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UNICEF

Final evaluation of the project: "Rehabilitation of two piped water systems in Mozambique"

Contract N°43227982

Final Report

Final version – Submitted on January 18th, 2018

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Title: Final evaluation of the project: “Rehabilitation of two piped water systems in Mozambique” (Contract N°43227982)
Type of report: Final report
Client: UNICEF Mozambique; Project manager: Jesus Trelles
Consultant: HYDROCONSEIL (France)
Contract starting date: 25 July 2017 (kickoff meeting)
Report submission date: 15 November 2017 (draft version); 16 January 2018 (final version); 21 March 2018 (revised final version)
Revision number: 8 (internally)
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Acronyms

Acronyms	Definition
ADB	African Development Bank
AFD	Agence Française de Développement
AIAS	Water and Sanitation Infrastructure Administration
CRA	Conselho de Regulaçoa das Aguas
DAC	Development Assistance Committee (OECD)
DMF	Delegated Management Framework
DNAAS	National Directorate of Water and Sanitation
DPOPHRH	Direçao Provincial das Obras Publicas e Recursos Hidricos
DMF	Delegated Management Framework
EU	European Union
GAS	Grupo de Agua e Saneamento
GoN	Government of Netherlands
GoM	Government of Mozambique
FIPAG	Fundo de Investimento e Património do Abastecimento de Água
KII	Key Informant Interviews
LF	Logical Framework
MOPH	Ministry of Public Works and Housing (Ministério das Obras Públicas e Habitação)
OECD	Organisation for Economic Co-operation and Development
PEC	Participação e Educação Comunitária
PWSS	Piped Water Supply Systems
SNV	Netherlands Development Organisation
SDPI	Serviços Distritais de Planificaçao e Intraestruturas
SPAS	Provincial Water and Sanitation Services
TOC	Theory of Change
TOR	Terms of Reference
UNICEF	United Nations Children's Fund
WASH	Water Sanitation and Hygiene
WB	World Bank
WSP	Water Supply Program
WSUP	Water and Sanitation for the Urban Poor

A. Executive summary

A.1. Background, presentation of the project and methodology for the evaluation

In 1998 the Government of Mozambique introduced the Delegated Management Framework (DMF) for urban water supply services, a public-private partnership whereby assets are owned by the government's agencies FIPAG (for main urban areas) and AIAS (for small towns), and operations are managed by the private sector under a concession, lease or management contract. Regulation is ensured by the regulatory commission CRA. UNICEF's support to the implementation of the DMF started in 2012 with the introduction of its Small Towns WASH programme. The programme is implemented in partnership with public counterparts and aims to support AIAS in the development of an implementation model to leverage funds for broader implementation of the DMF. To date, UNICEF's Small Towns WASH Programme is covering six small towns in the provinces of Nampula, Tete, Manica and Inhambane, through the implementation of three sub-programmes / projects supported by the Governments of Australia and Netherlands, the European Union and UNICEF.

As part of this Small Towns WASH programme, the project "Rehabilitation of 2 piped water supply systems in the towns of Ulónguè (Angonia District) in Tete Province; and Espungabera (Mossurize District) in Manica Province" was implemented by UNICEF in collaboration with AIAS from early 2012 to mid-2017 (5,5 years). The project had a budget of USD 6,263,727, mainly funded by the Government of the Netherlands (82%), with contributions from UNICEF (15%) and the GoM (3%). The project's main objective was to reduce the relative poverty levels in Angonia and Mussorize districts in Mozambique through improved access to water supply, adequate sanitation and hygiene promotion. It included 3 components: rehabilitation of piped water supply systems, sustainable management models for the water systems, and peri-urban sanitation. The projects expected outputs were the following: 36,000 new users of 2 rehabilitated systems, with 16,000 users in Ulónguè and 20,000 users in Espungabera, a certain number of artisans trained to produce, advertise and sell sanitation products and a certain number of households with improved latrines in two towns[1].

The objective of this end-of-project evaluation is to evaluate the project's performance based on the OEDC-DAC methodology for evaluating development assistance, following the standard evaluation criteria of relevance, effectiveness, efficiency, impact and sustainability. In addition to these 5 standard criteria, the following 3 additional criteria were used: added value, equity and inclusion, respect of the environment. This evaluation has been carried out together with another study: the review of the implementation of WASH projects in small towns within the Delegated Management Framework (DMF) in Mozambique. The two small towns under this project evaluation are part of the six towns where the overall review of the DMF had been carried out; the four additional towns being: Manjacaze, Moamba, Mocimboa da Praia, Ribaue. The study included 3 phases: Phase 1) Preparatory activities (desk review, development of evaluation design and tools, submission of inception report, methodology validation workshop), Phase 2) Data collection (Interviews with key stakeholders in Maputo and regional capitals and field visit to the 2 small towns) and Phase 3) Analysis and report writing (submission of the draft report, presentation of the draft report in a meeting, finalization of the report following comments received and submission of the final version).

A.2. Results of the study according to the evaluation criteria

A.2.1. Relevance

The project was very relevant in terms of responding to the sector priorities and needs and being aligned with national priorities and consistent with national strategies (namely the DMF

[1] The number of artisans to benefit from the trainings and the number of households to benefit from improved sanitation facilities are not defined in the project proposal.

framework, which it contributed to strengthen). The project was also designed in a consultative manner with the influence of national and local stakeholders. In addition, the risk assessment was relevant and useful. The overall design of the project was reasonably adequate, however, a significant weakness was that the design of the project was not based on any Logical Framework nor Theory of Change and expected outcomes, outputs and activities were not clearly linked. The Value-for-Money analysis was absent and the budgeting was inaccurate at the beginning but was subsequently corrected in the revisions of the project's scope (from 3 towns to 2 towns) requested and granted by the donor. Quality of the situation analysis was fair for water supply although there was no assessment of initial coverage rates; situation analysis for the hygiene and sanitation component was weak. Targeting of priority groups amongst beneficiaries was limited (the strategy to address poor and vulnerable users was weak both for water and sanitation) but targeting of priority groups in terms of capacity building was adequate.

A.2.2. Effectiveness

The effectiveness of the project is evaluated as being relatively low with respect to water supply, a bit higher for sanitation. The water systems were effectively rehabilitated in the 2 towns, the systems were correctly dimensioned according to the expected users, and the quality of the infrastructures is good. However, the number of beneficiaries is well below the target number declared in the project proposal, which (implicitly) referred to the potential users for which the systems have been dimensioned, and not to the expected users at the end of the project implementation. While UNICEF and its government partners jointly chose to privilege future users instead of present users, this choice is questionable from an effectiveness perspective, since there is no guarantee that these potential users will really benefit from the service in the future (many conditions are needed, some of which are not likely to happen / are currently not planned). **The quality of the monitoring is considered average, considering the absence of initial targets and accurate and robust indicators**. The absence of a sound M&E framework is a significant weakness of the project but was compensated by systematic monitoring of activities' implementation (combined with technical support) that was made by UNICEF staff, by public authorities, and by implementing partners (including works supervision). After the end of the project, follow-up was ensured by AIAS with UNICEF's support and in coordination with the PO15 programme.

A.2.3. Efficiency

The projects efficiency is low with respect to timeliness. Initially planned to be implemented over a period of four years (January 2012 – December 2015), the project's timeline was extended (in agreement with the main donor, the GoN) by almost two years: Although it negatively influenced the efficiency of the project, such a time extension is not uncommon for this type of intervention. Based on the actual number of beneficiaries used in the framework of this evaluation, the average project cost per capita is 270 USD for water and 200 to 240 USD for sanitation. **This unit cost seems relatively high if compared to other projects in Mozambique based on international literature** (230 USD/capita based on G. Hutton and M. Varughese, 2016), although it is in line with estimates by Mozambican public institutions (260-400 USD/capita based on AIAS and FIPAG). The unit cost could have been reduced if the project had prioritized targeting of present users instead of future users: in fact, the project's investments were made for a population that is bigger than the number of people connected to the system today (dimensioned to cover projected population in 20 years-time). The hard/soft ratio for this project is around 2 to 1 which is quite a classical and reasonable ratio considering the focus on sanitation & hygiene and on the capacity building.

A.2.4. Impact

According to the perception of beneficiaries, the project brought positive changes in terms of increased access to basic services, especially water and to a lesser extent, sanitation. However, the current limited coverage of the networks (less than half of the towns' population) had significantly limited the project's impact, although this was a deliberate choice made by UNICEF and by national counterparts (prioritization of future users instead of present users). A negative impact of the project is that the increasing number of household connections has reduced water consumption (and tariff payment) at public stand posts, leading to closing down of some stand posts (1/6 in Espungabera and

7/8 in Ulongue[2]) and forcing the poor population to purchase expensive water from neighbours or turn to unprotected sources. **The rehabilitated water networks in the two towns are currently being used by the beneficiaries**. However, while private connections are functioning well, the public standposts are not functioning as expected and many have been closed down (see above). The quality of operation and maintenance is overall satisfactory but varies depending on the operator's capacity, and is higher in Ulónguè, more challenging in Espungabera. Both operators face challenges due to quality of staff. Regarding usage of sanitation facilities, results are less satisfactory. The main challenges concern public sanitation facilities in market places. In terms of household sanitation, the improved latrines built during the project are being used by the population, although the use is not always correct and maintenance is sometimes poor.

A.2.5. Sustainability

The project's strategy for sustainability was based on 2 key elements: Firstly, involvement of national counterpart and alignment with national strategies and procedures, secondly, the involvement of the private sector for the management of the services. **The projects' sustainability strategy was sound and gave good results**: the national stakeholders feel responsible over the services, the sanitation promotion activities have been (partially) taken on board by the local authorities, and the private operators are managing the water systems with good performance and good profit perspectives. However, the national counterpart's capacity to effectively play their monitoring role remains limited, for reasons that go beyond the responsibility of the project. Regarding sanitation, results of private operators (artisans and managers of public toilets) are below expectations, notwithstanding UNICEF's efforts; this may be partially due to structural challenges inherent to the sanitation sector, and partially due to the project's strategy, which included some good ideas but was not very structured.

A.2.6. Additional criteria

The project brought an undeniable added value to the sector: By supporting AIAS in the DMF process since the very beginning, UNICEF created a positive dynamic to leverage funds from other donors which started investing in this area. UNICEF's project's first added-value in terms of contribution to the DMF set-up is to be seen in the implementation modality of handling the procurement process at the regional level through the DPOPHRH, and generally, encouraging a strong role to be played by regional and district technical services. A second added-value of UNICEF's project was the project's capacity to integrate with other initiatives, and namely, the PO15 program also funded by the Government of the Netherlands. A third added-value of UNICEF's project, though less documented, was the projects tentative to adapt the "PEC zonal" approach to a small-town environment. Finally, a fourth added-value has been the change in the approach for the implementation of water supply interventions secondary cities by AIAS, from a design and build approach to a better suited approach of technical designs and construction being done in two separate successive contracts.

The equity and inclusion aspect was weakly taken into account during project implementation: with the exception of women, the priority groups (poor, children, disabled, etc.) were not consulted nor specifically involved in the project's activities. The design of the systems included public standposts which were supposed to benefit poor users, yet, not enough safeguards were taken to avoid the closing-down of stand posts, and no specific measure was taken to facilitate the access of vulnerable groups to domestic connections, although this would have been in line with their preferences. The design of sanitation facilities included specific latrines for people with disabilities; yet, the demand had not been evaluated, and this equipment is ended-up not being produced (for specific slabs "cadeira do rei") and not being used (for public toilets' cabins for people with disabilities).

Overall, the project was respectful of the environment and of the principles of IWRM. Yet, one negative impact on the environment identified is related to the increase in wastewater production at household level not being sufficiently addressed, resulting in stagnant water in some premises. In addition, the project did suffer from some weaknesses in terms of taking into consideration the risk of pollution of the water sources used by the network, since the capture works for the system in both towns do not have any perimeter of protection, therefore, human activities going on near the sources create a risk on contamination (potentially increasing treatment costs for the operators). Finally, environmental

[2] According to the Municipality and the operator, all 8 stand posts in Ulongue are shut down, however, according to CORAL, 1 stand post is still working.

impact assessments were not undertaken for the rehabilitation works (while this is consistent with national legislation, such assessments would have been desirable from an environmental perspective).

A.3. Lessons learned and recommendations

A.3.1. Main lessons learned

With respect to small towns water services, lessons learned include: the importance of a throughout risk assessment exercise; the need to include a variety of technological solutions (including decentralized water points) in order to meet the water supply needs of dispersed (peri)urban populations; the inadequacy of a design-and-build model for the rehabilitation of water supply systems in small towns and the need to have a proper design, and possibly, a separate feasibility study, focused only on the water source; the importance of considering the challenge of electricity supply in the choice of the technological solution.

With respect water services' management, lessons learned include: the importance of involving and building capacities of national counterpart especially at regional and district level to stimulate ownership, encourage monitoring and favor sustainability; the usefulness of contracting the water service operator before the end of the infrastructure works to involve it and train it even before the hand-over; the relevance of including the local authorities in the training on the operation of the system; the need to include significant incentives in the delegation contract to encourage the private operator to expand service levels.

With respect to small towns peri-urban sanitation, lessons learned include: need to implement sanitation activities during or after water works are finished (correct timing of soft/hard interventions); importance of combining demand creation and supply provision approaches for urban sanitation; usefulness of delegating management of public toilets to private operators, but need to include sanction measures; usefulness of organizing a sanitation contest between neighborhoods and of allowing payment in instalments for sanitation equipment (slabs) to stimulate self-investment by households.

A.3.2. Main recommendations

For UNICEF : for future projects, develop of a logical framework including a detailed and equity-lensed M&E framework; proceed to a more accurate cost-estimation for budgeting and better definition of beneficiaries and unit-cost; budget for sufficient secondary and tertiary network to cover the whole towns in order to maximize the immediate direct impact of the investment; develop baseline studies (household survey) at the beginning and at the end of the project in order to evaluate changes in access to service; consolidate all sanitation promotion activities and interventions into a consistent strategy or approach (in the form of a "manual for urban sanitation promotion").

For AIAS: Increase monitoring efforts and analyze data received from operators to provide feedback to them on how to improve service levels; work with DNAAS to formally agree on the role to be played by the regional and district technical authorities in the DMF and consequently train staff; develop a strategy to better involve municipalities in the monitoring of operators' performance; provide for independent auditing of the operators; improve clarification over responsibilities for network expansions; ensure investment in expanding the secondary and tertiary network; improve cooperation with CRA on the monitoring of the regulatory framework.

For CRA: Improve cooperation with AIAS on the monitoring of the regulatory framework; assess the utility and relevance of the CORAL mechanism; provide support to AIAS to revise the operators contract to increase their duration and better clarify responsibilities and targets for network expansion.

For DNAAS/DPOPHRH/SDPI : Sign a cooperation agreement with AIAS to better clarify the roles within the DMF; increase the budget allocation of deconcentrated bodies for monitoring activities; collaborate with administrative authorities to introduce a system of sanctions for users who are not respecting correct hygiene / sanitation practices (ex. open defecation or unappropriated waste management).

For local authorities: make available a copy of the operator's contract to the WASH technician; collaborate with DPOPHRH/SDPI to introduce a system of sanctions for users who are not respecting correct hygiene/sanitation practices ; organize public meetings and use communication media to explain the role of CORAL to users; increase collaboration with CORAL to jointly address complaints; make

sure that all invoices for public administration institutions are paid including arrears; play an active role in sanitation promotion, organizing activities such as the sanitation competition.

For service operators: Follow-up on recommendations that are regularly provided by sector institutions (AIAS, DPOPHRH/SDPI, Municipality, CRA) and donors; allow for payment in installments for the private connections on regular basis; set-up an efficient mechanisms for the management of public stand posts; decentralize more management functions to town-level managers; in Ulónguè: increase distribution hours; in Espungabera: keep record of the pumping hours, keep monitoring the fracturing of the capture works.

For donors: Keep investing in small towns water systems with significant interventions in many towns in parallel in the same region to enable to achieve economies of scale; provide sufficient funds to cover extension of systems with 100% coverage ; increase Value for Money monitoring of projects (consider 230-300 USD/capita); focus on sector governance improvement mechanisms ; establish a fund for small towns with very strict criteria; support AIAS with a strong and long-lasting technical assistance; support long-term projects and programs in small towns.

B. Context and objectives of the evaluation

B.1. Description of the project

Title of the project	Rehabilitation of 3 Piped Water Supply Systems (PWSS) in Angonia and Changara Districts (Tete) and Mussorize District (Manica) [initial title[3]] Rehabilitation of 2 piped water supply systems (PWSS) in the towns of Ulónguè (Angonia District) in Tete Province; and Espungabera (Mussorize District) in Manica Province [final title[4]]
Reference	SC110711 (UNICEF grant number)
Total Budget	USD 6,263,727
Contribution by funding source	With a budget of USD 6,263,727, the programme comprises the following contributions: - Government of The Netherlands: USD 5,003,427 - UNICEF: USD 604,740 - Government of Mozambique: USD 655,560
Level of expenditure	With a total expenditure of USD 6,068,299.28, the effective contributions were as follows: - Government of The Netherlands: USD 5,001,111.33 - UNICEF: USD 888,757.33 - Government of Mozambique: USD 190,150.00
Start of project	December 2011
End of project	Initial date: December 2015 First no-cost-extension: end June 2016 Second no-cost-extension: end December 2016 Final end date: end June 2017 Note that none of these extensions have implied a review on the project total budget, neither the donor contribution, which has remained the same All activities were completed by end of June 2017, but some payments continued until end 2017 (with UNICEF funding): payments for works completed before June 2017 have been received in the second half of 2017, including payment of performance guarantees / retention on civil works
Available reports	- Project proposal (including annexes) - Four progress reports (last one in May 2016) - Technical design reports for the water supply networks rehabilitated - Specific reports for the sanitation component - Qualitative research study: Pesquisa qualitativa sobre normas sociais, práticas de higiene, preferências de consumidores e vontade e capacidade de pagar por serviços de água e saneamento nas pequenas vilas de Inhambane, Tete e Manica - Elements of the final report (prepared for this evaluation)

[3] Project proposal developed by UNICEF and submitted to the Government of Netherlands, June 2011.

[4] Fourth Progress Report, UNICEF, May 2016.

Project components	- Rehabilitation of piped water supply systems - Sustainable management models for the PWSS - Peri-urban sanitation
Log Frame or TOC	Not available
General objective	To reduce the relative poverty levels in Angonia and Mussorize districts in Mozambique through improved access to water supply, adequate sanitation and hygiene promotion
Expected outputs	- 36,000 new users of 2 rehabilitated PWSS, with 16,000 users in Ulónguè, and 20,000 users in Espungabera - XX artisans trained to produce, advertise and sell sanitation products - XX households with improved latrines in two towns
Implementing partners	- UNICEF: Grant management, technical support - AIAS: Technical support and Contracting with Private Operator for water supply systems - DPOPHRH: Technical support, Contracting for project design, supervision, works for water supply system and other infrastructure, PEC. Monitoring and quality assurance - Contractors and consultants: technical studies, construction works, research studies - Municipalities and Local Administration: Monitoring and technical support for sanitation promotion and marketing. Leadership in terms of sanitation plan development and implementation - NGO: social engineering ("PEC urbano")
Main adjustments compared to initial proposal	**Water:** The project scope was reduced to the towns of Ulónguè and Espungabera due to actual construction costs well above the per capita cost budgeted in the proposal. The revised target is 36,000 beneficiaries in both towns (compared to 61,000 in the initial proposal). **Sanitation:** As the baseline study revealed that over 90% of households in Ulónguè and Espungabera towns have access to some type of excreta disposal system, the objectives were revised as follows: stimulate households to move up the sanitation ladder and, support the development of small-scale sanitation businesses. Two indicators were proposed: No. of artisans trained to produce, advertise and sell sanitation products, and No. of households with improved latrines.
Other aspects	The project takes advantage of a capacity development programme funded by the Government of Netherlands (GoN) and implemented by a consortium headed by Vitens Evides International, which is providing training to service providers in 15 towns, including Ulónguè. However, their technical support and monitoring expands also to Espungabera.

B.2. Localisation of the 2 towns

B.3. Objectives and methodology of the evaluation

B.3.1. Objectives

The objective of this end-of-project evaluation of the UNICEF-managed project "Rehabilitation of Two Piped Water systems in Mozambique" (Espungabera and Ulónguè) is to evaluate the project's performance based on the OEDC-DAC methodology for evaluating development assistance, following the standard evaluation criteria of Relevance, Effectiveness, Efficiency, Impact and Sustainability.

This end-of-project evaluation has been carried out together with another study, namely, the review of the implementation of WASH projects in small towns within the Delegated Management Framework (DMF) in Mozambique. The two small towns under this project evaluation are part of the six towns where the overall review of the DMF had been carried out, which are namely (in alphabetical order): Espungabera, Manjacaze, Moamba, Mocimboa da Praia, Ribaue, Ulónguè. The methodology and some of the tools used for these 2 studies (project evaluation and review of the DMF) are in common.

B.3.2. Methodology

- ***Use of OCDE / DAC criteria***

The project has been evaluated based on the following standard OCDE / DAC criteria:

Table 1: Standard OECD-DAC evaluation criteria (Source: OECD)

Criterion	Definition
Relevance	The extent to which the aid activity is suited to the priorities and policies of the targeted group, recipient and donors.
Effectiveness	A measure of the extent to which and an aid activity attains its objective.
Efficiency	Efficiency measures the outputs – qualitative and quantitative – in relation to the inputs. It is an economic term which signifies that the aid uses the least costly resources possible in order to achieve the designed results. This, generally, requires comparing alternative approaches to achieving the same outputs, to see whether the most efficient process has been adopted.
Impact	The positive and negative changes produced by an emergency / development intervention directly and indirectly, intended or unintended. This involved the main impacts and effects resulting from the activity on the local social, economic, environmental.
Sustainability	Sustainability is concerned with measuring whether the benefits of an activity are likely to continue after donor funding has been withdraw. Projects need to be environmentally as well as financially sustainable.

In addition to these 5 standard criteria, the following 3 additional criteria were used:

Table 2: Additional cross-cutting criteria (Source: EU guidelines for evaluations, 2012)

Criterion	Definition
Added value	The extent to which the development intervention has added value as compared to other interventions.
Equity and inclusion	Extent to which UNICEF interventions have implicated and benefited the most vulnerable: children, women, the elderly or the disabled, the most disadvantaged.

Criterion	Definition
Respect of the environment	Extent to which UNICEF interventions have not or have contributed to improving the environment and management of natural resources (especially in terms of water quality and shared use).

- ***Evaluation matrix***

Based on these 8 criteria, 12 key evaluation questions have been generated, together with the relevant sub-questions, sources of information, measurement methods, tools. The complete Matrix for the evaluation of UNICEF's WASH project in 2 small towns is available in Annex E4.

B.3.3. Activities

- ***Phase 1: Preparatory activities***

Activity	Description
Skype kick-off	The Kick-off meeting took place on 26th July 2017 in the presence of the consultants' team, UNICEF and AIAS. The meeting enabled to confirm the team mobilization, the study methodology, and update the study planning. It also enabled to draw a preliminary list of documents needed for the desk review and to agree on immediate next steps.
Desk review	The consultants reviewed an initial lot of documents shared by UNICEF prior to the field mission, namely 258 documents for the UNICEF project evaluation component and 87 documents for the DMF review component. The consultant mapped and analysed this documentation and identified further documentation needed.
Development of evaluation design and tools	Following the desk review, the Consultant developed the study tools: Matrix for the analysis of the DMF in 6 towns; Matrix for the evaluation of the UNICEF project in 2 towns of Espungabera and Ulónguè; guide for Interviews with key stakeholders at national, province and district level; guide for interviews and semi-structured Group Discussions with beneficiaries; Protocol for visit of small scheme (interview with operator and observation check-list). These are available in Annex E5.
Submission of Inception report	The Inception report enabled to present the preliminary results of the desk review, the updated methodology for the study, and a suggestion for the evaluation tools mentioned above.
Methodology validation workshop	The workshop took place on 26th September 2017 in the presence of the consultants' team, UNICEF, AIAS, CRA and stakeholders coming from the 6 small towns (except Moamba). The meeting enabled to present and discuss the study's methodology and the preliminary findings of the desk review, and pre-identify a certain number of questions and issues which deserved specific attention during the study. The agenda of the meeting and list of participants is available in Annex E6.

