SRI LANKA

Current Status of Animal Feed Industry in Sri Lanka

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Sri Lanka – at a glance

- Known as “Pearl of Indian Ocean
- Population – 21 million
- Total area - 65,610 km², with 64,740 km² of land and 870 km² of water
- Multi ethnic, multi religious country
- Main language is Sinhala
- Main religion is Buddhism
Livestock & Poultry Industries in Sri Lanka

- Livestock rearing is mainly a rural livelihood activity
- Livestock Industry is a rapidly growing industry
- Poultry is well developed industry in Sri Lanka
- Contribution of livestock & poultry sector to the total GDP is 1.0%

  - Contribution of different subsectors to the GDP of livestock sector
    - Dairy: 0.17%
    - Chicken meat: 0.39%
    - Egg: 0.07%
    - Beef: 0.08%
    - Mutton: 0.01%
    - Pork: 0.03%
Livestock & Poultry Industries in Sri Lanka


<table>
<thead>
<tr>
<th>Species</th>
<th>Poultry (million)</th>
<th>Cattle/Buffalo (million)</th>
<th>Goat</th>
<th>Swine</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>34.76</td>
<td>1.6</td>
<td>358,233</td>
<td>94,612</td>
</tr>
<tr>
<td>2016</td>
<td>36.72</td>
<td>1.8</td>
<td>470,294</td>
<td>124,880</td>
</tr>
<tr>
<td>2017</td>
<td>41.00</td>
<td>1.8</td>
<td>512,978</td>
<td>154,908</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Product</th>
<th>Chicken Meat (‘000 MT)</th>
<th>Egg (million)</th>
<th>Milk Production (million L)</th>
<th>Mutton (‘000 MT)</th>
<th>Pork (MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>164.45</td>
<td>2294</td>
<td>403.2</td>
<td>1.35</td>
<td>7180</td>
</tr>
<tr>
<td>2016</td>
<td>182.69</td>
<td>2304</td>
<td>454.6</td>
<td>1.40</td>
<td>7280</td>
</tr>
<tr>
<td>2017</td>
<td>200.98</td>
<td>2856</td>
<td>482.6</td>
<td>1.74</td>
<td>7890</td>
</tr>
</tbody>
</table>

Source: Livestock Statistical Bulletin – 2017, DAPH
## Livestock & Poultry Industries in Sri Lanka

### Per Capita Availability of Livestock & Poultry Products (2016 - 2017)

<table>
<thead>
<tr>
<th>Product</th>
<th>Chicken Meat (Kg/yr)</th>
<th>Egg (number/yr)</th>
<th>Milk &amp; Milk products (l/yr)</th>
<th>Beef (kg/yr)</th>
<th>Mutton (kg/yr)</th>
<th>Pork (Kg/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>7.82</td>
<td>109.05</td>
<td>48.56</td>
<td>1.53</td>
<td>0.09</td>
<td>0.34</td>
</tr>
<tr>
<td>2016</td>
<td>8.56</td>
<td>108.43</td>
<td>55.48</td>
<td>1.49</td>
<td>0.09</td>
<td>0.34</td>
</tr>
<tr>
<td>2017</td>
<td>9.29</td>
<td>132.90</td>
<td>56.00</td>
<td>1.39</td>
<td>0.12</td>
<td>0.37</td>
</tr>
</tbody>
</table>

*Source: Livestock Statistical Bulletin – 2017, DAPH*
Animal Feed Industry in Sri Lanka

- Well developed industry in Sri Lanka

- Majority of feed produced are poultry feed

- About 50 Department (DAPH) registered feed/premix manufacturers are available
  - Animal Feed manufacturers - 30
  - Premix producers - 20

- In addition, there are some self feed mixing farmers also available (Self mixers) and most of them are not registered
Categorization of Feed Manufacturers

- Registered animal feed manufacturers can be categorized according to their production

<table>
<thead>
<tr>
<th>Level</th>
<th>Production (MT/Month)</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Scale</td>
<td>&gt; 10,000</td>
<td>1</td>
</tr>
<tr>
<td>Medium Scale</td>
<td>5,000 – 10,000</td>
<td>4</td>
</tr>
<tr>
<td>Small Scale</td>
<td>&lt; 5,000</td>
<td>Rest</td>
</tr>
</tbody>
</table>
## Animal Feed Production

