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## **Report Name:** Livestock and Products Semi-annual - 2023

**Country:** India

**Post:** New Delhi

**Report Category:** Livestock and Products

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### **Report Highlights:**

The expansion of India's dairy sector is driving the increase in the cattle (both bovine and Asian domestic water buffalo) herd numbers. In marketing year (MY) 2023 (January-December) herd numbers have grown to 307.5 million head as compared to 306.7 million head in 2022. FAS New Delhi (Post) estimates that in MY 2023, India's carabeef and beef production will subsequently increase by two percent to 4.4 million metric tons (MMT) beyond last year's estimates. Production expansion is attributed to growing demand for carabeef from India's export markets. India's carabeef and beef consumption estimates for 2022 and 2023 are revised higher to 2.9 MMT and 2.96 MMT respectively as water buffalo beef continues to remain the most affordable source of animal protein. Post is raising the carabeef export number to 1.48 MMT in 2023 as industry sources are reporting increased demand from Malaysia and Middle Eastern markets.

## EXECUTIVE SUMMARY

The expansion of India's dairy sector is driving the increase in cattle (both bovine and Asian domestic water buffalo) herd numbers.<sup>1</sup> In marketing year (MY) 2023 (January-December), herd numbers have grown to 307.5 million head as compared to 306.7 million head in 2022. FAS New Delhi (Post) estimates that in MY 2023, India's carabeef and beef production, relative to 2022, will reflect growth of two percent to 4.4 million metric tons (MMT). Production expansion is attributed to growing demand for carabeef from India's export markets.

India's carabeef and beef consumption estimates for 2022 and 2023 are revised higher to 2.9 MMT and 2.96 MMT respectively as water buffalo beef continues to remain the most affordable source of animal protein.

Post is raising the carabeef export number to 1.48 MMT in 2023 as industry sources are reporting increased demand from Malaysia and Middle Eastern markets. Based on the Indian government's data, exports for 2022 are revised marginally lower than the initially anticipated export offtake for the last quarter of that marketing year. Export volumes to Egypt, a key importer of Indian carabeef, dropped in 2022 as a result of the Egyptian pound's devaluation, lack of U.S. dollars to pay for Egypt's imports, high inflation rates, and changed import procedures. In 2023, trade sources, however, remain bullish on the continued export demand for Indian carabeef, especially from the other Middle Eastern and South Asian markets.

While India has become, and will continue to be, the largest water buffalo beef exporter, its access to premium markets such as those of the United States and Japan will remain restricted as Foot-and-Mouth Disease (FMD) is endemic, despite India having made strides in recent years to reduce FMD levels. Currently, according to the World Organization for Animal Health (OIE), India does not have FMD-free status. Post continues to field queries from local industry trade members expressing their keen interest to export Indian carabeef to the United States. Similarly, the Indian government has been ramping up its request for U.S. market access for carabeef in meetings with Post.

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<sup>1</sup> India has more dairy cattle than any other country and has a diverse animal population, ranking first in buffalo population. In all, India has 13 percent of the world's cattle population and 57 percent of the world's buffalo population (see, <https://www.pashudhanpraharee.com/>).

