Poles apart from chicken meat, available information about duck meat in the region is quite limited. Therefore, CHAKRIT RIDMONTRI and the Asian Agribiz team met several key duck producers to map trends in the region’s duck meat industry. Interestingly, demand for duck meat in the region continues to increase due to factors such as economic growth, changing preference and availability of varied duck meat menus/products.

Frozen dressed duck sold in a supermarket in Indonesia.
With its unique texture and flavor, duck meat is being used by meat processors, restaurateurs and caterers across the region to create enticing dishes for local and overseas consumers.

As with the broiler industry, Thailand is leading the region’s duck meat industry with its quality and safety standards. As a result, its duck meat exports have been filling demand from export markets.

In Indonesia, duck meat demand is growing in line with the mushrooming of restaurants and food stalls offering duck meat dishes. However, this demand outpaces local production.

Vietnam, on the other hand, is seeing industrialization in its duck farming sector due to increasing duck meat demand. With the participation of large poultry integrators, the transformation will move even further, get better and bigger.

As the most developed country in the region, Singapore has been a good export market for duck meat. Malaysia benefits from its proximity to the city state and continues to enjoy the Singapore market while catering to its growing local market.

However, the tone is different in the Philippines where duck meat is not as popular as pork and chicken meat. It takes time for Filipinos to really enjoy good duck meat as industry players have to educate consumers and also farmers, on raising a good breed that will produce quality duck meat.

Quality & safety standards

Regardless of the scale of production, the future growth of Thailand’s duck meat industry remains positive.

For power player Charoen Pokphand Foods (CPF), duck exports increased by 20% in 2018, said Pisit Ohmpornnuwat, COO for Duck Business.

“CPF reported income of USD 32 million from exporting up to 5000 tons of fresh and processed duck meat products to overseas market last year,” he told Asian Meat Magazine.

Similar to its broilers, the EU and Japan are major importers of frozen and cooked duck meat products, followed by New Zealand, Singapore and CLMV countries (Cambodia, Laos, Myanmar and Vietnam).

To meet the requirements of major importers and other potential markets such as Hong Kong, South Korea and Australia, CPF has instituted various safety standards from upstream to downstream operations.

Feeding, PS farm, hatchery, commercial and contract farms, slaughterhouse, food processing plants are GMP, HACCP, GAP certified and comply with EU approved food safety standards like ISO 9001, animal welfare practices, UK genesis poultry standard and BRC Global Standards.

For the domestic market, the focus is on distribution via modern trade channels. The company also positions itself as a one-stop solution for entrepreneurs by introducing processed duck meat products for their business operations.
“With r&d on technology, hygiene, food safety and quality control standards, we can introduce a wide range of products from frozen, ready-to-cook and ready-to-eat specialty duck products to the overseas market with unique recipes and packaging development over the years,” Mr Pisit said.

**Horeca is key for growth**

The rising trend in demand for duck meat in Indonesia started 10 years ago. However, significant growth in demand was seen in the last five years, said L Hardi Prasetyo, Chairman of the World Waterfowl Working Group of the Asia Pacific Federation of the World Poultry Science Association.

The increasing demand is driven by many factors, he said.

“I guess that more people started to opt for duck meat because of concerns on avian influenza in broiler chicken. At the same time, there are dishes made from duck slaughtered at young age (6-8 weeks) so the meat is not fishy. “Add to that the mushrooming of restaurants and food stalls offering duck meat, especially in Java. Now, more consumers realize that the taste of duck meat is different from chicken

**Barbary ducks gain in Thailand**

While the bulk of Thailand’s duck industry still raise Cherry Valley ducks, Barbary duck, which is a crossbreed of indigenous and Muscovy breeds, is gaining a significant share among small and medium raisers.

Located in Rayong province, Pairat Farm is well known as the pioneer in Barbary duck, which it processes and distributes in the eastern region.

Since it began as a small scale raiser in 2005, the business has been growing over the years in networks of duck raisers and market demand, particularly in the eastern provinces of Rayong and Chantaburi.

