

# AFRICAN DEVELOPMENT BANK



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**PROGRAMME : RURAL DRINKING WATER SUPPLY (RDWS)**

**COUNTRY : REPUBLIC OF TUNISIA**

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## PROGRAMME APPRAISAL REPORT

*Date: July 2011*

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## **CURRENCY EQUIVALENTS**

(July 2011)

Currency Unit	:	Tunisian Dinar (TND)
UA 1	:	TND 2.21306
UA 1	:	EUR 1.11280
UA 1	:	USD 1.60077

## **FISCAL YEAR**

1 January – 31 December

## **WEIGHTS AND MEASURES**

Metric system

## **ACRONYMS AND ABBREVIATIONS**

ADPRSP	:	Accelerated Development and Poverty Reduction Strategy Paper
ADB	:	African Development Bank
AFD	:	French Development Agency
BCT	:	Central Bank of Tunisia
BD	:	Board of Directors
CGF	:	General Controller of Finance
CRDA	:	Regional Agricultural Development Commission
DGFIOP	:	General Directorate of Finance, Investments and Professional Organisations
DGGREE	:	General Directorate for Rural Engineering and Water Development
DWS	:	Drinking Water Supply
EIA	:	Environmental Impact Assessment
ERR	:	Economic Rate of Return
ESIA	:	Environmental and Social Impact Assessment
ESSA	:	Environmental and Social Strategic Assessment
GDA	:	Agricultural Development Group
Inh.	:	Inhabitant
IWRM	:	Integrated Water Resource Management
MAE	:	Ministry of Agriculture and the Environment
MPCI	:	Ministry of Planning and International Cooperation
NGO	:	Non-Governmental Organization
ONAS	:	National Sanitation Agency
PISEAU	:	Water Sector Investment Programme
RBCSP	:	Results-Based Country Strategy Paper
SINEAU	:	National Water Resource Information System
SONEDE	:	<i>Société Nationale d'Exploitation et de Distribution des Eaux</i> (National Water Development and Distribution Corporation)
STEG	:	<i>Société Tunisienne d'Electricité et de Gaz</i> (Electricity and Gas Corporation of Tunisia)
SYGREAU	:	Water Resource Management System
WB	:	World Bank

## PROGRAMME INFORMATION SHEET

### Client Information

**BORROWER** : Government of the Republic of Tunisia

**EXECUTING AGENCY** : Ministry of Agriculture and Environment (“General Directorate of Rural Engineering and Water Development”)

### Financing Plan

Source	Amount (UA)	Instrument
ADB	85.21 million	ADB loan
GVT	5.60 million	-
<b>TOTAL COST</b>	<b>90.81million</b>	

### ADB Key Financial Information

Loan currency	Euro
Interest Type	Enhanced variable spread loan; floating rate with option to convert to a fixed rate + base rate + lending margin + borrowing cost margin
Interest rate margin	0.60
Tenor	20 years
Grace period	5 years
NPV (baseline scenario)	103 627 149 (TND)
ERR (baseline scenario)	20.50%

### Timeframe – Main Milestones (expected)

Concept Note approval (OpsCom)	May 2011
Programme approval by the Board	October 2011
Effectiveness	June 2012
Completion	December 2016
Last disbursement	December 2017
Duration	5 years

## PROGRAMME SUMMARY

1. **Overview:** The Rural Drinking Water Supply (RDWS) Programme covers twenty (20) of the country's twenty-four (24) Governorates, namely: Ariana, Béja, Ben Arous, Bizerte, Gabès, Gafsa, Jendouba, Kairouan, Kasserine, Kef, Mahdia, Manouba, Médinine, Nabeul, Sfax, Sidi Bouzid, Siliana, Sousse, Tataouine and Zaghouan. It targets the most disadvantaged rural communities on the national territory, whose isolation and dispersal makes it difficult for them to have access to low-cost drinking water. At the end of the programme, drinking water will be available to 348,191 inhabitants. In the remaining four (4) Governorates, (Tunis, Monastir, Tozeur and Kébili), the urban and rural areas are fully covered by SONEDE, the urban water utility company, with a drinking water access rate of 100%. The main expected outputs are: (i) the construction of 161 new DWS systems; (ii) the rehabilitation of 150 simple DWS systems; (iii) the rehabilitation of seven (7) complex DWS systems to be transferred to SONEDE; (iv) the improvement of drinking water supply conditions in the three transfer areas (Sud Kairouan, Bizerte and Jendouba); (v) the training of 100 DGGREE experts; (vi) the procurement of 20 vehicles; and (vii) the recruitment of 20 rural engineers/technicians. The estimated programme cost is UA 90.81 million and the duration of implementation is expected to be five years, from January 2012.

2. The main beneficiaries are the rural communities in the twenty target governorates that will have access to drinking water, DGGREE and the 20 CRDAs whose capacity will be built, and the new staff to be recruited.

3. The above outputs will generate the following benefits: (i) at least 348,191 rural inhabitants will have access to drinking water as well the possibility of watering their cattle and, potentially, water for their new farms in times of drought; (ii) 100 DGGREE and CRDA experts targeted by the programme will be trained in water quality treatment, DWS works control and hydro-mechanical equipment; (iii) 20 rural engineers/technicians will have jobs; (iv) new structures for grassroots management of drinking water networks constructed or rehabilitated under the programme will benefit from technical, administrative, financial and accounting capacity-building.

4. **Needs assessment:** Thanks to various DWS programmes implemented by the Tunisian Government over the last few decades, the access rate is 100% in urban areas and 93.5% in rural areas. Given the various programmes underway, the rural drinking water supply access rate will reach 95% by end 2011. However, despite all efforts made, the highly dispersed and most disadvantaged communities still have no access. Moreover, the access rate still varies from one region to another: 89% in the North, 95% in the Centre and 98% in the South. The PISEAU I and II sector projects enabled the Government to disengage from a purely supply strategy to adopt a long-term demand management strategy. To address this demand, the Government raised the intervention thresholds in rural areas as follows: (i) TND 800/inh. for conventional rehabilitation systems; (ii) TND 1,250/inh. for complex rehabilitation systems; and (iii) TND 1,500 for new DWS systems. Obviously, much effort will be needed to achieve universal access to drinking water when these figures are compared with the African average of USD 55/inh. (about TND 76/inh.), the maximum level being USD 250/inh. (TND 346/inh.). Hence, Bank financing will help to meet the drinking water needs of the rural communities concerned (about 50l/inh./day), water the livestock and potentially irrigate farms during periods of drought. All public buildings (schools, dispensaries, etc.) will be connected to create a health and hygiene environment that covers all water users in the areas concerned.

5. **Bank's value-added:** Increasing access to drinking water is a priority for Tunisia. Having been absent from the sector for a long time (1997 to 2008), the Bank wishes to help this country to improve sector management by: (i) financing drinking water infrastructure; (ii) helping it to address the water shortage by formulating a strategy for mobilizing non-conventional water resources; (iii) developing the national water system (SINEAU); and (iv) supporting rural DWS management structures to ensure service sustainability. This DWS programme, which consolidates and supplements the on-going programme (PISEAU II), will enable the Bank to become one of the key stakeholders in the sub-sector. By financing institutional support that is crucial to DGGREE and CRDA, the operation will help these structures to provide the rural DWS grassroots management structures with all the technical, administrative, financial and accounting assistance that is indispensable for their smooth operation.

6. **Knowledge management:** Rural DWS in Tunisia will face all types of constraints (shortage and degradation of water resources, difficult access and dispersal of the population, growing investment and operational costs, and the limited capacity of beneficiaries). These constraints are challenges that the Government of Tunisia must address by relying on a demand-oriented approach that involves beneficiaries in the entire identification, execution and operation process. This will increase expertise and knowledge, leading to a better understanding of rural drinking water issues by both the Bank and the country. The monitoring/evaluation system already instituted under the PISEAU II project, will lead to the capitalization and sharing of knowledge acquired through the RDWS programme.

## RESULTS-BASED LOGICAL FRAMEWORK

<b>COUNTRY AND PROGRAMME TITLE:</b>	Tunisia – Rural Drinking Water Supply (RDWS) Programme
<b>PROGRAMME GOAL:</b>	Increase access to drinking water in disadvantaged rural areas.

