

USDA Foreign Agricultural Service

# GAIN Report

Global Agricultural Information Network

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY  
USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT  
POLICY

Voluntary  Public

**Date:** 12/16/2010

**GAIN Report Number:** ID1039

## Indonesia

**Post:** Jakarta

### Processed Meat-Chicken and Fish Products Ingredient

**Report Categories:**

Product Brief

**Approved By:**

Jonn Slette

**Prepared By:**

Sativa Pekerti/Consultant & Jonn Slette

**Report Highlights:**

**There is strong market potential for U.S. ingredients in the Indonesian meat processing industry. The best prospects include secondary beef cuts (head meat, cheek meat, liver, and other offals), soy protein isolate, corn starch, and whey protein concentrate. Over half of the beef imported into Indonesia is further processed – mainly into meatballs, but also beef sausages and beef nuggets. The meat processing industry is highly dependent on imported ingredients. Although Australia and New Zealand are the main suppliers of beef products, U.S. beef suppliers can potentially regain and expand market share.**

## **Executive Summary:**

As the fourth most populous country in Asia with over 230 million people (World Bank 2009), the annual per capita consumption of meat protein remains low at 4.5 kg/capita due to the production constraints for local meat and poultry products. Domestic meat and poultry production faces a number of challenges – from reliance on imported feedstuffs, a lack of supporting infrastructure, and tropical disease problems. Accordingly, the cattle population over the past 10 years has remained stagnant at approximately 11 million head with annual slaughter rates at around 1.25 million head. Similarly, slaughter rates for native chicken remains at around 276 million heads annually – with expensive imported feed costs a major constraint to growth among small backyard farmers (Indonesian Bureau of Statistics (BPS) and Director General of Livestock (DGLS) 2008). In contrast, slaughter rates for broilers among larger-scale producers increased to 1.1 billion birds (up 49 percent) over the past decade.

Other than beef, chicken, fish, and soybean-based foods (e.g. *tofu* and *tempe*), processed meat products are an alternative protein source for over 50 percent of the Indonesian population – namely among the middle and lower income consumers. Processed meat products include delicatessen products, burger patties, meatballs, sausages, and nuggets. These products are more affordable to the middle and lower income consumers than beef or poultry meat. For example, a piece of beef *rendang* or fried chicken (100-200 grams) costs between \$0.70 – \$1.25 per serving. On the other hand, three pieces (100 gram) of packaged sausages costs \$0.45 - \$0.50 and eight small meatballs cost \$0.85. If sold by street vendors along with leafy vegetables, these are typically prepared to make a dish for the entire family.

Meatball production has always been a significant source of meat protein for the total population. Burger patty, sausage, and nugget production took off after the financial and political crises in 1998. The meat processing industries require consistent supplies of quality meat as basic ingredients; this demand cannot be met locally. Therefore they are totally reliant on meat imports. The import of beef such as primary cuts, secondary cuts, liver, hearts, offal, and other parts like cheek meat and head meat remain high as 55 percent goes to meat processing industries.

Currently, the list of exporting countries with domestic halal certification bodies approved by the Indonesian Ulama Council (MUI) includes Australia, New Zealand, the United States, Canada, Brazil, and Ireland. In 2009, approximately 100,000 metric tons of meat was imported into Indonesia, an 11 percent increase from the previous year. This year, industry projects over 140,000 tons. However, it may not be realized due to unofficial and non-notified quotas issued by the government that reportedly limited the imported beef to 73,000 tons.

## **General Information:**

### **Market Situation**

The 39 major meat processing industries generate \$97.4 million in 2007 of all product types include canned corned beef and sausages, canned chicken sausages, buffalo burger, pork sausages, canned goat meat, shredded dried meat (*abon* from beef, chicken, and fish), frozen boneless cuts (of beef, pork, and chicken), preserved meat (goat, pork, beef, and chicken), and delicatessen products. Twenty four

percent of total production, at the value of \$23.6 million (See Table 1), consists of chilled and frozen products using beef, chicken and fish.

**Table 1. Total Production of Processed Chilled and Frozen Meat, Chicken and Fish 2007\***

Description	Quantity (Tons)	Value (000USD)
Beef sausages	3,922	5,392
Beef sausages in airtight packages	320	1,045
Beef burger	35	217
Smoked meat	18	96
Beef meat ball	5,633	7,011
Beef in airtight packages	356	1,084
Beef nugget	2,680	5,202
Chicken sausages	414	682
Chicken meatball	21	607
Chicken nugget	170	571
Burger (mixed meat)	168	574
Delicatessen	169	536
Processed fish	169	202
Fish ball	232	261
Surimi	45	139

Source: "Large and Medium Industrial Statistics-Production 2007," Center of Bureau Statistic, Jakarta

\*Data selected based on 39 major registered companies.

