

Leveraging the Benefits of Increasing Market
Demand for Meat in the Interest of Small
Ruminant Rearers

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Objective of the Presentation

- While there is significant development literature emphasizing the livelihood aspects of small ruminants, there is relatively less discussion on the meat demand supply aspects
- Very few academic work/studies have been undertaken on understanding the demand aspects of meat.
- The objective of the study undertaken on behalf of BMGF was to link the small ruminants development initiatives to demand-supply aspects
- The focus of the PPT is on the **i) Projected Demand-Supply Gap, ii) Implications for Livelihoods and iii) Key Recommendations for Policy Makers**

Demand for Mutton/Chevon

- Rising income levels, population growth and urbanization are driving a shift in dietary patterns in India away from carbohydrate rich cereals to diets richer in proteins and micronutrients (e.g. fruits, vegetables, meat, eggs, milk and fish).
- Growth in meat demand is highly responsive to incomes changes
- As per NSSO 2009-10, Per capita consumption of chicken was 0.96 kg (rural) and 1.2 kg (urban) about 300% increase from 1993-94
- Comparatively per capita consumption of mutton/chevon was 0.36 kg (rural) and 0.72 kg a decline of about 50% over 1993-94 (driven by low growth rate of supply and high population growth rate)
- With rising incomes, population growth rate and income responsiveness, the projected demand for mutton/chevon is a 7.9% increase per annum (Gandhi and Zhou, 2010)

