

Opportunities for animal fats and proteins in Asia

The opportunities are endless – Asia and particularly China is still in a massive growth phase. Simple end of story.

I think we will retitle this paper Is there opportunities for our animal fats and proteins in Asia when we move past our current stage of trade restrictions bought about by the assocoation of animal proteins in particular meat and bone meal with BSE.

I would like to examine this in 3 parts

1. Is there opportunity
2. How do we make the most of such opportunities
3. How does this impact on the Australian market

Is their opportunity

Animal Proteins

Many parts of Asia have been impacted by both regulatory and consumer perspective issues – e.g Japan no MBM , increasing regulations being proposed for tallow, and some consideration being given to possible import of poultry products from some origins. Issues with MBM to be excluded from diets of some seafood products.

Phillipines – MBM banned with reasons of lack of intra country control given as a reason.

These regulations continually hanging over the head of the global rendering industry will be a restrictor to our opportunities and a subject I shall discuss further in the next section

On a broad sense we will look at Australia 2 biggest markets for animal proteins Indonesia and China and how this market is currently being serviced.

I have a view that the world “proteins for feed” market is a massive jigsaw puzzle From some historical numbers I have assumed that we are looking to see if we can find a home for 1000000 Tons of animal protein out of Europe &/or USA into Asia and where can it go.

Some statistics for us to ponder

Chinese Meat Output Poultry

(10,000 Metric Tonnes)

	2000	2001	2002	2003	2004
National Total	1287	1310	1359	1312	1351
% Annual Change		1.79%	3.74%	-3.46%	3.01%

Chinese Pork Output

(10,000 Metric Tonnes)

	2000	2001	2002	2003	2004
National Total	4031	4185	4327	4519	4702
% Annual Chng		3.82%	3.39%	4.44%	4.04%

Source: 2000-2004 China National Statistics Bureau

China Egg Production

10,000 Metric Tonnes

	2000	2001	2002	2003	2004
National Total	2243.7	2336.7	2462.7	2606.7	2723.7
% Change		4.14%	5.39%	5.85%	4.49%

2000-2004 China National Statistics Bureau

Freshwater Aquaculture

(1000mt)

	2000	2001	2002	2003	2004
National Total	15134	15951	16930	17743	18921
% Annual Chng		5.40%	6.14%	4.80%	6.64%

2000- 2004 China National Bureau Statistics

Livestock & Aqua products Consumption

Chinese Urban and Rural Per Capita Livestock
and Aqua-Product Consumption (KG)

	Aqua-products		Meat, egg, poultry	
	Urban	Rural	Urban	Rural
2000	9.87	3.92	36.71	22.27
2001	10.33	4.12	34.83	22.93
2002	13.20	4.36	43.08	22.44
2003	13.35	4.65	48.70	23.05

Source: 2004 China Statistical Yearbook

Commercial Feed Production

Source: Asian Agribusiness Research Pte Ltd, Singapore

1/Indonesia

Poultry

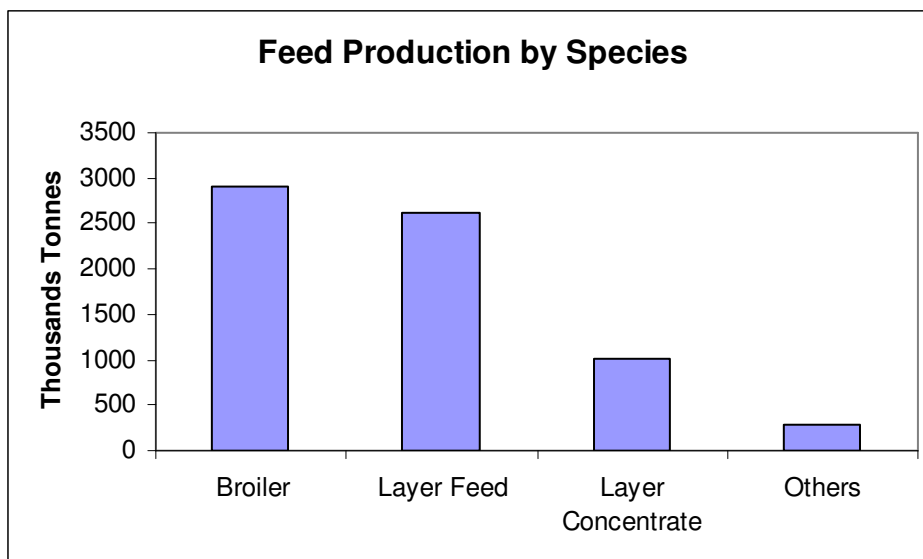
Population	2001	2003	2005
Native Chicken	268,039,058	287,343,618	286,689,454
Layer	70,254,492	85,047,761	98,490,574
Broiler	621,870,428	917,707,229	864,246,136
Ducks	32,068,344	48,119,918	45,316,689

