Brazilian Feed Figures

May, 2012

BRAZILIAN FEED INDUSTRY FORECASTS ONLY 3% MORE IN 2012 DESPITE AN INCREASE OF 5,2% LAST YEAR

Sector registered an increase of 5.2% and turnover of U$25 billion in 2011

The Brazilian Feed Industry Association (Sindirações) projected growth of 2,8% in 2012 compared to the previous year, with production of 66,2 million MT of feed and 2,58 million MT of mineral supplements. In 2011, the sector found a growth of 5,2% as well as turnover of U$ 25 billion in feedstuffs and additives and produced 64,5 million MT of feed and 2,35 million MT of mineral supplements.

The modest increase expected along 2012 will be gauged by livestock producers performance that have suffered a lot because higher cost of agricultural commodities and low domestics prices as well as export performance of chicken, pork and beef.

In the first quarter of this year, feed production reached 14,9 million MT, a decrease of 2% compared to the amount produced during the same period of the last year. Broiler and swine demand represents more than 70% of the overall feed and both dropped respectively 1,1% and 6,1%. Unlike these, dairy and beef cattle showed a slight increase of 1,2% and 1,1%, while the egg-laying hens remained virtually unchanged.

The Brazilian livestock production chain has gone through well succeed cycles of expansion, thanks to the continuous mobilization of technology and fostered by the global voluptuous appetite for animal protein. It already represents 6,5% of GDP, has generate million jobs and it is responsible for 18% of the overall agribusiness exports.

Since last winter, however, some husbandry segments have exposed too much and nowadays they have suffered more intensively the effects of the contemporary economic environment that has been impacting business in general and this scenario can damage the whole production chain.

The weakening of goods shipment caused by overvalued currency during almost entire 2011 and the embargoes imposed by USA, Russia and South Africa pushed down the amount of beef exported by 12%, while poultry exports increased only 3% and exports of pork fell 5%. Then, low prices were paid to producers in response to meat surplus offered in the domestic retail. It's believed that all sectors mentioned before still suffer under commodity overvalued prices that feedback the cost of production.

The recent pricing reduction for corn this year and the generous winter harvesting coming are supposed to keep prices under the average displayed last year. Nevertheless to say that corn price skyrocketed since middle 2010 and achieved 54 p.p. by March 2012 and it remains impacting a lot the cost of production of livestock feeding. The soybean meal price, in turn, has increased nearly 40% through April this year due to shrank international liquidity, while the minimum wage rate adjustment impacted the payroll of labor employed.

ARIOVALDO ZANI
CEO - Brazilian Feed Industry Association

Sindirações

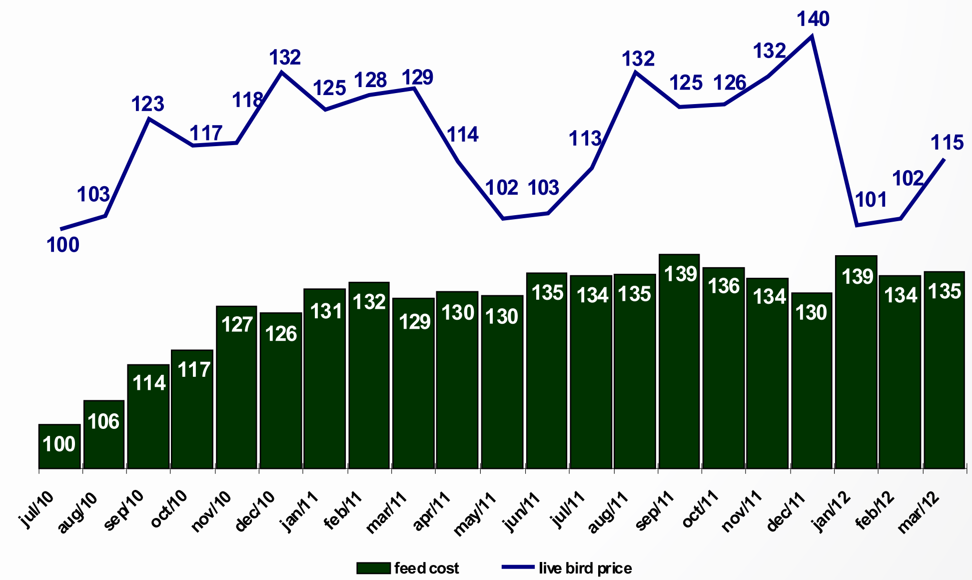
The Brazilian Feed Industry Association/Sindirações was founded in 1953 and since then has been recognized as the voice of the Brazilian feed enterperneurs, including feedstuff and additive suppliers, premixture and mineral supplement makers, livestock feed and pet food manufacturers. Its headquarter is established in Sao Paulo dowtown and the organization joins 140 affiliated private companies, which represent more than 90% of the overall commercial feed produced in Brazil.

