SECTOR BRIEFING

## **Appetite for Animal Protein** An Overview of Business Models, Opportunities and Strategies





## Indonesia's Growing Appetite for Animal Protein

An Overview of Business Models, Opportunities and Strategies

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Indonesia's burgeoning middle class – and young population – are transforming the animal protein industry. Currently generating about US\$21 billion in sales annually, the industry is expected to grow rapidly as the country has relatively lower meat consumption per capita compared to other Southeast Asian countries. And Indonesians are developing a taste for meat as their incomes rise and dietary preferences change.

As they consume more meat products – from poultry and fish to by-products like yoghurt and cheese – suppliers big and small will be jostling one another to capture some of that demand.

Meanwhile, integration and overcapacity remain barriers to entry. The sector is currently dominated by a few players that have in place a vertically integrated model and an efficient distribution network throughout the Indonesian archipelago. This structure should remain unchallenged until breeding margins pick up significantly. And over-investment in recent years would remain a deterrent for new entrants for some time, in our view.

In this report, we examine opportunities in the animal protein industry by evaluating the size of the overall market, delving into the various segments, and analysing the competitive landscape. We also consider issues such as barriers to entry, regulations, and costs.

The current beef deficit in Indonesia offers an opportunity for Indonesian oil palm planters to enter the business, subject to commitment, suitability, and profitability

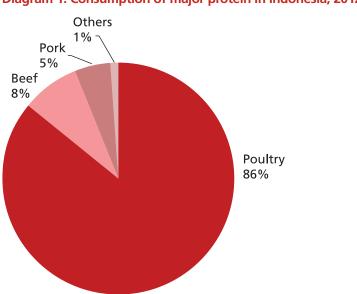


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## **Industry Overview** What's It Worth?

Indonesia's animal protein industry, as a whole, is estimated to generate around US\$21 billion in sales annually<sup>1</sup>. Poultry accounts for over half of the sales at US\$11 billion, followed by beef at US\$6 billion, aquaculture at US\$3 billion, and dairy at US\$1 billion.





Frost & Sullivan's research revealed that Indonesia still has relatively lower meat consumption per capita compared to other Southeast Asian countries. However, demand is rapidly increasing. Data from the Indonesian Ministry of Agriculture suggests that per capita protein consumption has increased to 8kg in 2012 from 4.8kg in 2009, representing a compound annual growth rate (CAGR) of 18.6%. The projections done by Frost & Sullivan also indicate strong demand expansion over the next three years.

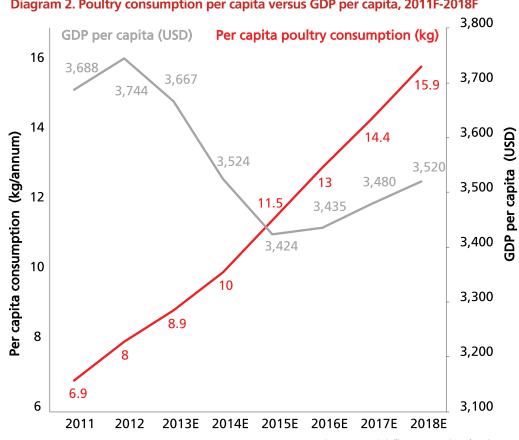
#### **Poultry: Leading the Pack**

According to Frost & Sullivan<sup>2</sup>, poultry meat is a leading source of protein in Indonesia, accounting for approximately 87% of total meat consumption. Affordability and dietary restrictions (88% of the population are Muslims) explain the significant share. Beef is not as popular as it is more expensive. A minority of the population also consume pork as their major protein because of its taste and affordability.

Indonesia has one of the lowest GDP per capita among Southeast Asian countries. In 2014, it dropped to US\$3,524 – mainly reflecting the Indonesian rupiah's depreciation against the US dollar. As our DBS Indonesian economist expects GDP to rebound and the rupiah to stabilise in 2016, poultry meat consumption should also increase.



Source: Frost & Sullivan





Source: Frost & Sullivan, IMF, DBS Bank estimates

The processed food segment for poultry products represents a growing opportunity in a relatively resilient segment. Euromonitor<sup>3</sup> estimates that the frozen poultry processed food market would grow at a CAGR of 8% between 2015 and 2019. Frozen processed poultry is estimated to continue to make the largest contribution towards frozen processed food over the forecast period, as well as register the fastest growth. According to Euromonitor, frozen poultry food experienced 10.4% CAGR volume growth between 2009 and 2014.

