Gene-edited disease-resistant animals could reduce poverty in Africa's most vulnerable communities

A researcher in Edinburgh is leading efforts to develop gene-edited farm animals for poor farmers in Africa. Prof Appolinaire Djikeng is developing cows, pigs and chickens that are resistant to diseases and more productive.

Among them are cattle that have been gene edited to be heat-resistant. Details of the project were given at the American Association for the Advancement of Science meeting in Washington DC.

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Prof Djikeng and his team are working closely with African research institutes to identify local problems and to help them find solutions...."We can drive out poverty in some of the most vulnerable communities," he told BBC News.

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His team is currently focusing on developing chickens that are resistant to Newcastle disease and dairy cattle resistant to East Coast fever.

One approach is to make cows whose coats repel the ticks that spread the disease. There is also a collaboration with a US firm, Acceligen, to produce cattle that are able to cope better with heat.

The company has identified a gene that makes a breed found in the US Virgin Islands, called Senapol, naturally heat-resistant. The gene....reduces their body temperature by at least 0.5C compared with a cow without the gene.

Read full, original article: Gene-edited animal plan to relieve poverty in Africa