## Water and climate change adaptation expert Title: Ms.

Raoudha

GAFREJ

- Title: 1. First nan
  - First names:
- 2. Family name:
- 3. Date of birth: 20/11/1963
- 4. Nationality: French/Tunisian
- 5. Place of residence: Tunisia
- 6. Civil status/Children with date of birth: 1 child, 20/07/2000



## 7. Education:

INSTITUTION [DATE FROM - DATE TO]	DEGREE(S) OR DIPLOMA(S) OBTAINED
South Mediterranean University (Tunisia, 2019)	Diploma of continuing training on Leadership & Public Policy
Swiss Federal Institute of Technology in Lausanne, 2006	Diploma of continuing education in Eco- management, Clean Production and Environmental Economics
Pierre and Marie Curie University, 1990 -1993	PHD in Earth Sciences
Faculty of Sciences of Tunis, University of Tunis El Manar, 1988 – 1990	Post-graduate diploma in Applied Mechanics
National Engineering School of Tunis, 1983 - 1988	Hydraulic Engineer

## 8. Language skills: Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing
Arabic		Mother tongue	
French	1	1	1
English	1	2	2

9. Member of the board of: Mediterranean Water Institute (IME),

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member of Atuge (NGO, Tunisia), Water and Environment (NGO, Tunisia) and AREMS (NGO, Tunisia)

- 10. Other skills: fully computer literate
- 11. Present position: Freelance Consultant
- 12. Years within the firm:
- 13. Key qualifications
  - More than 26 years of practical and analytical experience in Natural Resources/ Environmental Management with particular expertise in integrated water resources management, climate change mitigation and adaptation, vulnerability assessment, coastal zone management. And ecosystems management in relation with water and agriculture.
  - In-depth understanding of Climate Change issues and special professional interest in adaptation topic, in particular in the context of water resources, ecosystem services, biodiversity and territorial planning. Strategic planning, technical development and promotion of adaptations measures, e.g. involving waste water reuse and sludge reuse
  - Consultant on urban planning and development with focus on urban storm water management, urban drainages and protection against storms and floods; auditor for water networks and systems
  - High competence in design and implementation of capacity-building activities: strong didactical and methodological skills, sound experience in conceptual design, implementation of participatory and learner-centred trainings, moderation and facilitation of groups.
  - Certified and experienced trainer and trainer of the trainers on Integrating climate change adaptation into development planning (GIZ, based on OECD policy guidance, climate proofing); Integrating ecosystem services into development planning (GIZ, TEEB approach); National Adaptation Plan process (GIZ), virtual and water footprint concepts and use, etc.
  - Extensive experience with various donors (GWP, World Bank, IDB, EU), inter alia in projects of German Development Cooperation (GIZ) in the North and West Africa, including assignments in Mauritania aimed at national adaptation planning

## 14. Specific experience in the region:

COUNTRY	DATE FROM - DATE TO
Tunisia	1988 – to date
Libya	June 2019
Jordan	08/2007
Syria	09/2008
Comoros Islands	April- November 2018
Egypt	12/2014
Benin	October 2017 – January 2018
Mauritania	04/2014 - 05/ 2014; 11/2014 - 12/2014
	05/2016 - 11/2016
	06-10-2018
Mali	02/2010 – 11/2011
Morocco	06/2001
Algeria	Sep 2002- June 2010 – Feb 2020