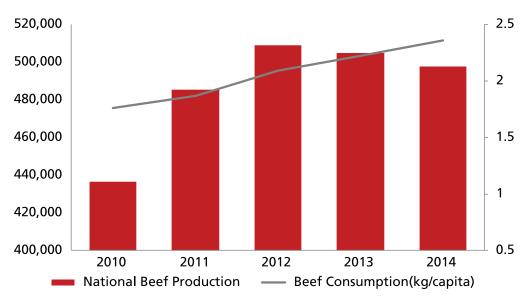
#### **Beef: High Cost Dampens Appetite**

Frost & Sullivan estimated the Indonesian beef industry, by sales value, was worth 56.2 trillion rupiah in 2013. Since 2009, the industry's sales value has grown by 18.7% CAGR; although in volume terms, the industry has expanded by 10.1% CAGR over the same period.

In 2012, beef accounted for about just 8% of overall meat consumption in Indonesia; about 13.3% of beef consumption is met by direct imports. As the meat is more expensive, it is not as popular as poultry and therefore mostly consumed during major religious festivals such as the Eid.

Beef is mostly consumed during major religious festivals such as the Eid





#### Diagram 3. Beef consumption per capita versus total production, 2010-2014

Cattle feed made up less than 3% of the whole animal feed industry in 2010, according to Frost & Sullivan. The major feed ingredients are cassava, rice bran, wheat polar, wheat bran, molasses, coconut cake, and soybean meal. Like poultry feed, the majority of the raw materials for cattle feed are imported and make up 85% of feed cost. This in turn drives up the cost of beef feed.

Feeder imports are regulated by quotas, but this system is plagued with price spikes. A drop in the 2015 September quarter's quota to 50,000 from 250,000 in the 2015 June quarter led to beef prices spiking up in September 2015 due to insufficient domestic supply.

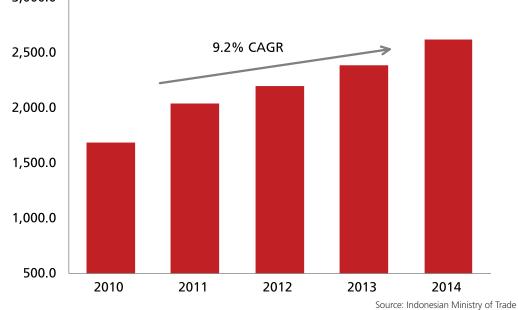
#### Shrimp: Mainstay of Aquaculture

Indonesia's main fishery export is shrimp, which is suitable for cultivation. Other forms of aquaculture include freshwater fish such as tilapia and pangeus. Indonesia is one of the largest exporters of shrimp; filling the void left by the outbreak of early mortality syndrome in China in 2009, Vietnam in 2010, Malaysia in 2010, Thailand in 2012, and Cambodia in 2013. According to industry sources, the Thai shrimp farming industry has largely recovered, but only up to 70% of pre-outbreak volume.

According to the Indonesian Ministry of Trade, the country's fish and shrimp export value grew by 9.2% CAGR between 2010 and 2014, while Global Aquaculture Alliance, a non-profit trade association, projected in 2013 that Indonesia's shrimp cultivation will expand by 10.7% CAGR between 2012 and 2015.



Source: Frost & Sullivan



## **Diagram 4. Fish and shrimp exports, 2010-2014, US\$m** 3,000.0

#### **Dairy: Dependence on Imports**

The economic development of a country determines its level of dairy consumption. According to Frost & Sullivan, growth drivers for the dairy industry in Indonesia are based on a combination of social and economic factors leading to strong purchasing power, a growing population, and rising urbanisation. Better health awareness and improved distribution networks are also key driving forces in the overall development of the dairy industry.

