**Background**

As a result of the challenges that climate variability and change brings about, farmers have adopted certain measures in order to adapt to their environment. The study assesses climate change adaptation strategies used by smallholder livestock farmers in the Upper West region of Ghana.

In all, 200 smallholder livestock farmers were interviewed, comprising different social groups. Men and women were 67 and 33% respectively. Also, the married groups were 82.5% of the total respondents, whereas the widowed were 16.5%. The single and divorced groups were 4 and 1% respectively. Another important social group that emerged was the pito brewers (23% of the respondents), which were mostly done by women. A respondent had an average of 19 years’ experience in livestock rearing. With respect to education, 95.5% of the respondent had no education whereas 3 and 1% had basic and secondary education respectively. Five (5) categories of adaptation strategies were identified. These were feeding, health, housing and breeding strategies. The fifth category is the non-adapters. For each category of an adaptation strategy, it was further identified as indigenous and an introduced strategy. In all, 96% of the respondents use at least one adaptation strategy whereas the non-adapters are 4%.

**Objectives**

- To measure the level of vulnerability of smallholder livestock farmers to climate change and variability
- To determine the factors influencing the vulnerability level of smallholder livestock farmers to climate change and variability
- To measure the level of adoption of adaptation strategies used by smallholder livestock farmers to adapt to climate change and variability
- To determine the factors influencing the adoption of adaptation strategies used by smallholder livestock farmers

**Methodology**

- The Livelihood Vulnerability Index was used to measure the level of vulnerability of smallholder livestock farmers
- Tobit regression were used to determine the factors influencing the level of vulnerability of smallholder livestock farmers
- Descriptive statistics were used to measure the level of adoption of adaptation strategies used by smallholder livestock farmers
- Multinomial regression were used to determine the factors influencing the adoption of adaptation strategies used by these farmers

**Preliminary Findings**

<table>
<thead>
<tr>
<th>ADAPTATION STRATEGIES</th>
<th>INDIGENOUS STRATEGY (%)</th>
<th>INTRODUCED STRATEGY (%)</th>
<th>TOTAL (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeding</td>
<td>57</td>
<td>43</td>
<td>100</td>
</tr>
<tr>
<td>Health</td>
<td>47</td>
<td>53</td>
<td>100</td>
</tr>
<tr>
<td>Housing</td>
<td>39</td>
<td>61</td>
<td>100</td>
</tr>
<tr>
<td>Breeding</td>
<td>79</td>
<td>21</td>
<td>100</td>
</tr>
</tbody>
</table>

**Some Indigenous & Introduced Strategies Compared**

<table>
<thead>
<tr>
<th>Indigenous</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun-drying of feed (grass)</td>
<td>Drying of feed under sheds</td>
</tr>
</tbody>
</table>

**Contact Us**

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**DFID**

Department for International Development

**IDRC & CRDI**

Canadian International Development Research Centre Centre de recherches et développement international

**Canad$$**

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