\*\*Possibility of using premium cut meat

In the past five years most meat product manufacturers experienced a 15 percent increase in annual sales. These same manufacturers report that a 23 percent increase is highly expected over the five years as the result of Indonesia's economic upturn and expanded middle class. Other contributing factors include the growing number of Western chain restaurants, cafes, and modern retail outlets. Also, there is an increased awareness that improving protein intake is critical for maintaining proper nutrition.

### **Ingredients for Manufactures**

There are only 19 major manufactures out of 42 companies that produce chilled and frozen sausages, meatballs, burger patties, delicatessen products, as well as nuggets. Four major and five smaller manufactures produce more sausages than the rest for modern and traditional markets. The production of meatballs for the traditional and local markets is primarily handled by three large factories. These products use large quantities of secondary cuts and various types of offal. Only six manufactures produce high quality sausages, delicatessen, and/or meatballs for upscale markets and the food service industry.

#### **1. Beef and Offals**

Importation of beef and offals has been limited to by the Ministry of Agriculture (MOA) for the first semester of 2010 to five major meat importers and 30 small scale importers. Media reports quoted MOA officials stating that the import curb was imposed to support the local cattle feedlot industry.

Actual imports reached 56,000 tons by June 2010. The MOA then increased the quota by 5,000 tons. This was quickly followed by an additional import quantity in 6 months to 22,000 tons (ASPIDI and MOA, 2010).

Most secondary cuts are imported from New Zealand (68 percent) and Australia (30 percent). Only since June, 2010 have U.S. secondary cuts (head meat, cheek meat), hearts, and livers began to enter the market. Volume in the initial months was reported at 150 tons per month.

The total consumption of meat imports continues to increase each year, 10 percent in 2008 and 15 percent in 2009. Post estimates another 20 percent increase in 2010 to 72,240 tons per month, which consists of 45,360 tons of mainly secondary cut beef, trimmings, variety cuts (tongue, oxtail), and 26,880 tons of offal (liver, hearts). Around 7,224 tons of prime cut meats consumed by high quality meat producers that utilize up to 75 percent meat content on their sausages and other smoked processed meat, and delicatessen products. Fifty-five percent (39,732 tons) of total meat import used meat processing industry, 35 percent goes to wet-market and 10 percent to food service operators. The secondary cuts and offal in the wet market can be used for making meatballs sold in the market and by small scale noodle vendors.

## 2. Chicken

All manufactures utilize local chicken for nugget, chicken meatballs, sausages, smoked chicken/delicatessen products production. In 2001 the government banned importation of chicken from the United States as well as other countries which contributed about 138 ton (179 tons end products) per year towards high quality meat processing industry or about 25 percent of total production. About 504 tons of chicken meat was used to produce 605 tons of sausage, meatballs and nuggets in 2007. An average requirement of meat for a single manufacture in 2009 was 2,920 tons to produce these top three products. Total consumption of large companies may be over 7,300 tons annually. One large manufacture can produce up to 500 tons of nuggets per month.

## 3. Fish

In 2007 processed fish was very small in quantity (production 456 tons; ingredient 351 tons) as people prefer to consume fresh fish, which is in abundance throughout Indonesia's archipelago as it is more affordable. Only a couple of manufactures produce quality fish products (see Table 1). Few companies use 10,819 tons of fresh fish to produce frozen surimi of 12,251 tons worth of \$12.82 million for export and 732 tons of fish balls ( \$4.52 million) for traditional market (BPS, 2007). Mackerel, snapper, yellow tail snapper, lizard-fish are excellent ingredients for fish balls. Surimi is made of white-flesh fish like threadfin bream, catfish, and yellow tail snapper. Snapper and mackerel are perfect for fish stick, and catfish for fish nugget. Besides local fish as main ingredients, tapioca (10-15 percent of main ingredients), seasoning and the spices of 3 percent are also used and available locally.

## 4. Other processed meat

Two major manufactures in Jakarta use 192 ton per year of CL80, 85, 65 secondary cuts to produce sausages. About 30 tons of prime cut like top site are used for premium product (delicatessen) while 2,160 tons per year of chicken used to produce nugget and chicken cordon blue. Their sausages distribution are 65 percent go to upscale retail, 35 percent to Hotel-Restaurant-Catering. For premium

product, 90 percent goes to HRI and 10 percent to high-end retail.

