



Strengthen Integrated Genomic Surveillance through Greater Capacities in National Public Health Institutes



Aim and Objectives

Improve public health decision making on the national and international level by enhancing genomic surveillance capacities

- Training and increasing capacity in genomic sequencing in national public health laboratories (WP1)
- Building capacity in bioinformatics (WP2)
- Ensuring evidence for action nationally and globally (WP3)
- Integration of data into national surveillance systems (WP4)
- Connection with international networks (WP4)

Project Description

National capacities on infectious disease diagnostics and surveillance are essential to allow countries to respond and protect the health of their populations and equally to enable forecasting and early responses at the global level. Here, national public health structures and specifically National Public Health Institutes (NPHIs), including their capability to build a sustainable workforce, have emerged as key actors.

A unique programme of work will be developed to establish integrated genomic surveillance (IGS) capacities within NPHIs in five designated countries across the African continent. In the initial phase the project will focus on existing partnerships RKI has established during the past years namely in Namibia, Madagascar, and Côte d'Ivoire.

Strengthening connections between laboratory, bioinformatics and surveillance will foster the integration of genomic data into national and international systems. A programme of policy dialogue for mid to high level decision makers in partner countries will help to make data available for public health decision making.

Work Packages and Outputs

WP1

Genomic sequencing



Sequencing



Lab Training

WP2

Bioinformatics



Landscaping Report



PH Access

WP3

Policy Analysis



Cross-sectional Data



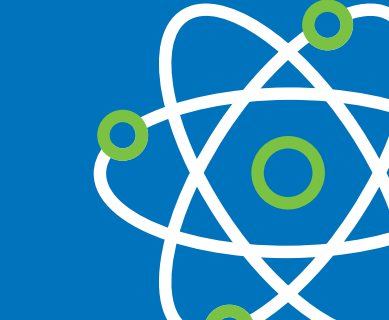
Active Dialogue

WP4

Integration & Networking



National Surveillance Data



Global Network

Key Activities

Stakeholder consultations and needs assessment of public health structures essential to IGS

- Understanding the country experience in genomic sequencing
- Landscaping report of national capacities in bioinformatics

Delivery of tailored training modules for genome sequencing, bioinformatic data analysis, disease surveillance, and evidence-based policy

- Laboratory personnel in national public health laboratories trained in wet lab techniques for genomic sequencing
- Bioinformatic workforce accessible to public health
- Surveillance personnel trained on integration of data into national systems
- Policy dialogue within countries

Country assessments and policy dialogue to understand challenges in data integration

- Recommendations for integration of cross-sectional data, including gap analysis

Connecting with international stakeholders (e.g. IANPHI, Africa CDC) and platforms

- Active integration of relevant data into global networks and databases
- Initiation of an active dialogue between countries and emerging global networks

