their average value?
5. What is their average duration?
6. How many are more than 3 years in duration? What is the average value of these programmes? Who are the key donors?
7. How many less than 3 years and more than 2 years in duration? What is the average value of these programmes? Who are the key donors?
8. How many are less than 2 years in duration but more than 1 year? What is the average value of these programmes? Who are the key donors?
9. How many greater than 1 year programmes are above £750K in value?
10. How many greater than 1 year programmes are between £300K to £750K in value?
11. How many greater than 1 year programmes are between £100K and £300K in value?
12. How many greater than 1 year programmes are less than £100K in value?
13. What is the average value of programmes with a duration less than 1 year?
14. Which countries are these programmes in?

a. How many in Asia? What's the average value and duration?
b. How many in East Africa? What's the average value and duration?
c. How many in West Africa? What's the average value and duration?
d. How many in MENAEE? What's the average value and duration?

2) Analysis to be provided by the Consultant (through document reviews, KIIs, surveys etc):

****Mapping the WASH programming strategies and approaches used:**

15. Which WASH technical standard/s do programmes reference and use to inform design and implementation?
16. To what extent do programmes follow and adhere to relevant WASH technical standards as evidenced in proposal and reports?
17. Which common WASH strategies and approaches do programmes use?
18. To what extent do programmes take a service delivery versus a rights-based approach?
19. To what extent do programme use participatory and community based approaches, including e.g., CLTS etc.?
20. To what extent do programmes use market-based approaches, e.g., market-led sanitation etc?
21. To what extent do programmes consider and integrate with wider WASH governance at the local government level?
22. How relevant, effective and efficient are these approaches given the context?
23. What are the sector trends and evidence of effective of alternative approaches for efficiently and sustainably scaling-up WASH interventions in rapid onset disaster, protracted humanitarian and development settings?

****Mapping the programme result chains:** Mapping the planned and actual key results, outcome and goal/indicative impact and theories of change of 36 programmes of highest value and detailing relevant observations, analysis and recommendations:

Please provide an assessment of planned outcomes and impact (based on proposal, log frames, MEAL plans etc) versus actual achieved by IR programmes (based on final reports/evaluation reports etc):

24. What key impacts do these programmes seek?
25. What actual reported impact have they achieved – based on available final report and evaluation reports? If any?
26. What key outcomes do these programmes seek?
27. What actual reported outcomes have they achieved – based on available final report and evaluation reports? If any?
28. What results/outputs do these programmes seek?
29. What actual key reported results/outputs have they achieved – based on available final report and evaluation reports? If any?
30. How many direct rightsholders on average have been planned and achieved per programme?
31. What is the unit cost per direct rightsholder per programme? What is the unit cost per litre etc?)
32. Are there any impact/significant change case studies available related to each of the specific programmes – particularly any that reflect the range of interventions, outcomes and impact arising from the programme?

Where possible, the above analysis should categorise and enumerate planned and actual results according to the following common result areas:

Reduce diarrhoea and other water-borne diseases

a) How many seek to reduce the prevalence of diarrhoea and other water-borne diseases among children?
b) How many seek to reduce the number of working days lost due to diarrhoeal diseases and other water-borne diseases?
c) How many seek to reduce the number of school days lost due to diarrhoeal diseases and other water-borne diseases?
d) How many seek to increase awareness of the causes and prevention of diarrhoea and other water-borne diseases?
e) How many seek to increase awareness on the appropriate treatment of diarrhoea and other water-borne diseases?

Improve access to safe, clean drinking water:

f) How many seek to increase safe access to clean, drinking water?
g) How many seek to decrease the distance to water sources?
h) How many seek to increase the volume of clean water available to communities?
i) How many seek to increase the quality of the water sources available?
j) How many seek to provide treatment of available drinking water?
k) How many seek to provide safe water storage?
l) How many seek to provide capacity building and training for the management of water sources?
m) How many seek to establish local water management groups?
n) How many seek to provide repairs and maintenance of existing water sources?

Increase access to improved sanitation:

o) How many seek to increase safe access to latrines?
p) How many seek to prevent groundwater contamination by faeces?
q) How many seek to increase to usage of improved sanitation facilities?
r) How many seek to promote good sanitation practices?
s) How many seek to provide safe solid waste disposal?
t) How many seek to provide solid waste management?

