International Livestock Research Institute

Training course report

How to improve pig farming

A training workshop by Pig Production and Marketing Uganda Limited

February 2014





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Project background

Safe Food, Fair Food: From capacity building to implementation (funded by BMZ/GIZ)

Millions of small-scale farmers efficiently supply many of the informal meat, milk and fish markets in Africa. Surging demand for livestock products and changing consumer preferences (the Livestock Revolution) provide an opportunity to set poor farmers on pathways out of poverty, but also threaten the continued presence of smallholder farmers in increasingly demanding markets. While the levels of food safety hazards (such as microbial pathogens and residues) in informally marketed food may be high, the risk to human health is mostly unknown and current food safety management is both ineffective and inequitable. Risk-based approaches for assessing and managing food safety offer a powerful new method for reducing the enormous health burden imposed by foodborne disease, while taking into account other societal goals such as pro-poor agri-food sector development and food and nutritional security.

The ultimate goal of the second phase of the Safe Food, Fair Food project is the improvement of livelihoods of poor producers and consumers by reducing the health risks and increasing the livelihood benefits associated with meat, milk and fish value chains. Its purpose is furthering research into the practical application of risk analysis and economic and social methods by food safety stakeholders and value chain actors, improving food safety and market participation of the poor in informal markets for livestock products in sub-Saharan Africa. The project contributes to this with outputs at two scales:

- 1. At the level of meat, milk and fish value chains, it pioneers and tests a practical, wholevalue-chain application of risk-based approaches to food safety in selected countries which are the focus of the CGIAR Research Program on Livestock and Fish. It will develop, test and communicate the technologies and methods to improve food safety and enhance smallholder market access.
- 2. At regional scale, it works through the food safety 'champions' supported in the first phase to better incorporate risk analysis and economic valuation methods into food safety policy, commercial practice and veterinary education.

The project works in four countries (Ethiopia, Senegal, Tanzania and Uganda) and with university and research networks and regional economic communities in East, West and southern Africa. It builds directly on previous work supported by the BMZ-funded Safe Food, Fair Food project that increased capacity and generated evidence for improving food safety in eight African countries, training over 50 food safety stakeholders and supporting 20 postgraduate research projects.

Training summary

Organizer: Christopher Mulindwa, Manager, Pig Production and Marketing (PPM) Uganda Ltd.

Lecturers/facilitators

- Ivine Nadamba (PPM)
- Danilo Pezo (ILRI)
- Robert Serwanga Salongo (Mutima Best Quality Feeds)
- Naluyima Emma (Animal Care Centre Entebbe)
- Joseph Kung'u (National Agricultural Research Organization/ILRI)
- Peter Senkungu (Novus International)
- Kristina Roesel (Freie Universität Berlin/ILRI)
- Peter Lule (PPM/ILRI)
- Simon Lubega (Wambizzi Cooperative Society)
- Lawrence Mayega (DVO Masaka)

PPM is a registered company in the Republic of Uganda. The company works with smallholder and medium-scale pig farmers in Uganda to increase productivity and create a reliable market for pig farm produce. Its mission is to modernize, promote and develop pig production in Uganda through providing secure and sustainable markets, advisory services and farm inputs to make the sector a reliable source of income for smallholder and medium-scale pig farmers in Uganda. More information about PPM is available at <u>www.pigfarmers.co.ug</u> and <u>www.facebook.com/pigfarmers</u>.

In 2012, the research team at ILRI Uganda met the manager of PPM, Christopher Mulindwa, and has since been working together with him to provide technical support to smallholder pig farmers. Christopher was part of the participatory rural assessment team, facilitating sessions on marketing channels from November 2012 to February 2013. He is very engaged and dedicated and, with the support of ILRI, won a stipend for the 2014 East Africa Agribusiness Innovation Incubator Programme Cohort.

Farmers in Uganda are often constrained by lack of learning materials to help them venture into piggery or upgrade their businesses. Therefore, PPM organized a two-day training workshop for 70 farmers against a fee of 65,000 Uganda shillings (25 United States dollars). The training was aimed at giving them insights into relevant topics concerning piggery, such as, pig feeding and use of additives, farm management and housing, economics, record keeping, how to access seed money, pig health and zoonoses, breeding and stock management and marketing.

Due to the collaboration with ILRI, the coordinator of the Safe Food, Fair Food project, Kristina Roesel, was invited by PPM to facilitate a session on pig and pork zoonoses. The 90-minute session introduced the subject zoonoses and highlighted the pig and pork-borne zoonoses that ILRI identified during the in-depth assessment in 2013. We discussed the symptoms of disease in pigs and people, risk factors for disease transmission and their management.

The life cycle of the pork tapeworm, *Taenia solium*, is often misunderstood and even wrongly communicated by technical staff. A poster co-developed by ILRI (Annex 1) helped to effectively communicate the life cycle of the pork tapeworm to the farmers, resulting in increased understanding of the concept. One of the farmers expressed interest in translating the poster into Luganda, the local language spoken in most of central Uganda. We also demonstrated preserved specimens of roundworms that were collected from pigs during field work in Uganda in 2013.

