

Morocco: ONEP Standpipe Programme I

Ex-post evaluation report

OECD sector	14030/Basic drinking water supply and basic sanitation	
BMZ project ID	1995 65 631	
Project executing agency	Office National de l'Eau Potable (ONEP)	
Consultant	Beller-IGIP	
Year of ex-post evaluation report	2009 (sample 2009)	
	Project appraisal (planned)	Ex-post evaluation (actual)
Start of implementation	Q 1 1996	Q 1 1996
Period of implementation	36 months	100 months
Investment costs (overall programme)	EUR 36.3 million	EUR 36.3 million
Investment costs (subprogramme, see text)		EUR 31.4 million
Counterpart contribution	EUR 10.7 million	EUR 10.7 million
		EUR 8.5 million
Financing, of which Financial Cooperation (FC) funds	EUR 25.6 million	EUR 25.6 million
FC finance for subprogramme		EUR 22.9 million
Other institutions/donors involved	<>	\$
Performance rating	2	
Relevance	2	
Effectiveness	2	
• Efficiency	3	
Overarching developmental impacts	2	
Sustainability	3	

Brief description, overall objective and programme objectives with indicators

The programme is being carried out as part of the nationwide Programme d'Approvisionnement Groupé en Eau Potable des Populations Rurales (PAGER), which is also supported by other donors and comprises a participatory planning and operational scheme for rural drinking water supply programmes. The overall objective of the FC measure was to make a contribution to lessening health hazards for the population. The programme objective was the sufficient all-year supply of hygienically safe drinking water via standpipes for up to 435,000 residents of Douar in 2010 (planning horizon).

The evaluation is concerned solely with the measures for installing standpipes in the villages (subprogramme), not with the pilot measures for supply via household connections financed from residual funds of EUR 2.7 million. The implementation of

these measures from Phase I has been included in Phase II of the programme concerned with supply via service connections. If included in a later sample, these partial measures from Phase I will be evaluated as part of the ex post evaluation of the sequel phase.

The programme measures comprised the construction of grouped water supply facilities which are gridded with existing mains pipelines into the rural consumer centres. The target group is the predominantly poor population in the rural programme locations. As the main outcome of the programme about 520,000 additional people in 771 villages were to be supplied with continuous hygienically safe water with the beneficiaries consuming up 10 I per capita and day on average for personal needs; in the villages, all the residents have as a rule been reached by the measures and people from peripheral districts and neighbouring villages also benefit from supply. Altogether, the programme under evaluation here (without residual funds) amounted to about DH 342 million or EUR 31.4 million with EUR 22.9 million financed from the FC grant, accounting for 71% of total costs. The residual funds of EUR 2.7 million are earmarked for pilot projects in village drinking water supply via service connections under Phase II of the programme.

Programme design/major deviations from original planning and main causes

The completion of 63 grouped water supply systems under the programme connected a total of 771 villages to the public water grid. The water for the supply systems is delivered solely via ONEP mains pipelines or existing local ONEP water supply facilities. The measures in the 63 grouped water supply facilities comprise 1,038 standpipes, 40 clean water catchments (reservoirs) with a capacity of 7,435 m³ and 24 pumping stations. Engineering services and awareness measures were also conducted.

The programme was implemented as an open scheme applying selection criteria in the preparatory planning for the individual measures, which were largely adhered to and met the criteria of the PAGER scheme set during planning and/or the specifications in the masterplan.

ONEP concludes a contract with the municipalities supplied for the operation of the facilities specifying the rights and duties on both sides. It guarantees proper and continuous water supply and undertakes to install the grid up to the water meters as well as the requisite reservoirs and pumps, etc. and to keep these in working order. The everyday operation of the standpipes is performed by the Gardien Gérant during fixed opening hours. It has a contractual relationship with ONEP and is responsible for collecting water fees and paying these to ONEP, for keeping the standpipe clean and conducting smaller maintenance work. Its income consists of the difference between the sale and purchase price. The operational scheme has proved effective.

Key results of impact analysis and performance rating

The operation of the standpipes is unprofitable for ONEP as the rates are generally inadequate. The tariff revenue it earns is only roughly enough to cover operating costs. The difference is made up through cross-subsidies, by levying a statutory solidarity surtax on the water price (surtaxe de la solidarité nationale), which is payable by every water customer and ensures that operating costs are ultimately met, according to ONEP. The investments are borne by the government. The income of the Gardien-Gérant can be assessed as adequate and the target group is generally able to pay the water fees under the present system.

The primary specific benefit of this programme consists in the discernible improvement in health over the last one and a half decades in the rural areas of Morocco, alongside other improvements (education, health care, economic growth) and which can in part be attributed to the programme via a plausible results chain. The programme thus contributes to narrowing the still wide disparities between urban centres and rural regions, which incur large macroeconomic costs. It improves the opportunities for the rural population, which includes a disproportionate ratio of poor people (by Moroccan poverty criteria), and hence acts as a major factor for national socio-economic and social stabilisation.

Taking into account all the effects of the programme, we assess developmental efficacy as follows:

Ensuring sufficient, all-year supply of the population in the programme locations with hygienically safe drinking water addresses a core problem of the target group. Thanks to the improved health situation, productive labour power can be put to better use, lessening costs for the families as well as for the government to pay for health care. Women can derive particular benefit from this and it indirectly promotes school attendance for girls, who have more free time at their disposal. This alleviates the disparities between urban centres and rural regions and progressively equalises living standards. The results chain for the programme, linking the core problem, the programme measures and the programme and overall objectives, is logically sound and comprehensible. In terms of scale and technical design, the programme was well suited to make a substantial contribution to solving the problem of drinking water supply in rural Morocco. It is in keeping with the needs and resources of the target group, as evident in its broad acceptance, even though demand for service water connections instead of standpipes in prosperous villages has increased so much that the technical layout will have to be adapted in the follow-on phase. This development reflects the higher demands of the population, but does not invalidate the technical approach. The developmental objective of the programme conforms with the goals of BMZ, the donors and the Moroccan Government, which pursue a joint policy with the PAGER scheme in the rural water sector. We therefore judge the relevance of the project as satisfactory overall (Subrating 2).