Sindiracoes is a board member of IFIF/International Feed Industry Federation and FeedLatina/Latin America and Caribbean Feed Industry Association.

Broiler Feed

Broiler production represented 50% of overall demand for feed in 2011 and is expected to consume 33,2 million MT in 2012, i.e. an increase of 3,1%. The graphic below discloses data captured from first months of 2012 and shows the deep fall on live birds price that may be linked to the oversupply of meat since late 2011 and because the 5% increase on chicks housing that resulted approximately 13 million tons of poultry and consumption of 47,4kg/capita, as well.

INDEX VARIATION (FEED COST AND LIVE BIRD PRICE)

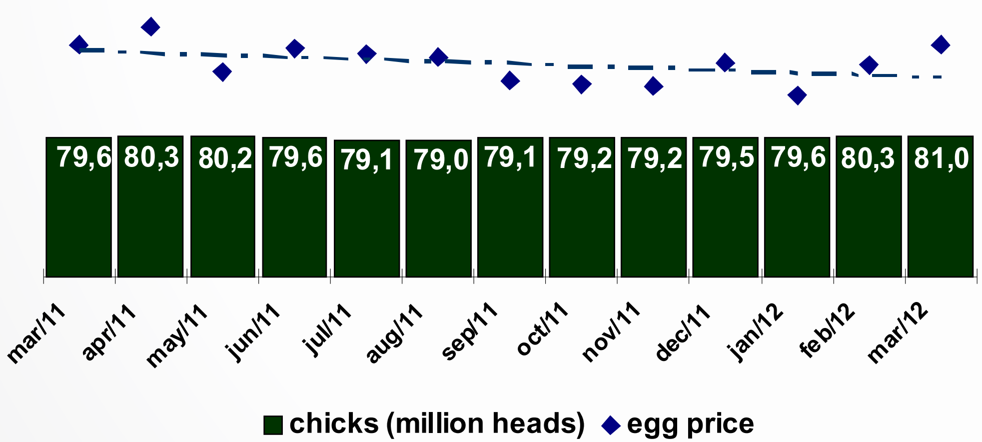


Source: Agribusiness Consulting Services / JOX and Sindirações (data based on Sao Paulo countryside)

Layer Feed

The production of feed for laying hens increased 2,6% and reached 5,0 million MT in 2011 in response to average housing of 79,7 million chicks as well as the domestic egg consumption growth over 9% and 162,5 eggs/capita. Otherwise, egg amount exported decreased 45%. The supposed low egg price along this current year and increasing trend of chicks housing has driven the feed industry to forecast a growth of less than 3% on layer feed, something around 5,1 million MT in 2012.