- ***Phase 2: Data collection***

Activity	Description
Interviews with key stakeholders in Maputo and regional capitals	Interviews were held with representatives of UNICEF staff and government partners (AIAS, CRA, DNAAS and DPOPHRH) and the government of the Netherlands (by skype). Questions addressed included background and history of the project, the development phase, the implication and role of each actor in the project, the implementation phase including possible challenges and lessons learned, the management of the systems and sustainability issues.
Field visit to the 2 small towns of Espungabera and Ulónguè	The consultant spent 2 days in each town to meet with the different stakeholders through bilateral interviews, meetings and group discussions, namely: the municipality or administrative post, the local regulatory commission, the SDPI (Serviços Distritais de Planeamento e Infraestruturas), the operator (managing director), the water and sanitation committee, a sample of beneficiaries (public standpipes and private connections). The field visit included direct observation of the network (pumping station, chlorination station if any, water tank, distribution network). The complete list of stakeholders met in the 2 towns is available in Annex E3.

- ***Phase 3: Analysis and report writing***

Activity	Description
Preparation and submission of preliminary findings	The preliminary findings of the evaluation following the desk review and the field mission have been presented in a draft report sent to the client 2 weeks before the presentation meeting.
Presentation of preliminary findings	The meeting to present the preliminary findings of the evaluation took place on November 27th and benefitted from the participation of UNICEF staff and relevant stakeholders involved in the project implementation. the consultant presented the results though a power point presentation and gatherer comments and contributions from participants.
Develop and submit the draft report	After the end of the second field mission, the Consultant completed the drafting of the report of the end-of-project evaluation. The consultant shared the report with UNICEF on 14 November 2017 in order to receive comments in view of establishing the final report.
Finalize the report and submit the final version	After having received UNICEF's feedback and comments on the draft version of the report, the Consultants will proceed to integrate the comments and produce final version that has been submitted on January 18th, 2018.

B.3.4. Challenges and limitations of the evaluation

- It is very challenging to evaluate a project that does not have a logical framework clearly indicating the activities and indicators and targets.
- It was not possible to have a quantitative measurement of impact, therefore, evaluation is based on perception and likely impact
- It was not possible to visit all rehabilitated equipment in terms of sanitation due to time-constraints: had to rely on secondary information sources
- Staff directly involved in project implementation or supervision not totally available for interviews (especially implementing partners ex. Kulima and sometimes local stakeholders ex. chief of administrative post in Espungabera is "new")
- Much of the data on technical and financial performance of the operators is produced by the operators and is not being verified by an independent authority or by AIAS, therefore the accuracy and reliability of such data is limited.

C. Results of the evaluation

C.1. Relevance

Definition: relevance refers to the extent to which the aid activity is suited to the priorities and policies of the targeted group, recipient and donors. Often associated with coherence.

Overall evaluability of this criterion: ■ medium evaluability

Ranking[5]: ■ low evaluability; ■ medium evaluability; ■ high evaluability

C.1.1. Project design

Evaluation question n°1: Has the project been adequately designed?

Brief history of the project design. Initially, in 2009, this project was supposed to be an add-on to a project that was being implemented at that time by UNICEF in rural areas: the "One Million Initiative". National counterparts complained that the One Million Initiative neglected small towns, where needs were very significant, therefore, UNICEF accepted to "extend" the intervention to include small towns. Project design started before 2009, based on a feasibility study carried out by Salomon Consultants (on water supply only and for two of the three small towns initially targeted: Ulónguè and Luenha), feasibility study that dealt both with technical and social aspects. This initial feasibility study was revised (in 2009) by Vitens-Evides who also assessed the technical and social feasibility for the small town of Espungabera (not included in Salomon's study). The project itself was developed between 2010 and 2011 by UNICEF who submitted a project document (in June 2011) to the Government of the Netherlands (fund request was around 5 million USD). For the purpose of this evaluation, the June 2011 project document is considered as the initial design of the project. Some significant aspects of the project design were modified in 2014, in agreement between UNICEF and the Government of the Netherlands – main aspect being the reduction from three to two small towns as initially planned (rationale for this change: initial construction costs had been underestimated).

Quality of situation analysis and baseline survey. The quality of the situation analysis and the baseline survey is considered fair as far as water is concerned. The technical assessment of the existing facilities was done in a sound manner. However, the initial coverage level was not assessed and the data available on the initial number of household connections and public stand posts is very approximate. The willingness to pay for improved water services was estimated. Recommendations were made regarding the most suitable management model and the price that would allow the private operator to cover the O&M costs as well as part of the investment costs (network extension) through tariff. The project document includes a situation analysis with regards to the institutional setup (in 2011) and more recent studies at that time were used to consolidate this analysis (for instance the WSP 2010 study on the potential of private management for small towns WSS systems). The capacity of the various stakeholders to be involved in the implementation of the project was clearly described and taken into consideration in the proposed project institutional setup.

On the sanitation side, the situation analysis was much thinner – the project document only refers to "initial scoping studies" that could not be located (the Salomon and Vitens-Evides studies only dealt with water supply). As a result, the initial situation in terms of sanitation was not properly assessed; for instance, the proposal to use CLTS was not relevant and the baselines conducted later during the project implementation confirmed that open defecation was anecdotal in small towns.

In both cases (water and sanitation) the evaluation team did not find any evidence of the fact that the situation analysis was conducted using a gender or equity-lensed approach. The initial situation in terms of access of the poor to the WSS services is not described in the project document.

[5] Evaluability aims to determine "the extent to which an activity or project can be evaluated in a reliable and credible fashion" (OECD-DAC). Main parameters to measure this evaluability are: i) initial project design, ii) stakeholder demand/interest and iii) availability and quality of data (adapted from Davies, 2013). On the same topic, see also Peersman, G., Guijt, I., and Pasanen, T. (2015) 'Evaluability Assessment for Impact Evaluation'. A Methods Lab publication. London: Overseas Development Institute (ODI).

Logical Framework & Theory of Change (or equivalent). The original project document did not contain a LF nor a ToC as such. In fact, due to the nature of this project which was supposed to be an addition to an existing project, it was assumed that the LF of the "One Million Initiative" would also apply to this project. However, this was never made explicit in the project proposal; also, the rural nature of the "One Million Initiative" makes it difficult to apply its theory of change to a small towns' context. In the project proposal, only basic outputs were indicated (in terms of number of new users benefiting from the water and sanitation services). The outcome level was missing in the project document and there was no clear causality link between the proposed outputs and activities and the goal to "reduce poverty levels [in the targeted districts] through improved access to water supply, adequate sanitation and hygiene promotion". The evaluation team did not find any evidence that a LF or a ToC was constructed during the project implementation phase.

Use of participatory approach in designing the project. Interviews confirmed that the project was designed in a consultative fashion, involving all the relevant stakeholders at that time: DNA, CRA, WSP, AIAS, DPOPH, local authorities, NGOs and private operators to some extent. The national stakeholders valued this participatory approach and especially UNICEF's willingness to involve the players at local level and provincial level, including in the project implementation itself. The project design included the establishment of a Steering Committee gathering all major stakeholders, which contributed to reinforce the participatory dimension not only in the design but also in the project implementation.

Quality and relevance of the risk assessment strategy. Risks were carefully assessed in the project document and the proposed mitigation measures were relevant and expressed in a concrete manner (table 5, page 25). The risk assessment strategy was also annually updated during the Strategic planning exercices with AIAS, but was not discussed with local stakeholders at town level. However, the mitigation strategies did not enable some of the major risks to materialize. Among the two risks ranked as "high", one did not materialize ("difficulty to recruit private operators with adequate skills") and one actually materialized ("changes on the scope of work", leading to the "increase in the budget cost and delay in the implementation of the project" – this point will be treated in more details in the "efficiency" section of this evaluation report). Some predictable risks, such as the non-payment of water tariffs by public institutions, have been omitted.

Existence and quality of the VfM analysis. To our knowledge, no VfM analysis was conducted during the project design phase. Unit costs were not indicated in the project document (not even the infrastructure capital cost per capita) and there was no cost benchmark with similar projects. There is no evidence either of a VfM study conducted during the project implementation. Overall, the initial budgeting process showed some weaknesses, and costs were not estimated accurately, especially concerning construction costs which were highly under-estimated, resulting in the final unit-costs being triple than originally planned. However, during the project implementation, an analysis and revision of the initial budget was made that lead to the reduction of the scope of the project. In addition, after UNICEF was able to gain more accurate information on the costs of the various interventions, a comparative analysis was done together with the Government on the various possible options and trade-offs in terms of infrastructure development (ex. on whether to privilege a more limited production capacity but larger distribution network, or vice-versa). A participative choice was then made as to favor the construction of systems with strong capacity in view of covering future needs, instead of systems with smaller capacity but which could enable a more extended current coverage.

Overall reply to the evaluation question	Score (out of 10)
The overall design of the project was reasonably adequate. Quality of the situation analysis was fair as far as water supply is concerned (sound technical studies but no assessment of initial coverage rates, clear overview of the institutional setup). However, situation analysis for the hygiene and sanitation component is considered weak. The risk assessment was relevant and has proven adequate. The project was designed in a participatory manner, with adequate focus on involving the local and provincial authorities ("decentralized" approach). Unfortunately, The VfM analysis was absent and the budgeting was inaccurate. The project design was not based on any Logical Framework nor Theory of Change. Outcomes are not clearly expressed and the causality chain between the overall goal of the project and the outputs and activities described in the project document was not properly developed.	**6**

C.1.2. Alignment

Evaluation question n°2: Has the project been aligned and consistent with national priorities/policies?

Consistency with the main elements of the national policies and priorities (at the time of the project design). As explained in detail in the project document, UNICEF's intervention was designed over the 2009-2011 period, when the WSS in small towns started to become a priority for the sector, after many years of focusing both on fully "urban" areas (i.e. FIPAG's perimeter) and on rural areas. In the context of a rapidly growing urban population, small towns were considered an area of under-investment and the increase in access to WSS services in small towns considered a priority. UNICEF was at that time mainly involved in the rural areas and benefited from a good reputation in terms of quality of its interventions and capacity to scale-up (this was confirmed by interviews with DGIS and other stakeholders); working in urban (or semi-urban) areas was therefore a strategic move for UNICEF and a way of meeting the priorities expressed by DNA at sector level.

Moreover, UNICEF's decision to work on small town WSS services and to promote the DMF to ensure maximum sustainability was perfectly in line with the national policies and priorities. The design of the project coincided with the development of the idea that the DMF worked reasonably well in the large cities covered by FIPAG and Aguas de Moçambique and that it was time to extend the DMF to small towns in order both to improve the level of service in the small towns and to promote the involvement of the domestic private sector in the water sector. UNICEF's positioning with the evaluated project was for example perfectly in line with the conclusions and recommendations of the WSP 2010 study, which documented the recent experiences of privately managed O&M in small towns (first contracts were signed in 2006-2007). UNICEF therefore contributed to scale-up what was considered a successful pilot project and the best way to quickly expand the service coverage in the small towns.

Analysis of the regulatory framework (and operational implications). The regulatory framework was carefully taken into account in the project analysis. UNICEF's long-lasting involvement in sector dialogue made the institution perfectly aware of the last developments of the evolving regulatory framework and especially the "novo quadro institucional" approved by the Government in 2009 that was only starting to be implemented at the time of the project design. The regulatory framework put in place in Mozambique eight years ago was a true innovation; Mozambique was probably one of the first countries in SSA to pilot and scale up a (rather ambitious) institutional framework that associated the delegation of O&M functions to the private sector and the regulation of service quality and tariffs through a formal regulatory body (CRA) which mandate was extended to include small piped systems. The close involvement of the CRA was an important dimension of UNICEF's project design; for instance, the evaluated project was one of the first interventions to foresee the setting up of 'decentralized' regulatory bodies (CORAL) proposed by the CRA[6]. Still from a regulatory perspective, UNICEF's project also coincided with the extension of CRA's mandate to cover sanitation services – even if this aspect had a much lesser influence on the project design as such.

Analysis of the enabling environment and influence on the project design. As analyzed above under evaluation question N°1, the enabling environment was carefully analyzed at design stage. More specifically, UNICEF assessed the capacity of main sector players to participate in the project design and later on, in the project implementation. When the evaluated project was designed, AIAS was a very recently established agency with many challenges linked to its establishment (in terms of human resources, project management capacity, technical skills, etc.). Involving AIAS in the implementation of the project was therefore (and rightly) seen at the same time as a risk (in terms of enabling environment for the project) and a unique opportunity to build AIAS' capacities. Lastly, during the project design, the enabling environment was carefully analysed at various levels (national / provincial / local), leading to a project setup empowering the DPOPH / AIAS provincial delegation in each of the two provinces – a choice that was highlighted as a wise one by a vast majority of the stakeholders interviewed by the evaluators. The involvement of the DPOPH during implementation included the contracting and monitoring of works, which was done following existing Government systems for contracting and management of infrastructure work, with technical support from UNICEF throughout the procurement process, contract management and implementation.

[6] See an assessment of this aspect under the sustainability criterion.

Overall reply to the evaluation question	Score (out of 10)
The project has been aligned and consistent with national priorities/policies in a satisfactory manner. The project design took into consideration the latest developments of the institutional framework (2009) and has been consistent with the water sector policies. The decision to focus on WSS services in small towns (not UNICEF's initial area of focus) was a way to meet the water sector's priorities both geographically and in terms of management model.	**10**

C.1.3. Targeting

Evaluation question n°3: Has the project answered the needs of the priority groups?

Needs of the selected towns versus overall needs in small towns at country level. The selection of the three initially targeted towns (as the first phase of a more ambitious project/programme targeting 10 small towns in total – with seven additional towns to be identified for phase 2) has been done in an overall context of the large needs identified by DNA and other sector players on this specific segment of the urban population (the 15% of the total Mozambican urban population living in small or 'district' towns). The needs were probably identified by national counterparts and were justified in the project document in a rather generic way – main argument being the level of deterioration of both the facilities and the level of service in the small towns at national level. However, probably because of the fact that DNA and AIAS were not able to provide an overall picture of the situation in all the small towns in the country, the choice of the 3 initially targeted towns was not properly documented during the project design. In summary, it is difficult to clearly establish if the three targeted towns constituted a priority in terms of access, quality of service, etc. compared to the overall situation of small towns in the country.

Identification of priority groups at design phase. There is no evidence that the priority groups were specifically identified and later targeted during the design phase. The project document and the related feasibility studies (Vitens-Evides, Salomon) address the socio-economic dimension of the project in general and emphasise the need to find a 'balance' between two potentially contradictory objectives: making the WSS services as affordable as possible (and therefore accessible to the poor) and reaching a minimum level of financial viability to attract potential private operators. However, the evaluators could not find any poverty mapping that would have influenced the design of the facilities and the decision making in terms of service areas (knowing that the available budget could not allow UNICEF to extend the secondary piped network to all the potentially served areas). It seems that when the project was designed, UNICEF followed the general trend of the sector to focus mainly on service extension rather than on equity, especially as far as small towns are concerned. The project was aimed at the rehabilitation of an existing infrastructure; so this, together with the budget limitation, reduced the scope for additional targeted interventions (such as extension of distribution networks for all areas in the towns, and specific interventions targeting vulnerable people). The final scope of works and prioritization of interventions was made in a consultative manner.

Globally, the project could have benefited from more disaggregated data. The priority groups (poor, women and children, disabled, etc.) were not properly identified during the design phase and the equity lens of the project is rather limited, which seems contradictory with the goal of the project, expressed specifically in terms of poverty reduction/alleviation in the districts.

On the sanitation component, the equity lens is not really apparent either. The baseline studies done during the first year of the project in the two targeted towns provided interesting data on the state of the sanitation facilities at household level, but data were not disaggregated (using a gender, poverty or disability angle). The research report conducted in 2015 ("Pesquisa Qualitativa") does contain interesting (but mostly qualitative) data and ideas on the willingness/capacity to pay for the WSS services (mainly focusing on water) but the equity lens is limited, which makes it almost impossible to conclude about the potential effects/impact of the project on the poorest inhabitants.

Targeting of priority groups for the purpose of building capacities. Given the innovative aspect of the service management model to be implemented in the project, the capacity building dimension was a very important one and the priority groups that should benefit from this capacity building activities were at the same time numerous and different in nature (and active at different geographical and institutional levels). The judgement of the evaluators is that the priority groups in terms of capacity building were properly identified and targeted, for both water and sanitation/hygiene components.

Overall reply to the evaluation question	Score (out of 10)
The project answered the needs of the priority groups to a limited extent only, in contradiction with the project's overall goal. The priority groups were not properly and specifically identified nor targeted in the initial design of the project, and this flaw has not been corrected in the project implementation. As a result, the equity lens of the project was not sufficiently developed, would it be for water or for sanitation; and this aspect of the project design makes it almost impossible to measure the effects or impact of the project on the potential priority groups: poor, women and children, disabled, etc. To nuance this overall poor targeting of vulnerable people, priority groups in terms of capacity building were properly identified.	**5**

C.2. Effectiveness

Definition: effectiveness is a measure of the extent to which and an aid activity attains its objective.

Overall evaluability of this criterion: ■

Ranking: ■ low evaluability; ■ medium evaluability; ■ high evaluability

C.2.1. Achievement of targets

Evaluation question n°4: Have the initial targets been met by the project?

Preliminary remarks. Firstly, as explained above (see question 1), the project was never associated with a logical framework and outputs/outcomes are only described in the project document in a very schematic/simplified manner. In the initial project document, the only target specifically indicated was the number of 'new users' that would have access to WSS services. Besides, no baseline study was carried out to estimate the coverage rate before the intervention (even if the service was deteriorated in the two towns, a small proportion of the inhabitants were receiving some kind of water service).

Secondly, the definition of 'new users' is not completely explicit in the project document (and later on in the progress reports and other documents produced during the implementation).

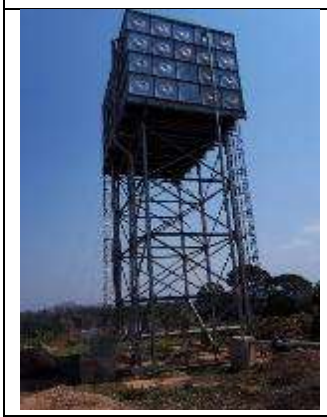
In fact, in the project documents, **the revised beneficiary targets refer to the projections on the number of beneficiaries during the lifetime of the systems, based on estimated future population** (as the current population in the towns is below such target). However, this is not in line with the standard definition of beneficiaires. According to the OECD « Glossary of Key Terms in Evaluation and Results Based Management », Beneficiaries are defined as : « The individuals, groups, or organizations, whether targeted or not, that benefit, directly or indirectly, from the development intervention. » It is acknowledged by evaluators that beneficiaries are those people that directly benefitted from the intervention at the date of the project termination. This definition does not include future or potential beneficiaries.

In fact, to measure the number of beneficiaries of such an intervention, at least four different categories of beneficiaries could be defined according to the exact 'benefit' they (or will) receive from the project:

- Users who were already connected (or had access) to the piped network before the project: but whose access to water supply significantly improved qualitatively and quantitatively thanks to the intervention of the project;
- Users who did not belong in the first category and gained direct access to the water service (through house connections or standpipes) thanks to the project;
- Users who still have no access to the water service (not connected to the network or too far from the closest standpipe) at the end of the project, but could have easily access to the service because the network exists / can be / will be easily extended in their areas;
- Users who still have no access to the water service (not connected to the piped network or too far from the closest standpipe) at the end of the project and could only be connected if there is a significant network extension (not in the scope of the operator's contract so far).

In the context of an end-of-project evaluation, effectiveness should be measured by taking into account the second category of (direct) beneficiaries of the project. It is likely that the third category will soon have access to the service, if the operator performs well enough; but this access is not formally guaranteed and cannot be directly attributed to the intervention itself.

Photo 1: Water system's reservoir in Ulongue and Espungabera


Ulongue


Espngabera

Final number of beneficiaries.

The project document initially set a target of 60,711 beneficiaries (described as 'new users') for both water and sanitation services; this figure being mainly based on Salomon & Vitens-Evides technical studies. The estimation of population done at the project proposal was not accurate, and revised figures have been provided through the progress reports submitted. After the 2014 alteration of the project scope (two towns instead of three), the number of beneficiaries was reduced to 36,000 new users (20,000 in Espungabera and 16,000 in Ulongue) for water and no precise target was any longer set for sanitation. As mentioned, these targets refer to **the number of potential users during the lifetime of the systems, namely, the target population for which the systems have been dimensioned, based on estimated demographic growth.** Accordingly, the systems were constructed for a population projected for the next 20 years for their primary components (water source, main pipe, primary network) and 10 years for the reticulated network. The population projected was indicated in subsequent reports as 24,000 people for Ulongue and 14,000 for Espungabera (projected population for design / 20 years, for which the investment was made). It is worth noting that the total population in the 2 towns at the time of intervention was less than the number of expected beneficiaries indicated in the proposal (e.g. in Espungabera, population in 2012 was 11,000).

If we estimate the number of 'new users' who actually gained access to the water service thanks to the project (current beneficiaries, not potential beneficiaries), using an average of 6 persons/house connection[7] and 500 persons/standpipe, the calculation leads to 5,636 new users in Ulongue and 4,906 new users in Espungabera[8]:

Ulongue	current n° of connections (July 2017)		n° people served by 1 water point	total n° people served
	connections	856	6	5136
	standposts	1	500	500
	TOTAL population served			5636

Esungabera	current n° of connections (August 2017)		n° people served by 1 water point	total n° people served
	connections	401	6	2406
	standposts	5	500	2500
	TOTAL population served			4906

Yet, it is worth mentioning that the interventions were related to the construction of water supply systems with **capacity to cover needs for over 38,000 people** (future population for the two villages), and the

[7] National standard is 5.3, but many cases of house connection shared between neighbours have been reported and therefore we can assume that the number of persons per connection is higher.
[8] Ulongue: 856 domestic connections and 1 standpost in July 2017, Espungabera: 401 domestic connections and 5 standposts in August 2017

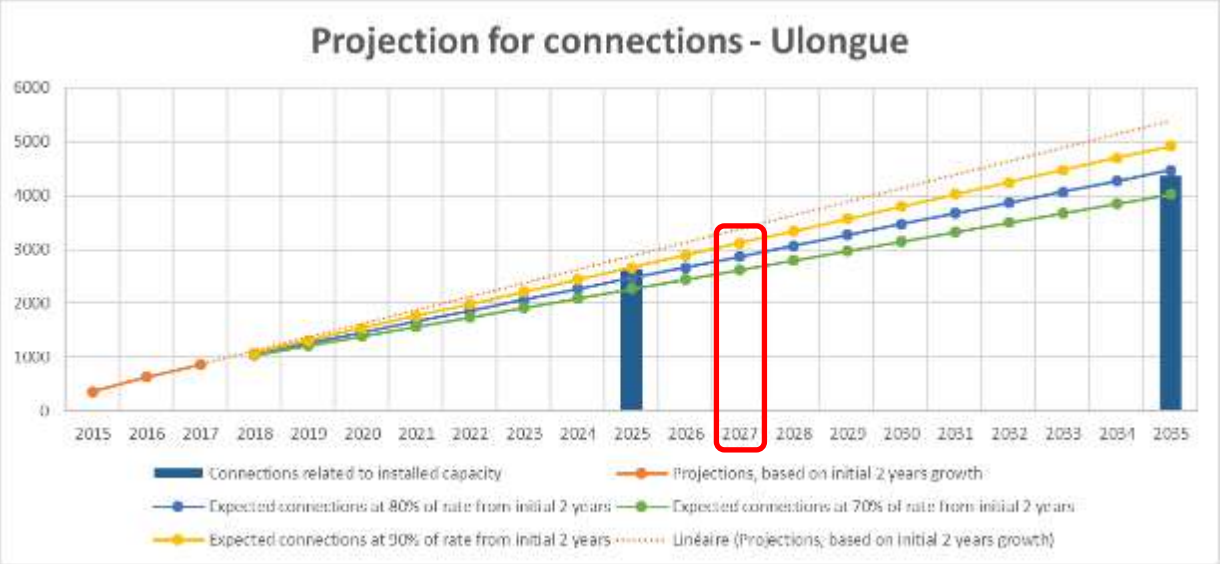
prioritization of the investment was done together with national stakeholders as to prioritize these future potential users rather than the current users.