**Table 2. Other Secondary Ingredients Consumption required in Meat Processing**

<b>Ingredients</b>	<b>Estimated Consumption (tons/year)*</b>	<b>Country of Origin</b>
Isolate Soy Protein (ISP)	3,924	China (< year 2006), Europe,USA (> year 2006)
Bread crumbs	6,120 to 7,000	Local, Korea, Thailand
Phosphate	480 – 600	Local, Europe
Potato Starch	480	China
Corn Starch	1,824	German, Europe
Flavoring (Savory)	82 (kg)	German, France, Local

\**Estimation by FAS USDA survey based on 19 largest processors (June-August, 2010)*

Isolate soy protein has been used as filling or as a so-called fat replacer (fat mimetic) to minimize the high price meat ingredients, which is capable of replacing 20-30 percent meat products. The imported ISP consumption from United States is over 1,000 tons per year (\$2.3 million) as shared by at least two or three importers. A few companies use additional potato starch at small amount albeit all use corn starch for less cost. Less than five companies import the secondary ingredients (see Table 2). Bread crumbs in nugget products used about 3-4 percent of total meat usage. Flavor is used only 0.03 percent of meat usage.

This industry has no brand loyalty towards basic ingredients, if they find a price cheaper price, they easily switch from one brand to another or from other country if it possible. They rely on imported products normally for better quality and for consistency of product availability so as to maintain profit margin as well as uninterrupted production. As long as U.S. prices are competitive and product is achievable, market potential in Indonesia will be strong.

### Main Consumers

The demand for processed meat is year round, the survey indicates that most products (65 percent) go to the wet/traditional markets, while 30 percent goes to modern retailers. The remaining 5 percent is absorbed by high-end meat products for foodservice industries and upscale retailers. Major fast-food burger chain and local bakery chain consume 36 tons prime cut meats per month for their burger patties and meat pastries.

In the past five years the chicken nugget has lost its popularity among the middle and upper class as consumers begin to explore new products. Even so, there is still opportunity for the industry to cater the lower income consumers, which constitutes 120 million people, who need to improve their meat protein intake.

Improving and increasing current production of snack sausages (jerky) for children in particular, where no refrigeration required, are sold in airtight packaging to reach the market outside of Java. Some home cooks use them as a compliment to main dishes and snacks such as soups, fried noodles and fried rice, baked macaroni, and bitterballen (*kroket*).

All chilled and frozen meat, chicken and fish products target every age-group throughout the country as alternative for protein source other than soybean *tofu* and *tempe*.

### Preference

The industries prefers red colored Australian beef liver as they presume it has a healthier look and is of better quality than the dark-red colored beef liver from the United States.

Hearts from New Zealand and Australian are considered cleaner without aorta attached while U.S. hearts have the aorta still intact.

Cheek meat from the United States comes in small cuts with more fat than Australia or New Zealand. The industry prefers U.S. cheek meat because of its price competitiveness.

### Distribution

All imported ingredients come through one main port located in Jakarta and distributed to Surabaya in East Java serving the eastern part of Indonesia, and Medan covering the western part of the country. The largest population is still Java Island with approximately 142 million people. The imported products are delivered directly to each manufacture or distributor then continuing on to their clients outside Jakarta.

The 42 major industries mainly in West Java, one large manufacture in East Java and four small high-end manufactures in Bali. They distribute their products in cool/refrigerated small box-car or mini container trucks for easy access due to inadequate road conditions in most areas. The trucks deliver the processed meat products to end consumers such as modern retailers and foodservice industries, traditional markets, distributors and sub distributors in remote area. From here, the product is delivered to vendors, small foodservice and retailer operators, even to small-scale home distributor for household member.

### Constraints

The MOA released a regulation in 2009, in which meat importer/distributor must obtain Letter of Import Permit - SPP (*Surat Persetujuan Pemasukan*) for animal based products including fresh meat and processed meat from Directorate General Livestock Services (DGLS). This decree adds another bureaucracy's door for importers to deal with besides extra time loss to meet as such.

Restriction in importation of meat ingredients by the Indonesian government is to protect the production of local integrated meat and poultry farmers.

U.S. beef importation has dwindling down since most plants are banned to export to Indonesia due to Bovine Spongiform Encephalopathy (BSE) and halal issues.

