Introduction

- There is limited attention to impacts of climate change on pigs in Uganda
- Pigs are very sensitive to heat stress (No functioning sweat glands and have small lungs)

Aim

To determine climate change impacts on pig farming with focus on heat stress and explore the heat-stress adaptation options towards better pig production in Lira District, Uganda.

Objectives

1. To determine heat stress status for pigs and the factors influencing heat stress in pigs in Lira District, Uganda
2. To identify, rank and recommend adaptation options to heat stress and assess gender implications of adaptation options especially labour and decision making

Methods

- Data from 104 households and 259 pigs in Lira district, Uganda.
- Lira has low pig density, high poverty level and expected heat stress throughout the year
- Four focus group discussions in Barr and Ojwina sub-counties.
- Meteorology data from the local weather station.
- The heat stress indicators included rectal temperature and skin temperature.

Results

<table>
<thead>
<tr>
<th>Rectal temperature</th>
<th>Skin temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>External temperature</td>
<td>External temperature</td>
</tr>
<tr>
<td>Humidity index</td>
<td>Humidity index</td>
</tr>
<tr>
<td>Pig management system</td>
<td>Pig management system</td>
</tr>
<tr>
<td>Pig category</td>
<td>Pig category</td>
</tr>
<tr>
<td>Water quantity given</td>
<td>Body condition score</td>
</tr>
<tr>
<td>Time of the day</td>
<td>Time of the day</td>
</tr>
</tbody>
</table>

- Pigs with heat stress=51.55% of all pigs
- Labor and decision making for adaptation options are mostly done by female

Conclusions

- Farmers should be vigilant when the day is hot
- Pig shelters should be designed to minimize overcrowding
- Incorporating ways to improve air flow and evaporative cooling by having a high roof, and/or using grass
- Availing water ad lib or even mixing water in the feed
- Allows pig swimming/wallowing and pouring water on the pigskin
- More awareness about the locally suitable adaptation option to heat stress

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