

# Health Systems Strengthening and Epidemic Prevention

## Project Fact Sheet

### Our Mission

Our objective is to better protect the population of Liberia against disease outbreaks with epidemic potential. To achieve this objective, we improve the surveillance and response system, as well as laboratory capacity in the Southeast of Liberia and strengthen human resources.

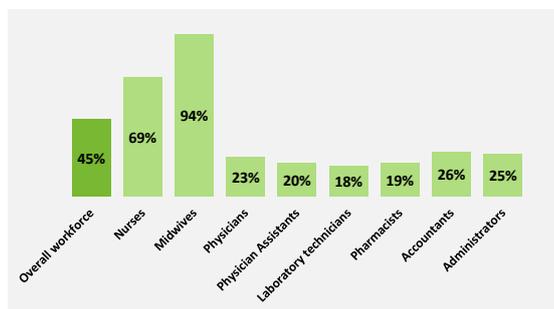
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| Project name          | Health Systems Strengthening and Epidemic Prevention                   |
| Commissioned by       | German Federal Ministry for Economic Cooperation and Development (BMZ) |
| Project region        | Southeast Liberia  |
| Lead executing agency | Ministry of Health (MOH), Republic of Liberia                          |
| Duration              | September 2020 – June 2023   |
| Budget                | 11.5 Million EUR   |

### The Background

The 2014-2015 Ebola Viral Disease outbreak in Liberia led to 10,672 reported cases of Ebola across the country, with 4,808 deaths. The epidemic demonstrated that Liberia's health system was not able to respond effectively to public health crises. However, even before the outbreak, Liberia's health system faced numerous systemic challenges:

- High burden of diseases: Liberia, typical for many Low-Income Countries, is faced with the dual challenge of high communicable disease incidence rates and an increasing threat from non-communicable diseases. In 2012 for example, 8.4% of deaths were caused by malaria whilst 8.9% of deaths were caused by heart disease and stroke combined. The maternal mortality rate is around 774 per 100,000 live births.
- Insufficient financing: While there has been great progress since the end of the war in 2003, there is little fiscal space for Liberia to invest much more in healthcare. Significant donor funding makes up some of this shortfall but a high rate (42%) of out-of-pocket expenditure remains that puts people at risk of impoverishment.
- Insufficient health workforce: There has been an 87% increase in the density of core health professionals from 6.3 to 11.8 per 10,000 population between 2009 and 2016. However, this is still only half of the global minimum standard. Additionally, there is maldistribution across cadres, levels of care and counties, and the quality of pre-service education is low.

These systemic challenges, unmasked by the Ebola outbreak, facilitated the spread of the virus and hampered the response at



Left: Health staff during Simulation Exercise, River Gbeh health facility, River Gee

Right: Share of women in Liberia's health workforce (selected cadres)



Left: AMR-IPC Training at Fishtown Hospital in River Gee  
Right: Focus area of the project in Southeast Liberia

all levels. However, other contributory factors to the impact and severity of the outbreak, have been identified:

- Poor surveillance and data management to identify initial cases, contact trace and follow up, coupled with a weak laboratory diagnostic capacity.
- A lack of emergency preparedness at all levels of the system, and a consequent lack of coordination and communication
- Poor clinical management of Ebola patients resulted in a high case-fatality rate and infections acquired in health facilities, resulting in high numbers of health worker infections.

The COVID-19 outbreak, with the first recorded appearance in Liberia on March, 16th 2020, has shown that key functions of the Epidemic Preparedness and Response System can be activated faster than during the Ebola outbreak but has also shown that the technical and financial capacities of the partner system are not sufficient to effectively contain an outbreak of such magnitude in the long term.

Considering these issues, the Government of Liberia and its international partners have set themselves the ambitious goals of increasing health security, reducing the risk of epidemics and improving access to safe and high-quality healthcare services to increase universal health coverage.

## Our Approach

The project 'Health Systems Strengthening and Epidemic Prevention' (HSSEP) seeks to respond to the challenges, building overall resilience and addressing specific issues related to emergency preparedness and disease control. HSSEP is a follow-on project of 'Post Ebola Health Systems Strengthening' and is led by Liberia's Ministry of Health (MOH), with significant involvement from the National Public Health Institute of Liberia (NPHIL). The German contribution is implemented by the

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

Apart from national-level support to the MOH and the NPHIL, the geographical focus of the interventions is on five counties in South-East Liberia, which is the remotest and poorest part of the country. The project has a strong emphasis on disease prevention and control, working across the major building blocks of a health system to achieve its goals in the following areas:

- **Human Resources:** Scholarships enable women to pursue degrees in health professions usually dominated by men, such as physician assistants, medical laboratory technicians but also Public Health. The recipients receive career advice and support to find a job after graduation. Two new university courses for the Public Health Department of the Tubman University in Maryland County with a focus on Epidemic Preparedness and Response and public health, with special attention to gender-specific aspects, have been developed and are now taught at Tubman University. These interventions will increase the availability of qualified staff for the Liberian health system.
- **National laboratory system:** Strengthening laboratory capacity, contributing to disease surveillance and to diagnosing and treating diseases, which is key to building both resilience and quality of care. The project improves the capacities of laboratory staff and the quality of delivered laboratory services. It contributes to the provision, maintenance and repair of laboratory equipment through support to Biomedical Technicians and Healthcare Technology Management. The approach is complemented by the development of a national policy for the cadre of Biomedical Technicians of the Healthcare Technology Management Unit at MOH. Further, the project established a surveillance system for antibiotic resistance (AMR) and set up an antibiotic stewardship programme in the Southeast. Together with AMR data from counties, the systematically collected data was, for the first time, submitted to the WHO GLASS (Global Antimicrobial Resistance Surveillance System) platform.



*Left: Laboratory Training and Mentorship at F.J. Grante hospital, Sinoe*

*Right: Train of Trainers for Tubman University, Maryland*

- **Integrated Disease Surveillance and Response (IDSR)** at county, district, health facility and community level. The project supports the improvement of such systems and their abilities to monitor and react to outbreaks of diseases and boosts ownership at community level. Activities include trainings on the newly developed IDSR 3rd edition guidelines and community event-based surveillance, as well as strengthening epidemic preparedness through institutionalizing the IDSR system, conducting simulation exercises, improving referral pathway and enhancing reporting at all levels (community, health facility, district and county). Roll-out of the IDSR 3rd edition guidelines was also done in Montserrado county with 225 health staff trained.

of cases and tracing as well as quarantining contacts. To control the outbreak on community level, awareness of transmission, risks and care pathways of infectious diseases is increased through County Health Teams and their efforts to implement community-event based surveillance systems. On facility level, their readiness for early detection is strengthened through capacity building for the triage and isolation teams. This includes promoting the adherence to infection prevention and control standards, like donning and doffing procedures of personal protective equipment, the development of guidelines for isolation precautions or procurement of IPC supplies. Additionally, the project supports the deployment and administration of Covid-19 vaccines (AstraZeneca) to risk groups.

## Covid-19 Response

The project supports the country's response to Covid-19 through partner organizations in the Southeast and Montserrado County, in which the capital Monrovia is located. The cornerstone of these activities are the identification, testing, isolation and care

By providing support to some of the key elements of a functional Disease Surveillance and Response; laboratory, and human resources system, the project aims to better protect the population of Liberia against disease outbreaks with epidemic potential.

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