Since 2000 Indonesia has maintained an import ban on all U.S. chicken products including whole chickens, chicken parts, and leg quarters. Even though Mechanically Deboned Meat (MDM) is allowed to be imported into but none of the U.S. chicken processing plant meets DGLS specifications and requirements, food safety and halal requirements.

The local meat processing industries are facing the Indonesian Standard National Agency (SNI) regulation in which it requires that any so-called meat product must contain 75 percent meat. The dilemma is that such requirement will push the product into premium product which was not the intent of the industry. In order to maintain sustainability, competitiveness and productivity, ideally the product use 60 percent of meat, therefore maintaining the price of \$3-4/kg (i.e.: sausage). Otherwise it must sell for \$5-7/kg as premium product.

In order to get SNI number, each manufacture must test its meat product. The lab-test fee can go as high as \$ 675/product. This cost will surely be shared in calculating price. At the end, the product will just be too expensive for consumer to buy.

In general, the major constraint for meat processing companies and importers of basic ingredients remains at the distribution system. With lack of cold storage facilities, unreliable shipping agencies, poor handling and bad transportation infrastructure, these intricate web of connection affecting all facet of the industry as a whole.

### Competition

The close proximity of New Zealand and Australia to Indonesia has given them the advantage in shipping cost and time versus that of the United States. They dominated almost the entire market in meat processing industry when government restricted the U.S. beef imports in 2009. However, in only two months, U.S. beef is starting to gain 4 four percent of the market share.

As long as U.S. prices are 10 percent less than New Zealand and Australia, the opportunity for U.S. secondary cut and offal will be very competitive, especially in the middle to lower market as alternative meat for the industry. This kind of industry is price sensitive.

The main exporters of flavoring are mostly European countries such as Germany and France. These countries have long established relationships with the industry. Their products are well known for quality and high prices, backed by know-how and sophisticated technology. Currently, China was trying to sell low-quality ISP to low-end manufactures but the uncertain quality of the product makes importer reluctant to trade.

### U.S. Opportunity

Prior to the restriction of importation of U.S. meat products, beef liver, offal and the U.S. second grade was the preferred choice among importers compared to other products. These products were well known for their longer shelf life, consistency of supply and steady price.

An estimate of 300 tons/two month of US cheek and head meat, liver, and hearts has entered the Indonesian market for meat processing industries. The demand is high for US secondary and beef offal.

Isolate soy protein as meat replacement in meat processing has the opportunity to substitute about 20-30 percent of meat by lowering the production cost.

The demand of potato starch and corn starch with similar characteristic with ISP as meat replacement and water binding agent 30 – 50 tons/year can be achieved by US made products.

U.S. exporters may start introducing flavoring to this meat processing industry in particular as the market is highly dominated by European countries.

**Advantages and Challenges for U.S. Food Ingredient Products in Indonesia**

Advantages	Challenges ( <i>Barriers to US Export</i> )
Quality and consistent supply of U.S. products are well known.	Price is not competitive compare to other countries and sometimes to local products.
Import tariff of around 5 percent for most high-value products	Required continuous introduction of various US ingredients available to the market.
Ingredients has significant high potential market to the entire populations, at least 138 million of most populated island (Java)	Infrastructure and cold chain distribution system outside Java remains under-developed.
Rapid development of department stores, food service outlets, chain restaurants, hotels, and cafes.	Major competition from other countries such as Australia, New Zealand, German, France, and China.
Once a long-term relationship with U.S. suppliers has been established, the importation gets easier.	A long term relationship is critical for the U.S. suppliers that are not familiarized with local system, culture, constraints, and lack of good long term relationship with their agents.
Respectable and dependable importer/distributor exist for any U.S. food product for expansion in HRI industry.	Major constraint for any U.S. food ingredient to enter this market continues due to the complexity and uncertainty in import regulations, procedures, and custom clearance.

**Forecast and Future Development**

Steady growth

With government control over meat importation through quota and/or other means, it is difficult to predict the growth of the meat processing industries, as they really depend entirely of imported product for main ingredients. However, with current steady situation, some importers expect the growth between 10-15 percent in volume and manufactures confidently expect to at least 20-25 percent growth over the next five years.

The new healthy eating trend of upper and middle society in bigger cities creates more demand for more quality meat as they prefer imported meat (75 percent) over local products (25 percent), considering the price of local meat is more expensive (30 to 50 percent).

Other Opportunities

Other products which may have opportunities in this market are:

- MDM beef for 52 tons/day /company producing beef sausages and meatballs.
- MDM chicken 9.6 tons/day/manufacturing company of sausages and nuggets.
- Chicken leg-quarter a minimum of 5 tons/day/sausage manufacture as substitute for local

chicken.

