# KFW

# Ex post evaluation – Afghanistan

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Sector: Basic drinking water supply and basic sanitation (CRS Code 14030) Project: CP Water Supply Kunduz BMZ No. 2003 66 229\* Programme-/Project executing agency: Afghan. Urban Water Supply & Sewerage Corp. (AUWSSC) - Strategic Business Unit Kunduz

#### Ex post evaluation report: 2014

		Project A (Planned)	Project A (Actual)
Investment costs (total)	EUR million	2.50	**3.90
Own contribution	EUR million	0.00	0.00
Funding	EUR million	2.50	**3.90
of which BMZ budget fund	Is EUR million	2.50	**3.90

\*) Projects in 2012 random sample \*\*) plus residual funds of 0.1 million for Herat water supply



Description: The project comprised measures to swiftly increase drinking water availability and supply security for the city of Kunduz (6 new deep wells, collection pipes, higher storage capacity with chlorination, design works for main distribution network). Operating costs were covered decreasingly and the institutional development of the operating organisation was initiated. The initial grant of over EUR 2.5 million was supplemented in 2005 by EUR 1.5 million, while residual funds of EUR 0.1 million were transferred to the FC project "Herat Water Supply" (BMZ No. 2002 65 637).

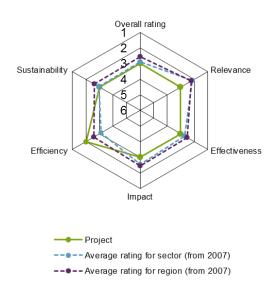
Objectives: The ultimate impacts were firstly to help improve living conditions and reduce health risks for the population in Kunduz; this was to be measured by virtue of survey results among the population and - if available - of data on the incidence of water-induced diseases; furthermore (added ex-post), the project was to contribute to strengthening the population's confidence in public-sector institutions' capabilities with view to provide basic services under (post-) conflict conditions. The project's objective was an improved drinking water supply as a way of quickly stabilising basic services for the population in a fragile country (added ex-post); this was to be measured against a) supply coverage, b) supply volumes, and c) water quality.

Target group: Roughly 120,000 inhabitants in the inner city of Kunduz (poor data quality and availability), of which roughly 85,000 were actually supplied (last updated 2014).

### **Overall rating: 3**

Rationale: The construction quality of the infrastructure supplied in a fragile environment is largely good and enables the connection of additional households up to a connection rate of 100 %. The number of inhabitants whose supply situation was improved significantly amounts to around 70-75 %, just below the targeted connection rate of 80 %. Survey results reveal noticeable health improvements for the population affected. The utility's capacity and reputation have been considerably enhanced, but further institutional strengthening will still be required at least in the medium term.

Highlights: The population was initially slow to respond to the progress regarding improved water supply and increased operating capacities. This initial reluctance has now given way to a marked increase in demand for household and yard connections. It remains to be seen how much the improved supply can boost confidence in public-sector bodies in general.





## Rating according to DAC criteria

### **Overall rating: 3**

The construction quality of the infrastructure supplied in a fragile environment is largely good and allows for the connection of further households up to a connection rate of 100 %. The project itself, however, was only able to finance 100 new connections due to budget limitations. The number of connected households has risen from 2,480 at final inspection (2009) to a remarkable 8,600 in 2014; as a result, almost ¾ of the population in the urban area benefit from an improved supply so far. The operation of the system is generally adequate, with occasional disruptions in supply - also confirmed by survey results. Achievements in institutional terms – with considerable TC support – should be acknowledged not least because the population now also considers the local waterworks to be responsible for the water supply (and no, e.g., an external parallel structure). At the project's beginning the utility was practically dysfunctional, but now it performs its duties to the best of its ability, at least in the urban area of Kunduz. Nevertheless, the province is tainted by overarching conflicts in the form of a) persistent armed opposition to the central government and their foreign supporters - at the latest since 2008, b) crime (particularly drug trafficking) as well as c) numerous, sometimes rival militias led by local and often corrupt warlords; those still are rather influential with view e.g. to filling of political offices as well as to the placement of key security staff. Under such circumstances, the undoubtedly necessary progress achieved in terms of improved water supply and increased operational capacity can only have a limited effect in terms of boosting confidence in public structures in general. The Overall project rating is considered to be still satisfactory.

