

One baboon gene could vastly improve lives of millions of African farmers

With one gene, molecular geneticist Steve Kemp may someday be able to boost the success of small farms across a huge swath of central Africa.

The gene is from a baboon, and it's important because it produces a protein that kills a diabolical protozoan called *Trypanosoma brucei*. *Trypanosoma brucei* causes a deadly wasting disease—trypanomiasis—in both cattle and humans. Now stick with me, here's where it gets interesting:

That protozoan, called a trypanosome, is the reason one-third of the African continent—an area the size of the United States—is almost completely prevented from keeping livestock. That's because the tse-tse fly, the trypanosome's preferred method of transportation, lives there. Where flies can infect cattle, cattle usually can't survive.

The implications of animal-free farming in the developing world are enormous. For starters, there's malnutrition. A quarter of the [800 million malnourished people](#) on our planet live in sub-Saharan Africa, and lack of protein is a significant contributing factor.

But the larger problem is labor. In that cattle-free zone, 90 percent of the land is still worked by hand.

Kemp now estimates that they're about a year away from having a transgenic cow grazing the ILRI pastures.

He doesn't pretend this effort will solve all livestock problems. "We don't imagine this is a silver bullet," he says, "But it does address the single most important pathogen over huge areas of Africa."

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: Genetically-Modified Cattle May Help Reshape African Farms