

International China Summit – looking for the way forward!

At the recent International China Summit, held during VIV China, Alltech's vice president, Mark Lyons, gave a keynote paper on 'The State of the Global Poultry Industry and Ideas for the Path Ahead'. International Poultry Production attended the Summit and now shares Mark's vision with you.

In essence Mark sees three key challenges facing the poultry industry. These are:

- Changing expectations.
- Resource issues.
- Industry evolution.

The real positive for the global poultry industry is that it is ready to respond to challenges – fast!

The consumer is king

The consumer is king and currently there are seven billion of them and their numbers are increasing. Certain activist groups are targeting intensive agriculture as being unsustainable, however challenges favour intensive production methods and modern technologies. Table 1 shows the predicted changing dynamics of human populations.

We are now in a new era in which world food scarcities increasingly shape global politics.

Historically, the origin of the chicken was in the southeast Asian jungle and chickens were first documented in Asia in the 5th Century BC. They were originally raised for fighting and the Romans regarded them as a delicacy.

Nowadays, they are the cornerstone to backyard farming in many parts of the world because of their ease of rearing.

Until the advent of large scale production

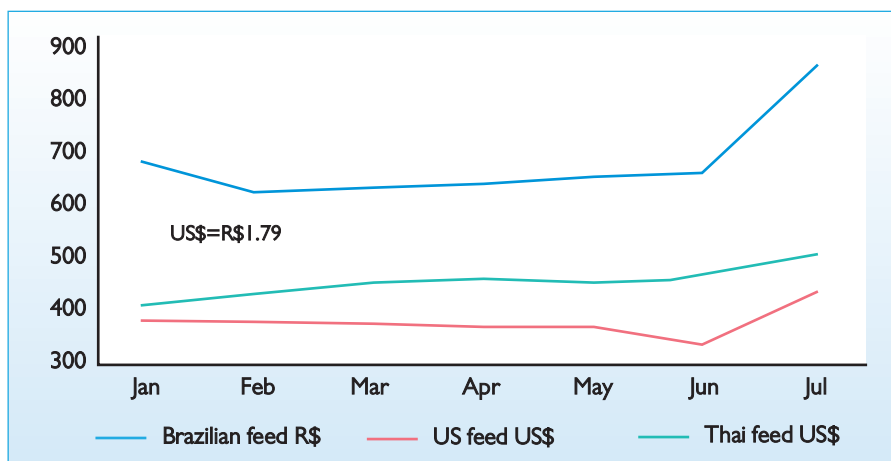


Fig. 1. Estimated feed costs in Brazil and Thailand in 2012 (US\$/MT).

in the 20th century, their economic and nutritional contributions to society were modest.

Integration provided a breakthrough (significant improvement) in FCR and by the early 1990s chicken had surpassed beef as America's most popular meat.

Globally, chicken is a dominant meat

source and in 2004 the map of the chicken genome was completed.

Between 1999 and 2009 there was a 42% growth in chicken production with the highest per capita consumption (49.2kg) in North America. The sale of eggs remains steady in developed economies. It is predicted that over the next 10 years poultry meat production will increase by 29%, while that of eggs will only increase by 16.5%.

Table 2. The status of global water supplies.

Status	People (billions)
Chronically short of water	0.5
No access to safe drinking water	1.1
Under stress due to lack of water	2.4
Without any sanitation	2.6

Rapid growth in fast food

Modern fast food outlets, such as KFC, have had a significant impact on Chinese chicken consumption.

Socio-cultural factors favour animal proteins and the nutritional value of meat can be enhanced, for example, by adding antioxidants, vitamins, organic minerals and omega

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Table 1. The eight largest countries (populations in millions).

2008		2050	
China	1,324	India	1,755
India	1,149	China	1,437
USA	305	USA	438
Indonesia	240	Indonesia	343
Brazil	195	Pakistan	295
Pakistan	173	Nigeria	282
Nigeria	148	Brazil	260
Bangladesh	147	Bangladesh	215

Table 3. Some current (October 2012) base costs.

	Corn (US\$/MT) * = wheat	Soy bean meal (US\$/MT)	Staff cost/month (US\$)
Brazil	250	700	500
USA	315	588	2,000
Thailand	330	750	300
China	400	700	300
Poland	275*	790	920

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3 fatty acids. There are consumer concerns over antibiotic resistance issues and this will result in less use of antibiotics.

When it comes to resources mankind will need 70% more food by 2050 and achieving this will be made harder by the scarcities of water, productive land and sunshine. The water status of the world's population is shown in Table 2.

China currently has 20% of the world's population but only 7% of the world's arable land and its per capita water supply is a quarter of the world's per capita water supply figure.