RESULTS CHAIN		PERFORMANCE INDICATORS		MEANS OF VERIFICATION	RISKS/ MITIGATIVE MEASURES	
		Indicator (including ISCs)	Baseline Situation	Target		
<b>IMPACT</b>	Living conditions of Tunisian rural communities improved.	(1) Average drinking water access rate in rural areas.	(1) 95% in 2011	(1) 98% in 2016	<p><u>Sources:</u> Reports from the MAE, from management structures of rural DWS systems</p> <p><u>Method:</u> National surveys</p>	<p><b><u>Risks</u></b> Increased water shortage due to severe droughts or overexploitation of resources; Lack of sanitation over a long period, which could cause deterioration in health and hygiene conditions. Delays in the capacity-building programme for rural DWS management structures financed by the Bank.</p> <p><b><u>Mitigative Measures</u></b> Acceleration of studies on the mobilization of supplementary non-conventional water resources; Implementation of the conclusions of water and sanitation studies; and increased utilization of IWRM. Identification of the bottlenecks affecting the implementation of the GDA Support Programme and acceleration of implementation</p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>EFFECTS</b></p>	<p>Improved access to DWS; Mobilisation and rational exploitation of water resources</p>	<ul style="list-style-type: none"> <li>- Population supplied with drinking water;</li> <li>- Improved distribution;</li> <li>- Improved consumption rate;</li> <li>- Increased number of successful management structures for rural DWS systems.</li> </ul>	<ul style="list-style-type: none"> <li>- 99 000 persons have 10 l/inh./day in 2001</li> <li>-249 191 persons do not have enough drinking water in 2011</li> <li>- 60% of rural DWS management structures have a collection ratio of &gt;= 80%.</li> <li>- 60% of rural DWS management structures implement the established preventive maintenance programme</li> </ul>	<ul style="list-style-type: none"> <li>- 99 000 additional persons have at least 50 l/inh./day in 2016;</li> <li>-249 191 persons continuously improve their consumption rate from 10 l/inh./day in 2011 to 50 l/inh./day in 2016</li> <li>- 90% of rural DWS management structures have a collection ratio of &gt;= 80% in 2016</li> <li>- 75% of rural DWS management structures implement the established preventive maintenance programme</li> </ul>	<p><u>Sources:</u> Reports from the MAE, from management structures of rural DWS systems; Annual reports of INES (infrastructure indicators).</p>	
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<b>OUTCOMES</b>	<p><b>Component A</b></p> <p>(1) DWS infrastructure development;</p>	<p>(1.1) Construction of new DWS systems;</p> <p>(1.2) Rehabilitation of conventional DWS systems</p> <p>(1.3) Rehabilitation of complex DWS systems;</p> <p>(1.4) Improvement of distribution conditions in the transfer areas;</p>		<p>(1.1) 161 new DWS systems constructed;</p> <p>(1.2) 150 conventional DWS systems rehabilitated;</p> <p>(1.3) 7 complex DWS systems rehabilitated;</p> <p>(1.4) Drinking water distribution conditions improved in the 3 transfer areas (Bizerte, Jendouba and Kairouan).</p>		<p><b>Risks</b></p> <p>Lack of interest from companies capable of handling small contracts and/or excessive accumulation of contracts by low-capacity enterprises;</p> <p>Insufficient human resources in CRDAs.</p> <p><b>Mitigative Measures</b></p> <p>Appropriate allotment of works to boost competition; special clause in the bidding document making the number of each company's contracts commensurate with its capacity;</p> <p>Government's undertaking, under the national recruitment programme, to give recruitment priority to the additional staff recommended by the programme for the Rural Engineering Districts of CRDAs.</p>
	<p><b>Component B</b></p> <p>(2) Institutional support</p>	<p>(2.1) Technical assistance of the Administration to rural DWS management structures in the areas of technical, administrative and financial management;</p> <p>(2.2) Capacity-building in water sector trades for DGGREE and the CRDAs;</p> <p>(2.3) Capacity-building for DGGREE and the CRDAs with human resources and vehicles;</p>		<p>(2.1) 161 management units for rural DWS systems set up and the staff trained;</p> <p>(2.2) 100 persons trained in the DGGREE and CDRAs</p> <p>(2.3) Recruitment of 20 rural engineers/technicians for the CRDAs, 1 accountant on contract, 1 secretary on contract at the DGGREE and procurement of 20 vehicles for the CRDAs.</p>	<p>Sources: MAE progress reports. Works acceptance reports. Progress reports of NGOs and associations. Bank supervision reports. Mid-term review. Audit reports. Training report.</p>	
	<p><b>Resources</b></p> <p>ADB loan: UA 85.21 million</p> <p>Government contribution: UA 5.6 million</p>					



# **REPORT AND RECOMMENDATION OF BANK GROUP MANAGEMENT TO THE BOARD OF DIRECTORS CONCERNING A LOAN PROGRAMME FOR TUNISIA TO FINANCE RURAL DRINKING WATER SUPPLY (RDWS)**

Management hereby submits this report and recommendation on a proposal to grant a loan of UA 85.21 million to the Government of Tunisia to finance the Rural Drinking Water Supply (RDWS) Programme.

## **I. Strategic Thrust and Rationale**

### ***1.1 Programme Linkages with Country Strategy and Objectives***

This programme falls within the framework of the Twelfth Rural Drinking Water Supply Plan, 2010-2014, and its extension to 2015-2016, thanks to which a 98% distribution rate will be reached by 2016. The Twelfth Plan itself tallies with the country's Twelfth Economic and Social Plan. The operation is a continuation of the national policy aimed at generalizing access to drinking water, especially in the most disadvantaged areas in 20 of the country's 24 governorates. It responds to the country's strategy of integrating rural areas into the economic and social development process. It will help to overcome water shortage challenges by providing a sufficient supply of drinking water to regions characterized by difficult access, harsh climatic conditions and erratic supply. The Tunisian government submitted an initial request to the Bank in June 2010. The priority nature of the Programme was confirmed by the new transitional government set up after the January 2011 revolution and its components redefined in a second request made in July 2011. Obviously, RDWS addresses the concerns of the revolution since it specifically targets the most disadvantaged and marginalised rural communities. Access to drinking water of sufficient quality and quantity will have an impact on: (i) the health of these communities by curbing the risk of water-borne diseases; (ii) education, especially for girls, by raising the school attendance rate; (iii) alleviation of the chore of fetching, thereby generating free time for other gainful activities; (iv) job creation, on a sustainable (capacity-building for the management structures of rural drinking water supply systems) or temporary basis during implementation (consultancies, businesses, NGOs); (v) future employment opportunities by laying down conditions necessary for tourism development in these zones; and (vi) community sedentarisation, by improving the living conditions and economic opportunities of beneficiary communities.

### ***1.2 Rationale for Bank's Involvement***

1.2.1 The programme is in line with the Bank's intervention strategy in Tunisia as defined in CSP 2007-2011, especially Pillars 2 and 3 ("infrastructure modernisation" and "human capital development"). It equally falls within the framework of the Bank's orientations in the water sector and blends harmoniously with the spirit and letter of the RWSSI programme, which applies to all countries having a drinking water policy and strategy as well as a programme like Tunisia's. This new intervention continues the process already initiated under the on-going Water Sector Investment Project, Phase 2 (PISEAU II), co-financed by the Bank. PISEAU II covers the 2009-2013 period, comprises a rural DWS component and affects about 98,000 inhabitants. Within this context, the Bank finances the consolidation of Agricultural Development Groups (GDAs), with respect to the drinking water component, while ADF finances irrigation GDAs. To ensure continuity, it is normal for the Bank to contribute more to financing drinking water infrastructure through the RDWS programme so as to consolidate and complete the achievements of PISEAU.

1.2.2 For now, the RDWS programme has no sanitation component because studies are still underway to: (i) define the best rural intervention strategy, especially for communities with fewer than 10,000 inhabitants, with Bank financing; and (ii) conduct a diagnosis of the sanitation sub-sector and an institutional study of the National Sanitation Agency (ONAS) with ADF financing. When completed, these studies are expected to give better visibility of the rural wastewater drainage sub-sector that will boost physical investments. Meanwhile, RDWS will make it possible to supply drinking water to 348,191 rural dwellers in twenty governorates.

