SOUTH AFRICAN ANIMAL FEEDS MARKET ANALYSIS REPORT

2016

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1. DESCRIPTION OF THE INDUSTRY

Animal feeds are generally referred to as foods that are used to feed farm animals. However in technical terms animal feed may be explained as high nutritious food components which are specially prepared for animals and can be fed to them as a sole source of ration for their proper growth and development in order to enhance their productivity. Animal feeds play a leading role in the global food industry, allowing economic production of animal proteins throughout the world. Feed is the largest and most important component to ensuring safe, abundant and affordable animal proteins. The main factors determining the composition of animal feed are prices of raw material, nutritional value of the components, nutritional requirement of the specific animal as well as rules and regulation of the government.

The South African feed industry is about 86 years old. The industry came into existence after severe droughts and depression that transpired during the 1930's. The industry produces a variety of feed for various segments including poultry (layer and broiler breeders), dairy, beef and sheep and pigs. The quality standards of South African feeds are high and up to international levels. Raw materials for animal feed to some extent are adequately available in South Africa particularly maize, the major ingredient in many of the manufacture animal feeds. The industry’s production on average is about 3.5 million tons per annum. South African animal feed industry is dominated by major role players which mainly use modern computerized plants and latest equipment for analytical procedures and least cost formulation and use the latest manufacturing technology. Based on Animal Feed Manufacturers Association (AFMA) members raw material usage and inclusion rates from 2009/10 to 2014/15, on average the inclusion rates for maize was 52.1% of total feed sales. The average inclusion rate for soya bean meal and sunflower seed and oilcake was about 13.6% and 4.4% respectively while that of the fish meal was about 0.2%. It is important to note that there are also other various raw materials that are minimally included in feed formulation. Similar to those that are significantly used their inclusion rates vary from formulation to formulation, as well as between different species.
2. GLOBAL MARKET OVERVIEW

Animal feed is an important component in the overall food production process, particularly for livestock based food products industry. Normally, production occurs in industrial mills or in simple on farm mixes. The figure below shows that globally, the animal feed market is experiencing a huge demand owing to the growth of animal based products. Growth in animal based products consumption in the developing world has also contributed to a rapid demand for animal feed recently. During 2015, global animal feed production was found to be around 980 million tons, showing a growth of 1.8% from the year (2013). Based on Table 1 below, in terms of global feed production, China holds the first position with an annual production of 182.69 million tons during year 2015, 3% less than in 2013, followed by USA, Brazil and Mexico while South Africa is ranked number 23 in the world. However compared to other African countries, South Africa is the largest animal feed producer on the continent. South Africa contributed more than 11 million tons of animal feed to the world animal feed production in 2015. Globally, poultry feed accounts for the biggest share in the overall feed consumption followed by ruminants, pig, aquaculture and other species. Approximately one billion tons of global production is commercially produced while only 300 million tons of feed is produced directly by farm mixing.

Table 1: Global feed production rankings - 2015

<table>
<thead>
<tr>
<th>RANK</th>
<th>COUNTRY</th>
<th>MILLION TONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China</td>
<td>182.69</td>
</tr>
<tr>
<td>2</td>
<td>USA</td>
<td>172.45</td>
</tr>
<tr>
<td>3</td>
<td>Brazil</td>
<td>66.15</td>
</tr>
<tr>
<td>4</td>
<td>Mexico</td>
<td>30.70</td>
</tr>
<tr>
<td>5</td>
<td>India</td>
<td>29.43</td>
</tr>
<tr>
<td>6</td>
<td>Spain</td>
<td>29.18</td>
</tr>
<tr>
<td>7</td>
<td>Russia</td>
<td>25.66</td>
</tr>
<tr>
<td>8</td>
<td>Japan</td>
<td>24.31</td>
</tr>
<tr>
<td>9</td>
<td>Germany</td>
<td>23.58</td>
</tr>
<tr>
<td>10</td>
<td>France</td>
<td>22.16</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>.</td>
</tr>
<tr>
<td>23</td>
<td>South Africa</td>
<td>11.38</td>
</tr>
<tr>
<td>24</td>
<td>Other</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>161.7</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>980</td>
</tr>
</tbody>
</table>

