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Kitchen waste as pig feed sustains transmission of Taenia solium cysticercosis in Mbeya, Tanzania

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Background

• Recent data have shown that confinement of pigs can be insufficient in preventing transmission of porcine cysticercosis, indicating that pigs might become infected while being confined [1].

Hypothesis

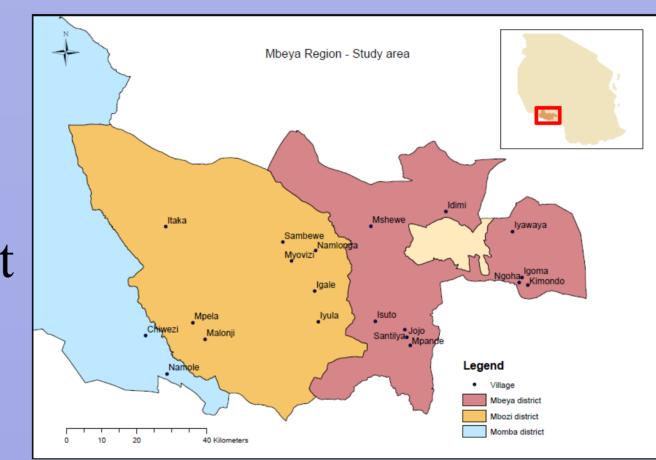
• Pigs are infected with porcine cysticercosis through environmental contamination while being confined.

Aim

To identify risk factors associated with porcine cysticercosis using a case-control study design.

Methods

Case-control study design consisting of questionnaire interviews and observational surveys, utilising known information on persistent or multiple infections of porcine cysticercosis in an endemic area of Tanzania [1].



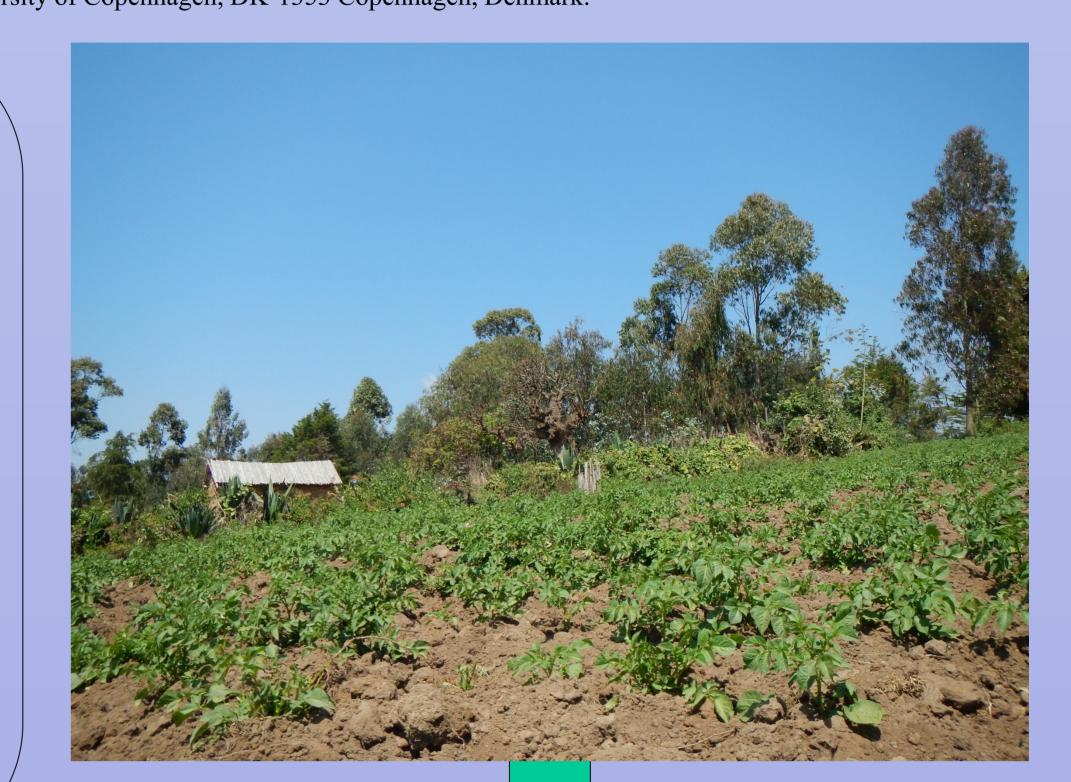
- Households were allocated to either the case or control group based on at least two visits during a 14-month period.
- Cases had one or more cysticercosis positive pigs on at least two occasions whereas controls had none.
- Risk factors were identified by logistic regression analyses.