Increase hygiene awareness:

u) How many distribute hygiene items/kits?
v) How many seek to promote good hygiene practices?
w) How many seek to increase access to soap?
x) How many seek to impart handwashing knowledge?
y) How many seek to promote good handwashing practices?
z) How many provide handwashing facilities with soap and water?
aa) How many provide handwashing education at schools?
bb) How many provide menstrual hygiene facilities/items?
cc) How many seek to increase COVID-19 awareness?

****Mapping range of WASH components and features prioritised/incorporated in IR programmes**

33. What is the range of different WASH related features and components (e.g., boreholes, tube wells, piped systems, rainwater harvesting, micro dams, trucking etc. and e.g., communal, household, public latrine types, CLTS etc.) incorporated within IRW WASH programmes?
34. Which are the most common?
35. How frequently do these features appear in different programmes?
36. What are some of the most innovative or potentially may have the most impact relative to cost?
37. To what extent are these interventions and features relevant, sustainable and cost-effective given the context? Should IR prioritise some and not others? Why?

****Mapping approaches to sustainability of interventions and investments**

38. What are the claimed and actual sustainability strategy pursued by the different programmes?
39. How effective are the sustainability strategies employed? What evidence is available to support?
40. To what extent are WASH committees established and trained to sustain investments? Is the strategy likely to be sustainable/effective?
41. What are the good practices from within IR and evidence from wider sector of enhancing sustainability of WASH actions?

****Mapping resilience, protection and inclusion and other cross-curing themes – what's done well and what needs to improve and why?**

42. How well do programmes ensure safety, protection and gender considerations?
43. How well do programmes ensure environmental protection and risk considerations?
44. How well do programmes ensure conflict-sensitivity?
45. How many integrate DRR, climate change or resilience mainstreaming? What the type and range of related interventions and activities?
46. What percentage of rightsholders are women/men? Please provide commentary and any summarised data on sex, age, disability profiles of programme participants.

47. Do any highlight work with older people, people with disabilities? What additional components do these programmes incorporate?

48. How many programmes are inclusive of faith and faith leaders? If any?

49. How many support and promote and integrate a rights-based approach?

50. How well do programmes integrate with wider Programmes and result areas related to e.g., livelihood (irrigation), education, nutrition etc.?

51. Do any have evidence of policy influencing activities at national or local levels or capacity building of relevant technical departments or bodies of government on relevant WASH areas? Please provide detail of range of related activities and any indicative results/impact from these.

****Mapping WASH intervention MEAL mechanism and systems:**

52. How appropriate are the planned output, outcome and impact targets and indicators?

53. How many programmes planned and report results appropriately at the outcome or impact levels?

54. What monitoring and evaluation mechanisms and systems did the programmes employ to assure delivery of outputs and measure progress towards outcomes and impacts?

55. How many have relevant result monitoring reports?

56. How many have been evaluated?

57. How many have baseline reports?

58. How many have end-line reports?

59. How many have both base-line and end-line reports?

60. How is sustainability of interventions monitored and assured?

61. What MEAL activities are done well and what needs to improve and why?

****Shortlisting potentially highest impact WASH programmes**

62. From the list of 36 programmes provided, please extract and document the 18 most significant/prominent programmes that are deemed to have the highest impact and sustainability potential (and justify selection method):

a. 7 for Asia

b. 4 for East Africa

c. 3 from West Africa

d. 4 from Middle East/Eastern Europe

63. Of the 18 programmes selected which are the 6 programmes with most significant indicative impact? Please justify selection.

64. What are the most common features of the 18 selected programmes? Please assess based on identified significant case studies, theory of change, results, reported outcomes and impacts. What are the key differences between these programmes?

65. What are the broad theories of change/approaches/strategies behind the most common type of the 18 selected programmes?

66. What are the theories of change behind the specific 6 programmes selected as having potentially the most significant impact?

67. How does these theories of change/strategies/approaches compare to evidence-based best practice in wider literature and/or large donor Programme design for WASH programming (e.g., UNICEF, DANIDA, EC, USAID)?

68. Are there any new stand-out or innovative features in selected IR Programmes?

69. Are there any key features missed/not incorporated in IR Programmes that are suggested by wider WASH best practice, systematic reviews or donor programming priorities?

70. What are the recommendations for consolidating, scaling-up and/or focusing IR WASH Programmes to contribute to Agenda 2030, in particular SDG 6 (Clean Water and Sanitation? Which SDG 6 targets should IRW focus on if choosing just two SDG 6 targets and why?