Source: Alltech Global Feed Survey – 2015
2.1 World feed per species

Globally, poultry feed accounts for largest share in the overall animal feed consumption of 47%. This is as a result of a rapid and constant rise in the demand for primary poultry products (meat and eggs). This reflects consumption of high-quality products with relatively low price because of efficiency of production. Poultry feed is followed by pig and ruminants (comprising dairy, beef and small ruminants) both acquiring 26% and 20% of the total animal feed consumption respectively. The trends recorded by the Food and Agriculture Organization (FAO) of the United Nations suggest that the total global consumption of aquaculture products is increasing, and farmed fish and shellfish now exceeds beef on a weight basis, hence aquaculture feed contributes 4% to the overall animal feed production globally. Pet and equine feed have shares of 2% and 1% respectively.

Source: AFMA
3. **ANIMAL FEED INGREDIENTS PRODUCTION TRENDS**

3.1 **Local animal feed major ingredients**

The production of compound feed requires the use of various agricultural raw materials. However, it must be noted that not all raw materials are used in all compound feeds. The inclusion rates of different raw materials vary from formulation to formulation, as well as between different species. In this report, only major ingredients are considered based on the raw material utilization by AFMA members in 2015/16. The most significant ingredients include oilcake, maize, as well a fish meal. The production of these ingredients will be analysed. The analysis will begin with the local production trends of oilcake followed by maize and finally fishmeal.

3.1.1 **Local oilcake production**

Oilcakes provide proteins in animal feed and are relatively used more in most types of animal feed than in others after maize. The major aim is to provide high quality protein. South Africa produces soybean, groundnut, cotton, sunflower, and canola meals and these in addition to other uses, are used as major ingredients in animal feeds. Soybean is the most frequently used oilseed meal followed by the sunflower and is commonly used in both cattle and poultry feed oilcake. Cottonseed cake and meal use as feed ingredient has vanished over past the three years in South Africa. Limited amounts of groundnut and canola meal and fullfat contribute to the totally produced oilcake in South Africa.
Figure 2 above shows the total oilcake produced in South Africa over the period of ten years. Relatively higher volumes of oilcake were recorded at the beginning of the season in 2006/07. This was followed by a decline in production volumes during 2007/08 season and thereafter began to show an increasing trend reaching the highest volume recorded during the closing year (2015/2016). This could mainly be attributed to an increase in demand for oilcake into poultry and other feed diets. The figure above also shows that there was a continued increase in the production of oilcake from 2011/12 until the closing period in 2015/16. The observed oilcake production is as a result of structural change occurring in South Africa in the soya market due to local soy strategy announced by the DTI and ITAC more than four years ago. The local crushing capacity started going up over the past five years and more soybeans were channelled to crushing for animal feed. The market mechanism allowed more local soya oilcake to be taken by the local industry, replacing the initial high volumes of soya oilcake imports.

3.1.2 Local maize production

Maize is one of the most important ingredients used in animal feed. The animal feed industry uses primarily yellow maize for the purpose of animal feed manufacturing. Approximately 60% of total maize produced in South Africa is used for food consumption, industrial (other than feed) and seed purposes. The rest is used for the production of animal feed. Annual maize production is about 10.5 million tons, about 4 million tons of
which are used in the starch industry, 4.5 million tons in animal feeds and 2.5 million tons in human consumption and seed production. Maize is a major ingredient in feed milling, constituting up to one half of the total volume of ingredients used. According to AFMA, maize constitutes approximately 55% of the 4.2 million tons of feed produced by its members. Production of yellow maize varied between 4 million and 4 million tons/year in the 2011/12 to 2015/16 periods. The figure below focuses on yellow maize production over past decade.