Farm owner Tippawan Thawornwiriyanan said the farm today runs integrated operations comprising P
t
ing farming, hatchery, commercial farming, slaughtering and cold storage with an average distribution of 7000-8000 ducks/day.

“Barbary duck raising can be a good alternative for small and medium scale raisers looking for market competition and higher income,” she told Asian Meat Magazine.

After years being a contract farmer for Thailand’s duck meat leader Bangkok Ranch and seeing the fierce competition in Cherry Valley duck, Mrs Tippawan and her husband opted to shift to the Barbary duck breed introduced by the Royal Project Initiative, mainly due to its unique meat quality.

It is meaty, tender and mild in flavor as well as odor. Compared to Cherry Valley, the Barbary is very quiet, well-behaved and resilient. It can be raised in the rooftop farming system.

As each Barbary duck can weigh up to 3.8kg, it takes about 65-85 days to grow compared to the average 45 days among Cherry Valley ducks. This means fewer production cycles. However, the price of Barbary duck is higher at USD 3.21/kg compared to the Cherry Valley at USD 2.72/kg.

**For local market**

Mrs Tippawan conceded that initially, it was difficult to market Barbary duck products, particularly spiced duck, to vendors because they cost USD 2 more than Cherry Valley.

To boost the market then, they conducted meat quality testing to attract clients. The response was good. Year round availability of Barbary duck products is key to getting her clients to switch from Cherry Valley to Barbary.

After gaining good response from the fresh market clients, Pairat Farm started expanding its market to hotels in Chomburi’s beachside district of Pattaya and Rayong. Hotel chefs appreciated the odorless meat which goes well with European dishes and started ordering the product regularly.

In Asia, all of the duck’s internal organs can be sold to fresh market vendors. “For duck, every part is valuable. Nothing is wasted,” said Mrs Tippawan.

Today, Pairat Farm and its network can generate up to about USD 640,500 in annual sales to clients in eastern provinces and as far as hotels and restaurants in Chiang Mai. The products are not yet distributed via modern trade because of limited production capacity.

As demand usually peaks during festive seasons, Pairat Farm recently invested USD 800,000 for a 60-ton cold storage system.

Mrs Tippawan strongly believes there is room to grow for fresh Barbary duck meat in the domestic market as well as for export to neighboring countries like Laos in the near future.
meat,” Prof Prasetyo explained to Asian Meat Magazine.

Ang Hendra, President Director of Indonesia’s duck company Putra Perkasa Genetika (PPG), agrees that demand for duck meat in Indonesia continues to grow. “In the past five years, we only produced 300-400 DOD [day old duck] per week. Now we produce 700,000 DOD per month and this production is always sold out. We also receive more orders for duck carcasses and portioned cuts from restaurants,” Mr Hendra told Asian Meat Magazine.

Demand outpaces production

There is no official data on monthly duck meat demand in Indonesia, but Prof Prasetyo estimates demand (local duck and Pekin duck combined) at over 1 million carcasses, with Java being the largest market. “The demand is big, but local production can’t cope. To help meet demand, many duck traders also buy productive layer ducks, young layer ducks, male layer ducks and spent layer ducks,” he said.

Ade Zulkarnain, Chairman of the Indonesian Local Poultry Farmers Association (Himpuli), has an even bigger demand estimate, saying that the national monthly demand for duck meat is around 4500 tons. “We have less than five big duck meat producers, which I estimate can produce 30,000 tons annually. The gap is filled by duck meat produced by small scale farmers,” Mr Zulkarnain told Asian Meat Magazine.

Market segmentation & channels

Prof Prasetyo sees the market as segmented into the premium and middle-low income market. Pekin duck is geared towards the former, while local ducks including hybrid meat-type duck, productive layer duck, young layer duck, male layer duck and spent layer duck fill the needs of the latter.

