

## Rinderpest global situation in 2008

F. Njeumi(1), A. Diallo(1), J. Lubroth(1) and J. Domenech(1)

(1) Animal Health Service, Food and Agriculture Organization of the United Nations (FAO), Viale delle Terme di Caracalla, 00153 Rome, Italy

The widespread occurrence of rinderpest after the Second World War was a major stimulus for the founding of the Food and Agriculture Organization (FAO) of the United Nations in 1945 as a specialised agency. This study summarises the global situation through FAO and partner efforts. The eradication process was through the FAO-EMPRES Global Rinderpest Eradication Programme (GREP).

Within this programme, GREP has assumed responsibility for assisting the veterinary services of rinderpest-affected countries eliminate the infection (vaccination), develop or assess their evidence relating to the demise of the infection (clinical searches, serosurveillance, contingency planning) and express this in accordance with the (dossier writing) rules developed by the OIE – the body ultimately responsible for evaluating and adjudicating on the officially submitted evidence of disease eradication or elimination of infection. GREP counted on the partnership with the OIE, economic blocs or regional specialised organisations, such as the African Union (AU), South Asian Association for Regional Cooperation (SAARC) and numerous donor agencies such as the European Commission, the DFID, the French Ministry of Foreign Affairs, etc.. However, the most important partners of GREP have been the countries themselves.

Following molecular analysis, rinderpest virus strains are grouped into three lineages: the lineages I and II being from Africa while lineage III is composed of virus strains isolated from Asia and Middle East. The rinderpest virus strains of the lineage II have been suspected to be endemic in the Somali Ecosystem, an area covering southern Somalia and the adjoining parts of Ethiopia and Kenya. Sero-surveillance was carried out between 2002 and 2007. Follow-up field investigations carried out in late 2007, focusing on sero-positive sites negate the possibility of endemic status for the region and suggest that the sero-positivity witnessed in previous surveys was likely due to mis-ageing of sampled animals and their past vaccination histories. These findings are augmented by the results of susceptible species sero-surveillance carried out concurrently. In addition, serological and syndromic disease investigations were carried out through GREP support in other areas around the world.

Early in the twentieth century, Australia and Latin America faced accidental incursions: Brazil in 1920 and Australia in 1923, with each outbreak originating with importation of cattle from Asia. India confirmed the rinderpest eradication by eliminating the last reservoirs of infection in 1995. Southeast Asia has undoubtedly been free from rinderpest since the late 1950s. Rinderpest has not been reported in central Asian states for several decades. No clinical cases have been reported in the Middle East region for more than 10 years.

Based on these investigations, we dare to conclude that the rinderpest virus strains of the lineage II may have also joined other lineages as extinct. Only through international coordination can transboundary animal diseases such as rinderpest be eradicated.

Keywords

Rinderpest, Eradication, FAO, EMPRES, GREP, OIE, AU, SAARC