

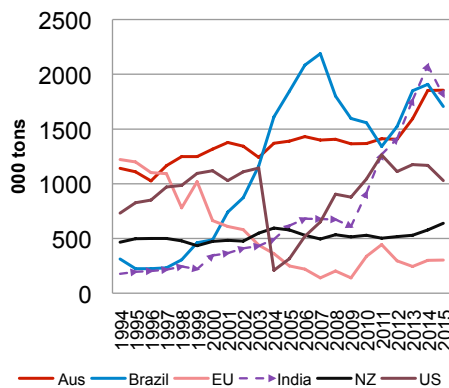
From Where the Buffalo Roam: India's Rise as Major Exporter of Bovine Meat

Pratap Birthal

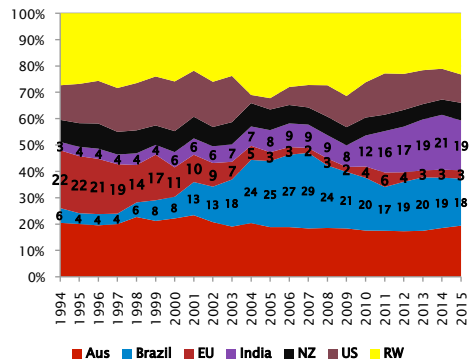
National Institute of Agricultural Economics and Policy Research, New Delhi
(Indian Council of Agricultural Research)

India's share in global exports of bovine meat

Source: USDA database)



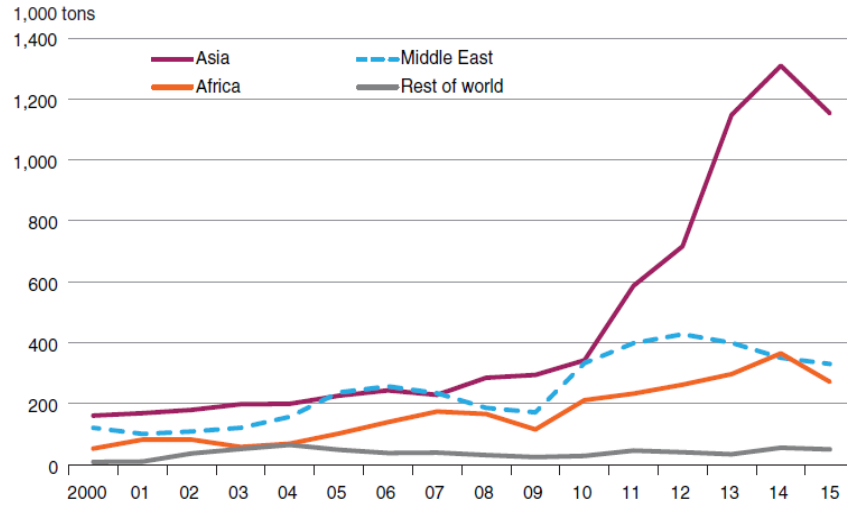
► **India**
1994-96=0.19 million t
2013-15=1.884 million t