![Figure 3: Yellow Maize Production](image)

Source: SAGIS

Figure 3 above show yellow maize produced in South Africa from season 2006/07 up to 2015/16. During 2006/07 season, relatively low volumes of maize were recorded and were however, followed by a substantial increase of maize volume from 2007/08 to 2008/09 production season. Yellow maize production remained fluctuating over the period under review; with the highest maize production recorded during 2014/15 season. The observed increasing trend of yellow maize production may be as a result of implementation of more efficient production technologies and practices by producers. However the ongoing severe drought has led to decline in the country’s maize production, which had a massive negative impact on the crop and for the end users and processors of maize. According to (AFMA), available maize volumes for processing and consumption during 2015/16 dropped by 45% as compared to the previous year. Estimates indicate that the volume available for processing and consumption will drop further by 35% in 2016/17 season.
3.1.3 Local fish meal production

Fishmeal is a good source of high-quality protein; hence its price is usually high. It is also rich in minerals (calcium, phosphorus and trace minerals), B vitamins and essential fatty acids. Fishmeal is an important – sometimes the only – source of animal protein ingredients in most developing countries. However in South Africa a limited amount of fishmeal is used in the compound feed formulation. Its use is determined by availability, product mix and price in relation to other available protein sources. Future expansion possibilities in fishmeal production are limited. Over the past ten years local production of fish meal has not increased significantly. Although fish meal is used in smaller quantities it is worth analysing as it is the third most important ingredient for compound feed formulation as indicated by AFMA.

![Figure 4: Fish meal production](image)

Source: AFMA

Figure 4 above shows the total fish meal produced in South Africa over the period of ten years. The figure shows that over the period under analysis the volume of locally produced fish meal has been fluctuating. The animal feed production volumes were relatively lower during the year 2006/07. This was followed by a substantial increase in production volume during 2007/08 season. A peak was reached during the 2009/10 season recording 98 000 tons of locally produced fish meal. The production recorded a consistent decline from the season 2011/12 until the closing period in 2015/16. The lowest local fish meal production was
recorded during the 2014/2015 marketing season, while relatively higher fish meal production trends were evident in 2015/16 season. Although fish meal still in short supply, it remains one of the most important protein sources.

4. DOMESTIC ANIMAL FEED PRODUCTION

Figure 5 and Table 4 show the total animal feed produced in South Africa over the period of six years. Feed types included in the total animal feed production encompass dairy, beef and sheep, pigs, layers, broilers, dogs, horses, ostriches and aquaculture amongst others. The figure below shows that animal feed production volumes were relatively lower during the year 2010/11. This was followed by a substantial increase in production volume during 2011/12 season. The production recorded a consistent increase from the season 2010/11 until 2015/16, closing higher above 11 million tons. This shows a growth rate of about 0.7% on a national production level as compared to the previous season.

![Figure 5: Total Animal Feed Production](image)

Source: AFMA

<table>
<thead>
<tr>
<th>Year</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy</td>
<td>1880000</td>
<td>1974000</td>
<td>1997688</td>
<td>2057619</td>
<td>2055846</td>
<td>2136384</td>
</tr>
<tr>
<td>Beef and Sheep</td>
<td>3038000</td>
<td>3156482</td>
<td>3211089</td>
<td>3297788</td>
<td>3387408</td>
<td>3512035</td>
</tr>
</tbody>
</table>
### National Animal Feed Production (tons)

<table>
<thead>
<tr>
<th>Years</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pigs</strong></td>
<td>810746</td>
<td>851283</td>
<td>855539</td>
<td>855539</td>
<td>877098</td>
<td>905977</td>
</tr>
<tr>
<td><strong>Layers</strong></td>
<td>1130755</td>
<td>1182770</td>
<td>1187028</td>
<td>1223333</td>
<td>1235387</td>
<td>1276342</td>
</tr>
<tr>
<td><strong>Broilers</strong></td>
<td>3194130</td>
<td>3295120</td>
<td>3318186</td>
<td>3364156</td>
<td>3535010</td>
<td>3323278</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>601397</td>
<td>626469</td>
<td>576708</td>
<td>582152</td>
<td>567494</td>
<td>582722</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10655028</td>
<td>11086124</td>
<td>11146238</td>
<td>11380587</td>
<td>11658243</td>
<td>11736738</td>
</tr>
</tbody>
</table>

Source: AFMA

### 4.1 Production Segmental Shares (2015/16)

The South African animal feed industry is primarily classified into five major categories (pig, beef and sheep dairy, broilers, and layers) and all the remaining types of animal feeds are considered under the group other.

