

Curriculum Vitae

1. **Family name:** de Condappa
2. **First names:** Devaraj Kumar Carl
3. **Date of birth:** 31th August 1975
4. **Nationality:** French
5. **Civil status:** married
6. **Residence:** Chennai, India
7. **Email:** devaraj.de.condappa@googlemail.com
8. **Education:**

Institution [Date from - Date to]	Degree(s) or Diploma(s) obtained:
Université Joseph Fourier, Grenoble, France [01/2002 – 04/2005]	PhD, Natural Sciences (Hydrology)
ENS d'Hydraulique et de Mécanique de Grenoble, France [09/1997 – 07/2000]	Engineer's degree, Hydraulics and Hydrology

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

Language	Reading	Speaking	Writing
French	Mother tongue		
English	1	1	1

10. **Other Training:**

Water and Environment Law and Policy », UNESCO-IHE, 2007

11. **Key qualifications:** 21 years of professional experience in Integrated Water Resources Management (IWRM) and Planning:

- IWRM and Planning (River Basin Plans, Water – Food – Energy Nexuses, participatory intersectoral scenarios).
- Water Resources Allocation Modelling (setting models, analysing large range of scenarios for hydrological impact of climate change, sectoral water demands, hydropower, environmental flows).
- Hydrological Modelling (physically-based or regression analysis).
- Assessing impacts of Climate Change (IPCC's reports, impact assessment, latest climate change models ensemble analysis).
- Adaptation to Climate Change (Ecosystems-based Adaptation).
- Advice for Policymaking (convey technical results for policy-making).
- Establish Partnership with Government Agencies, Stakeholders and NGOs (for IWRM, participatory scenarios, policy advices).
- Training and Capacity Building.
- Monitoring and Evaluation, performance indicators.
- Mapping and GIS analysis.
- Proposal development, project management.

12. **Computer skills:**

Hydrological model	Integrated Water Planning model	GIS	Data analysis and Visualisation
QSWAT, HEC-HMS	WEAP	GRASS 7.x, QGIS, SAGA, ArcView 9.x	R

13. **Career:**

Dates	Location	Organisation	Position
Since 2009	India and Germany	Freelance, associated with the Stockholm Environment Institute	Consultant
2020 – 2021	Germany	TMG Research	Research Associate

Dates	Location	Organisation	Position
2007 – 2009	France and West Africa	Institut de Recherche pour le Développement (IRD), France	Research Fellow
2006	Benin	Institut de Recherche pour le Développement (IRD), France	Post-doctorate
2002 – 2005	France and India	French Geological Survey (BRGM), France	Doctoral Researcher

14. Countries experience:

Region / Country	Date from - Date to	
Africa (central)	Cameroon	03/2017
	Chad	03/2015, 07/2015, 06/2016, 06/2022
	DRC	04/2015
Africa (eastern)	Eritrea	11/2010
	Rwanda	03/2022
Africa (southern)	Lesotho	11/2013
	Mozambique	06/2012
Africa (western)	Benin	01/2006 to 04/2006
	Burkina Faso	Several missions since 09/2007
	Ghana	Several missions since 09/2007
	Mali	Several missions from 09/2007 to 03/2010, 08/2021
	Niger	Several missions since 02/2017
	Togo	01/2006
Asia	Afghanistan	Several missions from 11/2011 to 03/2013
	India	Since 1998
	Pakistan	07/2015
Caucasus	Armenia	10/2013
Europe	Albania	03/2014, 02/2022
	France	02/2001 to 08/2001
	Moldova	05/2014, 05/2015
Maghreb	Morocco	Several missions since 09/2014
	Tunisia	Several missions since 10/2015
Middle East	Jordan	Several missions from 11/2017 to 12/2018
Small Islands	Comoros	12/2014

15. Professional experience

Date from - Date to	Location	Company, reference person and Donor Agency	Position	Description
06/2022 – ongoing	West Africa	GIZ (Alexandre Mesnil, alexandre.mesnil@giz.de)	RBO expert	<p>Role of river basin organisation in preventing conflicts around natural resources in context of climate change</p> <ul style="list-style-type: none"> The FREXUS (Improving security and climate resilience in a fragile context through the Water-Energy-Food/WEF Security Nexus) project has been designed to support the peaceful resolution of social tensions and conflicts between population groups that are caused or exacerbated by climate change in fragile areas. River Basin Organisations (RBOs) are seen as having a role in preventing conflicts. The aim of this assignment is to gather information on RBOs practices in the WEF Nexus and the RBOs practical role in supporting peace & security in context of climate change. Tasks: <ul style="list-style-type: none"> ➤ Prepare the bid in response to a public request for proposals from GIZ. ➤ Manage the project (e.g., contracts, budget, planning, experts' travels, invoices, liaising with GIZ). ➤ Facilitate exchange workshops between RBOs in West Africa. ➤ Draft a policy paper on roles of RBOs in supporting peace & security in context of climate change.
04/2022 – ongoing	Rwanda (Kigali)	SHER (Michel-Henri Bourge, bourge@sher.be) ENABEL	Team Leader and IWRM expert	<p>Elaboration of the Rusizi River Catchment Management Plan, Rwanda</p> <ul style="list-style-type: none"> Develop a catchment management for Rusizi through the following steps: (i) conduct a hydro-biophysical assessment and at sub-catchment level, (ii) conduct a socio-economic analysis and livelihood assessment and (iii) identify feasible bankable and implementable projects to restore the catchment based on consultation and prioritisation with stakeholders. Tasks: <ul style="list-style-type: none"> ➤ Project management and technical supervision (e.g., plan activities, lead a team of 8 experts, monitor activities). ➤ Coordination, preparation and quality control of deliverables. ➤ Communication with the client. ➤ Contribute to the development of the water allocation modelling of water resources (WEAP) and multi-criteria analysis to identify robust solutions. ➤ Include hydro-economic modelling. ➤ Stakeholder engagement.
02/2022 – ongoing	Rwanda (Kigali)	SHER (Michel-Henri Bourge, bourge@sher.be) FONERWA / World Bank funding	Team Leader and IWRM expert	<p>Integrated Strategic Water Resources Planning and Management for Rwanda</p> <ul style="list-style-type: none"> The general objective is to develop integrated strategic water resources plans and management guidelines as follows: (i) assess and evaluate the availability and vulnerability of water resources up to 2050 under climate change, (ii) formulate sustainable water resources investment plans for 2050, (iii) prepare a revised water resources policy in line the SDG 6 and (iv) carry out a cost-benefit analysis of the proposed investment plans. Tasks: <ul style="list-style-type: none"> ➤ Project management and technical supervision (e.g., plan activities, lead a team of 9 experts, monitor activities). ➤ Coordination, preparation and quality control of deliverables. ➤ Communication with the client. ➤ Contribute to the diagnosis and water allocation modelling of water resources. ➤ Stakeholder engagement.