► **India**
1994-96=3.53%
2013-15=19.71%

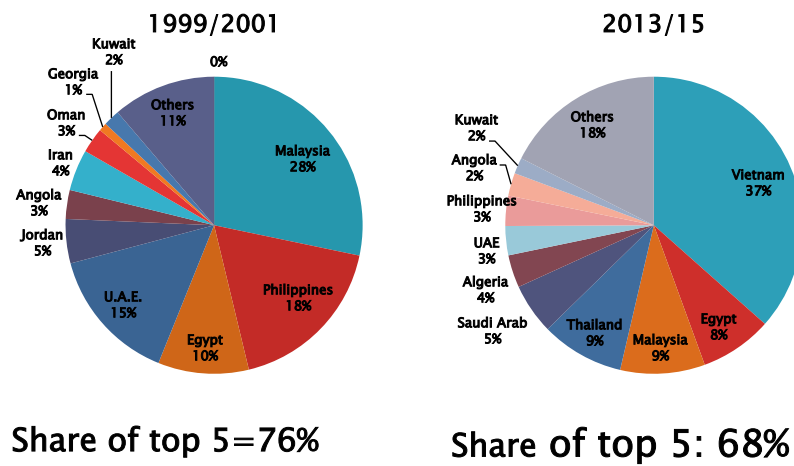
India's exports by region

Source: Landes et al. 2016



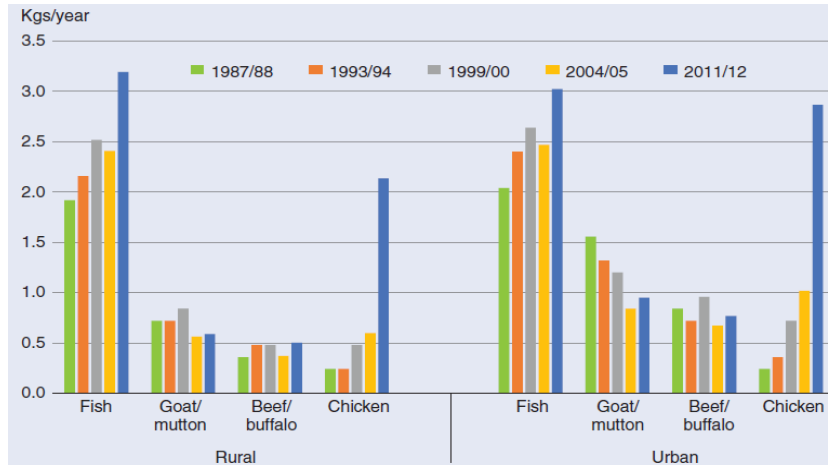
India's top destinations

Source: USDA database



India's per capita consumption

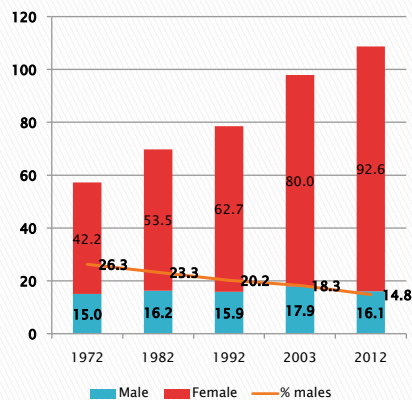
Source :GoI



Majority Hindu population does not prefer bovine meat. Of the total over 4 million tonnes of bovine meat about half enters the international markets.

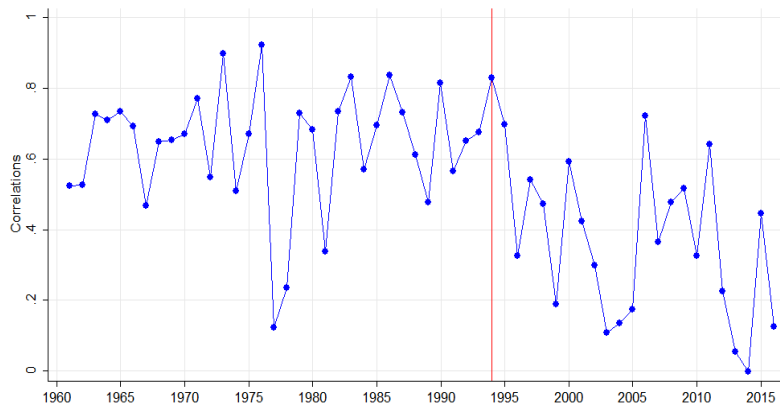
Under-exploited potential

- ▶ **Utility of buffalo**
 - Milk
 - Males for draught power
 - Meat
- ▶ **Mechanization**
 - Reduced demand for draught services
 - Declining farm size draught animals uneconomical
- ▶ **Increasing use of AI**
- ▶ **Slaughtering, exports not banned**
- ▶ **Meat is produced from male calves, culled dairy animals**
- ▶ **Low cost of production**—mixed farming system; crop residues and by-products

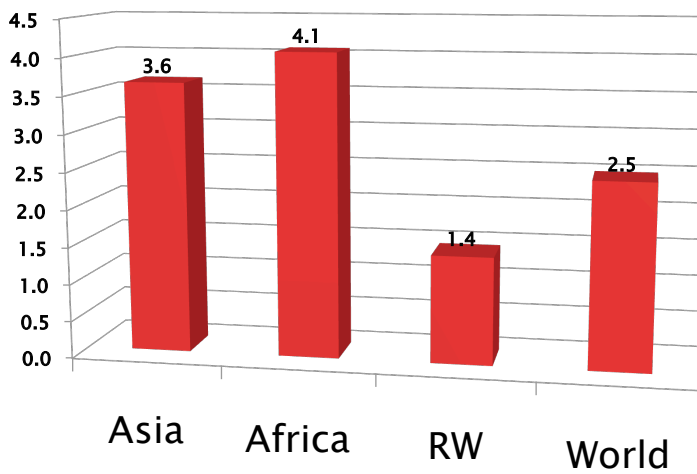


Buffalo population (million)

