

# Sustainable water use in Cameroon

INTEWAR – Innovative Technologies for the containment of Water Associated Diseases



**Due to its geographical location and meteorological conditions, the central African country Cameroon is regularly exposed to floods, which are increasing in frequency and intensity as a result of climate change. At the same time, droughts are also becoming more frequent. Rapid population growth is also increasing the already high settlement pressure, resulting in uncontrolled settlements where hygienic conditions and supply structures are often critical. In these areas, extreme climatological events have catastrophic effects on human health, but also cause immense economic and ecological damage.**

INTEWARs objective is to develop a holistic concept for the prevention and control of the negative impacts of floods and droughts in three exemplary pilot regions in Cameroon. Core components are protection concepts for critical infrastructures and buildings, a monitoring concept for the surveillance of drinking water quality as well as alarm and operation guidelines for disaster management operations. A decentralized drinking water treatment plant is designed and implemented to ensure the supply of clean drinking water to the population in the event of a disaster. Simultaneously, awareness-raising and training measures are being carried out to raise the local population's awareness of the connection between hygiene, health and drinking water quality.

The results of the project will assist Cameroonian authorities in the pilot regions to independently assess flood risks, prevent natural disasters and mitigate health risks resulting from these disasters. The aim is to transfer the results to other regions in Cameroon and other countries in sub-Saharan Africa.

The INTEWAR concept was already elaborated and implemented in a first pilot area with an increased vulnerability to the climatic extremes as flooding due to heavy rain and drought. By creating high-resolution flood hazard and risk maps of the pilot region, it was possible to identify a potential flood-safe locations for a decentralized water treatment plant. The water treatment plant, adapted to



*Well in the wetlands.*

local conditions, was then installed and handed over to a newly formed water committee. In addition to technical training on the operation of the plant, an operator concept was developed with the water committee to ensure the long-term operation of the plant and, in particular, access to clean drinking water in the event of a disaster. In two other pilot areas, interviews and workshops are currently being held with the local administration and civil society to raise awareness of health risks resulting from unsecured access to drinking water and potential geohazards. At the same time, the research of relevant basic data and the joint development of adapted disaster management concepts are continued. The cultural diversity of Cameroon with a multitude of traditional structures within the local administrative levels makes close cooperation with local organizations and partners indispensable whilst the scientific and cultural exchange at eye level is an enrichment for all project partners.

## Project overview

### PROJECT TITLE

INTEWAR – Innovative Technologies for the containment of Water Associated Diseases

### PROJECT PERIOD

05/2020 – 04/2023

### PROJECTPARTNERS

Institut für Hygiene und Öffentliche Gesundheit (IHPH) am Universitätsklinikum Bonn; Institut für Arbeits-, Sozial- und Umweltmedizin (IASU), Uniklinik der RWTH Aachen; Lehrstuhl und Institut für Wasserbau und Wasserwirtschaft (IWW) der RWTH Aachen; PAULA Water GmbH, Viersen

### FUNDING

SPONSORED BY THE



Federal Ministry  
of Education  
and Research

### SUPERVISED BY

VDI Technologiezentrum GmbH

### CONTACT

Institute for Water Management and Climate Future at RWTH Aachen University  
Kackertstraße 15 – 17 / 52072 Aachen

Dipl.-Ing. Manuel Krauß

T +49 241 80 2 68 43 / krauss@fiw.rwth-aachen.de

Matthias Hirt, M.Sc.

T +49 241 80 2 68 40 / hirt@fiw.rwth-aachen.de

[www.fiw.rwth-aachen.de](http://www.fiw.rwth-aachen.de)

*As a member of the JRF research community, FiW is funded by the state of North Rhine-Westphalia.*

*The FiW is a member of the Zuse-Gemeinschaft.*

### STATUS

October 2022