## COMMODITIES

### CATTLE

**Table 1. India: Commodity, Cattle – Production, Supply and Distribution (PSD)**

Animal Numbers, Cattle	2021		2022		2023	
Market Year Begins	Jan 2021		Jan 2022		Jan 2023	
India	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
<b>Total Cattle Beg. Stocks</b> (1000 HEAD)	305500	305500	306700	306700	307550	307500
<b>Dairy Cows Beg. Stocks</b> (1000 HEAD)	127650	0	128650	128650	129300	129300
<b>Beef Cows Beg. Stocks</b> (1000 HEAD)	0	0	0	0	0	0
<b>Production (Calf Crop)</b> (1000 HEAD)	69800	69800	70000	70000	70100	70100
<b>Total Imports</b> (1000 HEAD)	0	0	0	0	0	0
<b>Total Supply</b> (1000 HEAD)	375300	375300	376700	376700	377650	377600
<b>Total Exports</b> (1000 HEAD)	0	0	0	0	0	0
<b>Cow Slaughter</b> (1000 HEAD)	0	0	0	0	0	0
<b>Calf Slaughter</b> (1000 HEAD)	0	0	0	0	0	0
<b>Other Slaughter</b> (1000 HEAD)	38750	38750	39400	39450	39925	39985
<b>Total Slaughter</b> (1000 HEAD)	38750	38750	39400	39450	39925	39985
<b>Loss and Residual</b> (1000 HEAD)	29850	29850	29750	29750	29825	29730
<b>Ending Inventories</b> (1000 HEAD)	306700	306700	307550	307500	307900	307885
<b>Total Distribution</b> (1000 HEAD)	375300	375300	376700	376700	377650	377600

Note: Post data is not official USDA data.

### PRODUCTION

India has the world's largest live cattle inventory, followed by those of Brazil and China in terms of absolute numbers. The national cattle herd is composed of a combination of bovine dairy cattle (*Bos taurus* and *Bos indicus*) and the Asian domestic water buffalo (*Bubalus bubalis*). FAS New Delhi (Post) is raising the total cattle herd number to 307.5 million head in 2023 as compared to 306.7 million head in 2022.<sup>2</sup> Post attributes the increase in herd numbers resulting from a healthy calf-crop, driven by improving dairy cattle reproductive success.

Industry and government sources anticipate that India's cattle herd will experience robust growth over the next few years, thanks to improved breeding, nutrition, and animal health. With the

<sup>2</sup> India's A1 milk producing cow breeds (cross breed – *B. taurus*) include largely Holstein Friesian, Karan Swiss, Jersey, and Brown Swiss. Whereas India's A2 milk producing cow breeds (pure desi breed – *B. indicus*) include the Gir, Sahiwal, Red Sindhi, and the Kankrej. The zebu, also known as indicine cattle or humped cattle, is a species or subspecies of domestic cattle originating in the Indian sub-continent. The zebu has a fatty hump on its shoulders, a large dewlap, and often drooping ears. Used often in the past as a draught animal, cross breeding with foreign imported breeds has led to the increased incidence of smaller humps in bulls and bullocks, reducing their value as draught animals. Key physiological differences that *B. indicus* and *B. taurus* cattle evidence include delayed age at puberty along with higher circulating concentrations of hormones such as estradiol, progesterone, insulin, and IGF-I. Overall reproductive success of *B. indicus* animals is inferior to that of *B. taurus* ones. However, *B. indicus*, is heat tolerant and parasite resistant, making it better adapted to India's hot, humid climatic conditions. These animals can be used for both meat and milk production, however, meat quality characteristics vary and milk its milk production is not necessarily very high.

improvement in the reproductive health of animals, calf crop numbers will gradually march upwards.

**Photo 1. Zebu (*Bos indicus*) and of the Asian domestic water buffalo (*Bubalus bubalis*)**



Source: FAS New Delhi.

In 2022, India experienced anew an outbreak of the Lumpy Skin Disease (LSD) in cattle in various parts of the country (see, [GAIN-INDIA | IN2022-0066 | Outbreak of Lumpy Skin Disease in Cattle Raises Alarm in Cattle-rearing Communities in the State of Gujarat](#) and [GAIN-INDIA | IN2022-0070 | Update – Lumpy Skin Disease Spreads to Northern States of India](#)).

**Photo 2. India, Cross Breed Cattle Evidencing Lumpy Skin Disease in 2022.**



Source: Zee News, India.

According to industry sources, ultimately the overall observed impact of the outbreak was not as severe as could have been, the disease has now been largely contained. A new homologous vaccine, developed indigenously by the Indian Council for Agricultural Research-Indian Veterinary Research Institute (ICAR-IVRI) at Izatnagar (a locality in Bareilly in the Indian state of Uttar Pradesh) and the National Research Centre on Equines (Hisar, Haryana), is expected to help control the spread of the virus in the coming years.

