How to improve pig farming
A training workshop by Pig Production and Marketing Uganda Limited
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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, whole-value-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 www.pigfarmers.co.ug and www.facebook.com/pigfarmers.

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 69,000 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

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Facilitator</th>
<th>Organization</th>
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<tbody>
<tr>
<td>14 Feb 2014</td>
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<tr>
<td>0800 hours</td>
<td>Registration of participants</td>
<td>Irvine Nadamba</td>
<td>PPM</td>
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<tr>
<td>0900-0910 hours</td>
<td>Welcoming remarks About PPM Introduction of participants</td>
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<tr>
<td>0910-1000 hours</td>
<td>Official opening ILRI pig project in Uganda Participants’ reactions</td>
<td>Danilo Pezo</td>
<td>ILRI</td>
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<td>1000-1030 hours</td>
<td>Relevance of commercial feeds to pig production in Uganda</td>
<td>Robert Serwanga</td>
<td>Mutima Best Quality Feeds</td>
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<td>1030-1100 hours</td>
<td>Health Break</td>
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<td>1100-1230 hours</td>
<td>Pig feeding and farm management Participants’ reactions</td>
<td>Emma Naluyima</td>
<td>Animal Care Centre Entebbe</td>
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<td>1230-1300 hours</td>
<td>Centenary Rural Development Bank (Pig farm financing)</td>
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<td>Centenary Rural Development Bank</td>
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<tr>
<td>1300-1400 hours</td>
<td>Lunch Break</td>
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<td>1400-1500 hours</td>
<td>Pig health management</td>
<td>Joseph Kung’u</td>
<td>National Agricultural Research Organization/ILRI</td>
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<td>1500-1530 hours</td>
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<td>15 Feb 2014</td>
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<td>Kristina Roesel</td>
<td>ILRI</td>
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<td>1000-1030 hours</td>
<td>Participant reactions</td>
<td>Kristina Roesel</td>
<td>ILRI</td>
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<td>1030-1100 hours</td>
<td>Health Break</td>
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<td>1100-1200 hours</td>
<td>Economics of pig farming</td>
<td>Peter Lule</td>
<td>PPM, vet &amp; pig market specialist</td>
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<td>Pig markets at Wambizzi cooperative abattoir</td>
<td>Simon Lubega</td>
<td>Wambizzi cooperative abattoir Limited.</td>
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<td>1220-1300 hours</td>
<td>Participants’ reactions</td>
<td>Peter Lule</td>
<td>PPM and Wambizzi</td>
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<td>1300-1400 hours</td>
<td>Lunch break</td>
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<td>1400-1500 hours</td>
<td>Record management Practical application of the sow calendar Practical housing plans</td>
<td>Lawrence Mayega</td>
<td>District Veterinary Office, Masaka</td>
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<td>1500-1830 hours</td>
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<td>Joseph Kung’u</td>
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<td>Closing remarks</td>
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### Training materials

- Local newspaper clippings articles on pork safety (Annex 1)
- Poster: *How to break the tapeworm cycle* (Annex 2)

### 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

Red Pepper, 13 June 2012
Annex 2: Poster on the pork tapeworm cycle

**LET'S BREAK THE PORK TAPEWORM CYCLE**

with these 6 easy steps

1. Always use a toilet.
   Use a toilet to drop pork eggs into a pit or other toilets.

2. Wash your hands.
   Wash your hands with soap and water after using the toilet and before touching food.

3. Go to the clinic.
   See a doctor if you have symptoms of pork tapeworm infection.

4. Stop pigs from roaming.
   Keep pigs in a pen or other controlled area to prevent the spread of tapeworm eggs.

5. Check meat is safe.
   Eat pork that has been cooked to an internal temperature of 71°C (160°F) to kill the tapeworm eggs.

6. Cook meat well.
   cook pork to an internal temperature of 71°C (160°F) to kill the tapeworm eggs.