#### Relevance

The unreliable and inadequate drinking water supply of the population of Kunduz – combined with weak operating capacities – was identified as the core problem and assessed correctly: this basically provided a suitable entry point to support local peace processes through visible measures effective in the short-term. The technical concept or design chosen for the subsequent development of the project displays certain flaws - e.g. regarding the site selected for the water reservoir that did not ensure sufficient line pressure for all supply zones. Safe water supply was and is one of the most pressing problems of the Afghan government and the city of Kunduz. This essentially offered a way to start stabilising living conditions in a volatile environment. However, the fact that a large proportion of the population was and in some cases still is drawing drinking water of dubious quality from private shallow wells where the drinking water is remains a challenge. With at best rudimentary hygiene awareness, this posed a considerable acceptance risk at the beginning of the project.

The project's intervention logic is essentially sound. However, as was customary at that time, it focused largely on the infrastructural aspects; from the current perspective, equally relevant aspects of stabilisation under (post-) conflict conditions were only addressed peripherally ("dual system of objectives"). As regards the original hierarchy of objectives, a lack of suitable indicators can be identified on the one hand, which was adjusted ex-post (see below). On the other hand, the overall objective of "improved living conditions" should- in retrospect - be regarded as at least of equal importance to the then sole objective of "improved health".

The reform of the institutional framework, which was in urgent need of adjustment, was well-covered by complementary TC interventions. In general, German DC is recognised as "Lead Donor" in the field of urban water supply.

In its aims, the project conforms to the "Afghan National Development Strategy" adopted by the Afghan government. Coordination with other donors, above all the World Bank (within the framework of its 11 cities programme) is considered good. Due to the timing of its planning, the BMZ's concept for development cooperation in the fragile context of "Development for Peace and Security" of 2013 could not yet be considered explicitly.

#### **Relevance rating: 3**



#### Effectiveness

The wording of the project objective (outcome), the improved drinking water supply, was adjusted retrospectively: in order to adequately reflect the structural dimension in a fragile context, to the phrase is complemented by "empowering sufficiently legitimated local structures that are capable to provide essential public services".

The former parameters of the indicators (supply level and water volume per resident) are supplemented by the aspect of water quality.

The fundamental results are as follows (data inconsistent in some cases):

Indicator	Measurement parameter	Status PA	Objective (Planned)	Status EPE
Level of supply	%	22	80	70-75
Water volume per supplied resident	l/person+day	5 <sup>1</sup>	50	48
Water quality	WHO standard	Not met	> standard	Chlorination is carried out, positive sur- vey results

As a result of intensive work (particularly public relations work, hygiene campaigns), which was and is supported by the complementary TC project, the utility succeeded in increasing the number of household connections to over 8,600. For the urban area (comprising 120,000 people) that can technically be supplied by the system, the intended connection rate of 80 % is therefore almost achieved operator.

The indicator for the available water volume per inhabitant (indicator 2) was largely fulfilled. The project contributed significantly to improving water quality. The development of a new well field outside the city improved the water quality with a high level of certainty, as confirmed by several consumers during a quality survey. A metering system was also installed and is permanently in operation, but no large-scale water tests have yet been carried out. There are doubts regarding the continuous supply claimed by the utility, as numerous respondents reported interruptions and poor water pressure. This correlates with information about an increased silting of drill holes in the well field, which is assumed to be due to execution and design flaws (inadequate sand filters, oversized pumps). Data on loss rates fluctuate considerably and are consistent only in part. However, it can be plausibly inferred that at least some significant improvement has occurred.

As it took several years to significantly expand the supply system (and thus increase connection rates), the aim of rapidly improving the water supply - as an essential part of the stabilisation objective - was not achieved. Admittedly, there were no project funds were only available to connect 100 household. However, people are acknowledging "their" water utility as a service provider, even if they are not yet completely satisfied. That said the utility's capacities were enhanced to a greater degree than originally expected under the (post-) conflict conditions. According to information from the operator, it was not only possible to reduce technical water losses significantly (from over 40 % to below 20 %), but also to achieve operating cost coverage out of own income.

<sup>&</sup>lt;sup>1</sup> From existing central network. Amount taken from shallow well is not presented.



The results achieved under difficult circumstances (including initially reticent customer response - see "Relevance") justify the satisfactory sub-rating from a technical perspective; this also applies to the dimensions of visibility and the utility's institutional legitimacy as a sufficiently competent service provider.

#### Effectiveness rating: 3

#### Efficiency

Investment costs per connected inhabitant are around EUR 50 which is good by local standards. However, inevitable security problems and political tensions under the general conditions in Afghanistan as well as the premature withdrawal by the contractor for security reasons delayed, the construction period was by almost 27 months. This impinged on the swift efficiency and visibility originally intended. Accordingly, production efficiency is only rated as satisfactory.