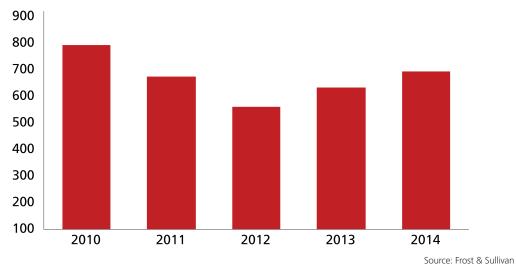


Diagram 5. Total dairy production volume, k MT



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Expanding domestic milk output has become one of Indonesia's national objectives

Indonesia relies heavily on imports, mainly from Australia and New Zealand, to meet its demand for dairy products. In 2013, approximately 83% of the dairy products consumed were imported. Expanding domestic milk output has therefore become one of Indonesia's national objectives as it seeks to reduce its dependence on imports.

Generally, dairy cows prefer a cool and dry climate to a warm and humid one. At higher elevations, Java is suitable for dairy farming. In 2013, almost 99% of dairy cows in Indonesia were located in Java, with more than 50% in East Java.

#### **Understanding the Business**

The animal protein industry derives the majority of its cash flow from sales of poultry feed, which has fixed gross margins of 10-15%, ignoring raw material price movements. Feed sales volumes expanded by about 4% CAGR between 2012 and 2015, and it is expected to grow 5% CAGR between 2015 and 2018. This is principally led by population growth and a shift in consumption patterns due to urbanisation and rising income.

Poultry feed is typically paired with day-old chicks (DOCs), when sold to grow-out farmers (i.e. covering both independent and partnership formats), who in turn sell the live broilers to large distributors, directly to wet markets, or back to the protein producers' slaughter houses.

An analysis of estimated gross profit from the companies in this sector revealed that cash flow from sales of feed remains the backbone, while sales of DOCs and broilers are generally unpredictable and volatile.



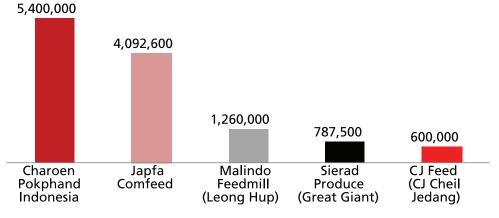
## The Players

#### **Poultry Feed's Competitive Landscape**

Like other countries throughout Asia, production of animal protein in Indonesia is dominated by a few large integrated regional companies. Their regional presence enables them to take the most efficient model and apply it in different localities, while mid-size producers, primarily, have a domestic presence.

Indonesia's poultry feed capacity as at the end of 2014 is estimated at 15 million metric tonnes. The space is dominated by the top four players, Charoen Pokphand Indonesia, Japfa Comfeed Indonesia, Malindo Feedmill, and Sierad Produce, which have a combined market share of around 80%.

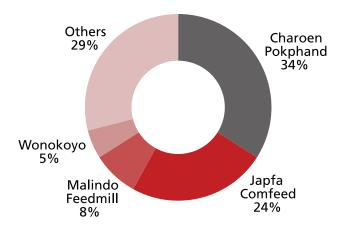
#### Diagram 6. Poultry feed capacities of largest players, 2014, MT



Source: Companies, DBS Bank estimates

Integrated players such as Charoen Pokphand Indonesia, Japfa Comfeed Indonesia, and Malindo Feedmill have three channels to sell their feed: Internal sales, partnership, and open market sales.

#### Diagram 7. Poultry feed market share, 2014



Source: CPIN company presentation



Over time, the larger groups have gained market share at the expense of smaller players. We believe the transformation is a function of scale and efficiency, as consumer demand expanded rapidly and tastes and preferences shifted. We expect this trend to continue.

#### **Poultry Breeding's Competitive Landscape**

The top five players in DOC breeding control approximately 84.7% of the industry's total parent stock population, also indicating concentration within the industry. The oversupply issues since the 2014 September quarter had pushed DOC prices lower, although they have started to recover since the 2015 June quarter. We understand smaller farmers started exiting this business in the 2014 December quarter by putting their farms up for sale to the bigger players. However, by the 2015 June quarter, the recovery in DOC prices prompted many smaller farmers to stick it out.