### **1.3 *Aid Coordination***

1.3.1 In Tunisia, the Five-year Economic and Social Development Plan is the main reference framework for Government and development partner interventions. Under the responsibility of the Ministry of Planning and International Cooperation (MPCI), coordination and synergy mechanisms are set up at the official launching of each Five-Year Development Plan to channel and coordinate external financing. Outside these periods, coordination is done on an ad-hoc basis and by sector. Although a few attempts were initiated to formalize the water sector coordination framework (particularly those made in 2005 to set up Thematic Coordination Groups under European Union leadership), such formalization has not been effective to date. Nevertheless, practical coordination arrangements exist in the form of joint financing, harmonization of procedures, information sharing and consultation among the partners involved in the sectors and/or similar operations.

1.3.2 With respect to co-financing, harmonization among donors is very advanced. Budget support initiatives constitute a unique case of a fully harmonized programme between the Bank and two co-financiers (the World Bank and the European Union). They are based on matrices of common measures, common disbursement conditions, joint missions and a common stance. PISEAU II is another example of a donor-coordination success story under a programme since procurement procedures were harmonized with the two other co-financiers (the World Bank and the French Development Agency) for the entire project cycle.

1.3.3 The operations of various donors fall within the framework of respective five-year development plans. In general, the areas of intervention of each donor are defined by MPCI.

<b>Table 1.1</b>				
<b>Financing of the Rural DWS Sub-sector</b>				
Sector or Sub-sector*	Size			
	GDP	Exports	Labour	
Rural drinking water				
<b>Stakeholders – Annual Public Expenditure (average)**</b>				
	<b>Government</b>	<b>Donors</b>		
Year	[UA million]	[UA million]		
			L	
2006	23.04	64.53	:	
2007	22.90	54.55		
2008	38.84	25.05		
2009	48.60	58.81		
2010	42.14	60.46		
Total	175.52	263.40		
<b>Aid Coordination Level</b>				
Existence of thematic working groups			[No]	
Existence of a global sector program			[Yes]	
ADB's role in aid coordination***			[M]****	
*the most appropriate; ** Years [Y1 to Y2]; *** for this sector or sub-sector				
**** L : Leader; M: member (not leader): None: no role				

1.3.4 The main donors in the rural drinking water supply sub-sector are the World Bank, the European Union, Japanese Bank for International Cooperation (JBIC), the French Development Agency, the African Development Bank Group, German Bank for Technical Cooperation (KfW), the UNDP and Arab cooperation funds (Saudi and Kuwait Funds).

## II. Program Description

### 2.1 Programme Components

**Table 2.1**  
**Programme Components**

Name of Components	Cost Estimate (UA million)	Component Description
<b>A. DWS Infrastructure Development</b>	85.21	<p>This component, which concerns the supply and installation of drinking water supply systems, was sub-divided into sub-components, depending on the nature and complexity of the works, as follows:</p> <p><i>A.1 Construction of new DWS systems:</i> Development and equipment of water points for a population of about 99,548 inhabitants with no access to water;</p> <p><i>A.2 Improvement of distribution conditions in the transfer areas:</i> This component targets rural areas with inadequate water resources, in terms of quantity and quality, by implementing DWS programmes in the SONEDE transfer areas of Bizerte, Jendouba and Kairouan. The beneficiary community will comprise about 24,453 inhabitants;</p> <p><i>A.3 Rehabilitation of conventional systems in operation:</i> Rehabilitation of former DWS systems by improving water quality, standardizing pumping and regulation equipment, increasing distribution points and overhauling the civil engineering infrastructure. The target population is 194,524 inhabitants.</p> <p><i>A.4 Rehabilitation of complex systems to be transferred to SONEDE:</i> This sub-component concerns the execution of works on drinking water supply systems whose management exceeds the capacity of the structures managing rural DWS systems and which have to be transferred to SONEDE. The target population is 29,666 inhabitants.</p>
<b>B. Institution Building</b>	5.60	<p>This component targets capacity-building and consolidation of resources for the main stakeholders involved in programme implementation, mainly DGGREE and the CRDAs. It is sub-divided as follows:</p> <p>B.1 Detailed design and implementation studies;</p> <p>B.2 Technical assistance to CRDAs for works supervision and control;</p> <p>B.3 Procurement of vehicles for DGGREE and the CRDAs (20 vehicles);</p> <p>B.4 Training of DGGREE and CRDA experts (there are plans to train about one hundred persons in programme analysis, water quality treatment, network management, regulation and remote management).</p>

### 2.2 Technical Solution Adopted and Alternatives Explored

2.2.1 During preparation of the RDWS Programme, the technical services of the Ministry of Agriculture and the Environment (MAE) conducted a diagnostic study of the DWS systems to be rehabilitated as well as feasibility and preliminary design studies for the new systems to be built. For the 2012 sub-programme, DGGREE finalized a set of studies following a serious request from the communities. The sub-projects resulting from these studies will be presented to the Government at the end of the year for the 2012 budget. The different acceptable technical solutions were reviewed on a case-by-case basis to determine, for each one, the water resources to be mobilised, the nature and scope of works to be executed, taking into account the serious request of the communities and the implementation capacity of the decentralised contracting agencies.

2.2.2 Hence, for 2012, there are plans to build 33 new DWS systems and rehabilitate 32 simple systems currently operational, as well as one (1) complex system to be transferred to SONEDE. On a case-by-case basis, DGGREE reviewed the most appropriate water supply

source for each given locality: boreholes, shallow wells, connection to the SONEDE network or construction of a water treatment plant to render the available water drinkable. Furthermore, depending on the communities' choice, the water is distributed through public taps or individual connections. Among the technical solutions retained, one specific case is noteworthy for its singularity, namely the decision to build a compact, more efficient and more reliable treatment plant for small localities within a shorter time, instead of the conventional water treatment stations commonly used by SONEDE. This station will be built in Dejnene Delegation (Bizerte Governorate).

**Table 2.2**  
**Examples of Alternatives Explored and Reasons for Rejection**

<b>Alternative</b>	<b>Brief Description</b>	<b>Reasons for Rejection</b>
<u>In Sejnene</u> (Bizerte Governorate) Use of a conventional water treatment plant	The plant will comprise various independent modules.	This plant takes up a lot of space, consumes more energy and is operationally less efficient than the compact station, especially for small localities like Sejnene.
<u>In Chebaâne</u> (Zaghouan Governorate) Backup/distribution operation	Step up production and continue to ensure backup/distribution operation with the same low-capacity reservoir.	Does not improve service quality and leads to frequent overflow of the reservoir when there is low demand and water shortage during peak periods; a lot less efficient than when the backup and distribution functions are separated, and a new reservoir with greater capacity is built.
<u>In Ain Kisiba</u> (El Kef Governorate) Only one force main	The idea is to backup water from the borehole through a force main	Requires the use of three air-locks to supply the five distribution stages and consumes more energy compared to two supply pipes.

### **2.3 Programme Type**

This is a sector investment programme, which should contribute to the implementation of the 2012-2014 National Drinking Water Supply Plan and its extension in 2015-2016 to rural areas. The beneficiary areas and investment amounts are determined annually, and choices are made based on eligibility criteria clearly defined by the Ministry of Agriculture and the Environment (MAE) after a fully participatory process. RDWS should help to raise the access rate for the Tunisian rural population from the estimated 95% at end 2011 to 98%. Each year, DGGREE conducts feasibility studies and preliminary designs financed with own resources to prepare an annual sub-programme to be implemented the following year. The budget for the annual sub-programme is voted at the end of the year and constituted at the beginning of the following year. Donor funds supplement government's contribution to this budget. For over two decades, DGGREE has proceeded in this manner and implemented various operations, including PISEAU I and especially PISEAU II in which the counterpart contributions by co-financing donors were provided through a "common pot".