![Figure 6: Animal Feed Production Segemental Shares (2015/16)](image)

Source: AFMA

In terms of animal feed volume produced during 2015/16 season, beef and sheep feed accounted for the largest share of about 30%, followed by broiler feed at 28% (about 5% decrease from the previous season). The dairy and layers feed consumption accounted for about 29% combined. Although globally pig
production is the second largest animal feed produced however in South Africa only 8% of the total feed production is produced for pigs. Other species feed (dogs, horses, ostriches and aquaculture) combined contributed 5% consumption. The effect of the continued challenges experienced by the South African poultry industry has clearly manifested in the feed volumes sold in this segment. Although poultry remains the most affordable source of protein when measured against other protein sources, feed sales in this segment has declined in 2015/16 with broiler feed declining by 1.5% to 2,808,360 tons and breeder feed declining by 3.3% to 499,307 tons. Measured in volume growth, beef and sheep feed sales led the growth, increasing with (3.7%) increase as compared to the previous season.

5. ANIMAL FEED MAJOR INGREDIENTS IMPORTS AND EXPORTS ANALYSIS

South Africa does not import compound animal feed and it is mostly the feed ingredients that are imported from other countries. This is especially the case when there are domestic production shortages of the ingredients. South Africa also exports some of the ingredients. In this analysis the consideration is given to exports and imports of the important animal feed ingredients. The export and import market of these ingredients play a major role in the animal feed production. The analysis will begin with yellow maize succeeded by soybean and finally fish meal exports and imports are analysed.

5.1 Yellow maize

Figure 7 below illustrates imports of yellow maize for the period 2006/07 to 2015/16.

![Figure 7: Yellow maize imports](source: SAGIS)
The period under review started with relatively higher volumes of yellow maize imports between 2006 and 2007. However this was followed by a drastic decline between the seasons 2008/09, 2009/10 and 2010/11 were extremely low volumes of yellow maize imports are recorded. The availability of maize during 2015/16 marketing season shows a significant drop when compared to the previous year. South Africa had relatively lower opening stocks of 791 000 tons of yellow maize at the start of the season. This was due to higher export volumes to the world market in 2014/15 marketing season. The effect of severe drought conditions saw an increase in imports of yellow maize during 2015/16 period. The figure shows that South Africa is now a net importer of maize for the first time since 2007/08 season. According to Grain SA, the total maize production for 2015/16 is estimated at 7.05 million tons, which could possibly increase both white and yellow maize imports to higher levels above 3.8 million tons.

South African yellow maize exports for the period 2006/07 to 2015/16 are presented in Figure 8.

Source: SAGIS

Figure 8 above shows that the total volume of yellow maize exports has fluctuated over the period under analysis. The period started with relatively low volumes of yellow maize exports in 2006/07 and 2007/08 respectively. A slight increase in exports was experienced during 2008/09 season. A significant increase in exports was also recorded during the 2010/11 season and was attributable to the relatively high production
domestically that was experienced at the same time. A massive decline in yellow maize exports was observed during 2012/13 and was followed by significant rise in exports during 2013/14 season. The period under analysis closed with a drastic decline in volumes of yellow maize exported by South Africa in 2015/16 season. Figure above shows that the cumulative exports of yellow maize by the end of marketing season 2015/16 is well below the exports seen in the past five years. This could be attributed to severe drought which resulted in unfavourable weather conditions affecting the final crop in the major maize production areas.

5.2 Soya oilcake

Figure 9 shows total soybean oilcake imports during the period between 2006 and 2015.

Figure 9: Soyabean Oilcake imports

Source: Quantec Easy Data

During 2006 the volumes of soybean imports were relatively low. However they began to show an increasing trend from the year 2006 up to 2007. A significant decline was experienced during the year 2009. Soya oilcake imports declined for three successive years to 503 064.9 tons during 2015, about 44.7 percent decline from the 911 000 tons imported in 2014. The continued decrease over the three years from 2011 already represents a 46.7 percent drop in imports of soya oilcake. After showing decreases for the past four consecutive years, soya oilcake imports increased to 587 692 tons during 2015/16 season.
Despite the increasing levels of soybean production, considerable volumes of soybean oilcake and oil still imported and this represent a 20% increase from the 487,919 tons imported in 2014/15. The observed decline was due to structural changes occurring in South Africa in the soya market due to the local soy strategy announced by the DTI and ITAC more than four years ago. The local crushing capacity went up over the past four years and more soybeans were channelled to crushing for animal feed. The market mechanism allowed more local soya oilcake to be taken by the local industry, replacing the initial high volumes of soya oilcake imports. More of soya oilcake imports can be expected to be replaced by local products given the observed trend over the past five years.