Company	Est. parent stock	Share
Charoen Pokphand I'sia	17,734,356	50.6%
Japfa Comfeed I'sia	6,408,108	18.3%
Bibit Indonesia (Malindo)	2,620,800	7.5%
CJ Feed + Patriot	1,782,000	5.1%
Wonokoyo	1,149,120	3.3%
Taat Indah Bersinar	1,008,720	2.9%
Hybro Indonesia	936,000	2.7%
Missouri	843,840	2.4%
Cibadak Indah Sari Farm	840,924	2.4%
Expravet Nasuba	625,680	1.8%
Reza Perkasa	516,708	1.5%
Satwa Borneo Jaya	432,000	1.2%
Karya Indah Pertiwi	180,000	0.5%
Total	35,078,256	100.0%
Top 5 Share		84.7%

#### Diagram 8. Industry parent stock (PS) population estimate, 2015

Source: Tempo Magazine

#### **Cow Feedlot's Competitive Landscape**

There are roughly 30 importers of live feeders into Indonesia. Among the largest are Santosa Agrindo, Santori, and Austasia Stockfeed – all part of Japfa group, Great Giant Livestock, and Pasir Tengah. Feeders for intensive fattening have historically been imported primarily from Australia, given the close proximity and the fact that it remains free of foot and mouth disease (FMD).



It typically takes 90 to 180 days for feeders to reach the desired weight of 500-600kg from 250kg when imported. The local cow population is typically slaughtered at only 170kg (basis for government's calculation of local beef demand).

In addition to having industrial-scale feedlots in Indonesia, importers have also been acquiring Australian ranches; Japfa now owns 555,000 hectares, while we understand Great Giant Livestock has 200,000 hectares.

#### Diagram 9. Top feeder importers based on December quarter 2015 quota

Company	Group	Import quota (heads)
PT Pasir Tengah	Widodo Makmur	22,400
PT Great Giant Livestock	Gunung Sewu	20,800
PT Santosa Agrindo	Japfa Comfeed	10,800
PT Agrisatwa Jaya Kencana	Independent player	8,800
PT Agro Giri Perkasa	Consolidated Pastoral	8,540
PT Sadajiwa Niaga Indonesia	Independent player	8,000
PT Austasia Stockfeed	Japfa Comfeed	7,200
PT Citra Agro Buana Semesta	Independent player	5,600

Source: Kontan Newspaper

#### Aquaculture's Competitive Landscape

Shrimp farming is the mainstay of aquaculture in Indonesia, and is dominated by Central Proteina Prima, which also has a significant share – 52-55% – in Indonesia's aquaculture feed sector. It also controls 40-42% of the market in fish feed and 55-60% of the market in shrimp feed. Japfa Comfeed also has aquaculture operations, although the scale is insignificant relative to Japfa's entire operations.

#### **Dairy's Competitive Landscape**

#### Cheese

According to Euromonitor, Kraft is the dominant leader in Indonesia, accounting for 61% of total sales in 2014. It entered the market early, has a wide range of products and advertises them aggressively.



#### **Drinking milk**

According to Euromonitor, drinking milk products in Indonesia is dominated by five players: Nestle, Frisian Flag, Ultrajaya, Indolakto, and Fonterra, which together control 78% of the market. However, competition is also intensifying, with various up-and-coming producers such as Kalbe Farma, Nutrifood Indonesia, Danone Dairy Indonesia, Sari Husada, and Greenfields Indonesia (Japfa) emerging.

#### Yoghurt

According to Euromonitor, the two main players in the yoghurt market are Yakult Indonesia Persada and Danone Dairy Indonesia. In 2014, Yakult Indonesia commanded 38% market share while Danone Dairy controlled 34%.

#### **Other dairy products**

According to Euromonitor, Frisian Flag Indonesia and Indolakto remain the leading players in this category. Frisian Flag Indonesia with its Frisian Flag brand registered a share of 35% in 2014 (based on sales value), closely followed by Indolakto, with its brands Indomilk and Enaak accounting for 34%. Nestlé Indonesia sits in third position with a share of 16%.