15. Profes	15. Professional experience				
DATE FROM - DATE TO	LOCATION	COMPANY	POSITION	DESCRIPTION	
March 2021- Feb 2022	Tunisia	WWF-NA Imen Rais ( Irais@wwfna.org)	Expert IWRM, technical and scientific advisor	Provide technical and scientific advice for the implementation of MedGIRE project actions for Medjerda Basin (in particular for the development of the future IWRM plan), Ensure the technical monitoring of the project; Ensure the adhesion of key institutional partners (in both countries) to the process and objectives of the future IWRM scheme; Plan and monitor the communication and engagement plan of the actors responsible for IWRM at the level of Medjerda basin and organize and facilitate capacity building workshops;	
JanFeb 2021	Tunisia	UNDP Bochra Jaouani <u>bochra.jaouani@un</u> dp.org	National water resource Expert	Support to the Tunisian Parliament's Committee on Agriculture, Food Security, Trade and Related Services, in examining the 2019/66 low of the water code. PPT presentation to provide clarification and a critical reading by highlighting the novelties brought by this draft code and this through a national workshop and five (05) regional workshops	
Nov – Dec 2020	Tunisia	UNDP Ezzeddine Ferchichi ezzeddine.ferchichi @undp.org	National climate change Expert	Development of a mapping of initiatives and projects on climate change (mitigation and adaptation) in Tunisia	
Jun-Jull 2020	Tunisia	UN-Resident Coordinator Office Ilhem Brini ilhem.brini@one.un .org	National water resource Expert	Assessment of the water sector in Tunisia and development of a concept note for a common water program for the three UN agencies: UNDP, UNICEF and FAO Réaliser une évaluation du secteur de l'eau en Tunisie et élaborer une note conceptuelle pour un programme Eau commun aux trois agences des NU : PNUD, UNICEF et FAO	
Jan – March 2020	Tunis	MALE Lotfi Ben Said b.said.lotfi@gmail.c om	National Trainer	Based on 3 workshop, training of 54 national education inspectors on the theme: "education for sustainable development" in the framework of cooperation with the Portuguese Ministry of the Environment.	
Feb to may 2020	Algeria	GFA Alexandre Borde (Alexandre.Borde@ gfa-group.de)	Regional Expert on climate change adaptation	Under GIZ ClimGov programme, the purpose of the consultation is to contribute to the development of a methodological guide [or roadmap] for the implementation of the adaptation aspects of the NDC at the level of the Forestry sector, considering the "gender" dimension. The contribution of the regional expert is about ensuring the integration of the gender dimension and traditional knowledge on local systems and knowledge at all levels in the future NDC	
February 2020-March	Tunis	OSS Nebi Ben Khatra	National Expert	The objective of the consultation is to develop a strategy and an action plan for strengthening the capacities of national actors (NDA, GCF Readiness-Tunisia 2 team, ministries, national agencies, governmental and non-	

2020		(nabil.benkhatra@o ss.org.tn)		governmental organizations, etc.) and other promoters of projects. adaptation and mitigation on both climate change and climate finance, through consultations with relevant stakeholders.
December 2019	Tunis	MALE Mohamed Zmerli zmerli_mohamed@ yahoo.com	National expert on adaptation to CC	Contribution to the national workshop to support the assessment, review and updating of the Tunisia NDC for submission to the UNFCCC Secretariat ahead of COP26 in 2020
Nov – December 2019		MALE Mohamed Zmerli zmerli_mohamed@ yahoo.com	Member of Tunisia delegation	Participation to COP25
December 2019-June 2020	Tunisia	World Bank Olivier Durand (odurand@worldba nk.org)	National Expert water and agriculture specialist	Contribution to the preparation of an agriculture public support review through public spending, other Government interventions and statistical analyses. The review will cover the period 2008-2019 (analyze public investment and intervention efficiency vis-à-vis agriculture sector objectives, notably food security and export promotion, and along various dimensions, including inter alia cost efficiency, sustainability, equitability (across subsectors, farmers categories, regions, etc.), etc.; recommendations on how to possibly improve the efficiency of the public support to agriculture will be provided)
15-16 November 2019	Tunisia	OSS (Nabil Hamada: nabil.hamada@oss. org.tn)	Trainer, international expert	Libya Readiness Programme: animation of a workshop on identifying national institutions that will join the accreditation process and creation of partnership between the NDA, the future accredited entities, the GCF and national project holders. [AC/OSS/READINESS-LY_MODERATOR/221019-19]
Aug 2018 to date	Tunisia	WWF NA Imen Rais ( Irais@wwfna.org)	technical and scientific advisor (part time)	Support the Freshwater programme and the implementation of GEMWET (Conservation and Sustainable development of coastal wetlands with high ecological value :The Ghar el Melh case, Tunisia) programme and provide expertise on water management in wetlands according to national water strategy
17 june – 22 June 2019	Tunisia	OSS (Nabil Hamada: nabil.hamada@oss. org.tn)	Trainer, international expert	Libya Readiness Programme : "workshop on sensitization and mobilization of actors on climate finance" of the Libya NDA and private sector under the framework of « READINESS » PROJECT & PREPARATORY SUPPORT TO LIBYA : Preparation of Libya to Climate Finance through GCF country programming and establishment of the GCF national designated authority GRANT : [LBY-RS-001]
October 2018- December 2019	Tunisia	Baastel Olivier Beucher (olivier.beucher@b aastel.com)	National expert	<ul> <li>Support the accreditation of the Agricultural Promotion and Investment Agency (APIA) to the Green Climate Fund</li> <li>Develop a targeted action plan to meet the GCF fiduciary, environmental and social standards.</li> <li>Train APIA staff at key stages, master FVC online accreditation system</li> <li>Strengthen APIA's individual and institutional knowledge of climate finance (eligibility criteria for projects, accountability and accounting rules for international climate finance).</li> <li>Develop a portfolio of programs / projects.</li> </ul>
Nov – December 2018		MALE Mohamed Zmerli zmerli_mohamed@ vahoo.com	Member of Tunisia delegation	Participation to COP24

