**Post-rinderpest era but not “case closed”**

**Working for** farmers and pastoralists of Africa, Middle East and Asia

**Working to** keep the world safe from rinderpest recurrence

**Working with** IAEA, OIE, African Union and other regional bodies and governments

**Working thanks to** EU, Ireland, Italy, Japan, Sweden, Switzerland, USA and other resource partners

On an epidemiological level, the world is in a “post-rinderpest era,” with the disease eradicated. Yet in a bigger picture, the network of institutions involved in the eradication campaign have the potential to continue making positive contributions to veterinary research and improved animal disease management.

It is only now that the socio-economic effects of rinderpest’s eradication can be fully appreciated. It has protected tens of millions of livestock keepers from losses, and protected wildlife populations across continents – the latter safeguarding the biodiversity and resilience of ecological systems. Chad credits a three percent increase in its GDP to the absence of rinderpest. Household income across Ethiopia rose by €38.1 million as a result of rinderpest control and eradication.

Countries have been able to assess their internal rates of return, in terms of a benefit-cost ratio range, from 11 percent in Ivory Coast to 118 percent in Burkina Faso.

In total, FAO estimates that eradication of rinderpest has meant some USD 920 million in annual economic benefits in Africa alone. This underlines the importance of supporting programmes that aim to avert the return of the rinderpest pathogen, as well as those focusing on improved disease management and prevention of...
other diseases affecting the world’s livestock, biodiversity and food and nutritional security.

**RINDERPEST RESEARCH CAN CONTINUE IN BIO-SECURE LABORATORIES**

Although rinderpest has been eradicated from fields and pastures, virus samples remain quite alive in the dozens of laboratories that participated in the control campaign. Laboratory freezers still contain samples that were used to diagnose or study the disease in animals they tested, or to manufacture vaccines.

FAO is now working with partners to determine the best way to destroy the remaining strains of samples while keeping some – under the safest environments in bio-secure facilities – for further research or vaccine development if needed.

This requires working with ministries as well as laboratories where the strains exist to determine what, if any, further research might be conducted. For example, smallpox was eradicated in 1978 but laboratories continued studying strains from different parts of the world. What was learned in the post-smallpox era has contributed to the better understanding of other pox viruses. In fact, current studies on capripox, which affects cattle, sheep, goats and wild animals, are compared with that smallpox research. Such research could help if similar diseases emerge in the future.

The fact that rinderpest no longer poses a threat in the field means that young veterinarians and community animal health workers, as well as farmers and livestock keepers, have never seen actual cases, leaving them unprepared should an outbreak occur. Thus, not only do veterinarians need continuing education on rinderpest recognition and control, the vaccines and diagnostic materials used for rinderpest identification must also be kept current.

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**BLOOD SAMPLES CONTAIN TREASURE TROVE**

Numerous laboratories around the world also contain blood serum samples taken from animals during the surveillance and eradication efforts. Due to the enormity of the campaign, they were collected from extremely remote areas that researchers had never reached before and probably never will again. From the beginning, FAO recognized their potential to provide information for future research, and requested that the laboratories keep the samples properly stored. Thus, the laboratories now house thousands upon thousands of vials filled with clues that can be used to see the footprint of other diseases, such as foot-and-mouth disease or Rift Valley fever. Taking them out of the freezers and studying them could be the first step on a treasure hunt that increases veterinary knowledge on prevalence of diseases and their geographical range.

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