Project evaluation: summary report

Tunisia: Development of rural regions – integrated water resources management (AGIRE)

Title according to the offer:	Development of rural areas – integrated water resources management (AGIRE)
Project no.:	2013.2235.3
Country/region:	Tunisia
Sectoral attribution:	Water sector policy and administrative management
Project objective:	Planning and management mechanisms for sustainable water resources management are implemented on a pilot basis.
Project term:	July 2013 – June 2016
Project volume:	EUR 4,000,000
Commissioned by:	BMZ
Lead executing agency:	Ministry of Agriculture, Water Resources and Fisheries (*Ministère d'Agriculture et des Ressources Hydrauliques et de la Pèche*, MARHP)
Implementing organisations (in the partner country):	Office of Planning and Hydraulic Balance (*Bureau de Planification et des Equilibres Hydrauliques*, BPEH), Regional Commission for Agricultural Development (*Commissariat Régional de Développement Agricole*, CRDA)
Other participating development organisations:	None
Target groups as per the offer	Water users in poor and marginalised regions in the interior, primarily farmers in public irrigation perimeters who are cooperating in user groups (*Groupement de Développement Agricole* – GDA) and also commercially operating private landowners. The improvement of the legal and institutional framework for resource management sought by the measure will ultimately also benefit water users in other regions of Tunisia.

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Project description

Tunisia suffers from a chronic and worsening shortage of water. The share of agriculture in fresh water use is 82%, and development of surface water resources has reached 90%, putting it close to the upper limit of potential. Availability of water in Tunisia is subject to very great fluctuation. Overuse (estimated total water consumption 2,200 cu. m., available fresh water per inhabitant 450 cu. m.) is making water a scarce resource. Overall, per capita availability of water in the MENA region will be further reduced by half by 2050 through population growth and overuse.

Other factors in Tunisia are the societal change and rebellion against state authority following the revolution, and the earlier authoritarian government, leading to rejection of any regulation of the allocation of water resources. Conflicts over use of water are now publicly debated, reflecting the increased self-confidence of stakeholders. Since the overthrow of the old government, new wells are being drilled on a large scale, in numbers which in many areas exceed the approved (legalised) wells. This has led to a further dramatic increase in the overuse of water resources.

Sustainable management of scarce water resources in the target region of central Tunisia is one major objective of the project. The use of participatory decision-making procedures is an integral element of the advisory services that are helping establish institutional structures at regional level. This provides an opportunity for learning first-hand about democratic change and decentralisation. Improving the informational basis for integrated water resources management is an important precondition for effectively taking into account climate change, and in particular for gauging its impact on water resources, and for planning concrete adaptation measures within the framework of water management plans.

The project's objective, 'Planning and management mechanisms for sustainable water resources management have been developed and are implemented on a pilot basis' addresses the relevant problems, follows the model of integrated water resource management (IWRM) and takes into account the conditions prevailing in the sector. The project strategy engages with the context and builds on ongoing change processes. In this, the project follows a multi-level approach, and seeks to deliver effective solutions to pressing water management problems and conflicts through capacity development and structural reforms.

The project concentrates primarily on rural areas, and its target group includes specifically water users in the poor and marginalised regions in the Kairouan Governorate in central Tunisia. These are largely farmers who own or lease their land. In addition there are users of drinking water installations. A logical lead executing agency for the project is the Ministry of Agriculture, Water Resources and Fisheries (*Ministère d'Agriculture et des Ressources Hydrauliques et de la Pèche*, MARHP), which has the advantage of bringing together responsibility for agriculture, irrigation, drinking water supply and water resources management under one roof. The implementing organisations selected are the Office of Planning and Hydraulic Balance (*Bureau de Planification et des Equilibres Hydrauliques*, BPEH) at the national level and the Regional Commission for Agricultural Development (*Commissariat Régional de Développement Agricole*, CRDA) at regional level. At the local level, collective and participatory resource management are being further strengthened, with the emphasis on capacity development for user groups (*Groupement de Développement Agricole*, GDAs).