November – January 2019	Tunisia	Heinrich-Böll- Stiftung, Afrique du Nord Nidhal Attia (Nidhal.Attia@tn.bo ell.org)	Water resource expert	Team leader: Evaluation of the water code project (copy of April 2018) in relation to the PPP law in Tunisia; Critical reading and proposal of recommendations for a common understanding of the water partnership's issues with the aim of adopting the new water code
September- October 2018	Tunisia	Giz Tunisia Seif Derouiche (seif.derouiche@giz .de)	Adaptation to climate change Expert	Tam leader: Diagnosis of the situation of Adaptation to climate change, SWOT analysis and formulation of a new project to support Tunisia's efforts in the implementation of its national adaptation plan
October – December 2018	Tunisia	European Union Denis Reiss (Denis.REISS@eea s.europa.eu)	Water resource expert	Final Evaluation of the Support Program for Public Policies for Water Resources Management for Rural and Agricultural Development (PAS -Eau)
April – October 2018	Comoros Islands	AGRER Frank Feys: frank.feys@agrer.c om	International Trainer expert	Training of 130 directors and local stakeholders on "integrating adaptation to climate change to development planning under GCCA programme
June – November 2018	Mauritania	Acterra (Stéphane SIMONET : s.simonet@acterra consult.com)	International expert, team leader	Team leader: Assessment of Nouakchott vulnerability to climate change. Elaboration of an adaptation strategy and selection of main projects for a short, medium and long term action Plan
Jully-August 2018	Tunisia	OSS Nebi Ben Khatra (nabil.benkhatra@o ss.org.tn)	Adaptation to climate change expert	Implementation of Readiness Program in Tunisia: awareness-raising workshops at the regional level on GCF's climate finance process (Design and development of presentation materials and Animation of climate finance awareness sessions and access procedures for GCF funding)
January- October 2018	Tunisia	BM Abdoulaye Sy asy2@worldbank.or g	Expert on water sector	Tunisia Public expenditure review for water sector (team leader )
October 2017- January 2018	Benin	ECO Consult Sepp & Busacker Partnerschaft Fernando Camargo: fernando.camargo @eco-consult.com	International Trainer expert	<ul> <li>Customization of the training to country context;</li> <li>Adaptation of the evaluation form to the context of the training event;</li> <li>Implementation of a training event on M&amp;E in the context of climate change adaptation</li> <li>Follow-up with a national expert assigned by the GIZ</li> <li>Support the reporting of the national expert</li> </ul>
Nov – December		MALE Mohamed Zmerli	Member of Tunisia	Participation to COP23

