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# **India**

# **Livestock and Products Annual**

2010

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### **Report Highlights:**

Based on provisional results of the Indian government's 2007 Livestock Census, cattle numbers since 2004 have been revised. Buffalo meat production is estimated at 2.85 million tons in 2010 and is forecast to increase marginally in 2011, reflecting increasing domestic consumption, growing exports and the small but growing trend of raising male buffalo calves for meat production. Buffalo meat (mostly frozen) exports declined to 609,000 tons (on a carcass weight equivalent basis) in CY 2009 and are estimated at 700,000 tons in CY 2010. Exports are forecast to increase in CY 2011 due to growing demand for bovine meat in key export markets and competitive Indian buffalo meat prices.

#### **Commodities:**

Animal Numbers, Cattle Meat, Beef and Veal

#### **Production:**

Growth in India's bovine herd is largely due to growth in Indian dairy production, which is the main driver behind livestock production in India. Despite being home to the world's largest bovine herd and being the world's largest dairy producer, India faces a growing dairy supply shortage. In response to this supply-demand situation, Indian producers have increased the livestock population. As a result, combined cattle and buffalo stocks continue to rise. In 2009, Indian cattle and buffalo stocks were pegged at 303.5 million head, consistent with the steady increases the dairy sector has experience since 2004. This trend is expected to continue in the short-term, with 2010 and 2011 combined stocks forecast slightly over 2009 at 304 million head. Note that results of the government's semi-decadal livestock census of 2007 [1] (CY 2007 ending inventories) shows a bounce back in the combined cattle and buffalo population at 303 million (198.3 million cattle and 104.7 million buffalo), an increase of 7 percent over the 2003 census number of 283.1 million (185.2 million cattle and 97.9 million buffalo). The latest census result has necessitated an upward revision to the total animal population since 2004.

India's large livestock and dairy sector is characterized by a small-holder system with low milk productivity on a per animal basis. In order to respond to the growing dairy supply gap within this type of production system, the Indian cattle and buffalo herd will likely grow in the short term, with an emphasis on genetic improvements and hybrid crosses intended to increase milk output. Over the long-term, however, livestock production should taper off, assuming that milk producers adopt more efficient practices and experience economies of scale. The calf crop, in the short term, is likely to grow as producers attempt to keep cows in milk production. Calf production numbers have been revised to reflect increased milk demand, as well as revisions from the 2007 census.

Indian livestock farmers show mixed preferences between buffalo and cattle. Traditionally, Indian farmers have preferred buffalo milk due to its high milk volumes and fat content. Additionally, with the introduction of modern slaughterhouses, a guaranteed market for buffalo meat has encouraged rearing of buffalo at the expense of cows in some regions of India. However, many larger dairies, as well as dairy processors, are trending towards growth in cow production due to characteristics such as shorter dry periods/consistency of supply, and yield improvements gained from imported genetics. As a result, it is likely that growth will occur in both species in the short-term.

Although no official statistics are available, Indian buffalo meat production is forecast to rise by around 3 percent in CY 2011 to around 2.9 million tons, due to increasing domestic and export demand, according to industry sources. There is a significant potential for India to increase buffalo meat production due to the large availability of low-priced animals and the current low level of technology across the supply chain.

Buffalo cows, particularly those which have completed their lactation cycles, are predominantly used for meat. There are about 3,900 licensed slaughter houses in the country authorized by local bodies. In addition, there are around 26,000 unauthorized slaughter houses. However, there are now 13 export-oriented, modern, integrated abattoirs or meat processing plants registered with the Agricultural and Processed Food Export Development Authority (APEDA). There are also 24 meat processing and packaging units, which receive dressed carcasses from approved municipal slaughter houses for the export of meat. It is likely that other export plants will be developed in the future given India's export focus.

Almost all Indian buffalo meat is a by-product of the Indian dairy sector, which is characterized by a low input/low output production model. Under the low input system, farmers minimize buffalo and cattle feed rations to inexpensive green fodder

and agricultural crop residues. There is limited use of high quality feed grains or oilmeals. Although the government of India is encouraging the rearing of male buffalo calves for meat purposes (see Production Policy section), there are only a few organizations engaged in intensive buffalo rearing. As a result, Indian demand for feed grains in the cattle sector is limited.