## 2.4 Programme Cost and Financing Arrangements

2.4.1 The total cost of the programme, net of taxes and customs duties, is TND 200.96 million or UA 90.81 million. The programme cost by component is presented in Table 2.3 below:

**Table 2.3**  
**Summary of Programme Cost by Component**

Components	TND million			UA million			% of total
	F.E.	L.C.	Total	F.E.	L.C.	Total	
<b>A. DEVELOPMENT OF DWS INFRASTRUCTURE</b>	<b>137.35</b>	<b>22.99</b>	<b>160.34</b>	<b>62.06</b>	<b>10.39</b>	<b>72.45</b>	<b>93.51</b>
<b>B. INSTITUTION BUILDING</b>		<b>10.57</b>	<b>10.57</b>	-	<b>4.78</b>	<b>4.78</b>	<b>6.49</b>
<b>Total base cost</b>	<b>137.35</b>	<b>33.56</b>	<b>170.91</b>	<b>62.06</b>	<b>15.17</b>	<b>77.23</b>	<b>100</b>
Physical contingencies	13,74	3,35	17,09	6,21	1,52	7,73	
Price escalation	9,61	3,35	12,96	4,34	1,51	5,85	
<b>Total programme cost</b>	<b>160,70</b>	<b>40,26</b>	<b>200,96</b>	<b>72,61</b>	<b>18,20</b>	<b>90,81</b>	

The programme cost by expenditure category is presented in Table 3 below:

**Table 2.4**  
**Cost by Expenditure Category**

Expenditure category	TND million			UA million			% F.E.
	F.E.	L.C.	Total	F.E.	L.C.	Total	
Works	109,88	23,43	132,31	49,65	10,14	59,79	82,79
Goods	27,47	1,30	28,77	12,41	0,59	13,00	95,46
Services	-	9,83	9,83	-	4,44	4,44	0
<b>Total base cost</b>	<b>137,35</b>	<b>33,56</b>	<b>170,91</b>	<b>62,06</b>	<b>15,17</b>	<b>77,23</b>	
Physical contingencies	13,74	3,35	17,09	6,21	1,52	7,73	
Price escalation	9,61	3,35	12,96	4,34	1,51	5,85	
<b>Total programme cost</b>	<b>160,70</b>	<b>40,26</b>	<b>200,96</b>	<b>72,61</b>	<b>18,20</b>	<b>90,81</b>	

**Table 2.5**  
**Sources of Financing**

Sources of Financing	TND million			UA million			%
	F.E.	L.C.	TOTAL	F.E.	L.C.	TOTAL	
<b>ADB</b>	<b>160.70</b>	<b>27.78</b>	<b>188.48</b>	<b>72.61</b>	<b>12.60</b>	<b>85.21</b>	<b>93.83</b>
<b>GOVERNMENT</b>	-	<b>12.48</b>	<b>12.48</b>	-	<b>5.60</b>	<b>5.60</b>	<b>6.17</b>
<b>TOTAL</b>	<b>160.70</b>	<b>40.26</b>	<b>200.96</b>	<b>72.61</b>	<b>18.20</b>	<b>90.81</b>	<b>100</b>

2.4.2 The programme will receive an ADB loan of TND 188.48 million (about UA 85.21 million), representing 93.83% of the total cost, net of taxes and customs duties. The Bank will finance 100% of the foreign exchange cost (UA 72.61 million) and 69.23% of the local currency cost (UA 12.6 million). The Tunisian Government will contribute TND 12.48 million (about UA 5.6 million) in local currency, representing 6.17% of total costs, net of taxes and customs duties. This contribution from the Bank is not consistent with the "rule of 50% contribution from the Bank and 50% contribution from the ADB borrower country." Tunisia is facing an economic situation characterized by slow growth caused by various factors, including the severe impact of the Libyan crisis and the decline in expected revenue from such key sectors as tourism. Consequently, the country is experiencing major fiscal difficulties stemming from revenue decline and an increase in socio-economic demands after the revolution. Furthermore, the recent downgrading of Tunisia's sovereign debt rating has contributed to making the country's access to external financing more costly. Given all these

factors, it is difficult for Tunisia to contribute to financing its development projects, including the Rural Drinking Water Supply (RDWS) Project.

2.4.3 The programme's expenditure schedule is as follows:

**Table 2.6**  
**Expenditure Schedule by Category**

COMPONENTS	Total Cost in UA million					
	2012	2013	2014	2015	2016	Total
A. DEVELOPMENT OF DWS INFRASTRUCTURE	15.34	19.88	18.37	19.28	12.34	<b>85.21</b>
B. INSTITUTION BUILDING	1.10	1.30	1.15	1.27	0.78	<b>5.60</b>
<b>TOTAL COST</b>	<b>16.44</b>	<b>21.18</b>	<b>19.52</b>	<b>20.55</b>	<b>13.12</b>	<b>90.81</b>

## 2.5 Programme Area and Beneficiaries

2.5.1 The programme will cover 20 of Tunisia's 24 Governorates, with a total population of 348,191 inhabitants, namely: Ariana, Béja, Ben Arous, Bizerte, Gabès, Gafsa, Jendouba, Kairouan, Kasserine, Kef, Mahdia, Manouba, Médinine, Nabeul, Sfax, Sidi Bouzid, Siliana, Sousse, Tataouine and Zaghouan. The Tunis, Monastir, Tozeur and Kebili Governorates are not concerned because their urban and rural areas are supplied by SONEDE, the urban water utility company, and the access rate in both urban and rural areas is 100%. The average rural access rate should reach 95% at end 2011.

2.5.2 The programme targets the most disadvantaged rural communities on the national territory with limited access to low-cost drinking water owing to their isolation and dispersal, or with drinking water systems that are currently not operational. In a bid to improve the situation of such communities, the Government has raised the investment threshold as follows: (i) TND 800/inh. for conventional rehabilitation systems; (ii) TND 1,250/inh. for rehabilitation of complex systems; and (iii) TND 1,500/inh. for new DWS systems. Obviously, much effort will be needed to achieve universal access to drinking water, when these figures are compared with the African average of USD 55/inh. (about TND 76/inh.), the maximum level being USD 250/inh. (TND 346/inh.). The programme will help to meet the drinking water needs of the rural communities concerned (about 50 l/inh./day) through individual connections, watering of livestock and potentially irrigating farms during periods of drought. All public buildings (schools, dispensaries, etc.) will be connected to create a health and hygiene environment that covers all water users in the areas concerned.

## 2.6 Participatory Approach for Programme Identification, Design and Implementation

2.6.1 Community participation was at two levels: (i) direct participation at the local level in the identification and orientation of programme investments; and (ii) participation in the management of rural drinking water supply systems through management, maintenance and operation of these systems by the GDAs set up.

2.6.2 This experiment in participatory water management, generalized since the 1980s, has substantially contributed to the reduction of State expenditure and triggered the emergence of local grassroots organisations that currently serve as major local development stakeholders. Initiating a process of shared responsibility and consolidating the organization

of target groups (GDAs) by setting-up organs that are more representative and more effective in terms of local initiatives, and the effective transfer of operational and maintenance duties, constitutes the foundation for demand-driven development. A sustainability programme for decentralized structures responsible for managing drinking water systems was initiated with Bank financing and should produce the mechanisms and tools needed to guarantee sustainability. An empowerment process for members of such structures and the institution of an incentive and performance evaluation system would generate a positive behavioural change within the communities with respect to the development and sustainability of DWS infrastructure. This process is expected to end by mid-2012.

## **2.7 Bank Group Experience and Lessons Reflected in Programme Design**

2.7.1 Programme design benefitted from the lessons learnt by the Bank and the Tunisian government from implementing local development programmes (education, health and energy), the PISEAU I and PISEAU II projects and various studies commissioned by the government to improve the performance of the drinking water and sanitation sector, and ensure the sustainability of drinking water supply systems. The lessons learnt from the Bank's experience highlight the need to: (i) defer the "sanitation" component until the findings of on-going studies are released; (ii) reinforce the participatory approach and decentralization in the management of sub-programmes to speed up their implementation and ensure their sustainable operation; (iii) build institutional capacity with respect to operational management and the existing monitoring/evaluation system with the participation of the decentralized organs of the administration and the communities through the decentralized management structures of DWS systems; and (iv) apply the Bank's procurement procedures.