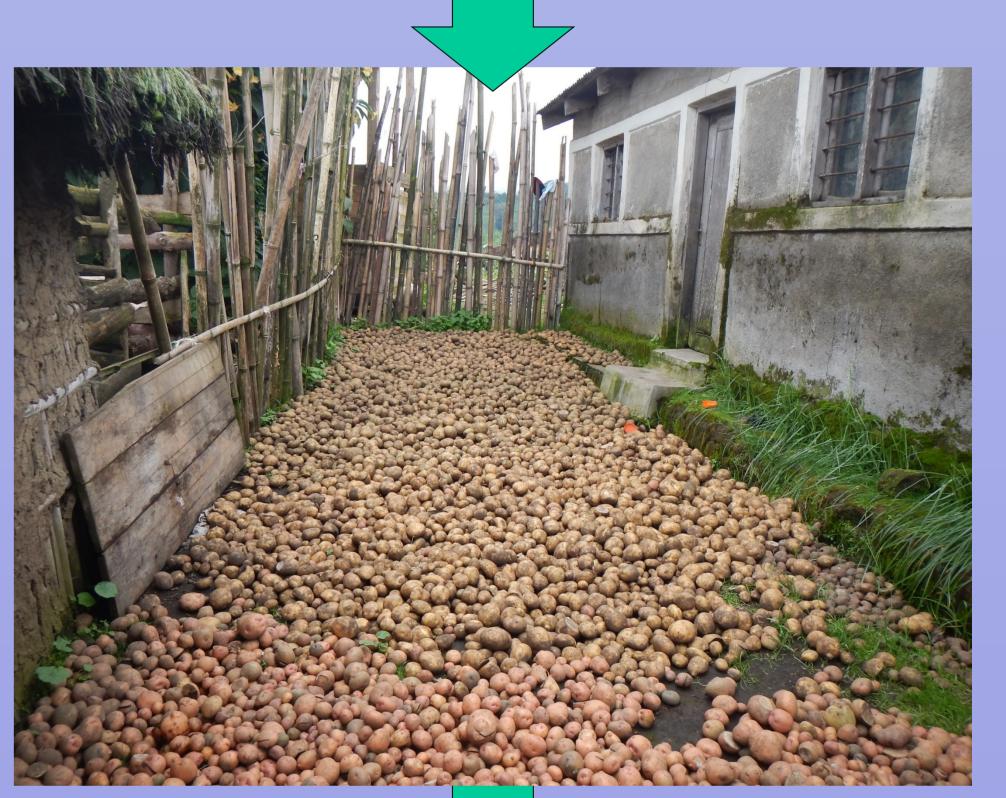
Results

- From 20 villages a total of 93 households participated 43 cases and 50 controls.
- Potato peels were said to be given to pigs either raw or boiled by 46% of the farmers.
- Porcine cysticercosis could be associated with absence or a completely open latrine (p=0.035, OR 5.98, CI: 1.33-43.02) compared to an enclosed latrine and feeding potato peels to pigs (P=0.007, OR 3.45, CI: 1.43-8.79).

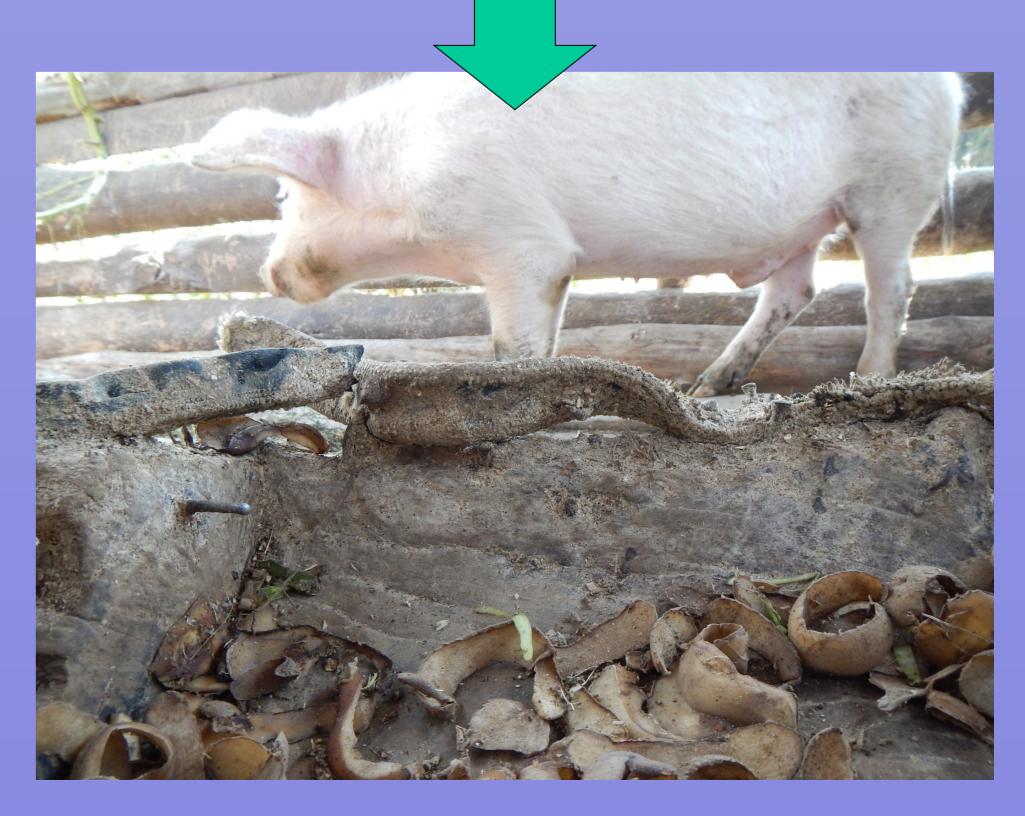
Take home messages

- Whether potato peels are contaminated with *Taenia* eggs before they reach the household or whether the contamination is from water or dirty hands during peeling, remains to be confirmed.
- This study suggests that detailed assessment of a number of areas of pig management is essential for designing effective control programmes.











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solium cysticercosis in pigs in Mbeya Region, Tanzania. Parasit. Vectors. 7, 574.



1. Braae, U.C., Magnussen, P., Lekule, F., Harrison, W., Johansen, M.V., 2014. Temporal fluctuations in the sero-prevalence of Taenia

This study has been accepted for publication in Veterinary Parasitology and is available here:

