

Vacancy	PhD in socio-hydrology: dialogues for dealing with drought in north-east Brazil
Organization	Wageningen University
Department	Social Sciences, Public Administration and Policy Group
Chair holder	Prof. Katrien Termeer
Starting date	1 April 2019
Duration	4 years at 1 fte

In April 2019 an interdisciplinary research project will start, coordinated by Wageningen University: ***Diagnosing drought for dealing with drought in 3D: Toolbox for increasing drought preparedness of actors in water and climate governance, starting from north-eastern Brazil.***

This project is a joint effort of Brazilian and Dutch organizations including: Wageningen University (WU; The Netherlands); the Research Institute of Meteorology and Water Resources (FUNCEME; Brazil); the Federal University of Ceará (UFC; Brazil) and the Brazilian Research Agricultural Corporation, National Research Tropical Agroindustry Center (EMBRAPA; Brazil).

Project description: To manage drought better, human influences on drought must be better understood. Current frameworks for drought monitoring and water accounting focus on the natural boundary conditions and therefore offer little help in distilling human influences on drought. This project combines insights from socio-hydrology and water management to produce an entirely new approach, incorporating the study of water-related human dimensions (D₁), socio-hydrological dynamics (D₂), and the **structuring of dialogues (D₃) among actors**. The project will develop and test the integrated, participatory 3D Drought Diagnosis (3DDD) toolbox. We will investigate nested scale levels, related to local water resources and virtual-water transfers together with actor networks of users, managers, traders, and policymakers. Test case is the drought-affected north-east of Brazil. Finally, the 3D Drought Diagnosis toolbox can be used to enable existing drought monitors to provide contextualized information in drought-affected regions worldwide. We will demonstrate how proposed drought management solutions perform with regard to cross-scale synergies and trade-offs in relation to the UN Sustainable Development Goals 2, 6, 10, and 13. The project will kick-off with three PhD candidates, each focussing on one of the three D's: water-related human dimensions (D₁), socio-hydrological dynamics (D₂), and dialogues among actors (D₃). As a PhD candidate in this project, you will work in an international and interdisciplinary team, studying the development and impact of droughts using approaches from different scientific disciplines.

In the context of the 3DDD project Wageningen University is looking for a **PhD student in the field of socio-hydrology: dialogues for dealing with drought in north-east Brazil**

The PhD student will focus on the following **research question:** What are effective ways to bridge the distinct perspectives and interests of actors, in order to develop context-specific and actionable knowledge that empowers actors to take timely and informed actions to address drought?

Together with two other PhD students and a post-doctoral researcher you will develop and test an integrated, participatory 3DDD toolbox for providing actionable knowledge to improve water and climate governance supported by drought monitoring frameworks. The toolbox will serve to increase drought preparedness of actors in multi-level water and climate governance. You will focus on drought governance in north-east Brazil, the policy decisions at different levels that affect drought preparedness and drought response, and how improved drought monitoring can inform adaptive decision-making.

Your tasks

- Map out actor perspectives on drought preparedness and response through framing analysis
- Analyse decision-making by key actors across scales with respect to drought preparedness and drought response, and identify the role of drought information in those decisions
- Using integrative participatory methods (co-production, scenario analysis, serious gaming) for evaluating the effects of actions by different actors in water governance, and to inform the development of the 3DDD toolbox.
- Analyse the potential of enhanced drought monitoring for more adaptive drought governance
- Writing a PhD thesis based on academic publications

Who we are.

Wageningen University & Research centre aims to deliver a substantial contribution to the quality of life. Within our domain, healthy food and living environment, we search for answers to issues affecting society - such as sustainable food production, climate change and alternative energy. Every day, 6,500 people work on 'the quality of life', turning ideas into reality, on a global scale.

This PhD-project will be carried out at the Public Administration and Policy (PAP) group of Wageningen University, with Prof. dr. Art Dewulf. PAP is part of the Department of Social Sciences of Wageningen University. PAP's research and teaching focus on analysing and designing governance arrangements for dealing with complex sustainability issues, by studying norms and values, connections across boundaries and transformations of policies and governance arrangements. The PhD-project will be conducted in close collaboration with Water Resources Management (WRM) group of Wageningen University. WRM is engaged in interdisciplinary research and education at the intersection of water, technology, and society.

What we look for.

We are looking for a candidate with the following qualifications:

- a master degree in political science, policy science, organization science, water resources management or a related field
- experience in social science research methods, policy analysis and participatory methods (e.g. participatory GIS or serious gaming)
- a creative, critical and collaborative person with an interest in interdisciplinary research
- ability, willingness and commitment to collaborate in a research team and write joint publications
- excellent communication in English (<https://www.wur.nl/en/Education-Programmes/PhD-Programme/English-language-requirements.htm>), and good communication skills
- some knowledge of the Portuguese language would be an asset.

Conditions:

This PhD project is in the form of a Sandwich PhD. This means that your PhD defence will be at Wageningen University. You will stay in the Netherlands for 18 months and in Brazil for 30 months. Your supervisors will be experts from Wageningen University and project partners from Brazil (UFC, EMBRAPA, FUNCEME). Your monthly allowance will be: €1,400 (in the Netherlands) and €1,000 (in Brazil). There is additional budget for research activities, attending courses and workshops, international travel, etc.

You can only apply for a Sandwich PhD if you are a national of one of the countries in the following regions: Middle and South America, Africa, countries that belong to the former Soviet Union and that are not an EU-member state and all Asian countries except Israel, Japan, South Korea and Singapore.

Contact information

Additional information about this project can be obtained from
Prof. dr. Art Dewulf (Wageningen University; art.dewulf@wur.nl)
Dr Pieter van Oel (Wageningen University; pieter.vanoel@wur.nl)
Prof.dr. Eduardo Martins (FUNCEME; espr.martins@gmail.com)

You can apply up and until 28 February 2019.

For this position you can only apply by sending your CV and motivation letter to pieter.vanoel@wur.nl

Job interviews will be held in the period 11-15 March 2019 in Fortaleza, Brazil.