2.7.2 Several achievements of the PISEAU I and II projects were reflected in programme design, namely: (i) the sustainable management of groundwater resources through the involvement of decentralized management structures for DWS systems to monitor groundwater levels and thus avoid their overexploitation; (ii) build the administrative, technical and financial capacity of these structures through the CRDA and DGGREE, which are tasked with providing technical assistance; (iii) improve monitoring/evaluation and use of *ex poste* reviews to avoid delays by the Tunisian party and the Bank; (iv) use the special account as one of the disbursement methods; (v) execute energy contracts by private companies approved by *Société Tunisienne d'Electricité et de Gaz* (STEG) under the supervision of the same company; (vi) use the World Bank's standard procurement documents (standard documents used for the PISEAU I and II programmes), which are acceptable to the Bank and with which the CRDAs are familiar; and (vii) include a special clause requiring disclosure of information on-going contracts currently executed by bidding enterprises, to avoid awarding contracts whose numbers exceed the capacity of such enterprises, as was the case in the Secondary Education Support Programme financed by the Bank.

## **2.8 Key Performance Indicators**

2.8.1 The key performance indicators from the programme's logical framework are: (i) the number of DWS systems constructed or rehabilitated; (ii) the average annual consumption of the communities supplied by the constructed or rehabilitated DWS systems; (iii) the number of persons trained in water techniques; (iv) the number of decentralized structures tasked with managing DWS systems that are fully operational according to criteria defined by the MAE; and (v) the number of persons recruited.

2.8.2 Monitoring and evaluation of these indicators will be based on the monitoring/evaluation system instituted in the programme area by PISEAU II and the baseline situation will be prepared as soon as the RDWS programme is launched in 2012. This system will focus on the drinking water indicators defined under PISEAU II and on additional new indicators defined under RDWS.

### **III. PROGRAMME FEASIBILITY**

#### **3.1 *Economic and Financial Performance***

3.1.1 The RDWS essentially comprises dispersed systems to be set up in areas that are not viable from the technical, institutional and social standpoints. The project is expected to benefit the poorest communities whose capacity to pay for water supply services is hardly enough to ensure infrastructure maintenance and repair. Consequently, the programme will not be profitable from the financial standpoint. However, its economic benefits are obvious and will be reflected in the improved quality of life, reduced health expenditure, less time spent on fetching water and time gains in terms of working and school days. Based on cautious assumptions and quantification of certain benefits (consumer surplus, valuation of the chore of fetching water, savings on the health budget), the ERR will stand at 20.5% while the net present value will be TND 103.6 million. These indicators would be even higher were it possible to quantify other benefits such as the number of working days and school days gained as a result of improvement in the quality of life in rural communities.

#### Other Socio-economic Benefits

3.1.2 Drinking water supply to the localities targeted by the programme will help to reduce the sources of diseases contracted through consumption of unsafe water. Infant mortality caused by water-borne diseases will definitely decrease in the programme area. Furthermore, access to a local drinking water supply system will alleviate the currently harsh water supply conditions whereby women have to spend a whole half-day fetching water. The resulting time gain will enable women to participate more in income-generating activities and thus raise the productivity of households. Furthermore, the income to be earned by employees (local labour), national economic operators and informal sector stakeholders during works execution will help to reduce poverty in these localities.

#### **3.2 *Environmental and Social Impact***

##### Environment

3.2.1 The programme is classified under Environmental Category 2 and was the subject of an ESMP prepared in 2010 by the CRDAs. Its summary was published on the Bank's website. The RDWS programme comprises two components whose implementation requires small- and medium-sized physical interventions with no particular impact on the biophysical and human environment. Similarly, there is no expected impact on biodiversity, natural resources and protected areas. Overall, the programme will have largely positive socio-economic effects on the beneficiary population.

3.2.2 Its implementation will help to improve rural living conditions, hygiene and sanitation. It will contribute to the reduction of the poverty index, which should reach 2% in

2015, and of vulnerability levels in the target areas. With regard to its negative effects, the programme will have a potential, short-lived, localized and very limited negative impact that is easily controllable and will be mitigated through measures contained in the Environmental and Social Management Plan. Their implementation will be monitored by the relevant services of the CRDA, which have broad experience in this domain.

### Climate Change

3.2.3 Tunisia's Initial Communication under the United Nations Framework Convention on Climate Change drafted in October 2001 stipulates, in accordance with projections, that beyond 2025, the country will face water shortage (less than 500 m<sup>3</sup>/inh./year). Recent findings confirm that the country is already experiencing such shortage and the average water resource endowment is 480 m<sup>3</sup>/year. The North and Centre water tables are already showing signs of decline. Surface water resources are affected by climate disruption caused by changes in rainfall and evaporation patterns. The water from the deep water tables in the Southern sector is of poor quality (because of salinity) with low piezometric levels. The programme is squarely in line with Tunisia's adaptation strategy, which is based on climate monitoring and consolidation of the water resource management programme that the country has been running for over a decade.

### Gender

3.2.4 Access to drinking water supply is close to 50% in the rural areas of the North and Centre, for women and girls of 7 to 25 years of age. According to sources, women spend an average of about two (2) hours daily fetching water. In the programme area where several localities are scanty and isolated, such a chore could take a whole half-day. The RWDS programme will generate time gains for women at home, which they could use to develop other activities or concentrate more on caring for their children. Young girls will have more time to devote to their training or register more in associations. Indeed, the dynamism of women's associations - now translated into a mandatory quota for women to be elected to the Constituent Assembly in 2011- will put more women in direct contact with the management of DWSS services in rural areas. Infectious diseases associated with personal hygiene that particularly affect women (e.g. candidiasis), will reduce by close to 90%, according to sources, owing to the steady supply of water.

### Social

3.2.5 Tunisia's strategic policies on economic and social development target a rural DWS access rate of 98% by the end of 2016. The programme will benefit the most disadvantaged population of 348,191 inhabitants. It will provide this population with: (i) an improvement in their living conditions, hygiene and sanitation, and a consequent reduction in the prevalence and spread of water-borne diseases; (ii) time gains and an almost 40% improvement in the rural school enrolment ratio (cleaner children feel happier attending school) and the greater amount of time that mothers spend with their children; and (iii) a decline in the school dropout rate.

3.2.6 The main challenges associated with the programme fit the crosscutting themes pursued by the Bank, especially in the area of poverty reduction. Community living conditions, quality of life and wellbeing will improve. In turn, this will promote community sedentarisation and curb rural exodus. Local activities, especially stockbreeding and other income-generating activities, will witness a revival, leading to better distribution of wealth

and contributing to the creation of short-term and permanent jobs. Therefore, thanks to the programme, vulnerability levels will be lowered.

#### Forced resettlement

3.2.7 The activities planned will not lead to forced resettlement of the communities.

## **IV. IMPLEMENTATION**

### ***4.1 Implementation Arrangements***

4.1.1 The planning of rural DWS programmes and projects is conducted through close collaboration between the General Directorate of Rural Engineering and Water Development (DGGREE) of the Ministry of Agriculture and Environment (MAE) and *Société Nationale d'Exploitation et de Distribution des Eaux* (National Water Development and Distribution Company, SONEDE) in consultation with regional services (20 DGGREE CRDAs and the corresponding SONEDE districts). Planning is done at three levels: (i) long-term planning through the preparation of Regional Master Plans for rural DWS in each governorate; (ii) medium-term planning through Five-Year Development Plans; and (iii) short-term planning through annual budget preparation. The DGGREE is the programme executing agency and is responsible for its general coordination. The following six-member team will be assigned to coordinate the programme: (i) a studies officer; (ii) a water works expert; (iii) an electro-mechanics expert; (iv) a procurement officer; (v) an accountant on contract, recruited on the national budget; and (vi) a secretary on contract, also recruited on the national budget.

4.1.2 The Tunisian government will adopt the principle of reinforcing existing structures to implement programme activities in a decentralized manner. To that end, the DGGREE, assisted at the local level by the CRDAs, will be the programme executing agency. The decentralised DWS system management structures representing beneficiaries (the structures participated in project design) will be consulted by the CRDAs during implementation on all technical issues. In their capacity as the future operators of the water systems, these structures will be given assistance and targeted training by the CRDAs. There are plans to build the capacity of the CRDAs through training, equipment purchase and assistance in studies preparation, works control and monitoring/evaluation.

