



Innovating Alternatives

a podcast about AMR in food-animal production and the researchers around the globe who are working to reduce it.

Special One Health Day Mini Episode: A Charismatic Beetle

Special guest: [Dominique Charron](#), Vice-President of Programs and Partnerships, IDRC

Dominique Charron (DC) – In 1992, there was a World Summit on Sustainable Development, where the UN framework on climate change was born. At that time IDRC was asked to take on a much stronger environmental portfolio.

DC – This programming really helped develop the field of Ecohealth, where human health and animal health were really connected to better managing the environment. In developing regions, a large majority of people feel the impact of environmental degradation or the threats of emerging diseases or the ongoing problems of chronic diseases linked to poor environment, and this creates a real appetite for finding solutions that then can be applied right away to help make things better.

DC – I'm Dominique Charron, and I'm the vice president of programs and partnerships at Canada's International Development Research Center and a member of the One Health High Level Expert Panel of the United Nations.

DC – The One Health concept links the well-being of people, animals and ecosystems under one umbrella. A really good example of this is work that IDRC supported in Guatemala to help address the re-emergence and spread of Chagas disease, a parasite that is spread by a charismatic beetle, called a kissing beetle. In the poor areas of rural Guatemala, people live in brick huts that have cracks in the wall between the bricks. And this is the favorite hiding place with these bugs. And they come out at night, and they drop onto the sleeping people in the building and the animals, and they bite and feed. and the parasite is transmitted into the bite wound from the bug's poop. It can cause deterioration of heart muscle, it affects the muscles of the digestive tract, and this can lead to long term chronic problems.

DC – The IDRC research was really transformative, because it focused on working with communities to help people understand where the disease is coming from, and how by managing their environment just a bit better, keeping the animals out of the house, sealing up those walls, and moving away brush and rubbish from near the houses where the bugs can hide. This really reduce the transmission of the disease. But it was done using local indigenous methods that were supported with a bit of help from the government to bring in the materials this became a very straightforward thing for communities to do, and so effective, that it reduces the transmission of the disease by 90%. And it lasts much longer than just spraying the walls with insecticide. And so, the Pan American Health Organization together with the Governments of Guatemala, Honduras and El Salvador are scaling up this approach to rural communities across the region.

[End]

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To celebrate World One Health Day, Innovating Alternative brings you a bonus episode! This short story about rainforests and kissing beetles illustrates the One Health concept in action.

Innovating Alternatives is a serialized podcast that delves into the issue of antimicrobial resistance, a slow-moving pandemic that risks erasing the last 80 years of modern medicine's progress. We will take you right to the cutting edge of science, where researchers are developing new and surprising alternatives to antibiotics and innovative solutions to reduce the use of antimicrobials in livestock and aquaculture production.

Get in touch and let us know what you think of the podcast by email innovetamr@idrc.ca or on twitter [@Livestock IDRC](https://twitter.com/Livestock_IDRC).

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