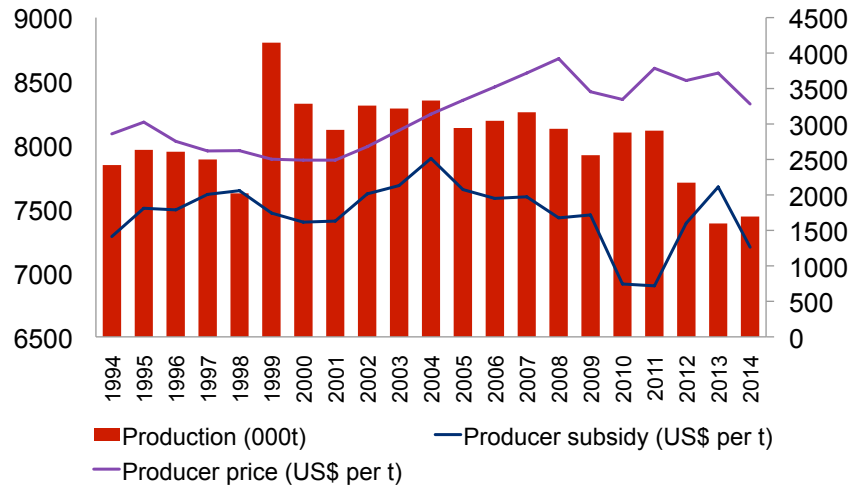
WTO: Growing disconnect between domestic production and consumption growth across countries



Strong growth in demand for meat in Asia and Africa 1995-2011

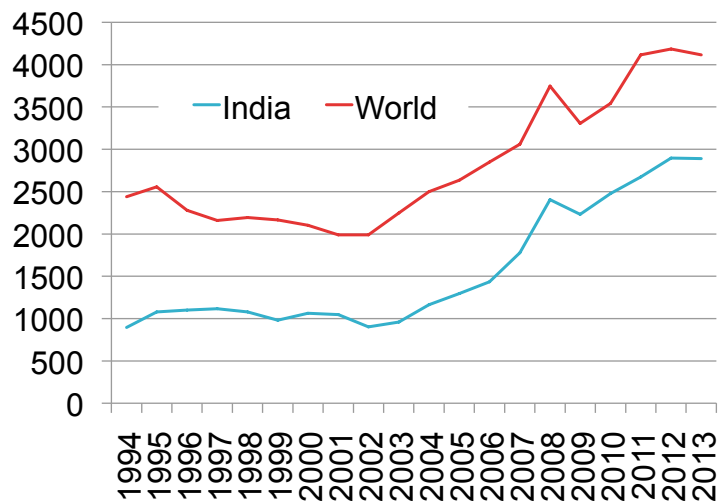


Subsidy, producer price in EU



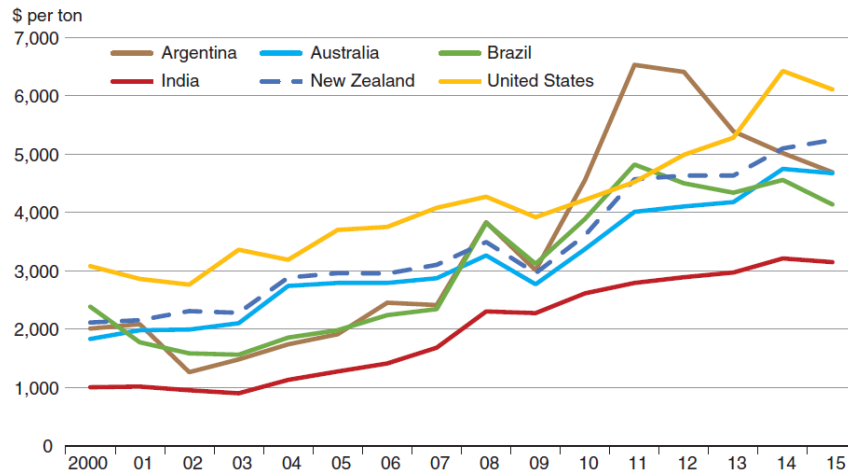
Unit export value (US\$/t)

Source: FAOSTAT



Export unit value (US\$/t) for major exporters

Source: Landes et al. (2016)