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01/2022 – ongoing	Zambia (home-based)	HYDROC GmbH (Georg Petersen, gpetersen@hydroc.de) GIZ funding	Project manager and technical backstopper	<p>Sustainable Water Resources Management and Agricultural Water Use, Zambia</p> <ul style="list-style-type: none"> GIZ is implementing the “Accelerate Water and Agricultural Resources Efficiency” (AWARE) project in the Lower Kafue Sub-Catchment (LKSC) in Zambia. In this context, the objectives of the assignment are: (i) strengthen and capacitate four new Water User Associations (WUAs) being established in the LKSC, (ii) support Integrated Watershed Management (IWsM) in close collaboration with the WUAs and District Expert Teams (DETs) and (iii) support the Lower Kafue Sub-Catchment Management Plan (LKSCMP). Tasks: <ul style="list-style-type: none"> ➢ Prepare the bid in response to a public request for proposals from GIZ. ➢ Manage the project (e.g., contracts, budget, planning, experts’ travels, invoices, liaising with GIZ). ➢ Provide technical backstopping as needed.
01/2022 – ongoing	Albania (Elbasan)	IUCN (Mihaela Dragan-Lebovics, mihaela.draganlebovics@iucn.org)	Team Leader / IWRM expert	<p>Nature-based Solution baseline study and pilot project in Elbasan municipality, Albania</p> <ul style="list-style-type: none"> IUCN is implementing the project ADAPT “Nature-based solutions for resilient societies in the Western Balkans”, with a pilot project in the Elbasan municipality, located within the Shkumbini river basin, Albania. The objective of the assignment is to lead a team of multidisciplinary experts to develop an NbS baseline assessment and recommend a pilot NbS project in Elbasan municipality. Tasks: <ul style="list-style-type: none"> ➢ Prepare the bid in response to a public request for proposals from IUCN. ➢ Technical supervision (e.g., plan activities, lead a team of 5 experts, monitor activities). ➢ Coordination, preparation and quality control of deliverables. ➢ Scoping study of baseline situation and identify potential NbS measures in the Shkumbini river basin and Elbasan. ➢ Draft the NbS baseline assessments report, including (i) a socio-economic analysis, (ii) a gender and inclusive governance analysis, (iii) a climate change policy analysis, (iv) a final list of NbS measures for water management in the Shkumbini river basin and Elbasan municipality, (v) recommendations for a NbS pilot project in Elbasan municipality and (vi) M&E framework for the pilot NbS project.
12/2021 – ongoing	Central Asia (home-based)	HYDROC GmbH (Georg Petersen, gpetersen@hydroc.de) GIZ funding	Project manager and technical backstopper	<p>Cross-border dialogue on climate, water and security issues in Central Asia and Afghanistan</p> <ul style="list-style-type: none"> GIZ supports the Green Central Asia initiative, to address high vulnerability to climate change in Central Asia. The objective of the assignment is to support the drafting of a regional climate change adaptation document providing recommendations on joint actions for adaptation in Central Asia. Tasks: <ul style="list-style-type: none"> ➢ Prepare the bid in response to a public request for proposals from GIZ. ➢ Manage the project (e.g., contracts, budget, planning, experts’ travels, invoices, liaising with GIZ). ➢ Prepare a detailed workplan with the partners to ensure their involvement throughout the process. ➢ Contribute to drafting the deliverables (background report for climate change adaptation in Central Asia, the regional climate change adaptation document).
12/2021 – ongoing	Somalia	HYDROC GmbH (Georg Petersen, gpetersen@hydroc.de) GIZ funding	Trainer	<p>Capacity Development measures on basic data requirement analysis within Shabelle Basin, Somalia</p> <ul style="list-style-type: none"> GIZ supports the establishment of IWRM in Somalia. In this context, the objective is to develop capacities of the technical staff of relevant water and line institutions on data requirement analysis and hydrological monitoring, with an application case on the Shabelle basin. Tasks: <ul style="list-style-type: none"> ➢ Situational analysis in terms of training needs. ➢ Collect data needed for the hands-on training. ➢ Develop the content for training on hydrological analyses, GIS for water resources, rainfall/runoff modelling with HEC-HMS, water resources management with WEAP ➢ Conduct hands-on training.