2017		zmerli_mohamed@ yahoo.com	delegation	
August 2017- January 2018	Tunisia	Acterra (Stéphane SIMONET : s.simonet@acterra consult.com)	Water and climate change adaptation expert	Team leader: Assessment of water resource vulnerability to climate change for the preparation of the 3d national communication to UNFCCC with the implication of local authorities, national authorities, NGOs, universities under workshops and dialogue
June 2017- August 2017		TPAD (Maher Mani : mahermani@tpadof fice.com)	Water management Expert	Team leader: Inventory of good practices in the water sector in Tunisia, CREM project, GIZ / OSS: different investigations with local authorities, farmers, water users to identify best practices
April 2017- March 2018	Tunisia	Direction générale de développement durable/Bureau ACC (Ali Chelbi : ali.chelbi@acc.com .tn) Chokri Mezghanni : chokri.mezghani@y ahoo.fr	Water and environmental expert	Development of a national strategy for the social responsibility of companies and organizations
25 January _ March 2017	Tunisia	International Alert Olfa Lamloum (olamloum@interna tional-alert.org)	Water expert	Team leader: Water resource governance in Tunisia. Case study of water governance in Kasserine This research was based on various meetings and investigation with farmers, waters users associations, locals authorities and local NGOs
November 2016- March 2017	Tunisia	DHI, Hungary Zsuzsanna Nagy (z.nagy@dhigroup. com)	Water resource Expert	Team leader: Water and Climate Change Practice Framework Assessment Report, Tunisia. In the framework of Water and Climate Change Practice Framework Assessment Report prepared for project "Sustainable Use of Transboundary Water Resources and Water Security Management (Water SUM)" of the Regional Environmental Center (REC), funded by the Swedish International Development Cooperation Agency (Sida). http://www.watersum.rec.org/
April _ October 2016	Tunisia	CODEV Imen Selmi (imen@codevforma tion.com)	Expert Trainer	Training of main directors from different ministries and African countries : Mali, Senegal, Burkinafasso et Niger mainstreaming of adaptation to climate change in main sectors and climate proofing of national documents
November 2016	Marrakech	Association Atuge	Member	Participation to COP22: side event (Tunisia pavilion, green area) : Green innovation for Tunisia water resources management
Mai 2016 – October	Mauritania	GIZ/GFA	Adaptation to climate	Under the GIZ ACCVC project, the activity corresponds to a capacity development process for project partner institutions at national, city (Nouakchott and Nouadhibou) and local level (9 communes of Nouakchott). The process

2016		Julius Arnegger : Julius.Arnegger@gf a-group.de	change Expert	<ul> <li>is based on the methodological approach "Climate Proofing for Development" by GIZ. The assignment component are:</li> <li>Work package 1:Familiarisation and preparation of Mauritania context</li> <li>Work package 2: Conducting "Mainstreaming ACC" training</li> <li>Work package 3: Conducting "Replication of GIZ ACC pilot projects" training</li> <li>Work package 4: Accompanying the "mainstreaming" of ACC in 4 national documents</li> </ul>
April 2016- September 2016	Tunisia	OTEDD (Observatoire Tunisien de développement Durable) Samira Nefzi : samira.benjrad@g mail.com	Adaptation to climate change expert	Team leader: Development and assessment of 28 indicators for adaptation to climate change in agriculture sector in Tunisia
Since 01/2013 – to 2017	Tunisia	GWP-Med Sarra Touzi : sarra@gwpmed.org	Senior expert Advisor (part time)	<ul> <li>Support for the implementation of the WACDEP programme in North Africa: work based on workshops and dialogues between countries (Algeria, Libya and Tunisia) and with locals authorities, farmers, NGO and private organizations:</li> <li>Integration of climate change impacts in System Aquifer du Sahara Septentrional (SASS) water management in collaboration with Sahara and Sahel Observatory (OSS)</li> <li>Development of maps representing water resources vulnerability to climate change</li> <li>Development of methodology for mainstreaming climate change issues in territorial planning of facilities for integrated and sustainable management of natural resources in the Douimis basin; proposals for no/low regret adaptation actions;</li> <li>Capacity building (development and delivery of trainings): mainstreaming of adaptation to climate change in the water sector</li> <li>Facilitation of the Panafrican WACDEP Platform: moderation of e-discussion on water security and sustainable development of 8 African countries (Burkina-Faso, Burundi, Cameroun, Ghana, Mozambique, Rwanda, Tunisia, and Zimbabwe)</li> </ul>
02/2012 – to date	Tunisia	GIZ (Anselm Duchrow : anselm.duchrow@g iz.de	Senior expert (part time)	<ul> <li>Save water in the Mediterranean (SWIM project financed by EU)</li> <li>Benchmarking of the wastewater Treatment and reuse of sustainable integrated wastewater in the Mediterranean</li> <li>Baseline assessment and analysis of the best practices</li> <li>Environmental impact assessment of the small-scale infrastructure for water in several districts in Tunisia</li> <li>Comprehensive water quality monitoring</li> </ul>
11/2015 – 12/2015	France	MEDD Amel Akremi : akremi_amel@yah oo.com	Water & CC expert	Participation to the COP 21

