

# Tunesia

This country profile, commissioned by The Netherlands Ministry of Foreign Affairs (Department of Inclusive Green Growth), gives a snapshot of what is happening in the closely interrelated themes Food & Nutrition Security, Water, Climate (including Renewable Energy) in Tunesia. It provides basic statistics on Tunesia's performance on key indicators and indexes, but also analyses relevant national policies, current donor interventions, and the main trends on the abovementioned themes. Combined with an overview of Dutch support to Tunesia, this profile concludes by suggesting potential priority result areas for The Netherlands.

In total, 12 countries profiles have been made, plus one regional profile for the Sahel.

BURKINA FASO

CHAD

EGYPT

IRAQ

JORDAN

LEBANON

NIGER

NIGERIA

SENEGAL

SOMALIA

SUDAN

SAHEL REGION

## COUNTRY PROFILE TUNESIA

### METRICS

#### INTERVENTIONS & PLANS

#### WHAT NL ACTORS DO

### TRENDS & LIMITATIONS

#### MAIN RESULT AREAS

#### COLOFON

# Metrics



### TUNESIA, FACTS

#### Government

- Unitary semi-presidential republic
- President: Beji Caid Essebsi
- **Official language:** Arabic
- **Religion:** Islam (99.1%)
- **Area:** Total 163,610 km<sup>2</sup> (91st)

#### Population

- Population (2018 estimate) 11,659,174
- Population prospect 2050 13,884,000
- Density 63/km<sup>2</sup> (133rd)
- **GDP (PPP) 2017 estimate**
- Total \$ 136.797 billion
- **GDP (nominal) 2014 estimate**
- Total \$ 40.289 billion
- Per capita \$ 3,553

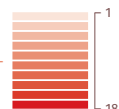
### GENERAL INDICATORS

#### UN Human Development Index

188 countries: 1st = best opportunities for development



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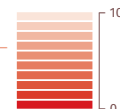


#### Anti-corruption and Accountability

100 = strongest policies and practices



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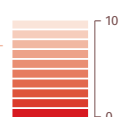


#### World Bank Doing Business Index

100 = most conducive environment for business



70.5

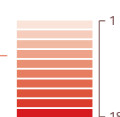


#### Gender Inequality Index

188 countries: 1st = smallest gender divide



#58



### CLIMATE/RENEWABLE ENERGY INDEXES

#### World Bank ESMAP Electrification Index

population with access to electricity



100%

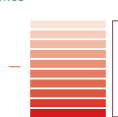


#### ND GAIN Index

181 countries: 1st = least climate change vulnerable, and best ready to improve resilience



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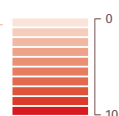
### FOOD NUTRITION SECURITY INDEXES

#### Global Hunger Index (IFPRI)

Range 0 – 100: 0 = no hunger



7.4

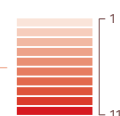


#### Global Food Security Index (Economist)

113 countries: 1st = best food security



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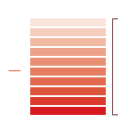


#### Land Management Index (UNCCD)

180 countries: 1st = most sustainable land governance



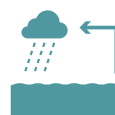
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### WATER INDEXES

#### FAO AquaStat

Variation per capita internal renewable water resources



8.5%



#### World Bank Drinking Water Index

population using at least basic drinking water services



94%

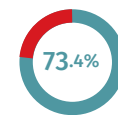


#### JMP Sanitation Index

population with access to improved sanitation facilities



73.4%





# Donor interventions and plans



## Government policies

The government of Tunisia has commissioned several policy documents on water and food security, notably the “Etude Strategique: Eau 2050 en Tunisie” (2011), and the “Revue Strategique de la Securite Alimentaire et Nutritionnelle en Tunisie” (2017).

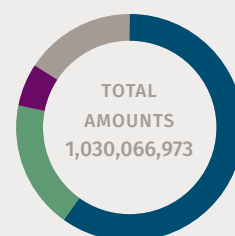
In terms of a policy on climate change/ renewable energy, Tunisia submitted its First NDC in February 2017, outlining its plans for climate change mitigation and adaptation. In its NDC, Tunisia proposes to reduce GHG emissions by 41% in 2030 relative to the base year 2010, of which two third will be conditional on international support. Mitigation efforts will focus on the energy sector, which will account for 75% of the reductions proposed.

The remainder will be realized in agriculture, forestry, land use change and waste. Adaptation measures focus on water resources, coastline, agriculture, ecosystems and tourism.

No bespoke policies on the three sectors were identified.