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02/2021 – ongoing	Mali (Bamako)	HYDROC GmbH (Georg Petersen, gpetersen@hydroc.de) KfW funding	Modeller	<p>Support monitoring and knowledge of the Niger river</p> <ul style="list-style-type: none"> Support the national water agency (Direction Nationale de l'Hydraulique, DNH) to monitor, assess and manage water resources in the Malian portion of the Niger transboundary basin. Tasks: <ul style="list-style-type: none"> ➤ Diagnosis of current monitoring of surface water resources and water uses. ➤ Assess modelling needs at the DNH. ➤ Assess training needed for modelling at the DNH. ➤ Calibrate a hydrological and water allocation model in the Malian portion of the Niger basin. ➤ Analyse scenarios of climate change, further development and allocation policies. ➤ Hand-on training on modelling.
04/2018 – ongoing	Niger (Niamey)	GFA GROUP (Christian Rake, Christian.Rake@gfa-group.de) LuxDev funding	Team Leader and IWRM expert	<p>Framework contract for IWRM Technical Assistance</p> <ul style="list-style-type: none"> LuxDev provides a technical assistance to the Nigerien ministry of water resources (Ministère de l'Hydraulique et de l'Assainissement) to support implementation of IWRM. Tasks: <ul style="list-style-type: none"> ➤ Develop a roadmap for this TA. ➤ Collaborate with regional organisations, including AGRHYMET and the Niger Basin Authority ➤ Lead experts and conduct technical assistance in IWRM (e.g., draft RBM plans, establish river basin agencies, produce water management information, support IWRM consultations, document efforts to mitigate pastoral water conflicts).
12/2021 – 02/2022	Senegal (home-based)	IRD (Andrew Ogilvie, andrew.ogilvie@ird.fr)	Modeller	<p>Water resources modelling for the Master Plan of the Senegal river basin</p> <ul style="list-style-type: none"> The French Development Research Institute (IRD) is developing a WEAP model to support drafting of the Master Plan of the Senegal river basin. Tasks: <ul style="list-style-type: none"> ➤ Update the WEAP model of the Senegal river basin with latest data. ➤ Develop scenarios of change in water demands, development of new reservoirs, new allocation policies and climate change. ➤ Analyse results and outcomes.
12/2021 – 01/2022	Gabon (home-based)	Hydroconseil (Bruno Valfrey, valfrey@hydroconseil.com) UNESCO funding	Trainer	<p>Training on assessing water resources</p> <ul style="list-style-type: none"> UNESCO office in Gabon has commissioned a series of training for Gabonese professionals in the water sector. Tasks: <ul style="list-style-type: none"> ➤ Develop the content for training on the water cycle, river basin, water budgets, impact of climate change, assessing surface water resources, assessing groundwater. ➤ Conduct the training online.
12/2021	Burkina Faso, Mali, Niger (home-based)	Iwel (Joseph Thompson, josephthompson.consulting@outlook.com) WaterAid funding	Workshop facilitator	<p>Evaluation of the West Africa Securing Water Resources Approach (SWRA)</p> <ul style="list-style-type: none"> WaterAid has been supporting the development of the Securing Water Resources Approach (SWRA) since 2011, for community monitoring and management of water resources. WaterAid has commissioned an evaluation of the approach. Tasks: <ul style="list-style-type: none"> ➤ Facilitate an online workshop for launching the evaluation and field works in Burkina Faso, Niger and Mali.

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06/2021 – 10/2021	Ukraine (home-based)	HYDROC GmbH (Georg Petersen, gpetersen@hydroc.de)	Modeller	<p>Analysis for the Don River Basin Management Plan – Component 2, Analysis of climate change impacts in the Siversky Donets River Basin</p> <ul style="list-style-type: none"> Assessment of climate change impacts in the Siversky Donets river basin. Tasks <ul style="list-style-type: none"> Scrutinise input hydro-meteorological data. Develop a WEAP model for the Siversky Donets river basin, including a hydrological modelling of the snow hydrology. Simulate the water balance in the basin. Include climate change scenarios. Simulate water balance and extreme flows (floods and droughts) under climate change.
09/2018 – 08/2021	Niger, Ghana, Burkina Faso	Stockholm Environment Institute (Holger HOFF, holger.hoff@sei.org) Swedish Research foundation funding	IWRM modeller and Stakeholders Engagement	<p>Climate information for integrated renewable electricity generation (CIREG) – Water/Energy Nexus</p> <ul style="list-style-type: none"> Demand-driven climate services to support renewable electricity generation in the transboundary Volta basin. Typical example of <u>Water, Food and Energy Nexus</u>. Tasks: <ul style="list-style-type: none"> Identification of benefiting stakeholders in Burkina Faso and Ghana. Identify stakeholders' climate-services needs. Hand-on training of stakeholders in WEAP. Co-develop WEAP-LEAP applications to examine Water and Energy scenarios. Analysis of ISIMIP ensemble of climate change models, impacts on water resources, water uses and hydropower in the Volta basin.
04/2020 – 03/2021	India (Pune)	TMG Research (Larissa Stiem-Bhatia, Larissa.Stiem-Bhatia@tmg-thinktank.com) International Climate Initiative (IKI)	Research Associate (full-time)	<p>Upscaling Ecosystem-based Adaptation in Maharashtra, India</p> <ul style="list-style-type: none"> Development of a Roadmap to upscale Ecosystem-based Adaptation (EbA) in Maharashtra state, India. Tasks: <ul style="list-style-type: none"> Supervision of two Watershed Development/EbA case studies. Draft EbA effectiveness synthesis report, "From Watershed Development to EbA". Contribute to drafting the Roadmap to upscale EbA in Maharashtra. Project management and supervision of technical content.
12/2019 – 09/2020	India (Delhi, Dehradun and Lucknow)	AHT GROUP (Jürgen Rambow, rambow@iht-group.com) GIZ funding	Team Leader and Trainer	<p>Development and implementation of a modular training program on the River Basin Management Cycle in India</p> <ul style="list-style-type: none"> In context of the Indo-German bilateral cooperation project "Support to Ganga Rejuvenation", to develop and implement a participatory training program on River Basin Management Cycle. Tasks: <ul style="list-style-type: none"> Overall project management, quality assurance and coordination of project activities with the team of experts. Developing and delivering training modules tailored to the participants from different governmental organisations. Practical training on the DPSIR method.
01/2019 – 06/2020	Morocco (Marrakesh)	AHT GROUP (Jürgen Rambow, rambow@iht-group.com) GIZ funding	Team Leader and Hydrologist	<p>Strengthening River Basin Agencies capacity in monitoring water resources</p> <ul style="list-style-type: none"> In context of the IWRM Program AGIRE, to bring-back professional skills within the river basin agencies (ABH) in monitoring water resources. Tasks: <ul style="list-style-type: none"> Overall project management, quality assurance and coordination of project activities with the team of experts. Assess the current situation in term of data processing and storage. Develop a process manual specific to this phase. Train based on the manual. Support the ABHs into implementing the manual.