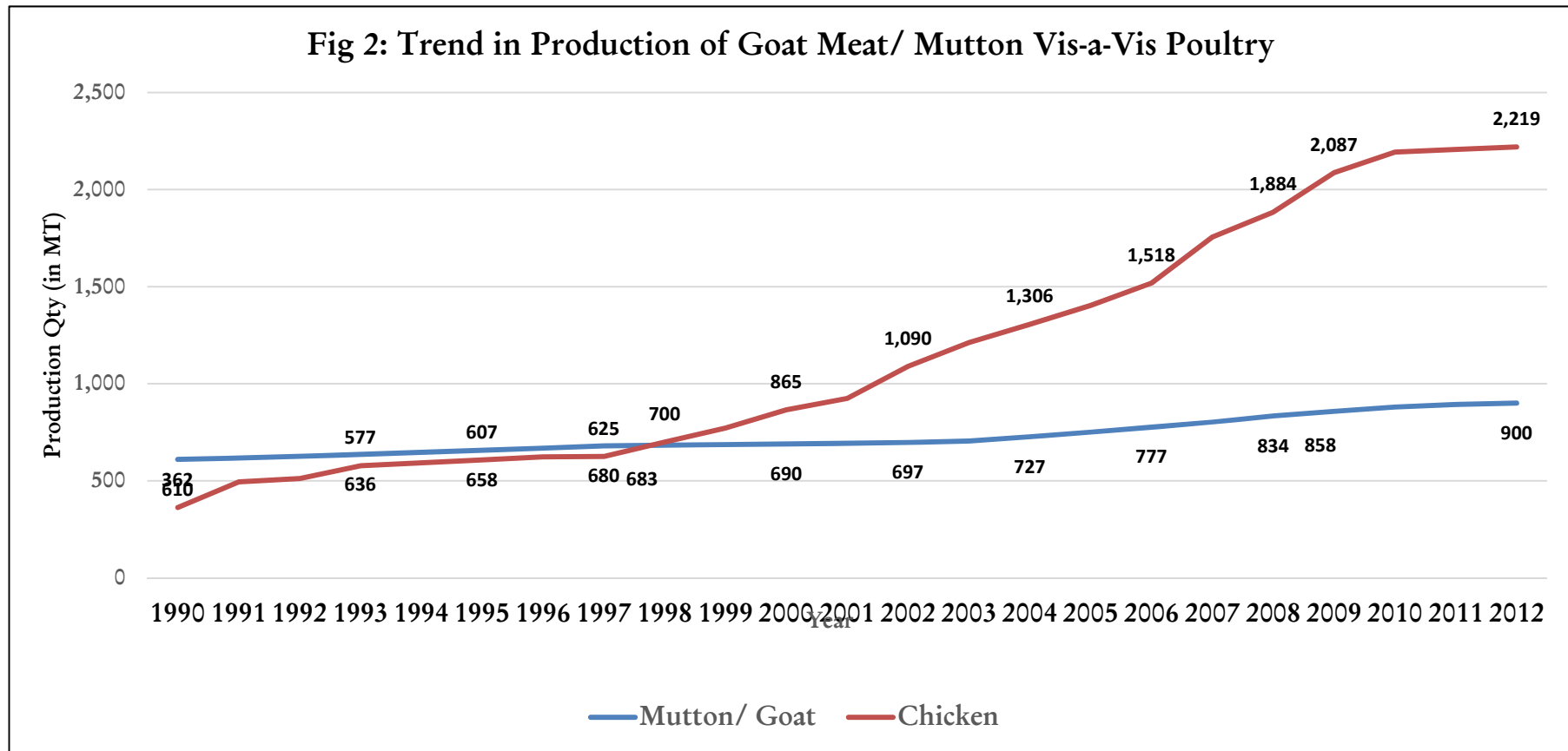
Meat Situation in the Country

- Of the total meat available in the country, 45% is chicken, about 24% each is goat and buffalo meat, while the remaining about 8% is pork. (BAHS, 2013)
- Per capita availability of about 4.4 KG per annum is far below the requirement of about 13 KG as recommended by ICMR (Indian

	Milk and milk products excluding butter	Eggs	Meat
India	72.2	2.3	4.4
Asia	54.4	9.2	30.8
Africa	43.9	2.3	17.6
Least developed countries	36.1	1.3	12.9
Americas	168.2	11.4	85.7
European Union	239.3	12.1	84.8
Oceania	178.1	6.4	105.3

Relative price of various meats in major cities meats: Beef – Rs.150/ Kg. Broiler Chicken – Rs.160-200/ Kg, Chevon/mutton – Rs.350-400/ Kg, which increases to Rs. 420-450/kg during winters and festivals