PARTICIPATION OF COWS IN SLAUGHTER AND LIVE CATTLE PRICE INDEX

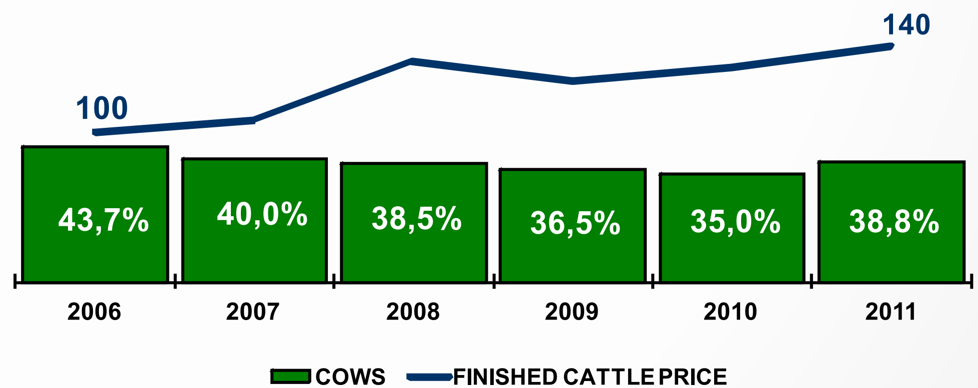


Source: Agribusiness Consulting Services/JOX and Foundation for Poultry Science and Technology/APINCO, Adapted Sindirações

Beef Cattle Feed

The beef cattle feed industry produced 2,7 million MT and 2,35 million MT of mineral supplements, an increase of 7,1% and 9,8% respectively in 2011, while feedlot reached 2,8 million heads and was characterized by modest supply of bulls, but offset by slaughter of more cows. Despite relative good prices paid to finished cattle the cost for feeding accounted 35% of the overall feedlot cost and pressured raisers profitability. By turn, in 2012 the feed industry expects to produce 2,9 million MT of feed and 2,6 million MT of mineral supplements, addition of 5,6% and 9,8% respectively, due to increased feedlot growth rate at least 5%. Nevertheless this forecast is also dependent on calves replacement market, possible cows retention cycle reversion, export opportunities for beef, etc.

PARTICIPATION OF COWS IN SLAUGHTER AND LIVE CATTLE PRICE INDEX

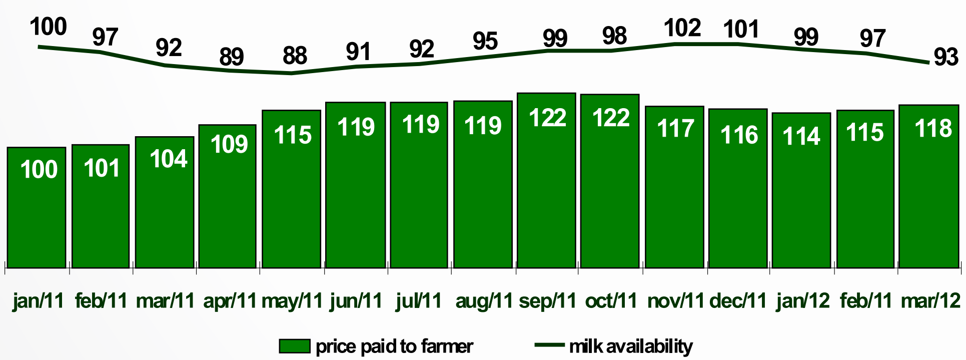


Source: Brazilian Institute of Geographic and Statistics/IBGE and Center for Advanced Studies on Applied Economics/CEPEA, Adapted Sindirações

Dairy Feed

Even impacted by rising feedstuffs that increased the cost of production over 20%, the growth of 9,3% resulting in 5,1 million MT of dairy feed in 2011 can be explained, in part, by limited supply of milk available in response to low quality of pastures and bad logistical effects that strengthened prices paid to milk producers along entire last year and pressured the profitability of dairy by-products manufacturers. Along this year, the feed industry foresees an increase of 2,7% and production of 5,2 million MT of feed due the balance among the stimulation of milk production, lower prices paid to farmers and continuous rate on milk imports.