The event received media coverage in the *Daily Monitor* newspaper of 19 February 2014: http://www.monitor.co.ug/Magazines/Farming/-Farmers-urged-on-best-practices/-/689860/2213650/-/cve41e/-/index.html

Agenda

Time	Торіс	Facilitator	Organization		
14 Feb 2014					
0800 hours	Registration of participants	Ivine Nadamba	PPM		
0900-0910 hours	Welcoming remarks About PPM Introduction of participants		PPM		
0910-1000 hours	Official opening ILRI pig project in Uganda Participants' reactions	Danilo Pezo	ILRI		
1000-1030 hours	Relevance of commercial feeds to pig production in Uganda	Robert Serwanga (Salongo)	Mutima Best Quality Feeds		
1030-1100 hours	Health Break				
1100-1230 hours	Pig feeding and farm management Participants' reactions	Emma Naluyima	Animal Care Centre Entebbe		
1230-1300 hours	Centenary Rural Development Bank (Pig farm financing)		Centenary Rural Development Bank		
1300-1400 hours	Lunch Break				
1400-1500 hours	Pig health management	Joseph Kung'u	National Agricultural Research Organization/ILRI		
1500-1530 hours	Participants' reactions				
1530-1600 hours	Pig feed additives	Peter Senkungu	Novus International		
1600-1615 hours	Closing remarks				
15 Feb 2014					
0900-1000 hours	Pig and pork zoonoses (Contact and consumption)	Kristina Roesel	ILRI		
1000-1030 hours	Participant reactions	Kristina Roesel	ILRI		
1030-1100 hours		Health Break			
1100-1200 hours	Economics of pig farming	Peter Lule	PPM, vet & pig market specialist		
1200-1220 hours	Pig markets at Wambizzi cooperative abattoir	Simon Lubega	Wambizzi cooperative abattoir Limited.		
1220-1300 hours	Participants' reactions	Peter Lule	PPM and Wambizzi		
1300-1400 hours	Lunch break				
1400-1500 hours	Record management Practical application of the sow calendar Practical housing plans	Lawrence Mayega	District Veterinary Office, Masaka		
1500-1530 hours	Participants' reactions				
1530-1640 hours	Pig breeding and stock management	Joseph Kung'u	National Agricultural Research Organization/ILRI		
1600-1650hours	Closing remarks				

Training materials

- Local newspaper clippings articles on pork safety (Annex 1)
- Poster: *How to break the tapeworm cycle* (Annex 2)
- Presentation: *Pig and pork zoonoses in Uganda* (<u>http://www.slideshare.net/ILRI/pig-and-pork-zoonoses-in-uganda</u>)

Participants

The training was attended by 25 women and 45 men, all from Uganda.

Annex 1: Newspaper clippings on pork safety

https://safefoodfairfood.wordpress.com/2012/06/06/in-the-news-most-pork-in-kampala-is-unsafe-say-health-experts/

Daily Monitor, 6 June 2012

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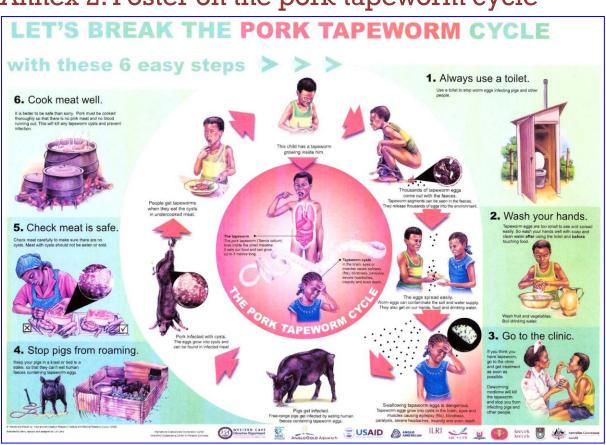
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Red Pepper, 13 June 2012



Bujagali Energy Pro has Shs366.91bn By Hope Muhairwe MPALA CAPITAL City Aut ity has pened a fresh war on por Joints claiming the most of them are and operate illega All pork supplied in Kampala for hu man consumption contaminated, KC public health dep ment said, threat ing to close all p joints around the Economy Watch to some abattoir ers in different of the city and th what they said; "We are so frus over this warning

	RED PE	PPER, WEDNESDAY, JUNE 13,	2012
MA	RO	NP	165
	Abo	KCCA /ows To olish Pork	
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agall Energy Project; s Shs366.91bn as unsp		Ministry has Si unspent money	-
Hope multimente	put our business at risk since being the	ing epilepsy or running	butchery attendants and animal transporta- tion to end this food insecurity in the city.
AMPALA CAPITAL City Author- ity has	job that helps us earn income. Butch- ers said they make awesome profits from	related ailments. The city is littered with illegal pork abattoirs	A team of officials who included Police- men, KCCA law en-
fresh war on pork	the business ranging from Shs8,000 a kilo. Emilia Ahimbisibwe,	such as Bweyogerere commonly known as Ekimezza, Nsambya	and inspectors from the Ministry of Agricul- ture raided pork joints
nost of them are dirty and operate illegally. All pork supplied in Kampala for hu-	nary Officer said that pork sold in the city is increasingly becoming	in Lubaga Division and many more," he	and Luzira. A dozen of pigs were carried away and more than 200
man consumption is contaminated, KCCA public health depart- ment said, threaten-	sumption, clung the reported unhygienic nature in which meat is being slaughtered	He explained that pork contains tape worms which cause epilepsy when consumed with-	Pork is a delicacy enjoyed by a vast
ing to close all pork joints around the city. Economy Watch spoke to some abattoir own- ers in different parts	"A big percentage of pigs slaughtered	out excellent preparation and warned consumers against	different pork joints around the city. In the
of the city and this is what they said; "We are so frustrated over this warning	cleared for numari consumption," Ahim- bisibwe said. He	which is not thorough cooked. Ahimbisibwe said they are draft-	business to venture
because this has	pork consumers face		A CONTRACT OF THE OWNER OF



Annex 2: Poster on the pork tapeworm cycle