

## RUFORUM WEBINAR SERIES-2020

### **Webinar 5: Building a Regional Collective Response to Invasive pests and transboundary crop-livestock diseases**

#### **Synthesis Report**

##### **Introduction:**

The intensity, frequency and spatiality of invasive species of transboundary nature has been on the increase and has caused significant negative effect on global agriculture. Amidst the COVID-19 Pandemic, the African region has also been dealing with an incursion of transboundary pests and desert locusts, following earlier devastating effects of the fall army worm in most parts of the continent. Further, other invasive crop diseases and pests such as the larger grain borer, potato cyst nematode, fruit flies and citrus psyllid have been devastating the agricultural sector. In addition, there have been frequent epidemics of transboundary livestock diseases such as foot and mouth disease and African swine fever and Anthrax, which have decimated livestock populations and negatively impacted trade in livestock products in Africa and the rest of the world. No country alone can successfully tackle the challenges associated with epidemics and pandemics because of their transboundary nature as well as the porous borders and interconnectedness of many African countries and ecosystems. Owing to the fact that Africa's food security is primarily driven by the production and agricultural stability of smallholder farmers, regional and international coordinated and strategic interventions are no longer an option but an issue of immediate need.

This report covers points of action and emerging issues from Webinar 5 on *Building a Regional Collective Response to Invasive pests and transboundary crop-livestock diseases* held on 29<sup>th</sup> July, 2020

##### **The Problem:**

As invasive pests and transboundary crop-livestock diseases continue to ravage Africa's agriculture, the environment and livelihoods, and as trends are unlikely to change in the near-term, it is urgent and critical that the continent mobilizes itself to tackle these challenges. However, the current capacity at country as well as continental levels is limited to effectively develop and implement preventive and control measures. Additionally, early detection and control, stronger phytosanitary capacities and systems, continental and nation-wide surveillance, and integration of invasive species threats into national disaster response, interdisciplinary–cross border research to develop new innovative solutions, and collaborative resource mobilisation, are urgently needed. The time is now for a more systematic, coordinated, consolidated, proactive, and sufficiently financed national, regional and international effort.

### **Webinar Objectives:**

This webinar on *Building a Regional Collective Response to Invasive Pests and Transboundary Crop-livestock Diseases* sought to deliberate on the need to:

- (i) Intensity efforts and costs the impact of threats from invasive pests and diseases in Africa region: science basis and the impact so far;
- (ii) Develop regional policy interventions and institutional support mechanisms ;
- (iii) Building collective financing for regional level response; and
- (iv) Strengthen Africa’s capacity for confronting invasive pests and diseases and in particular the role of universities and research agencies in being agents for early action.

This Webinar was moderated by **Ms. Diana Akullo Ogwal Oyena** of the Department of Rural Economy and Agriculture, African Union Commission, Ababa-Ethiopia; while presentations and discussions were given by:

1. Prof. Jean Jacques Mbonigaba Muhinda, Executive Secretary, Association for Strengthening Agricultural Research in Eastern and Central Africa ( ASARECA), Entebbe-Uganda
2. Dr Wamalwa Kinyanjui, Animal Health Expert, IGAD Centre for Pastoral Areas and Livestock Development (ICPALD), Djibouti
3. Prof. Ibrahim Adam El-Dukheri, Executive Secretary, Arab Organisation for Agricultural Development, Khartoum-Sudan
4. Prof. John H. Nderitu, University of Nairobi, Nairobi-Kenya
5. Prof. Lise Korsten, University of Pretoria, South Africa

### **Key Learning and Action Points:**

1. **Capacity Building:** In order to effectively handle current and future invasions as well as to develop climate smart response plans, there is a need to develop capacity at the technical as well as the beneficiary levels along the agricultural value chains. In this regard, universities have a critical role to play in developing the requisite high-level skills and knowledge, and support training at the technical level. As a Network, RUFORUM should identify, inventorise and tap into the existing areas of excellence among its member universities and jump-start the required skills development in key gap areas. The Network could go a step further and establish capacity and knowledge platforms by building on the already existing structures within the organization and its Network universities. Additionally, RUFORUM should consider developing and introducing specific regional masters and doctoral programmes for management of invasive pests and transboundary crop-livestock diseases. This would imply a consideration for strengthening skills and knowledge in foundation sciences (plant pathology, entomology, weed science and soil science) and epidemiology, experimental design, statistical analyses and interpretation of findings. Relatedly, in light of the COVID-19 Pandemic, RUFORUM should likewise work with its Network universities to build capacity in diagnostics, medical epidemiology, virology, molecular biology and gene

sequencing, for which African governments and their partners should provide the necessary investment support.