<table>
<thead>
<tr>
<th>Type of Feed</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>As a %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry Feed (‘000 MT)</td>
<td>501.82</td>
<td>620.31</td>
<td>678.19</td>
<td>57.4</td>
</tr>
<tr>
<td>Cattle Feed (‘000 MT)</td>
<td>30.54</td>
<td>40.85</td>
<td>51.28</td>
<td>4.3</td>
</tr>
<tr>
<td>Swine Feed (‘000 MT)</td>
<td>2.70</td>
<td>2.26</td>
<td>1.14</td>
<td>0.1</td>
</tr>
<tr>
<td>Goat Feed (‘000 MT)</td>
<td>0.46</td>
<td>0.11</td>
<td>0.09</td>
<td>0.008</td>
</tr>
<tr>
<td>Other (‘000 MT)</td>
<td>0.68</td>
<td>0.60</td>
<td>1.48</td>
<td>0.13</td>
</tr>
<tr>
<td>Premixers (‘000 MT)</td>
<td>0.77</td>
<td>0.98</td>
<td>0.16</td>
<td>0.01</td>
</tr>
<tr>
<td>Self Mixed (‘000 MT)</td>
<td>396.0</td>
<td>413.54</td>
<td>450.13</td>
<td>38.0</td>
</tr>
<tr>
<td><strong>TOTAL FEED PRODUCTION</strong></td>
<td><strong>932.97</strong></td>
<td><strong>1,078.65</strong></td>
<td><strong>1,182.47</strong></td>
<td></td>
</tr>
</tbody>
</table>
Raw Material Usage

Major ingredients used for feed production

• Energy supplements - Maize, Rice and Rice by products (Broken rice, Rice polish/Rice bran)

• Protein supplements - Soya bean meal, Fish meal, Coconut meal, Sesame meal

• Mineral supplements – Di Calcium Phosphate, Calcite, Shell grit

• Other feed additives
Most of the Major raw materials use for feed production are imported.

<table>
<thead>
<tr>
<th>Feed Ingredients</th>
<th>Local</th>
<th>Imported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Broken Rice</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Rice Polish</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Coconut meal</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Soya Bean Meal</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Sesame Meal</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Fish Meal</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Minerals</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Additives</td>
<td>25%</td>
<td>75%</td>
</tr>
</tbody>
</table>
Most of feed rations are formulated according to the NRC standards and standards based on local conditions.

- **Maize**: 40%
- **Rice by product**: 25%
- **Soya bean meal**: 20%
- **Coconut meal**: 5%
- **Fish meal**: 5%
- **Minerals**: 3%
- **Additives**: 2%

**Typical Feed Formula (Poultry)**
Legislation on Feed Production

There are legislation to regulate, supervise and control the manufacture, sale, importation and distribution of animal feed/feed ingredients in Sri Lanka.

Main legislative documents

• Animal Feed Act No. 15 of 1986
• Regulations to the Act (1996.04.25)
• Amendments to the Animal Feed Act No. 15 of 1986 (Animal Feed (Amendments) Act No. 15 of 2016)
Animal Feed Act

- Registration of
  - Animal feed manufactures
  - Feed, feed ingredient, feed additive importers
  - Feed, feed ingredient, feed additive distributors
  - Self mixers

- Quality assurance of animal feed & feed ingredients

- Monitor & maintain the standards of animal feed and feed ingredients which has direct influences on safety of animal originated food which is the main public health concerns
Animal Feed Act

To implement the activities of animal feed act

• Registrar (Animal Feeds) — Licensing Authority

• Animal Feed Advisory Committee (AFAC)
  • Director General/Animal Production & Health (Chairman)
  • 5 Animal Nutritionists
  • 1 Animal Feed Industry Representative
  • Registrar (Animal Feeds)

• Authorised Officers — Inspection, monitoring

• Authorised and Reference Laboratories — Quality Assurance
Constraints

- No proper monitoring system in feed industry
- Inadequate laboratory facilities for quality assurance and residue analysis
- Lack of accredited nutrition laboratories
- Lack of verification system among laboratories (Proficiency Testing Programs)
- Lack of knowledge of farmers on nutrition, biosecurity etc.
- Negligence of Farmers on those aspects
- Use of therapeutic antibiotics in feed (Tylosin, Amoxycillin) without proper consultation
Future Plans/Activities

- Strengthening the monitoring system by increasing authorised officers
- Further strengthening and conduct awareness programs for all stakeholders in livestock & feed Industry
- Develop available authorised laboratory at VRI, DAPH as National Level Accredited laboratory (Nutrition) with the facilities of quality assurance and residue analysis
- Develop Proficiency Testing Programs among available laboratories
- Develop programs for prudent use of therapeutic antibiotics
Future Plans/Activities

- Implement the National Action Plan for combating Antimicrobial Resistance in Sri Lanka
- Registration of all self mixing feed producers and farmers
Thank you