UNICEF has made projections of these future potential users, based on the current expansion rate of the network (number of additional connections per year). According to these projections[9], the expected number of beneficiaries (20,000 in Espungabera and 16,000 in Ulongue) will be reached:

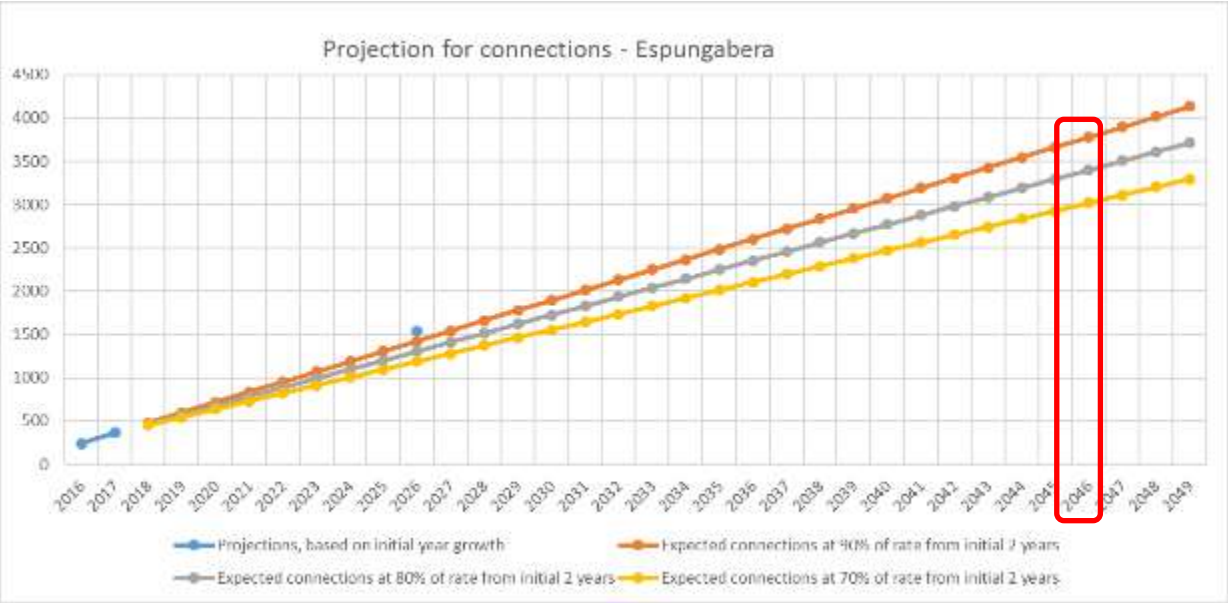
- **in 2027 in Ulongue** (within the life-span of the network, expected to last 20 years): 3117 connections serving 16 520 users. In fact, the progression rate of connections in Ulongue has been very fast for the 1st year (+77%), positively influencing the projections. The progression rate has decreased in the 2nd year (+36%).
- **in 2046 in Espungabera** (beyond the life-span of the network, expected to last 20 years): 3781 connections serving 20 038 users. In fact, the progression rate of connections in Espungabera for the 1st year has been slower than in Ulongue, although still very fast for international standards (+50% in 1 year).

In both cases, the very strong progression rate of connections so far has been mainly due to (1) the low level of initial connections and (2) the policy of subsidized connection (the operators charged the connection below the market price due to free connection material they received from AIAS). In Ulongue, the strong progression may also be due, to a certain extent, to the closing down of public standposts.

UNICEF's projections regarding the expansion of domestic connections are illustrated in the graphs below:



[9] Most optimistic scenario : Expected connections at 90% of rate from initial 2 years



The above projections are based exclusively in the growth of household connections; however, the expansion in the coverage in unserved areas should also include the use of tap-stands (fontanarios) particularly for the most peripheral areas where population density is not enough to grant the expansion with household connections.

The number of beneficiaries according to UNICEF's final project report is as follows:

Town	Target beneficiaries as per amended proposal	Beneficiaries as per June 2017*	Projected beneficiaries by 2025**	Projected beneficiaries by 2035***
Espungabera	20,000	4,320	10,191	14,000
Ulónguè	16,000	8,290	14,500	24,000
Total	**36,000**	**12,610**	**24,691**	**38,000**

* Based on actual number of connections and standposts per town at the date of closure of the project.
** Users referred to the actual capacity of the infrastructure constructed/installed
*** Users referred to the maximum capacity of the primary components of system (water source, main pipe, primary network)

These projections are based on the current rate of expansion of domestic connections. However, based on the consultant's experience in other countries, these projections are quite unrealistic, since even in the best possible conditions, the level of progress of connection rate largely decreases over time, on an average rate of -15% / -20% per year. This decreasing trend has already been observed in Ulongue, where the number of new connections in 2017 was 16% times less than the number of new connections in 2016 (273 new connections the 1st year, 229 new connections the 2nd year). In Espungabera, we only have data for 1 year, since the system only started operating in September 2016.
If we apply this (more realistic) annual decreasing rate in the number of new connections, the expected number of beneficiaries/potential users will never be reached: in Ulongue, the maximum number of users connected will be 10 037, reached in the year 2057, while in Espungabera, the maximum number of users connected will be 10 335, reached in the year 2073. Thereafter, the rate of progress of annual connections will simply equalize population growth.

In fact, in order for UNICEF's optimistic projections to have some possibility to become a reality, certain key conditions will be required:

- strong population growth and strong economic development (increase in wealth of the population) to sustain high demand
- urban policies and plans which encourage densification in the city centre instead of urban sprawl
- a program of social connections or subsidized connections for poor users (namely the two last quintiles) which are unable to cover the connection cost unless subsidized

- a strong contractual obligation for operators to maintain current public standposts operational and to develop additional public standposts for those users that cannot be reached by the network, although these standposts may not be profitable for the operators;
- setting ambitious targets and incentives in the operators' contracts in terms of new annual connections, and continuously updating these targets
- strong communication and marketing efforts to boost connections and facilitations of payment for connection fees (ex. in instalments or gradually deduced from the monthly fee)
- strong communication and marketing efforts to convince users not to make use of shared connections. Or, alternatively, if shared connection are acceptable for the sector (which we encourage), a review should be made nationally of the method to calculate users, in order to more accurately take into account shared connections in the calculation of users and coverage,
- urban planning which entrusts land property to users and which encourages urbanization of town-sections in terms of better road infrastructure
- significant investments from AIAS to extend the secondary network to additional neighbourhoods (to increase demand and to take into account the probably un-avoidable dynamics of urban sprawl), including construction of intermediate reservoirs if needed to allow sufficient pressure in distant areas.

While some of these conditions are likely to occur (ex. population growth) or easy to put in place (ex. contractual obligations for operators), some key conditions which require financial resources are unlikely to happen or at least, are not currently planned (ex. strong investments from AIAS and a program of social connections).

Regarding the sanitation and hygiene component, the last report communicated to the evaluators by UNICEF contains the following results of both 'hard' and 'soft' activities:

Indicator	Espungabera	Ulongue
Number of schools with school sanitation groups	5	4
Number of 'palestras' on sanitation and hygiene[10]	56	65
Number of people participating	5,500	5,250
Number of latrines constructed[11]	429	263

It is difficult to measure the effectiveness of the sanitation component, because the scope of the intervention was very vaguely described in the project document and because the initial target was expressed in terms of 'new users' (the target for water and the target for sanitation being identical) – which can be surprising considering the "demand generation" and social marketing orientation of the sanitation and hygiene component. With an average of 6 persons per latrine newly built as a direct effect of the project, the total number of 'new users' for sanitation is 4,150. If the 'new users' related to the sanitation facilities built in the schools are added to the domestic users, the total number of new users is probably between 5 and 6,000 persons[12].

In addition to this, it must the noted that **the project gave a strong contribution for the elimination of open defecation and construction of traditional improved latrines**, which comply with the global definition of safe / improved sanitation (one that hygienically separates human excreta from human contact). As this type of sanitation solution is not officially recognised as adequate for urban areas in Mozambique according to national definitions, the number of traditional improved latrines remained unreported for the project ; but in reality, the project's contribution for people to "rise up in the sanitation ladder" cannot be denied, and this was indeed one of the projects objectives. This is illustrated by available data on access to sanitation services, as presented below:

- In 2012, 10% of the population of the 2 towns practiced open defecation and 90% had some kind of latrines (traditional or improved), according to World Vision's baseline survey

[10] Including those palestras at school level.

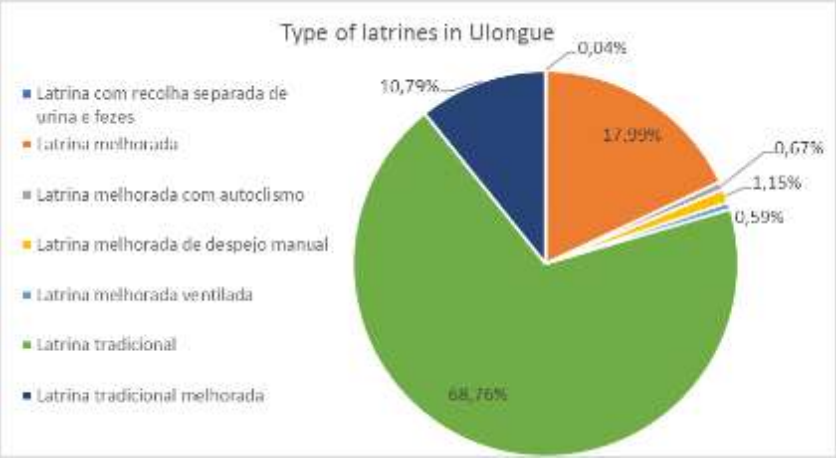
[11] As agreed during the sanitation championship, only improved latrines and latrines/toilets with septic tanks were counted for the purposes of this summary (traditional latrines and improved traditional latrines were not recorded).

[12] Under the assumption that the revised target for sanitation is also identical to the revised target for water.

- In 2015, 5% of the population of the 2 towns practiced open defecation and 95% had some kind of latrines (traditional or improved), according to the "Pesquisa Qualitativa" study
- In 2017, 0% of the population practiced open defecation and 100% had some kind of latrines (traditional or improved), according to the last PEC monitoring report.

Although data collected generated by different surveys with supposedly different methodologies cannot be directly compared, these results show a positive trend in terms of "climbing up the sanitation ladder".

This positive result can also be explained by the fact that the individual families with no sanitation facilities were identified by sanitation promoters at town level, and specific follow up for these was made up to the finalization of the project. For the case of Ulongue, all families identified with no latrine had constructed their latrine by the end of 2015. In addition, the BIAS survey done this year by AIAS in Ulongue (not available for Espungabera) shows that approximately 30% of the population has some kind of ***improved*** latrines, and that these are of a huge variety of technologies, as shown by the table below:



Final number of beneficiaries of capacity building/training activities.

Specific gaps in the capacity of technical staff amongst implementing partners were identified, particularly for province and district level partners, through the baseline studies conducted for the NAMWASH and AGUASANI programmes (which followed the Dutch funded project). UNICEF, in coordination with AIAS, therefore embarked into the development of a training package aimed at developing the capacity of public and private stakeholders involved in the DMF to be delivered for all districts and provinces included into the UNICEF small towns WASH programme, and for potential replication in other provinces. The training package comprises of five modules, consisting of a one-week theory unit followed with practical on the-job training and an assessment test. The content of the modules is indicated below:

- Module 1. Water and sanitation services planning in small towns: Concepts of the delegated management framework, water supply projects planning, and town-wide sanitation planning.
- Module 2. Piped water supply systems design (including project appraisal and costing), behavior change communication and sanitation demand generation tools.
- Module 3. Procurement procedures for piped water supply works.
- Module 4: Operation and Maintenance of Water Supply Systems and Guidelines to prepare a Sanitation Competition.
- Module 5: Supervision of Constructions Works, Contract Management and Operation and Maintenance of Public Toilets

The roll-out of the training package was done between 2015 and 2017 in Inhambane province. To ensure a critical a mass for the trainings and stimulate experience sharing, the training includes representatives of AIAS delegations, DPOPHRH Inhambane, Tete and Manica and SDPI for Inhambane province (Jangamo, Morumbene, Homoine, Inharrime, Panda), Manica province (Mossurize) and Tete (Municipality of Ulongue) together with the PEC teams implementing community mobilization activities under the Dutch funded project (KULIMA) and AGUASANI programme (DACAL).

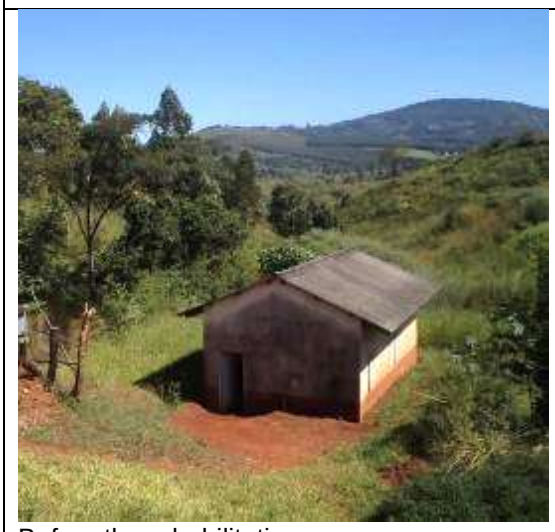
According to the participants lists provided, **approximately 10-15 local, provincial and national technical staff concerned by the 2-towns project benefitted from the trainings** (excluding staff from

Inhambane province, UNICEF staff and logistic staff). In terms of results of these trainings, the assessment test shows that 60% of participants replied correctly to the test questions for Module 1 and 77% of participants replied correctly to the test questions for Module 2 (results for the remaining modules are not available).

But since the number of beneficiaries of capacity building/training activities and the results of these activities were not set as a quantitative target in the initial project document, it is not possible to assess the effectiveness of the achievement of this result. Also, it must be noted that the results of the capacity building activities were not systematically reported throughout the project implementation (no training report is available) and no information was included in the progress reports.

Overall reply to the evaluation question	Score (out of 10)
The effectiveness of the project is evaluated as being relatively low with respect to water supply, a bit higher for sanitation. The project suffered from the lack of clearly defined targets and indicators (to be linked to the poor design of the project, see relevance) which make it difficult to evaluate this aspect. The water systems were effectively rehabilitated in the 2 towns, the systems were correctly dimensioned according to the expected users, and the quality of the infrastructures is good; however, the number of current beneficiaries is well below the target number of beneficiaries declared in the project proposal. This is due to the fact that the target in the project proposal was (implicitly) referred to the potential users for which the systems have been dimensioned, and not to the expected users at the end of the project implementation. While UNICEF and its government partners made a **conscious choice to privilege future users instead of present users**, this choice is questionable from an effectiveness perspective, since there is no guarantee that these potential users will really benefit from the service in the future (many conditions are needed, some of which are not likely to happen / are currently not planned).	**5**

Photo 2: Pumping station at the catchment area in Espungabera



Before the rehabilitation

After the rehabilitation

Photo 3: Pumps from the underground reservoir to the elevated reservoir

Espungabera

Ulongue

C.2.2. Project's monitoring

Evaluation question n°5: Have the activities, outputs and outcomes been properly monitored?

Quality and use of the M&E framework for the project. Due to the absence of logical framework, we cannot really say that the project was equipped with a fully developed M&E framework. The absence of M&E framework does not mean that the project has not been properly monitored by the UNICEF WASH team; it means that the M&E framework was lightly structured and focused mainly on the monitoring of activities, deadlines (to some extent), risk assessment and mitigation and of course financial aspects. During project intervention, UNICEF's monitoring framework and quality assurance system for the water component was based on the engagement of supervising engineer firms, as per regular engineering practice, to monitor (and ensure the quality of) the implementation of the construction works, with resident personnel on site. For sanitation, the monitoring was done through the PEC partner, as well as through the evaluations of the sanitation championship. To complement these system, UNICEF (and DPOPH and SDPI) also conducted regular field visits to have first-hand information and ability to provide immediate feedback to the implementation of on-site activities.

After the end of the project, the responsibility of post-implementation follow-up shifted from UNICEF to AIAS. The capacities of AIAS to undertake an adequate monitoring of the systems are however very low, and the formal reporting system used by the operators following AIAS's template is exclusively quantitative and very sophisticated, multiplying risks of errors. However, due to the extension of the Grant, UNICEF had the opportunity to follow-up on some of the developments after the conclusion of the project's activities, and information exchange continued, especially in collaboration with the PO15 programme, enabling some kind of post-project support.

Quality, accuracy and robustness of the reported indicators.

For all the reasons developed above, the quality, accuracy and robustness of the reported indicators is found not satisfactory. This is partly due to the project design (addressed in the previous chapter) but also concerns project monitoring, since the monitoring activities did not result into rigorous reporting based on robust indicators. The indicators found in the project progress reports are limited, sometimes inconsistent from one year to another, and their definition is vague. None of the existing indicators are gender sensitive and they cannot be disaggregated against any category of users or priority groups. Even if the project did not have any initial LogFrame, during implementation the project team could have developed a set of indicators to fill-in this gap and to facilitate monitoring, but this has not been done. The qualitative research report (2015) could have generated an interesting set of specific sanitation-related indicators, but that has not been the case. The weakness in the formal monitoring of the project can be considered a true 'missed opportunity' that negatively affected not only this evaluation, but also the ability of UNICEF to learn from the project and share any kind of rigorous analysis of the effects / impact with the sector.

Quality and accuracy of the reporting to major partners. The project progress reports, although interesting and well-presented, are very narrative, qualitative and do not include an M&E section; the chapter called "results" in the progress reports actually deals more with a description of activities. However, the stakeholders interviewed during this evaluation (at least at national and provincial levels) expressed no particular concern with the operational and financial monitoring of the project.

Overall reply to the evaluation question	Score (out of 10)
The quality of the monitoring is considered average, considering the absence of initial targets and accurate and robust indicators. The absence of a sound M&E framework and especially the lack of accurate, well thought-through and robust indicators clearly appear to be a weakness of the project. However, this weakness was partially compensated by systematic monitoring (combined with technical support) that was made on the implementation of activities in the field, including the contracting of Engineering Consulting Firms for Supervision of construction works and in all stages from technical assessments and designs, tendering, implementation of activities on ground, capacity building, etc., as well as strong efforts of the UNICEF team to monitor activities with frequent stakeholders' meetings and field missions. After the end of the project, follow-up was ensured by AIAS with UNICEF's support and there was a coordination with AIAS and PO15 for ensuring that the Operators of these two systems comply with the national reporting requirements (based on a very sophisticated national template not related to the project). No particular concern was raised by stakeholders regarding the financial and operational reporting of the project.	**6**

C.3. Efficiency

Definition: efficiency measures the outputs in relation to the inputs. It is an economic term which signifies that the aid uses the least costly resources possible in order to achieve the designed results). Often associated with Value for Money (VfM), even if the two terms are not exactly identical.

Overall evaluability of this criterion: ■

Ranking: ■ low evaluability; ■ medium evaluability; ■ high evaluability

Evaluation question n°6: Have the project resources been used in an efficient way?

Overview of the project final budget. Based on the figures presented in the 'pre-final' project report communicated by UNICEF to the evaluators, the project final budget is summarized in the table below:

Budget lines	Total amounts in USD			Weight in the budget (spent)	Category
	Revised allocation	Expenditure	Difference		
1. Capacity building	615 000,00	653 597,65	-38 597,65	10,5%	Soft
2. Stakeholder management	9 600,00	12 718,73	-3 118,73	0,2%	Soft
3. Training	18 000,00	15 673,95	2 326,05	0,3%	Soft
4. Technical assistance	100 800,00	245 746,68	-144 946,68	4,0%	Soft
5. Equipment	243 000,00	144 234,90	98 765,10	2,3%	Hard
6. Civil works	3 910 000,00	3 733 566,62	176 433,38	60,1%	Hard
7. Hygiene promotion and sanitation	650 000,00	770 106,60	-120 106,60	12,4%	Soft
8. Knowledge management	165 000,00	310 287,99	-145 287,99	5,0%	Soft
9. Global recovery cost (HQ – 7%)	327 327,00	327 325,97	1,03	5,3%	Soft
Grand total	**6038727**	**6213259,09**	**-174532,09**	**100%**	**N/A**

The hard/soft ratio for this project is around 2 to 1 (62% of the expenses above can be classified as related to hardware – these expenses fall under the 'civil works' and 'equipment' budget lines, although the "Hygiene and sanitation promotion" line also includes a sub-line on infrastructure for peri-urban sanitation, where the WASH in institution facilities was reported). This is quite a classical and therefore reasonable ratio considering the focus on sanitation & hygiene and on the capacity building (the first budget line actually refers mostly to the costs of supporting the national stakeholders involved in the implementation of the project, with a large portion being dedicated to covering the costs borne by AIAS and the two DPOPHs).

Respect of initial timeline, milestones and deadlines. Initial planned to be implemented over a period of four years (January 2012 – December 2015), the project's timeline was extended (in agreement with the main donor, the GoN) by almost two years. The project officially ended in June 2017. Implementation of activities at field level was finished by 30 June 2017, however some payments (for example, the performance guarantees dues several months after works have concluded) are still being executed, using UNICEF resources. All activities undertaken after June 2017 are being covered by UNICEF's funds. The final report is due end 2017. Although it negatively influenced the efficiency of the project, such a time extension is not uncommon for this type of intervention; and the impressive number of short monitoring missions done by UNICEF's staff surely helped make the project implementation 'flow' better, probably preventing extra delays that could have occurred. Specific reasons can be identified to explain this delay:

- The institutional framework was new when the project started and some institutions (including one of the key partners, AIAS) were not yet fully operational and staffed;
- The construction costs were grossly under-estimated (by more than 30%); leading to a time-consuming reduction of the scope of the project two years after it started;
- The fact that part of the project was to rehabilitate existing (but largely non-functioning) networks created a certain complexity from a technical point of view; leading to the necessity to make a lot of small decisions to re-orientate the initial scope of the contractors;
- Although the evaluated project was not exactly a 'pilot' project, the fact that it was dealing with an entirely new institutional set up made it more complicated to implement;
- In the case of Espungabera, some security concerns linked to the political situation in 2016 also contributed to slow down the implementation process and added extra delays.

Value for Money analysis based on unit cost

If we assume that 20% of the overall project costs were related to the sanitation and hygiene component, and based on the estimated number of beneficiaries estimated above (see effectiveness chapter), the average project cost per capita is 270 USD for water and 200 to 240 USD for sanitation.

These costs are relatively high for an intervention in small towns, even if it is very difficult to identify a relevant source that could serve as a benchmark. According to international literature (G. Hutton and M. Varughese, 2016), in Mozambique average unit costs for water supply improvements (household connections) are of approximately 230 USD/capita for urban areas. This unit price estimate is based on a review of various development projects. According to AIAS investment plan (developed in 2013 by Engidro), the unit costs for water systems in small towns are estimated of 330-370 USD/capita for construction of water supply networks and 260-300 USD/capita for rehabilitation of water supply networks (80% of construction unit cost). Finally, FIPAG's urban systems usually consider an average unit cost of 400 USD/capita. These various unit costs are not totally comparable, since they may be based on slightly different technology options (different life-span of the systems); but the comparison can be used to give a general idea. Based on these benchmark, UNICEF's unit costs seem quite high if compared to standards for Mozambique as mentioned in international literature, but in line with unit costs estimates by Mozambican public institutions.

Yet, following comment above, the intervention included investments made for a population that is bigger than the number of people connected to the system today. As a consequence, the cost per capita required to increase the number of beneficiaries in the future years will be lower as it will mainly comprise of household connections and part of the network that still needs to be extended, while the more considerable investments (treatment works, reservoir, etc.) have been already covered. In fact, the number of users/beneficiaries is increased over time, so we could also say that the unit cost is similarly decreasing over time and will continue to decrease for still a few years, until the systems will stop (or significantly slow down) their rhythm of expansion. While various factors influence the way that the service expansion occur, the trend so far shows that the investments made by the project have effectively reduced the financial requirements for families to continue accessing water and that systems can continue grow based on the investment that was initially made by the project.

Other aspects of Value for Money:

The project followed cost effective business practices to achieve the best value for money against its budget. Particularly for construction / rehabilitation works for the water supply systems in the two targeted towns (the budget line with highest value), the process included de development of costed scenarios where various technological options, levels of coverage where analyzed against the investment required. The final decision made on the scope of works to be implemented was based on a consultation with partners at national and decentralized levels where the various scenarios were presented and discussed.

Moreover, procurement of goods and services (including construction / rehabilitation works as per the agreed scope) were done following Government of Mozambique's procurement processes, which includes a competitive selection through open tendering, to ensure the most cost-effective technically compliant commercial value. For items such as vehicles, the project benefited from UNICEF supply and procurement global systems where more competitive processes were accessed through UNICEF's Long-Term Agreement with global suppliers.