Total volumes of oilcake exports are presented in Figure 10 below. During the period under review, the volumes of total oilcake exports have fluctuated. The first two years is characterized by relatively low volumes of oilcake exports. A significant increase during the year 2008 is observed while the years 2010 and 2011 are characterized by consistent growth. The period under analysis closed with relatively higher levels of export volumes of 95,613 tons in 2015.

![Figure 10: Total Oilcake exports](image)

**Source:** Quantec Easy Data

Figure 11 show total soybean exports during the period between 2006 and 2015.
Soya oilcake exports have been fluctuating over time. The figure shows that South Africa is a small player in the soybean oilcake export market. According to Grain SA, in the past five years the industry exported an average of 39 443 tons of oilcake with all exports destined for African markets. The first three years of the period under analysis show relatively low volumes of soybean oilcake exports. A slight increase was experienced during the year 2008. However, this was followed by a drastic decline of export volumes during 2009. The export volume showed an increasing trend from 2010 until it a peak was reached above 70 000 tons in 2015. This may well be also explained by a steady increase in soya available for crushing every production year and also the structural change occurring in South Africa in the soya market due to local soy strategy announced by the DTI and ITAC more than four years ago.

5.3 Fish meal

Over the past ten years there have been no imports of fish meal to South Africa, only imports quantities from Namibia and Russian trawlers were recorded over the past 10 year. However these quantities are omitted in this analysis as they are normally not used locally and they are exported as well. The high international demand for fish meal over the years has led to the tendency of rather exporting than supplying the local market. Hence, South Africa is a net exporter of fishmeal and the figure below show the trend of fish meal exports over the past ten years.
According to AFMA, exports of fish meal are influenced by the international prices, which are the major driver. This consequently results in the fluctuation of fish meal exports over the years. Figure 12 above illustrates that during the first two years of the period under review there were relatively low volumes of fish meal exported. The figure further shows that a significant increase in fish meal exports was recorded during 2008/09. The period under review closed with the highest levels of fish meal exports (about 52 000 tons) recorded during 2015/16 marketing season. According to AFMA, significant volumes of more than 50% of South African fish meal are expected to be exported.

6. ANIMAL FEED INDUSTRY STRUCTURE, PROCESSING AND MILLING

6.1 Composition of South African animal feed producers

Supply of animal feed production is composed of various producers in the country. Table 3 below shows the composition of South African animal feed producers during the 2015/16 marketing season. These producers produce a variety of compound feed including the feed for dogs, horses, ostriches and aquaculture.
Table 3: Composition of South African animal feed producers 2015/16

<table>
<thead>
<tr>
<th>Producers</th>
<th>Production ('million tons')</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFMA members</td>
<td>7.183</td>
</tr>
<tr>
<td>SA Feedlots</td>
<td>2.10</td>
</tr>
<tr>
<td>Pig producers</td>
<td>0.56</td>
</tr>
<tr>
<td>Dairy farmers</td>
<td>0.00120</td>
</tr>
<tr>
<td>Other manufacturers</td>
<td>0.866</td>
</tr>
</tbody>
</table>

Source: AFMA

As can be seen from the table above, most of the South African animal production is mainly from the AFMA members as they produce around about 6.80 million tons alone. This accounts for about 61% of the total production. They are followed by SA Feedlots which produce about 2.1 million tons of animal feed. Pig and dairy farmers as well as other manufactures accounts for minor percentages of the total animal feed production in South Africa. The top animal feed manufacturers are AFGRI, Bokomo Voere, Epol, KK Animal Nutrition, Meadow Feeds, Noordwes Voere, Brenco Feeds and Senwesko Voere. The animal feed market value chain is presented in Chart 1 below. The value chain includes raw materials and feed ingredients suppliers, feed producers, feed traders/retailers, and animal farmers.
6.2 Animal feed milling process

