SIERRA LEONE RESEARCH & EDUCATION NETWORK

DEVELOPING AND IMPLEMENTING INFRASTRUCTURE FOR OPEN SCIENCE: LESSONS FROM SIERRA LEONE

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Presentation Outline

1) **INTRODUCTION**

2) **STATE OF NATIONAL SCHOLARLY PUBLICATIONS**

3) **EXISTING NATIONAL OPEN SCIENCE POLICIES AND STRATEGIES**

4) **ONGOING NATIONAL OPEN SCIENCE INITIATIVES**

5) **LESSONS LEARNT FROM OPEN SCIENCE IMPLEMENTATION**

INTRODUCTION

❖Like many countries, higher education institutions in Sierra Leone were closed during COVID-19 pandemic

❖In post covid era, all universities are required to upscale teaching mode towards Open Distance Learning and Online course delivery

❖Faculties are expected to ***partially teach using digital learning tools*** *and* keep supervising research activities online

❖Information and Communication Technology recognised as a strategic priority for universities

❖Open Science is an integral part of the National Science, Technology and Innovation Strategy

OBJECTIVES

To provide thorough insight of:

- The state of scholarly publishing in Sierra Leone

- Existing national policies and strategies for Science Technology and innovation

- Ongoing National Open Science initiatives

- Lessons learnt from developing infrastructure for Open Science

STATE OF SCHOLARLY PUBLISHING

- **Research and knowledge systems** – like most post independent Africa countries, the higher education landscape is controlled, funded and supervised by the government through the Ministry of Education.

- **Research Publication and Communication** – Scientific research and publications are serious challenges. It is almost impossible to quantify research outputs. Limited functional in-campus journals and low evidence of subscription to journals. We are grateful to Research4Life for providing online resources - e-books, e-journals, etc.

- **Poor Infrastructure** –University campuses operate on low or unreliable internet bandwidth. CT facilities are inadequate

- **Mentorship** – Limited mentoring and network building for early career researchers

- **Gender and Research** – Equitable participation and full realisation of women's potentials very low

EXISTING NATIONAL STI POLICIES AND STRATEGIES

The following core national policies and strategies established and fully operational:

- National ICT Policy

- National Innovation and Digital Strategy

- National Science, Technology and Innovation strategy, and

- National Open Distance Learning policy

- National Science, Technology and Innovation Council (NSTIC) to promote research, development and innovation

ONGOING OPEN SCIENCE INITIATIVES

- National Open Science Policy development

- National and institutional repository (**Open Data**) - DSPACE

- **Open Access** – Africa Journals Online , RUFORUM, Research4Life

- Implementation of e-learning platforms – Moodle LMS, Canvas LMS

- Upgrade campus networks and support for AfricaConnect-3 participation

- Pilot WACREN's Identity & Access Management (**eduroam, eduID**)

- Technical capacity building for ICT, Library and faculty staff

LESSONS LEARNT

- Stakeholder sensitisation and outreach on Open Science

- Develop Open Science policies at national and institutional levels

- Shared open science infrastructures will support the long-term sustainability

- Capacity building for Open Science actors - ICT, Librarians and academics

- Promoting innovative approaches for Open Science - Open Access, Open Data, Public Engagement and Citizen Science

- Tackling the role of publishers, including ownership of published materials and Challenges of Intellectual Property Right (IRP)

- Monitoring the transition to Open Science and its implications

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Thank You For Your Attention

Q&A