By Presidential Decree, the water price in Afghanistan was increased by an average of EUR 0.09 to approximately EUR 0.36 per m<sup>3</sup> from June 2012. This tariff increase has been implemented since 2012 by the nationwide supply agency AUWSSC. It is socially acceptable and theoretically enables all costs to be covered for operations in Kunduz: There, costs calculated for the water supply including amortisation amount to approximately EUR 0.24/m<sup>3</sup>. Further progress beyond covering operating costs (cf. "Effectiveness" above) would require a further reduction in water losses and an increase in charges. However, this calls for more significantly enhanced efforts from the side of Kunduz waterworks. Altogether, the allocation efficiency - regarding improved public services in particular - can be assessed as good. Combined with favourable unit costs – this still justifies a good sub-rating.

#### Efficiency rating: 2

#### Impact

Data on the achievement of the original overall objective (especially health statistics) is sparse, partly contradictory and only of limited significance. Nonetheless, quality surveys alternatively conducted among the local population provide evidence on clear improvements in terms of general living conditions as well as of health conditions. Limitations regarding hygiene result from the fact that waste water disposal in the city is still inadequate and there is now a greater volume of waste water; a complementary sanitation project by the World Bank failed to materialise.

The public service competencies of the local waterworks included in the new set of objectives have been improved at least to some extent. , They are necessary to build trust towards sufficiently legitimised public structures, especially at the level of the project-executing agency. So far though, only a marginal contribution can at best be expected towards a general stabilisation of public institutional structures in Kunduz.

In summary, a large proportion of the population benefits from improved living and health conditions. Should the conflict-laden situation persist, however, the question is how far the increased performance especially by the project-executing agency can contribute to enhancing trust from the population towards public structures in general. Overall, the impact level is rated satisfactory.

#### **Impact rating: 3**

#### **Sustainability**

In terms of sustainability there are several critical aspects - from an institutional and organisational as well as from a technical and economic point of view. After all, the Kunduz water utility succeeded in massively increasing the number of connections within recent years – from 300 at the beginning of the project to more than 2,480 in 2009 and above 8,600 in 2014. From an institutional perspective, the utility can be expected to operate the supply system on a self-sufficient basis and without further external support (still ongoing) only in the medium term. Clear improvements have been identified here since handover. It should be emphasised that - despite the critical security situation - the water supply has so far not been notably affected either in Kunduz or anywhere else in the country. Overall, sustainability is still considered to be satisfactory.

#### Sustainability rating: 3



#### Notes on the methods used to evaluate project success (project rating)

Projects (and programmes) are evaluated on a six-point scale, the criteria being **relevance**, **effectiveness**, **efficiency** and **overarching developmental impact**. The ratings are also used to arrive at a **final assessment** of a project's overall developmental efficacy. The scale is as follows:

Level 1	Very good result that clearly exceeds expectations
Level 2	Good result, fully in line with expectations and without any significant shortcomings
Level 3	Satisfactory result - project falls short of expectations but the positive results dominate
Level 4	Unsatisfactory result – significantly below expectations, with negative results dominating despite discernible positive results
Level 5	Clearly inadequate result – despite some positive partial results, the negative results clearly dominate
Level 6	The project has no impact or the situation has actually deteriorated

Ratings level 1-3 denote a positive assessment or successful project while ratings level 4-6 denote a negative assessment.

#### Sustainability is evaluated according to the following four-point scale:

Sustainability level 1 (very good sustainability): The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.

Sustainability level 2 (good sustainability): The developmental efficacy of the project (positive to date) is very likely to decline only minimally but remain positive overall. (This is what can normally be expected).

Sustainability level 3 (satisfactory sustainability): The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. This rating is also assigned if the sustainability of a project is considered inadequate up to the time of the ex post evaluation but is very likely to evolve positively so that the project will ultimately achieve positive developmental efficacy.

Sustainability level 4 (inadequate sustainability): The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and is very unlikely to improve. This rating is also assigned if the sustainability that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

The **overall rating** on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. Ratings 1-3 of the overall rating denote a "successful" project while ratings 4-6 denote an "unsuccessful" project. It should be noted that a project can generally be considered developmentally "successful" only if the achievement of the project objective ("effectiveness"), the impact on the overall objective ("overarching developmental impact") and the sustainability are rated at least "satisfactory" (rating 3).