He said the horeca (hotel, restaurant and catering) industry is the main market channel for duck meat in Indonesia. Some players in this industry prefer to buy carcass because they have different standards for cutting size. On the other hand, Mr Hendra sees that more restaurants want portioned cuts rather than carcass “because they want efficiency and uniformity. We portion duck carcass at our processing facility using machines to get consistent and uniform cuts.”

In another development, Prof Prasetyo observed that horeca players are more selective when it comes to local ducks. They only want 1-1.5kg carcasses from white feather ducks. Carcasses from black or brown feather ducks are priced cheaper because the skins have dark spots.

Mr Hendra added that weight preference from this sector has

Dao Vu Ban, a customer of Grimaud duck breed, has increased the size of his farm by five-fold to 40,000 PS, supplying 20,000 DOD/day.
Unique automation of duck cut-up

Duck portions make a really special meal and are becoming an increasingly common sight on dinner tables. Breast fillet, both skinless and skin-on, and legs are the most popular, although there is often a ready market for wings and crowns (bone-in front halves without wings) too. Portions are often marinated, smoked or roasted to give a tasty and convenient snack or meal component.

Marel Poultry can now offer duck processors an automatic modular in-line cut-up system capable of handling up to 6000 ducks/hour of up to 2.8kg eviscerated weight.

The ACM-NT system, developed specially for ducks, is the only one of its kind currently on the market and will handle both air and water chilled products.

Flexible, modular and precise

The ACM-NT uses the unique Sigma overhead conveyor; its layout is flexible and can be configured to suit the exact processing and layout requirements of each plant.

A combination of the unique ACM-NT shackle and turning mechanisms within the system allows products to be held and positioned perfectly for each cutting operation, resulting in optimum yield as well as top presentation and quality.

Typical cuts

The ACM-NT for ducks will cut carcasses into wing, front half and whole anatomic leg portions. If required, wings can be cut into separate inner and middle joint portions. In some markets, wings are cut with back meat, breast meat or both attached.

Front halves are usually filleted manually on a cone deboning line. Where a second line is installed, a Marel SmartLine grader can be used to feed each deboning line with a regular flow of sized front halves. If required, the ACM-NT system can also cut breast caps.

Butcher quality

Users are impressed by the high quality of the legs cut by the system; yield and presentation are as good as when legs are butchered manually.

The secret of the ACM-NT’s JL anatomic leg module is that it pulls rather than cuts legs from the back half. Legs retain their natural shape and there is no damage to the hip bone.

Combined line

An ACM-NT duck cut-up line can be extended upstream to accommodate a QS3 quality grading station and a SmartWeigher. In this situation ACM-NT becomes a combined whole carcass distribution and cut-up line.

A combined line has a number of advantages. Carcasses no longer need to be rehung. It also makes for a more hygienic process as product is kept in line.

Capacity, yield and quality

The ACM-NT is a valuable and versatile tool for duck processors. It can save on labor without compromising in any way the yield or presentation of the end product. In short, this system can transform the overall efficiency of a duck portioning operation.

Marel Poultry’s ACM-NT system, developed specially for ducks, is currently the only one of its kind on the market and can handle both air and water chilled products.

changed from the previous 800-990g carcass to a weights higher than 1.1kg.

Dressed ducks are also available in supermarkets, but only in frozen form and brand choices are limited.

In several supermarket visits made by Asian Meat Magazine, Multi Sarana Pakanindo (a subsidiary of Charoen Pokphand Indonesia) and Putra Prima Mandiri based in East Java are the only two suppliers of frozen Pekin duck.

In traditional markets, only live local ducks are sold.

Key producers in Indonesia

Prof Prasetyo observes that there are few large scale players in the duck industry. There are only three Pekin duck integrators, namely Charoen Pokphand Indonesia, Mita Bebek Persada (a subsidiary of poultry integrator Malindo Feedmill), and Putra Prima Mandiri.

An external source told Asian Meat Magazine that Charoen Pokphand Indonesia plans to begin operations of its new USD 9 million duck processing facility in Cikande, Banten this year.