Consumption

Egg	3.29	3.83	4.26
Broiler meat	2.74	3.83	3.51

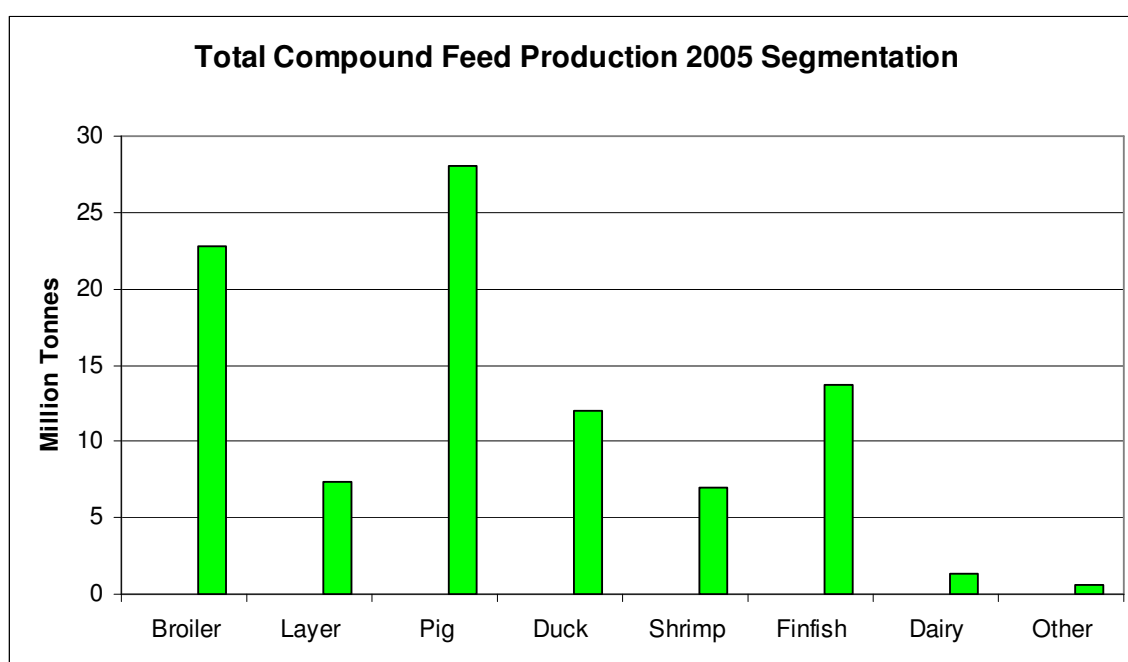
Compound Feed Production 2005

Feed segmentation	000MT
Broiler	2901
Layer Feed	2624
Layer Concentrate	1019
Others	281
Total	6825



China
AAR survey results 2006

Feed Production MMT	AAR est.
Broiler	22.8
Layer	7.3
Pig	28.1
Duck	12
Shrimp	7
Finfish	13.7
Dairy	1.3
Other	0.57
Total	92.77



China Feed Industry Figures quote Total Feed Production in 2005 = 103 Million tonnes

What are they using now?

China Soybeans

03/04 Imported 17 Million tons to go along with production of 15 million tons

04/05 Imported 26 Million tons to go along with production of 17 million tons

Soybean Meal

03/04 Use in China 19.5 Million Tons

04/05 Use in China 23.46 Million Tons

05/06 Use in China 27 Million Tons (Forecast)

Plant: 12 CHINA
 Product: 12-1210 BROILER GROWER

Time: 11:21:17
 User: KEN
 Page: 1

Rounded Trial Formula Cost: 1897.00/Tne 189.70/Ckg 1.8970/Kg Version: 17

INGREDIENT SOLUTION: (Rounded Wt: 1000.00)

IngrCode	Ingredient Name	Amount Kgs	Cost \$/Tonne	Low Range	High Range
290	CORN 7.5% CHINA	522.67	1170.00	1038.00	1740.20
85	SOYA 44%	143.00	2920.00	2714.50	2965.10
91	CANOLA SOL 36%	100.00	1350.00		2008.60
71	RICE POLLARD	100.00	1200.00		1453.10
114	MEAT & BONE MEAL	63.00	3000.00	2971.00	3132.10
170	TALLOW	55.00	3500.00	2891.60	3634.90
125	LIMESTONE 38%	4.000	173.00		486.50
150	LYSINE-HCl	2.600	18730.00	2333.00	22320.00
151	DL-METHIONINE	2.050	22450.00		33936.20
766	BROILER PREMIX	2.000	43000.00		
156	SODIUM BICARBONA	1.750	1200.00	406.00	4185.60
155	SALT	1.650	960.00		2088.30
126	DICAL PHOSPHATE	1.000	1470.00	923.40	1589.80
203	AVATEC	0.6670	63000.00		
164	CHOLINE CHL 60%	0.6150	4600.00		48326.20

NUTRIENT SOLUTION:

No	Nutrient Name	Units	Analysis	Minimum	Maximum
15	ME-Enzyme	kcal/kg	3029.511	3025.000	
20	CRUDE PROTEIN	PCT	18.895		
22	LYSINE	PCT	1.146		
23	METHIONINE	PCT	0.510		
24	MET + CYS	PCT	0.849		
25	THREONINE	PCT	0.695		
26	ISOLEUCINE	PCT	0.697		
27	LEUCINE	PCT	1.476		
28	TRYPTOPHAN	PCT	0.197	0.190	
29	ARGININE	PCT	1.195		
40	T.Dig.Lys.Poult	PCT	0.998	1.000	
41	T.Dig.Met.Poult	PCT	0.479	0.480	
42	T.Dig.M+C.Poult	PCT	0.754	0.755	
43	T.Dig.Thr.Poult	PCT	0.569	0.570	
44	T.Dig.Iso.Poult	PCT	0.609	0.610	
60	CRUDE FAT	PCT	10.486		
62	LINOLEIC ACID	PCT	1.922		
70	CRUDE FIBRE	PCT	4.362		
100	ASH	PCT	6.321		
101	CALCIUM	PCT	0.932	0.850	
102	AV. PHOS	PCT	0.466	0.475	0.600
105	SODIUM	PCT	0.180	0.180	
106	CHLORIDE	PCT	0.240	0.160	0.240
107	POTASSIUM	PCT	0.809	0.800	
162	CHOLINE	MG/KG	1298.391	1300.000	
177	LASALOCID	MG/KG	100.050	100.000	

The question then is can MBM work into these diets, in order to show that yes they can listed below is a formulated broiler feed diet. The costs of product were as they were presented some 12 months ago from participants in the Chinese workshop.

Utilizing this diet as our typical Chinese diet structures and only including the avian species in the calculations China alone has 43 million tons of compounded feed and using a usage of 6.5% gives us a requirement of 2.73 million tons of MBM. Is there opportunity – would surely seems so. And then there is the aquaculture story.

Tallow

Biofuel – Biofuel – Biofuel

I believe that with this market growing at what can only be described as “at a rate of knots” animal fats will look to close the gap with our competing vegetable oils unless we see some massive development of high yielding – big volume – low cost of production crops to be utilized in this demand sector.

How this market is sorted between the oleochemical , soap, fuels/alternate energy industry will be very interesting but in terms of demand creation Australia is set to have demand of some 600000Tons of Biodiesel feedstock by the end of 2007 and with growth in all regions of the world being both market and legislative driven seemingly exponential then our opportunities here are well catered for.

I am going to pilfer a quote from Neville Chandler “the biggest issue for biodiesel is where will all the feedstock come from.”

So how do we make this work.

The issue of what to focus on between fats and proteins points to us needing to focus on the protein phase.

I will go back to my earlier comments about the regulatory and consumer impact issues. It seems like the biggest issue facing the rendered industry is proteins

Regulatory – We need to continue to assist authorities in developing protocols and procedures in order to assist them in ensuring that animal proteins are used in a safe manner within their country. As an industry we must continue to offer information and conduct R&D to achieve this. Some examples of this from which we have had some success are the response to Indonesia last year when presented with a new list of import requirements – this response involved a joint visit of Australian industry and government representatives able to offer alternative suggestions that industry would enable trade to continue whilst delivering the required outcomes.

In recent years we have a study which was requested by our TSE expert committee into feeding and disease transference. There were a couple of interesting issues that I believe we in rendering need to focus on.

1. There has never been a transference of the prion from cattle to poultry
2. Pet food is often excluded from any feedban discussions or consideration

Given the numbers we have shown for broiler growth in China and the general concept that increasing affluence increases pet ownership. This should give us some

ideas for R&D - e.g. how do we translate this information into market access (markers??) and then marketing ideas for our animal proteins

Education

As the commercial production of livestock develops further throughout Asia it will be important that we are able to have all the sellers of our products educated in the nutritional aspects and benefits of the products we are marketing.

As an example of this the ARA undertook some nutrition workshops in China last year – 2 main agenda items

1. Education re our clean green wonderful animal health status
2. Education re diet formulation from a commercial standpoint and the inclusion of MBM

This with the document Australian Meat and Bone technical review has been the start of our education program both domestically and with our customers.

We aim to continue this program and ultimately if we have global suppliers “singing from the same hymn book” in terms of animal product benefits then opportunities and rewards will abound for all.

Marketing

With the exclusion of EU & North American MBM from parts of Asia during recent years our global spend on marketing of animal proteins has been strongly diminished. If as anticipated these restrictions are steadily lifted then my view is we will need an all out focus to market the “Benefits of animal proteins and how they will deliver you value”. In terms of opportunity we have seen examples where some of the major feed companies in China have not used animal proteins in diets purely because they cannot get enough product consistently to enable them to have it consistently in their diets and sadly Australia as a market is simply not a large enough supplier to ensure this can happen.

How does this impact on Australia

1. We would welcome the return of everybody to the market – yes we have benefited from some short term price increases or premiums over some however we have seen some customers go by the wayside because of the lack of guaranteed consistent supply issue.
2. Marketing efforts through collaboration are able to be focused and while our meals may be slightly different in terms of specification the underlying nutritional values will be similar
3. The emergence of volume allows us to refocus on marketing, attract customers and do that wonderful thing of creating demand to assist our prices.

In conclusion

Yes opportunity exists in Asia

Now we have to get ourselves in a position to make the most of it firstly with our regulators and then the market.