The programme aimed at supplying enough, high-quality drinking water to the region concerned. With the available funds, substantially more municipalities were provided with standpipes than planned. Instead of 435,000 inhabitants in 210 villages, 771 villages with approx. 520,000 inhabitants were connected to the public water mains supply. Basic consumption needs were estimated at 20 l/cd, but the actual water demand of the target group amounts to only about 10 l/cd. For the population, who have a tradition of saving on water, this low standpipe use is enough to meet basic needs for drinking, cooking and hygiene purposes. There is an evident awareness of the value of hygienically safe water for health, while other traditional sources are used in the household as far as possible for other purposes. The standpipes provide the only reliable water source in a broad radius, particularly in arid regions. The technical operability of the facilities installed over the planned service life is assured thanks to the good efficiency of ONEP and the successful operational approach. Altogether, the standpipes are in good condition and are put to proper use. Water quality is regularly monitored and meets the WHO standard. The envisaged supply standards in terms of availability, quantity and quality have been met by the programme measures. We therefore judge the effectiveness of the programme as satisfactory (Subrating 2).

The water supply facilities were installed at relatively low specific investment costs. They are almost 20% under the estimates at programme appraisal and are reasonable considering the extensive building measures for the scattered villages and the low population density. The water rates at the standpipes are subsidised and the population can pay for them without great difficulty. The target group is willing and able to pay, with the contribution by the population for installing a standpipe reaching 99% of the planned amount. At present, the funds available and allocated for operation and maintenance are sufficient, but they are only earned in part through income from the sale of water, the rest being provided by cross-subsidies from the solidarity surtax. Thanks to the practice of cross-subsidies in favour of the rural regions, basic future finance is generally assured, not, however, for replacement investments. The facilities were commissioned after considerable delays due to protracted negotiations with landowners. Accounting for these factors, the efficiency of the programme is gauged as sufficient overall (Subrating 3).

The overall objective was defined at programme appraisal as the reduction of hazards to the population through water-transmitted diseases. In all probability, the programme has made a contribution to this, since common water-transmitted diseases in the region are documented and the decline in the incidence of disease and the halving of child mortality rates during the programme term indicate a positive contribution. From a macroeconomic standpoint, the programme thus contributes to closing the persistent wide economic and social disparities between urban centres and rural regions and slowly equalising living standards. The more equitable opportunities for the rural population act as a major factor for national socio-economic and social stabilisation. The overall developmental impact of the programme is rated as satisfactory (Subrating 2).

The operational scheme for the standpipes would also appear appropriate for rural poor districts in future as well. It can assure continuous and reliable water supply with ecologically viable sanitation. Rural water supply operation can also be sustained in future, since ONEP is a well organised and positioned enterprise with the necessary support at policy level. The current economic deficits in rural water supply are no longer severe either in macroeconomic terms or on the balance sheets of ONEP, as the cost element for rural water supply only amounts to approx. 8%, the operational deficit is offset by surtax and finance for future expansion steps also appears to be assured from the government budget. A basic factor influencing programme sustainability is, however, the current accelerating transition from traditional to modern lifestyles in rural Morocco. In the water sector, this is raising demand in the population for service connections, which, however, entails higher costs and places heavier demands on adequate sanitation and water resource management. Over the medium term, Morocco must plan national water resource and irrigation management more effectively to ensure that the available national water resources can meet the foreseeable increase in demand. Considering these factors, we assess programme sustainability as sufficient overall (Subrating 3).

Weighing up the individual subratings, programme performance is accorded the overall rating of satisfactory (Rating 2).

General conclusions

Standpipe programmes only provide an adequate solution to the drinking water problem in rural districts when the population is very poor and traditional water sources are meagre. In countries undergoing a social transition phase and with the necessary economic resources, such as Morocco, this becomes apparent in decreasing acceptance for standpipes and keener demand for service connections. These should, however, only be financed when adequate sanitation is assured so as to avoid causing new environmental problems.

In Islamic countries, women can also operate standpipes, provided the location is selected applying socially compatible criteria. They often have a greater interest in an operational water point than men since they are traditionally responsible for supplying their family household with water.

Ongoing cross-subsidies for the basic supply of very poor sections of the population to meet essential water needs on statutory terms and conditions can make for an effective and sustainable measure in poverty reduction. Even if water supply that runs a commercial deficit is undesirable, cross-subsidies for drinking water in favour of underdeveloped rural regions contribute to reducing regional disparities and hence act as a major factor for socio-economic and social stabilisation in a country that appears eligible for assistance under favourable general conditions.

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

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

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

A rating of 1 to 3 is a positive assessment and indicates a successful project while a rating of 4 to 6 is a negative assessment and indicates a project which has no sufficiently positive results.

<u>Sustainability</u> 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 an improvement is very unlikely. 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 <u>overall rating</u> on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. A rating of 1 to 3 indicates a "successful" project while a rating of 4 to 6 indicates an "unsuccessful" project. In using (with a project-specific weighting) the five key factors to form an overall rating, it should be noted that a project can generally only be considered developmentally "successful" if the achievement of the project objective ("effectiveness"), the impact on the overall objective ("overarching developmental impact") <u>and</u> the sustainability are considered at least "satisfactory" (rating 3).