## Top 3 donors (based on 2017 IATI data<sup>1)</sup> 2017

DONOR	AMOUNT (IN \$)
World Bank Group	648,832,000
EU Institutions	180,163,000
African Development Bank	61,941,300



## Top 3 Sectors attracting development funding

SECTOR	AMOUNT (IN \$)
Banking and financial services	211,924,000
Business and other services	207,905,000
Government and civil society, general	190,140,000

Most donors are active in the fields of banking, business and government and civil society. Some of these interventions have a peripheral focus on issues related to FNS, water or energy/climate change. However, there are very few direct donor financed projects that are directly active in the IGG result areas. However, the Government of Tunisia itself is active in these sectors.

<sup>1)</sup> This data originates from self-reported data in IATI by major donors. It should be noted that not all aid flows and financial sources are captured.

# What NL actors already do

## Major commitments from the Netherlands (based on IATI)

BUDGET SPENT BY NETHERLANDS MINISTRY OF FOREIGN AFFAIRS (IN 2017)	AMOUNT (IN \$)
Government and civil society, general	1,368,430
BUDGET SPENT BY NETHERLANDS ENTERPRISE AGENCY (IN 2017)	AMOUNT (IN \$)
Agriculture	152,227

## Top three largest programmes supported by the Netherlands (active as of 2017)

THEME	ORGANISATION	PROGRAMME TITLE	COMMITTED (\$)
SME development	SPARK	Local Employment in Africa for Development (LEAD) – also in Somalia	7,497,775
Legal and judicial development	Netherlands - Ministry of Foreign Affairs / UNDP	TUN - Access To Rights - UNDP	532,662
Security system reform	Netherlands - Ministry of Foreign Affairs / Aktis	AKTIS CVE Tunesie	468,620

The Netherlands has very recently signed a Letter of Intent with Tunisia for continued collaboration in the area of agriculture. The focus of climate smart agriculture brings a variety of elements into play, mainly focussing on sustainable agricultural inputs and returns for farmers. Water, pesticide/fertilizer use, as well as land use and reversal of degradation are key to this approach. Together with FAO, key (sub)sectors are identified, including horticulture, with the aim to improve the market-orientation, use of technological innovations, and resource efficiency.

RVO is also active in Tunisia and in the agricultural sector specifically. Through the PSD Apps (worth USD 152,227) studies by Wageningen University & Research were supported on how The Netherlands can support the modernization of Tunisian agricultural sector (2017).

# Trends and limitations

## Food security

Tunisia has, for many decades, never experienced food shortages and/or serious difficulties that have led to food insecurity. It is one of the three African countries to be classified globally in the category “good performance” in terms of food security. Improved production and local productivity did not stop the increase in the amount of imported food products; 9% of food is imported, of which the share of cereals in the value of food imports exceeds 43%, followed by vegetable oils and sugars and derivatives<sup>2</sup>.

Some factors threaten the stability of food security, including:

- Import dependence on cereals,
- Increase in the value of food imports,
- Price volatility in domestic and international commodity markets,
- Degradation of the variability of production and availability of products
- Political stability violence / terrorism
- Risks associated with climate change, specifically the increasing scarcity of water (medium / long term).

Agriculture plays a leading role in Tunisia's economy, with approximately 16% of the country's workforce engaged in the agricultural sector. Agriculture contributes about 12% to the country's GDP, and the sector is growing at around 5% per year<sup>3</sup>.

## Water

Tunisia is one of the most water scarce countries in the world. Tunisia has a water availability of approximately 410 m<sup>3</sup>/c/y. This places it at the top of the list of most water scarce countries, with a strongly receding reserve. Estimations of various world renown institutes indicate that by 2030 the country could suffer acute water shortages to the extent that it will be severely limited in implementing its agricultural programme.

Tunisia has implemented numerous water saving programmes in agriculture to address these pending water shortages. This has been an important investment, as approximately 80% of the water resources of Tunisia are used in agriculture. Together with FAO and IFAD, Tunisia has implemented Participatory Irrigation Management techniques, and has adopted new technologies, which have reduced water consumption in irrigated agriculture.

Land erosion in Tunisia is also a problem, mainly as a consequence of lack of water, and due to climate change, which has changed weather patterns. La lute contre la désertification (the struggle against desertification) is a serious attempt by the Tunisian government to push back this land degradation. Again, water shortages make this struggle even more difficult.