The processed meat sector, formerly regulated by the Ministry of Food Processing Industries (MOFPI), is now regulated by the Food Safety and Standards Authority of India (FSSAI) through the Meat and Meat Products Order (MFPO), 1973 [2]. The MFPO contains standards for the licensing of meat processors and regulates the standards for domestic production and sale of meat products. It also enforces sanitary maintenance and controls at all stages of meat (including fish and poultry) products production.

In February 2009, the GOI launched the National Meat and Poultry Processing Board (<a href="http://nmppb.gov.in/">http://nmppb.gov.in/</a>), an autonomous body to oversee the growth and further promotion of the meat and poultry processing sector in India.

### **Production Policy**

A National Project on Cattle and Buffalo Breeding (NPCBB) was launched by the government in October 2000 for a period of 10 years. The project envisaged genetic improvements of indigenous cattle and buffaloes, development and conservation of important indigenous breeds and the building of a sustainable breeding policy, with a focus on increasing milk production. The government of India (GOI) has decided to continue this program through the 11<sup>th</sup> Five Year Plan period (2007 -2012).

The nationwide animal mortality rate due to diseases as well as undefined reasons in India is reportedly at 7.5 percent in cattle and 9.6 percent in buffaloes. An estimated 40 million animals die every year in the country due to natural causes, disease and other problems <sup>[3]</sup>. Livestock diseases constrain production and productivity of Indian cattle although a major pillar of the GOI's livestock development strategy recently has been the subsidized public delivery of veterinary services. Although Rinderpest has been eradicated, other cattle diseases still continue to pose a threat to livestock production. Diseases such as Foot-and Mouth Disease, Contagious Bovine Pleuropneumonia, New Castle Disease (Ranikhet Disease) are causing economic losses.

Over time, the government has built up networks of physical and human infrastructure to provide veterinary services to millions of farmers. However, the quality of services provided by these institutions is sometimes inadequate. In response, the Department of Animal Husbandry, Dairying and Fisheries (DAHD), Ministry of Agriculture, GOI, is implementing the 2009 "Livestock Health and Disease Control" program in collaboration with various state governments (animal husbandry is a state subject), which aims to improve diagnosis of a series of common diseases. The various components of the program are: (a) Assistance to States for Control of Animal diseases; (b) National Project on Rinderpest Eradication; (c) Professional Efficiency Development; and (d) Foot & Mouth Disease Control Program. The DAHD has recently added some additional components to the program, which include The National Control Program of Peste des Petits Ruminants; The National Animal Disease Reporting System; Establishment and strengthening of existing veterinary hospitals/dispensaries; and a National Control Program of Brucellosis.

At the World Organization of Animal Health 78<sup>th</sup> General Session, held in Paris, India was recognized as having 'negligible risk' for Bovine Spongiform Encephalopathy (BSE). This recognition has been hailed by India's livestock sector in general and by the export-oriented meat industry in particular, which exports about 500,000 tons of bovine meat annually to over sixty countries.

Based on the assessments and recommendations made by the GOI Standing Committee of Parliament and the Planning Commission, DAHD launched the program "Salvaging and Rearing of Male Buffalo Calves", which envisages utilizing male buffalo calves by rearing them for meat production and developing linkages with export-oriented slaughter-houses in several potential states <sup>[4]</sup>. The new program, when fully implemented, could lead to a further increase in buffalo meat production in coming years. Nonetheless, there are several constraints to increasing buffalo production in India, which include:

Scarcity of feed and fodder.

- Anti-cow slaughter legislation in several states.
- Research and development constraints.
- Inadequate market infrastructure, unorganized markets for livestock products, and a poor cold chain network.
- Animal health and welfare issues.
- Food safety issues.
- Environmental constraints.