A new player in the Pekin duck business is the joint venture (jv) company between Thailand’s duck integrator Bangkok Ranch and Indonesia’s largest food conglomerate Salim Group. From an interview with an executive of Bangkok Ranch, Asian Meat Magazine learned that the jv is now searching for a location around Jakarta to set up a duck meat processing plant.

Meanwhile, PPG is the only integrator for hybrid duck. This
company is now setting up a duck slaughterhouse and a duck meat processing plant in West Java. Currently, this company rents two slaughterhouses to process its ducks.

In Pati, Central Java, there is Samaco Karkasindo Utama that set up a 2000 birds/hour duck slaughterhouse in 2017. This company sources live ducks from its contract farmers in the region.

Beyond these industry scale players, there are small and medium scale duck farmers spread throughout the country, but mainly in Java.

Meanwhile, there is a backward integration move. In 2017, Indonesia’s duck meat resto chain Indo PD Mandiri set up a 5000 birds/day duck slaughterhouse in Central Java to produce carcass and portioned cuts. This facility supports the expansion of its ‘Bebek Pak Ndut’ resto throughout the country.

Modern slaughterhouse

However, these integrators are not really involved in the downstream operations. In north Vietnam, traders are the key players in collecting ducks from farms and bringing them to slaughterhouses. Dressed carcasses are then delivered to wet markets for sale.

Meanwhile in the south, ducks are slaughtered and dressed in modern slaughterhouses that supply ducks and portioned cuts to roasted duck restaurants or vendors.

San Ha Company operates two duck slaughterhouses in Dong Nai and Long An. The plant in Long An can process 1500 ducks/hour while that in Dong Nai has a capacity of 1000 ducks/hour. The two plants process whole and portioned ducks for restaurants and supermarkets in Ho Chi Minh City and surrounding areas.

For its part, the Mavin Group is planning to be Vietnam’s first vertically integrated duck operator, operating an entire supply chain from commercial duck production to slaughtering and processing.

Pham Cao Bang, Director of Livestock Production Division of Mavin Group, said the company plans to produce 12 million ducks/year and set up a facility to produce 10,000 tons of processed ducks annually.

Diverse duck cuisine

All duck producers in Vietnam agree that there is a need to diversify duck dishes to entice consumers to eat duck meat.

“Duck meat is the main ingredient in north Vietnam cuisine and duck meat dishes in the north are more diverse than in the south. That’s why northerners are bigger duck consumers than southerners. “But this is changing, as people in the south are turning to duck following a wider variety of duck dishes,” said Nguyen The Nguyen, Manager of Duck Duck Restaurant in Ho Chi Minh City.

“We offer over 15 dishes made from duck meat cooked northern style, but with a southern taste,” he explained.

The restaurant buys mallard ducks from wet markets and manually slaughter and dress them. “We use...
mallard ducks because their meat contains less fat. They are smaller and their meat is more delicious compared to Pekin ducks,” he said.

**Cross-border trade**

Poultry farming is a big business in Malaysia, with per capita consumption of approximately 42kg. The successful establishment of chicken farming paved the way for duck farming too, with focus mostly based on frozen duck meat and export.

Production of broiler and mule ducks are carried out by small and medium sized commercial operators. Broiler ducks (Pekin ducks) are raised mainly around abandoned tin mining pools and are targeted towards a lucrative Singapore market that accepts them as live birds as well as processed, frozen varieties.

Meanwhile, the mule ducks are produced by specialized farmers and fulfill a small niche restaurant market within the country and in Singapore.

A quick search on the internet showed that fresh and frozen duck meat is available via online platforms and grocers who carry gourmet food such as Jaya Grocer and Tesco. Popular halal duck meat restaurants such as Restoran Norazlina Chong also shows the growth of duck meat consumption locally among Muslim consumers.

**Key players in Malaysia**

In 2016, Malaysia’s production of meat-type ducks was estimated at around 28.56 million birds, of which 7.25 million were exported live to Singapore valued at USD 35.4 million.