## COMMODITIES

### MEAT, BEEF AND VEAL

**Table 2. India: Commodity, Meat, Beef and Veal – Production, Supply and Distribution**

Meat, Beef and Veal	2021		2022		2023	
Market Year Begins	Jan 2021		Jan 2022		Jan 2023	
India	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
<b>Slaughter (Reference)</b> (1000 HEAD)	38750	38750	39400	39450	39925	39985
<b>Beginning Stocks</b> (1000 MT CWE)	0	0	0	0	0	0
<b>Production</b> (1000 MT CWE)	4195	4195	4350	4350	4425	4440
<b>Total Imports</b> (1000 MT CWE)	0	0	0	0	0	0
<b>Total Supply</b> (1000 MT CWE)	4195	4195	4350	4350	4425	4440
<b>Total Exports</b> (1000 MT CWE)	1397	1397	1475	1450	1475	1480
<b>Human Dom. Consumption</b> (1000 MT CWE)	2798	2798	2875	2900	2950	2960
<b>Other Use, Losses</b> (1000 MT CWE)	0	0	0	0	0	0
<b>Total Dom. Consumption</b> (1000 MT CWE)	2798	2798	2875	2900	2950	2960
<b>Ending Stocks</b> (1000 MT CWE)	0	0	0	0	0	0
<b>Total Distribution</b> (1000 MT CWE)	4195	4195	4350	4350	4425	4440
<b>Balance</b>	0	0	0	0	0	0
<b>Inventory Balance</b>	0	0	0	0	0	0
<b>Weights</b>	108.3	108.3	110.4	110.4	110.8	111
<b>Production Change</b>	12	12	4	4	2	2
<b>Import Change</b>	0	0	0	0	0	0
<b>Export Change</b>	9	9	6	4	0	2
<b>Consumption Change</b>	13	13	3	4	3	2
<b>Imports Percent Consumption</b>	0	0	0	0	0	0
<b>Exports Percent Production</b>	33	33	34	33	33	33

Note: Post data is not official USDA data.

## PRODUCTION

Throughout 2022, Indian carabeef production experienced healthy growth. Assuming that this trend continues in 2023, Post is revising carabeef and beef production higher by two percent, to reach approximately 4.44 million metric tons (MMT) above last year's estimate of 4.35 MMT. Post attributes the uptick in production to meet growing demand from India's export markets, namely in the Middle East and Southeast Asia.

The carcass weight equivalent (CWE) of animals' (i.e., water buffalo) post-slaughter is increasing. The Indian government is providing support to the local livestock meat industry, maintaining, and facilitating essential food and agricultural product processing. It announced in the [India Fiscal Year Budget – 2023/2024](#), a sizeable allocation of funding for the Ministry of Agriculture and Farmers' Welfare's Department of Animal Husbandry and Dairying (DAHD) for the livestock health and disease management program. This has been done in order to control two deadly animal diseases, African Swine Fever and Lumpy Skin Disease.

Most Indian states continue to prohibit the slaughter of live cattle (i.e., *B. taurus* and *B. indicus*) of all ages, including female and male calves. For a few states, however, there are some very limited exceptions that permit authorized bovine cattle slaughter (see, [GAIN-INDIA | IN5085 | \(July 7, 2017\) – Cattle Slaughter Legislations](#) and [GAIN-INDIA | IN2022-0075 | Livestock and Products Annual - 2022](#)).<sup>3</sup>

## CONSUMPTION

India's 2023 carabeef, and bovine beef (*B. taurus* and *B. indicus*) wherever permissible, consumption is raised by two percent to 2.96 MMT. Similarly, 2022 consumption estimates are revised higher to 2.9 MMT. Carabeef continues to remain the most affordable source of animal protein, serving as a valuable nutrition filled consumable that is available at relatively lower prices.<sup>4</sup> Although most of India's Hindu-majority population forgoes carabeef and beef consumption, the country's Muslim and Christian populations do consume it in volume.<sup>5</sup> Increases in consumption are now being facilitated by greater product availability through eCommerce and a more organized retail sector.