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11/2018 – 05/2020	India (Trichy)	ANTEA India (Krishna GUPTA, Krishna.Gupta@anteagroup.com) ADB funding	Hydrologist	<p>Climate Adaptation in the Vennar sub-basin of the Cauvery delta</p> <ul style="list-style-type: none"> In context of the Climate Adaptation in the Vennar Subbasin of the Cauvery Delta project, to assess water resources, upgrade infrastructure and strengthening embankments of six main channels. Tasks: <ul style="list-style-type: none"> Review outputs from climate change studies. Analyse hydro meteorological data. Calibrate a SWAT model for the study area. Develop current and future storm profiles under climate change.
11/2017 – 05/2019	Jordan (Amman)	AHT GROUP (Jürgen Rambow, rambow@iht-group.com) GIZ funding	Team leader and modeller	<p>Foster the institutionalisation of WEAP for the water sector in Jordan</p> <ul style="list-style-type: none"> Pursue the improvement of the WEAP model and to establish institutional cooperation within the Ministry of Water and Irrigation (MWI), the Water Authority of Jordan (WAJ) and the Jordan Valley Authority (JVA). Tasks: <ul style="list-style-type: none"> Support MWI to improve the WEAP model (structuration, calibration, assumptions, scenarios analysis). Engage with senior managers of the MWI, WAJ and JVA in order to tailor WEAP to the needs of decision making. Define a framework to establish WEAP team as a service provider for decision making. Draft a booklet presenting the WEAP team, the model and its outputs.
11/2017 – 05/2019	Tunisia (Tunis)	AHT GROUP (Jürgen Rambow, rambow@iht-group.com) GIZ funding	Trainer (modeller)	<p>Support to the development of the WEAP model for the Nebhana system – phase II</p> <ul style="list-style-type: none"> Continuation of the work in context of the IWRM project AGIRE to support government representatives in developing collaboratively an application of the WEAP model. Tasks: <ul style="list-style-type: none"> Support the WEAP team from Tunisian administrations. Improve the WEAP Nebhana model by adding hydro-economic and water quality modelling. Institutionalise the model within national ministries. Draft the user guide of the model.
10/2017 – 10/2018	Tunisia (Kairouan)	AHT GROUP (Jürgen Rambow, rambow@iht-group.com) GIZ funding	Water Resources Expert	<p>Support the Water Forum for IWRM in Kairouan and Sidi Bouzid</p> <ul style="list-style-type: none"> In context of the IWRM project AGIRE to strengthen a Water Forum in the governorates of Kairouan and Sidi Bouzid, between water operators, water users and the regional offices of the Ministry of Agriculture. Tasks: <ul style="list-style-type: none"> Technical support on water resources management. Foster both forums by establishing dialogue on technical and pragmatic issues, such as participatory diagnosis of current situation and field surveys.
10/2017 – 03/2018	Morocco (Marrakech)	AHT GROUP (Jürgen Rambow, rambow@iht-group.com) MASEN funding	Team Leader and IWRM expert	<p>Study of the impact of the large NOOR solar energy complex in the river basin of Midelt region (Moulouya river basin)</p> <ul style="list-style-type: none"> MASEN has commissioned this study to examine the potential impact of water withdrawal in the Moulouya river basin for operation of the NOOR solar complex and recommend mitigation measures. <u>This project is a practical example of the Water – Energy – Food Nexus.</u> Tasks: <ul style="list-style-type: none"> Overall project management, quality assurance and coordination of project activities with the team of experts. Diagnosis of the current situation in the river basin. Prognostic for the future situation (climate change, construction of new reservoirs, change in water demands, siltation of reservoir). Assessment of the water demand for the NOOR complex and its potential impacts in the river basin. Integrated water resources modelling with WEAP for suggestion of optimum management of the river basin.

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05/2017 – 11/2017	Home-based and Kenya (Nairobi)	HYDROC Consult (Georg Petersen, gpetersen@hydroc.de)	Modeller	<p>Complementary studies for Thwake multipurpose water development program: Thwake Reservoir modelling</p> <ul style="list-style-type: none"> The objective of this assignment is to contribute to the review of the multi-purposes Thwake dam by modelling the best operational rule of the reservoir and its associated benefits. Tasks: <ul style="list-style-type: none"> Develop a WEAP model with Thwake dam with water uses (drinking water supplies, hydropower, irrigation, downstream flow requirement). Optimise the operation rules of the Thwake dam/reservoir under a 1000 years synthetic streamflows time-series. Examine the robustness of the optimised operational rules under uncertainty for water demands. Conduct a sensitivity analysis of climate change impact. Prepare a hydrological monitoring program for pre- and post-impoundment (water quantity and quality).
09/2015 – 09/2017	Morocco (Marrakech)	AHT GROUP (Jürgen Rambow, rambow@iht-group.com) KfW funding	Team Leader and Hydrologist	<p>Study for developing an IWRM plan in the Chichaoua basin</p> <ul style="list-style-type: none"> Drafting of an IWRM plan for the Chichaoua basin (sub-basin of the Tensift). The study has three phases: 1) diagnoses on several themes pertaining to IWRM; 2) drafting of the IWRM plan for the basin and 3) pre-feasibility study of prioritised actions. Tasks: <ul style="list-style-type: none"> Project management and technical supervision (e.g., plan activities, lead a team of 14 experts, monitor activities). Coordination, preparation and quality control of deliverables. Contribute to the diagnosis on surface water resources. Water resources modelling and scenarios (climate change, implementation of the IWRM plan, implementation of the prioritised actions). Stakeholder consultations and participatory design of IWRM measures. Participative multi-criteria analysis for prioritisation of IWRM measures. Drafting of the IWRM Plan. Cost-benefit analysis of the IWRM Plan.
09/2016 – 07/2017	Morocco (Marrakech)	AHT GROUP (Jürgen Rambow, rambow@iht-group.com) GIZ funding	Team Leader and IWRM expert	<p>Study for ratifying a Water Convention for the Haouz-Mejjat groundwater system</p> <ul style="list-style-type: none"> In context of drafting with GIZ and the River Basin Agency of Tensift (ABH-T) a “Water Convention” to establish IWRM and better manage the overexploited Haouz-Mejjat groundwater system, with all the stakeholders (decision makers, planners, managers, associations, users ...). Tasks: <ul style="list-style-type: none"> Project management and supervision of the technical content of the study. Engagement and consultations with the stakeholders to define the action plan of the Convention. Model and analyse various scenarios (climate change, general development trends, implementation of the prioritised actions) to optimise the action plan. Supervise the drafting of the Water Convention.
02/2017 – 05/2017	Niger (Niamey), Yaoundé (Cameroon)	Hydro – R&D (Eric Vanden Borre, evb@hydro-rdi.eu) AFD funding	Team Leader and Hydrologist	<p>Final evaluation of the project IWRM2/Niger HYCOS of the Niger Basin Authority</p> <ul style="list-style-type: none"> Final evaluation of the GIRE2 project of the Niger Basin Authority (NBA), funded by the AFD. The GIRE2 project strengthened national hydrological services (e.g., monitoring equipment, observation and database) and supported development of water resources management tools. Tasks: <ul style="list-style-type: none"> Prepare the evaluation methodology. Conduct the evaluation at the regional level (NBA, GIZ, AGHRYMET, IRD). Conduct the evaluation at the national level in Niger and Cameroon (NBA focal point, hydrological services, water users). Draft the final report.