The participants in the water forum, identified by means of a social network analysis, are receiving support to draw up local development plans for managing local water resources. To increase the information available within the water forum dialogue, a water management model (WEAP) is to be used, which includes current water reserves and distribution and also creates future scenarios (population growth, climate change). Raising awareness among water users at the local level is intended to reveal new approaches and options for more efficient and economical management of water resources. Greater participation in management by user groups promotes cohesion between the different water user groups. In addition, mediation and conflict transformation mechanisms are being specifically developed, in case conflicts over use emerge.

At regional level, the focus is on promoting an appropriate institutional framework and IWRM-relevant coordination mechanisms (water committee), which are then to be involved in formulating regional development plans. In parallel, selected measures and initiatives from the development plans are implemented on a pilot basis (e.g. more efficient use of irrigation water, improved management of GDAs, assistance to women in rural areas, promoting local employment in the water sector, the water-energy nexus, awareness-raising campaigns for young people).

The CRDAs are to receive support in elaborating investment and management plans at the level of a larger hydrological region (Nebhana water system). The project will provide sporadic support with data management and modelling, but will focus on capacity development for the CRDAs and MARHP.

At the national level, experience gained in the pilot regions with the implementation of integrated water resources management will be used in the further development of the strategic and legislative framework. Lessons learned from the Nebhana water forum will specifically be used in the development of the National Water Strategy 2050.

During its term to date, the AGIRE project, has integrated the following initiatives financed from regional funds: '*Ambassadrices de l'Eau*' (Open Regional Fund ORF Femmes Maghreb), '*Eau et Emploi*' (ORF Gouvernance), '*Arbitrage dans le secteur de l'eau*' (ORF Gouvernance). In addition, the '*Amont du Nebhana*'-project, financed from the MENA special initiative will be integrated.

Overall rating of the OECD-DAC criteria:	Individual rating of the OECD-DAC criteria:
To determine the TC measure's overall rating, calculate the average of the individual ratings of the five OECD-DAC criteria: 14 – 16 points: very successful 12 – 13 points: successful 10 – 11 points: rather successful 8 – 9 points: rather unsatisfactory 6 – 7 points: unsatisfactory 4 – 5 points: very unsatisfactory	Relevance: very successful (16 points) Effectiveness: unsatisfactory (6 points) Impact: rather unsatisfactory (8 points) Efficiency: rather successful (11 points) Sustainability: rather successful (10 points) Overall, the project is rated **rather successful.** (Average of the individual ratings = 10.2 points.)

Relevance (Are we doing the right thing?)

The project aims to help develop processes for integrated water resources management, with improved availability, accessibility and usability of data on water resources, water quality and water use. At regional level the emphasis is on promoting an appropriate institutional framework and improving integrated water resources management processes. Support is provided at national level for the further development of the pertinent strategic and legislative framework. The capacities of water users, suppliers and the entities responsible for IWRM and monitoring water resources are being developed. Guaranteed availability of water (volume, quality and timing) is a central limiting factor of production for Tunisian agriculture. This is illustrated by the enormous number of private wells which have been drilled without permits since the revolution. Overall, there have been few opportunities to date for water users to collaborate on resource allocation or articulate their needs. The decentralised water forum will strengthen the influence of the target group vis à vis state bodies, which will also be a substantial contribution towards improving participation and transparency.

The particular role of women in irrigated agriculture and the disadvantages they suffer as a result of their traditional status and cultural stereotypes is specifically addressed (very frequently they work as day labourers with an income of EUR 5-7). Income generating initiatives for women are supported, to help gear the actions of state and civil society organisations more explicitly to their situation.

