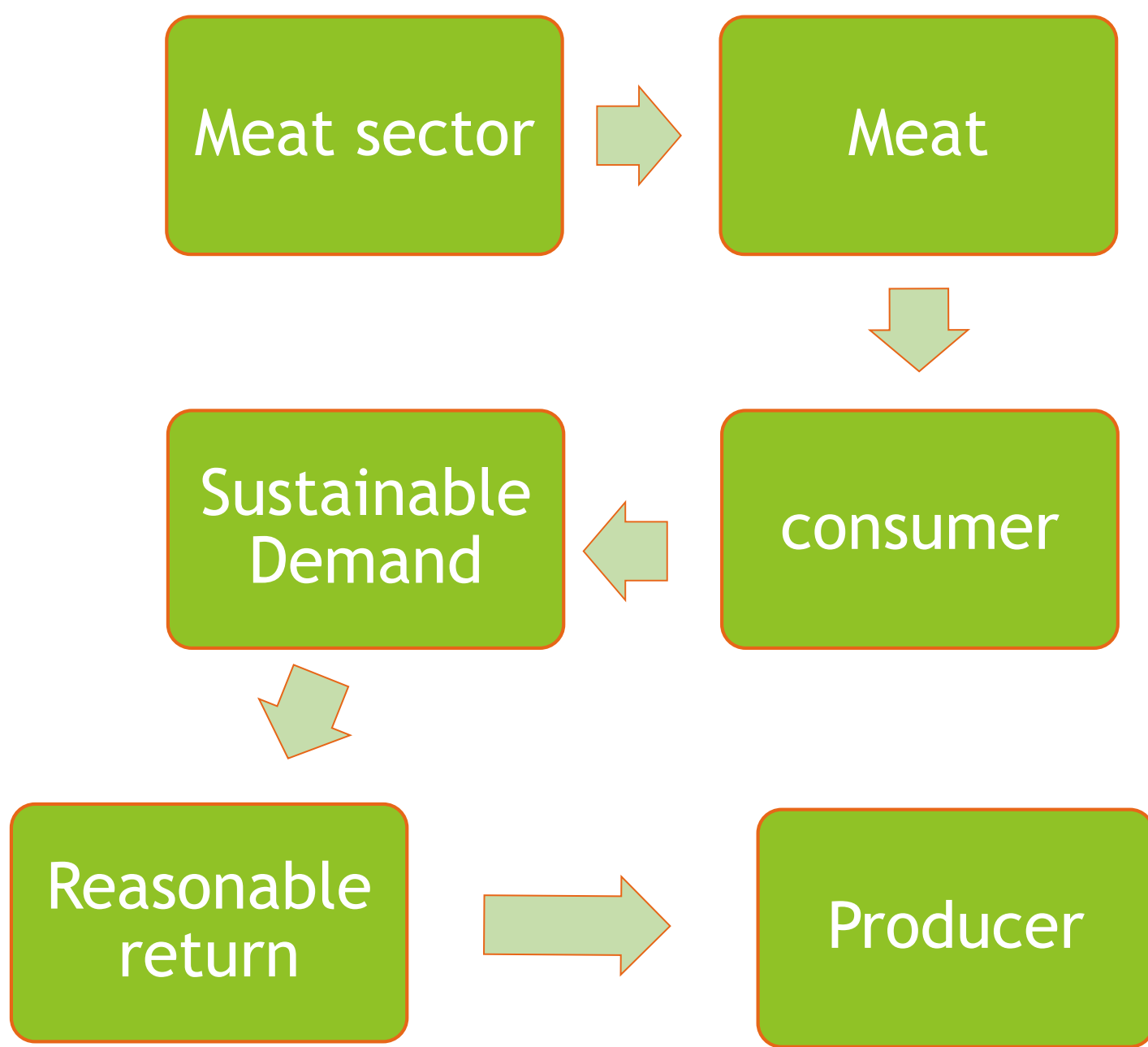


A photograph of a large industrial meat processing facility. Rows of animal carcasses are hanging from overhead metal rails in a long, brightly lit aisle. The carcasses are arranged in neat lines on both sides of the aisle. In the background, a person wearing a white protective suit and a cap is visible, standing in the aisle. The floor is a light-colored, polished concrete. The overall atmosphere is clean and industrial.