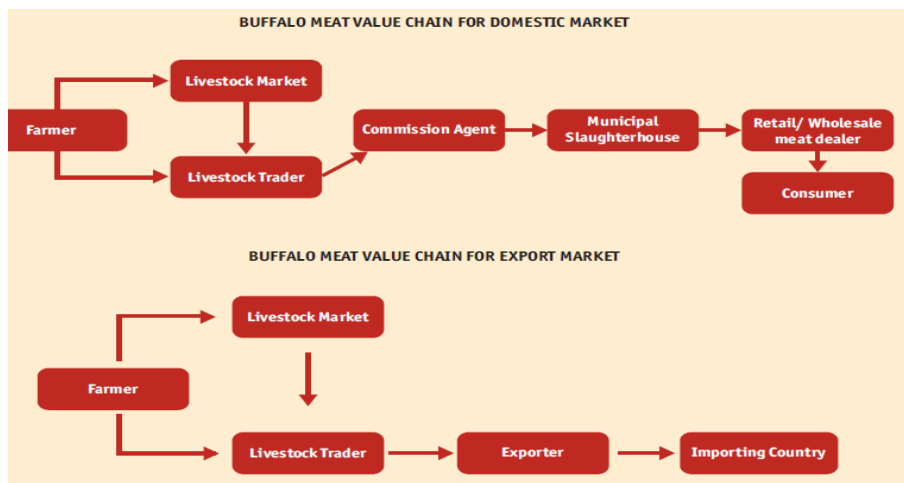
Unique characteristics of buffalo meat

- ✓ Buffaloes are raised in mixed farming systems, and no practice of using hormones, antibiotics etc. for fattening as in commercial systems, near organic
- ✓ Buffalo meat is lean, and comparable to cattle meat in terms of nutritional values and palatability
 - ✓ Higher protein
 - ✓ Higher Vit B6 and B12
 - ✓ lower calories
 - ✓ Lower cholesterol
- ✓ India produces meat according to halal standards- a key requirement of Islamic countries



Value chains for buffalo meat

Source: FICCI (2015)



Production policy

- India is free from all the OIE 'A' list diseases excluding FMD. The government has been implementing FMD control program in 351 districts
- Salvaging and rearing buffalo male calves: 14 million male calves perish annually. Subsidized credit to farmers, NGOs and corporates for rearing buffalo calves.
- Modernization of slaughterhouses and abattoirs: grant-in-aid assistance of 50-75% for cost of plant and machinery and technical civil work limited to Rupees 15 crores

Export policy

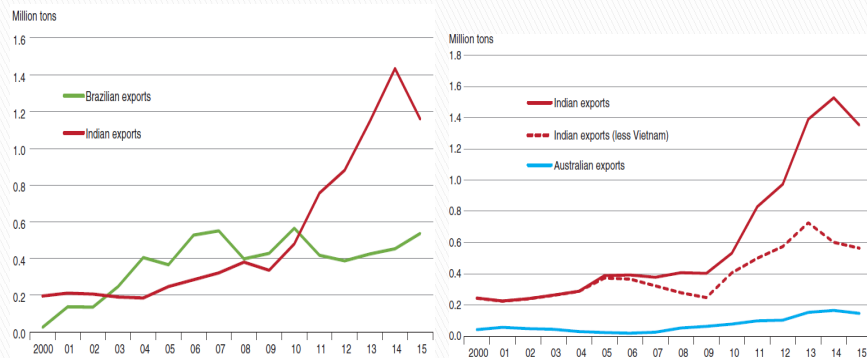
- **Exports only from licensed and APEDA registered plants:**
 - ✓ Registration is done by APEDA, Export Inspection Council of India and Food Safety and Standards Authority of India and is renewable
 - ✓ Hygiene and sanitary conditions, ante and post-mortem inspections, infrastructure, laboratory facilities, etc.
- **Quality control**
 - ✓ Compliance with SPS measures required by the International Animal Health code of World Organization for Animal Health (O.I.E.)
 - ✓ All export-oriented units are HACCP and ISO: 9000 certificates; and follow Good Manufacturing Practices and Good Hygiene Practices
 - ✓ Export shipments undergo microbial and other tests with a comprehensive pre-shipment certificate indicating that meat comes from a healthy stock and is free from infectious diseases including FMD
 - ✓ Exports of only de-boned and de-glanded meat as per OIE Terrestrial Animal Health Code to prevent contamination by FMD virus; and Bone-in meat is prohibited for exports,

Export policy

- **Of India's top 25 export markets**
 - 8 have MFN tariffs <10%
 - 7 have tariffs of 10-20%
 - 4 have tariffs >20%
- **Regional trade agreements with members of ASEAN for preferential tariffs**
 - Thailand, 0 tariff
 - Philippines 7%
 - Laos 21%
 - Malaysia 7%