VARIATION ON MILK PRICE INDEX AND MILK AVAILABILITY

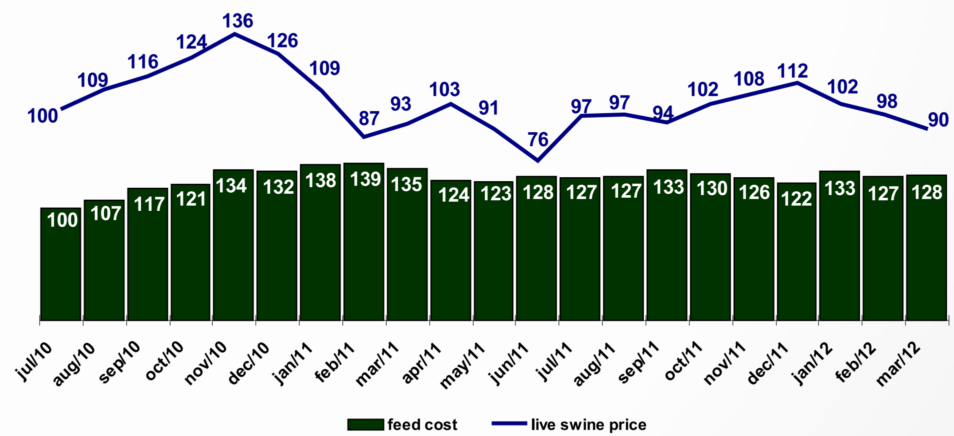


Source: Center for Advanced Studies on Applied Economics/CEPEA, Adapted Sindirações

Swine Feed

The amount of pork exported in 2011 dropped more than 4% due the local currency overvaluation during first half and because trade embargoes imposed by usual customers. The domestic market absorbed additional 180 thousand tons of pork and per capita consumption exceed 15kg. The increase in production cost pulled by higher feedstuff prices set a fast pace in the slaughter of breeders and particularly lighter animals, as well. These factors pushed the swine live price and discouraged increased herd. Following the stability trend, the feed industry produced 15,4 million MT in 2011 and it has projected to deliver the same amount in 2012, although the increased shipments to China and recent open markets in Japan and South Korea are supposed to move pork production ahead.

INDEX VARIATION (FEED COST AND LIVE SWINE PRICE)

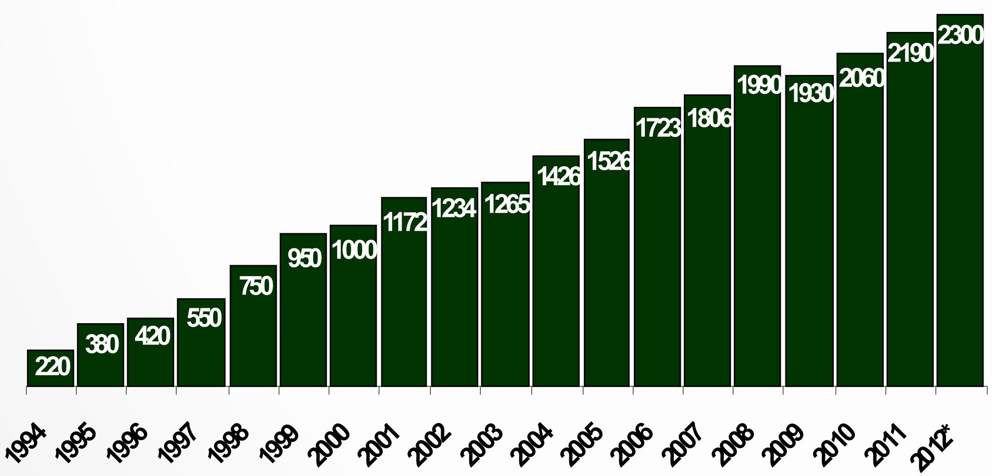


Source: Swine Raisers Association / APCS and Sindirações (data based on Sao Paulo countryside)