Big players in the industry include Dynavest Food Industries, TCH Group, Sin Long Heng Breeding Farm, PG Lean Hwa Trading and Southern Zone Farming, to name a few.

Of these, Dynavest is one of the major suppliers for the Singapore market. The company is the Malaysian subsidiary of Singapore’s duck meat producer Mua Hin Poultry Group. The company produces frozen whole duck, duck parts and edible offal.

The products are supplied to both local and export markets such as Singapore, East Malaysia, the Middle East, Indonesia and Japan. For the Malaysian and Singaporean consumer markets, their products are available at supermarket chains, wet markets stalls, restaurants, caterers, food courts and hawker stalls.

Dynavest prides itself with a state-of-the-art processing plant, using advanced machinery from France-based Bayle that enables it to produce up to 10,000 frozen ducks daily. The frozen products are then stored in their cold storage facility, which has a capacity of 2000 tons.

The company adheres to strict food hygiene and safety practices. The products are also processed according to Islamic Law and certified with MS 1500:2009 (Halal) by the Department of Islamic Development Malaysia.

In addition to duck processing, Dynavest also has duck farming, hatchery and feed processing operations.

**Less popular than pork and chicken**

While duck egg is a ubiquitous local fare in the Philippines, it is the opposite for duck meat as Filipinos’ palate are more used to chicken and pork.

“The duck meat industry is very young because people have the notion that duck meat is tough and smelly compared to chicken and pork,” Vicente Lao of Maharlika Agro-Marine Ventures Corp told Asian Meat Magazine.

He said this is because the Philippine duck industry has never really promoted the taste of good, quality duck meat.

“In our farm, we raise Cherry Valley duck, a brand of real Pekin duck and its meat is tasty and juicy. These are grown for its meat, not for its eggs. What the local duck meat market offers are spent layer ducks, that’s why the taste is different, and Filipinos don’t like it,” Mr Lao explained.

Because production volume is...
still small, it is more expensive to produce than broiler chickens. “Duck volume isn’t even a tenth of the volume of chicken. There are very few duck meat raisers in the Philippines. Most of the duck meat consumed locally are from backyard growers who are also into balut (boiled duck embryo).

“We cannot bring down the price unless we generate the volume. In the economies of scale, if there is volume, the price will also go down,” said Mr Lao.

Maharlika Agro-Marine supplies duck meat to Chinese restaurants serving Pekin duck dishes. Considered as red meat, he said duck meat is actually tasty especially if grilled. But he admits Filipinos will take time getting used to it and chicken will remain the preferred poultry meat.

**Slow growth**

“There will be growth but not as strong as chicken, the growth of which is triggered by the fast food chains. All have chicken on their menus, and they are expanding. Duck meat will further grow if there is demand for good quality meat, not the ordinary meat that came from spent layer ducks,” remarked Mr Lao.

“We are using Cherry Valley breed from the UK, which is also raised in China for their duck meat production. China consumes 80% of the global duck meat consumption. It will take some time for Filipinos to really enjoy good duck meat as we have to educate consumers and also farmers on raising a good breed that will produce quality duck meat.”

**Philippine duck production**

Duck raising in the Philippines is mainly centered on egg production, particularly for balut.

Data from the Philippine Statistics Authority show that in Q3 2018, duck meat production fell by 0.97% to 7.29 tons live weight from 7.36 tons in 2017, as output from Central Luzon, the major duck production area declined.

The top three duck producing regions were Central Luzon, Soccsksargen (South Cotabato, Sultan Kudarat, Sarangani and General Santos), and Western Visayas. These regions contributed 60.68% of the country’s total production.

Total duck production as of July 1, 2018 was nearly 11.71 million birds, up 3.7% from 2017. Laying flocks accounted for almost half of the total population, with other half shared by growing flock and day-old duck at 35% and 15% respectively.

Meanwhile, average farm price in Q2 2018 stood at USD 1.05/kg up by 7% from USD 0.98/kg the previous year. AM