2. **Evidence Collection and Knowledge Sharing:** Based on past experiences and isolated efforts, Africa has already started putting data, information, guidelines, strategies and policies in place, at country and sub-regional levels for the management of pests and diseases. There is already some knowledge on the epidemiological spread of many pests and diseases. However, in order to strengthen collective action, there is a need to create a centralized knowledge and information hub to enable timely and factual information which can form the basis for the financial and policy support. The Knowledge Hub (K-Hub) Flagship Programme of Vision 2030 of RUFORUM should actively engage with regional and sub-regional organizations that are already hosting knowledge hubs, such as ASARECA and IGAD, to coordinate the compilation of information and development of knowledge products appropriate for sharing through central hubs. In addition, as part of creating awareness, simple messages on local radio stations in local languages, fliers and national TV, can be developed and disseminated in a timely and context specific manner, which requires the support of governments.
3. **Collaborative Resource Mobilisation:** The tackling of such diseases and pests requires specific technical and financial resources. There is a need for resources to enable the set-up or enhancement of research laboratories for studying and understanding the biology and genetics of pest and disease species in order to develop appropriate prevention and control strategies. Additionally, there is a need to invest in agricultural research and foresight data by governments and development partners. At the continental level, Forum for Agricultural Research in Africa (FARA), which works closely with RUFORUM, sub-regional organizations and National Agricultural Research Institutions is already strengthening the capacity for foresight among professionals in African AR4D institutions and private sector through its Africa Foresight Academy. This is an initiative that can be leveraged on and strengthened. Further, RUFORUM is in the process of developing a higher education capacity indicator's platform that needs to be operationalized and possibly linked to an African-wide agricultural science technology indicator platform.
4. **Policy Frameworks and Priority Setting:** In order to ensure regional prevention and control of transboundary animal and crop pests and diseases, to enhance trade, livelihoods and food security, there is a need to set priorities, and formulate bi- and multi-lateral agreements. In the same spirit, it is important to ensure that there is no duplication of efforts in handling transboundary animal diseases by countries and sub-regional organs. Mechanisms for ensuring compliance to set guidelines by different actors should be instituted at the regional level. Specifically, there is a need for policy framework for movement of crops and livestock, regional Phytosanitary and Sanitary Strategies and their domestication, livestock identification and traceability, harmonised disease surveillance, vaccination and reporting, to be put in place.

The current partnership engagement between the Arab and African countries through the African Union and the Arab Organization for Agriculture Development (AOAD) provide a useful platform for collective response to the invasive and transboundary pests and diseases. This needs to be harnessed and supported by bringing on board research institutions and universities to the policy arena. Equally important would be the engagement of the African Universities and their Networks and research institutions in the ongoing European Union- African Union policy dialogue.

#### **Main Conclusions:**

- There is an urgent need for a more systematic, coordinated, consolidated, proactive, and regional and international effort to respond to invasive pests and transboundary crop-livestock diseases and other current and emerging uncertainties affecting Africa's food and nutrition security.
- There is some existing information regarding the epidemiology of some of the pests and diseases based on past and current research and observation, however, there is a need to enhance and invest in foresight data by governments, Regional Economic Commissions and the African Union Commission.
- There is a need to develop regional training programmes in foundation science related to both agricultural and medical fields.
- There is a need for Regional efforts to sufficiently tackle challenges of invasive pests and transboundary crop-livestock diseases but this needs to be supported by adequate financial and human capital resources, appropriate policies and strategies based on thorough priority setting.
- The African Union Commission, the Arab Organization for Agriculture Development and RUFORUM need to forge a tripartite partnership to respond to some of the agriculture and food and nutrition security issues as part of the Afro-Arab Partnership framework.

*Prepared by Dr Alice Mutiti Mweetwa, RUFORUM Deputy Executive Secretary, Programme Development and Implementation ([e.mweetwa@ruforum.org](mailto:e.mweetwa@ruforum.org))*