[1] See: http://dahd.nic.in/draft\_report\_quick.htm

[2] See: www.fssai.gov.in/mfpo.aspx

[3] See: Parliamentary Committee on Agriculture Report <a href="http://164.100.47.134/lsscommittee/Agriculture/DFG%20%282010-11%29%20DAHDF.pdf">http://164.100.47.134/lsscommittee/Agriculture/DFG%20%282010-11%29%20DAHDF.pdf</a>

[4] For details please see: <a href="http://dahd.nic.in/SalvagingofMaleBuffalo.pdf">http://dahd.nic.in/SalvagingofMaleBuffalo.pdf</a>

**Consumption:** Indian consumption of buffalo meat is low (per capita consumption is only two kilograms per person). Local preferences for vegetarian protein sources have led Indian consumers pay a premium for beans and pulses, while buffalo meat is among the least expensive locally available protein sources. Local buffalo meat consumption shows only marginal increases, a reflection of a growing population, and a preference for vegetarian and dairy-based protein sources

#### Trade:

India does not import beef meat. Additionally, imports of pork, poultry, eggs (except for specific pathogen free (SPF) eggs), hatching eggs and day old chicks are prohibited from the United States and other countries. India allows imports of bovine semen and embryos and is in the process of developing an import protocol for live dairy cattle for breeding purposes. However, various quality requirements specified under these import guidelines are restrictive and limit the availability of imported genetics products. The detailed text version of these guidelines can be found at: <a href="http://dahd.nic.in/trade/RGIIEX.pdf">http://dahd.nic.in/trade/RGIIEX.pdf</a>.

Indian buffalo meat exports have consistently grown over the last several years, due largely to its competitive pricing in the world market. An exception to this trend took place in CY 2009, when exports declined by 9% from the previous year to 609,000 tons (on a carcass weight equivalent basis). These declines were likely due to the global economic slowdown, which may have lead to reduced demand in key markets in Asia and Africa (the Philippines, Angola, for example). It is important to note, however, that as a low cost competitor, Indian buffalo meat has generally weathered the economic slowdown, and is forecasting a return to growth for 2010.

India mainly exports deboned frozen buffalo meat. The growing demand for bovine meat in global markets and its high prices have resulted in an increase in buffalo meat exports from India in recent years. The buffalo meat share in total meat exports from India is more than 90 percent (in value terms), followed by a three percent share of goat and sheep meat and the rest comprised of poultry meat and animal casings. Exports of pork, poultry, and processed meat are almost negligible due to high costs, inadequate meat processing facilities, and infrastructure constraints.

Exports of beef and veal have increased during the past 20 years, particularly to the Middle East and some South Asian countries. Indian buffalo meat is exported to more than 60 countries. Prominent among these are traditional markets such as

Vietnam, Malaysia, The Philippines, the Middle East and emerging markets in Africa (Angola, Congo, Cote D' Ivories, Gabon, Ghana etc.), CIS (Azerbaijan, Georgia, and Uzbekistan). In 2009 exports to Syria and Iraq registered significant growth. Competitive pricing and increasing efforts by exporters to upgrade quality with support from the government provide an impetus to India's meat exports.

Globalization of the Indian economy into the world economy through trade, investment and technology transfer is bound to influence the livestock industry. The ability of the corporate sector to enter into agriculture and allied activities in the name of modernisation and scale economies, thereby capturing raw material supplies for agro-processing and exports, should support India's meat processing industry.