Dog and Cat Food

The production of food for dogs and cats increased by 5% in 2011 and reached almost 2,2 million MT, while pet business retailers earned about R$ 10 billion in overall pet food revenues. About half of dogs and cats population is fed industrialized food, although this entire segment already represents 8% of the global pet market estimated at more than U$ 80 billion. The social rising trend of Brazilian families because consistent increase on their income and the clear confirmation of the extension of responsible ownership allow the feed industry forecasts a production of 2,3 million MT in 2012, i.e. an increase over 6%.

DOG AND CAT FOOD EVOLUTION thousand tons)



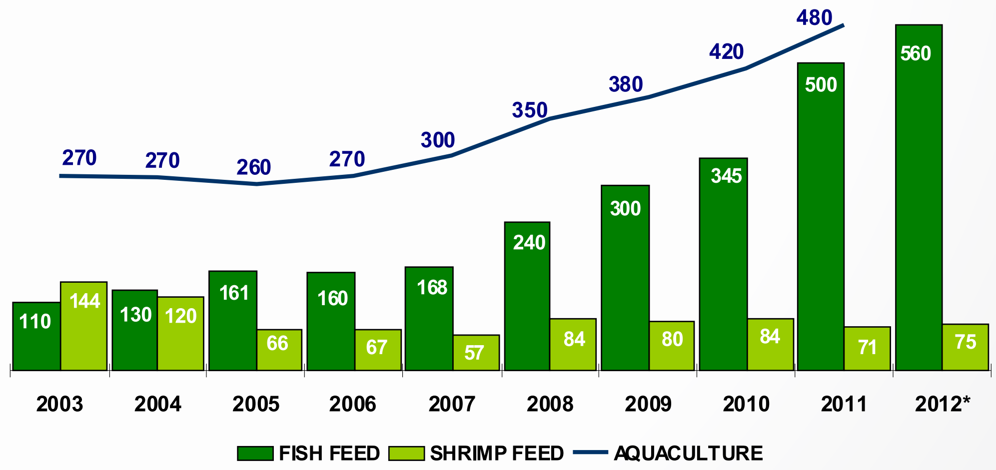
Source: Sindirações
**Forecast*

Fish and Shrimp Feed

The demand for fish feed in 2011 was 500 thousand MT, representing a 43% growth rate over 2010, in response to increasing continental fish production. The marine segment, however, revealed far less productive because shrimp industry fell to 71 thousand tons, impacted negatively by health challenges, trade embargoes, global price reduction, environment licensing bureaucracy and industry unable to invest appropriately in technology and more productive and sustainable farming systems. In response, the consumption of shrimp feed dropped almost 17% and ended 2011 with just 70 thousand MT.

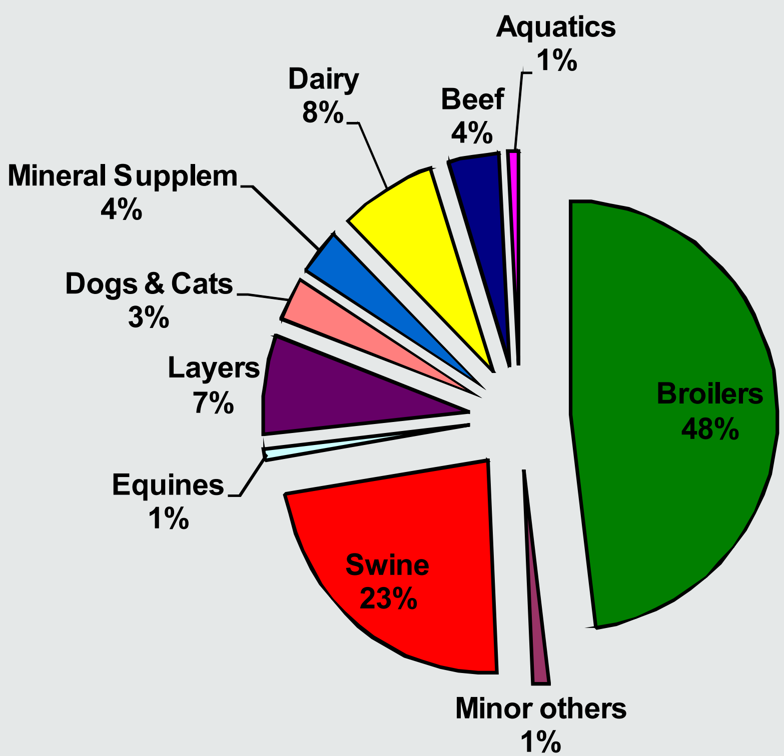
The feed industry perspective for 2012 is to produce 560 thousand MT of fish feed and not more than 75 thousand MT of shrimp feed.

