IN KENYA’S VAST RIFT VALLEY, PORIA OLE SUNTAI, A MAASAI ELDER, supports a family of 30 by keeping and trading cattle. Ole Suntai, 70, is among those who remember the devastation caused by rinderpest.

“In 1958, there was no vaccine, so there were great losses to the herd in the area,” Ole Suntai says, as he stands on a breezy hill among his grazing cattle.

Another elder, Peter Ole Komoi, 65, was just a boy when he first witnessed an outbreak of rinderpest.

“I can remember because during that time, a quarantine was imposed where I was,” said Ole Komoi. “It had an impact because you could not even sell the animals, you could not take them elsewhere for grazing. So you were confined by that quarantine.”

Massive cattle losses from rinderpest triggered widespread famine in Africa in the 19th and 20th centuries.

In eastern Africa, rinderpest moved easily across the borders of neighboring countries with cattle trade and the migration of livestock and vulnerable wildlife.

The Somali ecosystem – an area of roughly 920,000 square kilometers that extends across parts of Ethiopia, Kenya and all of Somalia and Djibouti – was especially vulnerable. It accounts for more than seven million head of cattle, many of which move frequently over national borders.

In Kenya, rinderpest also took a toll on wildlife, including buffalo, kudus and giraffes, affecting on the region’s biodiversity and tourism industry.

Kenya’s experience with rinderpest ultimately contributed to eradication of the disease. In the 1950’s and 60’s, Englishman Walter Plowright conducted research at a laboratory in Muguga, near Nairobi, which led to development of a highly effective rinderpest vaccine.

In 2001, the world’s last confirmed case of rinderpest was detected in wild buffalo in Kenya’s Meru National Park.

LIKE MOST PEOPLE, DAIRY FARMER AJITH HABARAKADA HAS NEVER seen a case of rinderpest, even though the ancient animal virus has wiped out countless herds of cattle and other hoofed animals, both domesticated and wild.

Still, Habarakada has no doubt what an outbreak of the disease would mean for him and his family.

“If our animals were destroyed by disease, it would be a catastrophe,” he says.

Historical accounts suggest that rinderpest originated in the steppes of central Eurasia, later sweeping across Europe and Asia with military campaigns and livestock imports.

In Sri Lanka, livestock imports triggered three major epidemics between 1926 and 1994, according to the national department of animal production and health.

At age 54, Habarakada is counting on his children to help him to carry on the traditional dairy farming practices that he learned from his own parents.
“My son is quite interested and it is with his help that we are continuing to develop the farm,” says Habarakada. “We have 10 cows, of which four are milking cows.”

The family farm recently became one of the last proving grounds in a historic, global campaign to eradicate rinderpest from all but a few laboratory samples worldwide.

A team of veterinary investigators examined the cattle on Habarakada’s farm and drew blood samples to take back to a laboratory in Welisara.

Roughly 4,500 head of cattle in Sri Lanka underwent blood testing in 2010 under the UN Food and Agriculture Organization’s Global Rinderpest Eradication Programme (GReP), created in 1994 and charged with coordinating international efforts to eliminate the transboundary disease.

In a European Union-funded phase of the programme, field and laboratory personnel gathered the final scientific evidence needed from Sri Lanka and a handful of other countries to confirm that the world was free of the disease.

Sri Lanka has not reported a case of rinderpest since 1994.

A centuries-old challenge in Rome

THE CITY OF ROME IS HOME TO ONE OF THE OLDEST PUBLIC HEALTH facilities in Europe, Santo Spirito in Saxia Hospital. Santo Spirito, first constructed in the 8th century, went on to face many of the public health and social challenges of its times.

In the early 18th century, one of those challenges was rinderpest, or cattle plague, which was crisscrossing Europe and Asia, wiping out entire herds of domesticated and wild animals, and taking a toll on human livelihoods and food supplies.

Pope Clement XI ordered Santo Spirito’s chief physician, Giovanni Maria Lancisi, to study rinderpest. In 1711, Lancisi began writing what would become the world’s first book-length manuscript on the disease. Today, it is part of a historic, 20-thousand-volume collection of writings kept in the Lancisi Library.

Lancisi wrote down eleven specific recommendations for responding to and preventing the spread of rinderpest, including the use of quarantines.

The recommendations made by Lancisi and other researchers led several countries in Europe to adopt quarantines and order health certificates on imported animals. They were only part of long series of scientists, researchers and leaders who would seek to control repeated outbreaks of rinderpest.

Lancisi also recommended that medical education create a specialization in animal health. This thinking contributed to the establishment, in 1761, of the world’s first veterinary school in Lyon, France.

Rinderpest was high on the list of challenges facing agriculture when in 1945, the United Nations established the Food and Agriculture Organization as a specialized agency.

In 1994, FAO formed the Global Rinderpest Eradication Programme to coordinate international efforts and to provide technical guidance and financial support, in close coordination with the World Organisation for Animal Health and other institutional partners, national governments and donors like the European Union.

Three hundred years after Lancisi wrote his book about rinderpest, the global campaign to eradicate rinderpest can finally claim success.