71. Identify 4 programmes which have been or are potentially of the most impact and which warrant further detailed field-based impact assessments or evaluations. Suggest what components or dimensions of these programmes should be more specifically assessed during the study and suggest possible impact measurement methodology that could be employed given available data for those programmes.

Annex 2 Time schedule realised

Month / Activity	February				March			
Inception phase								
– Initial review of relevant literature and programme reports								
– Initial / preparatory digital FGDs with key informants								
– Collaboration and consultation with IRW HQ key stakeholders								
– Selection of key informants								
– Writing and submitting the draft Inception report								
– Receiving feedback on the draft report								
– Writing and submitting the final Inception report (deliverable 1)								
Review phase								
– Literature review								
– Semi-structured interviews with purposefully selected key informants from different key informant groups								
– Informing and collaboration + consultation with IRW HQ key stakeholders								
– Analysis of all information, including cross-checks								
– Writing and submitting the draft review report								
– Receiving feedback on the draft report								
– Writing and submitting the final Review report (deliverable 2)								
Final presentation and discussion								
– Informing and collaboration + consultation with IRW HQ key stakeholders								
– Develop a presentation about the assignment results								
– Develop the participatory method for the meeting and discussions								
– Final presentation and discussion (deliverable 3)								

In the above time schedule, we have assumed that the relevant stakeholders will comment on the draft reports each time within one week.

Annex 3 List of persons interviewed

A 3.1 IRW Global level staff

Country	Name(s) of staff	E-mail
UK	Mohammad MirBashiri	mohammad.mirbashiri@irworldwide.org

A 3.2 IRW national and local WASH and MEAL experts

Country	Name(s) of staff	E-mail
Somalia	Abdirazak Abdullahi Hassan and Abdirahman Abdullkadir Yasin	abdirazak.hassan@islamic-relief.or.ke abdirahman.yasin@islamic-relief.or.ke
South Sudan	Richard Terence Obulejo	richard.obulejo@islamic-relief.com.ss
Pakistan	Shah Faisal	shah.faisal@irp.org.pk
Bangladesh	Jakir Hossain	jakir.hossain@islamicrelief-bd.org
Ethiopia	Tagel Wubetu	tagel.wubetu@islamic-relief.org.et
Sudan	Ibrahim Daleel	Ibrahim.mekki@islamic-relief.org.sd

Annex 4 Interview questions

A 4.1 Questions for IRW HQ level

1) Which WASH approaches are common in IRW? Why?
2) Does IRW have a vision on how to improve its WASH programmes in the near future? Please explain.
3) What are the most important strengths of IRW WASH programmes?
4) What are the most important weaknesses of the IRW WASH programmes? Is there a difference between countries/continents?
5) Does IRW have a programme to reinforce local staff on WASH aspects?
6) Do IRW national offices all work with a common software system for the WASH programmes in all countries where IRW is active? If so, which one is it? Could I see it?
7) Does IRW have WASH manuals that are used by all IRW national and local offices? Can I get them?
8) Are there any other things you feel you can inform me about as part of my assignment?

A 4.2 Questions for local IRW WASH experts

1) How do you ensure proper quality of the WASH programmes (outputs and activities)?
2) How do you design/develop new WASH programmes?
3) How do you know which water quality tests are to be done and what the maximum allowable levels are of the water quality parameters?
4) Specific questions with regard to the WASH programmes reviewed in which the IRW WASH expert was involved.
5) How do you think IRW in your country can/should improve its WASH programmes?
6) Are there any other things you feel you can inform me about as part of my assignment?

A 4.3 Questions for local IRW MEAL experts

1) What surveillance activities does your office standardly execute to prepare, design, monitor and evaluate WASH programmes?
2) How do you ensure proper quality of the WASH programmes (outputs and activities)?
3) How do you know which water quality tests are to be done and what the maximum allowable levels are of the water quality parameters?
4) Specific MEAL related questions with regard to the WASH programmes reviewed in which the IRW WASH expert was involved.
5) How do you think IRW in your country can/should improve MEAL in its WASH programmes?
6) Are there any other things you feel you can inform me about as part of my assignment?