Overall reply to the evaluation question	Score (out of 10)
Overall efficiency of the project is considered average. Based on the actual number of beneficiaries used in the framework of this evaluation, the average project cost per capita is 270 USD for water and 200 to 240 USD for sanitation. This unit cost seems relatively high if compared to other projects in Mozambique (although in line with estimates by Mozambican public institutions) and could probably have been reduced. The initial duration of the project (4 years) was extended by 50%, which is not unusual for this type of intervention, but negatively contributed to the efficiency.	**6**

C.4. Impact

Definition: impact refers to the positive and negative changes produced by an emergency / development intervention directly and indirectly, intended or unintended. This involved the main impacts and effects resulting from the activity on the local social, economic, environmental.

Overall evaluability of this criterion: ■ low evaluability

C.4.1. Perception of impact

Evaluation question n°7: What are the main impacts perceived by the beneficiaries and the project key stakeholders?

Main changes brought by the program:

According to the perception of beneficiaries, the project brought positive changes in terms of increased access to basic services of water and sanitation. Overall, all stakeholders interviewed are satisfied with the project's impact and have the feeling that the project brought improvements in people's lives.

The local government authorities are the most satisfied amongst all the stakeholders interviewed. The Chief of the Administrative Post of Espungabera considers that the **increased access to drinkable water had positive impacts on health reducing diarrhoeal diseases, and that having household connections had a positive impact on economic activities** since it reduced time for families (especially women) to go and fetch water at the public handpump or at the river. The Municipality of Ulónguè has the same opinion and also considers that the absence of cholera in the town in the last years is mainly due to the project's intervention on water and sanitation. The positive impact has been confirmed by some households interviewed. **All beneficiaries interviewed (namely, households connected to the network) are very satisfied with the service provided: they mentioned that having a household connection "changed their lives".** Overall, there is a general satisfaction with respect to: quality of water (highly appreciated), pressure (generally good, but with some exceptions), tariff (users feel that the tariff is correct). No major complaint has been identified with service quality in Espungabera, however, **in Ulónguè users are unsatisfied of the limited distribution hours (only 6 hours/day): this is in fact a key element of disappointment**. This is in contradiction with what the operator is reporting in the monthly report to AIAS (12 h/day, 7 days/7) and is also in contradiction with what reported in UNICEF's 3° annual report for 2014 ("The expanded system will provide safe water 24 hours a day, 7 days a week», not corrected/updated in subsequent annual reports).

In addition, in both towns, users were also initially discontent about the tax they had to pay to get a domestic connection (approximately 4000 mt), but in both cases, after a few months the **operators introduced "discounts" and reduced this tax by half: this boosted the connections, and now the users feel the tax level is correct**. Yet, the fact that users have to pay for the tubing of tertiary network is a cause of discontent and a major obstacle to connection.

However, while there is a general consensus on the positive impacts in terms of access to water, the level of perceived impact in terms of access to sanitation vary from one stakeholder to another. Some stakeholders are enthusiastic about the "PEC-urbano" approach and consider that the impacts were very positive in terms of increased access to improved sanitation and behavior change, while some others stakeholders consider that the impacts were limited as compared to the resources mobilized. Households interviewed in the 2 towns consider that the new latrines had a positive impact in their lives; the new facilities are particularly appreciated as compared to the previous traditional latrines since they last longer. However, the "grupo the saneamento" members interviewed consider that there is still a long way to go, since many households still don't have latrines, especially in the "new" neighborhoods of recent expansion, where the land property issues are not yet clarified and people are waiting to have certain guarantees before investing in infrastructure. Of the people met in semi-structured group discussions, approximately 50% had improved latrines. The regional director of water in Chimoio (D/DRA, DPOPH) considers that the sanitation component was the "Achille's talon" of the project and that it did not achieve the expected impacts, mainly due to the declining demand for sanitation equipment after the end of the project, the incorrect usage of latrines, and weaknesses in public sanitation.

In addition, all stakeholders agree that there is a significant portion of population of the two towns which has not benefited from the project, since the new systems have not covered the whole town. In fact, the project never intended to cover all neighborhoods of the town since a choice

was made to prioritize future users instead of current users, as mentioned earlier. This choice of prioritization on the scope of works was done in a participatory way at the beginning of the project implementation. According to UNICEF, stakeholders at all levels including in the two towns were informed about this choice since the very beginning. However, in the two towns, the project raised some expectations at local / community level that were beyond the control of the project, and UNICEF was unable to prevent that stakeholders feel some frustration due to the limited scope of the rehabilitations. In Espungabera, the distribution network covers 3 out of 6 neighbourhoods, and in 1 of these 3, the pressure is extremely low so as to consider it unserved. SDPI and GAS interviewees consider that less than half of the population has actually benefitted from the project. In Ulónguè, there are 5 main neighborhoods, of which 4 have been covered by the network (all except Filipe Samule Magaia). Of these 4, one has very low pressure (Josina Machel). So overall, 3/5 of the neighborhoods are adequately served.

Photo 4: GAS members met in Espungabera

Photo 5: FG participants met in Espungabera

GAS members and FG participants met in Espungabera are disappointed by the low coverage of the network (5/7 of GAS members and 18/20 FG participants met don't have a household connection)

There is a general dissatisfaction or frustration amongst the local partners and the population to see that the coverage was so limited. Seeing the glass half-full, the Municipality of Ulónguè optimistically feels that "the project's impact will be higher in the future, since the infrastructure of the new system has the potential to cover all the town". There is in fact a good indicator on the increasing impact of the project through time, given by the increasing number of connections: In Espungabera, the operator has made approximately 170 new connections per year (850 new beneficiaries/year), while in Ulónguè, the operator has made approximately 230 new connections per year (1150 new beneficiaries/year). However, the rhythm of increase of household connections is quite slow if we consider the low initial level of coverage. This is a very good result for a private operator, if compare to experiences in other countries. However, **if the network keeps expanding at this rhythm, 10 years will be needed for the two systems to cover the whole town population** (9,5 years for Ulonge and 10,8 years for Espungabera). Yet, it is not likely that the network will keep expanding at this rhythm; it is most likely that the rhythm will significantly decrease in the following years, unless important investments are made to expand the networks and a certain number of exogenous and endogenous conditions or factors are met (see chapter C.2.1, pg. 20). Indeed, the two main obstacles for the expansion of the household connections (and therefore, of the coverage) are the following:

- **the limited extension of the tertiary network**, in those neighbourhoods covered by the network, leaving it to households to purchase the tubing that cover the long distances between the network and their houses. For example, in Espungabera, a household that lives 200 mt from the network will need to pay approximately 7000 mt only for the tubing, in addition to the 2000 mt of the price of the connection. This sum represents almost 4 times the average monthly salary. It is the contractual responsibility of the operator to extend the tertiary network, but the two operators have not done any such investment until now and are not planning to do so in the near future either.
- **Absence of secondary network in some neighbourhoods of the towns**. This would require important investments, and for the time being, according to the contractual agreements, significantly

expanding the secondary network does not fall under the responsibilities of the private operator[13], and there is no immediate plan for AIAS to invest in such expansion either.

Photo 6: Material for HH connection in Espungabera

Connection material left by the constructor to the operator in Espungabera, for the operator to continue connecting households

Unexpected effects or impacts:

In terms of unexpected effects or impact of the project, it is worth mentioning that in some cases, in both towns visited, **the increasing number of household connections has had the effect of reducing water consumption at public stand posts**, therefore reducing the incomes and the sustainability of such stand posts. In Ulónguè, this has led to closing down of the stand posts which are in deficit. This has **negative impacts on the poor population of the areas, which cannot afford a household connection and are therefore forced to purchase expensive water from neighbors or turn to unprotected sources**. In Espungabera, none of the 6 public stand posts has been closed for the moment (except for the school's stand posts which is no more operational since the school now has a private connection). The reason is probably that there is currently no volumetric tariff applied to these stand posts (which is against the law), but the operator rather collects 60% of the incomes of the caretaker. There is however a high risk that some stand posts will also close in Espungabera once the operator starts invoicing per volume, especially in the case of the stand posts n°2 whose consumption is gradually declining according to interviews.

Overall reply to the evaluation question	Score (out of 10)
According to the perception of beneficiaries, the project brought positive changes in terms of increased access to basic services, especially water and to a lesser extent, sanitation. However, the current limited coverage of the networks (less than half of the towns' population) had significantly limited the project's potential impact. A negative impact of the project is that the increasing number of household connections has reduced water consumption at public stand posts, leading to closing down of some stand posts and forcing the poor population to purchase expensive water from neighbors or turn to unprotected sources	**7**

C.4.2. Use of facilities

Evaluation question n°8: Are the project results being actually used by the beneficiaries?

Extent to which the facilities are effectively used, operated and maintained by the beneficiaries, the service providers, the local authorities (if relevant)

[13] As per the contract, the operator has to expand the primary network up to 500 mt and the secondary network up to 1000 mt. These distances are very limited and totally insufficient to cover the needs.

The rehabilitated water networks in the two towns are currently being used by the beneficiaries. They are operational and providing a precious service to the population. The private operators in charge of managing the systems are in place and have been operating the systems for 2,5 years for Ulónguè (since April 2015) in Ulónguè and for 1 year in Espungabera (since August 2016). Both operators have contracts signed with AIAS and are producing monthly reports based on a standard template ("Planilha de monitoria"). **However, while private connections are functioning well, the public standposts are not functioning as expected: in Ulónguè, only 1 out of the 8 is currently operational**, the remaining have been cut due to lack of payment, since the management system that has been set-up for the public standposts is not functional and failed to create the conditions for effective usage (the system was based on ex-post, end-of-month lump-sum payment by users, instead of payment per jerrycan at the moment of withdrawal). In Espungabera, 5 out of 6 initial public standposts are functional, thanks to a management system which is more effective and more acceptable to the population, although it is not complying with the tariff system: in fact, there is no meter and the operator charges 1mt/20 liters jerrycan which means 50mt for m3 (instead of 10mt/m3 as and foreseen in the regulatory framework), and then leaves 40% of the revenues generated to pay the salary of the caretaker. **Regarding the household connections, these are mostly functional;** however, while in Espungabera, just a few connections have been cut since service begun due to lack of payment (6 cut of which 1 re-connected), in Ulónguè there is a higher rate of non-payment and therefore service interruption for the faulty households: 32 connections cut in 2017 (4% of total) and only 6 re-connected.

Photo 7: Shut-down stand post in Ulónguè

Photo 8: The well being used as alternative

Photo 9: operational stand post in Espungabera

Photo 10: private connections in Espungabera

The quality of operation and maintenance is overall satisfactory but varies from one system to the other, mainly based on the operator's capacity, and is higher in Ulónguè, more challenging in Espungabera. In Ulónguè, the operator Collins Sistemas de Água Lda (CSA) is a national Maputo-based company established in 2009 with previous experience in managing water supply systems in secondary cities, namely in Moamba since 2013. **Collins is well structured and competent,** and is

currently managing water supply networks in 08 towns[14]. Collins has a central ICT system for managing its systems, allowing many management tasks to be undertaken at its headquarters in Maputo, including invoice processing, financial management, human resources management, and reporting to the regulator and the AIAS. This delivers economies of scale, cross-learning, and an integrated management approach. **In Ulónguè, *reported* technical performance indicators are overall good:** 100% water quality testing for residual chlorine are compiling, 95% revenues collection ratio, 100% complains treated in average 2 days, 97% meters read, 54% non-revenue water (high amount but consistent with national averages). Current challenges in terms of O&M include high physical losses, high input costs (principally energy and chemical products), scarcity of equipment and spare parts on the local market, non-payment by administrative clients, and most of all, a lack of qualified and trust-worthy staff: **the manager and the administrative staff in Ulónguè has been recently changed by the operator due to bad governance**. There is also the need to develop and currently update the map of the network, which currently is not available locally.

In Espungabera, the operator BP Construçoes is also a national Maputo-based company but specialized on construction and with more limited experience in managing water supply systems in secondary cities (the same company is currently managing the system in Manjacaze and Nametil). **BP Construçoes is overall less qualified/competent and is managing the system in a simpler way, yet satisfactory**, using the tools provided by AIAS without developing their own. **In Espungabera, the *reported* performance indicators are also overall good, but some data are also unrealistic**, which creates doubts on the quality of the reporting/the capacity of reporting according to the provided templates : 100% water quality testing for residual chlorine are compiling, 128% revenues collection ratio (unrealistic), 100% complains treated in average 1 day (however, the operator mentioned that they don't receive any complain), 97% meters read, 9% non-revenue water (unrealistic). Current challenges include the maintenance of the capture equipment, which seems under-dimensioned for the current high pressure of water gushing from underground sources and is currently fracturing, with water exfiltrating all around, the lack of daily register of the pumping hours, bad quality and irregular supply of electricity, and serious difficulties to secure qualified staff (**in Espungabera**, **the manager changed 4 times since the beginning of the contract**, for an average of 3 months per manager. Yet the latest manager, completing 5 months, seems more qualified than the previous ones.)

Photo 11: Damaged water catchment in Espungabera

Both operators have benefitted from trainings done by the constructor and by the PO15 technical assistance programme. Both operators mentioned that these trainings were useful, especially on the electro-mechanic aspects; although Collins mentioned that the tools and templates provided by the trainers were less adapted than the tools they were already using. In both cases, it is regrettable that the staff that originally benefitted from the training was no longer working in the system due to high turn-over, which is a challenge for continuity of the learning process.

Regarding usage of sanitation facilities, results are less satisfactory. The main challenges concern public sanitation facilities in market places. In Ulónguè, the public sanitation facilities in the

[14] Moamba, Ulongue, Morrumbene, Jangamo, Mopeia, Mocuba, Inharrime, Homoine

markets are being used but face huge challenges due to an unclear management model. Overall, the two facilities are well maintained by the operators but level of users is very low (approximately 5-10 users per day reported by the operator), and the cabin for people with disabilities that was included in one of the facilities, is currently being used as warehouse. In Espungabera, the management model for public toilets in the 2 markets is clearer and more effective: the SDPI has contracted a private operator to manage both toilets following the launching of a public bid, and the operator that won is a young businessman with a lot of good will. However, the situation is similar in terms of low frequentation by users, especially in one of the two markets (approximately 15-20 users per day reported by the operator). Both in Ulónguè and in Espungabera, in terms of usage of institutional sanitation facilities, this is effective in the 2 schools and 1 health center in Ulónguè and the 2 schools and 1 hospital in Espungabera, although the level of maintenance is variable.

Photo 12: Public sanitation facility in Espungabera: well-maintained but with limited users

In terms of household sanitation, the facilities being built during the project (improved latrines) are being used by the population, although the quality of maintenance and cleanliness varies widely from one household to another. The “grupo de saneamento” interviewed says that nowadays, people have started to accept the principle “one household – one latrine”, but that *the use of the latrine* is “the main problem” now, since latrines which are not being correctly used increase the contamination risk instead of decreasing it. Also, the variety of sanitation options being proposed by the project and having been included in the training of the artisans, is not being exploited: in reality, the vast majority of households are only using the simple slab model and not the other technologies (ex. “cadeira do rei”, which are more expensive).

In Espungabera, users are becoming more and more aware of the importance of sanitation. Poor households feel that cement slabs are preferable as compared to the previous traditional latrines since they are more secure and they fill-in less quickly, so they use them. Some users have even invested to further improve their sanitation facilities and increase in the sanitation ladder (but mainly investing in the superstructure). However, some users are not correctly maintaining their latrine, which is dirty, and often, there is a lack or incorrect use of the hole lid (therefore enabling for flies to enter and exit, increasing risks of contamination). The compliance with hygiene best practices is also variable from one household to another and from one neighborhood to another, overall reflecting the wealth level of the household; generally, water is available near the latrine for hand-washing, but soap is only sometimes available; some good examples of tippy-taps were observed in some household.

Photo 13: New latrines on the left, old latrines on the right

Photo 14: Tippy taps

Overall reply to the evaluation question	Score (out of 10)
The rehabilitated water networks in the two towns are currently being used by the beneficiaries. However, while private connections are functioning well, the public standposts are not functioning as expected: in Ulónguè, only 1 out of the 8 is currently operational, In Espungabera, 5 out of 6 initial public standposts are functional. Regarding household connections, in Ulónguè there is a high rate of clients being "cut" due to non-payment: 32 connections cut in 2017 (4%) and only 6 re-connected. The quality of operation and maintenance is overall satisfactory but varies from one system to the other, mainly based on the operator's capacity, and is higher in Ulónguè, more challenging in Espungabera. Both operators face challenges due to quality of staff: the manager and the administrative staff in Ulónguè has been recently changed by the operator due to bad governance; in Espungabera, the manager changed 4 times since the beginning of the contract. Regarding usage of sanitation facilities, results are less satisfactory. The main challenges concern public sanitation facilities in market places. In terms of household sanitation, the facilities being built during the project (improved latrines) are being used by the population, although the quality of maintenance and cleanliness varies widely from one household to another.	**8**

C.5. Sustainability

Definition: sustainability is concerned with measuring whether the benefits of an activity are likely to continue after donor funding has been withdrawn. Projects need to be environment-friendly as well as financially sustainable.

Overall evaluability of this criterion: ■ medium evaluability

C.5.1. Likelihood of sustainability

Evaluation question n°9: To what extent the design and implementation modalities have enabled to maximise the likelihood of a sustainable and continuous use of the services?

The project was designed and implemented taking into good consideration its sustainability, and mechanisms were put in place at various levels to guarantee this sustainability. The project's strategy for sustainability was based on 2 key elements: (1) firstly, the involvement of national counterparts at all levels (national, regional, district/town) and the alignment with national policies and strategies and use of national mechanisms in place (such as using national procurement through AIAS, SDPI and the local authorities) and (2) secondly, the use of the existing delegated management framework (DMF) which provides for delegation to private operators for service provision. These two elements were well-thought and fundamental to guarantee sustainability.

Regarding the first element, **involvement of national counterpart and alignment with national strategies and procedures enabled to stimulate ownership of national actors over the project therefore encouraging them to play their role in monitoring and supervision also after the project's termination**. In addition, the project included technical assistance and training components which enabled to build capacities sector stakeholders, and the project provided support to government counterparts to establish structures that would allow for the sustainability of the interventions. Yet, the national counterpart's capacity to effectively play its monitoring role remains limited, for reasons that go beyond the projects control.

Overall, it is clear that **the rehabilitated systems belong to AIAS which feels ownership and responsibility over its monitoring and its future expansion. However, AIAS capacities for effective monitoring of and support to the operators are limited**. AIAS has played its role in the project, however, for the time being, AIAS is still very weak in terms of capacities (financial, technical, and HR) to ensure an adequate level of monitoring of the performance of the operators and to provide adequate support and capacity building of the operators. This is an overall challenge in Mozambique which goes beyond UNICEF's project. In fact, based on interviews with AIAS and confirmed by our own analysis, AIAS has insufficient staff in terms of quantity, staff insufficiently skilled/trained on relevant areas (water and sanitation engineering, electro-mechanics and financial management), decreasing government budget for functioning (as it is the case with all public institutions). AIAS has currently 4 regional delegations in the southern, central and norther areas of Mozambique, namely in Zambezia, Inhambane, Cabo Delgado and Nampula, but the level of decentralization is insufficient to efficiently monitor all systems under its mandate. Ulónguè and Espungabera are very far away from any of the regional delegations or headquarters (need 1-day travel with airplane and 4-8 hours' drive). AIAS regularly receives data from the operators but does not analyze the data and provide feedback to the operators. Monitoring visits are sometimes done, and these result in recommendations, but there is no follow-up on the implementation of the recommendations. In addition, AIAS is supporting the operators with materials and equipment (provided by the PO15 program), but the targeting of this equipment is not relevant: for example, AIAS provided a generator to the operator in Ulónguè while this was not needed, and vice-versa, AIAS did not provide the equipment that the operator had requested. **At regional and district level, a very important role is played by the Ministry of water's deconcentrated bodies, the DPOPHRH and SDPI. These have been closely involved in the project at all stages, and are currently still doing some monitoring and follow-up, although limited.** This is something that was promoted and supported by the project, and to complement the above indicated limited decentralized capacities of AIAS. They also suffer of limited resources and limited capacities to correctly ensure this role, and they also feel that they are not totally responsible for these systems which are "AIAS's systems": they don't have the official mandate to play this role (no agreement signed between them and AIAS) and they don't have the information that they will need to correctly do the monitoring (for example, they don't have a copy of the operator's contract; and they receive the monthly reports only very late and after repeated requests). The little monitoring that they are still doing at the

regional level is mainly encouraged by the fact that UNICEF still collaborates with them on other projects and therefore they feel somehow accountable to UNICEF, while at the district and town level, they are encouraged to monitor by the municipalities or the users which sometimes address them with complains (there is a positive "democratic" dynamic in place at this level); however, their capacities at district/town level are very low.

Finally, CRA and its local representations, the CORAL, also plays an important role. UNICEF closely collaborated with CRA, which developed a regulatory framework for each of the towns, including tariff setting and performance indicators and targets, and established the local regulatory bodies which are supposed to monitor the operator's performance, respond to users' complains and contribute to regulation of water supply services at the local level. While the CORAL is operational in Ulónguè (in 2015) and seems to play a useful role, it is not yet active in Espungabera (has been established and trained in early 2017, and their future office has been rehabilitated with UNICEF's support, but is awaiting the official starting date) and CORAL staff doesn't really know what is expected from them.

Photo 15: the CORAL office in Espungabera

Photo 16: SDPI office in Espungabera

UNICEF's project included capacity building efforts addressed to all these stakeholders. As mentioned above, provincial and district technicians benefited from the capacity building initiatives undertaken in conjunction with other provinces. Provincial and district technicians from Manica/Espungabera and Tete/Ulongue benefited from a 5 modules training delivered in conjunction with another WASH in small towns project. In addition, UNICEF "delegated" the capacity building tasks to sector partners such as the contractor (to train the operator) and the PO15 program (to train the operator and AIAS). Yet the PO15 capacity building was very general and not sufficient to address the operators' needs.

Regarding the second element (involvement of private operators), **with respect to water, the decision to follow the DMF and to delegate the management of the two systems to private operators was a good decision in terms of sustainability**. Previous experiences in Mozambique and elsewhere (Kenya, Ouganda, Congo, Burkina Faso, Tanzania, Zambia, Mali, Mauritania, etc.) show that systems in small towns operated by public institutions or community groups tend to be less well-managed and rarely achieve financial sustainability, while on the contrary, local private operators have shown good performances in managing these systems. In Ulónguè and Espungabera, the two private operators currently managing the services are demonstrating good performances which provide good probability for sustainability of the services. The main indicator of potential sustainability is the interest of the operator in continuing managing the services, and for the time being, both operators are interested in pursuing the activity. Although the cash-flow and margin *reported* in Ulónguè both seems negative, the operator explained to us that the financial results are satisfactory for him and that he is not losing money. In Espungabera, the *reported* cash flow of the operator is positive since May 2017 and the *reported* margin is positive since June 2017 (has been on average 20% for the last 3 months). The current tariff for water (which was already increased for Ulónguè after 8 months of operation) therefore seems sufficient to generate a correct profit for the operators, and there are perspectives for increasing this profit in the future, thanks to increased number of clients, and further tariff increases currently under negotiation with CRA. Overall, the observed trends of main performance indicators (technical and financial) lead to a continuous and sustainable use of services.

Regarding sanitation, the choice of involving the private sector in terms of artisans and sanitation marketing, and in terms of private managers for public toilets in markets, was also a good choice, however, results are less encouraging. This could be partially due to the less clear regulatory framework that governs the sanitation sector in Mozambique, and also overall even-more-limited capacities of stakeholders in this area; but also partially due to insufficient adequacy of UNICEF's

strategy to the specific context of the small towns. In fact, UNICEF's strategy for sanitation was a learning-by-doing strategy ("strategic, incremental approach ») which was not very clear since the very beginning, did not have clear targets, and underwent various changes throughout the project implementation following additional information that was gradually made available. Various parallel initiatives were undertaken and the consistency and coherence of all these initiatives is not completely clear. As a consequence, most efforts during project implementation were oriented towards clarifying the sanitation activities and the expected results, and not as many efforts towards consolidating the results and setting up mechanisms to ensure sustainability and follow-up on them.