Table 1: India: Beef Exports (Metric Ton)									
				1					
	IFY [1] 2006/07	IFY 2007/08	IFY 2008/09	IFY 2009/10					
VIETNAM SOC REP	21,188	50,344	104,286	114,737.03					
MALAYSIA	69,443	53,096	45,004	55,826.96					
PHILIPPINES	46,203	55,625	47,788	40,525.86					
KUWAIT	40,299	37,477	32,939	33,370.84					
EGYPT A RP	12,145	28,730	39,608	32,891.24					
SAUDI ARABIA	30,752	32,518	24,039	28,369.26					
U ARAB EMTS	29,891	26,212	15,649	21,418.39					
JORDAN	28,655	19,513	14,662	17,724.39					
ANGOLA	47,441	43,348	28,743	14,829.82					
OMAN	11,872	12,216	10,165	13,923.87					
IRAQ	2,122	6,564	1,353	12,876.16					
CONGO P REP	14,067	10,896	13,947	12,789.45					
SYRIA	168	114	1,588	7,983.69					
IRAN	19,672	10,075	11,979	7,645.50					
GEORGIA	13,069	10,041	6,179	6,928.32					
LEBANON	3,041	5,441	6,353	6,075.38					
GABON	6,812	7,997	5,689	5,885.90					
SENEGAL	7,800	6,821	5,056	5,546.73					
GHANA	6,498	9,880	7,109	4,746.60					
QATAR	4,278	3,214	3,736	4,716.83					
ARMENIA	1,466	5,926	4,355	4,294.04					
COTE D IVOIRE	6,986	4,658	4,279	3,634.10					
MAURITIUS	3,558	3,594	3,748	3,342.93					
PAKISTAN	25,606	9,948	2,789	3,038.22					
BAHRAIN	3,254	2,401	2,136	2,616.07					
AZERBAIJAN	6,311	3,469	3,555	2,519.24					
TAJIKISTAN	1,048	2,626	2,055	2,054.21					
COMOROS	1,758	1,958	2,008	1,897.58					
YEMEN REPUBLC	3,400	2,807	1,323	1,457.06					
EQUTL GUINEA	1,389	1,517	962	1,318.40					
BRUNEI	1,468	1,723	1,534	868.29					
ALBANIA	1,003	279	1,366	812.37					

NAMIBIA	224	565	954	337.04
CHINA P RP	3,612	564	526	307
AFGHANISTAN	3,869	3,512	1,251	273.03
UZBEKISTAN	1,112	492	569	224
OTHER	13,026	7,317	3,468	11543.31
TOTAL	494,506	483,478	462,750	311,305

Source: Director General of Commercial Intelligence and Statistics, GOI

Note: These GOI figures are on actual weight basis and not on Carcass Weight Equivalent basis

## **Policy:**

The Livestock Importation Act, 1898 and its amendments regulate the importation of livestock and livestock products. Details on the Livestock Importation Act, Livestock Importation (Amendment) Act 2001 and various notifications issued under the Act can be accessed from: http://www.dahd.nic.in/tradematters.htm.

Procedures for the import of various livestock products into India, sanitary conditions/health protocol for various livestock products, guidelines for imports/exports of animal germplasm, and other conditions with regard to imports of livestock products have also been notified by the government of India and can be accessed from the above mentioned website.

The GOI extended the ongoing prohibition on imports of specified live animals and livestock products from all countries reporting Highly Pathogenic Avian Influenza (HPAI) and Low Pathogenic Notifiable Avian Influenza (LPAI) until six months following the most recent date of notification (March 18, 2010).

Current GOI regulations prohibit imports of live animals as well as poultry, ovine, caprine and swine meat and meat products from the United States and other countries. Imports of beef from all sources is restricted. Bovine germplasm from the United States has limited market access.

## **Production, Supply and Demand Data Statistics:**

Table 2: Animal Cattle, PSD

Animal Numbers, Cattle India										
		2009			2010			2011		
	Market Y	Market Year Begin: Jan 2009			Market Year Begin: Jan 2010			Market Year Begin: Jan 2011		
	HGDA	01.1	N.T.	TIGDA	01.1	N.T.	USDA	Old	N.T.	
	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post	Officia 1	Pos t	New Post	
	281,40	303,50	303,50	281,10	281,10	304,00	Ī		304,00	(1000
Total Cattle Beg. Stks	0	0	0	0	0	0			0	HEAD)
L	120,30	127,50	127,50	120,90	120,90	128,00			128,00	(1000
Dairy Cows Beg. Stocks	0	0	0	0	0	0			0	HEAD)
Beef Cows Beg. Stocks	0	0	0	0	0	0			0	(1000 HEAD)
Production (Calf Crop)	57,960	61,250	61,250	58,300	58,300	61,500			62,000	(1000 HEAD)
Intra-EU Imports	0	0	0	0	0	0			0	(1000 HEAD)
Other Imports	0	0	0	0	0	0			0	(1000 HEAD)
Total Imports	0	0	0	0	0	0			0	(1000 HEAD)
	339,36	364,75	364,75	339,40	339,40	365,50			366,00	(1000
Total Supply	0	0	0	0	0	0			0	HEAD)
Intra EU Exports	0	0	0	0	0	0	1		0	(1000

<sup>[1]</sup> Indian Fiscal Year (IFY) runs April through March.