Annex 5 Indicators used in IRW WASH programmes

Table 15 Percentages of IRW WASH programmes specifying HH water access indicators

Household water access indicator	% Programmes with information on the indicator		
	Baseline	*Planned*	*Realised*
# Persons using only improved water point(s)	6%	47%	56%
# Persons using only unimproved water point(s)	35%	3%	3%
# Persons using a combination of improved and unimproved water points	6%	3%	9%
# Persons who always have sufficient water for drinking	9%	9%	12%
# Persons who always have sufficient water for other household purposes and prayers	9%	9%	9%
The # of rightsholders for whom the time needed to fetch water (round trip including queuing time) is less than 30 minutes	18%	18%	18%
The # of rightsholders whose water is safe for drinking?	15%	21%	21%
The # of rightsholders for whose households it is safe to collect water?	3%	12%	15%
The # of rightsholders for whose households the water is affordable?	0%	9%	9%

Table 16 Percentages of IRW WASH programmes specifying water management indicators

Community water management indicator	% Programmes with information on the indicator (realised)
The # of rightsholders whose main water source(s) are managed by a water committee or other water entity	24%
The # of rightsholders whose water committee / organisation executes small maintenance/repairs at least quarterly	3%
The # of rightsholders whose water committee / organisation cleans water source & surroundings at least monthly	0%
The # of rightsholders whose water committee / organisation has a solid (guaranteed) safety net/structure for timely large maintenance and repairs of the water source(s) when needed	3%
The # of rightsholders whose water committee / organisation has a solid (guaranteed) safety net/structure for timely replacement of the water source(s) when needed	0%
The # of rightsholders whose water committee/organisation keeps records of water payments	0%
The # of rightsholders whose water committee / organisation has a bank account	3%
The # of rightsholders whose water committee/organisation has at least 40% female members in its Board structure	9%

Table 17 Percentages of IRW WASH programmes specifying HH toilet access indicators

Household toilet access indicator	% Programmes with info on the indicator		
	Baseline	*Planned*	*Realised*
# Rightsholders with access to an Improved toilet	12%	15%	18%
# Rightsholders with access to an interim toilet (traditional or improved traditional pit latrine)	9%	18%	18%
# Rightsholders with access to an unimproved toilet or open defecation	15%	9%	9%
# Rightsholders with toilet use by one or two households	3%	3%	9%
# Rightsholders whose toilet is inside or attached to the house	6%	6%	6%
# Rightsholders whose toilet can always easily be reached	0%	0%	0%
# Rightsholders whose toilet is mostly functional throughout the year (occasional breakdowns/damage is allowed)	0%	0%	0%
# Rightsholders whose toilet slab or seat is of reasonable to good design	0%	3%	3%
# Rightsholders whose toilet roof and superstructure are of reasonable to good quality and in a reasonable to good state	0%	6%	6%
# Rightsholders whose toilet slab or seat is of a good quality and in a good state	0%	3%	3%
# Rightsholders whose toilet has no danger of collapse	0%	3%	3%
# Rightsholders whose toilet provides good enough privacy	0%	6%	6%
# Rightsholders whose toilet does not contaminate groundwater	0%	3%	3%
# Rightsholders whose village, neighbourhood or other area is certified ODF (or anything similar)	3%	3%	0%

Table 18 Percentages of IRW WASH programmes specifying HH hygiene access indicators

Household hygiene access indicator	% Programmes with info on the indicator		
	Baseline	*Planned*	*Realised*
# Rightsholders with access to a hand wash facility/option on the premises at < 60m from the house	3%	3%	6%
# Rightsholders with access to a hand wash facility/option beyond 60m from the house	0%	3%	3%
# Rightsholders who (almost) always have clean water for hand washing	0%	0%	0%
# Rightsholders who usually have water (though not always clean) for hand washing	0%	0%	0%
# Rightsholders who usually have access to soap (or other cleansing agent) at or near the hand wash location	3%	3%	3%

Table 19 Percentages of IRW WASH programmes specifying HH hygiene access indicators

Household hygiene practice indicator	% Programmes with info on the indicator		
	Baseline	*Planned*	*Realised*
# Rightsholders who normally use a toilet	0%	0%	3%
# Rightsholders who normally wash their hands with water and with soap, ashes or other cleansing agent	0%	0%	3%
# Rightsholders whose toilet is very clean	0%	0%	0%
# Rightsholders whose toilet is reasonably clean	0%	0%	0%
# Rightsholders whose compound is very clean	0%	0%	0%
% Rightsholders with babies who handle child stools hygienically	0%	0%	3%

Annex 6 Toilet types suitable for rural areas

- **Improved pit latrines.** An improved pit latrine comprises:
  (a) a hand dug pit (e.g., 3 m deep) without a lining or with a partial lining made of cheap and easy to obtain local materials,
  (b) the pit is covered with a large (ideally reinforced, otherwise dome-shaped) concrete slab with sufficient overlap over the ground (if required, consisting of two or three parts) and with a key shaped drop hole (not too large and not too small) with a concrete stop attached with a chain to the slab, which can easily be cleaned,
  (c) the superstructure is made of local materials collected by the rightsholders, that are easily available while they are suitable for the circumstances and provide sufficient privacy for the toilet users (especially women and girls).