The artisans that were trained as part of the project are currently showing a variable performance. In Espungabera, of the 08 sanitation artisans that were trained, only 06 continued involved in the project and received a 40.080,00 MT grant (25%) and loan (75%) in June 2015 to boost their business and sell sanitation products. Of these, in October 2016 (last available information), only 30% of the loans had been paid back after 15 months, and the performance of these artisans was judged by Kulima (the local NGO working on social engineering) as « good » for 2 artisans, « satisfactory » for 1 artisan, and « not good » for the remaining 3. Interviews in the town enabled to confirm that the reimbursement rate is still very low today[15], and that rates of sales of slabs are very low and constantly declining.

Photo 17: the estaleiro of 1° de Maio in Espungabera (Felix David)

Regarding public sanitation (public toilets in markets), the situation is also not very promising. In Ulónguè, there is a serious management problem: the operators have been nominated by the market committees and are not accountable to the Municipality, which believes that the infrastructures "belong to the markets". In one market, there is a dispute with the land-owner who claims that he should manage the facility. The management system is not clear and the operators does not know the duration of their mandate. One of the operators, who attended a training with PO15, is investing to diversify the service by building latrine slabs, making a borehole to provide car-wash services and sell water to users, which is a positive trend, however, the situation of the other toilet is deplorable. In Espungabera: the current operator of the market toilet, contracted 3 months ago, is managing 2 public toilets in each of the 2 main markets, and signed a 1-year renewable contract with SDPI. He is not very satisfied with the profit he is generating. He explained that in 1 of the toilets, the existence of a public tap enables him to make some revenues with sales of water, since the revenues generating from sanitation are very limited. He is planning to renew the contract in this market (were incomes are higher thanks to the water tap, and constantly increasing) but abandon the other market since the business there is not profitable. In both towns, the operators regret the very low number of daily users (15-20 in Ulónguè, 20-30 in Espungabera). So overall, in both towns, for half of the trained artisans and half of the sanitation infrastructures built in markets, the observed trends of main performance indicators (technical and financial) lead to a non-sustainable use of services. In addition, the local authorities, although being well aware of the situation, are not pro-actively intervening to solve the problems and are overall playing a quite passive role. Although the Sanitation Plan developed with the support of the project and the PO15 has been approved by the Ulónguè Municipality in February 2016, it does not seem that the Municipality is currently engaged in its implementation. Although the sanitation team of the project was included in the staff of the Municipality, unfortunately no-one of this staff remained after the end of the project. In Espungabera, no Sanitation Plan was developed (since it is not a Municipality, a district-level Plan would

[15] No date was fixed as deadline to reimburse the loan; therefore, this may dis-incentivize the reimbursement.

have been needed, which goes beyond the scope of this project). Yet in Espungabera, the SDPI is very pro-active and has hired one of the sanitation-promotion workers previously working for Kulima to continue working on urban sanitation : this is a good result of the project which has managed to influence local authorities to take a role on sanitation promotion (when it was previously not seen as their responsibility), considering that previously to the project sanitation activities were only focused in rural areas. However, the local authorities may not have the correct tools or incentives to address the sanitation problem, in addition to structural insufficient capacity and resources, and this puts sustainability at risk.

Overall reply to the evaluation question	Score (out of 10)
The project was designed and implemented taking into good consideration its sustainability, and mechanisms were put in place at various levels to guarantee this sustainability. The project's strategy for sustainability was based on 2 key elements. Firstly, involvement of national counterpart and alignment with national strategies and procedures, which positively enabled to stimulate ownership of national actors over the project therefore encouraging them to play their role in monitoring and supervision also after the project's termination. Yet, the national counterpart's capacity to effectively play this role remains limited, and UNICEF's capacity building efforts were mainly indirect and overall insufficient. Secondly, the decision to follow the DMF and to delegate the management of the two water systems to private operators was a good decision in terms of sustainability. Both operators declare that their financial results are satisfactory and that they are willing to continue working in this area in the future. The current tariff for water seems sufficient to generate a correct profit for the operators, and there are perspectives for increasing this profit in the future, thanks to increased number of clients, and further tariff increases currently under negotiation with CRA. Regarding sanitation, the choice of involving the private sector in terms of artisans and sanitation marketing, and in terms of private managers for public toilets in markets, was also a good choice, however, results are less encouraging: about half of the trained artisans are not performing well, sales of sanitation products have declined rapidly, public toilets in markets are not profitable for operators, and the local authorities are not pro-actively intervening to solve the situation.	**8**

C.6. Cross-cutting criteria

Definition: Specific criteria related to this evaluation: Added-value, Equity and Inclusion and Respect of the Environment.

Overall evaluability of this criterion: ■ high evaluability

C.6.1. Added value

Evaluation question n°10: To which extent the project has added value as compared to other sector interventions?

The delegated management framework in small towns in Mozambique applies to 135 small towns under AIAS's mandate. Currently, there are 24 of these small towns (including Ulónguè and Espungabera) which are under delegated management, and the process is gradually expanding. But at the time when the UNICEF's project was developed (in 2011), there wasn't any system already delegated. The first system to the delegated was Moamba in 2014, and Ulónguè was part of a group of 12 towns which were delegated in 2015. UNICEF therefore contributed to the implementation of the DMF by supporting AIAS in rehabilitating and delegating the water networks in 2 small towns under its mandate, and therefore, contributing to expand the DMF in 2 additional towns in Mozambique, and **by supporting this DMF process from the very beginning, UNICEF created a positive dynamic to leverage funds from other donors which started investing in this area** (EU, AusAid, World Bank, AfDB, Canada).

UNICEF's project's first added-value in terms of contribution to the DMF set-up is to be seen in the implementation modality of **handling the procurement process at the regional level through the DPOPHRH,** and, generally, encouraging a strong role plaid by the regional and district level authorities within the DMF. This is a positive innovation since it enables to manage the project at a level which is more decentralized and closer to communities, increasing ownership at regional level. In addition, the procurement process done at regional level seems more efficient as compared to the national level. UNICEF's strategy of promoting the regional and district level, to complement the weaknesses of the national level, is innovative as compared with other interventions in small towns in the country, where this linkage is weaker / absent. The engagement of these stakeholders (particularly at district / town level) is something that contributes to the sustainability of the intervention.

A second added-value of UNICEF's project was **the project's capacity to integrate with other initiatives, and namely, the PO15 program** also funded by the Government of the Netherlands. The synergies with this program were numerous. First of all, the operator in Ulónguè benefitted from the trainings done by the PO15 program, and later on, the operator in Espungabera also benefitted as UNICEF advocated for the inclusion of this towns in the PO15 (later PO35) program. Secondly, the PO15 provided support for the establishment of the Sanitation Plan in Ulónguè. Finally, the operators in the 2 towns benefitted from the management tools developed by the PO15 program (namely the template for monthly reporting, the business plans, the billing software, etc.).

A third added-value of UNICEF's project, though less documented, was the projects **tentative to adapt the "PEC zonal" approach to a small-town environment.** This was done through the "strategic, incremental approach » mentioned above. Although the results of this approach are mitigated, UNICEF has the merit to be one of the first cooperation agencies in Mozambique to address this challenging area of sanitation promotion in small-towns, which combine both rural and urban challenges. Yet, in order for this experience to be translated into lessons-learned for the sector, an effort to assess the strengths and weaknesses of the experience is required. This is currently being done under the AGUASANI project, and advocacy with AIAS already started, including exchange learning visits to project.

Last but not least, a fourth added value has been **the change in the approach for the implementation of water supply interventions secondary cities by AIAS**. Before the project, a design and build approach was used by AIAS as the standard approach (and therefore used for Ulongue). Due to the evidence-based advocacy made by UNICEF (based on the lessons learnt from the Ulongue project), this approach has since been changed to a staged approach of technical designs and construction being done in two separate contracts, which is better suited to cover the inherent challenges and uncertainties of the interventions related to the construction / rehabilitation of water supply systems in secondary cities under AIAS jurisdiction.

Overall reply to the evaluation question	Score (out of 10)
By supporting AIAS in the DMF process since the very beginning, UNICEF created a positive dynamic to leverage funds from other donors which started investing in this area. UNICEF's project's first added-value in terms of contribution to the DMF set-up is to be seen in the implementation modality of handling the procurement process at the regional level through the DPOPHRH, and generally, encouraging a strong role plaid by the regional and district level. A second added-value of UNICEF's project was the project's capacity to integrate with other initiatives, and namely, the PO15 program also funded by the Government of the Netherlands. A third added-value of UNICEF's project, though less documented, was the projects tentative to adapt the "PEC zonal" approach to a small-town environment. Finally, a last added-value was in changing the approach for rehabilitation of AIAS's networks from a "design and build" model to a staged approach of technical designs and construction being done in two separate contracts.	**8**

C.6.2. Equity and inclusion

Evaluation question n°11: To which extent UNICEF's project has involved and benefited the most vulnerable: children, women, the elderly or the disabled, the disadvantaged?

As mentioned in the "Relevance" criteria, the evaluation team did not find any evidence of the fact that the situation analysis prior to the development of the project proposal was conducted using a gender or equity-lensed approach. **Globally, the priority groups (poor, women and children, disabled, etc.) were not properly identified during the design phase and the equity lens of the project is rather limited**. As a result, very few equity-oriented measures were proposed to specifically target the poorest users. In addition, it seems that vulnerable people (except women) have also not been specifically involved in the project's activities at the various stages of the project cycle, and this made it difficult to take into account their specific opinions, needs and priorities. UNICEF did not make contact with any group or association working with vulnerable groups nor with the respective ministries (ex. Açcao Social) to support in the identification and involvement.

With respect to water services, the design of the systems included public standposts which were supposed to benefit poor users. While it has been partially confirmed that these are being mainly used by poor households; **yet, the project did not take put in place enough safeguards to avoid the closing-down of stand posts due to low rentability, for example, by setting up a viable management mechanism,** in order to avoid penalizing the poor. A consequence of the closing down of stand posts that has been observed in the small towns is water selling from richer households which have a private connection, to poorer neighbours which cannot afford a connection, at a very high price. Generally, the water resale to neighbors at a very high price has been observed in both towns, independently from the closing-down of public standposts (ex. in Espungabera, 2,5 mt/20l for water reselling to neighbors vs. 1 mt/20l in the public standpost). For the poor households, this situation is preferable than the previous situation (otherwise, they wouldn't be buying the water); and both rich and poor neighbours are benefiting; Yet, the richer are benefitting much more than the poorer. While "regulating" this informal water selling activity is very delicate, the project could have made some more efforts to assess the phenomenon and sensitize rich users on being more generous with neighbours or at least, on selling at a "correct" price.

On the other hand, based on the assumption that poor users would primarily use public stand posts, **no specific measure was taken to facilitate their access to domestic connections. For example, no guideline was provided to project implementing partners to orient the targeting of the initial for-free connections to poor or vulnerable users** (the only criteria provided was that these connections were to be provided in priority to the users of the ancient system). Yet, most vulnerable people interviewed mention that the main obstacle to access of water services is not the payment of the monthly fee but rather the connection fee, which is still very high (even after the "discount"). No evidence was found that the operators are allowing households to pay the connection fee in instalments to facilitate the process (as originally planned and as mentioned in UNICEF's progress report). **Similarly, on the tariff side, CRA focused on the overall flat rate, without experimenting a tariff structure that**

would specifically target the poorest users (for example, by allowing for an initial amount of free water or by identifying specific categories of users that could be exempt from payment etc.).

On the sanitation component, in the design of sanitation facilities, some efforts were made to address the needs of the vulnerable namely people with disabilities: one cabin for people with disabilities was constructed in the public toilet in Ulónguè, and the designs for household slabs included variations for the disabled. However, **no consultation of potential users and no analyses of the demand for this disabled-friendly sanitation equipment was done, and in the end, these mechanisms proved not to be effective**. The cabin of the public toilet is used as a warehouse (see photo below).

Photo 18: Public sanitation facility in Ulongue: cabin for people with disabilities used as warehouse

The sanitation infrastructure that was developed specifically targeting people with disabilities, namely, the "cadeira do rei" (a slab including a cement seat), ended up being more expensive than the other types of latrines (875 mt instead of 700 mt) since it uses more cement to be built, and as a consequence, it is not being sold. In Espungabera, not 1 single case of this type of latrine was identified in town except the demonstration latrine built during the training. Yet, the stakeholders interviewed all agreed that these types of latrines are preferable for vulnerable people, not only people with disabilities but also the elderly, children, pregnant women, etc. However, as for water, there was no indication given to the implementing partners that the initial demonstration latrines should be given to poor households. The price seems to be the main obstacle to access. The artisans have encouraged payment in instalments and this has facilitated sales, yet, the price remains too high for vulnerable households.

Finally, as mentioned above, the M&E system for the project is lacking, and this penalizes also the equity aspect, since it doesn't allowed UNICEF to report progress in this respect. In UNICEF's annual progress reports, there is no information on the equity and inclusion aspects of the project, and neither in the reports of the implementing partners. The overall absence of a logical framework and the limited disaggregation of the project's target indicators don't facilitate the M&E of the equity and inclusion aspects either.

Overall reply to the evaluation question	Score (out of 10)
Globally, the priority groups (poor, women and children, disabled, etc.) were not properly identified during the design phase and the equity lens of the project is rather limited. In addition, it seems that vulnerable people (except women) have also not been specifically involved in the project's activities at the various stages of the project cycle, and this made it difficult to take into account their specific opinions, needs and priorities. With respect to water services, the design of the systems included public standposts which were supposed to benefit poor users, yet, the project did not take put in place enough safeguards to avoid the closing-down of stand posts due to low rentability. Also, no specific measure was taken to facilitate the access of vulnerable groups to domestic connections. No guideline was provided to project implementing partners to orient the targeting of the initial for-free connections to poor or vulnerable users. In the design of sanitation facilities, some efforts were made to address the needs of the vulnerable namely people with disabilities; yet, no consultation of potential users and no analyses of the demand for this disabled-friendly sanitation equipment was done, and in the end, this equipment is not being used. Finally, the M&E system for the project is not equity-lensed as to allowed UNICEF to report progress in this respect.	**5**

C.6.3. Respect of the environment

Evaluation question n°12: To which extent the project has contributed (or not) to improving the environment and management of natural resources?

Overall, the project was respectful of the environment and of the principles of IWRM. The works did not create any major negative impact, at the same time, the water resource used for the systems was not withdrawn from any other previous usage (ex. for agriculture or industry), not penalizing any preexisting economic activity.

Yet, one negative impact on the environment identified is related to the increase in waste water production at household level not being sufficiently addressed. In fact, in some household the increasing availability of clean water thanks to the project, has produced an increased production of waste water, sometimes resulting in stagnant water in the yard, since an adequate drainage system has not been constructed (see photo). This can increase environmental pollution (especially due to the use of soap and cleaning products) and can increase the risk of contamination of some water-borne diseases and the proliferation of mosquitos.

In addition, the project did suffer from some weaknesses in terms of taking into consideration the risk of pollution of the water sources used by the network. Particularly in the case of Espungabera, the water sources from the system are in an area where there are many natural sources and rivers and where the population currently practices many water-related activities such as: bathing, washing the clothes and the dishes, etc. **The intake works for the system in both towns do not have any perimeter of protection,** therefore, these human activities going on near the sources directly impact the quality of water resources through a risk on contamination (and potentially increasing treatment costs for the operators).

Finally, environmental impact assessments were not undertaken for the rehabilitation works (while this is consistent with national legislation, such assessments would have been desirable from an environmental perspective).

Photo 19: Stagnant water in a household near the new connection in Espungabera

Photo 20: A woman washing clothes near the source of the Espungabera network

Overall reply to the evaluation question	Score (out of 10)
Overall, the project was respectful of the environment and of the principles of IWRM. Yet, one negative impacts on the environment identified is related to the increase in waste water production at household level not being sufficiently addressed. In addition, the project did suffer from some weaknesses in terms of taking into consideration the risk of pollution of the water sources used by the network, since the capture works for the system in both towns do not have any perimeter of protection, therefore, human activities going on near the sources create a risk on contamination (and potentially increasing treatment costs for the operators). Finally, no environmental impact assessment was undertaken for the 2 towns as these are not required according to the current legislation guiding the implementation of EIAs in Mozambique (Decreto 45-2004).	**7**

D. Conclusions

D.1. Overall conclusions

D.1.1. Overall evaluation results per evaluation question

Relevance
EQ n°1: Has the project been adequately designed?
The overall design of the project was reasonably adequate. Quality of the situation analysis was fair as far as water supply is concerned but there was no assessment of initial coverage rates, and situation analysis for the hygiene and sanitation component is considered weak. The risk assessment was relevant and has proven adequate. The project was designed in a participatory manner. Unfortunately, the VfM analysis was absent and the budgeting was inaccurate at the beginning, although this was later on addressed in the extensions being agreed and granted by the donor. The project design was not based on any Logical Framework nor Theory of Change and expected outcomes, outputs and activities were not clearly linked.
EQ n°2: Has the project been aligned and consistent with national priorities and policies?
The project has been aligned and consistent with national priorities/policies in a satisfactory manner. The project design took into consideration the latest developments of the institutional framework (2009) and has been consistent with the water sector policies. The project was also designed in a participatory manner with the influence of national and local stakeholders. The decision to focus on WSS services in small towns (not UNICEF's initial area of focus) was a way to meet the water sector's priorities both geographically and in terms of management model.
EQ n°3: Has the project answered the needs of the priority groups?
The project answered the needs of the priority groups to a limited extent only, in contradiction with the project's overall goal. The priority groups were not properly and specifically identified nor targeted in the initial design of the project, and this flaw has not been corrected in the project implementation. Construction of public tap-stands was the strategy for reaching those who could not be reached with the network that could be implemented with the existing budget. However, this strategy was not adequate, and no measure was taken to avoid closing-down of public tap-stands in Ulongue. As a result, the equity lens of the project was not sufficiently developed, would it be for water or for sanitation; and this aspect of the project design makes it almost impossible to measure the effects or impact of the project on the potential priority groups: poor, women and children, disabled, etc. To nuance this overall poor performance in terms of targeting of addressing poor users, priority groups in terms of capacity building were properly targeted.
Effectiveness
EQ n°4: Have the initial targets been met by the project?
The effectiveness of the project is evaluated as being relatively low with respect to water supply, a bit higher for sanitation. The project suffered from the lack of clearly defined targets and indicators (to be linked to the poor design of the project, see relevance) which make it difficult to evaluate this aspect. The water systems were effectively rehabilitated in the 2 towns, the systems were correctly dimensioned according to the expected users, and the quality of the infrastructures is good; however, the number of current beneficiaries is well below the target number of beneficiaries declared in the project proposal. This is due to the fact that the target in the project proposal was (implicitly) referred to the potential users for which the systems have been dimensioned, and not to the expected users at the end of the project implementation. While UNICEF and its government partners made a **conscious choice to privilege future users instead of present users**, this choice is questionable from an effectiveness perspective, since there is no guarantee that these potential users will really benefit from the service in the future (many conditions are needed, some of which are not likely to happen / are currently not planned).

EQ n°5: Have the activities, outputs and outcomes been properly monitored?

The quality of the monitoring is considered average, considering the absence of initial targets and accurate and robust indicators.

The absence of a sound M&E framework and especially the lack of accurate, well thought-through and robust indicators clearly appear to be a weakness both of the project. However, this weakness was partially compensated by systematic monitoring (combined with technical support) that was made on the implementation of activities in the field, including the contracting of Engineering Consulting Firms for Supervision of construction works and in all stages from technical assessments and designs, tendering, implementation of activities on ground, capacity building, etc., as well as strong efforts of the UNICEF team to monitor activities with frequent stakeholders' meetings and field missions. After the end of the project, follow-up was ensured by AIAS with UNICEF's support and there was a coordination with AIAS and PO15 for ensuring that the Operators of these two systems comply with the national reporting requirements (based on a very sophisticated national template not related to the project). No particular concern was raised by stakeholders regarding the financial and operational reporting of the project.

Efficiency

EQ n°6: Have the project resources been used in an efficient way?

Overall efficiency of the project is considered average.

Based on the actual number of beneficiaries used in the framework of this evaluation, the average project cost per capita is 270 USD for water and 200 to 240 USD for sanitation. This unit cost seems relatively high if compared to other projects in Mozambique (although in line with estimates by Mozambican public institutions) and could probably have been reduced. Yet, the project's investments were made for a population that is bigger than the number of people connected to the system today (dimensioned to cover projected population in 20 years-time). In fact, the number of users is increasing over time, so we could also say that the unit cost per user is similarly decreasing over time and will continue to decrease for still a few years. The initial duration of the project (4 years) was extended by 50%, which is not unusual for this type of intervention, but negatively contributed to the efficiency.

Impact

EQ n°7: What are the main impacts perceived by the beneficiaries and the project key stakeholders?

According to the perception of beneficiaries, the project brought positive changes in terms of increased access to basic services, especially water and to a lesser extent, sanitation. However, the current limited coverage of the networks (less than half of the towns' population) had significantly limited the project's potential impact, although this was a deliberate choice made by UNICEF and by national counterparts (prioritization of future users instead of present users).

A negative impact of the project is that the increasing number of household connections(as per design and agreement) has reduced water consumption at public stand posts, leading to closing down of some stand posts (1/6 in Espungabera and 7/8 in Ulongue) and forcing the poor population to purchase expensive water from neighbours or turn to unprotected sources

EQ n°8: Are the project results being actually used by the beneficiaries?

The rehabilitated water networks in the two towns are currently being used by the beneficiaries. However, while private connections are functioning well, the public standposts are not functioning as expected: and many have been closed due to non-payment (8/8 in Ulongue). The quality of operation and maintenance is overall satisfactory but varies depending on the operator's capacity, and is higher in Ulónguè, more challenging in Espungabera. Both operators face challenges due to quality of staff. Regarding usage of sanitation facilities, results are less satisfactory. The main challenges concern public sanitation facilities in market places. In terms of household sanitation, the improved latrines built during the project are being used by the population, although the use is not always correct and maintenance is sometimes poor (40% of latrines visited).

Sustainability
EQ n°9: To what extent the design and implementation modalities have enabled to maximise the likelihood of a sustainable and continuous use of the services?
The project's strategy for sustainability was based on 2 key elements: Firstly, involvement of national counterpart and alignment with national strategies and procedures, secondly, the involvement of the private sector for the management of the services. The strategy was sound and gave good results in terms of sustainability: the national stakeholders feel responsible over the services and the private operators are managing the water systems with good performance and good profit perspectives. However, the national counterpart's capacity to effectively play their monitoring role remains limited. Regarding sanitation, results of private operators are not very positive, and the local authorities are not pro-actively intervening to solve the situation.
Added value
EQ n°10: To which extent the project has added value as compared to other sector interventions?
By supporting AIAS in the DMF process since the very beginning, UNICEF created a positive dynamic to leverage funds from other donors which started investing in this area. UNICEF's project's first added-value in terms of contribution to the DMF set-up is to be seen in the implementation modality of handling the procurement process at the regional level through the DPOPHRH. A second added-value of UNICEF's project was the project's capacity to integrate with other initiatives, and namely, the PO15 program also funded by the Government of the Netherlands. A third added-value of UNICEF's project, though less documented, was the projects tentative to adapt the "PEC zonal" approach to a small-town environment. Finally, a fourth added-value has been the change in the approach for the implementation of water supply interventions secondary cities by AIAS, from a design and build approach to a better suited approach of technical designs and construction being done in two separate successive contracts.
Equity and inclusion
EQ n°11: To which extent UNICEF's project has involved and benefited the most vulnerable: children, women, the elderly or the disabled, the disadvantaged?
Globally, equity was not included into the project proposal and equity agenda was not reflected in the program objectives from the start. The priority groups (poor, women and children, disabled, etc.) were not properly identified during the design phase and with the exception of women, they have also not been consulted nor specifically involved in the project's activities. The design of the systems included public standposts which were supposed to benefit poor users, yet, not enough safeguards were taken to avoid the closing-down of stand posts, and no specific measure was taken to facilitate the access of vulnerable groups to domestic connections. The design of sanitation facilities included specific latrines for people with disabilities; yet, the demand had not been evaluated, and this equipment is ended-up not being produced/used. Finally, the the M&E system for the project is not equity-lensed and data is not disaggregated.
Respect of the environment
EQ n°12: To which extent the project has contributed (or not) to improving the environment and management of natural resources?
Overall, the project was respectful of the environment and of the principles of IWRM. Yet, one negative impacts on the environment identified is related to the increase in waste water production at household level not being sufficiently addressed. In addition, the project did suffer from some weaknesses in terms of taking into consideration the risk of pollution of the water sources used by the network, since the capture works for the system in both towns do not have any perimeter of protection, therefore, human activities going on near the sources create a risk on contamination (and potentially increasing treatment costs for the operators). Finally, environmental impact assessments were not undertaken for the rehabilitation works (while this is consistent with national legislation, such assessments would have been desirable from an environmental perspective).

