


ILRI/BMZ Safe Food, Fair Food

Preliminary findings on slaughter hygiene at Wambizzi abattoir




Kristina Rösel/ Katie Holmes
ILRI-Kampala
August 16, 2012

International Livestock Research Institute

Visit in June 2012



And some initial observations...




- Too many animals, people and activities in one place (the other building was flooded)
- No separation between dirty areas (where live animal is slaughtered, scalded and de-haired) and clean areas (where intestines are removed and the carcass is inspected and dressed)




- Poor hygiene in the slaughter area.
- But scalding in hot water may reduce the contamination again?



- Animal welfare issues: slaughtering of pregnant females.



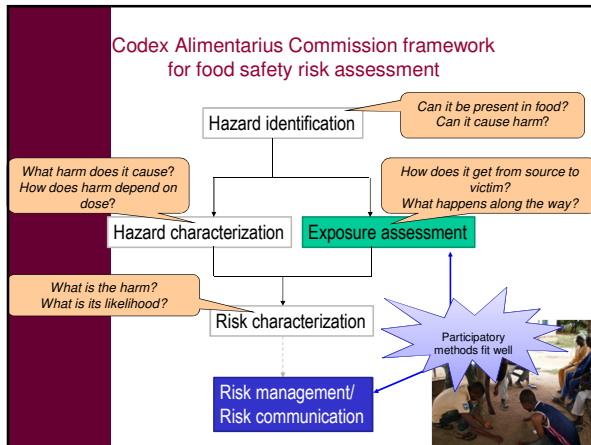
- Diseases?
The picture to the left is taken from a textbook and shows a healthy lung of a pig which is homogenous and of pink colour
The picture to the right shows a pile of lungs being sold outside the abattoir with a variegated appearance.



- No protective wear of workers – exposed to injury and disease?
- Tap water for cleaning needs to be carried in jerry cans from one central water storage point – sometimes the stream is closer.



- These pictures are taken INSIDE the premises of the slaughter house
- ANYONE to the processing areas, carrying dirt, influence the meat inspectors



Risk assessment at Wambizzi abattoir


- Using participatory methods for exposure assessment (August 2012):
 - group discussion with 4 members of the management
 - In-depth interview with 2 meat inspectors
 - Group discussion with 10 abattoir workers
- Triangulation for comparison/verification:
 - Structured observation checklist
 - Review of battoir sales records and movement permits
 - Biological sampling (October/November 2012)

What do we need to know?

1. Where do the pigs at Wambizzi come from and where does the pork go to? Regional distribution of suppliers and buyers
2. Is there a seasonal change in supply? If yes, what factors are leading to it?
3. Where on the premises does which step of the process take place?
4. What happens from the point the live pig arrives at the slaughter house until it leaves the premises?
5. Who does what? Allocation of work force and relationships
6. Who gets what? Flow of products, by-products and cash
7. Knowledge and attitude of stakeholders on pork safety

- possible risk factors compromising public health

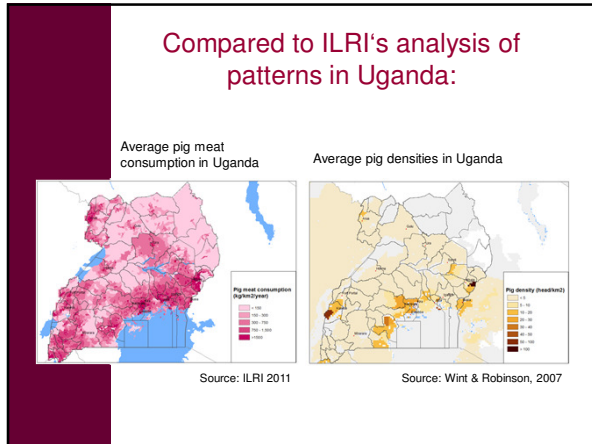
1. Regional distribution of suppliers



57% Central
 21% Eastern
 15% Northern
 7% Western

Why is this important to know?