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03/2015, 07/2015, 06/2016	Chad (N'Djamena)	AHT GROUP (Jürgen Rambow, rambow@iht-group.com) GIZ funding	Hydrologist	<p>Organisational advice for the Lake Chad Basin Commission (LCBC)</p> <ul style="list-style-type: none"> Organisational and knowledge management advices to the <i>Lake Chad Basin Commission (LCBC)</i>. Tasks: <ul style="list-style-type: none"> Support the LCBC in preparing its Annual Monitoring Report (template of the report, protocol for data collection, integration with the regional database and information system of the LCBC). Strengthen the use of the WEAP model within the Commission in continuation of previous works. Support the LCBC in drafting the Scope of Basin report.
10/2015 - 05/2016	Tunisia (Tunis)	AHT GROUP (Jürgen Rambow, rambow@iht-group.com) GIZ funding	Trainer	<p>Support to the development of the WEAP model for the Nebhana system</p> <ul style="list-style-type: none"> Support representatives of government organisations managing the system of Nebhana reservoir, especially the Regional Office of Agricultural Development (CRDA) of Kairouan, to develop an application of the WEAP model. Tasks: <ul style="list-style-type: none"> Support the national team in modelling in WEAP the current situation, defining scenarios and analysing results. Establish a tool to extract results from the model. Draft the user guide of the model. Prepare a summarising booklet for decision makers.
10/2014 – 12/2015	Morocco (multiple)	Hydro – R&D (Eric Vanden Borre, evb@hydro-rdi.eu) BTC funding	Team Leader, M&E expert	<p>Institutional and operational support to River Basin Agencies: setting the Baseline and the M&E system</p> <ul style="list-style-type: none"> Set the baseline and the M&E system of the project A3ABH, for institutional and operational support to the three River Basin Agencies Loukos, Moulouya and Souss-Massa. Tasks: <ul style="list-style-type: none"> Estimate the baseline situation with a diagnosis on RBAs (communication activities, their local delegations and collaborations with partners and local water users). Review and improve the existing logical framework matrix of the project. Define relevant performance indicators for the project. Set an M&E system for the project. Suggest a risk management strategy for the project. Conduct the evaluation of the project for year 2015.
07/2015	Pakistan (Jamshoro)	Stockholm Environment Institute USAID fundings	Trainer (modeller)	<p>U.S.-Pakistan Center for Advanced Studies in Water</p> <ul style="list-style-type: none"> The U.S.-Pakistan Center for Advanced Studies in Water is an education and applied research centre at the Mehran University of Technology & Engineering (MUET). Tasks: <ul style="list-style-type: none"> Provide a WEAP training to faculties. Support the faculties in integrating WEAP into their research and teaching activities.
05/2014, 05/2015	Moldova (Chisinau)	BRLi (Julien Verdonck, Julien.Verdonck@brli.fr) Millennium Challenge Account – Moldova funding	Trainer (modeller)	<p>Training on modelling integrated water resources management, applied to the Nistru and Raut river basins</p> <ul style="list-style-type: none"> In context of the Irrigation Sector Reform Activity. The target organisations are the “Apele Moldovei” Agency, the State Hydro-meteorological Service and the Institute of Ecology and Geography. Tasks: <ul style="list-style-type: none"> 5-days hand-on training on WEAP. Applied to the Raut river basin (snow hydrological modelling). Applied to the Nistru/Dniestr river basin (domestic and irrigation water demands, Dubasari reservoir & hydropower, water allocation). Analysis of climate change scenarios.