Existing management procedures are being improved in cooperation with relevant actors, and new decentralised structures and instruments introduced. Under the new Constitution, Tunisia is committed to decentralisation. However, the current legislative framework does not reflect this (the legislative framework for water, the '*Code des Eaux*', dates back to 1975). The project supports the participating national institutions in establishing a solid basis of data and developing decision-making aids using data and expertise. A team of experts is to draw up a new water strategy for the period up to 2050 ('*Stratégie Nationale des Eaux 2050*'), with the project helping elaborate detailed terms of reference (among other things). One of the project's priorities in implementing IWRM principles is improved coordination between national bodies, decentralised structures and local users (CRDA, Ministry, and – in future – the farmers).

In Tunisia, the introduction of integrated water management systems, more efficient water use and enhanced demand management are explicitly mentioned in the Tunisian Government's policies and strategies, from which the project objective can be directly derived. It is also congruent with the goals of the current Tunisian development strategy for environment and natural resources (May 2012). Promotion of IWRM at the local level contributes directly to achieving MDG 7 (ensure environmental sustainability) by ensuring more efficient use of water as a scarce resource. At the same time, it helps secure agricultural production on the part of primarily subsistence-oriented and disadvantaged small farmers, resulting in a reduction in extreme poverty (MDG 1). Both results are increasingly important in the face of high population growth and advancing climate change. Specific promotion of women through gender-appropriate advisory and capacity development services strengthens the role of women in irrigated agriculture (MDG 3). The project is also in compliance with the Sustainable Development Goal 6 (Access to water and increasing water efficiency). The BMZ sectoral strategy regards the IWRM approach as an internationally recognised paradigm for good water policy, and as an approach for achieving the objectives of development cooperation in the water sector.

Priorities of German-Tunisian cooperation in the water sector include improving irrigation methods, institutional reforms to achieve decentralised and participatory planning and distribution of irrigation water, and strengthening the role of farmers (particularly women farmers) in irrigated agriculture. These priorities are reflected in the project's multi-level approach and fields of action. BMZ's principles for promoting sustainable agriculture cite 'resource conserving and climate-neutral agriculture' as one objective, and call for optimising the 'scale and efficiency of water use'. The project's promotion of participatory structures will particularly benefit small farmers, in line with the paradigm of 'promoting small-scale farming'.

Overall, in terms of relevance the project is rated **very successful**.

Effectiveness (Will we achieve the project's objective?)

Objectives indicator	Target value according to the offer	Current status according to the project evaluation
1 In two cases, local development plans for the development and sustainable use of local water resources, agreed between user groups and representatives of the responsible CRDA, have been adopted.	Two coordinated local development plans for water management.	Reporting, feedback from the regional partner organisations, the process plan, and presentations by individual user organisations indicate that one coordinated local development plan for water management is likely to be adopted by the end of 2016.
2 One of the CRDAs in the project region has an investment and management plan for the regional water sector, produced using participatory procedures, which complies with IWRM principles.	An investment and management plan in compliance with IWRM principles has been produced.	The regional implementation level depends partly on the successful development of the WEAP decision-making aid. All stakeholders are convinced in principle that WEAP will be completed by the end of 2015/ beginning of 2016. Participatory formulation of an investment and management plan for the regional water sector which complies with IWRM principles is only possible to a limited extent.
3 A consultation and coordination mechanism has been established, which goes beyond the CRDA level and reflects the natural boundaries of water resources.	A consultation and coordination mechanism has established itself.	Ongoing measures in preparation for the water forum receive significant support from the regional partner structures. The process of establishing the water forum will probably be finalised during the project term. While at regional level the readiness exists to involve user representatives, the cooperation at central government level that would be required to effectively restructure the decision-making process cannot realistically be achieved within the term of the project. The coordination mechanism will be established with limitations.
4 Experience with implementing an integrated water resources management approach in the pilot region is taken into account in the decisions of the national water council ('*Conseil de l'Eau*').	Local and regional experience is taken into account in implementing IWRM at national level.	There has been no evidence to date that implementation experience has been incorporated in the National Water Strategy 2050 and the framework legislation for water, due to the combination of the lack of experience at local and regional level and the lack of will on the part of the Government and individual departments in the Ministry to generate these documents. Despite the additional project measures (e.g. prepared terms of reference) the necessary steps have not been initiated within the Ministry, and the options for obtaining financial support from other donors have not been utilised. It will probably not prove possible to achieve the indicator.

