Senegal Dairy Genetics:  
Milk Composition of Dairy Cattle Breeds in Senegal


- The objective of the Senegal Dairy Genetics project in this study is to determine the milk composition of the various dairy cattle breeds found within the project sites.
- 4 major groups identified out of 241 individual animals:
  
  **Group 1:**
  - Pure local zebu breeds

  **Group 2:**
  - 75% local zebu x 25% exotic zebu

  **Group 3:**
  - 50% local zebu x 50% exotic taurine breeds

  **Group 4:**
  - Pure exotic taurine breeds

- Analyses were carried out using a field milk analyser (LactiCheck Analyser®)

<table>
<thead>
<tr>
<th></th>
<th>Group 1(n=132)</th>
<th>Group 2(n=38)</th>
<th>Group 3(n=56)</th>
<th>Group 4(n=15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fat (% ± SE)</td>
<td>4.88 ± 0.13</td>
<td>5.14 ± 0.23</td>
<td>5.11 ± 0.22</td>
<td>5.75 ± 0.47</td>
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<tr>
<td>Protein (% ± SE)</td>
<td>3.68 ± 0.02</td>
<td>3.68 ± 0.03</td>
<td>3.52 ± 0.03</td>
<td>3.74 ± 0.06</td>
</tr>
</tbody>
</table>

- Solids-not-fat and lactose were constants

- The different breeds of dairy cattle in Senegal differed in regards to their protein milk composition
- This result has practical implications for soured milk or yoghurt manufacturing

Table I: Fat and Protein milk contents derived from 4 dairy cattle breeds groups in Senegal.