**Prices:** The wholesale price index (WPI) for buffalo beef (carabeef) and beef in 2022 (July-November) rose four percent, (figure 1), a modest increase compared to those for other meats, which make these red meats relatively more affordable and accessible to consumers. In comparison, pork meat pricing dropped four percent thanks to improved, greater supplies. The WPI for goat meat (classified in India as mutton) rose by six percent, and the poultry meat WPI increased by 21 percent from July-November 2022. The WPI for freshwater or inland fish (both from wild caught and aquaculture) rose by six percent.

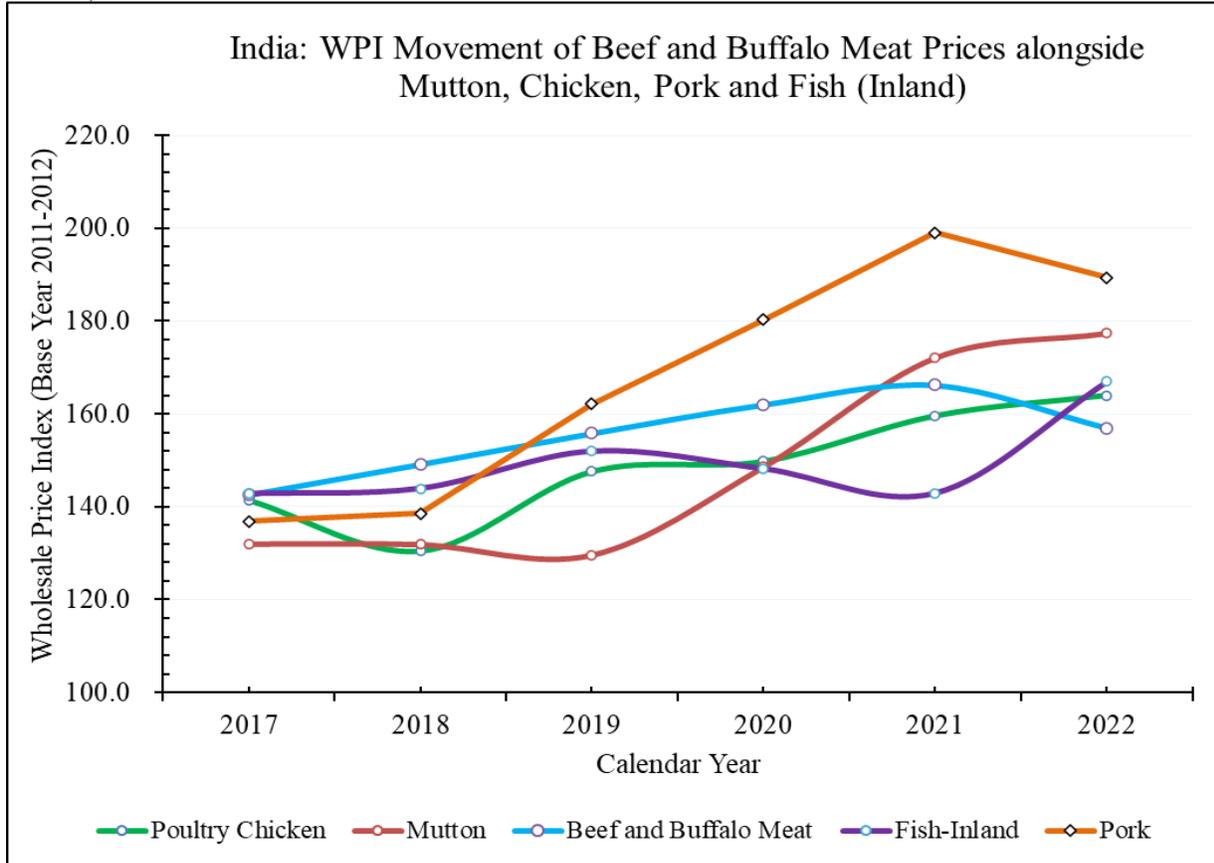
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<sup>3</sup> Article 48 in the Indian Constitution indicates that states should consider preventing cattle slaughter but provides no specific enforceable laws or directives on the subject. Agricultural policy, including cattle slaughter, is governed individually by each Indian state. Many Indian states and union territories address cattle slaughter and the interstate movement and trade of live cattle and animal products. However, because there are no central or federal laws for cattle slaughter, most states and union territories have developed varying legislation, including creating different legal definitions for calves, bulls, and bullocks (steers).

