

Establishing the Baseline of Disease Control - Experiences with Control of TADs in the Horn of Africa

What is being done now about TADs in the HoA?

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Introduction

- The Horn of Africa region (HoA) has one of the largest concentrations of livestock in the whole world.
- This resource wealth has not been translated into export revenues for the countries and the people who depend for their livelihood on the sector.
- Several factors may be responsible for this disparity between actual resources and export revenues from those resources, including the prevalence of epidemic animal diseases, in particular those categorized as "trans-boundary animal diseases" (TADs).

Conventional approach: Rinderpest control and eradication:

- Rinderpest has been perhaps the most serious of what are termed TADs, that are readily and quickly transmitted from animal to animal and which can cross national frontiers.
- For HoA and Africa in broader sense the only comprehensive disease eradication scheme known so far is the rinderpest eradication initiative.
- Rinderpest is being eradicated in HoA by vaccination and surveillance.

RP Status in Eastern African Countries

The OIE Director General publish the following list of countries recognized as free from Rinderpest,

- Eritrea: Free from infection in 2007
- Ethiopia: Free from infection in 2008
- Sudan: Free from infection
- Uganda: Free from infection
- Djibouti: Provisionally Free from RP disease (self declaration) in 2003
- Kenya: Provisionally free from RP disease (self declaration) in 2007
- Somalia: Provisionally free from RP disease (self declaration) in 2007

Types of regional RP campaigns

Since the introduction of Rinderpest into Africa in the 1880s and the resulting pan African epidemic, there have been four programs organized to control and eradicate the disease from the continent.

1. The first all African Rinderpest eradication campaign known as Joint Project No.15 or in short (JP15) was launched in 22 African countries in 1962. This campaign was organized and coordinated by the Organization of African Unity –Science and Technical Research Council (OAU/STRC).
- Generally the process of rinderpest eradication campaign in Africa was categorized in four phases. The first three phases were implemented in West African countries namely, Cameroon, Niger, Chad, Nigeria, Dahomy (Benin), Gambia, Ivory Cost (Cote-de Voir), Mali, Upper Volta (Burkina), Liberia, Sierra Leone, Togo, Senegal, Ghana, Guinea and Mauritania. The fourth and the last phase of the campaign was implemented in East African countries namely, Kenya, Tanzania, Uganda, Sudan, Somalia and Ethiopia (including the present Eritrea).

2. Pan African Rinderpest Campaign (PARC) started in 1986 and is based upon lessons learnt from JP15. The Pan African rinderpest Campaign (PARC) was part of the Global rinderpest Eradication Programme and was coordinated by the AU/IBAR, PARC Coordination Office in Nairobi. The PARC programme had as its objective the eradication of rinderpest through mass vaccination programs, sustainable restructuring of veterinary services and preventing desertification.
3. The Pan African-Program for the Control of Epizootics (PACE) was funded, mainly, by the European Commission (EC) and coordinated through the Inter-African Bureau for Animal Resources (IBAR) of the African Union (AU). The Pan African Control of Epizootics (PACE) program was formulated in October 1998 as a successor to the PARC project. The main objectives of the PACE program were to eradicate rinderpest by sustaining achievements of the PARC program and also conduct surveillance and control measures on other trans-boundary animal diseases (TADs).

4. SERECU: PACE has widely succeeded in eradicating rinderpest in North, South, West and Central Africa and can be considered free from rinderpest. Remaining foci seem to resist in the Somali Ecosystem. This ecosystem is thought to be where the last possible foci of rinderpest in the world may be found.

For this reason, a structure called Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU) had been established and the strategy plan developed to ensure the final eradication of rinderpest from the presumed remaining last foci from the world. Despite the presumed persistence of infection, the rinderpest virus associated with mild disease in cattle in the ecosystem was last confirmed over 10 years ago.

Coordination

The eradication initiative is strongly coordinated regionally by AU/IBAR and internationally by FAO (GREP).