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04/2015	Democratic Republic of Congo (Kinshasa)	CICOS (Olivier Thamba, oligothamba@gmail.com) MESA funding	Modeller	<p>Development of a hydrological model for predicting water levels on the Kasai River</p> <ul style="list-style-type: none"> The purpose of this service is to predict water levels of the Kasai River for navigation in context of the <i>Monitoring for Environment and Security in Africa</i> (MESA) project. Tasks: <ul style="list-style-type: none"> Engaging with stakeholders involved in navigation (CICOS, Régie des Voies Fluviales). Review and processing of input data. Development of multiple linear regression models to predict levels water in 5, 10 and 15 days. Training of CICOS experts in the development and use of the model. Drafting the model user guide.
09/2014 – 04/2015	Morocco (Ouarzazate)	AHT GROUP (Jürgen Rambow, rambow@aht-group.com) KfW funding	Team Leader, IWRM expert	<p>Study of the impact of the large NOOR solar energy complex in the river basin of Ouarzazate region (Draa river basin)</p> <ul style="list-style-type: none"> Assessment of potential impact of water withdrawal in the Draa river basin for operating the Ouarzazate NOOR solar complex and to recommend mitigation measures. <u>This project is a practical example of the Water – Energy – Food Nexus.</u> Tasks: <ul style="list-style-type: none"> Overall project management, quality assurance and coordination of project activities with the team of experts. Diagnosis of the current situation in the river basin. Prognostic for the future situation (climate change, construction of new reservoirs, change in water demands, siltation of reservoir). Assessment of the water demand for the NOOR complex and its potential impacts in the river basin. Integrated water resources modelling with WEAP for suggesting optimum management of the river basin.
12/2014	Comoros (Moroni)	UNDP (Charaf-Eddine Msaidie, charaf-eddine.msaidie@undp.org)	Trainer (climate change)	<p>Training on climate change and climate risks for water resources management</p> <ul style="list-style-type: none"> In context of the project "Comoros Adapting Water Resource Management", for a training on climate change and climate risks for water resources management. Tasks: <ul style="list-style-type: none"> Prepare and deliver the training. Training on the latest results from IPCC's AR5 reports. Specific climatic context of the Comoros. Training on integrated water resources planning model WEAP and simulation of climate change scenarios. Training on introduction to the concept of climate risks and their management.
09/2014 – 11/2014	Home-based	HYDROC GmbH (Georg Petersen, gpetersen@hydroc.de) UNDP funding	Modeller	<p>Integrating climate change risk into water and flood management by vulnerable mountain communities in the Greater Caucasus region - phase II</p> <ul style="list-style-type: none"> The project aims to reduce vulnerability of the mountain communities of the Greater Caucasus region of Azerbaijan to climate change induced water stress and flood hazards. Tasks: <ul style="list-style-type: none"> Development of a WEAP application for the Türyanchay basin. Assessment of water resources (surface and groundwater). Assessment of water demands for domestic water supply, irrigation and hydropower.

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03/2014	Albania (Tirana)	UNDP (Mirela Kamberi, mirela.kamberi@undp.org)	Trainer (modeller)	<p>Training on modelling integrated water resources management, applied to the Mati river basin</p> <ul style="list-style-type: none"> The UNDP organised a workshop to train Albanian specialists on studying impacts of Climate Change on availability and planning water resources. Tasks: <ul style="list-style-type: none"> ➤ 5-days hand-on training on WEAP. ➤ Applied to the Mati river basin (mountainous snow hydrology, domestic and irrigation water demands, Ulza reservoir and hydropower, Shkopeti reservoir and hydropower). ➤ Analysis of climate change scenarios.
12/2013 – 02/2014	Home-based	HYDROC Consult (Georg Petersen, gpetersen@hydroc.de) ADB funding	Modeller	<p>Drafting of the Western Basin Water Master Plan, Afghanistan</p> <ul style="list-style-type: none"> In context of the Western Basin Water Resources Management Project (WBWRMP) in Afghanistan, mainly for the Hari Rud River Basin. Tasks: <ul style="list-style-type: none"> ➤ Development of a WEAP application for the Hari Rud basin. ➤ Examine future scenarios of climate change, rehabilitation of canals and construction of new dams/reservoirs, such as including Salma Dam. ➤ Explore different potential hydropower and irrigation operation rules.
11/2013	Lesotho (Maseru)	HYDROC Consult (Georg Petersen, gpetersen@hydroc.de) Multi-donors funding and GIZ implementation	Analyst	<p>Gathering of current and future water demands in the Orange-Senqu river basin, in Lesotho and Botswana</p> <ul style="list-style-type: none"> In context of the project “Consolidation of the Orange-Senqu River Basin IWRM Plan” funded by Germany, Australia and the United Kingdom development funds and coordinated by GIZ. Tasks: <ul style="list-style-type: none"> ➤ Engage with different organisations in Lesotho having a stake in water resources. ➤ Estimate current and future water demands, current and future water infrastructures.
10/2013	Armenia (Yerevan)	Booz Allen Hamilton (Jen Braswell, braswell_jen@bah.com) USAID funding	Modeller and Trainer	<p>Drafting of the Vortan river basin plan, including impacts of climate change</p> <ul style="list-style-type: none"> In context of the “Clean Energy and Water” (CEW) Program, integrated water resources management in the Vortan river basin. Tasks: <ul style="list-style-type: none"> ➤ Continuous hand-on training on WEAP. ➤ Developing an application of WEAP in the Vortan river basin, including snow hydrological modelling. ➤ Analysis of climate change scenarios. ➤ Outcome for drafting the River Basin Plan.
05/2013	Home-based	Stockholm Environment Institute (Jennie Barron, jennie.barron@sei-international.org) World Bank funding	Analyst	<p>Compilation of existing and planned irrigation schemes in seven African river basins (Congo, Niger, Nile, Orange, Senegal, Volta and Zambezi)</p> <ul style="list-style-type: none"> In context of the project “Enhancing the Climate Resilience of Africa’s Infrastructure”. Tasks: <ul style="list-style-type: none"> ➤ Compilation of data on existing and planned irrigation schemes (extent of irrigated areas, cropping patterns, irrigation infrastructure, number of beneficiaries and ex ante environmental impacts). ➤ In seven major African river basins (Congo, Niger, Nile, Orange, Senegal, Volta and Zambezi).