EVOLUTION OF AQUACULTURE BUSINESS IN BRAZIL (thousand MT)



Source: Sindirações
**Forecast*

Feed Intake by Species in 2011



Source: Sindirações

Feed Consumption and Forecast - 2011/2012

FEED PRODUCTION (million MT)			
SEGMENT	2011	2012*	% 11/12
POULTRY	37,2	38,3	3,1
Broilers	32,2	33,2	3,1
Layers	5,0	5,1	2,9
SWINE	15,44	15,45	0,1
CATTLE	7,8	8,1	3,7
Dairy	5,1	5,2	2,7
Beef	2,7	2,9	5,6
DOGS & CATS	2,17	2,30	6,1
EQUINE	0,59	0,61	4,2
AQUA	0,57	0,64	11,4
Fish	0,50	0,56	12,0
Shrimp	0,070	0,075	7,1
OTHERS	0,80	0,84	5,0
TOTAL LIVESTOCK FEED	64,6	66,2	2,5
MINERAL SUPPLEMENTS	2,35	2,58	9,8
OVERALL	66,9	68,8	2,8

Source: Sindirações
** Forecast*

Feedstuffs Demand and Forecasts 2011/2012

	FEEDSTUFFS - Metric Tons																	
	BROILERS		LAYERS		SWINE		DAIRY		BEEF		OTHERS		FEED		SUPPLEMENTS		TOTAL	
	2011	2012*	2011	2012*	2011	2012*	2011	2012*	2011	2012*	2011	2012*	2011	2012*	2011	2012*	2011	2012*
CORN	19126966	19576624	3049530	3110521	9680560	9686830	1607035	1636955	646387	682099	2567970	2731154	36678446	37424181	0	0	36678446	37424181
SOYBEAN MEAL (46%CP)	7321636	7549016	975657	995171	2906426	2908308	611155	623139	180581	190613	338076	359559	12333531	12625806	0	0	12333531	12625806
WHEAT and by-products	161000	166000	55011	56112	618526	618927	917973	935973	226800	239400	249597	265458	2228908	2281870	0	0	2228908	2281870
MEAT AND BONE, FEATHER MEAL & FAT	3639244	3752264	240049	244850	928870	929472	0	0	0	0	316616	336736	5124780	5263322	0	0	5124780	5263322
SORGHUM	760340	783953	0	0	681175	681616	0	0	490564	517818	218268	232138	2150347	2215525	0	0	2150347	2215525
COTTON MEAL 40%	0	0	0	0	0	0	518126	528285	512187	540642	36287	38593	1066600	1107520	0	0	1066600	1107520
CALCARIUM	251160	258960	450093	459095	236257	236410	146366	149236	102600	108300	60541	64388	1247016	1276388	0	0	1247016	1276388
CORN FEED MEAL (21%)	86787	89483	1175	1199	0	0	289711	295391	122313	129108	170423	181253	670409	696433	0	0	670409	696433
CORN GLUTEN MEAL (60%)	161000	166000	1280	1306	0	0	739	754	138	145	35064	37292	198221	205497	0	0	198221	205497
DICALCIUM PHOSPHATE	214200	365200	100021	102021	30964	30984	25499	25999	21600	22800	12477	13270	404761	560274	794300	870906	1199061	1431180
SALT	122360	126160	17504	17854	51091	51124	25499	25999	18900	19950	14769	15707	250122	256794	672100	736921	922222	993715
CALCIUM CARBONATE & SULFATE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	152985	167740	152985	167740
UREA	0	0	0	0	0	0	51000	52000	51300	54150	0	0	102300	106150	161798	177403	264098	283553
BY PRODUCTS FROM RICE, SOY, SUGAR CANE, CITRUS	96600	99600	69982	71381	154821	154921	875115	892274	315900	333450	83199	88486	1595617	1640113	513474	562996	2109091	2203109
L-LYSINE HCL	63434	65404	9661	9854	18528	18540	0	0	0	0	1416	1506	93039	95305	0	0	93039	95305
METHIONINE	64400	66400	10144	10346	9264	9270	0	0	0	0	1658	1763	85466	87780	0	0	85466	87780
DAIRY BY-PRODUCTS	0	0	0	0	54466	54501	11512	11738	0	0	0	0	65978	66239	0	0	65978	66239
BLOOD PLASMA	0	0	0	0	6043	6047	0	0	0	0	0	0	6043	6047	0	0	6043	6047
PREMIXTURES	130875	134938	19943	20329	63009	63050	20270	22257	10729	11524	16640	17697	261465	269795	58402	64035	319867	333830
TOTAL	32200000	33200000	5000000	5100039	15440000	15450000	5100000	5200000	2700000	2850000	4123000	4385000	64563000	66185000	2353059	2580000	66916059	68765000