Future prospects: India's competition in beef market

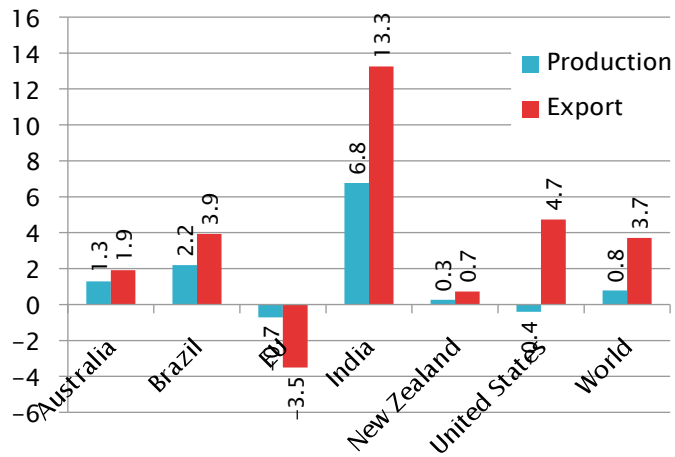
Source: Landes et al. (2016)



Top common markets: Algeria, Angola, Iran, Jordan, Lebanon, Philippines, UAE, Vietnam

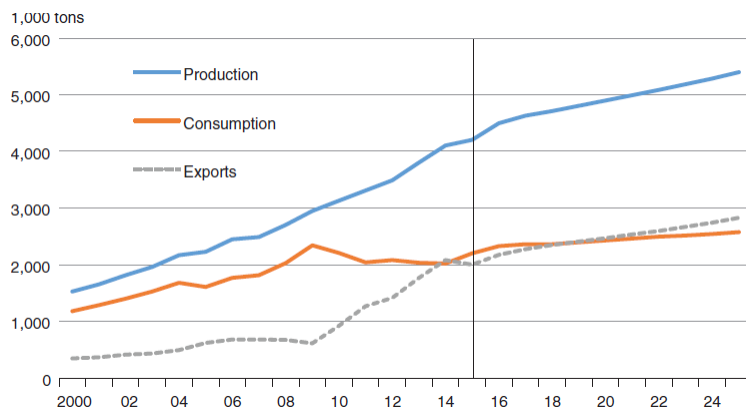
Top common: Jordan, Kuwait, Malaysia, Philippines, Saudi Arabia, Thailand, UAE, Qatar and Vietnam

Future prospects (% annual growth 2001–2015)



Future prospects: India's exports to 2025

Source: Landes et al. 2016



Concluding Remarks

- ✓ Buffalo is valued for milk, and meat as an adjunct, hence India's is likely to remain a low-cost producer of buffalo meat
- ✓ There is little trade-off, if any, between milk and meat production
- ✓ With increasing mechanization of agriculture, and declining landholding size the utility of male buffalo as draught animal will decline further
- ✓ Demand for meat in India's major export markets is likely to remain stronger
- ✓ China and Russia are emerging as new export markets for Indian bovine meat

Thank you

Rules for culling of cattle in Government Farms- (Source: para 137 of Manual of The Animal Husbandry Department , Andhra Pradesh State (First Edition, Volume I, 1968)

The culling of cattle in Government Farms should be resorted to in the following cases:-

- a. Animals that do not conform to the breed characteristics.
- b. Animals that are uneconomical and weak and do not thrive inspite of good management.
- c. Animals that are old in age, generally 12 years has to be taken as old age.
- d. Animals that are poor in milk (if the animal to be culled is a milch breed, the minimum milk yield should be fixed as 750kg, for Ongole breed, 1000kg for Murrah buffaloes, 1500kg if cross bred. This should be strictly followed.
- e. Poor breeders that do not respond to proper treatment and management.
- f. Bulls and cows that are throwing out progeny which are not conforming to breed characteristics.
- g. Male stock that are not fit for breeding purposes.
- h. Young stock that are stunted in growth and unfit for rearing further profitably and comes from poor pedigree.
- i. Animals that are suffering from incurable diseases.
- j. Animals with deformities
- k. Animals that are too old and unfit for work purposes.
- l. Young female stock and cows that are not productive.
- m. The number of animals over and above the maximum strength at the farm to have to be disposed off to progressive farmers for breeding purposes under orders. This is to promote pure breeding in rural areas.

Meat Price along the value chains

Source: FICCI (2015)