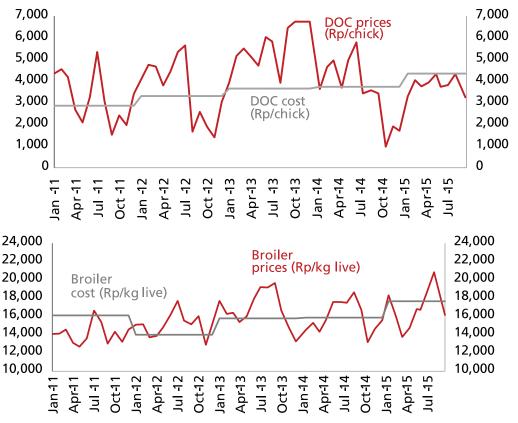


## **Drivers of Demand, Supply and Prices** The Battle For Market Share

It is not hard to see Indonesia's young population and expanding middle class as the prime target markets for animal protein producers. Because GDP per capita is still relatively low, demand for animal protein fluctuates with income, as is the case in most emerging markets.

Yet, despite a myriad of regulations designed to match supply and demand, the plunge in DOCs and live broiler prices in 2014-2015 revealed that demand has lagged the overinvestment in capacity over the last few years, resulting in losses for independent poultry farmers across the country.

The Indonesian poultry industry's established networks are supported by the producers' ability to push for the lowest possible food conversion ratio (FCR) and the most efficient transportation model (though not the lowest) throughout the archipelago. We believe the prevailing market – and over-capacity in DOC production – favours the current structure, which is dominated by a few efficient players. Potential new entrants would find this a deterrent for years to come.



#### Diagram 10. DOC prices vs. cost of production, 2011 – 2015, rupiah per bird

Source: Pinsar, Arboge.com, DBS Bank estimates





#### **Poultry: Marked by Volatility**

Most of Indonesian poultry producers' revenue comes from sales of DOCs and broilers. Poultry breeders generally rely on large distributors for their DOC output. These distributors typically broadcast DOC prices from various breeders, take orders, and pick up and deliver the DOCs to farmers for roughly 200 rupiah per chick.

Both DOCs and broiler prices have historically been volatile due to seasonal factors. Retail prices in wet markets also depend on middlemen, who buy live broilers from farmers (i.e. at farm-gate prices) and deliver them to the retailers (i.e. wet markets). These middlemen serve a crucial role in distribution and, as a result, end up controlling retail prices. Efforts by large commercial farms to sell their goods directly have been unsuccessful due to uncompetitive practices.

Over the past two years, supply has outpaced demand, causing DOC prices to plummet. A combination of over-investment (i.e. over-importation of grandparent stock (GPS), despite being regulated by the government's quota system) and weaker purchasing power (lower commodity prices, higher cost of living due to subsidy removal, and a weaker rupiah) led to an oversupply of DOC by 20-30% in 2014. DOC oversupply in 2015 would have reached 30-40% if there was no culling of parent stock. To address the oversupply, most breeders had discarded 10-40% of their unhatched DOC eggs to prevent prices from collapsing any further.

The Indonesian Breeder Association (GPPU) estimated that there will be total stock of 3.3 billion DOC broilers this year, against domestic demand of only 2.4 billion, implying that the industry is oversupplied by about 35%.

#### Addressing Oversupply

In early 2015, the government cut the GPS import quota by 8% to 665,000 units. However, the impact of this reduction is unlikely to be felt until the December quarter of 2015, at the earliest. Industry sources reckon that total DOC production may drop by 20-30% in 2016, as a result of this regulation. To address the oversupply in early 2015, most breeders had already discarded 10-40% of unhatched DOC eggs, while Japfa had also culled its non-performing parent stock (PS) to cut losses.

Following an independent survey undertaken by the Agriculture Ministry in August 2015, the government mandated a cull of six million parent stock in September 2015 – of which 50% was assigned to market leader Charoen Pokphand Indonesia. Physical culling of about two million PS took place in late October 2015, and another two million in December. The culling of the remaining two million is expected to take place during the early months of 2016.



#### **Poultry Feed**

Poultry feed supply is driven by capacity expansion, which is turn is based on demand from distribution areas. Generally, new capacity of 300 metric tonnes per day, or roughly 90,000-100,000 metric tonnes per annum, would be added whenever existing capacity exceeds 80%. Demand is also gauged by the expansion undertaken by competitors. On the other hand, demand expansion comes from rise in farmer numbers from year to year.

