

## Nigeria Addressing COVID-19 Through a One Health Approach

# NACOH

## Strengthen Key Capacities of the Veterinary Sector in Nigeria Contributing to Ongoing Efforts of Disease Control under the One Health Umbrella

### Duration

2021–2023

### Budget

approx. 600,000 EUR

### Partner countries

Nigeria

### Challenges addressed by the project

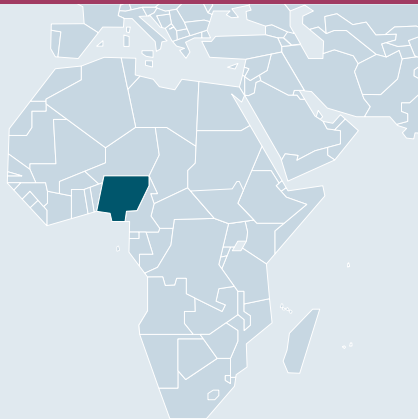
Nigeria will predictively be the 3<sup>rd</sup> most populous country in the world by 2050. Growth in population density and the resulting demand for means of livelihood necessitates human encroachment and exposure to zoonotic diseases like coronavirus and the risk of pathogen spillover from domestic animals and wildlife to humans and vice versa. The status of Nigeria as a zoonotic disease hotspot is further aggravated by socio-cultural and economic practices such that zoonoses and (re-) emerging pathogens at the human-animal interface pose recent public health challenges. This could in turn negatively affect the well-being and prosperity of the nation, thus requiring a holistic One Health approach in solving and control emanating disease associated health problems.

### Objectives

- » Supporting One Health approaches in Nigeria
- » Enhancement of the capacities in molecular epidemiology in the veterinary sector
- » Evaluation of reservoir and spill-over events at selected human-animal interfaces
- » Strengthening anthropological methods to study spill-over events at the human-animal-interface
- » Defining strategies for One Health risk assessments and risk communication strategies matching the socio-cultural setting of the target communities

### Overview of activities

Planned activities build on the ongoing support of the National Veterinary Research Institute (NVRI) to national efforts in controlling the COVID-19 pandemic. This project presents a perfect opportunity to make use of the One Health approach following the recommendations of the Nigerian Strategic One Health plan in a sense of “Putting theory into practice”. It will help to understand underlying mechanisms of disease transmissions between humans and animals (creation of “secondary reservoir”) and to combine epidemiology, anthropology, animal health, public and environmental health under one umbrella. This should result in concrete response to pandemic crises caused by zoonotic pathogens. The project shall create and strengthen interinstitutional, national and international partnerships, leadership and coordination in combination with an emphasis on innovation, training, surveillance, publication of research outcomes and risk communication. The project will strengthen not only the technological capacities in Nigeria, it will have an enormous



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impact on the bioinformatic abilities of researchers at the Animal Health side as project partners will be trained and backed-up during the entire project period in bioinformatic sequence analysis and molecular epidemiology. The techniques can be transferred to outbreaks of any emerging pathogen. Establishing sustainable and reliable modern sequencing technology and competence within the field of One Health would achieve independent analysis of epidemics ideally resulting in a more rapid risk communication. The project is embedded in a larger initiative of the RKI “Burden of COVID-19 among health care workers, assessing infection, risk factors, working experiences and one health implications: a mixed methodology, multisite international study”, supporting the COVID-19 response in Africa.

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