<sup>4</sup> Price comparison of various kinds of meat shows beef as the lowest cost animal meat at Indian rupees (INR) 200 per kilogram; chicken-INR 260/kilogram; mutton-INR 700/kilogram and pork-INR 350/kilogram (see, <https://dailypricelist.com/. 2/13/2023>).

<sup>5</sup> India with a population of over 1.389 billion (Central Intelligence Agency – 2022 estimate), has an Indian Muslim populace numbering nearly 200 million, or about 14.2 percent of the national population based on the 2011 census. India currently has the world's third largest number of Muslims (trailing Indonesia with 231 million and Pakistan with 212.3 million), despite Islam being the second largest religious grouping in this Hindu-majority country. India's Muslim inhabitants are projected to grow to 236 million by 2030, narrowing the gap with Indonesia at 238.8 million and Pakistan 256.1 million (see, <https://www.pewresearch.org/religion/2011/01/27/the-future-of-the-global-muslim-population/>). Projections put India's Muslim population surpassing 310 million by 2050, making India's Muslim population the largest in the world with 11.2 percent of the world's total Muslim population (see, <https://www.pewresearch.org/religion/2015/04/02/muslims/#:~:text=The%20number%20of%20Muslims%20around,nearly%202.8%20billion%20in%202050>). Christians number about 32 million based on the 2011 census making up 2.3 percent of the national population.