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11/2011 – 03/2013	Afghanistan (Kabul)	Landell Mills (Simon Foxwell, simonf@landell-mills.com) World Bank funding	Modeller and Trainer	<p>Technical Assistance for drafting an investment plan for the Kabul and Panj-Amu basins and for providing trainings – Afghanistan Water Resources Development (AWARD)</p> <ul style="list-style-type: none"> The AWARD project provided technical assistance to the Ministry of Energy and Water (MEW) for supervision of planning and project preparation activities done by and for the MEW. Works focused on river basin planning of Kabul and Panj-Amu basins with respect to economic needs and climate change. Tasks: <ul style="list-style-type: none"> ➤ Continuous hand-on training on WEAP. ➤ Development of a WEAP application in the Kabul and Panj-Amu basins. ➤ Development of an hydro-economic modelling framework. ➤ Analysis of a large ensemble of scenarios for Robust Decision Making, to prioritise future infrastructures development. ➤ Discussions with stakeholders. ➤ Drafting of the investment plan of the two basins.
06/2012	Mozambique (Maputo)	UNDP (Clara Landeiro, clara.landeiro@undp.org) AAP funding	Trainer (modeller)	<p>Training on modelling water resources management</p> <ul style="list-style-type: none"> This workshop was part of activities of the African Adaptation Programme to build capacities of scientists in vulnerable countries in Africa. Tasks: <ul style="list-style-type: none"> ➤ 4-days hand-on training on WEAP. ➤ Applied to the Monapo river basin. ➤ Analysis of climate change scenarios.
07/2011 – 02/2012	India (Puducherry)	Indian National Trust For Art and Cultural Heritage (Ashok Panda, intachpondy@gmail.com) French Environment and Energy Management Agency (ADEME) funding	Analyst and Stakeholders Engagement	<p>Integrated regional planning in South India</p> <ul style="list-style-type: none"> The ADEME funded an initiative to develop a regional plan for the Puducherry-Viluppuram-Auroville-Cuddalore region, for an integrated inter-state growth strategy. Tasks: <ul style="list-style-type: none"> ➤ Review of existing water resources studies. ➤ Enagement with stakeholders (local government agencies, projects, experts, civil organisations). ➤ Organisation of a consultation workshop on water resource management in the region.
03/2011 – 02/2012	India (Nagaur)	Indiabulls Foundation (Sabyasachi Das, s.das@indiabulls.com)	Advisor	<p>Groundwater study and recommendations in Rajasthan</p> <ul style="list-style-type: none"> The Indiabulls Foundation supports the development of the Nagaur district of Rajasthan, typical arid area with scarce rainfall, high over-exploitation of groundwater for irrigation leading to depletion of groundwater resource and deterioration of its quality. Tasks: <ul style="list-style-type: none"> ➤ Study of the groundwater resource in collaboration with the Indian Institute of Science, including mapping (quantity and quality). ➤ Study the agricultural spatial patterns and practices. ➤ Engage with stakeholders (local government agencies, research institutes). ➤ Draft recommendations for fruitful partnerships, alternative agricultural practices, community management of groundwater, urban waste water treatment and desalination.

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03/2010 – 08/2011	India (Jalpaiguri)	International Water Management Institute (Jennie Barron, jennie.barron@sei-international.org) Bill and Melinda Gates Foundation funding	Modeller	Agricultural water modelling in West Bengal <ul style="list-style-type: none"> In context of the 'AgWater Solution Project', focus on the Jaldhaka River Basin, Brahmaputra system, and development of a SWAT model to assess impact on the groundwater resource of landuse changes and further agricultural water pumping. Tasks: <ul style="list-style-type: none"> Consult stakeholders. Conduct field groundtruthing for landuse mapping. Calibrate a SWAT model, coupled with a groundwater model. Analyse scenarios of irrigation developments. Draft report.
11/2010	Eritrea (Asmara)	UNDP (Isaac Habte, isaac.habte@undp.org)	Trainer	Training on modelling integrated water resources management <ul style="list-style-type: none"> The UNDP supported the Eritrean Government for drafting Eritrea's Second National Communication for the Conference of the Parties of the UNFCCC. It organised a workshop to train Eritrean specialists in Water. Tasks: <ul style="list-style-type: none"> 3-days hand-on training on WEAP. Applied to the Mereb Gash river basin. Analysis of climate change scenarios.
05/2010	India (Bankijholi)	Orissa Tribal Empowerment & Livelihoods Programme (OTELP)	Trainer	Community-based training on basic GIS (from GPS to GIS) <ul style="list-style-type: none"> OTELP empowers the tribals and enables them to enhance their food security, increase their incomes and improve their overall quality of life. Tasks: <ul style="list-style-type: none"> 5-days hand-on basic GIS. Manipulation of GPS for mapping farms fields, buildings, roads. Using a customised GIS software for visualisation, preparing maps and spatial calculations.
03/2010	Mali (Bamako)	IUCN (Kwame Odame-Ababio, odameababio@yahoo.coc)	Trainer	Training on modelling integrated water resources management <ul style="list-style-type: none"> This activity was a continuation of the training provided in 2009 in Accra and the objective was 1. to strengthen the skills acquired by the participants during the previous training and 2. to cement further the networks of local experts. Tasks: <ul style="list-style-type: none"> 4-days hand-on training on WEAP. Applied to the transboundary Volta river basin. Coordination with various projects ongoing in the Volta basin, West Africa.
05/2009 – 12/2009	India (Roorkee) and Home-based	International Water Management Institute (Bharat Sharma, b.sharma@cgiar.org) CPWF funding	Modeller	Assessment of water resources (including snow & ice melting) in the Ganges and Indus basins <ul style="list-style-type: none"> The Challenge Programme on Water and Food (CPWF) funded the Basin Focal Project in the Ganges and Indus basins (BFP IGB) to translate its global goals into specific research objectives for the IGB. Tasks: <ul style="list-style-type: none"> Calibration of a WEAP application in the Ganges and Indus basins, with focus on contribution from snow and ice melting. Representation of the extensive water uses / diversions. Analysis of climate change scenarios.