One way China is trying to redress this is to acquire land elsewhere in the world – for

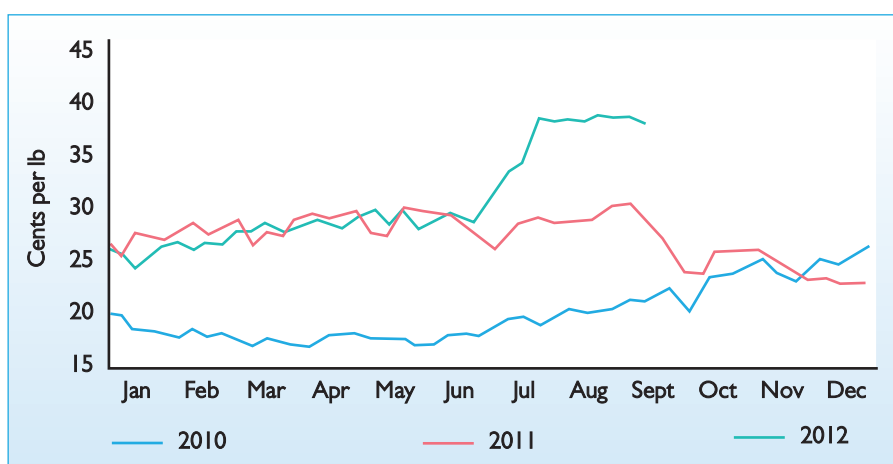


Fig. 2. Estimated chicken feed costs.

example China recently tried to buy five million hectares in the Philippines and purchased 6.5 million hectares in Madagascar.

In 2012 50% of the USA's corn crop was used in ethanol production and globally 25% of grain is expected to become some sort of biofuel!

When it comes to harvests a fortnight is a long time – on 3rd June 2012 the Americans were forecasting their best ever harvest and after storms on 17th June they were forecasting their worst harvest in 30 years! Predicted feed costs around the world is shown in Fig. 1 and its impact on American chicken feed costs is shown in Fig. 2. The net effect of this being live cost in the North American broiler sector at record levels. This also impacts on various national industries' base costs – see Table 3.

Currently, global feed production is 873 million tonnes and poultry feed represents 44% of this figure.

Recipe for financial discomfort

Over the last six months our industry has seen large rises in costs (feed), while this has not been reflected in the prices it receives for poultry products – a recipe for financial discomfort. As a consequence, the industry has exercised restraint when it comes to placing breeding stock. Fig. 3 shows the situation in the USA, while Table 4 shows global parent stock market sizes for white feathered chickens.

Where the real problem lies is in squaring the circle. This is shown in Table 5, which summarises the problem.

Table 4. Global parent stock markets.

Region	Parent stock (millions)
North America	78.5
South America	95.9
Europe	82.3
Middle East and Africa	67.8
Asia and Australasia	132.7

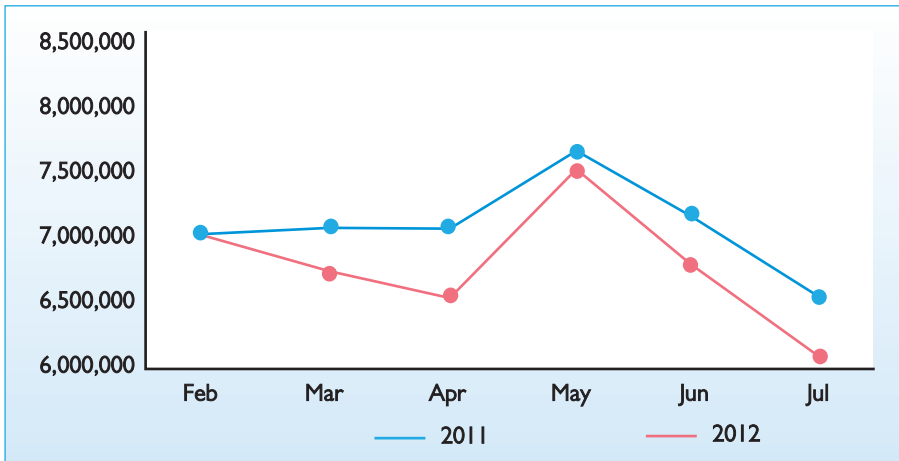


Fig. 3. USDA breeder placements compared to previous year February through July.

Globalisation of animal production enterprises is another topical issue with Brazilian companies buying into the USA and Europe and US companies acquiring operations in Brazil, India and China.

This, in effect, means that Brazilian and USA companies are driving the global consolidation process in the meat industry.

Recent large scale poultry acquisitions have included those made by Bachoco, JBS, Peco, Harim Group from South Korea and MB.

What lies ahead?

So, where do we go from here? In answering this question we need to consider alternatives, technologies, consumer response and branding. The future will require:

- Integrated thinking.
- Movement beyond commodity, bulk and price driven production behaviour.
- Reducing the genetic gap so that what is actually achieved is closer to the genetic potential.
- Demonstrably better products.
- Continued genetic improvements.

Mark Lyons was adamant that we can not solve tomorrow's problem with today's thinking!

As feed makes up 65-75% of our production costs this is where we should focus our attention. To do this we need to address the following questions:

Table 5. The problem! Population vs. crops as percentages.

Region	Pop.	Corn	Wheat	Soy
N. America	7.8	44.8	13.3	42.7
S. America	5.8	9.2	2.5	42.6
Europe	11.9	10.8	36.4	1.2
Africa	15.1	7.0	3.8	0.8
Asia	55.9	27.8	37.8	12.4
Oceania	0.4	0.1	3.2	0.0

How do we use fibre? How do we use wheat and other grains? Does the future lie in heterotrophic algae production? Can we use technology to programme young animals to use their nutrients more efficiently? Will brands hold all the power in the marketplace?

Mark then concluded with three thought provoking statements:

- Poultry must not be a victim of its own success. It may struggle with industry challenges but it is better placed than other proteins to thrive.
- An integrated approach is the best approach for solving challenges.
- Poultry must enhance itself in brand as well as in consumer perception. ■