



Phages for the replacement of antibiotics, and reduction of drug resistant nontyphoidal *Salmonella*, in poultry farms in Kenya

March 2019 – December 2021

Objectives

- 1) To test known and new bacteriophages from Kenya (as well as a combination of both) with lytic activity towards Kenyan *Salmonella* strains.
- 2) To conduct field trials using bacteriophages in selected smallholder farms.
- 3) To assess the impact of bacteriophage technology and adoption by women chicken farmers.

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Partners: Université Laval (Canada) & SyntBioLab Inc.

Funding: IDRC – InnoVet AMR & UKAID, CRP on Livestock.

Highlight of 2020 achievements

- 12.5% of *Salmonella* and 37.4% of *E. coli* isolated from poultry farms are MDR (excluding erythromycin & penicillin G).
- 65 *Salmonella*-specific lytic bacteriophages were isolated from the field & purified. Some can survive at low pH.
- A Kenyan *Salmonella* field strain was tested *in vivo* & can cause weight loss in chicken.