  This toilet type is most suitable where rightsholders do not use water for anal cleansing and where the underground is stable enough, not rocky and not having a high groundwater table. This type becomes a VIP latrine if vent pipe, well closing door, etc. are added. When the pit is full, the rightsholder digs a new pit, places the slab on it and constructs a new superstructure with the old or with new materials.

- **Fossa Alterna double pit latrine.** The pits can be sunk in the ground or, in case of high groundwater and/or rocky ground, raised fully or partially above ground. On top is a reinforced concrete slab and a superstructure which made of local materials or of (usually) more permanent materials (then often executed as a VIP). The pit is made of concrete or bricks with cement mortar, so it is a permanent structure. This type is suitable where people do not use water for anal cleansing and are prepared to empty the pits in rotation (this may require long-term awareness raising, small village level pilots, etc.). It is necessary to add soil or organic material to the pits on a regular basis. The pit contents, if left idle in the pit for six months or more, are sterile and can be used as a humus in agriculture.

- **Pour flush double pit toilet.** This toilet has a slab with a water seal that prevents odours and flies. Water is poured into the bowl to flush the excreta and urine away. This toilet type may also have a seat (then in need of more water to flush) and usually it has a concrete floor (to enable easy and hygienic cleaning). The toilet is connected to two pits that are below or behind the toilet compartment. The pits are lined (in case of unstable soils or above ground pits) or unlined (in the stable ground). The pits enable infiltration of the liquids into the earth. They are used in rotation and emptied manually. The difference with a Double Ventilated Improved Pit latrine or the Fossa Alterna, is that it needs flushing water and it is not necessary to add soil or organic material to the pits. The full pits require a longer retention time (two years is recommended) to degrade the material before it can be excavated safely. This type is suitable for people using water for anal cleansing.

There are all kinds of variations and combinations of the above types. For further information see L14.

Annex 7 Bibliography

1. IRW WASH Programme reports.
2. Minimum Evaluation Procedure (MEP) for water and sanitation programmes. International drinking water supply and sanitation decade. Publication no. 6. WHO. May 1985.
3. mWater and Connect International generic WASH surveys in mWater (HH WASH survey, school WASH survey, health centre WASH survey, water system and management survey).
4. Connect International Water Guidelines.
5. GWC Strategic Plan 2016-2020.
6. Guidelines. Embedding and integrating a human rights-based approach into WaterAid Programmes. WaterAid.
7. MINISTRY OF WATER AND ENVIRONMENT. DIRECTORATE OF WATER DEVELOPMENT. National Operation and Maintenance. Framework for Rural Water Infrastructure in Uganda. FINAL. MAY 2019.
8. IRC Symposium 2010 Pumps, Pipes and Promises. Cost of delivering water services in rural areas and small towns in Ghana. Nyarko K. B., Dwumfour-Asare, B., Appiah-Effah, E. and Moriarty, P. IRC, International Water and Sanitation Centre. 2010.
9. https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm
10. https://www.spring-nutrition.org/publications/tool-summaries/kap-survey-model-knowledge-attitudes-and-practices.
11. https://irw.indikit.net/sector/775-wash
12. MINISTRY OF WATER AND ENVIRONMENT. DIRECTORATE OF WATER DEVELOPMENT. National Operation and Maintenance Framework for Rural Water Infrastructure in Uganda. FINAL. MAY 2019. (This is an informal report , not officially embraced and approved by the government of Uganda).
13. https://smartcentregroup.com/
14. https://akvopedia.org/wiki/Sanitation_Portal
15. https://www.ircwash.org/washcost#:~:text=The%20WASHCost%20project%20(2008%2D2013,survive%20in%20the%20long%20term.
16. https://portal.mwater.co/#/resource_center/pre_site_assessment
17. https://www.ircwash.org/news/service-delivery-approach#:~:text=In%20a%20service%20delivery%20approach,the%20end%20of%20its%20designed