05/2015 – 06/2017	Tunisia	Ministry of environment (Fathi Bouzghaya, bf_fathy@yahoo.fr)	ACC expert	National expert: Technology needs assessment in adaptation to climate change including preparation of a technology action plan for three sectors: agriculture, water resources (early warning system for flood protection in Medjerda basin) & coastal and marine zones management. With the involvement of local authorities, national authorities, NGOs and Universities under several workshops (adaptation projects )
05/2014 – 06/2015	Tunisia	ACC compagny (Ali Chelbi : ali.chelbi@acc.com .tn)	Water & environment expert	The development of the Tunisian national strategy Green Economy :contribution as expert for water sector, agriculture, forests, coastal zones and solid waste. Development of main strategic projects with cost benefits assessment and GHG emissions reduction.
01/2013 – 06/2015	Tunisia	ACC company (Ali Chelbi : ali.chelbi@acc.com .tn)	Expert	Conception, design and implementation in two pilot regions of an information and monitoring system for sustainable development
12/2014	Egypt	IP Consult / GIZ GIZ/IP Consult (Kathrin Zimmermann, zimmermann@ip- consult.de)	Training expert	Trainer on the mainstreaming of adaptation to climate change in the development planning based on OCDE and GIZ manuals
11/2014 – 12/2014	Mauritania	GIZ, Mauritania (Jell, Britta, britta.jell@giz.de)	Expert	Assessment of the current gaps and capacities related to national adaptation planning in Mauritania. Identification of strategic goals for improving capacities and reducing gaps related to national adaptation planning over the next 3-5 years. GIZ tool <i>SNAP questionnaire</i> was used as part of the assessment methodology.
03/2014 – 06/2014	Tunisia	Ministry of environment and sustainable development (Lotfi Ben Said :b.said.lotfi@gmail. com)	Water expert	Review, alignment and finalization of the Tunisian National strategy for sustainable development based on three regional workshops and one national workshop with broad stakeholder involvement
04/2014	Mauritania	OXFAM INTERMON (Hatem Grissa, grissa_hatem@yah oo.fr)	Water expert	Diagnosis of the drinking water system, proposed solutions for interconnecting the two existing networks managed by two different WASH operators for securing the water supply of the camp of Malian refugees "Mberra"
06/2013 -	Tunisia	GIZ	Expert	National Adaptation Plan
09/2013		(Anselm Duchrow :		Support to implementation of the UN Framework Convention on Climate Change in Tunisia: assessment of gaps

		anselm.duchrow@g iz.de		and capacities (i.a. with the help of GIZ tool <i>SNAP questionnaire</i> ) related to national adaptation planning; setting strategic goals for improving respective capacities and reducing gaps over the next 3-5 years, scoping a sequential set of steps, activities and responsibilities for advancing the process of national adaptation planning over the next 1-2 years (preparation of a "roadmap").
07/2013 and 11/2013	Tunisia	GIZ/GWP-Med Sarra Touzi: sarra@gwpmed.org	Training expert	Trainer on the mainstreaming of adaptation to climate change in the development planning based on OCDE and GIZ manuals: preparation and delivery of two training sessions for water and non-water stakeholders.
06/2012	Tunisia	L'univers de l'eau	Water & CC expert	Consultation on preparation and conduction of stakeholder workshops for the development of coastal adaptation strategy to climate change
03/2012 – 01/2013	Tunisia	GIZ (Anselm Duchrow : anselm.duchrow@g iz.de	Senior water expert	UN Framework Convention on Climate Change in Tunisia Advisory services on water management and climate change adaptation for the implementation of the UN Framework Convention on Climate Change in Tunisia
03/2011 – 07/2011	Tunisia	Alcor/GIZ Rafik Missaoui (r.missaoui.alcor@ gmail.com)	Senior expert	Member of expert group meetings for the establishment of Tunisian National climate change strategy (mitigation and adaptation ( cost benefits analysis, GHG emissions reduction).
20/07/2012 08/2012	Tunisia	GWP-Med Sarra Touzi: sarra@gwpmed.org	Senior expert	WACDEP Program Development of an Implementation Plan for the North African Region Activities within the programme's framework, aiming to support countries and river basins to integrate water security and climate resilience in development planning at transboundary, national and local levels through policy dialogues and participatory approaches.
09/2011 – 08/2012	Tunisia	GIZ, Ministry of Agriculture	Senior expert	<ul> <li>Status and mid-term review of the pilot program of upgrading of sewage sludge in agriculture in Tunisia:</li> <li>Evaluation and state of the art; identification of the main technical and institutional bottlenecks</li> <li>Technical review of the sewage sludge</li> <li>Drafting of recommendations, mainly technical ones regarding small scale infrastructure</li> <li>Public awareness</li> <li>Proposals for mitigation measures to reduce the impact of sludge reuse</li> </ul>
01/2011 – 05/2012	Tunisia	World Bank / League of Arab States Dorte Verner dorteverner@me.co m	Senior expert	<ul> <li>Adaptation to a Changing Climate in the Arab Countries. A Case for Adaptation Governance in Building Climate Resilience (Report N° 64635 – MNA)</li> <li>Contributing author for Chapter 3 "Climate change contributes to water scarcity" and Chapter 9 "Implementation of policy responses to increase climate resilience".</li> <li>Lead author of the chapter "Biodiversity and ecosystem services have role in climate adaptation".</li> </ul>
11/2011 – 01/2012	Tunisia	GIZ, Ministry of the Environment	Water expert / Trainer	UN Framework Convention on Climate Change in Tunisia Communication programme & awareness campaign on Climate Change for stakeholders in the sectors of agriculture tourism and education. Three training sessions in different parts of the country were carried out aimed at explaining the difference between climate change and natural climate variability, consequences and impacts of climate change at global, regional and national level as well as required adaptation and mitigation measures based on national-wide studies in various sectors.