4.1.3 Operational implementation will be conducted as follows: (i) DGGREE's Department of Drinking Water and Rural Infrastructure will set up an in-house technical team responsible for programme coordination. Each CRDA will be responsible for implementing sub-projects in its governorate and execute them according to its organisational structure. Under the authority of the Agricultural Development Commissioner, the Procurement Commission, the Department of Administration and Finance, and the Rural Engineering Division will execute sub-projects in accordance with their respective mandates. In Tunisia, CRDAs have proven experience in managing DWS projects and the same mechanisms have been used over several decades (PISEAU I and PISEAU II are some examples of projects implemented at the CRDA level).

#### **Procurement**

4.1.4 All goods and works financed with Bank resources will be procured in accordance with Bank *Rules of Procedure for the Procurement of Goods and Works*, using the Bank's standard bidding documents. Through their procurement units and procurement committees, the Regional

Agricultural Development Commissions will be charged with procuring goods/works/services, consultancy services and others (as appropriate) as detailed in Annex B5. The resources, capacity, expertise and experience of the CRDAs are presented in detail in Annex B5 and the procurement plan. Consultancy services and goods entirely financed by the Government will be procured using national procedures. A procurements expert, who is a DGGREE employee, will be designated at the central level to monitor the progress of procurement operations conducted at the CRDA level as well as compliance with the applicable rules and procedures.

◆ **Special provision**

4.1.5 The CRDAs are in charge of the Water Sector Investment Project - Phase 2 (PISEAU II) and the Project to Support the Programme to Strengthen Drinking Water Supply to Agricultural Development Groups (GDA), both of which are underway. The bidding documents used for executing these projects will be used in implementing the RDWS Programme. These documents could be slightly modified, with respect to the specific data on the bidding process, given the many unfruitful works contracts noticed during PISEAU II.

**Financial Management and Disbursements**

4.1.6 *Financial arrangements:* At the central level, the use of the national public finance management system is recommended. The DGGREE, which is the executing agency, will be responsible for managing loan resources through its Directorate of Drinking Water and Rural Infrastructure, whose director will be the project coordinator. Furthermore, the General Directorate of Finance in the Ministry (DGFIOP) will oversee the presentation of requests for funds from the ADB loan to the Central Bank of Tunisia (BCT), which is the manager of the ADB special account. The DGGREE will be responsible for centralizing the overall project budget, keeping the accounts in accordance with national practices and preparing annual financial statements, especially the revenue and expenditure statement that presents expenditure by component and by source of financing. At the decentralized level, the 20 CRDAs will submit periodic financial reports to the DGGREE, presenting the status of expenditure for works and services contracts. The CRDAs will also examine payments requests from contractors and service providers to be defrayed by either the national budget or the special ADB account managed by the BCT. Financial management monitoring reports will be included among the quarterly progress reports to be submitted to the Bank. The Bank will be interested in obtaining any report issued by public audit agencies on the programme, the executing agency or other units.

4.1.7 *Disbursement arrangements:* Loan resources will be disbursed in accordance with the provisions of the ADB's Disbursement Manual. Given the multitude of contracts and their low amounts, the special account method will be authorized for the programme. In that regard, a special account bearing the programme's name will be opened at the Central Bank of Tunisia (BCT). Expenditure financed through the special account must be eligible in accordance with the loan agreement and cover a programme of activities for six months approved by the Bank. Replenishment of the special account will be subject to justification of at least 50% of the last advance and 100% of all previous advances. The special account will be audited annually in accordance with paragraph 4.1.5 on the financial arrangements. The operating expenses of the executing agency related to programme coordination will be defrayed by the national budget. Counterpart funds provided for in the national budget will be disbursed formally, through the public treasury, based on financial documents analysed by the CRDAs.

4.1.8 *Audit arrangements:* An external audit of project accounts will be conducted each year by the General Controller of Finance (CGF), in keeping with its mandate to undertake an external audit of public expenditure and in accordance with the terms of reference approved by the Bank. The audit report will be forwarded to the Bank latest six months following the end of the fiscal year. A final audit will be conducted on the date of programme completion.

## 4.2 *Monitoring*

4.2.1 The programme provides for the use of the monitoring/evaluation system (MES) instituted under PISEAU II right from its first year of implementation (2012), based on three modules: (i) procurement; (ii) physical and financial management of sub-programmes; and (iii) monitoring of programme results and performance. Special attention will be given to results-based management (RBM). Indicators to monitor during programme implementation include trends in rural drinking water access rate and consumption, performance of rural DWS management structures and status of programme activities (monitoring of contracts, DWS infrastructure, procurement of vehicles and training of DGGREE and CRDA staff).

4.2.2 The main reports to be prepared during programme implementation are presented in Table 2.5. The table highlights the reports to be prepared, the entities responsible and the deadlines.

**Table 4.1**  
***Main reports expected***

<b>Subject</b>	<b>Authority in charge</b>	<b>Deadline</b>
Physical and financial status report of the programme with procurement tables	Government	Every half-year: 30 <sup>th</sup> of the month following the half-year period
Financial audit reports for each fiscal year (1 January – 31 December)	Government	30 June of the following year
Action plans and annual budget, comprising supplies, works and services	Government	30 September of the previous year
Mid-term review report	Government and ADB	June of the programme's 3rd year
Completion report	Government and ADB	At programme completion

## 4.3 *Governance*

4.3.1 The audit environment of Bank-funded programmes in Tunisia received a favourable appraisal from the Bank's audit services in 2007<sup>1</sup>. Furthermore, Tunisia was ranked in the first quintile with a very satisfactory score of 4.6 by the 2009 Country Performance and Institutional Assessment (CPIA, prepared by the ADB).

4.3.2 Under the decentralisation policy, rural drinking water systems are managed by autonomous decentralized structures with elected board members and a specific institutional and organization framework. These structures will be subject to monitoring and control procedures by the Hydraulic and Agricultural Infrastructure Division (DHER) of each CRDA.

<sup>1</sup> Final Internal Audit Report No. FR/2007/34 on assessment of the management of Bank-funded programmes in Tunisia, May 2008

## **4.4 Sustainability**

4.4.1 A series of measures will guarantee the sustainability of investments, among which: (i) the institution of billing systems adapted to drinking water sectors, in order to improve cost-recovery and encourage better economic development of water resources; (ii) user participation in water management through the decentralized structures established.

4.4.2 Furthermore, the capacity of various decentralised structures of DGGREE will be developed through better training and reinforced with human resources and vehicles for field operations. The recurrent costs of the programme will be fully borne by the Government and the decentralized structures established. Such structures will experience no difficulty in this area given the development of their management skills (administrative, technical, financial and accounting) and the existence of real effective demand. Furthermore, the staff in these structures will be motivated to ensure infrastructure maintenance and development. The recovery of operating and maintenance costs in rural areas, which is generally the most costly aspect, will constitute a reassuring element for programme viability.

## **4.5 Risk Management**

4.5.1 In the short term, the risks will relate to inadequate sanitation in the programme area, which could contribute to the deterioration of community sanitary conditions despite the availability of sufficient drinking water. This component was not taken into account prior to the preparation of a clear strategy on the sub-component, especially for operations in small localities with less than 10,000 inhabitants (ONAS treats localities with population of between 4,000 and 10,000 on a case-by-case basis). Nevertheless, during implementation, the community will be sensitized on the importance of drainage to health, and so be brought to request this service once all the conditions are in place.

4.5.2 Another risk is pressure from overexploitation of water in a context of scarcity in Tunisia where 89% of exploitable water resources are mobilised, and where climate change as well as industrial and agricultural pollution contribute to the deterioration of this resource. The government intends to address this challenge by exploring the possibility of mobilizing new water resources through studies on: (i) water desalination; (ii) recycling of treated wastewater for agriculture or groundwater replenishment; and (iii) the integrated management of water resources by 2050. All these studies are financed by the Bank.