A multilateral funding has supported this regional and international eradication initiative in the form of:

- Definitions and regulations
- Diagnostics and confirmation ; through the world reference Laboratory
- Technical guidelines and vaccine development
- Cost of campaigns

- regional and international level meetings
- scientific developments and trainings for a number of African veterinary services,
- Epidemiological surveillance (disease surveillance, sero monitoring and sero surveillance, wildlife surveillance)
- Participatory disease surveillance
- Community based animal health service delivery in remote and marginalized areas
- Emergency preparedness and responses
- infrastructure, capital equipment
- Veterinary privatization promotion
- etc

Rinderpest eradication under the leadership of AU/IBAR and FAO has successfully spearheaded the fight of the disease.

However, rinderpest often perceived to be a relative simple disease to eradicate due to:

- animals that recover from Rinderpest infection are immune for life and there is no carrier state
- Rinderpest virus does not survive long outside the body

- The virus is transmitted by direct contact between animals. As a result, the disease always needs to find new, susceptible individuals to survive.
- Vaccination reduces the number of these susceptible animals.
- Rinderpest vaccine is considered one of the finest animal or human vaccines ever developed

However, with a huge multilateral fund support, strong regional and international coordination effort and strong African countries commitment almost it took us more than 40 years to eliminate this very simple disease from African continent.

What could we expect as benefits from Rinderpest eradication;

- Each country to gain OIE accreditation of freedom from rinderpest infection and thereby restore better terms of trade and value to the livestock sub-sector.
- Improving of the the livelihoods of the poor livestock keeper
- Improving the contribution of livestock to GDP (impact on the wider economy).
- greater security from reduced disease risk
- contribution to social functions
- Above all best practice for the control / eradication of other TADs

Other programmes / practices in the control of TADs in the HoA

1. Quarantine as a tool to reduce risk of introduction eg. in Ethiopia
2. Response to TADs outbreaks (vaccinations, movement control, community awareness, etc)
3. comprehensive national epidemiological studies on some TADs
4. National contingency planning and emergency preparedness

5. Livestock Epidemic Surveillance Project (LESP) in Sudan (Southern and Northern sub-project) :

- Sudan is recognized by OIE as free of Rinderpest infection
- The Epidemic-Surveillance System (ESS) is efficiently used and is an integral and sustainable unit within the government administration
- Action plans for improvement of the control of the main infectious animal diseases (i.e. HPAI, CBPP, FMD, PPR, RVF, and tick-borne diseases)

6. Somali Livestock Certification Project (SOLICEP):

- Capacity of Somali institutions to improve access to international livestock markets enhanced
- An accredited animal health certification system which is adapted to pastoral areas developed
- Coordination of animal health certification at regional level (SES) and between trading partners improved

7. Establishment of disease free zones at national level (Kenya):
8. Two phase certification system which is based on compartment approach (Ethiopia)
9. Participation of African Nations in Sanitary and Phyto-sanitary Standard-setting Organizations (PAN-SPSO)
10. Support Programme for Integrated national Action Plans of Avian and Human Influenza (SPINAP- AHI).
11. SAHSP Epidemiological information, service production, contingency planning
12. LTMP Livestock routes and animal traceability

Current scenarios:

- Even though rinderpest eradication has been achieved in most HoA countries, the persistence of TADs like FMD, CBPP, PPR, ASF, RVF and others have limited trade opportunities
- TADs control/eradication in the HoA can't be implemented for a variety of reasons (conflict, resource, technical, operational and technological constraints).
- Therefore living with TADs and develop an alternative approach look other ways of addressing the problem in the HoA

There is a growing perception that international standards are becoming more and more stringent and often used as instruments of protectionism.

- The eradication of transboundary animal diseases would not guarantee access to the lucrative markets of particularly the developed countries, there is a realization that any country that wants to take part in the international livestock and livestock product market will have to move towards adoption and implementation of these standards.

The question is which way forward:

will the HoA countries do it in a haphazard and uncoordinated manner or through a deliberate strategy defined in a way that can maximize the impact and minimize the cost?

- How can HoA countries influence the development of relevant international standards at the OIE and Codex Alimentarius?
- How can the HoA countries speak in one voice in these highly technical and science-intensive institutions?
 - who should lead this effort?
 - AU/IBAR?, IGAD?, COMESA?, FAO?
 - Combination of these?