The poultry feed business works on a "cost plus margin" model, using mostly imported raw materials. Hence, import cost and the rupiah rate dictate local feed prices. Recent government policy restricting corn imports also made domestic corn more expensive than imported corn. To be competitive, feedmills generally must:

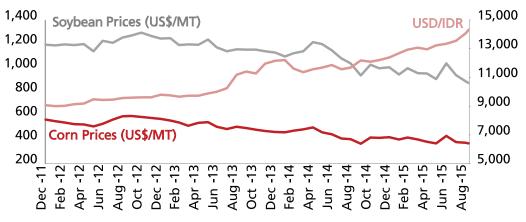
- 1. be located near corn producing regions and seaports
- 2. have low FCR
- 3. package their sales with DOC

It costs US\$7 million to build a feedmill that has capacity of 100,000 metric tonnes per annum and US\$10 million to build one that has 150,000 metric tonnes. While theoretically anyone can build a feedmill, not everyone has the expertise to be a DOC breeder.

Poultry feed prices are based on average realised cost of inventory (typically three months), although there are timing considerations in passing on raw material costs. Feed raw materials typically consist of:

- 1. Corn (47-50% by volume)
- 2. Soybean meal (25-28% by volume)
- 3. Fibre (15% by volume)
- 4. Palm/fish oil (2.5% by volume)
- 5. Other ingredients (10% by volume)
- 6. Direct labour costs and overhead costs are included in cost of goods sold

#### Diagram 11. International corn and soybean prices



Source: Company, DBS Bank, Bloomberg Finance L.P

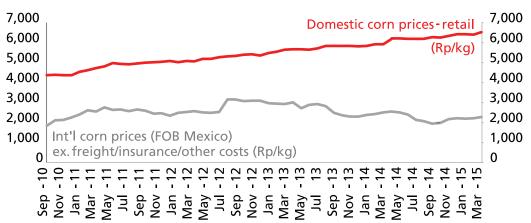


Recent government policy restricting corn imports also made domestic corn more expensive than imported corn

Approximately 60% of the corn requirements are sourced locally. Likewise, about 60% of Indonesia's local corn output is consumed by the animal feed industry. While local pricing is approximately 30% less to account for moisture content, it has generally followed international prices until recently. Soybean meal is imported primarily from Brazil and Argentina as Indonesia does not have the right climate for large acreages of soybeans nor does it have a viable crushing industry that can produce meal.

Since August 2015, the Indonesian government has required all corn purchases to be placed through its agencies for both imports (to encourage local production) and domestic purchases (to eliminate various trade layers or middlemen). Rather than buying corn directly, all feed producers have to go through the government; importation is still allowed as long as the government is involved.





Source: Indonesia Agriculture Ministry, Index Mundi, World Bank

We understand input costs have been consistently dropping in 2015, reflecting the declines in international corn and soybean prices. However, as of most of these raw materials are imported, the weak rupiah reverses some of the benefits of declining commodity prices.

We expect feed prices to continue falling (in US dollar terms) as the costs of global corn and soybean remain low. Subject to the depreciation of the rupiah, this should help to improve the poor margins in commercial grow-outs.

#### **Beef: Imports Dominate**

According to BMI Research, domestic beef production is dominated by imports of live cattle. Beef demand is estimated at 653,982 metric tonnes (equivalent to 3.84 million cattle) in 2015 while the domestic supply is 416,090 metric tonnes (2.44 million cattle), resulting in a deficit of 237,890 metric tonnes (1.39 million cattle equivalent).



In reaction to Australia's temporary export ban to Indonesia in 2011, Indonesia is now seeking to promote its domestic cattle industry. At the same time, the Indonesian government is pushing for diversification of origin countries away from Australia, buying more from countries such as Mexico. We have heard that there is an intention to revise Law no. 41/2014 to allow importation of feeders from FMD-free zones within FMD countries.

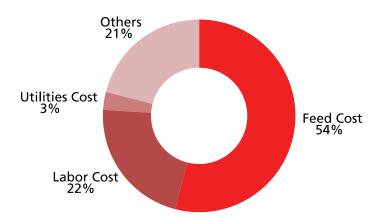
Importation of feeders is regulated through quotas, which are meant to control the cattle population and maintain price stability. In early 2015, the government changed its annual quota to a quarterly one. A significant drop in the September quarter 2015's quota (to 50,000 from 250,000 in the June quarter) led to a spike in beef prices in September 2015 due to lack of visibility in the December 2015 import quotas and insufficient domestic cattle supply. This in turn prompted the government to allow importation of live cattle for slaughter through Permentan No. 42/2015 to ease prices.