D.1.2. Evaluation scores per evaluation question and per criteria

Relevance	EQ n°1: Has the project been adequately designed?	**6**	
	EQ n°2: Has the project been aligned and consistent with national priorities and policies?	**10**	
	EQ n°3: Has the project answered the needs of the priority groups?	**5**	
Effectiveness	EQ n°4: Have the initial targets been met by the project?	**5**	
	EQ n°5: Have the activities, outputs and outcomes been properly monitored?	**6**	
Efficiency	EQ n°6: Have the project resources been used in an efficient way?	**6**	
Impact	EQ n°7: What are the main impacts perceived by the beneficiaries and the project key stakeholders?	**7**	
	EQ n°8: Are the project results being actually used by the beneficiaries?	**8**	
Sustainability	EQ n°9: To what extent the design and implementation modalities have enabled to maximise the likelihood of a sustainable and continuous use of the services?	**8**	
Added value	EQ n°10: To which extent the project has added value as compared to other sector interventions?	**8**	
Equity and inclusion	EQ n°11: To which extent UNICEF's project has involved and benefited the most vulnerable: children, women, the elderly or the disabled, the disadvantaged?	**5**	
Respect of the environment	EQ n°12: To which extent the project has contributed (or not) to improving the environment and management of natural resources?	**7**	

D.2. Lessons learned

Note: some of these lessons learned have been selected and adapted from the lessons learned included in UNICEF's 3° and 4° annual progress reports; others present new ideas from the consultants' own analysis.

Small towns water services:

- A throughout risk assessment exercise is very important when intervening in small towns, especially when initial data is lacking or incomplete and when a new institutional set-up is being put in place (unknown to local stakeholders).
- Meeting the water supply needs of small towns with large dispersed populations requires varied technological solutions rather than merely the rehabilitation of the piped water system. In combination with the main town piped system upgrading, satellite neighborhoods unreachable by the system should still gain improved water supply through dispersed water points or 'mini-systems'.
- The design-and-build model is not the most appropriate for the rehabilitation and expansion of water supply systems in small towns of Mozambique. The systems need new conceptual studies and in-deep analysis which are not in line with a design-and-build model.
- Proper design of the water supply system is a key component for the success of the project and sufficient time and budget should be allowed for this activity. Without adequate design or with inconsistencies in the design, there is a high chance that there will be delays with implications on the quality of the works.
- Before the start of a project a separate feasibility study, focused only on the water source, should be carried out. The design of the water system components are dependent on the water source selected. The full scope of the project can only be determined after the definition of the type of water source (for e.g. if there will be a water treatment plant).
- Electricity supply is a challenge in Mozambique and must be a criteria for selection of design solutions. Not all towns have reliable electricity supply and the needs for a generator, and related O&M requirements, should be considered from the onset.

Management of Water services:

- The mechanisms put in place by the project to guarantee the sustainability of the management of the water systems were good and worth reproducing in future projects, namely, the involvement of national counterpart especially at regional and district level, the alignment with national strategies and procedures for procurement, the delegation to private operators under a contractual agreement with AIAS according to the DMF, and capacity building of sector stakeholders: all this enabled to stimulate ownership of national actors, and therefore encourage monitoring and follow-up on the operators' performance.
- The launch of the bid for the operator 4 months before the end of the infrastructure works was a good timing: it enabled to involve the operator in the final stages of the networks construction and hand-over and it enabled the constructor to provide a training to the operator. It is crucial that the handover of the construction works is done at the same time as the handover of the system to the operator. This allows the operator to receive the system immediately after the construction finishes and assess its technical conditions. It also ensures an ideal knowledge transfer from the contractor to the operator, overseen by AIAS.
- The training in the practical operation of the system provided by the contractor at the end of the construction works must be attended by the local authorities. The local authorities need to always be involved as they are the ones which will be the main government agent for the system, even if the operator changes.
- It is too optimistic to expect that the private operator will make significant efforts to expand service levels unless this is clearly stated as a target in the delegation contract, and significant (financial) incentives are provided to the operator to compensate to the efforts undertaken.

Small towns peri-urban sanitation

- Timing of water supply and sanitation interventions is a key determinant for success in sanitation actions as there is little point in promoting sanitation, health and hygiene promotion activities in the absence of water supply.
- An appropriate strategy tor small-town and peri-urban sanitation includes a variety of demand creation (through PHAST and similar IEC techniques) and supply provision (such as sanitation marketing) approaches. Yet, these approaches need to be inserted into a regular activity to be implemented regularly by the local authorities, and need to be coupled with sanction and regulation mechanisms, otherwise, results will not be sustainable.
- The delegation of the management of public toilets in market places to private operators is a good strategy and it is important that the operator is officially contracted by the Municipality or SDPI. In addition, it is important that the market authority informs users about the prohibition to urinate or defecate outside the public toilet, and that sanctions are officially approved by the authorities and published in a public place, and that control measures are taken to apply the sanctions.
- The sanitation contest between neighborhoods was a good initiative to stimulate households to invest in their own equipment and to motivate communities. However, this initiative did not become a regular activity of the local authorities (ex. annual competition) but remained a single initiative.
- Payment in instalments for sanitation equipment (slabs) was a very good strategy to facilitate purchase from households, it enabled to increase sale rates and was much appreciated by users.

D.3. Recommendations

D.3.1. For UNICEF

1. Logical framework:
   - 1.1. Proceed to the development of a logical framework and/or theory of change for future projects.
   - 1.2. If a project suffers from initial lack or inadequate logframe, it is possible to develop a logframe or update the logfram at any stage of the project to fill-in this initial gap.
   - 1.3. The logframe should include a precise set of indicators (for activities, results and impacts)
   - 1.4. The indicators in the logframe should be equity-lensed: Establish an M&E system which enables for more data disaggregation including taking more into account the E&I dimensions.
2. Budgeting:
   - 2.1. Proceed to a more accurate cost-estimation for budgeting of future interventions in small towns, based on previous experience.
   - 2.2. A distinction needs to be done in project proposals between project beneficiaries (people gaining accesso to water as an immediate consequence of the project) and future potential users of the network.
   - 2.3. The calculation of unit costs should include indirect costs (related to project management, capacity building, etc.) and not exclusively construction costs.
   - 2.4. Include in the budget sufficient secondary and tertiary network to cover the whole towns in order to maximize the immediate direct impact of the investment. In the case where budget is limited, privilege intervening only in one town (instead of various) but make sure to maximize the immediate impact of the intervention through a comprehensive network, or, alternatively, ensure co-funding from AIAS (or the Municipality) to expand the network but make sure this investment is done at the same time of the project (make it a condition).
3. Baseline and endlines:
   - 3.1. Develop baseline studies (household survey) at the beginning of the project (first activity) in order to have a clear idea of the initial situation of access to water and sanitation; this study should include an equity & inclusion focus.
   - 3.2. At the end of the project, develop end-line study made with the same exact methodology (and possible by the same consultant or NGO) to evaluate changes in access to service.

4. Sanitation:

   4.1. Proceed to assess more in detail the sanitation activities (though a participatory capitalization exercise including implementing partners) and identify lessons learned for intervening in peri-urban and small-towns environments.

   4.2. Based on these lessons learned, reunite all sanitation promotion activities and interventions into a consistent and coherent strategy or approach well defined in a written document available to guide all implementing partners and national counterparts (in the format of a guide or manual, such as UNICEF's manuals available on WASH-in-school). This work of capitalization and development of a manual can be done by the UNICEF team or by an external consultant.

5. Equity and inclusion:

Work with national counterparts to push the equity and inclusion agenda, including:

   5.1. Establishing an OBA mechanism: social connections to the water networks and subsidies for on-site sanitation

   5.2. Include equity and inclusion messages in the community awareness campaigns

   5.3. Include in the baseline studies a site-by-site mapping of vulnerable groups with specific indicators

   5.4. Train public toilet operators and water system operators on equity and inclusion (priority targets: women, elderly and disable persons, 2 lowest wealth quintiles)

   5.5. Instructing operators to allow for payment in installments for private connections (target: 2 lowest wealth quintiles)

   5.6. Revision of AIAS's M&E system to include equity-based indicators that would capture the poverty and gender aspects, as well as the need to measure the access to services of the most vulnerable groups

   5.7. Setting-up an efficient mechanism for the management of public stand posts, to avoid closing down of these water points which primarily benefit poor households

   5.8. Support CRA in economic regulation: assess the affordability of the revised tariffs, and support the establishment/strengthening of pro-poor tariffs: end-user bucket-tariff (not m3 tariff) for public stand posts and social package for private connections (lower rate for the 3 first m3)

   5.9. Undertake a robust WTP survey in a representative sample of small towns, to assess the variability of WTP for better services (connections and stand posts) against the wealth quintiles, the socio-economic groups and, last but not least, the link with the population's spatial distribution

   5.10. Train CORAL on equity and inclusion and support it's role in assessing users' availability and capacity to pay and in identifying poor users / help targeting poor users for specific interventions

D.3.2. For public institutions

- ***AIAS***

- Increase monitoring efforts and analyze data received from operators to provide feedback to them on how to improve service levels
- Train staff of municipalities or SDPI on the type of monitoring they need to do of the operator. This should start with the definition / clarification / better understanding of the role of the Districts / Municipalities in the operation and management of the water supply system under the DMF : a joint technical working group AIAS +DNAAS could be established to discuss this issue and legally establish an operational partnership.
- Develop a strategy to better involve municipalities in the monitoring of the operators, considering the collaboration with them as an opportunity
- Provide for independent auditing of the operators
- Improve clarification over responsibilities for network expansions (both in the contract and in the divulgation / information of stakeholders at different levels)

- Improve cooperation with CRA on the monitoring of the regulatory framework. The regulatory mechanisms needs to be improved especially through: direct line of communication between CORAL's and AIAS (ex. have 1 focal point to deal with CORAL's within AIAS), better information exchange on the systems (cross-check of data between AIAS and CRA), joint monitoring missions, joint efforts to benchmark operators (through publications or public meetings or competitions) in order to encourage competition based on performance.
- Set more realistic targets for operators (targets that depend on the operators and not on AIAS: for example, in terms of household connections, the operators will soon achieve the maximum possible connections within the current network and will require AIAS to invest in secondary network to be able to reach additional users) and regularly assess the level of improvement towards these targets
- Better communicate with DPOPHRH/SDPI and share key documentation/contracts, sign an agreement to determine SDPI's role in daily monitoring in the place of AIAS
- For the system in Espungabera: invest in rehabilitating/expanding the capture works
- For both systems: invest in expanding the secondary and tertiary network

- ***CRA***

- Improve cooperation with AIAS on the monitoring of the regulatory framework (see above under "AIAS")
- Assess the utility and relevance of the CORAL mechanism to determine whether to change the mechanisms or how to strengthen it. CRA is currently planning a study on this, since there are many weaknesses observed, such as: CORAL members are not skilled enough to exercise a regulatory function and still have a quite vague idea of their roles and responsibilities; they are still not well known by the population and lack credibility, part-time functioning creates some challenges, etc. (see DMF report by the same authors).
- Provide support to AIAS to revise the operators contract to increase their duration and better clarify responsibilities and targets for network expansion. While the Operators' contract is under AIAS responsibility, it is the role of the regulator to make sure that this contract allows to correctly balance the interests of the various parties and includes the correct incentives to maximise service quality at minimum price, bearing in mind users' interests (especially poor users).

- ***DNAAS/DPOPHRH/SDPI***

- Sign a cooperation agreement with AIAS to better clarify the roles for monitoring
- Increase the budget allocation for monitoring activities
- Collaborate with the Municipal authorities to introduce a system of sanctions for users who are not respecting correct hygiene / sanitation practices (ex. open defecation or unappropriated waste management)

D.3.3. For local authorities

- Request to receive a copy of the operator's contract (District Administrators participate in the contract signing as witnesses and therefore have access to the contracts, however, the final counter-signed version is sometimes "lost" in the administrative dungeon) and make this available to the WASH technician (don't store it only at higher hierarchy levels)
- For Municipalities, introduce a system of sanctions for users who are not respecting correct hygiene / sanitation practices (ex. open defecation or unappropriated waste management). For SDPI and District Administrations, explore what legal means are available to enable a similar intervention.
- Organize public meetings to explain the role of CORAL to users and increase collaboration with CORAL to jointly address complaints received by either institution, and use other communication media (as radios) to disseminate this and other messages.
- Make sure that all invoices for public administration institutions are paid including arrears
- Play a more active role in sanitation, organizing activities such as the sanitation competition to encourage the communities

D.3.4. For service operators

- Follow-up on recommendations that are regularly provided by sector institutions (AIAS, DPOPHRH/SDPI, Municipality, CRA) and donors
- Allow for payment in installments for the private connections. This should not be done on an ad-hoc basis or as part of a promotion, but should be a regular option for payment.
- Set-up, with the support of sector institutions, an efficient mechanisms for the management of public stand posts that avoid closing them down
- Share more information with the local management staff in order to responsibilize them and enable them to better discuss with and respond to queries by local stakeholders (especially in Ulongue, where the whole management is based in Maputo)
- In Ulónguè: increase distribution hours. Currently, the system provides water 6 hours/day. No clear explanation was provided or identified to explain this limited service hours. This could be due to a limited capacity of the manager who is only distributing water when the pumps are operating (to fill-in the reservoirs), instead of enabling a longer period of distribution beyond pumping hours by exploiting the gravity system.
- In Espungabera: keep record of the pumping hours to better control power consumption and equipment performance, keep under close control the fracturing of the capture works (which are currently leaking and enabling water to ex-filtrate) and if the fractures become more important, inform AIAS on any need for major repairs/interventions

D.3.5. For donors

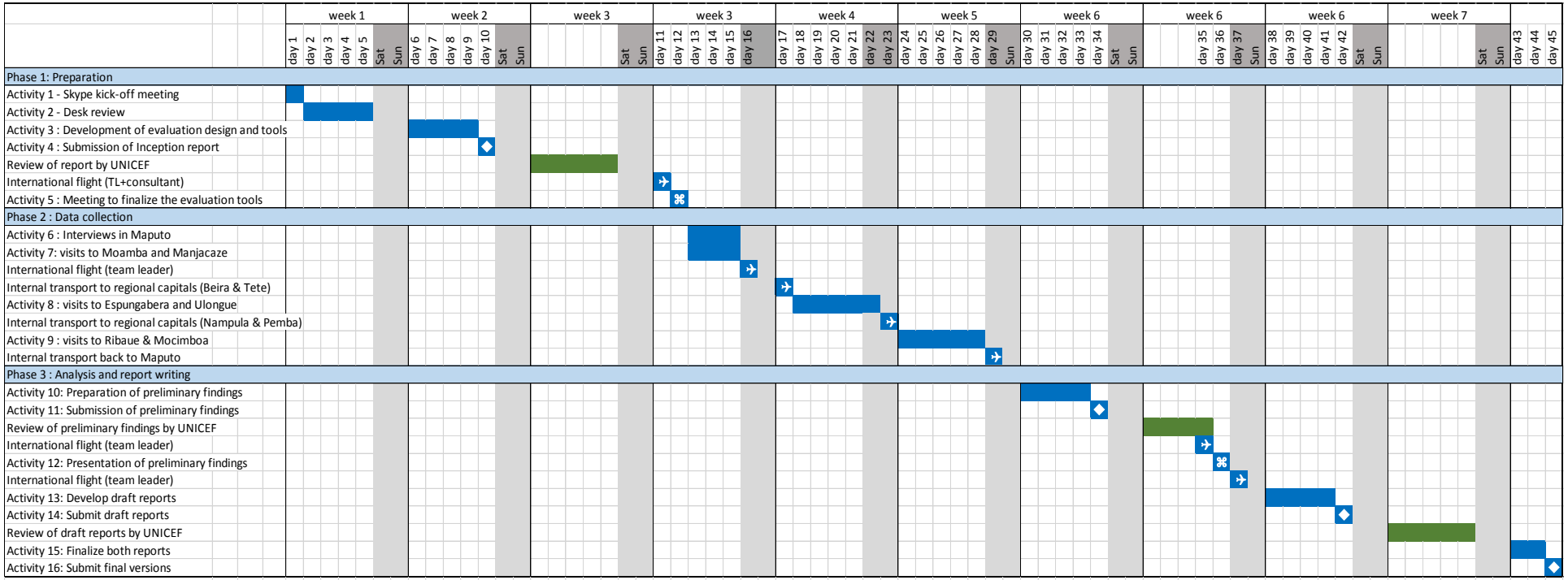
- Keep investing in small towns water systems with significant interventions in many towns in parallel in the same region to enable to achieve economies of scale Provide sufficient funds to cover extension of systems with 100% coverage (as per the recommendation indicated above). Currently, the amount of funding being allocated is insufficient to achieve a 100% coverage, and this leads to the difficult choice of whether to prioritize investing on system's capacity or on network coverage.
- Increase the requirements in terms of Value for Money of projects (which does not mean, lower per-capita unit costs, but maximization of results with the same inputs). In fact, unit cost for this kind of interventions should be considered around 230-300 USD/capita. Projects with lower unit costs should be considered as providing insufficient quality and/or insufficient coverage.
- Focus on sector governance improvement mechanisms
- Establish a fund for small towns with very strict criteria
- Support AIAS with a strong and long-lasting technical assistance
- Support long-term projects and programs in small towns

E. Annexes

E.1. Work plan for the assignment

E.1.1. Overall work plan

Figure 1: Work plan for the assignment



Expert Level of Effort	H	F	T	day 1	day 2	day 3	day 4	day 5	Sat	Sun	day 6	day 7	day 8	day 9	day 10	Sat	Sun	Sat	Sun	day 11	day 12	day 13	day 14	day 15	day 16	day 17	day 18	day 19	day 20	day 21	day 22	day 23	day 24	day 25	day 26	day 27	day 28	day 29	Sun	day 30	day 31	day 32	day 33	day 34	Sat	Sun	day 35	day 36	day 37	Sun	day 38	day 39	day 40	day 41	day 42	Sat	Sun	Sat	Sun	day 43	day 44	day 45
Team Leader	7,0		16,0	0,5		0,5		0,5			0,5		0,5		0,5																												1,0	1,0																								0,5
field		9,0																		1,0	1,0	1,0	1,0	1,0	1,0																							1,0	1,0	1,0															
Consultant 1 - international	12,0		26,0	0,5	0,5		0,5	0,5			0,5	0,5		0,5	0,5											1,0	1,0	1,0	1,0	1,0	1,0	1,0										1,0	1,0												1,0	1,0	1,0	1,0	0,5					0,5	0,5	0,5
field		14,0																		1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0																																	
Consultant 1 - national	6,0		20,0																		1,0																			1,0	1,0	1,0										1,0					0,5	0,5							
field		14,0																					1,0	1,0		1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0																															

E.1.2. Main steps / key dates of the assignment

Updated time frame following the kick-off meeting:

- July 26th: start of assignment (Skype kick-off meeting);
- End of July to mid-August: desk review and development of data collection tools (evaluation matrix, interview guides, observation check-lists);
- August 20th: submission of the draft inception report (including data collection tools);
- September 26th - October 12th: field mission (TL for the 1st week, assistant TL for 1st and the 2nd week, national consultant for all 3 weeks). Please note the need to have a meeting with UNICEF, CRA and AIAS on Sept 26 to validate the methodology and tools;
- October 16th-20th: data analyses and writing of draft report;
- November 14th : submission draft report;
- November 28th and 29th : presentation of draft report (second field mission of TL);
- Around December 10th: submission of the final deliverables.

E.1.3. Detailed planning of field mission

Day	Date	Activity
Mon	25-sept	Arrival of international consultants from abroad, arrival of Augusto from Nampula, internal team work for preparation
Tue	26-sept	Meeting with UNICEF, AIAS and CRA to validate the evaluation tools; Individual interviews with sector stakeholders (AIAS, CRA, UE, etc.)
Wed	27-sept	Visit of the town network of Moamba (1h30 from Maputo)
Thu	28-sept	Morning: meetings with stakeholders, afternoon: travel to Manjacaze
Fri	29-sept	Morning: visit Manjacaze network, afternoon: back to Maputo (time is short in Manjacaze, but we are 3 consultants and we will work in parallel to interview different stakeholders at the same time).
Sat	30-sept	Departure of Bruno
Sun	01-oct	Departure of Martina to Chimoio and Augusto to Tete
Mon	02-oct	Travel from regional capitals to small towns in the morning (or previous day, depending on flight schedule) and start interviews in the afternoon
Tue	03-oct	Visit of the town network of Espungabera (Martina); Visit of the town network of Ulónguè (Augusto)
Wed	04-oct	Visit of the town network of Espungabera (Martina); Visit of the town network of Ulónguè (Augusto)
Thu	05-oct	Travel back to Chimoio and to Maputo (Martina); Travel back to Nampula (Augusto)
Fri	06-oct	Informal debriefing with UNICEF in the morning, additional interviews if needed, departure in the afternoon (Martina); Visit network of Ribaue (and also next day if needed) and back to Nampula (Augusto)
Sat	07-oct	Reporting or complementary visits/interviews
Sun	08-oct	Departure of Augusto from Nampula to Mocimboa da Praia
Mon	09-oct	Visit of the town network of Mocimboa
Tue	10-oct	Visit of the town network of Mocimboa
Wed	11-oct	Travel from Mocimboa to Nampula
Thu	12-oct	Meeting with AIAS/CRA Nampula (North delegation)

E.2. List of documents consulted

Proposal	Final Proposal (15-06-2011) without annexes versao final
	2014-05-06 annex 2. proposed budget changes
Sanitation - Espungabera	Campeonato de Saneamento (11 docs)
	Capacitacao de Artesaos (30+ docs)
	Grupo de Saneamento de Saneamento (30+ docs)
	LISTA DE PESSOAS CHAVES
	relatorios de progresso (12+ docs)
	Situacao de Base Saneamento (2 docs)
Sanitation - Ulónguè	Campeonato de Saneamento (13 docs)
	Capacitacao de Artesaos (100+ docs)
	Fotos de Teatro no Mercado em Marco de 2015 (4 photos)
	LISTA DE PESSOAS CHAVES
	Mapas dos Bairros (4 docs)
	Plano de Saneamento (6+ docs) ○ CMVU Mapeamento das Tecnologias de Saneamento por Bairro e Quarteirao 1 ○ LISTA DO GRUPO DE SANEAMENTO ○ Matriz do Plano de Saneamento Ulongue ○ Plano de Acção de Saneamento Narrativo ○ Regulamento Plano de Accao Ulongue ○ SINTESE DA REUNIÃO DO GRUPO DE SANEAMENTO HAVIDA NO DIA 02 DE MARCO DE 2016
	relatorios de progresso (10+ docs)
Sanitation (both towns)	• CMVU BASE DE DADOS SANEAMENTO ABRIL 2015 • ESPUNGABERA BASE DE DADOS SANEAMENTO • Relatorio espungabera Narrativo Fevereiro e Marco2017 • Results - Sanitation competition Ulongue Sep 2016 • Ulongue Familias sem latrinas por baiiro Quarteirao • FICHAS Palestras realisadas de Janeiro a Novembro 2016 • NUCLEOS DE SANEAMENTO ESCOLAR • VILA DE ESPUNGABERA- Comites de Agua e Saneamento – Copy
Studies	Annex 7. Qualitative research report (in Portuguese)
1. First Progress Report - June 2013	narrative report
	financial report
	annex 1. report of public consultation with potential operators of Ulónguè water system – may 2012 (in portuguese)
	annex 2. baseline report of espungabeira - kulima, 2012 (in portuguese)
	annex 2. baseline report of ulónguè - world vision, 2012 (in portuguese)
	feedback from dutch on report
	Queries from DGIS & responses
	Working docs
2. Second Progress Report - June 2014	narrative report (submitted)
	financial report (submitted)
	funds utilization report (14.06.14)
	proposed budget changes (submitted)
	Working docs