01/2010 – 12/2010	Tunisia	Ministry of environment and sustainable development Chokri Mezghanni : chokri.mezghani@y ahoo.fr	Senior consultant	Feasibility study for establishment of a strategic monitoring system for sustainable development that would allow the Ministry of environment to be alerted in time on the impacts that these issues can have in Tunisia, and to take the necessary measures to preserve the sustainability of development efforts.
02/2010 – 11/2011	Mali	Islamic Development Bank	Senior expert	<ul> <li>Bamako Storm Water Drainage and Sanitation Infrastructure Program:</li> <li>assessment of the technical and economic rationale of the planned investments;</li> <li>technical, socio-economic and institutional analysis and justification of the programme under the prospective of IDB involvement;</li> <li>analysis of the risks associated with the planned investments.</li> </ul>
02/2010 – 09/2010	Tunisia	Ministry for Agriculture and water resources	Senior expert	Study of the deflection of roads which are located in the Oued Ettine dam reservoir-hydrological and hydraulic studies; environmental impact assessment; analysis of the impact on the existing storm water drainage infrastructure
10/2009	Beirut	UN-ESCWA DP	Water resource adaptation to CC Expert	Member of the Expert Group Meeting <i>Towards Assessing the Vulnerability of Water Resources to Climate Change in the Arab Region.</i> The aim of the expert group meeting was to reach a consensus among regional stakeholders on the purpose, scope and methods to be adopted for the preparation of an Arab regional vulnerability assessment of the impact of climate change on water resources.
01/2009 – 02/2011	Tunisia	Ministry of environment and sustainable development	Senior consultant	Sustainable development projects Project study on the best initiatives as regards sectoral concretization of sustainable development (agriculture, tourism, industrial, transport).
02/2008 – 09/2009	Tunisia – Algeria	EPPM	Senior expert	<ul> <li>Technical assistance in the fields of water management, wastewater treatment, EIA, incl.</li> <li>Urban planning and development with focus on urban storm water management and urban drainages in cities (Algeria and Tunisia);</li> <li>Hydrology studies and protection against storm and floods</li> </ul>
08/2007, 01/2008	Jordan, Syria	GTZ / Ministry of Agriculture and water resources	Water expert/Trainer	Mentoring and facilitation of seminars in Amman (Jordan) and Damascus (Syria) for dissemination of the national strategy for adaptation of Tunisian agriculture and ecosystems to the climate change.
05/2007 – 09/2007	Tunisia	GTZ / Ministry of Agriculture and water resources	Water expert/Trainer	Mentoring and facilitation of eight regional seminars for dissemination of the national strategy for adaptation of Tunisian agriculture and ecosystems to the climate change.
04/2007 – 10/2007	Tunisia	Ministry of Agriculture and water resources (Forestry unit) / CDRA of Bizerte	Senior expert	Water resource need and management within the framework of the study Management plan for the Ichkeul Lake

2006 – 2007	Tunisia	Ministry of Agriculture and water resources / GTZ	Water resources Senior expert	Development of a national strategy of adaptation of Tunisian agriculture and ecosystems to the climate change: Water resources vulnerability to climate change, projection of the water resources with and without the climate change impacts, protection against floods and drought