



Jointly Working to Control Infectious Diseases in Sub-Saharan Africa: Collaboration of SACIDS and EAIDSNet in PANDORA

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Disease Burden in East Africa

- **The Congo Basin and Rift Valley Ecosystems with high human, animal and vector populations provide high risk of disease transmission**
- **Recent outbreaks:**
 - **Cholera, Rift Valley Fever, Yellow Fever, Dengue, Marburg, Ebola**
- **Region with inadequate Financial and human resources to effectively manage outbreaks**
- **Therefore Innovative approaches for disease control are needed**



The East African Community Integrated Disease Surveillance and Response Network (EAIDSNet)

- Response by disease control practitioners (Human, Animal & Environment) from Burundi, Kenya, Rwanda, Uganda and Tanzania
- From Public Universities, Research Institutes, and Ministries of Health
- Formed a network for disease surveillance as to complement other measures for improving disease control, in 2000 with Rockefeller funding.
- Coordinated by the Health Desk of EAC, a Regional Economic Community
- EAC collaborates with ECSA-HC to implement EAIDSNet programs



About ECSA Health Community



- Kenya
- Lesotho
- Malawi
- Mauritius
- Swaziland
- Tanzania
- Uganda
- Zambia
- Zimbabwe

The East, Central and Southern Africa Health Community (ECSA HC) **regional inter-governmental health organization** established in 1974 to foster and promote regional cooperation in health among member states.





Targets of EAIDSNet

- i. Improved IDSR data quality and use**
- ii. Strengthened laboratory network**
- iii. Improved joint cross border surveillance, preparedness, investigation, collaboration and response**
- iv. Promote continuous exchange of expertise and best practices for Disease Surveillance and response**



SACIDS

- One Health Virtual Centre
- Links academic and research institutions operating in southern Africa– Tanzania, Zambia, Mozambique, South Africa and Democratic Republic of Congo
- Driven by the mission to harness innovation in science and technology
- To improve sub-Saharan Africa's capacity to detect, identify and monitor infectious diseases of humans, animals and their interactions in order to better manage the risk posed by them.
- Headquarters at Sokoine University of Agriculture (SUA), Tanzania
- Operates two Centres of Excellence in Human and Animal Infectious Diseases in Zambia (UNZA) and Tanzania (SUA)





Pan African Network for Rapid Research, Response, Relief and Preparedness for Infectious Diseases Epidemics (PANDORA)

- **A consortium of organizations and institutions spread all over sub-Saharan Africa**
- **To profit from the European and Developing Countries Clinical Trials Partnership (EDCTP) -2 funding**
- **Aims at building capacity in SSA to effectively and efficiently manage the preparedness for and response to disease outbreaks and involves: Training, research, and strengthening health systems at all levels**
- **Building on achievements of EDCTP-1**
- **ECSA-HC and SACIDS implement PANDORA Work Package 9 on improved surveillance and research on mosquito-borne Arboviruses**



Work Package 9: MOSQUITO-BORNE ARBOVIRUS AND RE-EMERGING DISEASES: TRENDS, SURVEILLANCE AND RISK MODELLING

- **Early warning systems for emerging diseases to be developed using**
 - Routine epidemiological data and research,
 - Information and communications technology,
 - Climate forecasting,
 - Mathematical and statistical modeling and computational skills
- **Cross-border surveillance to be improved by**
 - Strengthening laboratories in trans-boundary areas
 - Training community resource persons on disease surveillance
- **Mechanisms for data sharing through regional platforms and electronic systems to be enhanced**



SACIDS-ECSA-HC Collaboration in PANDORA

- **SACIDS**

- University-based modeling of epidemics of various diseases,
- Molecular analysis of pathogens
- Computation skills

- **ECSA-HC (EADSNet)**

- Cross-Border community involvement
- Trans-boundary laboratory capacity
- Platforms for dissemination of best practices

- **Both**

- Develop and expand use of electronic surveillance data systems



Expected Outputs

1. Increased pool of trained scientists in the region
2. Improved laboratories in trans-boundary zones
3. Novel digital systems applied for data collection will be part of early warning system
4. Dissemination of disease surveillance data and best practices in regional fora
5. Empowered cross-border communities
6. REDUCTION IN EPIDEMICS– MORBIDITY, MORTALITY, ECONOMIC LOSS FOR THE REGION
7. Therefore, disease surveillance networks could be an efficient system of rolling out disease control strategies.



Thank You