## **4.6 Knowledge Building**

4.6.1 One of the core reasons for ADB, World Bank and AFD operations under PISEAU I and PISEAU II was to help the government to move from a supply-oriented water management strategy to a long-term demand strategy. Such a change requires a transition from technical engineering to institutional engineering. Accordingly, this programme will help to improve knowledge related to the management of several planned information systems and ensure the development of knowledge and innovation in several domains (water quality treatment, network management, regulation, control technology and remote management, etc.).

4.6.2 Rural DWS programmes encounter all sorts of constraints (resource scarcity, difficult access, growing investment and operating costs, and the limited capacity of beneficiaries). These constraints are challenges that the Government of Tunisia must address

by relying on a demand-oriented approach in which beneficiaries are involved in the entire process of identification, execution and operation. This increases expertise and knowledge, and leads to better understanding of rural drinking water issues by both the Bank and the country.

## **V. LEGAL FRAMEWORK**

### **5.1 *Legal Instrument***

The legal framework of the rural DWS programme will be the loan agreement between the Republic of Tunisia and the Bank. The Agreement signed to the satisfaction of both parties in terms of format and content, will comprise the usual terms and conditions.

### **5.2 *Conditions Associated with Bank's Intervention***

**A. *Loan effectiveness conditions:*** The loan agreement shall become effective subject to fulfilment by the Tunisian Government of the conditions outlined in Sections 2.01 and 2.02 of the General Conditions Applicable to Loan Agreements and Guarantee Agreements.

**B. *Conditions precedent to first disbursement:*** The Government shall provide to the Bank, evidence of opening a special account at the Central Bank of Tunisia to receive loan resources.

**C. *Other condition:*** The Borrower shall, to the Bank's satisfaction and latest prior to the commencement of works in each target area, compensate persons affected by the programme, in accordance with the Environmental and Social Management Plan.

**D. *Commitments:*** The Borrower undertakes to: (i) implement the Environmental and Social Management Plan; and (ii) refrain from commencing works in any project area without prior compensation of persons affected.

### **5.3 *Compliance with Bank Policies***

This programme complies with all applicable Bank rules.

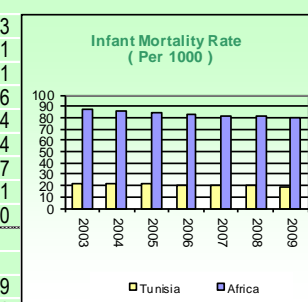
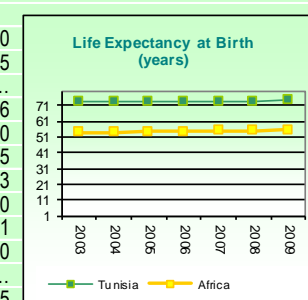
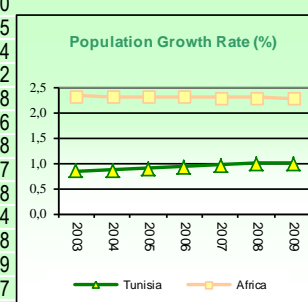
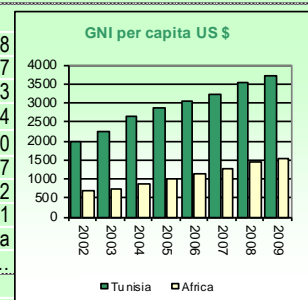
## **VI. RECOMMENDATION**

It is recommended that an ADB loan not exceeding UA 85.21 million be granted to the Government of the Republic of Tunisia to finance the Rural Drinking Water Supply Programme, as described in this report.

## Tunisia

### COMPARATIVE SOCIO-ECONOMIC INDICATORS

	Year	Tunisia	Africa	Developing Countries	Developed Countries
<b>Basic Indicators</b>					
Area ( '000 Km <sup>2</sup> )		164	30 323	80 976	54 658
Total Population (millions)	2010	10,4	1 031,5	5 659	1 117
Urban Population (% of Total)	2010	67,3	39,9	45,1	77,3
Population Density (per Km <sup>2</sup> )	2010	63,4	34,0	69,9	20,4
GNI per Capita (US \$)	2009	3 720	1 525	2 968	37 990
Labor Force Participation - Total (%)	2010	37,1	40,1	61,8	60,7
Labor Force Participation - Female (%)	2010	26,9	41,0	49,1	52,2
Gender -Related Development Index Value	2007	0,752	0,433	0,694	0,911
Human Develop. Index (Rank among 169 countries)	2010	81	n.a	n.a	n.a
Popul. Living Below \$ 1 a Day (% of Population)	2005-08	...	42,3	25,2	...
<b>Demographic Indicators</b>					
Population Growth Rate - Total (%)	2010	1,0	2,3	1,3	0,6
Population Growth Rate - Urban (%)	2010	1,6	3,4	2,4	1,0
Population < 15 years (%)	2010	22,8	40,3	29,0	17,5
Population >= 65 years (%)	2010	7,9	3,8	6,0	15,4
Dependency Ratio (%)	2010	42,0	77,6	55,4	49,2
Sex Ratio (per 100 female)	2010	101,1	99,5	93,5	94,8
Female Population 15-49 years (% of total population)	2010	28,8	24,4	49,4	50,6
Life Expectancy at Birth - Total (years)	2010	74,3	56,0	67,1	79,8
Life Expectancy at Birth - Female (years)	2010	76,5	57,1	69,1	82,7
Crude Birth Rate (per 1,000)	2010	16,1	34,2	21,4	11,8
Crude Death Rate (per 1,000)	2010	6,0	12,6	8,2	8,4
Infant Mortality Rate (per 1,000)	2010	18,5	78,6	46,9	5,8
Child Mortality Rate (per 1,000)	2010	20,7	127,2	66,5	6,9
Total Fertility Rate (per woman)	2010	1,8	4,4	2,7	1,7
Maternal Mortality Rate (per 100,000)	2008	60,0	530,2	290,0	15,2
Women Using Contraception (%)	2006	60,2	...	61,0	...
<b>Health &amp; Nutrition Indicators</b>					
Physicians (per 100,000 people)	2009	119,0	58,3	109,5	286,0
Nurses (per 100,000 people)*	2009	336,4	113,3	204,0	786,5
Births attended by Trained Health Personnel (%)	2005-08	...	50,2	64,1	...
Access to Safe Water (% of Population)	2008	94,0	64,5	84,3	99,6
Access to Health Services (% of Population)	2005-08	...	65,4	80,0	100,0
Access to Sanitation (% of Population)	2008	85,0	41,0	53,6	99,5
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2007	0,1	4,9	0,9	0,3
Incidence of Tuberculosis (per 100,000)	2009	24,0	294,9	161,0	14,0
Child Immunization Against Tuberculosis (%)	2009	98,0	79,9	81,0	95,1
Child Immunization Against Measles (%)	2009	98,0	71,1	80,7	93,0
Underweight Children (% of children under 5 years)	2006	3,3	30,9	22,4	...
Daily Calorie Supply per Capita	2007	3 326	2 465	2 675	3 285
Public Expenditure on Health (as % of GDP)	2008	6,0	5,7	2,9	7,4
<b>Education Indicators</b>					
Gross Enrolment Ratio (%)					
Primary School - Total	2008	107,1	102,7	107,2	101,3
Primary School - Female	2008	105,8	99,0	109,2	101,1
Secondary School - Total	2008	91,8	37,8	62,9	100,1
Secondary School - Female	2008	95,6	33,8	61,3	99,6
Primary School Female Teaching Staff (% of Total)	2008	54,1	47,0	60,5	81,4
Adult literacy Rate - Total (%)	2008	77,6	64,8	80,3	98,4
Adult literacy Rate - Male (%)	2008	86,4	74,0	86,0	98,7
Adult literacy Rate - Female (%)	2008	71,0	55,9	74,8	98,1
Percentage of GDP Spent on Education	2007	7,1	4,6	3,8	5,0
<b>Environmental Indicators</b>					
Land Use (Arable Land as % of Total Land Area)	2008	18,2	7,8	10,6	10,9
Annual Rate of Deforestation (%)	2005-09	...	0,7	0,4	-0,2
Annual Rate of Reforestation (%)	2005-09	...	10,9	...	...
Per Capita CO2 Emissions (metric tons)	2009	2,2	1,1	2,9	12,5



Sources : ADB Statistics Department Databases; World Bank: World Development Indicators;

last update :

May 2011

UNAIDS; UNSD; WHO, UNICEF, WRI, UNDP; Country Reports.