3. Third Progress Report - June 2015	narrative report (submitted)
	financial report (submitted)
	funds utilization report (14.06.14)
	2015-06-19 Extension request Grant SC 110711
	DGIS-UNICEF emails correspondence on project extension
4. Fourth Progress Report - June 2016	narrative report (submitted)
	Uncertified donor statement (SC110711) to Dec 2015 (= final financial report)
Final Progress report (draft version)	• SC110711 (November 2017) (INPUTS FOR FINAL EVALUATION) DRAFT
Information provided by the operator in Espungabera	• Cadastro do equipamento – Espungabera (provided by the operator) • PO15 Training module for Espungabera (ppt presentation): PROGRAMA DE FORMAÇÃO PROFISSIONAL DE OPERADORES DE ÁGUA, OPERAÇÃO E MANUTENÇÃO DE EQUIPAMENTOS ELECTROMECÂNICOS ○ 1ª sessão, 21 de Agosto de 2017 ○ 2ª Sessão, 22 de Agosto de 2017 ○ 3ª sessão, 23 e 24/Agosto/2017 • Relatorio narrativo interno do operador de Espungabera, Agosto 2017
Documentation from AIAS	• BIAS survey 2017 (on sanitation in Ulongue) • Contrato Cessao ulónguè • Contrato Cessao Espungabera
Documentation on regulatory framework	• Guiao DE REPORTING.CORAL • QR SAA de Ulongue final
Capacity building	• 2015-02-24 Capacity development for the expansion of the Delegated Management Framework to small towns in Mozambique • Lista de Participantes Seminario Inhambane Agosto, 2015 • Modulo 1 Inhambane Maio 2015 (participants list) • Modulo 4 Maputo Moamba Julho 2016 (participants list) • Modulo 5 Inhambane Abril 2017 (participants list) • Resultados do Modulo 2 • Resultados do Teste2 • Resultados Modulo 1
Scenarios and projection of beneficiaries for water supply systems	• Apresentação 26.06.2014 4 • Projection on beneficiaries - SC110711 Evaluation • Ulongue P. D. Presentation -30th April 2013 AS • Ulongue Treatment Adhock 22 07 2013
Additional documentation from UNICEF	• Desenho, Reabilitação e Expansão do Sistema de Abastecimento de Água à Vila de Ulóngué, Projecto Preliminar – Versão Final, CHINA GEO/SEURECA/EQUILÍBRIO, Julho 2013 • 30 examples of monitoring mission reports (random samples consulted) • 105 minutes of coordination meetings with sector stakeholders for the 5 years (random samples consulted) • Cost per capita analysis, UNICEF, november 2017 • Additional considerations - Evaluation of WASH in small towns project, UNICEF, nov 2017

E.3. List of stakeholders met in the 2 towns

Stakeholders met in Ulónguè:

Institution	Position	Name	Contact
UNICEF	WASH consultant	Juvencío Nhaule	jsnhaule@unicef.org 842000293
DPOPHRH-Tete	Provincial director	Joaquim Manticade Chá Bethe	
DPOPHRH-DAS-Tete	Chefe do DAS	Carlos Fransisco Cabo	825330387
	Técnico	Hermenegildo Nhaquila	823818904
Ulónguè Municipality	Vereador for public infraestructure	Victor Melisse	844830129/ 827712880
	Vereador for Planning	Lucas Mandaliza Evasse	
Ulónguè CORAL Member	Presidente	Maria Luisa Pinto	845380837
	Vogal	Francisco Canama	867813154
Municipality	Ex supervisor for Sanitation activities	Wilton Armando Júlio	
Water network operator-Collins	Operation Manager (Based in Maputo)	Thiel Amaral	84 538 22 66 tamaral@collins.co.mz
	Local manager (representante)	Domingos Myback	846465171
	Account	Leida Sardinga	
	Técnico-Estação de tratamento	Domingos Alfinete	
Public toilet of the Ngwenha Market	Operator		
Public toilet of campo de aviação	Operator		
Local leaders	Adjunto de Secretário do Bairro Josina Machel	Samson	
	2 local leaders near the Fontenario Mateus Sansão Mutemba	Amulewa	
Ex-artisan	Ex-artisan	Domingos (actualmente trabalha para o operador do Sistema).	
CRA Beira (phone conversation)	Delegado Regional	Felisberto Lúcio	flucio.dpophs@yahoo.com.br 847642692

- 3 local leaders (see above) which also represent elderly people
- 1 family with house connections (bairro Josina Machel)
- 1 family with house connections (bairro Mateus Sansão Muthemba
- 03 women's benefited for water from standpipes in Mateus Sansão Muthemba bairro
- 01 family selling water from a water well (*Poço-Bairro Josina Machel)*

Please note: the interviews with domestic users was done with women which were representing their households. 100% of households included children and 50% included elderly.

Stakeholders met in Espungabera :

Institution	Position	Name	Contact
UNICEF	WASH officer	Samuel Manhica	sam.manhica@gmail.com +258 84 013 66 42
DPOPHRH-Chimoio	Chief of WASH department	Sandra Roque	84 93 17 609
DPOPHRH-Chimoio	WASH technician, UNICEF focal point	Filipe Mandava	82 78 32 560
SDPI Espungabera	Director of SDPI	Custodio Lourenço	86 61 52 847
SDPI Espungabera	WASH technician	Borges Vasco Sapulene	86 10 12 010
SDPI Espungabera	WASH activist	Essinate Canjera	86 77 65 049
District Government of Espungabera	Permanent Secretary	Vasco Marceta	
Administrative Post of Espungabera	Chief of the Administrative Post	Benjamin Joaquim Patinho	
Water network operator	Local manager (representante)	Armando Nhavene	84 56 87 097
CORAL	Presidente	Vittorino Guelote	86 64 74 910
CORAL	Vogal	Alda de Ascensao Adelina	87 77 32 749
Public toilet of the Market 2000	Operator	Lino Georges Jambara	
Fontenario N°5	Care-taker / manager	Gracinda Bonifacio	

- 6 members of the GAS (Grupo de Agua e Saneamento): 2 women and 4 men (Issufu, Olivia, Alegria, Mario, Feliz, Elias)
- 12 users (9 women and 3 men, of which 2 elderly men and 1 elderly women) of a handpump in the Expansao neighbourhood, including 02 users of domestic connections (currently not working)
- 03 artisans of latrines/slabs (main interview with Artisan of 1° de Maio, Mr. Felix David)
- 02 users of domestic connections near the Fontenario N°5 (Gracinda and Margarida)
- 05 users of domestic connections in the Bairro Cimento

Please note: the interviews with domestic users was done with women which were representing their households. 100% of households included children and 50% included elderly.

E.4. Matrix for the evaluation of UNICEF's WASH project in 2 small towns

Evaluation criteria	Evaluation questions	Sub-questions / areas of interest	Sources of information Methods of measurement	Tools mobilised to collect and analyse information
Relevance *(the extent to which the aid activity is suited to the priorities and policies of the targeted group, recipient and donors)*	1. Has the project been adequately designed?	• Accuracy of the situation analysis prior to project preparation • Existence and quality of the baseline survey & indicators measured • Existence and quality of the LF, the TOC or equivalent (any document linking assumptions, causes, expected outcomes and indicators) • Quality and relevance of the risk assessment strategy • Existence and quality of the participatory mechanisms put in place in the appraisal phase	• Project documents • Studies commissioned by UNICEF prior to or during the project preparation	• Document analysis • Semi-structured interviews with key staff / consultants / national counterparts
	2. Has the project been aligned and consistent with national priorities and policies?	• Consistency of the project with existing policies, strategies, guidelines at the time of the design • Extent to which the legal and regulatory framework has been properly analysed & included • Extent to which enabling environment has been analysed and taken into account in the design	• Project documents • Sector documents • Studies commissioned by UNICEF prior to or during the project preparation • Minutes of meetings, workshops, etc.	• Document analysis • Semi-structured interviews with key staff / consultants / national counterparts / other development partners
	3. Has the project answered the needs of the priority groups?	• Extent to which the selected towns were a priority in terms of access, quality of service, etc. compared to the overall situation in the country • Existence and quality of the identification and selection process	• Project documents • Sector documents • MICS surveys or equivalent (EDS)	• Document analysis • Semi-structured interviews with key staff / consultants / national counterparts / other development partners

Evaluation criteria	Evaluation questions	Sub-questions / areas of interest	Sources of information Methods of measurement	Tools mobilised to collect and analyse information
		• Existence and quality of the identification of priority groups in the towns during the design phase • Extent to which the project has been designed in order to provide capacity building to the relevant groups (public bodies, private sector, users)	• Studies commissioned by UNICEF prior to or during the project preparation • Minutes of meetings, workshops, etc.	
Effectiveness *(a measure of the extent to which and an aid activity attains its objective)*	4. Have the initial targets been met by the project?	• Level of achievement of all the specific targets in terms of results set in the project proposal • Final number of beneficiaries (both for water supply and sanitation) in the 2 targeted towns • Final number of beneficiaries of all the capacity building / training activities carried out by the project • Quality of the outputs delivered by the project (construction, management model, outputs linked to the enabling environment)	• Progress reports • Studies produced during the project execution • Population data from last national census • Data provided by the service providers • Evaluation field visits	• Document analysis • Data processing • Semi-structured interviews with key staff / consultants / national counterparts • Field survey protocol
	5. Have the activities, outputs and outcomes been properly monitored?	• Extent to which the M&E framework put in place for the project has allowed UNICEF to achieve the results, measure progress and adapt or modify the approach during the project execution • Quality, accuracy and robustness of the reported indicators • Quality and accuracy of the reporting to national partners and donors	• M&E reports (project-specific or using UNICEF corporate system) • Studies produced during the project execution	• Document analysis • Data processing • Semi-structured interviews with key staff / consultants / national counterparts • Field survey protocol

Evaluation criteria	Evaluation questions	Sub-questions / areas of interest	Sources of information Methods of measurement	Tools mobilised to collect and analyse information
Efficiency *(measures the outputs in relation to the inputs. It is an economic term which signifies that the aid uses the least costly resources possible in order to achieve the designed results)*	6. Have the project resources been used in an efficient way?	• Extent to which the initial timeline has been respected; % of milestones & deadlines actually met • Extent to which the resources mobilised by UNICEF have optimised the project results • Extent to which it would have been possible to achieve the same results with less resources (management costs, construction unit costs, etc.) • Extent to which the procurement process has enabled UNICEF to secure the resources at the lowest possible cost without reducing the quality of the services • Quality standards of the financial management of the project (incl. management of contracts) • Existence and quality of the mechanisms put in place for the project coordination and to ensure the involvement of stakeholders	• Project financial reports (internal and external) • Documents produced throughout the process of procuring services • Benchmarking with other UNICEF projects and other sector projects (incl. the One Million initiative) • VfM studies that would allow comparison with the evaluated project	• Document analysis • Data processing • Financial analysis, determination of ratios • Semi-structured interviews with key staff / consultants / national counterparts / donors • Field survey protocol

Evaluation criteria	Evaluation questions	Sub-questions / areas of interest	Sources of information Methods of measurement	Tools mobilised to collect and analyse information
Impact *(positive and negative changes produced by an emergency / development intervention directly and indirectly, intended or unintended. This involved the main impacts and effects resulting from the activity on the local social, economic, environmental)*	7. What are the main impacts perceived by the beneficiaries and the project key stakeholders?	• Main changes / positive or negative effects of the program in terms of access to basic services, poverty reduction, health, etc. that can be clearly attributed to the project • Unexpected effects or impacts and the way they have been included into the project implementation • Existence and quality of the risk assessment/mitigation strategy specifically put in place for the evaluated project	• M&E reports (project-specific or using UNICEF corporate system) • Perception of effects by the stakeholders and the beneficiaries themselves • Specific impact assessment (if any) • Health system data (at local level if possible) • Benchmarking with other UNICEF projects and other sector projects (incl. the One Million initiative) • Impact studies that would allow comparison with the evaluated project	• Document analysis • Data processing • Semi-structured interviews with key staff / consultants / national counterparts / implementing partners / other donors • Beneficiary group discussions in the two towns
	8. Are the project results being actually used by the beneficiaries?	• Extent to which the facilities are effectively used, operated and maintained by the beneficiaries, the service providers, the local authorities (if relevant)	• % of facilities (water supply and sanitation) effectively used and in good condition • Specific studies or sections in the project progress reports • Perception of the stakeholders and the beneficiaries themselves on this aspect • Evaluation field visits	• Beneficiary group discussions in the two towns • Semi-structured interviews with key staff / consultants / national counterparts / implementing partners / other donors • Field visit protocol

Evaluation criteria	Evaluation questions	Sub-questions / areas of interest	Sources of information Methods of measurement	Tools mobilised to collect and analyse information
Sustainability *(sustainability is concerned with measuring whether the benefits of an activity are likely to continue after donor funding has been withdraw. Projects need to be environment-friendly as well as financially sustainable)*	9. To what extent the design and implementation modalities have enabled to maximise the likelihood of a sustainable and continuous use of the services?	• Existence and quality of a sound strategy regarding sustainability • Level of participation of stakeholders in the discussions on the strategy to ensure maximum sustainability (especially at local level) • Extent to which observed trends of main performance indicators (technical and financial) lead to a continuous use of services • Extent to which households or service providers have the capacity to maintain the latrines and to evacuate and treat the faecal sludge?	• Financial data on the management of the 2 delegated contracts • Specific studies or sections in the project progress reports • Perception of the stakeholders and the beneficiaries themselves on this aspect • Evaluation field visits (direct observation)	• Beneficiary group discussions in the two towns • Semi-structured interviews with key staff / consultants / national counterparts / implementing partners / other donors • Field visit protocol
Cross-cutting issues *(specific issues related to this evaluation)*	**Added value** 10. To which extent the project has added value as compared to other sector interventions?	• Extent to which the project has provided significant and verifiable improvements to the implementation of delegated management • Capacity of UNICEF-AIAS team to develop innovative tools • Capacity of the project to integrate with other initiatives	• Specific studies or sections in the project progress reports • Perception of the stakeholders and the beneficiaries themselves on this aspect • Evaluation field visits (direct observation)	• Document analysis • Discussion workshops • Semi-structured interviews with key staff / consultants / national counterparts / implementing partners / other donors • Field visit protocol
	Equity and inclusion 11. To which extent UNICEF's project has involved and benefited the most vulnerable: children, women, the elderly or the	• Quality of the design in terms of equity and inclusion (e.g. in relation to the baseline) • Extent to which the project has managed to integrate the specific needs of vulnerable groups • Extent to which the M&E system for the project is equity-lensed and	• Specific studies or sections in the project progress reports • Perception of the stakeholders and the beneficiaries themselves on this aspect • M&E reports	• Document analysis • Discussion workshops • Semi-structured interviews with key staff / consultants / national counterparts / implementing partners / other donors

Evaluation criteria	Evaluation questions	Sub-questions / areas of interest	Sources of information Methods of measurement	Tools mobilised to collect and analyse information
	disabled, the disadvantaged?	allowed UNICEF to report progress in this respect (need to distinguish water/sanitation)	• Evaluation field visits (beneficiary group discussions)	• Field visit protocol
	Environment 12. To which extent the project has contributed (or not) to improving the environment and management of natural resources?	• Extent to which the project managed to reduce the negative effects or impacts on the environment • Extent to which the project followed the principles of integrated water resources management in an urban context (need to distinguish water/sanitation)	• Specific studies or sections in the project progress reports • Perception of the stakeholders and the beneficiaries themselves on this aspect • Evaluation field visits (direct observation and Beneficiary group discussions)	• Document analysis • Discussion workshops • Semi-structured interviews with key staff / consultants / national counterparts / implementing partners / other donors • Field visit protocol

E.5. Interview guides

E.5.1. Interview guide for national stakeholders

Destinatarios:

- MOPH
- DNA
- CRA
- AIAS (Maputo e Delegaçoes)
- Doadores (DGIS, EU, AusAid se possivel)

Perguntas sobre o projeto da UNICEF:

1. Papel e responsabilidades da entidade no sector WASH
2. Papel neste projecto (supervisão, contratação, tomada de decisões, elaboração de relatórios, etc.)
3. Contributo deste projecto para os objectivos e as políticas nacionais (em particular quadro da gestão delegada)
4. Contributo da UNICEF para as políticas, os objectivos e as estratégias nacionais
5. Se bem informado acerca do projecto:
   - consulta por parte da UNICEF no planeamento e concepção
   - qualidade dos contratados e da gestão dos contractos
   - dificuldades do project, desafios e êxitos
   - impacto do projecto
   - perspectivas para sustentabilidade dos sistemas
   - lições aprendidas
6. Recomendações para o GdM e a UNICEF e os outros doadores

Perguntas sobre o QGM em geral:

1. Quais foram os motivos por trás da criação do QGD? Quais eram na opoca os problemas identificados e os resultados esperados com a introduçao deste quadro?
2. O que você acha das evoluções históricas do quadro (expansão gradual para outras cidades)? A expansão veio no momento certo? As condições necessárias foram atendidas?
3. Na voça opiniao, os resultados esperados foram alcançados?
4. Quais sao os pontos fortes e fracos do actual *QGD* (regulamentos, organizaçao institutional a nivel nacional, fluxos financeiros, fluxos de informaçao, regulaçao, coordinaçao, etc)?
5. Quais sao os pontos fortes e fracos do actual *modelo de delegaçao* à nivel das pequenas vilas (tipo de contacto / Cláusulas contratuais, maneira de organizar a colaboraçao entre atores a nivel local, prestação de contas, etc)?
6. Entre as pequenas vilas delegadas, quais são os exemples de sucesso e os exemplos de insuccesso (mas experiencias)?
7. Quasi sao as dificuldades mais frequentes das entidades publicas a diferenteis niveis?
8. Quais sao as dificuldades mais frequentes dos operadores ?
9. Na sua opinião, o nível de serviço foi melhorado?
10. Quais sao as perspectivas para a evoluçao do QGD no futuro ?
11. Recomendações para o GdM e os parceiros

E.5.2. Interview guide for province and district level stakeholders

Destinatarios:

- Serviços Provinciais de Agua e Saneamento (se for possivel encontra-los)
- Serviços Distritais de Planeamento e Infraestruturas (SDPI)
- Municipio
- CORAL

Perguntas para as 6 vilas:

1. Papel e responsabilidades em relação ao WASH
2. O que é o QGD e qual é o papel de cada instituiçao ? (para medir o nivel de conhecimneto do quadro). Opiniao sobre o QGD (um quadro institutional pertinente/eficaz?)
3. Qualidade da relaçao e da partilha de informaçao com as outras instituiçoes do sector (pesquisar sobre respeito de papeis de cada instituiçao)
4. Descriçao geral do projecto de construçao/rehabilitaçao do sistema (parceiros, orçamento, atividades, duraçao e datas, etc.)
5. Papel na identificação e elaboração do projecto e concepção dos sistemas
6. Papel na escolha do tipo de gestao et na seleçao do operador privado
7. Papel na implementação e no acompanhamento do projecto
8. Dificuldades da instituiçao no desempenho do seu papel em relação ao WASH
9. explicar quais sao as responsabilidades e os deveres do operador privado e qual é a relaçao com outra instituiçoes (clausolas contractuais, prestaçao de contas, etc).
10. Nivel de performancia do operador privado
11. quais sao as dificuldades mais frequentes dos operadores ?
12. Na sua opinião, o nível de serviço foi melhorado com a delegacao ? relativamente a:
    a. aumento da cobertura
    b. melhor qualidade microbiologica da agua
    c. mais quantidade de agua (continuidade, pressao)
    d. melhoria da gestao do serviço (rapides de reparaçao, transparencia, integridade)
13. desafios e perspectivas para sustentabilidade dos sistemas
14. Lições aprendidas
15. Recomendações para as instituiçoes publicas
16. Recomendações para os parceiros en geral

Unicamente sobre o projeto da UNICEF:

17. Descriçao geral do projecto relativamente as atividades de saneamento
18. implicaçao nestas atividades et nivel de satisfaçao
19. resultados en termos de saneamento
20. Responsabilidades e capacidade para operação e manutenção das casas de banho/ latrinas públicas
21. Qualidade da relaçao con UNICEF
22. Qualidade dos empresas e ONG contratadas e qualidade da gestão dos contratos pela UNICEF
23. Dificuldades do projecto, desafios e êxitos
24. Impacto do projecto – água e saneamento; Acessibilidade e qualidade do serviço, satisfaçao dos usuarios...
25. Recomendações especificas para a UNICEF

E.5.3. Interview guide for Interviews and Group Discussions with Beneficiaries

Destinatarios:

- Líderes comunitários
- Representantes da associaçao de usuarios, si existe
- 2-3 cobradores de fontenarios, si existe
- 3-5 representantes de usuarios de ligaçoes domiliciaires
- 3-5 representantes de usuarios de fontenarios publicos
- 2 pessoas envolvidas nas atividades de sanemanto

Perguntas para as 6 vilas:

1. Nivel de conhecimento do projecto (relativamente a abastecimento de agua)
2. Relevância do projecto em relação às prioridades dos residentes das vilas (tanto da zona urbanizada como das zonas periféricas) em termos de serviços públicos
3. Envolvimento no projecto, se consultados em qualquer fase
4. quale era a situaçao antes da construçao/reabilitaçao do sistema
5. como ameliorou esta situaçao com o sistema
6. Percentagem de residentes ligados ao sistema e que poderão ligar no futuro
7. Custo e acessibilidade dos fontenarioes e da ligação
8. Existência de ligações ilegais ou de outros casos de incivismo
9. Custos do serviço actual de abastecimento de água por categoria
10. Qualidade do serviço:
    a. Sabor, odor, turbidez, etc.
    b. Regularidade do abastecimento de água
    c. Presencia de avarias
    d. Tempo para reparar as avarias
    e. Satisfaçao com o operator (atendimento das reclamaçoes, comunicaçao, transparencia, etc.)
11. Recomendações para o operador
12. Recomendações para as autoridares publicas (municipio, governo...)
13. Recomendações para os parceiros

Perguntas adicionais para as 2 vilas de Espungabera e Ulónguè :

14. Nivel de conhecimento do projecto (relativamente a saneamento): descriçao das atividades
15. Quale era a situaçao do saneamento antes do projecto
16. Como ameliorou esta situaçao com o projecto
17. Nivel de satisfaçao das atividades de sensibilizaçao/promoçao/formaçao do projecto
18. Custos das latrinas (por categoria / partes)
19. Presencia de estaleiros e rentabilidade do negocio do saneamento
20. Presencia de latrinas publicas (escolas, mercados)
21. Situaçao das latrinas publicas e problemas
22. Percentagem de residentes com latrinas melhoradas
23. Recomendações relativamente ao saneamento

E.6. Agenda for the Methodology Validation Meeting

Date of Meeting: 26 September 2017; Venue: Hotel Cardoso

Table 3: Agenda for the Methodology Validation Meeting

Time	Description	Responsibility
08:30 – 09:00	Arrival and Registration of participants	UNICEF
09:00 – 09:15	Presentation of the objectives and the agenda of the meeting	Jesus Trelles or Andrea Rossi
09:15 – 09:30	Presentation of participants	Participants
09:30 – 10:00	Overview of the study TOR and team, methodology and workplan	Bruno
10:00 – 10:30	Comments and questions	Participants
10:30 – 11:00	**Coffee Break**	**UNICEF**
11:00 – 11:30	Presentation of results of the desk review: (1) legal framework of the DMF and overview of the 6 towns, (2): UNICEF's project overview, how this evaluation can inform the DMF review (3) information gaps	Martina & Bruno
11:00 – 11:30	Comments and questions	Participants
11:30 – 12:00	Presentation of the Evaluation Matrix	Bruno
12:00 – 12:30	Presentation of the Review Matrix	Martina
12:30 – 12:45	Quick overview of the interview guides	Augusto
12:45 – 13:15	Comments and questions	Participants
13:15 – 14:00	**Lunch**	UNICEF
14:00 – 15:00	Working groups on the Evaluation Matrix and Review Matrix	Participants
15:00 – 15:30	Presentation of the group work: recommendations to consultants on how to improve the matrices	Participants
15:30 – 15:45	Synthesis of the main changes to be made to the draft evaluation tools before using them	Bruno
16:00	Closing of the workshop	Representative from AIAS?