In terms of possible interventions and support, it is important that a more concerted effort is made to address the pending water crisis. This crisis is not only a crisis of Tunisia, but will affect all of the North African region. Tunisia has already taken many steps to improve its water security. However, the various users of water are not fully aware of both the pending crisis, and the way to address this in a concerted manner. The Netherlands can assist Tunisia by helping it develop a coping strategy which integrates efforts in the various sectors that use water (agriculture, potable water use, electricity, industry, tourism, etc.). The Netherlands can bring its experience with bringing together key civil society stakeholders to manage water to bear to benefit Tunisia. This would include assisting the government with the development of coordination mechanisms to both increase investments in water infrastructure (desalination plants, water re-use, rainwater catchment, etc.) and to increase synergies of water saving and water production of the various sectors. Finally, it is important that the private sector is included in the financing, implementation and operations of much of this infrastructure to augment available resources. The Netherlands can assist Tunisia in developing private sector models, and to mediate between the various water use sectors.

## Climate/Renewable Energy

Tunisia relies almost entirely on fossil fuels to meet its domestic energy needs. Over 94% of installed energy capacity in the country is hydrocarbon-fired. Tunisia imports most of its energy needs, despite being a relatively small natural gas and oil producer. The remaining 6% of installed capacity come from renewable energy resources; mostly hydro and wind. The government is making efforts to integrate 30% of total electricity generation from renewable energy resources by 2030. Tunisia has also focused strongly on energy efficiency as a way of diversifying its energy mix, with existing regulatory frameworks and energy efficiency laws. The government is currently adopting its third energy program with energy efficiency targets<sup>4</sup>. Tunisia launched its renewable energy program, PROSOL ELEC, in 2010 to scale up solar photovoltaic.

In terms of more regional efforts at introducing renewable energy, The Mediterranean Renewable Energy Centre (MEDREC), based in Tunis, was launched by the Italian Ministry of Environment and Territory. It involves international and governmental Institutions of Algeria, Egypt, Libya, Morocco, and Tunisia. The center is the focal point of the Mediterranean Renewable Energy Program. The mission of MEDREC is to

develop regional competencies through the transfer of technologies, training of experts, and the dissemination of information in the field of Renewable Energies and Energy Efficiency.

At present the importance of the nexus between water, energy and food security/agriculture in Tunisia is becoming ever more evident. With hydropower producing almost 30% of renewable energy sourced power the availability of water is crucial. The link of water reserves and precipitation events to (irrigated agriculture) to ensure sufficient food production is also evident. Finally, the energy required to pump water for irrigation, drinking water, sanitation and industry will have to be ensured through ever more renewable sources.

Climate change will further exacerbate the challenges in the water and agricultural sectors, as higher temperatures, declining rainfall and more frequent, more intense and longer-lasting droughts are projected to further reduce water resources. Furthermore, the expected rise in sea level is expected to lead to important losses of water resources from coastal aquifers through salinization.

2] <http://www.ites.tn/wp-content/uploads/2017/12/etude-a-mettre-sur-site-1-1.pdf>

3] <https://www.export.gov/article?id=Tunisia-Agricultural-Sector>

4] <http://www.rcreee.org/content/tunisia>

# Ranking of main result areas

Based on the above analysis, the following result areas can be considered to be most promising for intervention.

This ranking is indicative only. It is based on the country needs, complementarity to interventions by other donors, and match with The Netherlands' development policy, knowledge and experience.

F&N SECURITY	DIRECTION	SHORT NARRATIVE	
<ul style="list-style-type: none"><li>• Malnutrition</li><li>• Agricultural growth</li></ul>			
Sustainable food systems	Resilience	Strengthening of the resilience of rural agricultural communities to increase their ability to address the impacts of pending droughts, changes in weather	patterns, shortages of water and the concomitant social shocks and likely migration to urban centres.
Enabling environment			
WATER	DIRECTION	SHORT NARRATIVE	
Water resources management	Water security	<p>Water availability, water use, and the financing of (new) water sources is a prime priority. As indicated above, water is key to many significant elements of Tunisian society. Ensuring that sufficient water resources are provided in the next 50 years is the key to ensuring that Tunisia as a state continues to prosper. Tunisia's water security has to be improved. This activity can be sub-divided into three sub-foci:</p> <p>1. Ensuring water availability, especially for urban centres, will require large investments in desalination. These can be coupled to renewable energy de-</p>	<p>velopments, as desalination requires large amounts of energy. Recent technological breakthroughs have shown that renewable energy and desalination projects are viable and bankable projects;</p> <p>2. Building capacity and improving communication on water use, so as to limit wastage in all sectors. It is also important to prioritize use if water to ensure the largest return.</p> <p>3. Valuing (uses of) water, providing alternatives and linking water development to agricultural planning and renewable energy projects.</p>
Transboundary river basin management		Strengthening the regional approach to data management on climate change, droughts, rainfall events and mitigating measures for farmers. Across the North-Africa region there are several institutions that have regional climate models that show when extreme weather events can take place. This process	of knowledge management should be further supported to ensure that appropriate mitigating measures are taken, and/or adaptation measures are provided. Other donors such as the USAID regional programme for the MENA region have provided support in the past.
Increased water productivity			
CLIMATE* AND RENEWABLE ENERGY			
<ul style="list-style-type: none"><li>• Access to renewable energy</li><li>• Sustainable forestry management and related practices</li></ul>			

\* The result areas under climate are partly integrated in the resilience components under the Water and Food and Nutrition Security results areas.