However, this conflicted directly with Law no. 41/2014 which prohibits importation of live cattle for slaughter. The government subsequently reversed the ministerial decree, raised the quota for the December quarter to 200,000 and plans to return to the annual quota system to give more clarity and time for industry players to prepare for the import process.

In addition to chronic undersupply in Indonesia, there is currently an undersupply of feeders in the US (due to the prolonged drought in some states) and China (due to increased demand). While prices of Australian feeder cattle have slowly increased from US\$2.70/kg in 2014 to US\$2.85/kg at the end of 2015, feeder cattle prices in the US have come off from a high of US\$5.32/kg in 2014 as consumers shifted to pork.

Cattle importers, including those from Indonesia, have progressively been acquiring Australian ranches, with Japfa currently owning 555,000 hectares (with carrying capacity of 45,000 cattle of mainly Brahman cross) and Great Giant reportedly owning 200,000

Source: Frost & Sullivan



#### Diagram 13. Beef cost of production breakdown (2013)



hectares. In 2015, Sidney Kidman & Co, one of the largest cattle farms in Australia was also put up for sale. Twelve bidders, mostly foreign firms, have been shortlisted.

According to Frost & Sullivan, in 2013, feed cost accounted for approximately 54% of the total input cost; labour cost was second. The labour cost associated with rearing cows is higher than that for rearing chickens because of the size of the animal.

#### Boosting domestic beef supply

The Indonesian government's push to raise the domestic supply of beef and reduce dependence on feeder cattle from Australia was also included in a new Plantation Law, which lists cattle breeding projects within oil palm plantations in Indonesia as one of the measures. President Joko Widodo, who took office in October 2014, also set a target for Indonesia to be self-sufficient in various food staples including beef within five years. While not a new idea, cattle-oil palm integration has never been seriously implemented in Indonesia for various reasons.

According to a 2014 Universitas Gajah Mada (UGM) study, Indonesia will consume 639,858 metric tonnes of beef in 2015. The domestic herd will produce 355,980 metric tonnes of beef, with the remaining 283,878 metric tonnes, representing 44% of total demand, being met by imported beef. That is equivalent to 1,802,400 cattle. Including the culling of local breeding heifers, dairy cows and buffaloes, there remains a deficit of 860,655 cattle for slaughter (21% of total beef demand). To become self-sufficient, Indonesia needs close to three million heads of breeders.

Nine years from now, Indonesian beef demand will reach 1.045 million metric tonnes, representing a CAGR of 5.6%, Domestic supply will provide 437,675 metric tonnes (2.3% CAGR). This means that Indonesia would still need to import 607,423 metric tonnes of beef (8.8% CAGR) or 58% of total demand – equivalent to 3,856,654 cattle for slaughter. Including the culling of local breeding heifers, dairy cows and buffaloes, this deficit is equal to about 2.7 million cattle for slaughter (41% of total beef demand).

To replace imports, the UGM study recommended that Indonesia should import breeding cattle to reduce the need of importing beef and feeder cattle for slaughter. This need was recently emphasised by shortages of feeders in China, which is looking to open its doors to Australian imports. This may create challenges for Indonesia, given the substantial price difference. China is looking to import feeders at US\$3.80/kg live, while Indonesia currently imports at US\$2.85/kg.

The current beef deficit in Indonesia therefore offers an opportunity for Indonesian oil palm planters to enter the business, subject to commitment, suitability, and profitability.

While not a new idea, cattle-oil palm integration has never been seriously implemented in Indonesia



## As a large importer, Indonesia would need to diversify suppliers and ensure the security of its beef supply ahead of a large demand from China. Drawing lessons from Malaysia, Indonesia will need a supportive regulatory environment to ensure that: (a) incentives are given, (b) regulations are integrated across all provinces and ministries promoting cattle farming (not just in plantations), and (c) disease is controlled.

#### **Dairy: Local Production Lags Demand**

According to the Frost & Sullivan report, Indonesia's per capita consumption of dairy products in 2013 was 14.6kg, having expanded 6.9% CAGR from 12kg in 2010. Yet, domestic supply of raw milk continues to struggle to meet demand. In 2013, only 17% of the demand for dairy products was met by domestic sources.