Note : n.a. : Not Applicable; ... : Data Not Available.

## ACTIVE PUBLIC SECTOR PORTFOLIO

(in UA million, as of 30 March 2011)

(Source: FFCO)

PROGRAMMES	Gross loans	Cancellations	Net loans	Disbursements	% of Disbursements	Dates of the Main Stages				REMARKS
	ADB	ADB	ADB	ADB	ADB	APPROV	SIGNAT	EFFECT	CLOSING	
<b>I - AGRICULTURE</b>										
Kairouan PDAI	15.95	0.00	16.00	8.13	50.93%	29/06/06	13/09/06	09/03/07	31/12/13	On-going
PISEAU II	20.53	0.00	20.59	4.48	21.85%	18/12/2008	18/05/09	13/08/09	31/12/14	On-going
<b>Sub-Total I (2 programmes)</b>	<b>36.48</b>	<b>0.00</b>	<b>36.48</b>	<b>12.61</b>	<b>34.56%</b>					
<b>II - TRANSPORT</b>										
Road Network Development (Category IV)	147.85	0.00	147.85	147.85	100.00%	24/11/04	22/03/06	20/9/06-	31/12/11	Almost completed
Railroad Modernization II	66.70	0.00	66.70	48.59	72.84%	03/12/03	04/05/04	13/10/04	31/12/11	On-going
Road Programme V	156.21	0.00	156.21	98.57	63.10%	11/06/08	22/10/081	11/05/09	31/12/13	On-going
Road Programme VI	211.47	0.00	211.47	0.00	0.00%	15/09/10	15/11/10	Non inter	31/12/15	On-going
<b>Sub-Total I (4 programmes)</b>	<b>582.23</b>	<b>0.00</b>	<b>582.23</b>	<b>295.01</b>	<b>50.67%</b>					
<b>III - COMMUNITY FACILITIES</b>										
Improvement of Electricity Distribution Network VI	69.13	0.00	69.13	65.32	94.49%	10/12/2003	20/09/04	21/02/05	31/12/11	On-going
Improvement of Electricity Distribution Network VII	42.63	0.00	42.63	7.74	18.15%	02/09/09	13/10/09	21/05/10	31/12/13	On-going
<b>Sub-Total III (2 programmes)</b>	<b>111.76</b>	<b>0.00</b>	<b>111.76</b>	<b>73.06</b>	<b>65.37%</b>					
<b>IV - SOCIAL</b>										
Secondary Education Support Programme	53.58	0.00	53.58	35.50	66.25%	28/09/05	23/11/05	16/05/06	31/01/12	On-going
<b>Sub-Total IV (1 programme)</b>	<b>53.58</b>	<b>0.00</b>	<b>53.58</b>	<b>35.50</b>	<b>66.25%</b>					
<b>V - ECONOMIC REFORMS</b>										
PAI	157.68	0.00	157.68	157.68	100.00%	16/04/09	18/05/09	18/08/09	31/12/11	Almost completed
<b>Sub-Total V (1 programme)</b>	<b>157.68</b>	<b>0.00</b>	<b>157.68</b>	<b>157.68</b>	<b>100.00%</b>					
<b>GRAND TOTAL (10 programmes)</b>	<b>941.73</b>	<b>0.00</b>	<b>941.73</b>	<b>573.86</b>	<b>60.93%</b>					

**ACTIVE PRIVATE SECTOR PORTFOLIO**

(Amounts in UA million, as of 30 March 2011)  
(Source: FFCO)

PROGRAMMES	Gross loans	Cancellations	Net loans	Disbursements	% of Disbursements	Dates of the main stages				REMARKS
	ADB	ADB	ADB	ADB	ADB	APPROV	SIGNAT	EFFECT	CLOSING	
<b>I - AIR TRANSPORT</b>										
ENFIDHA Airport	60.69	0.00	60.69	60.69	100.00	14/01/09	12/02/09	13/03/09	31/12/10	Completed
<b>II - ENERGY</b>										
ETAP Programme (Hasdrubal)	94.61	0.00	94.61	94.61	100.00	13/03/10	08/07/10	14/07/10	31/12/10	Almost completed
<b>GRAND TOTAL (2 programmes)</b>	<b>155.30</b>	<b>0.00</b>	<b>155.30</b>	<b>155.30</b>	<b>100.00</b>					

## STATUS OF ONGOING PUBLIC SECTOR STUDIES

(in UA million, as of 30 March 2011)

(Source: FFCO)

PROGRAMMES	Sources	Gross Grants	Cancellations	Net Grants	Disbursements	% of Disbursements	Key Stages			Remarks
							APPROV	SIGNAT	CLOSING	
<b>I - AGRICULTURE</b>										
- Support to the Farming Groups Consolidation Programme	MIC	0.59	0.00	0.59	0.00	0.00	20/10/09	12/4/2010		
<b>Sub-Total I (1 study)</b>										
<b>II. COMMUNITY FACILITIES</b>										
- Improvement of the Drinking Water Distribution Rate in Bizerte and Beja	MIC	0.46	0.00	0.46	0.00	0.00	28/9/09	12/4/10	31/12/12	
- ZARAAT Sea Water Desalination	FAPA	0.61	0.00	0.61	0.00	0.00	05/8/09	12/4/10	31/12/12	
- Protection against Floods in the Northern and Eastern Parts of Tunis	MIC	0.58	0.00	0.58	0.00	0.00	07/10/09	12/4/10	31/12/12	
- Sanitation in 80 Districts with -10,000 inh. and 6 Districts with +10,000 inhabitants	MIC	0.57	0.00	0.57	0.00	0.00	21/10/09	12/4/10	31/12/12	
- National Water Information System	AWF	1.73	0.00	1.73	0.00	0.00	22/12/09	15/11/10	31/12/14	
- 2050 Water Vision and Strategy	AWF	1.04	0.00	1.04	0.00	0.00	12/01/11	-	-	Not signed
<b>Sub-Total II (6 studies)</b>		<b>4.99</b>	<b>0.00</b>	<b>4.99</b>	<b>0.00</b>	<b>0.00</b>				
<b>III. SOCIAL</b>										
- Emerging and Re-emerging Diseases (PRI)	MIC	0.58	0.00	0.58	0.00	0.00	04/11/09	12/4/10	31/12/2013	
- Development of the Health Services Export Strategy	MIC	0.53	0.00	0.53	0.00	0.00	12/10/09	12/4/10	31/12/2011	
- Strategic Study on the Development of Cultural Industries	MIC	0.27	0.00	0.27	0.00	0.00	22/11/10	15/11/10	31/12/2013	
<b>Sub-Total III (3 studies)</b>		<b>1.38</b>	<b>0.00</b>	<b>1.38</b>	<b>0.00</b>	<b>0.00</b>				
<b>IV. ECONOMY AND MULTI-SECTOR</b>										
Support to the Tunisian Institute of Competitiveness and Quantitative Studies;	MIC	0.20	0.00	0.20	0.09	49.00	03/12/09	12/4/10	31/12/2011	
Performance Evaluation of the Microcredit System Managed by BTS	MIC	0.14	0.00	0.14	0.00	0.00	06/01/10	12/4/10	31/12/2011	
Emergency Aid to Address the Humanitarian Crises along the Tunisian-Libyan Border	BNI	0.63	0.00	0.63	0.63	100.00	11/03/11	14/03/11	31/12/11	
- Study on Trade Integration between Tunisia and various Sub-Saharan African Countries	MIC	0.32	0.00	0.32	0.00	0.00	24/09/10	15/04/11	31/12/2012	
<b>Sub-Total IV (4 studies and support initiatives)</b>		<b>1.29</b>	<b>0.00</b>	<b>1.29</b>	<b>0.72</b>	<b>55.81</b>				
<b>GRAND TOTAL (14 studies and support initiatives)</b>		<b>8.25</b>	<b>0.00</b>	<b>8.25</b>	<b>0.72</b>	<b>8.72</b>				

MAP