- Beef lung and the base part of beef tongue have potential market as mixture for meatballs and burgers production at a low cost.
- Dietary fiber as emulsifier to be added 0.5 – 5 percent of total meat mass, increasing water binding capacity, improve texture of sausage, meatball, burger patty, and nugget.
- Whey protein as fat mimetic as water binding, emulsifier, with characteristic like fat but retain the structure of the product under high temperature during processing. Most fat replacer causes the products lost its moisture during processing/cooking/frying. Currently, a research is undergoing by an institution to determine the best type of WPC and to what amount is best for each type of meat product. One specialty sausage manufacture, with production capacity of 20 tons/day, used WPC80 before the price went skyrocketed in 2004. Its products, at retail price of 11-13 dollars/kg and cater to Western and Japanese retailers, resorts and hotels in major resort areas with high concentration of expatriates.

### **Government Policy**

The Indonesian government imposes a 5 percent import duty and a 10 percent Value Added Tax (VAT) on all imported products including all type of beef cuts and other ingredients.

DGLS requires the following documentation for importing meat:

- Health Certificate of animal origin must accompany each product at the point of entry, valid for two months and for one shipment only. It must be issued by U.S. Department of Agriculture and endorsed by any appointed veterinary services.
- Halal Certificate from country of origin is required and based on the Decree of The Indonesian Council of Ulama D-140/MUI/X/2009, October 15, 2009, the approved Halal Certification Agencies in the USA for certifying slaughtered animal in this case cattle and cow are as follow:
  1. American Halal Foundation (AHF)
  2. Halal Food Council S.E.A
  3. Halal Transaction of Omaha
  4. Islamic Food and Nutrition Council of America (IFANCA)
  5. Islamic Information Center of America (IICA)
  6. Islamic Services of America (ISA)

The countries that receive accreditation must comply with halal requirements in procedures of slaughtering the animals, free of animal diseases approved by the DGLS, and food security system. Only few slaughter houses with accreditation was approved such as New Zealand (25), Brazil (5),

Ireland (2), and Australia (56). Only few of U.S. processing plants is permitted by DGLS due to BSE - *Bovine Spongiform Encephalopathy* disease and halal issues.

Indonesian government has not lift-up the ban on U.S. chicken products including whole chickens, chicken parts, and leg quarters since year 2000 as U.S. chicken processing plants do not meet DGLS specifications and requirements, food safety requirements, and the Indonesian Council of Ulama (MUI) requirements of halal.

## **Recommendations**

Initiate the formation of an Indonesian Food Ingredient Importer Association deal with any government regulations, importation issues, avoiding high fluctuation in local pricing, and unfair trade practices.

U.S. suppliers should participate in FAS Jakarta future activity introducing their food ingredients to local importers/distributors by participating in small U.S. Food Ingredient Show throughout the country.

Coordinate future activities to introduce a wider range of U.S. ingredient products and technical seminars on isolate soy protein, potato starch, and various type of whey protein concentrate usage in meat processing industry with USMEF, ASA, USPB and USDEC. At the same time request the involvement of NAMPA – National Association of Meat Processing Industry.

Further studies on each secondary ingredient are needed to get better data estimates on the consumption of imported products compare to local products.

## **POST CONTACT AND FURTHER INFORMATION**

The U.S. Foreign Agricultural Service in Jakarta maintains up-to-date information covering food and agricultural import opportunities in Indonesia and would be pleased to assist in facilitating U.S. exports and entry to the Indonesia market. Questions or comments regarding this report should be directed to the U.S. FAS in Jakarta at the following address:

**U.S. Department of Agriculture**  
**Foreign Agricultural Service**  
U.S. Embassy Jakarta  
Jalan Medan Merdeka Selatan No. 5  
Jakarta 10110 - Indonesia  
Tel: +622134359169  
Fax: +622134359920  
E-mail: agjakarta@cbn.net.id

Homepage: <http://www.fas.usda.gov>; <http://www.usdaindonesia.org/>

Please visit our home page for more information on exporting U.S. food products to Indonesia, including *Exporter Guide: Indonesia; Food Processing Sector Report: Indonesia; The Retail Sector Report: Indonesia; The HRI Food Service Sector Report: Indonesia, Market Brief-Bakery Product Ingredient; Market Brief- Snack Food Ingredient and other related reports.*

For more information on exporting U.S. agricultural products to other countries, please visit the Foreign Agricultural Service's Home Page: <http://www.fas.usda.gov>