The bulk of raw materials are stored in the silos and the lower volume dense materials are in flat storage on the mill floor. The animal feed milling process is illustrated in Chart 2 below. The grains from the silos are transported to the grinders in the mill where it is ground to a suitable coarseness depending on the type of
feed manufactured. Thereafter the raw materials that do not require grinding is included as well as the prescribed premixes of vitamins, minerals and medications and they are mixed together. The mas feed is then incorporated with steam to raise the heat and moisture of the feed. The mixed raw material, vitamins and minerals go through the pellet press where it is forced through a small opening to form a pellet. Post pelleting, pellets then require to be cooled. The pelleted feed passes through a shaker to get rid of unwanted fines and is now ready to be bagged or loaded in a bulk storage bin.

Chart 2: Animal feed milling process
6.3 Organizational Analysis

6.3.1 Producer and associated organizations

The main association responsible for the animal feed industry in South Africa is the Animal Feed Manufacturers Association (AFMA). Its objective is to represent the animal feed industry on different committees and platforms where it is necessary to increase or protect the interest of the industry. This includes liaison with and lobbying of the following:

- Non-AFMA feed manufacturers;
- Partners and links in the feed value-chain;
- Premix manufacturers;
- Traders;
- Raw material suppliers;
- Equipment manufacturers;
- Animal nutritionists;
- Veterinary professionals;
- Livestock industry organisations and livestock producers;
- Agricultural organisations and staff;
- Academics, students of universities, technikons and colleges;
- Agricultural research institute representatives;
- Government department officials;
- Related Government departments;
- International agricultural organisations; and
- International Feed Industry Federation and its members.

AFMA is also a member of International Feed Industry Federation (IFIF) which represents the global feed industry as an essential participant in the food chain that provides sustainable, safe, nutritious and affordable food for a growing world population. IFIF is made up of national and regional feed associations, feed related organizations, and corporate members from around the globe. Overall, IFIF members represent over 80% of the global compound animal feed production.

6.3.2 Drivers and threats

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth in livestock production</td>
<td>Increase in ingredient prices</td>
</tr>
<tr>
<td>Increasing consumption of animal-based food products</td>
<td>High pricing</td>
</tr>
<tr>
<td>Untapped market potential</td>
<td>Lower impact on native breeds</td>
</tr>
<tr>
<td>Drivers</td>
<td>Threats</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>Growth of user industries</td>
<td>Unpredictability of climatic conditions</td>
</tr>
<tr>
<td>Growing population</td>
<td></td>
</tr>
<tr>
<td>Increase in disposable income</td>
<td></td>
</tr>
</tbody>
</table>

According to the AFMA, the critical aspects in the supply of local soybean meal to the feed industry, in order of importance, are:

- All-year-round availability at the feed mill;
- Consistency of nutritional quality;
- Product price; and
- The rising presence of salmonella strain.

7. ACKNOWLEDGEMENT

The following organizations are acknowledged:

**Animal Feed Manufacturing Association**
P.O. Box 8144, Centurion, 0046
Tel: +27 (0)12 663 9097 or +27 (0)12 663 3282
Fax: +27 (0)12 663 9612
Email: admin@afma.co.za
Website: www.afma.co.za

**South African Grain Information System**
Tel: (012) 523 1400
Fax: (012) 349 9200
www.sagis.org.za

**Grain South Africa**
Tel: (056) 515 0918
Fax: (056) 515 1517
www.grainsa.co.za

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Website: www.quantec.co.za

For more information contact:

<table>
<thead>
<tr>
<th>Director: Marketing</th>
<th>Deputy Director: Commodity Marketing</th>
<th>Senior Agricultural Economist: Field Crops Marketing</th>
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<tbody>
<tr>
<td>Tel: (012) 319 8455</td>
<td>Tel: (012) 319 8081</td>
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<td>E-mail: <a href="mailto:MogalaM@daff.gov.za">MogalaM@daff.gov.za</a></td>
<td>E-mail: <a href="mailto:ElvisNak@daff.gov.za">ElvisNak@daff.gov.za</a></td>
<td>E-mail: <a href="mailto:MolahlegiM@daff.gov.za">MolahlegiM@daff.gov.za</a></td>
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