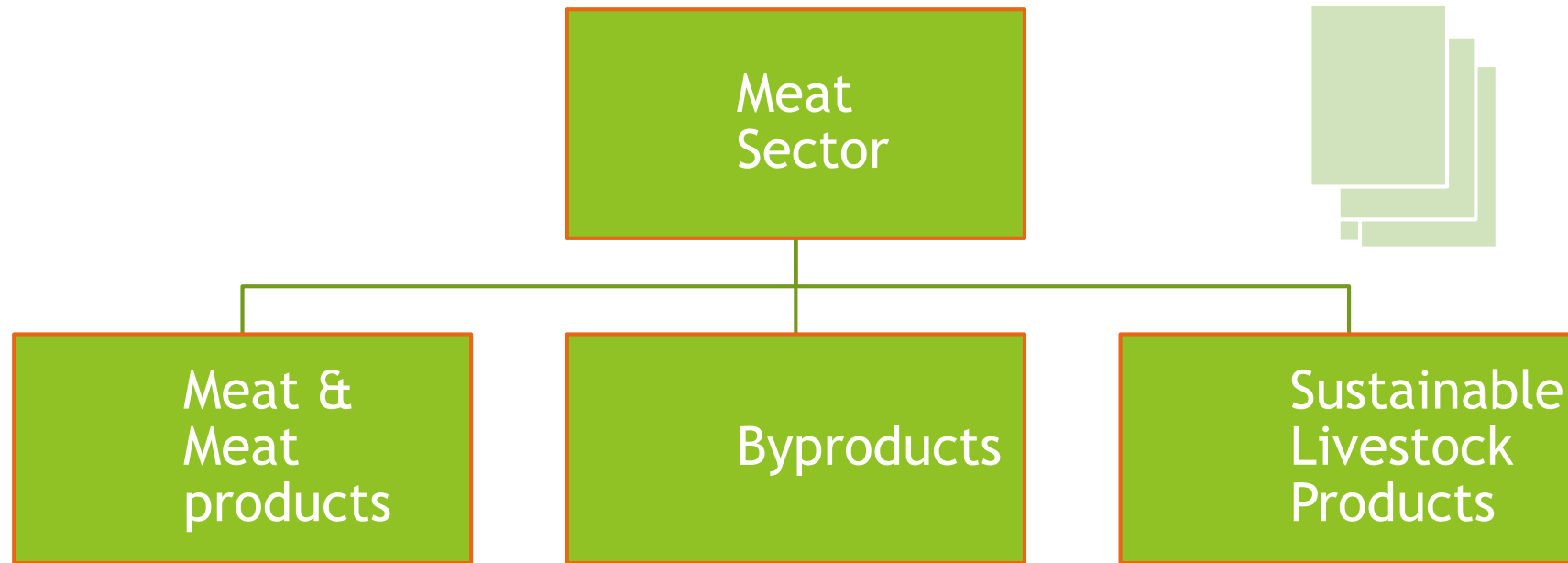
INDIAN MEAT INDUSTRY

MEAT SECTOR

- ▶ **Meat sector** contributes to sustainable livestock production through sustainable demand at reasonable returns to producers.



BENEFITS OF MEAT SECTOR



PROBLEMS FACED BY INDIAN MEAT SECTOR

- ▶ Largely Unorganized
- ▶ Lack of Awareness about Meat hygiene
- ▶ Infrastructure is Inadequate
- ▶ Investment in Meat sector & Investment in livestock for Meat purpose breeding is low
- ▶ Animals are generally not bred for meat purpose
- ▶ Farm animals Used for meat are Generally **spent Animals** hence the Quality of meat is affected

SPECIES USED FOR MEAT

- ▶ Meat produced in India is largely the byproduct of livestock especially Cattle & Buffalo Utilizing Spent Animals
 - ▶ Species Primarily used in India
 - ▶ Sheep & Goat
 - ▶ Pigs
 - ▶ Birds
 - ▶ Cattle
 - ▶ Buffalo
- Meat purpose rearing
- Spent animals as Meat

2012 CENSUS

SPECIES	POPULATION
CATTLE	190.9 MILLION
BUFFALO	108.7MILLION
GOATS	135.17 MILLION
SHEEP	65.06MILLION
PIGS	10.29 MILLION
POULTRY	729.2 MILLION

LIVESTOCK POPULATIONS, SLAUGHTER RATE, MEAT YIELDS & PRODUCTION

SPECIES	POPULATION (MILLION) (%)	SLAUGHTERD (MILLIONS)	YIELD (Kg/animals)	MEAT PRODUCTION (million tones)	%WORLD MEAT PRODUCTION
BUFFALO	98.7	10.86	138.1	1.50	46.88
CATTLE	177.84	12.45	103.0	1.28	2.07
SHEEP	64.27	19.54	12.4	0.24	2.7
GOATS	125.46	54.30	9.7	0.53	10.3
PIGS	14.00	14.20	35	0.5	0.43
CHICKEN	505	2444	0.9	2.2	2.96
DUCKS	35	56	1.3	0.07	1.77
MEAT TOTAL				6.32	2.21