- value chain mapping
- spatial distribution of diseases relevant to public health and potential control measures at abattoir level



Regional distribution of buyers

- mainly urban
- Kampala; ranking:
 1. Pubs and pork joints
 2. Processors (Quality Cuts, Fresh Cuts)
 3. Butchers
 4. Supermarkets
 5. Hotels
 6. Private org's (NGOs, missions) and private individuals

2. Annual supply, seasonality and influencing factors

The management was given 92 beans and distributed them proportionally according to their perception. This was later compared (and confirmed) by analysing the sales records.

	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Total
supply perceived by management													
absolute	4	3	2	5	7	9	8	10	20	12	8	4	92
relative	4.35	3.26	2.17	5.43	7.61	9.78	8.70	10.87	21.74	13.04	8.70	4.35	100.00
supply according to abattoir records													
absolute	1001	962	862	1463	1726	1874	1817	1899	2127	1925	XXX	XXX	19144
relative	5.23	5.03	4.50	7.64	9.02	9.79	9.49	9.92	11.11	10.06			100.00

- supply is fluctuating throughout the year
- highest in March, followed by April, February and December
- September is the month with the lowest supply.

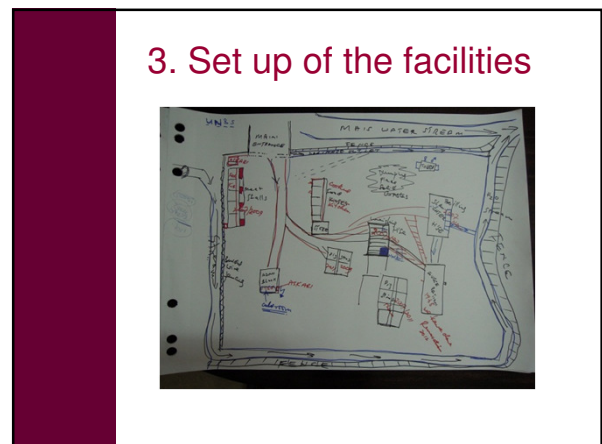
Factors influencing supply

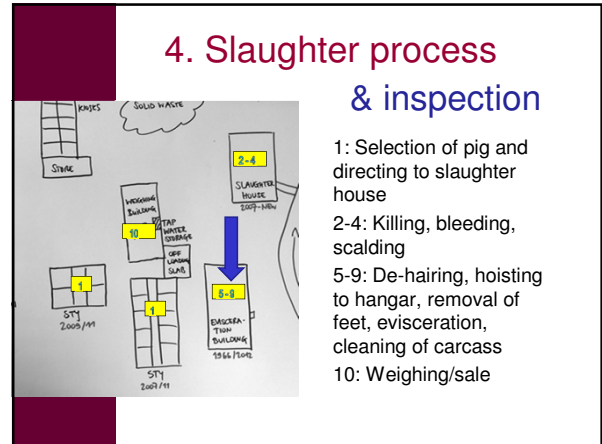
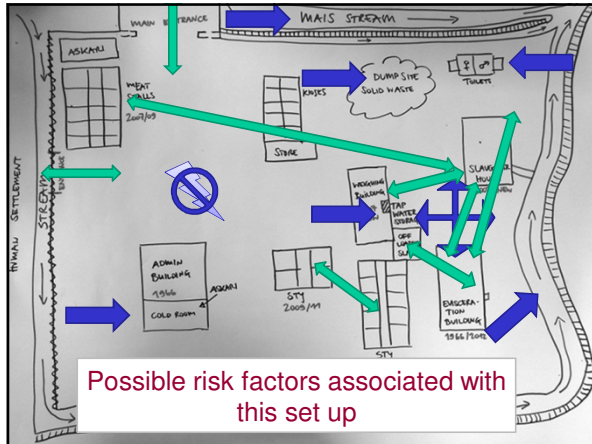
High supply:

- prior to festivities (e.g. Christmas and Easter): indicates pork being a popular dish among the Christian community
- prior to new school term: indicates that pigs serve as a "piggybank"