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06/2009	Ghana (Accra)	IUCN (Kwame Odame-Ababio, odameababio@yahoo.com)	Trainer	<p>Training on modelling integrated water resources management</p> <ul style="list-style-type: none"> The IUCN supported activities to address some of the water resources management challenges of the Volta basin (West Africa). It developed in 2008 and in collaboration with Dr. de Condappa an application of the WEAP model in the Volta basin. In an effort to educate on water planning tools, IUCN organised a WEAP training workshop in collaboration with the Volta Basin Authority. Tasks: <ul style="list-style-type: none"> ➤ 5-days hand-on training on WEAP. ➤ Applied to the transboundary Volta river basin. ➤ Support the development of a collaborative framework in the basin.
09/2007 – 03/2009	France (Montpellier) and West Africa (several countries)	French Institute for Development Research (IRD) (Jacques Lemoalle, jacques.lemoalle@gmail.com)	Research Fellow (full-time)	<p>Study of the Volta basin in the context of the Basin Focal Project – Volta</p> <ul style="list-style-type: none"> The Challenge Programme on Water and Food (CPWF) funded the Basin Focal Project in the transboundary Volta basin (BFP Volta) to translate its global goals into specific research objectives for the Volta basin. Tasks: <ul style="list-style-type: none"> ➤ Prepare thematic maps for the basin and edit the “Water Atlas of the Volta basin”. ➤ Develop an application of WEAP in the basin. ➤ Analyse scenarios of climate change, impacts of upstream small and informal reservoirs on the Lake Volta. ➤ Engage with stakeholder in the basin. ➤ Disseminate the outputs in various meetings in Africa. ➤ Assist in the coordination of the project
01/2006 – 04/2006	Benin (Cotonou)	French Institute for Development Research (IRD) (Randel Haverkamp, randel.haverkamp@gmail.com)	Research Fellow (full-time)	<p>Study of the Donga watershed, project ‘African Monsoon Multidisciplinary Analysis’ (AMMA)</p> <ul style="list-style-type: none"> The AMMA had the objective to improve the understanding of the West African Monsoon and its influence on the physical environment. Tasks: <ul style="list-style-type: none"> ➤ Extrapolate punctual measurements of soil properties to the scale of the Donga watershed, 600 km², using fuzzy logic. ➤ Simulate the soil hydrological budget with a distributed/physical hydrological model.
01/2002 – 04/2005	India (Hyderabad) and France (Grenoble)	French Geological Survey (BRGM) (Randel Haverkamp, randel.haverkamp@gmail.com)	PhD student	<p>Doctorate on soil hydrology, study of Maheshwaram watershed</p> <ul style="list-style-type: none"> The doctorate was based successively in ‘Indo-French Centre for Groundwater Research’ and the ‘Laboratory for Transfers in Hydrology and Environment’. The research focused on the semi-arid Maheshwaram watershed, 53 km², Andhra Pradesh, to study the hydrological processes in the soil cover, for a better estimation of the groundwater recharge. Tasks: <ul style="list-style-type: none"> ➤ Prepare protocol for measurements of soil hydraulic properties at different locations and depths. ➤ Conduct measurement campaigns. ➤ Extrapolate measured soil properties at different locations and depths using fuzzy logic. ➤ Study of bimodal soils (clay/sand), typical of tropical to sub-tropical zones, for which hydraulic behaviour is different than for soils of temperate region. ➤ Simulate the soil hydrological budget with a distributed/physical hydrological model.

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02/2001 – 08/2001	France (Montpellier)	French Geological Survey (BRGM) (Patrick Lachassagne, patrick.lachassagne@danone.com)	Research Assistant	<p>Research work in soil hydraulic properties in a Mediterranean groundwater recharge zone</p> <ul style="list-style-type: none"> The aim of this assignment was to characterise in-situ the soil hydraulic properties in the recharge zone (ca. 80 km²) of an aquifer tapped for supply of domestic water, south of France. Tasks: <ul style="list-style-type: none"> ➤ Prepare protocol for measurements of soil hydraulic properties at different locations and depths. ➤ Conduct measurement campaign. ➤ Analyse measurements to derive the soil properties.
07/2000	Benin (Djougou)	French Institute for Development Research (IRD) (Randel Haverkamp, randel.haverkamp@gmail.com)	Research Assistant	<p>Study of the Donga watershed, project 'African Monsoon Multidisciplinary Analysis' (AMMA)</p> <ul style="list-style-type: none"> The AMMA project was involving various international research organisation and has the objective to improve the understanding of the West African Monsoon and its influence on the physical environment. Tasks: <ul style="list-style-type: none"> ➤ Study of the the Donga watershed, 600 km². ➤ Measure soil hydraulic properties in several locations.
05/1999 – 08/1999	India (Puducherry)	M. S. Swaminathan Research Foundation (MSSRF)	Engineer Assistant	<p>Study of agricultural and irrigational practices in Puducherry Union Territory</p> <ul style="list-style-type: none"> The MSSRF aims to accelerate use of modern science for agricultural and rural development for development and dissemination of technology to improve lives and livelihoods of tribal and rural communities. Tasks: <ul style="list-style-type: none"> ➤ Study agricultural and irrigation practices in the region (e.g., cropping patterns, irrigation technology and practices). ➤ Study alternative practices.

15. Publications

- de Bruin, A., D. de Condappa, M. Mikhail, S. K. Tomer, M. Sekhar and J. Barron. (2012). Simulated water resource impacts and livelihood implications of stakeholder- developed scenarios in the Jaldhaka Basin, India. *Water International*, 37: 492-508.
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- de Condappa, D. J. Barron, S. K. Tommer and M. Sekhar. (2011). Impact assessment of agricultural water management interventions in the Jaldhaka watershed. Project Report. Stockholm Environment Institute: Stockholm, Sweden.
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- de Condappa, D. (2005). Water flow through the Vadose Zone in a watershed of Hard Rock Aquifer system. Application in estimating the groundwater recharge in the Maheshwaram watershed, Andhra Pradesh, India. PhD, Institut National Polytechnique de Grenoble, France.
- Braud, I., D. de Condappa, J. M. Soria, R. Haverkamp, R. Angulo-Jaramillo, S. Galle and M. Vauclin. (2005). Use of scaled forms of the infiltration equation for the estimation of unsaturated soil hydraulic properties (the Beerkan method). *European Journal of Soil Science*, 56: 361-374.