**Figure 1: India, Beef and Buffalo Meat, Mutton, Chicken, Pork, and Fish Wholesale Prices, 2017-2022**

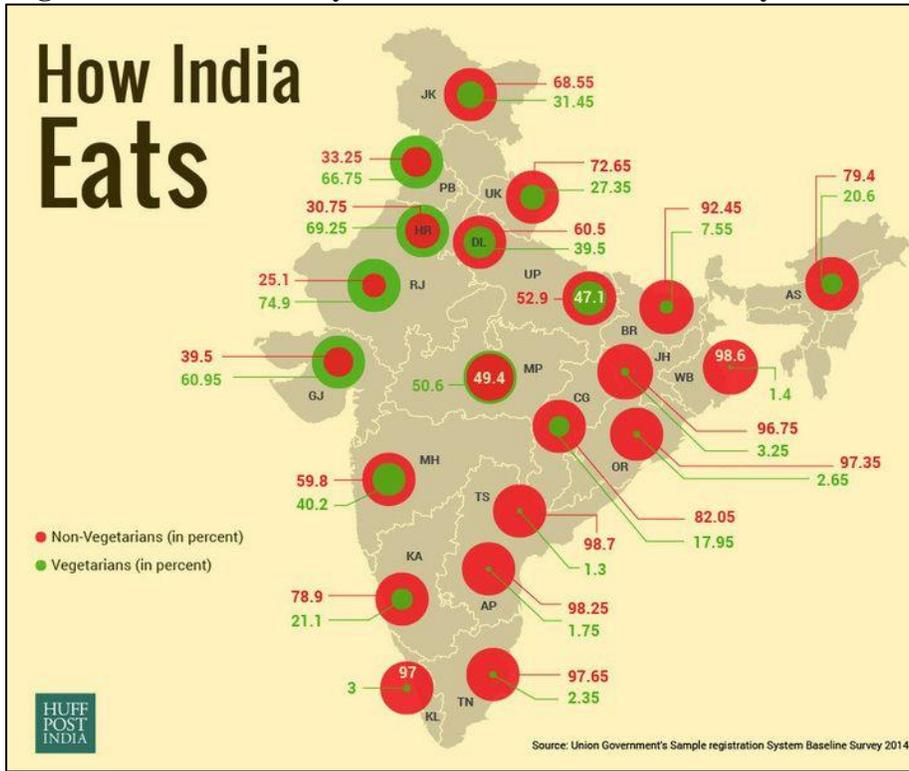


Note: There is only a single base year for the commodities (poultry/chicken, mutton (goat), beef and buffalo meat, fish (inland), and pork). The prices referenced are wholesale index prices, not retail prices.

Source: Ministry of Commerce and Industry, Trade Data Monitor, and FAS New Delhi office research.

**India's Consumption Preferences:** Data from the [National Family Health Survey \(NFHS-5\)](#), conducted in 2019-21 and released in March 2022, shows an increasing number of people are eating non-vegetarian foods. It also highlights that over 70 percent of the Indians consume fish, meat, or eggs. Some of the Indian states report having a high population of non-vegetarians (i.e., 97 percent), while some other states indicate having lower non-vegetarian populations (i.e., below 40 percent).

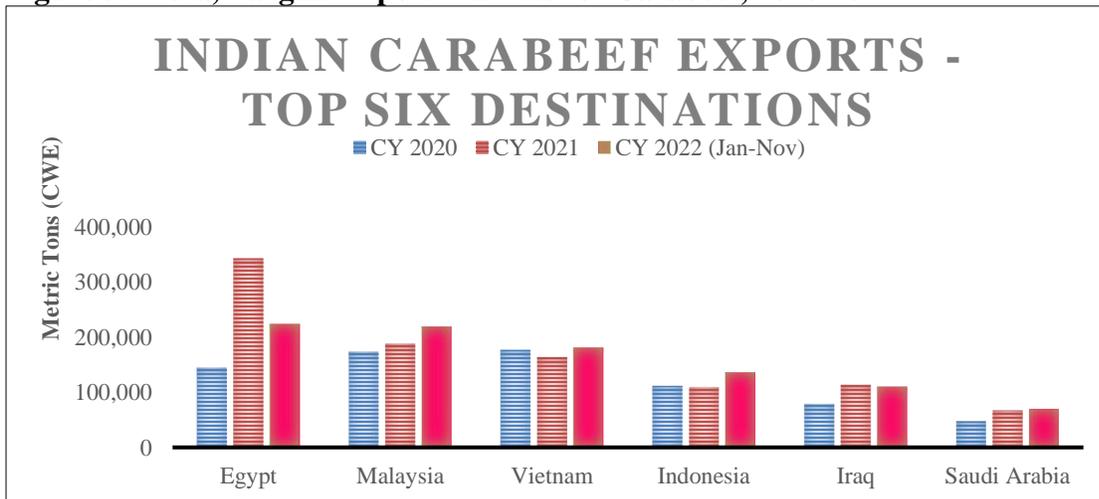
**Figure 2: India's Dietary Preference Across the Country**



Since 2006, India has witnessed a major shift from vegetarian diets towards new diet trends containing larger amounts of meat and meat products. Factors such as urbanization, greater exposure to new, foreign cultures, and increasing disposable incomes are some of the main reasons for the shift. Although India's per capita meat consumption is still low (4.5 kilograms per person), India's total meat consumption is among the highest globally given its population.

**TRADE**

**Figure 3: India, Largest Export Markets for Carabeef, 2020-2022**



Source: Trade Data Monitor and FAS New Delhi office research.

**Exports:** FAS New Delhi is raising India's 2023 carabeef export number to 1.48 MMT. Post's industry sources report strong, higher demand coming from the Malaysia and Middle Eastern markets. Based on the Indian government data, exports in 2022 are revised marginally lower than the initially anticipated export offtake for the last quarter of that market year.