TRENDS IN LIVESTOCK POPULATION IN INDIA

SPECIES	1997	2009	TREND
CATTLE	198.9	172.4	DECREASED
BUFFALO	89.9	106.6	INCREASED
GOATS	122.7	126	INCREASED
SHEEP	57.5	65.7	INCREASED
PIGS	13.2	13.8	INCREASED
POULTRY	347.6	613	INCREASED
TOTAL LIVESTOCK	485.4	484.5	DECREASED

MEAT CONSUMPTION

- ▶ In India, Beef, Buffaloes meat and Pork which comprise about 50% of total meat are available at relatively much lower prices and serve as valuable foods to ensure nutrition.
- ▶ The per capita Meat consumption is about **5.2 kg** per year in India
- ▶ World average in per capita Meat consumption **39.8 Kg**
- ▶ Developed countries have a per capita average meat consumption of **80.3 Kg**
- ▶ Developing countries average **28.9 kg**
- ▶ **70%** of Indian population is **Non Vegetarians**.

PER CAPITA MEAT CONSUMPTION IN INDIA

MEAT SOURCE	Kgs
BOVINE MEAT	2.1
SHEEP & GOAT	0.7
PIG	0.4
Poultry	1.7
OTHER MEATS	0.1
TOTAL	5.2

LIVESTOCK & MEAT TRADE

- ▶ Livestock trading in India is done in Livestock markets regulated by state governments supervised by local authorities like municipal corporations.
- ▶ APMC (Agricultural Produce Marketing Act) Has a provision of running private livestock market
- ▶ Animal farmers are not realizing the full potential of value of their produce due to lack of awareness
- ▶ The involvement of middle men in several stages is hampering the farmers actual economic returns.

LIVESTOCK & MEAT TRADE

- ▶ In India meat is mostly market in the form of Fresh, Hot carcasses.
- ▶ Meat sold through local retail shops in the residential areas.
- ▶ Most retail shops has no basic facilities for different operations and meat processing is not in a Hygienic way.
- ▶ No protection from dust and flies in such retail shops.
- ▶ Frozen meat products are generally consumed in big metros and they are having better infrastructure to prepare packed frozen meat in hygienic conditions.
- ▶ There is great need for hygienic retail Meat shops in the country where modern consumers could buy meat with information on nutritive value, expected shelf life and traceability



ABATTOIRS FOR DOMESTIC MEAT PRODUCTION

- ▶ Animal Husbandry Statistical database of (DAFD)Department of Animal Husbandry, Dairying and Fisheries number of slaughterhouse
- ▶ **5,520 Recognized**
- ▶ **4,707 Unrecognized**

- ▶ Domestic meat requirements is met by the Abattoirs but most of them lack basic amenities for hygienic slaughter and the proper utilization of byproducts profitably.

SCENARIO OF SLAUGHTER OF ANIMALS AND ABBATOIRS IN INDIA

- ▶ Traders/ Individual butchers buy animals from weekly Animal markets and supply to slaughter houses.
- ▶ The slaughter and dressing operation are done on the floor mainly ,Except for small ruminants where partial evisceration and flaying is done by hoisting in the rails
- ▶ The meat is sold hot during the day time after morning slaughter
- ▶ The carcass and edible byproducts packed in gunny bags and send to retail shops by various means of local transport

IMPROVEMENTS NEEDED

- ▶ Improvement of slaughter house with essential infrastructure facilities to produce Hygienic meat is required for a developing organized meat industry
- ▶ Local bodies need to initiate planned programmes for development of Hygienic slaughter facilities for clean meat production and marketing

MEAT PLANTS AND GOVERNMENT INITIATIVES

- ▶ Few integrated slaughtering and meat processing plants -
 1. Allanson ltd.
 2. Hind groups
 3. Al- Kabeer
- ▶ Some Broiler export companies
 1. Venkateshwara Hatcheries group
 2. Godrej

Contd-

- ▶ National Meat and poultry Processing Board (NMPPB) has been formed and addressing the issues related to production of hygienic, safe and Wholesome meat and meat products.
- ▶ 33 Approved Meat Export plants are presently working in India.