E.7. List of participants in the Methodology Validation Meeting

unicef AIAS

Analise da implementação de projetos WASH em pequenas vilas no ambito do Quadro de Gestao Delegada e avaliação final do projeto do projeto da UNICEF: reabilitação de dois sistemas de água canalizada em Moçambique

HYDROCONSEIL

SEMINARIO DE VALIDAÇÃO DA METODOLOGIA DO ESTUDO

Hotel Cardoso,
26 de Setembro de 2017

LISTA DOS PARTICIPANTES

N°	Instituição	Nome	Função	Telefone	Email
1.	CMV-Ribaue	Alberto H. Majuila	Tecnico	849434522	albertomajuila@gmail.com
2.	CRA	Suzana Loforte	Presidente	843115430	suzanasaranga2017@gmail.com
3.	C.M.V. Majaua	João Augusto Langane	Vereador Adm. e Finanças	847713050	augustolangane@gmail.com
4.	DPOPHRH Manica	Eduardo Naieticane	Director Provincial	824291880	enaieticane@yahoo.com.br
5.	UNICEF	Juvencio Nhaule	Oficial de WASH	842000273	jnhaule@gmail.com
6.	DPOPHRH Tete	Aristides Guila	Técnico	842629617	arlguilam2@gmail.com
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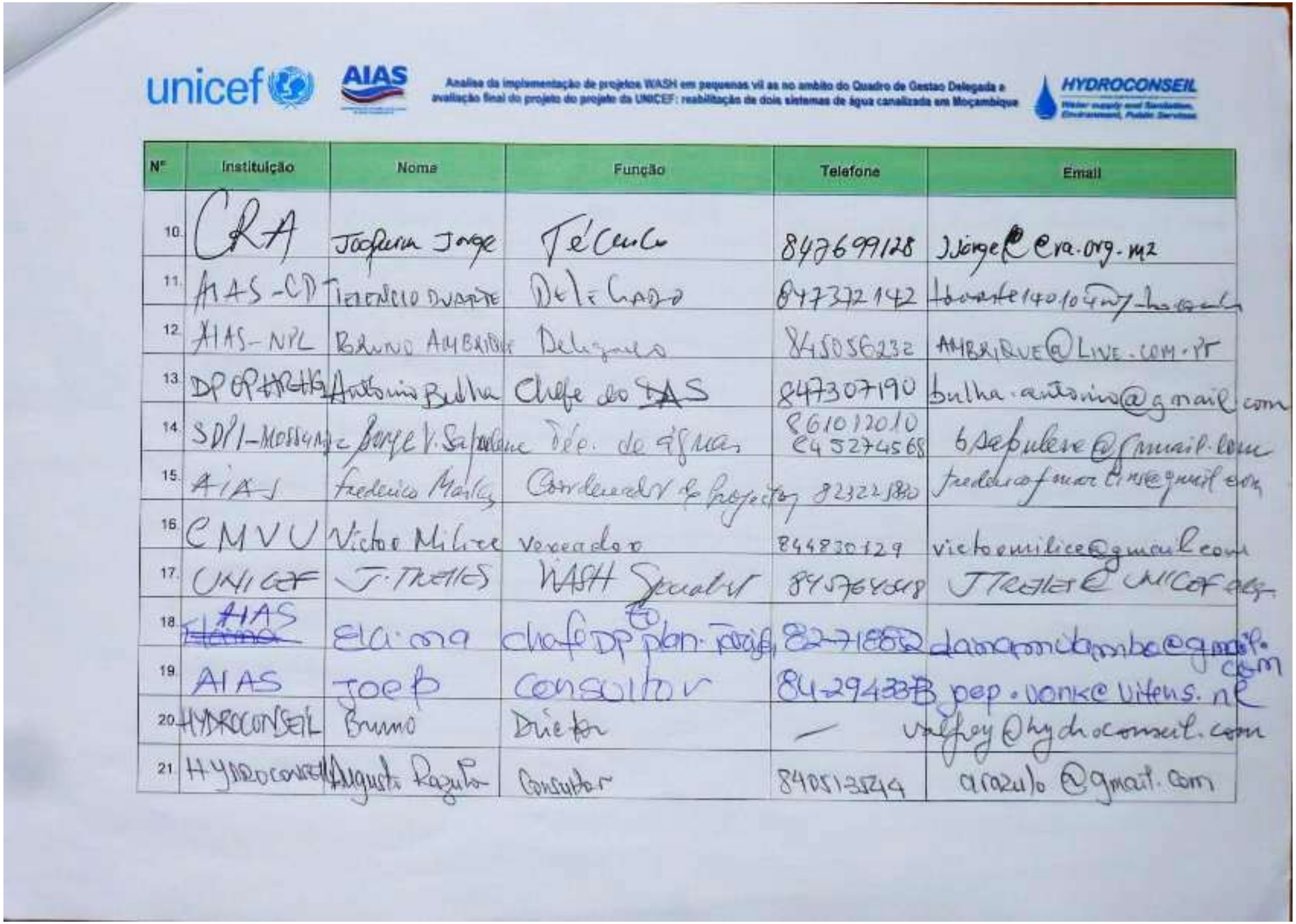
8.	DPOPHRH-NPL	Daniel Massingue	Chefe do Dpto.	847562134	dmassingue.ae@gmail.com
9.	CMVMP	Frederico José	Vereador	843898248	FredPemba@yahoo.com.br



unicef AIAS

Analise da implementação de projetos WASH em pequenas vil as no ambito do Quadro de Gestao Delegada e avaliação final do projeto do projeto da UNICEF: reabilitação de dois sistemas de água canalizada em Moçambique

HYDROCONSEIL Water supply and Sanitation, Environment, Public Services

Nº	Instituição	Nome	Função	Telefone	Email
10	CRA	Joaquim Jorge	Técnico	847699128	JJorge@cra.org.mz
11	AIAS-CD	Terencio Duarte	Delegado	847372142	tduarte140106[illegible]
12	AIAS-NPL	Bruno Ambrique	Delegado	845056232	AMBRIQUE@LIVE.COM.PT
13	DPOPHRH	António Bulha	Chefe do DAS	847307190	bulha.antonio@gmail.com
14	SDPI-Mossurize	Jorge V. Sepulene	Téc. de Água	861012010 / 845274568	bsepulene@gmail.com
15	AIAS	Frederico Mariz	Coordenador de Projectos	823221880	fredericofmarcimo@gmail.com
16	CMVU	Victor Milice	Vereador	844830129	victormilice@gmail.com
17	UNICEF	J. Trelles	WASH Specialist	845764648	JTrelles@unicef.org
18	~~Elaina~~ AIAS	Elaina	chefe DP plan. Projeto	827188[illegible]	damomicombo@gmail.com
19	AIAS	Joep	Consultor	8429433[illegible]	joep.vonk@vitens.nl
20	HYDROCONSEIL	Bruno	Director	—	valfrey@hydroconseil.com
21	HYDROCONSEIL	Augusto Razulo	Consultor	840513524	arazulo@gmail.com

unicef AIAS Analise da implementação de projetos WASH em pequenas vil as no ambito do Quadro de Gestao Delegada e avaliação final do projeto do projeto da UNICEF: reabilitação de dois sistemas de água canalizada em Moçambique HYDROCONSEIL

N°	Instituição	Nome	Função	Telefone	Email
22.	Hydroconseil	Martina Rama	Consultor WASH	84051 25444	rama@hydroconseil.com
23.	UNICEF	Hayza			
24.	CRA	Eng. Machava			
25.	AIAS	Enrico Macuacua			
26.					
27.					
28.					
29.					
30.					

E.8. Presentation of the evaluation team

HYDROCONSEIL has many references in Portuguese-speaking countries and in the fields of evaluations and UNICEF assignments. This study was conducted by a team of 3 consultants, 2 HYDROCONSEIL staff and 1 national consultant, gathering a team with multidisciplinary skills, vastly experienced in the fields of the assignment in developing countries. The experts mobilized for this assignment are presented in the table below.

Table 4: Presentation of the evaluation team members

Position	Name and nationality	Profile of the expert	Specific role in the assignment
Expert 1: Team Leader, WASH engineer and institutional expert	Bruno VALFREY, French	25 years of experience. Degree in Engineering, with focus on water services, institutional aspects and vast experience in WASH project and policy evaluations	Team leader, in charge of team coordination, client relation and quality assurance of all deliverables, also in charge of conducting KKI in Maputo and field visits in 1 small town and facilitating all meetings with stakeholders
Expert 2: WASH socio-economist, O&M expert	Martina RAMA, Italian	13 years of experience. Master in Environment and Sustainable Development, with focus on water services, and vast experience in project evaluations in the WASH sector	Assistant team leader, in charge of conducting desk-review, developing of survey tools, conducting KII in Maputo and field visits in 2 small towns. Will support the team leader in the facilitation role and will support in the drafting of all deliverables.
Expert 3: local consultant, WASH socio-economist	Mr. Augusto RAZULO, Mozambican	19 years of experience. Master in Management and Business Administration (MBA); Experience in WASH projects, Inclusive Business, Economic Development and Governance project. Vast experience in project evaluations. Capacity Building to Mozambique local organization, PMEs and Technical Assistance to private sector and Government Institutions include AIAS (Trough SNV) and DNAAS (PRONASAR).	National consultant, will be in charge of conducting KKI and field visits in 3 small towns, and contribute to drafting the preliminary findings.

E.9. Terms of reference of the study

TERMS OF REFERENCE

(RFPS-2017-9131475)

Review of the implementation of WASH projects in small towns within the Delegated Management Framework and end-of-project evaluation of project: rehabilitation of two piped water systems in Mozambique

1. Background and Context

In 1998 under the Decree 72/98, the Government of Mozambique introduced the Delegated Management Framework (DMF) for urban water supply services, a public-private partnership set up, whereby assets are owned by the government and operations are managed by the private sector under a concession, lease or management contract. The DMF centralizes responsibility for assets management and the award of contracts for operations.

Furthermore and b on the recommendation from the revised National Water Policy (2007), the Government of Mozambique (GoM) through the Decree Law 18/09 expanded the scope of DMF to include piped water supply systems not covered by the Decree Law 72/98, and to integrate drainage and sanitation. The piped water supply systems included are the ones that supply urban or rural centres. In this regard and under the Decree Law (19/09), the Water and Sanitation Infrastructure Administration (AIAS - Administração de Infra-Estruturas de Abastecimento de Agua e Saneamento), was established with primary responsibilities for overall management of public and piped water supply systems and drainage and sanitation systems, promoting an autonomy, operational and efficient management by involving private operators or other entities. In order to operationalize AIAS' responsibilities at decentralized level, the Ministry of Public Works and Housing (MOPH) has approved the establishment of Provincial Delegation of AIAS.

Under the Delegated Management Framework (DMF), the Water Regulatory Council (CRA - Conselho de Regulação do Abastecimento de Água) was created in 1998 by a Decree of Ministers' Council 74/98 and was given the responsibility to regulate the water supply service, in order to ensure a balance between the quality of the service, the interests of consumers and the financial sustainability of the water supply systems. The Decree Law (18/09) further expands the mandate of CRA to regulate all public piped water supply and sanitation systems.

In order to ensure the involvement of local authorities at decentralized levels, both Decree Laws 18/09 and 19/09 establish the Provincial Councils for Water and Sanitation (CPAS) as a consultative body, subordinate to the Provincial Government.

Since its creation, AIAS has coordinated the construction / rehabilitation of water supply systems in over 20 small towns throughout Mozambique, with the support of a variety of funding sources, including GoM's internal budget. UNICEF's support to the implementation of the GoM's Delegated Management Framework (DMF) started in 2012 with the introduction of its Small Towns WASH programme. The programme is implemented in partnership with AIAS and CRA and aims to to support AIAS in the development of an implementation model based to leverage funds for broader implementation of the DMF. To date, UNICEF's Small Towns WASH Programme is covering six small towns in the provinces of Nampula, Tete, Manica and Inhambane, through the implementation of three sub-programmes / projects supported by the Governments of Australia and Netherlands, the European Union and UNICEF. These are:

- NAMWASH: Small Towns WASH programme in Nampula Province, supported by the Government of Australia, covering one small town in Nampula province.
- Rehabilitation of Two Piped Water systems in Mozambique, supported by Government of Netherlands, covering 2 small towns in Manica (Espungabera) and Tete (Ulongue).
- AGUASANI: Inhambane Small Towns WASH programme, supported by the European Union, covering three small towns in Inhambane province.

To review the implementation of WASH projects within the Delegated Management Framework and to identify good practices and lessons learnt to date to inform its future implementation, UNICEF in close coordination with AIAS and CRA, is looking for an Institution / Consultancy firm with demonstrated

experience in the evaluation and documentation of WASH and development related projects. The consultancy will also cover an evaluation of the UNICEF managed project: “Rehabilitation of Two Piped Water systems in Mozambique”, for which implementation is finalizing in June 2017.

2. Objectives, Purpose and Expected Results

The Consultancy aims at reviewing the implementation of the WASH interventions within the scope of the Delegated Management Framework (DMF) for Water Supply, including the analysis of:

1. The implementation models used and determine to which extent the interventions have contributed to the implementation of the DMF;

2. The adequacy of the approach to improve access to water and sanitation in small towns; and

3. The level of ownership of the projects by partners and stakeholders at the various levels.

In addition, the consultancy includes an end-of-project evaluation of the UNICEF managed project “Rehabilitation of Two Piped Water systems in Mozambique: Espungabera (Manica) and Ulongue (Tete)” based on the standard OEDC-DAC methodology for evaluating development assistance and in line with the Project Logical Framework and corresponding targets and indicators. The two small towns under this project are part of the six towns where the overall review will be carried out.

The small towns to be included in the analysis are:

Province	Small Town
Manica	Espungabera
Tete	Ulongue
Nampula	Ribaue
Maputo	Moamba
Cabo Delgado	Mocimboa
Gaza	Manjacaze

3. Description of the Assignment

The Institution / Consulting Firm will be expected to conduct field visits to selected towns / villages (to be confirmed at the inception stage, subject to in-country security restrictions) where WASH projects have been implemented within the last 6 years.

Both Components of this assignment will be based on a combination of the following:

i) desk review of existing documentation and data;

ii) (semi-structured) interviews with stakeholders at national, province and district / town level;

iii) field observation of project activities and on-the-ground results, including discussions with communities / beneficiaries.

The validation of preliminary findings will be carried out through a consultative presentation and validation at a WASH sector meeting with key partners and stakeholders. For validation of the findings related to the end-of-project evaluation of the project “Rehabilitation of Two Piped Water Systems” this will be a more limited presentation to UNICEF and project specific stakeholders. The validation / consultation meetings are to be facilitated by the Consultant(s). Feedback received during the consultation meetings should be recorded and appended to the final reports.

The review of the implementation of the WASH interventions within the scope of the Delegated Management Framework (DMF) for Water Supply, must include but not be limited to the following aspects.

- Increase in equitable access to water supply in the selected towns, including the various levels of services (i.e. residential connections and water kiosks / community tap-stands).

- Operators’ capacity (technical and financial) for sustainable operation and maintenance of the water supply

systems and expansion of networks in unserved areas. The review should also identify key bottlenecks for service delivery and equitable expansion from the Operators and Users perspective.

- Improved regulation of water supply systems through CORALs / Operators' report on key performance indicators. The review should also identify key bottlenecks on the use of existing regulation mechanisms from CORAL, Operator, AIAS perspective

- Level of satisfaction of consumers in relation to the water supply services. The review should also include a qualitative analysis on the impact of improved water supply systems over users' wellbeing / quality of life and financial gains at community level.

- Value for Money, vis-à-vis investment in construction / expansion of the water supply systems and its operational costs.

- To what extent the increase in the access to sanitation has been included in the implementation of the DMF in the selected villages and what has been the level of success.

From the above activities and analysis, the Consultant(s)' report should include:

- Analysis of the implementation (timeliness and efficiency) of the various phases of the DMF model, including: design and implementation of technical projects, recruitment / section of Operator and establishment of local regulation authority / CORAL.

- Analysis on how sanitation has been incorporated within the implementation of the DMF and recommendations for its integration.

- Recommendations for expanding the implementation of the DMF model to the other unserved / underserved small towns / villages under AIAS responsibility, with a suggested action plan for their implementation. These should include an overall analysis of the time and resources required to achieve the SDGs for the small towns under AIAS responsibility within the DMF framework.

For the end-of-project evaluation of the project "Rehabilitation of Two Piped Water Systems", the analysis should also consider the OECD-DAC criteria for evaluating development assistance3 (Relevance, Effectiveness, Efficiency, Impact and Sustainability), complemented by additional criteria proposed by the Consultant(s), with approval by UNICEF.

The activities within this Consultancy should be undertaken in close coordination and consultation with the relevant stakeholders at national and sub-national level, including: AIAS, CRA, DPOPH and SDPI. A list of specific tasks is indicated below.

Task Estimated time allocation

Conduct a desk review of six WASH projects implemented in small towns to identify critical issues to be analysed at field level **5 days**

Develop an Inception Report with a proposed evaluation design along with the draft evaluation tools. The report should include an specific component for the end-of-project evaluation of the project "Rehabilitation of Two Piped Water systems in Mozambique" with evaluation tools based on the OECD DAC evaluation criteria **5 days**

Organize a validation meeting with UNICEF and Government partners to finalize the evaluation tools **2 days**

Undertake field visits to selected small towns for semi-structured interviews with local level stakeholders (i.e. provincial, district and community) and beneficiaries 15 days

Prepare an intermediate report on findings from interviews and field visits and facilitate meetings with stakeholders for consultation, validation and feedback review and evaluation preliminary findings **5 days**

Prepare a final report on the analysis of the implementation of WASH projects within the Delegated Management Framework to identify and document lessons learnt and outline recommendations for strengthening the DMF implementation model and future WASH interventions in small towns, including specific roles, responsibilities and resource needs for the various sector actors **5 days**

Prepare a stand-alone document for the findings of the end-of-project evaluation of the project "Rehabilitation of Two Piped Water Systems" **5 days**

TOTAL **45 days**

Ethical Considerations: The design of the evaluation and the implementation process should explicitly address the Strategic Guidance Note on Institutionalizing Ethical Practice for UNICEF Research and UNICEF Procedure for Ethical Standards in Research, Evaluation, Data Collection and Analysis. Therefore, the Evaluation Inception Report will be submitted for an Institutional Review Board (IRB) approval at the Mozambique CO.

4. Deliverables

Under the supervision of UNICEF Mozambique / WASH section, in close coordination with government partners, the experts designated by the Institution / Consulting Firm will be responsible for carrying out the following tasks (Time allocation indicated in the table is for reference only. Interested companies institutions should include the proposed time allocation that correspond to their technical and financial proposal):

Summary of activities, timelines and deliverables:

Item	Deliverable(s)	Associated activities	Timeline for submission	Comment
1	**Inception report**, including: - Summary of literature review - Detailed workplan and proposed list of interviewees - Proposed methodology and tools for review / evaluation	• Desk review and preliminary analysis of key documentation	Week 2	To be presented and discussed with UNICEF and key stakeholders at inception meeting
2	**Intermediate report on findings from interviews and field visits** (for consultation with stakeholders)	• Finalization of evaluation tools	Week 10	Field visits to selected project sites
3	**Draft evaluation report** on UNICEF project "Partnership for WASH in Eastern and Southern Africa: Rehabilitation of Three Piped Water Systems"	• In-country and field visits to WASH projects in small towns • Semi-structured interviews with stakeholders	Week 12	Draft report to be presented for comments and feedback from UNICEF and key stakeholders
4	**Final evaluation report** on UNICEF project "Rehabilitation of Two Piped Water Systems"	• Review meeting with key stakeholders	Week 14	Institution / Consulting Firm will be responsible to facilitate consultation / review meetings. Two meetings to be organized (one for evaluation and one for review / lessons learnt).
5	**Final report on review and analysis** of good practices lessons learnt from the implementation of WASH interventions within the Delegated Management Framework (DMF)	• Consultation with stakeholders, presentation and validation of recommendations	Week 16	

5. Reporting Requirements

Consulting Institution will report to the SPEaR (Social Policy, Evaluation and Research Section), UNICEF Mozambique. The day-to-day supervision and follow up of activities will be done by the WASH Section. Review and approval of reports and tools are to be done through a steering / coordination committee including UNICEF (SPEaR and WASH) and Government Partners (AIAS and CRA).

Specific deliverables and reports are included in the table above. Final reports (n. 4 and 5) must be produced in Portuguese and English and should include a power point presentation in each language

6. Location and Duration

The estimated time allocation4 for the Consultancy is 45 working days to be implemented within a maximum of 16-week timeframe.

The expert(s) designated by the Institution / Consulting Firm will be expected to conduct field visits and interviews with stakeholders and beneficiaries in selected locations (6 small towns) throughout Mozambique, as well as consultation with national level stakeholders based on Maputo. The estimated period for these visits and consultations is between 3 to 4 weeks (see timelines and deliverables above).

Institution / Consulting Firms based outside Mozambique must be able deploy suitable experts to Mozambique for the above indicated activities and period.

7. Qualification Requirements

4 This time allocation is for referential purposes. Interested companies institutions should include the proposed time allocation that correspond to their technical and financial proposal:

The Institution / Consulting Firm should be able to second / assign an individual – WASH/Evaluation expert – who meets the below indicated qualifications, experience and competencies.

Interested Institutions / Consulting Firms can submit additional team members to complement WASH/Evaluation expert's experience. This will consider as an added value for the technical proposal, however is not considered as a mandatory requirement.

Education and experience:

· 15 years or more of relevant professional experience in the development, planning and management of multi-stakeholder WASH projects/programmes in development settings, including demonstrated experience in reviews and evaluation of WASH related projects.

· Advanced university degree in WASH related field, including development studies, civil / hydraulic engineering, water and sanitation.

· Experience in public-private operation of water supply system and sanitation markets in urban / peri-urban areas will be an asset,

· Familiarity with the urban WASH sub-sector in Mozambique will be an asset.

Competencies:

· Strong ability to think strategically and creatively, and analyse and synthetize information to provide well-structured and high quality products;

· Strong organizational skills and readiness to work flexible hours to ensure that the agreed upon timeline is adhered to;

· Strong interpersonal skills, organizational networking, the ability to communicate efficiently and effectively with a range of government and civil society partners

· Fluent in Portuguese and English with excellent written and verbal communication skills (previous experience in report writing is required);

· Proven capacity to work collaboratively in a multi-cultural settings, while taking responsibility for individual deadlines and deliverables;

· Solid team player who can operate independently, with a demonstrated ability to work with flexibility, efficiency, and diplomacy in a fast-paced environment.

8. Evaluation Process

TECHNICAL PROPOSAL (80%)

Overall response (5%)

- Overall completeness of response as per the ToR (5%)

Institution / Consulting Firm and Key personnel (30%)

- Range and depth of experience with similar projects. Evidence of similar assignments undertaken in the region, Africa and elsewhere (10%)

- Client/partner references (5%)

- Key personnel: relevant experience and qualifications (as appropriate and defined by the ToR), roles distributions and availability to work in the field (15%)

Institution / Consulting Firm and Key personnel (45%)

- Quality of the proposed research methodology / design and data collection methods and procedures (15%)

- Quality of the proposed work-plan, management structure and monitoring and quality assurance processes (15%)

- Assessment of ethical concerns and risks and appropriateness of mitigation measures (15%)

NOTE: Institutions that fail to submit relevant documentation that will enable a thorough review of the Institution in all relevant areas, do so at their own risk and will be subject to disqualification or penalty of reduced points. The assessment of the Institution will be made on the basis of documents submitted for review in the Proposal.

FINANCIAL PROPOSAL (20%)

Assessment/review will include:

- Overall Price.

- Cost benefit comparison related to number and quality of personnel in the Proposal who will conduct the spot check or verifications (financial assessments).

- Completeness of the Financial Proposal (ensure that all costs, including professional fees, costs of travel, salaries, insurance, etc. are included in the price offered).

- Payment terms/schedule of payment proposed.

- Timeline proposed.

- Period of validity of Proposal.

NOTE: As the most financially attractive offers will be at an advantage, if the Institution can offer any discounts or options, they should be clearly marked in the financial proposal to facilitate the comparison.

9. Administrative Issues

Depending on the location of the proposed staff seconded for this Consultancy, the assignment may involve international trips to cover field based activities. Institutions / Consulting Firms should cover all costs related to international travels (including cost for transportation and accommodation/ Daily Subsistence Allowances (DSA), including local travel and in-country DSA. UNICEF will not provide accommodation to any member of the Institution / Consulting Firm.

Any other logistical requirements for day-to-day activities, international travels and travel within Mozambique are to be provided and organized by the Consulting Institution.

All costs related to the fulfilment of the contract, including all travel related costs must be included in financial proposal and have to be explicitly included as a separate item in the proposed budget

10. Project Management

Consulting Institution will report to the SPEaR (Social Policy, Evaluation and Research Section), UNICEF Mozambique. The day-to-day supervision and follow up of activities will be done by the WASH Section.

11. Payment Schedule

Item	Deliverables	Timeline	Proposed payment (%)
First payment	Inception report	Week 2	20
Second payment	Intermediate report and draft evaluation report on UNICEF project	Week 12	30
Last payment	Final report, including final evaluation report on UNICEF project	Week 16	50