In 2023, Post's trade sources are bullish on continued export demand for carabeef. Indian carabeef exports in the January-November 2022 period came in at 940,974 MT, up 53,689 MT, representing an increase of four percent, when compared, with the same period in 2021. Major Indian carabeef export destinations include Vietnam, Malaysia, and Indonesia, all of which are already evidencing good increases in volumes. Export volume to Egypt in 2022 did however tumble. The drop in exports to Egypt is attributable to the devaluation of the Egyptian pound in 2022, in tandem with a scarcity of U.S. dollars, along with high domestic inflation rates and changed import procedures.

All exported meat and meat products must be processed in abattoirs and meat processing plants registered with India's [Agricultural and Processed Food Products Export Development Authority](#) (APEDA).<sup>6</sup> Export shipments are subject to compulsory microbiological and other testing requirements. The registered processing establishment submits online requests for issuance of animal health certificates to the Indian (sub-national) state-level animal husbandry office to which their unit belongs and the certificate is issued by the Indian state veterinary officer. India exports frozen (halal) boneless carabeef, which is typically thawed, and resold in wet markets.

**Imports:** India restricts the import of foreign origin carabeef for religious reasons, as well as to protect domestic producers. India's import certification requirements and documentation for livestock products are available at: <https://dahd.nic.in/trade> (see, [GAIN-INDIA | IN2022-0075 | Livestock and Products Annual - 2022](#)).

The [India Fiscal Year Budget – 2023/2024](#) (announced in February 2023) included tariff reductions on various aquaculture (fish and krill meal) feed ingredients. The government is proposing reducing the customs duty on these products from 15 to 5 percent. The reduction in tariff will have minimal impact on U.S. trade as the intent of the lowered duty is to support domestic industries given rising input costs.

**Halal Regulations-Exports/Imports:** In India, halal is a religious attestation. The Indian government neither mandates halal certification, nor does it provide a unifying regulatory law. The Ministry of Health and Family Welfare's Food Safety and Standards Authority of India's (FSSAI) standard certification is the sole requirement for edible consumer products. Halal certification, in the form of an internationally recognized certificate, is not necessary to obtain trade permission either for exports or imports.

On January 17, 2023, the Ministry of Commerce and Industry's (MOCI) Directorate General of Foreign Trade (DGFT) issued **Notification No. 25/2022-23 – Streamlining of Halal Certification Process for Meat and Meat Products**. The 137-page long notification proposes

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<sup>6</sup> APEDA is an apex body that promotes India's export trade in food and agricultural products (including fresh fruits and vegetables, processed food products, livestock products, and cereals). It is an agency of the Ministry of Commerce and Industry.

draft guidelines to streamline the halal certification process for export of meat and meat products from India (see, [GAIN-INDIA | IN2023-0010 | India Halal Market Update - 2023](#)).

## **POLICY**

**Trade Policy:** The MOCI regulates livestock and livestock product exports. The DAHD regulates livestock and livestock product imports. In accordance with Section 3 and 3a provisions of the [Livestock Importation Act, 1898](#), ([Livestock Importation Act, Amended 2001](#)). It aims to prevent the entry of exotic diseases through imported livestock and livestock products.<sup>7</sup> As previously mentioned, bovine beef cattle (*B. taurus* and *B. indicus*) slaughter is banned in most Indian states; India also prohibits bovine beef exports, as well as imports (see, [GAIN-INDIA | IN2022-0075 | Livestock and Products Annual-2022](#)).

**Carabeef Meat Production, Programs, and Policy:** The FSSAI regulates domestic slaughter and meat processing by means of the Food Safety and Standards Rules and Regulation (2011). The regulation defines standards and regulations for domestic and imported meat products.

## **Attachments:**

No Attachments

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<sup>7</sup> Livestock covers mules, asses, bulls, calves, bullocks (steers), buffaloes, goats, swine, dogs, cats, poultry, parrots, pigeons, canaries, and finches. Beef is regarded as being separate and distinct from carabeef, or water buffalo meat.