The evaluation team concludes that by the end of the project the probable status of the target indicators will be
target indicator 1 *partly* achieved
target indicator 2 *partly* achieved
target indicator 3 *partly* achieved
target indicator 4 *not* achieved *at all.*

Improving water resources management requires measures which are quickly effective at local level. At the local level the project is restricted to the region of central Tunisia. The project is working intensively on establishing the water forum in Kairouan Governorate, which is intended to contribute towards collective and participatory resource management and provide a mechanism for mediating local conflicts over use. In addition, work is still in progress on modelling the water balance and relevant socio-economic scenarios. These measures have good prospects of successful implementation, although probably not by the end of the remaining project term (one year). At regional level, CRDA capacity development is already showing results in the active cooperation with the project and other regional service providers.

In terms of effectiveness the project is rated **unsatisfactory** with 6 points.

Overarching development results (impact) (Are we contributing to the achievement of overarching development results?)

The overarching goal of the project is the introduction of integrated water management systems, more efficient use of water resources and improved demand management. Through the introduction of integrated planning and management mechanisms for water resources management, the project also helps ensure the sustainability of the drinking water supply, irrigation and water use by industry and private households in rural areas of central Tunisia, and beyond. In the medium and long term, integrated and sustainable water resources management will contribute to economic growth, and thus help improve living conditions, particularly for poor population groups in rural areas. Improved water resources monitoring and an integrated planning and management system will enable the target group to adapt better in the long term to changing climatic conditions. Once WEAP becomes operational the project will identify a baseline and determine indicators on a ongoing basis.

Despite the successful elections in October 2014, post-revolutionary Tunisia is still in a transitional phase. The interim government, which was in office until shortly before the end of 2014, limited itself to questions of internal security and preparing for the elections in October 2014. As a result, there have been no attempts at or implementation of strategic change processes in the water sector since 2014. Replacement of management at BPEH and the lack of cooperation and communication between the various offices of the partner authorities and the project, and even with their own government, are leading to a standstill in adapting or developing strategic policies and legislation. As a result, the preconditions needed to achieve the intended results at the national level are not in place. Currently, it is not possible to predict whether the new government will manage to achieve greater political stability and so substantially improve the preconditions for reforms in the water sector. Various contacts have reported that the new '*Code des Eaux*' submitted to the Cabinet differs significantly from the draft previously discussed with several donor organisations, which is based on IWRM approaches. It should be noted that an unstable political situation and lack of political determination and courage to address reform processes were identified as risks at the macro level of the project.

While the partner authorities (MARHP and CRDA) have initiated the necessary steps for a change process and the CRDA is proactively tackling changes, it cannot succeed without political support. At regional level it should be noted that the scenarios to be developed with the WEAP include a calculation of water demand, based on the area farmed and the crops grown. Contacts at district and national level believe that this will significantly improve the possibility of demand-appropriate distribution of irrigation water in terms of quantity and timing.

The process of establishing a water forum has been launched, is very favourably regarded by all contacts, and is seen as a key step towards strengthening civil society actors in irrigated agriculture. In addition, various measures have already been taken to raise awareness and support women involved in farming. The competition held in the schools has attracted attention beyond the group of participants, and the values conveyed have been widely disseminated as a result. Individual women are currently being assisted to manage their irrigated crops more efficiently. NGOs are being investigated for their capacity to take over these measures and support them in future.