								HEAD)
Other Exports	0	0	0	0	0	0	0	(1000 HEAD)
•	0	0	0	0	0	0	0	(1000
Total Exports	0	U	U	U	0	0	U	(1000
Cow Slaughter	1,275	1,300	1,300	1,300	1,300	1,300	1,300	HEAD)
Calf Slaughter	4,065	4,065	4,065	4,175	4,175	4,200	4,200	(1000 HEAD)
Other Slaughter	20,820	22,000	22,000	21,825	21,825	23,000	23,700	(1000 HEAD)
Total Slaughter	26,160	27,365	27,365	27,300	27,300	28,500	29,200	(1000 HEAD)
Total Slaughter	20,100	21,303	21,303	27,300	27,300	20,300	27,200	(1000
Loss	32,100	33,385	33,385	31,270	31,270	33,000	33,700	HEAD)
	281,10	304,00	304,00	280,83	280,83	304,00	303,10	(1000
Ending Inventories	0	0	0	0	0	0	0	HEAD)
	339,36	364,75	364,75	339,40	339,40	365,50	366,00	(1000
Total Distribution	0	0	0	0	0	0	0	HEAD)
CY Imp. from U.S.	0	0	0	0	0	0	0	(1000 HEAD)
CY. Exp. to U.S.	0	0	0	0	0	0	0	(1000 HEAD)
С1. Ехр. ю О.З.	U	0	0	0	0	0	U	(1000
Balance	0	0	0	0	0	0	0	HEAD)
Inventory Balance	-300	500	500	-270	-270	0	-900	(1000 HEAD)
Inventory Change	0	0	0	0	0	0	0	(PERCENT
							^	(PERCENT
Cow Change	1	0	0	0	0	0	0	)
Production Change	1	0	0	1	1	0	1	(PERCENT
Production to Cows	48	48	48	48	48	48	48	(PERCENT
T 1. D.1	0	0	0	0	0	0	0	(1000
Trade Balance	0	U	0	0	U	0	U	HEAD) (PERCENT
Slaughter to Inventory	9	9	9	10	10	9	10	(FERCENT
TS=TD	_		0			0	0	

Table 3: Meat, Beef and Veal, PSD

Meat, Beef and Veal India											
	2009				2010			2011			
	Market Year	Begin: Jan 200	9	Market Year	Begin: Jan 201	0		Year Begi	in: Jan 2011		
	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post	USD A Offici al	Old Pos t	New Post		
Slaughter (Reference)	26,160	26,160	27,365	27,300	27,300	28,500			29,200	(1000 HEAD)	
Beginning Stocks	0	0	0	0	0	0			0	(1000 MT CWE)	
Production	2,610	2,660	2,750	2,760	2,795	2,850			2,920	(1000 MT CWE)	
Intra-EU Imports	0	0	0	0	0	0			0	(1000 MT CWE)	
Other Imports	0	0	0	0	0	0			0	(1000 MT CWE)	
Total Imports	0	0	0	0	0	0			0	(1000 MT CWE)	
Total Supply	2,610	2,660	2,750	2,760	2,795	2,850			2,920	(1000 MT CWE)	
Intra EU Exports	0	0	0	0	0	0			0	(1000 MT CWE)	
Other Exports	590	675	609	625	680	700			725	(1000 MT CWE)	
Total Exports	590	675	609	625	680	700			725	(1000 MT CWE)	
Human Dom. Consumption	2,020	1,985	2,141	2,135	2,115	2,150			2,195	(1000 MT CWE)	
Other Use, Losses	0	0	0	0	0	0			0	(1000 MT	