# Colofon

**Country profile:** This country profile is part of a series of 12 countries in the Sahel, Horn of Africa, and MENA regions, covering per country the themes of Food & Nutrition Security, Water, Climate and Renewable Energy. Commissioned by the Netherlands Ministry of Foreign Affairs (Department of Inclusive Green Growth, IGG), and implemented by Wageningen Centre for Development Innovation (WCDI), as part of the Support Facility of Food & Nutrition Security.

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**Photo's:** Leonid Andronov, romasph  
www.nl123rf.com **Design:** <http://rco.design>

## Methodology

These country profiles are considered a first reconnaissance for IGG in countries that currently do not have bilateral programmes on food, water, climate or energy. As a consequence, the design of these profiles is light and pragmatic. The consultants based these country profiles primarily on focus group discussions and interviews with staff of the Ministry of Foreign Affairs, Ministry of Agriculture, and RVO.

This data was augmented by interviews with country experts, databases from UN and World Bank Group, and IATI (a voluntary, multi-stakeholder initiative aiming to improve the transparency of aid and development resources. The Netherlands is committed to sharing data on its programmes and target areas in IATI).

Based on this data, the consultants offer for each country several result areas for consideration. These should be seen as general directions towards possible actions which (1) are needed and requested by the country, (2) are complementary to what

others are doing already, and (3) present an opportunity to cooperate on areas of Dutch expertise and interest. These possible result areas are not recommendations for specific programmes to be developed.

## Thank you

The authors thank all staff of the Ministry of Foreign Affairs and RVO for sharing information and ideas. Special thanks to Hans van Nieuwkerk, Adel Ouni, Irene Knoben and Frits van der Wal for suggestions and comments.

## Documents consulted

Besides internal Ministry of Foreign Affairs documentation and public documents from other agencies (such as WBG, FAO, WFP, USAID, DFID), specific references are footnoted in the text.

## Sources for metrics

**General country statistics:** sourced from CIA World Factbook, UNFPA, UNDESA, IMF, and Wikipedia.

**Human Development:** UN Human Development Index (2016) [www.hdr.undp.org/en/countries](http://www.hdr.undp.org/en/countries)

**Anti-corruption and Accountability:** Africa Integrity Indicators [http://aai.globalintegrity.org/scores-map?stringId=access\\_information\\_openness&year=2017](http://aai.globalintegrity.org/scores-map?stringId=access_information_openness&year=2017)

**Doing Business:** WBG Doing Business Index <http://www.doingbusiness.org/>

**Gender Inequality:** Gender Inequality Index <http://hdr.undp.org/en/content/gender-inequality-index-gii>

**Population 2018** estimate <http://worldpopulationreview.com/countries/>  
**Population 2050** projection UNDESA 2017 [https://esa.un.org/unpd/wpp/Publications/Files/WPP2017\\_KeyFindings.pdf](https://esa.un.org/unpd/wpp/Publications/Files/WPP2017_KeyFindings.pdf)  
**Hunger:** Global Hunger Index (IFPRI) <https://www.ifpri.org/publication/2017-global-hunger-index-data>  
**Food security:** Global Food Security Index (Economist) <http://foodsecurityindex.eiu.com>  
**Land management:** Land Management Index (UNCCD) [https://global-land-outlook.squarespace.com/s/Preliminary-draft-scoping-paper-from-LMI\\_May-2017.pdf](https://global-land-outlook.squarespace.com/s/Preliminary-draft-scoping-paper-from-LMI_May-2017.pdf)  
**Renewable water resources:** FAO AquaStat <http://www.fao.org/nr/water/aquastat/main/index.stm>. We calculated the Variation in per capita internal renewable water resources, by comparing the total internal renewable water resources per capita in 2014 (m<sup>3</sup>/inhabitant/year) with same values in 2007.  
**Drinking water:** World Bank Drinking Water Index <https://data.worldbank.org/indicator/SH.H2O.SMDW.ZS>  
**Electrification:** World Bank ESMAP Electrification Index <http://rise.esmap.org/>  
**Climate change vulnerability and readiness:** ND GAIN Index <https://gain.nd.edu/our-work/country-index/>  
**IATI:** <http://d-porta.org/> and <https://www.iatiregistry.org/>