Source: Sindirações
** Forecast*

Additives Demand and Forecast 2011/2012

	ADDITIVES - Metric Tons																	
	POULTRY						CATTLE											
	BROILER		LAYER		SWINE		DAIRY		BEEF		OTHERS		FEED		SUPPLEMENTS		OVERALL	
NUTRITIONAL ADDITIVES	2011	2012*	2011	2012*	2011	2012*	2011	2012*	2011	2012*	2011	2012*	2011	2012*	2011	2012*	2011	2012*
VITAMINS	24790	25560	3905	3983	8529	8535	5499	6038	3417	3670	5578	5932	51718	53718	0	0	51718	53718
Vitamin A (1000000 IU/kg)	272	280	27	28	109	109	59	65	32	34	46	49	545	565	0	0	545	565
Vitamin D3 (500000 IU/kg)	128	132	10	10	56	56	16	18	9	9	15	15	233	240	0	0	233	240
Vitamin E (50%)	2085	2150	207	211	472	473	229	251	489	525	697	742	4180	4352	0	0	4180	4352
Vitamin K3 (52%)	150	155	10	10	100	100	0	0	0	0	0	0	260	265	0	0	260	265
Vitamin B12 (0,1%)	160	165	29	29	368	368	0	0	0	0	108	115	665	678	0	0	665	678
Riboflavin B2 (80%)	153	157	15	16	82	82	0	0	0	0	35	37	285	292	0	0	285	292
Thiamine (B1)	54	56	2	2	27	27	0	0	0	0	5	5	88	90	0	0	88	90
Piridoxin (B6)	71	73	7	7	21	21	0	0	0	0	27	28	125	129	0	0	125	129
Biotin (2%)	120	123	0	0	104	104	0	0	0	0	3	3	227	231	0	0	227	231
Vitamin C (35%)	99	102	10	10	30	30	0	0	0	0	146	155	285	298	0	0	285	298
Nicotinic Acid	736	758	92	94	367	367	0	0	0	0	316	336	1510	1555	0	0	1510	1555
Pantothenic Acid (98%)	458	472	46	47	182	182	0	0	0	0	94	100	780	801	0	0	780	801
Folic Acid (98%)	13	13	1	1	18	18	0	0	0	0	4	4	35	36	0	0	35	36
Choline Choride	20292	20923	3450	3519	6593	6597	5195	5704	2888	3102	4082	4341	42500	44186	0	0	42500	44186
TRACE MINERALS	7190	7413	1225	1250	4085	4088	3230	3547	1720	1847	1077	1146	18527	19290	58402	64035	76929	83325
Iron Sources	2154	2221	367	374	1224	1225	968	1063	515	553	322	342	5550	5778	0	0	5550	5778
Cobalt Sources	19	20	3	3	11	11	9	10	5	5	3	3	50	53	280	306	330	359
Cupper Sources	948	978	162	165	539	539	426	468	227	244	142	151	2443	2544	5707	6257	8150	8801
Iodine Sources	25	25	4	4	14	14	11	12	6	6	4	5	64	66	256	281	320	347