Indonesia's total raw milk production was estimated at 817,360 metric tonnes in 2010. In 2011, production plummeted due to loss of dairy cows for beef supply. Although it subsequently recovered to 652,649 metric tonnes in 2012, it remained below the 2010 level.

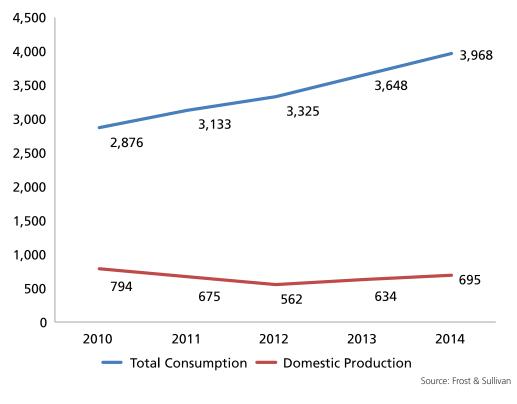


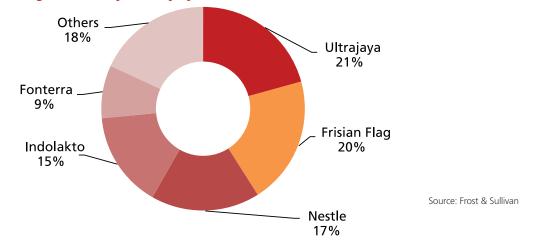
Diagram 14. Indonesia's dairy consumption vs. domestic production, MT

According to Euromonitor, dairy production in Indonesia consists of four major categories, namely drinking milk products, yoghurt and sour milk products, cheese, as well as other dairy products.

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1. **Drinking milk products:** These include fresh milk (also known as pasteurised milk), UHT milk (also known as long-life milk), and flavoured milk drinks. In volume terms, this category had the largest share (44.6%) in 2013. This category is driving the growth of the dairy industry.

- 2. **Yoghurt and sour milk products:** In 2013, this category accounted for 21.1% of the market in volume terms. The segment is expected to grow further to contribute 24% of volume by 2018.
- 3. **Cheese:** Processed and unprocessed cheese and other similar products fall into this category. Cheese is not popular in Indonesia, accounting for only 1.5% of the dairy market (by volume) in 2013.
- 4. **Other dairy products** include chilled and shelf-stable desserts, chilled snacks, coffee whiteners, condensed/evaporated milk, cream, fromage frais, and quark. The share of this segment has been stable through the years. According to Frost & Sullivan, Frisian Flag is the leader, controlling 38.4% of the segment in 2013.



#### Diagram 15. Dairy industry by market share, 2013

Modern retail channels in Indonesia will continue to grow

In Indonesia, the dairy retail market is dominated by traditional/general trade channels. However, in the past few years, modern retail channels have been developed to keep up with rapid expansion. The Frost & Sullivan research shows that between 2003 and 2008, the number of traditional/general trade channels expanded by 9.2% while supermarkets expanded by 75.3%.

Modern retail channels in Indonesia will continue to grow, thanks to a burgeoning class of middle/upper income consumers, rapid urbanisation, and infrastructure improvements. As hypermarkets, minimarkets and supermarkets become better at refrigeration, the shelf-life of fresh milk will increase. This, combined with increased health awareness, is expected to fuel demand for fresh milk.



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## Conclusion

Besides stiff competition, companies in the animal protein sector face issues such as volatility in raw material costs and currencies, changes in government regulations as well as liquidity risks. Outbreak of disease, which will certainly hurt demand, is also a potential threat.

However, we believe that the animal protein sector is in an upswing and prospects should be quite positive in the short to medium term. A stabilising rupiah, relatively cheaper soybean meal and corn prices, and friendly regulations should bolster growth of the industry.

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## References

- 1 These numbers exclude duck, swine, egg, lamb, and domestic shrimp markets. Likewise, we do not follow duck, layers, or egg prices in our analysis.
- 2 Frost & Sullivan (2014). Independent Market Research on Selected Food Markets in Indonesia, China, India, Vietnam, and Myanmar.
- 3 Euromonitor International (2014). Frozen Processed Food In Indonesia.

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