BYPRODUCTS UTILIZATION AND WASTE DISPOSAL

MUNICIPAL SLAUGHTER HOUSE

Ineffective collection of slaughter waste

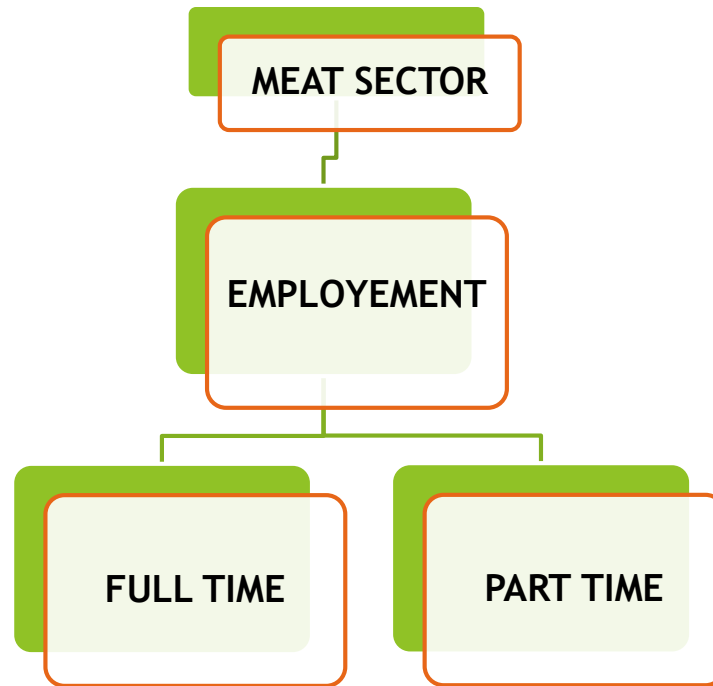
Waste such as blood and Rumen contents gets accumulated in the premises and it result in odor and pollution problem affecting the image of the meat sector.

INTEGRATED MEAT PLANT

1. Byproducts effectively utilized
2. Effluents are treated along with sanitary disposal of waste and biogas production
3. Good management of slaughter waste and No environmental pollution

EMPLOYEMENT GENERATION

- ▶ Meat sector has vast opportunities for Employment



- ▶ At present about 40 Million personnel are engaged directly or indirectly in different activities related to production and processing of meat and different byproduct

MEAT EXPORT POTENTIAL

- ▶ In the total Export of meat from India **90 %** of Meat is obtained from **Buffalo Beef** and **3%** is obtained from **Sheep & Goat**.
- ▶ Deboned frozen meat of Buffalo is high in demand in global market
- ▶ **APEDA (Agricultural and Processed Food Export Development Agency)** Under the Ministry of Commerce is the governing body which regulates the exports.
- ▶ **33 Export oriented** modern combined slaughter houses and meat processing plants is registered with the **APEDA**.
- ▶ **35** Meat processing and Packaging units are present in India out of that **12** is registered with **APEDA**

MEAT EXPORT POTENTIAL

YEAR	PERCENTAGE EXPORT OF BUFFALO MEAT PRODUCED IN TONES
2001-02	17
2002-03	21
2003-04	20
2004-05	20
2005-06	29
2006-07	30
2007-08	29
2008-09	28.1

ANIMAL PRODUCT EXPORTED FROM INDIA DURING 2009-10

Product Category	Quantity (MT)	Value (Rs Cr.)
Buffalo Meat	495019.71	5480.60
Sheep / Goat meat	52868.01	493.37
Poultry products	1016783.1	372.12
Processed meat	716.19	9.19
Swine meat	1117.96	10.34
Animal Casings	2020.56	31.53
Dairy Products	34379.97	402.68
Natural Honey	13310.77	146.65
Total	1616216.27	7200.72

PROCESSED AND VALUE ADDED MEAT PRODUCTS

- ▶ 200 processing meat units licensed under MFPO order 1973
- ▶ The meat of the spent animal is generally tough and thus more suitable for processing to value added products both on economic and quality consideration
- ▶ Organized development of processed meat sector is important to realize the full benefit from meat animals.

VALUE ADDED MEAT PRODUCTS

- ▶ Value addition is the important avenue for the effective utilization of livestock resources.
- ▶ Small scale venture of value added product would go a long way in improving the economics of livestock production and meeting the consumer demand



STRATEGIES FOR DEVELOPMENT OF MEAT SECTOR

- ▶ Organized meat industry
- ▶ Improved slaughter house-hygienic meat
- ▶ Scientific and hygienic slaughtering and is essential to produce wholesome meat
- ▶ Well designed and scientific hall with Ante mortem and Post mortem Facilities should be there.
- ▶ Hygienic transport facility with hygienically maintained closed container to local market where it is dressed and sold for immediate consumption.

A close-up photograph of a charcuterie platter. The platter is filled with various types of sliced meats. In the foreground, there are several slices of salami with a dark, speckled texture. To the right, there are larger, lighter-colored slices of ham. In the bottom foreground, there are rolled-up slices of turkey. The platter is garnished with fresh green lettuce and slices of red tomato. The background is slightly blurred, showing a wooden surface.

THANK YOU