Manganese Sources	1448	1493	247	252	823	824	651	714	346	372	217	231	3733	3886	5917	6488	9650	10374
Zinc Sources	2586	2666	441	450	1469	1470	1162	1276	619	664	387	412	6664	6938	15736	17254	22400	24192
Selenium Sources	9	9	2	2	5	5	4	5	2	2	1	1	23	24	56	61	79	85
Magnesium Sources	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10650	11677	10650	11677
Sulfur Sources	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19800	21710	19800	21710
AMINOACIDS	9246	9533	0	0	13864	13873	0	0	0	0	0	0	23110	23406	0	0	23110	23406
Threonine	9246	9533	0	0	10554	10561	0	0	0	0	0	0	19800	20094	0	0	19800	20094
Triptophan	0	0	0	0	3310	3312	0	0	0	0	0	0	3310	3312	0	0	3310	3312
ZOOTECHNICAL ADDITIVES	4889	5041	739	752	3552	3555	1166	1280	312	335	724	770	11383	11733	0	0	11383	11733
Enzymes	2132	2198	302	307	1041	1042	665	730	0	0	209	223	4349	4500	0	0	4349	4500
Growth Promoters	2473	2550	422	430	1405	1406	0	0	0	0	350	372	4650	4758	0	0	4650	4758
Pre/Probiotics	284	293	16	16	1106	1107	501	550	312	335	165	175	2384	2476	0	0	2384	2476
TECHNOLOGICAL ADDITIVES	26493	27315	4545	4636	15279	15289	5906	6485	2943	3161	4134	4397	59300	61283	0	0	59300	61283
Conservants	12194	12573	2107	2149	7076	7081	2766	3037	1366	1467	1990	2117	27500	28424	0	0	27500	28424
Antioxidants	8851	9125	1514	1544	5122	5125	1943	2133	994	1067	1377	1465	19800	20460	0	0	19800	20460
Mycotoxin Binders	5448	5617	924	943	3081	3083	1198	1315	583	626	767	815	12000	12399	0	0	12000	12399
SENSORIAL ADDITIVES	0	0	0	0	393	393	0	0	0	0	1007	1071	1400	1464	0	0	1400	1464
COCCITIOSTATS	27200	28045	4800	4896	0	0	0	0	0	0	0	0	32000	32941	0	0	32000	32941
TOTAL ADDITIVES	99807	102906	15215	15517	45703	45733	15801	17350	8391	9013	12520	13315	197438	203835	58402	64035	255840	267870
CARRIERS	31066	32031	4728	4811	17306	17317	4469	4907	2338	2511	4120	4382	64027	65958		0	64027	65958
PREMIXTURES	130873	134938	19943	20329	63009	63050	20270	22257	10729	11524	16640	17697	261465	269795	58402	64035	319866	333830

Source: Sindirações
** Forecast*