Low supply:

- Swine diseases (e.g. ASF, FMD) result in movement restrictions to Kampala
- Seasonal weather changes influencing feeds availability
- Every year in June, the release of the government budget paralyzes private investment until the funds are allocated 3 months later





Inspection (compressed)

1. Ante mortem
2. At least visual inspection of meat, organs, Lymph nodes
3. Further testing (lab)

Inspection (compressed)

1. Ante mortem
 - Why is this important?
 - Sick animals must not be slaughtered and separated from healthy animals
 - Identifying zoonotic diseases in live animals
1. At least visual inspection of meat, organs, Lymph nodes
2. Further testing (lab)

Signs observed in live pigs by inspectors and slaughter men

Frequency	Signs in live pigs as perceived by the slaughter men	Signs in live pigs as perceived by the meat inspectors
Often	-Diarrhea -Bruising/Lesions on back -Combination of red ear tips, bleeding patches, nasal discharge, and diarrhea	-Pregnancy -Coughing (one inspector) -Skin conditions -Inappetence
Less Often	-Nasal discharge only -Ectoparasites (lice)	-Diarrhea -Lameness
Rarely	-Coughing -Hernia -Vomiting -Circular scabs	-Coughing (one inspector)

Inspection (compressed)

1. Ante mortem
2. At least visual inspection of meat, organs, lymph nodes
 - Why is this important?
 - identify diseased animals and/or organs
 - decision on condemnation
1. Further testing (lab)

Possible risks factors associated with knowledge and attitude

- Lack of prerequisites
- Lack of (refresher) training
- Lack of ownership for pork safety due to financial dependencies
- Regular health check ups not compulsory and not funded

What do we (still) need to know?

- Do pigs at Wambizzi carry diseases, and if so which? – biological sampling and hazard identification Q4 2012
- Farmer/ trader/ consumer survey – Q4 2012
- Review of literature, health records at the hospitals, existing laws and regulations – ONGOING

Some recommendations

- Revisit location and design for slaughter facilities
- Revisit management plan to transfer (monetary) power from traders
- Training and awareness
- Others???

Acknowledgements

- The members of the Board/management of Wambizzi Cooperative Society Ltd:
 - Mr Simon Lubega
 - Mr Paul Sserubiri
 - Ms Justine Nabukeera*
 - Mr Thomas Kasule
 - Mr Fredrick Kibuuka
 - Mr Richard Sekasanvu
- David Walabyeki and Jane Lwanira, (A)APOs Lubaga Division
- Katie Holmes, University of Wisconsin
- Francis Ejobi and Joseph Kungu, Makerere University
- Margaret*
- Bioversity International - Kampala

Safe Food, Fair Food project (2008-2015)

Funded by BMZ*/GIZ**

*German Federal Ministry for Economic Cooperation and Development
 **International Agency for International Cooperation

Q&A, discussion

Some contributions from the discussion



- Piggery not restricted to Christians: Aga Khan raising pigs in Mukono/Jinja
- Offal are eaten – this is not commonly known
- ILRI scoping study will help investors (Italians, Chinese)
- Veterinary services should be re-centralized
- Current problems: lack of inspectors, food safety no priority, private/public often confused
- awareness among traders/ consumers

Some contributions from the discussion



- not creating laws but *enforcement* is the challenge
- "I know you need to wear a different hat in government than as a pig farmer; but the government has a heart for the youth and the ladies. And piggery is perfect for both."
- Pigs should be an *industry* rather than an *activity*; they should be on the mainstream agenda
- Inclusion to the strategic plan does not automatically lead to the release of funds related to all those activities; the sector needs advocacy

Some contributions from the discussion



- "Who owns Wambizzi?" (Simon Lubega, Wambizzi Project Coordinator)
- Wambizzi: location bad and cooperative needs re-structuring
- should clearly distinguish between trader- and producer-related activities
- "most important thing is (self-) organization"
- sub-committees work well in Kenyan cooperatives