								CWE)
Total Dom.								(1000 MT
Consumption	2,020	1,985	2,141	2,135	2,115	2,150	2,195	
F 1: 0: 1			0	0				(1000 MT
Ending Stocks	0	0	0	0	0	0	0	
Total Distribution	2,610	2,660	2,750	2,760	2,795	2,850	2,920	(1000 MT CWE)
Total Distribution	2,010	2,000	2,750	2,700	2,775	2,050	2,520	(1000 MT
CY Imp. from U.S.	0	0	0	0	0	0	0	
								(1000 MT
CY. Exp. to U.S.	0	0	0	0	0	0	0	CWE)
								(1000 MT
Balance	0	0	0	0	0	0	0	
L								(1000 MT
Inventory Balance	0	0	0	0	0	0	0	
XX7-1-1-4-	100	102	100	101	102	100	100	(1000 MT CWE)
Weights	100	102	100	101	102	100	100	(PERCEN
Production Change	3	5	3	6	5	4	2	,
							_	(PERCEN
Import Change	0	0	0	0	0	0	0	
								(PERCEN
Export Change	-12	0	-12	9	1	15	4	-/
								(1000 MT
Trade Balance	590	675	609	625	680	700	725	
					_			(PERCEN
Consumption Change	9	7	9	5	7	0	2	
Population	1,166,079,2 17	1,156,897,7 66	1,166,079,2 17	1,184,090,4 90	1,173,108,0 18	1,166,079,2 17	1,166,079,2 17	
Per Capita								
Consumption	2	2	2	2	2	2	2	(KG)
TS=TD			0			0	0	

# **Author Defined:**

**Table 4: Tariffs for selected Livestock Products** 

HS CODE	ITEM DESCRIPTION	BASIC	CVD	SPL CVD	TOTAL DUTY WITH 2+1%EC	IMPORT POLICY
01011010-	LIVE HORSES, ASSES, MULES & HINNIES	30	0	4	36.136	RESTD
01019090						
01021010 -	LIVE BOVINE ANIMALS	30	0	4	36.136	RESTD
01029090						
01031000-	LIVE SWINE	30	0	4	36.136	RESTD
01039200						
01041010			1			
_	LIVE SHEEP & GOATS	30	0	4	36.136	RESTD
01042000						
01051100 -	LIVE POULTRY I.E. FOWLS OF THE SPECIES	30	0	4	36.136	RESTD
01059900	GALLUS DOMESTICUS, DUCKS, GEESE,					
	TURKEYS AND GUINEA FOWLS					
02011000	MEAT OF BOVINE ANIMALS, FRESH AND CHILLED	30	0	4	36.136	RESTD
02013000						
02021000	MEAT OF BOVINE ANIMALS, FROZEN	30	0	4	36.136	RESTD
02023000						

02031100-	MEAT OF SWINE, FRESH, OR CHILLED	30	0	0	30.9	FREE
02031900						
02032100-	MEAT OF SWINE, FROZEN	30	0	4	36.136	FREE
02032900						
02041000						
-	MEAT OF SHEEP OR GOATS, FRESH CHILLED	30	0	4	36.136	FREE
02045000	OR FROZEN					
02061000	EDIBLE OFFAL OF BOVINE ANIMALS, FRESH	30	0	0	30.9	RESTD
	OR CHILLED					
02062100						
-	EDIBLE OFFAL OF BOVINE ANIMALS, SWINE,	30	0	4	36.136	*
02069090	GOATS, HORSES, ASSES, MULES OR HINNES,					
	FRESH, CHILLED OR FROZEN					
	MEAT, & EDIBLE OFFAL, OF THE POULTRY					
02071100-	OF HEADING 0105, NOT CUT IN PIECES, FRESH	30	0	4	36.136	FREE
02071200	OR					
	CHILLED OR FROZEN					
02071300	" CUTS & OFFAL, FRESH OR CHILLED	100	0	0	103	FREE
02071400	" CUTS & OFFAL, FROZEN	100	0	4	111.12	FREE

Note: CVD – Countervailing Duty, EC – Education Cess, RESTD – Restricted