The project's current objective provides for innovative and exemplary approaches. The widescale implementation of integrated water resources management measures can only be expected within the scope of follow-up measures. Implementation of measures has concentrated to date on a pilot region and on delivering support at national level to elaborate strategic and legislative documents. The water forum in particular offers a large number of farmers a chance to present their needs systematically and be heard by regional administration. This structure can be transferred to other locations, although there has been no binding statement on this yet from the decision-makers (BPEH, Ministry). However, attitudes in discussions have been mostly positive in principle. The WEAP is also rated positively as a tool to be developed

to support decentralised and local water resources management, as are the modelling tools that are being developed in parallel. At this current early stage it is not possible to say with any certainty to what extent they can be used efficiently on a broad basis without strong external or central government input. It is also too early to evaluate consciousness-raising measures, such as the school competition, after the first pilot efforts. Activities would have to be expanded significantly for this. It has not yet been possible to analyse and evaluate the results in this connection using reliable surveys and statistics.

In terms of impact the project is rated **rather unsatisfactory** with 8 points.

Efficiency (Are the objectives being achieved cost-effectively?)

The project has divided its core processes essentially into (1) developing a national system to support decision-making (including WEAP); (2) formulation of an investment and action plan by the water forum; (3) implementation of a participatory concept for a water forum; (4) capacity development for project partners (BPEH; CRDA, GDAs); (5) development of inputs to the National Water Strategy 2050, and (6) addressing cross-cutting issues. Activities and internal responsibilities are aligned with these fields of action. The activities are well structured, and make an organised contribution towards objective-oriented and resource-efficient implementation. Concentration on the selected pilot region makes good sense in terms of efficiency in particular. However, the current concentration of staff in Tunis is pushing up travel costs and impacting negatively on efficiency. Opening the Kairouan office in March 2015 and hiring two local staff have improved direct contact with local actors, and enhanced efficiency. Further transfer of staff to the regional level will probably not be feasible because of the significantly lower level of development there. The award of a consulting contract for establishing the water forum is bringing additional high-quality expertise to the project team, although without permanent in-country staff. Three international staff and 3.5 national experts are working directly for the AGIRE project in addition to the external experts. Two of the national experts live in Kairouan.

The partners' inputs are in the form of providing CRDA experts and management staff, and providing office space to a limited extent. The provision by MARHP and BPEH of the major coordination inputs to ensure the steering and harmonising of the planned services must be deemed to be inadequate. At local level in particular the partner authorities are supplying, making available and distributing all important sector-related information, but MARHP's contribution is inadequate.

During its term, the project has repeatedly shared information and coordinated with projects promoted by other organisations. However, potential for optimisation has been identified or requested by other donor organisations. The appraisers were struck by the extended start-up phase of the project, due among other things to the political turmoil and by the failure to adapt the project concept to the changed environment.

In terms of efficiency the project is rated **rather successful** with 11 points.

Sustainability (Are the positive results durable?)

The institutional mainstreaming and implementation of important elements of integrated water resources management are crucially important for the sustainability of the measure. So far the desired modifications to the national strategy and framework legislation for water have not been realised at national level, and there is no guarantee that the relevant documents will be produced soon. It is, however, assumed that the principles of IWRM have been understood at regional level and by individual staff members at national level, and that they will be incorporated in new documents in due course thanks to their efforts. Political directives and a stable budget will be needed to ensure this in the long term.

Participatory water use adapted to expected climate change will improve the sustainability of water resources management. The creation of the local water forum will be an important contribution. Improved water resources monitoring and an integrated planning and management system (WEAP) will enable water users to adapt better in the long term to climate change and changing conditions. The regional administration and its bodies have recognised the need and are promoting the establishment of the water forum. Decentralised data management at regional level and the associated management processes are designed for the long term. They can be transferred comparatively easily to other regions of the country. It is very probable that the tools, once created, will be used and maintained at regional level over the long term.

It should be noted as a criticism that no progress has been made to date in integrating the WEAP into the national database system, as planned by the '*Direction Générale des Resources en Eau*' (DGRE). The strategic reorientation in the wake of the Tunisian revolution has not yet reached all areas of the partner structure, and is delaying project success in some areas. There are no signs as yet of increasing religious radicalisation, which could lead to further deterioration in the security situation and prevent participation in transparent and participatory water resources planning, despite the terrorist attacks in early and mid-2015.

In terms of sustainability, the project is rated **rather successful** with 10 points.

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