Supply of Mutton/Chevon

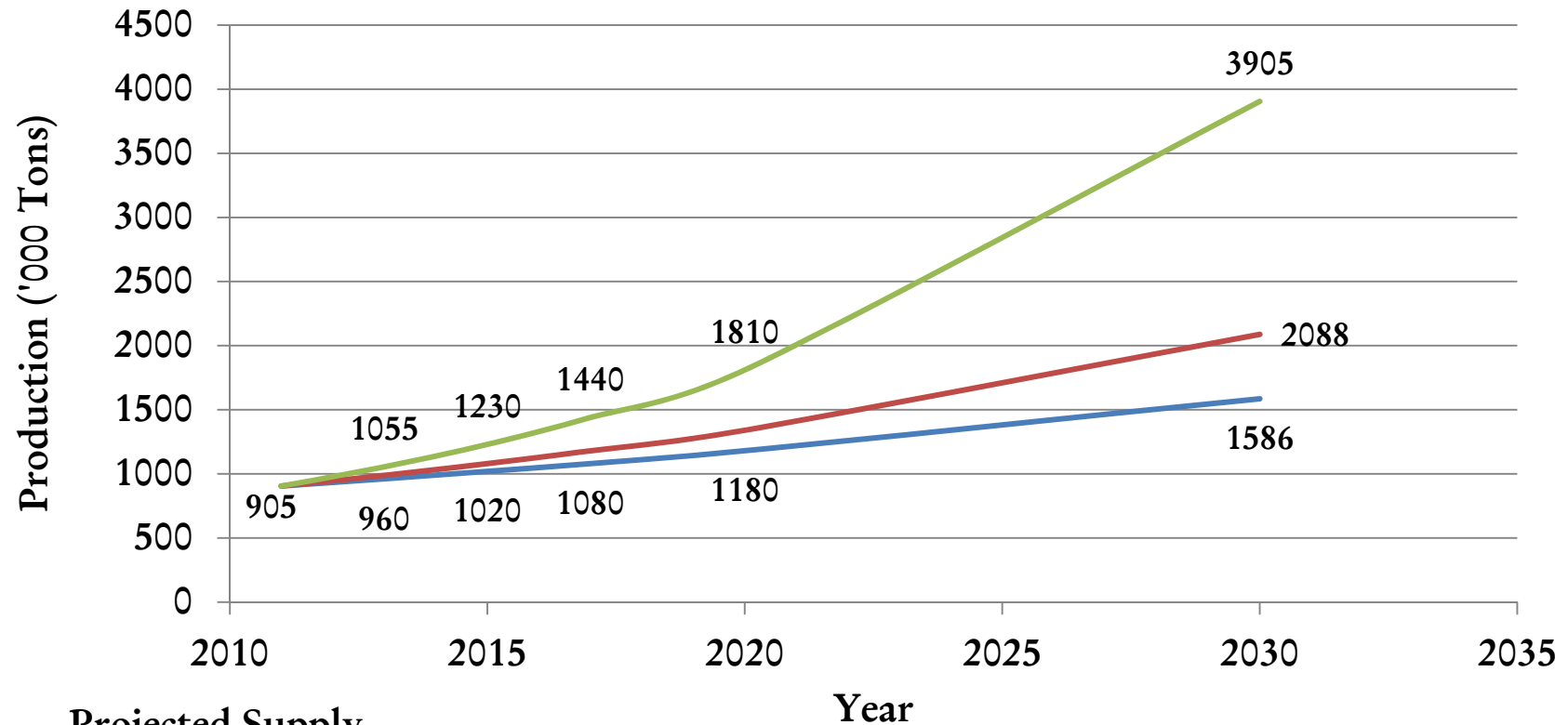


While, poultry industry has grown at about 8-10% per annum, supply of chevon/mutton has grown at about 3% per annum

Demand-Supply Gap

- Production of Chevon in 2011-12 ('000 MT) was 905 Thousand MT
- In general, demand is growth rate is $> 8\%$, whereas the supply is growing at 3%
- As per FAO estimates, goat meat production will increase to 2050 thousand MT in 2030 (\sim growth rate 4.5%), However, based on past trends, we estimate production growth will be slower and will reach only 1586 thousand MT by 2030 (assuming the current growth rate of $\sim 3\%$) metric tons. Either way, there will be a significant supply/demand gap.
- Because there is hardly any exports or imports, essentially the actual consumption equals supply.
- The gap in demand and supply will lead to higher prices, limiting consumption by the low income groups with implications for nutrition perspective.

Projected Demand Supply GAP



Projected Supply

— Team analysis

— Harvest Choice FAO

— Projected demand

Implications for Livelihoods

- Almost 89 percent of the goat population in India is owned by about 50 million small holders rearing 2-3 goats, serving as a moving bank to be used at times of emergency.
- Goats are largely reared on extensive system using common resources, forest land and crop residues; investments from public or private sector have been very minimal.
- While income from small ruminants is largely used to supplement the household income, it has the potential to become an important contributor to household income by strengthening the support system
- Small holders are willing to invest to grow their herd size (study survey):
 - Average herd size in Bihar was 3.6 goats, 65 percent of the goat rearers expressed interest in enhancing the goat herds to 6-10 goats.
 - Average herd size in Odisha is 4.8, 68% expressed interest in increasing the herd size to larger than about 20 goats.

Recommendations for Policy Makers

- Supply of meat is a function of growth rate of goat population, mortality rate and slaughter rate.
- Support to small ruminant sector can focus on encouraging larger herd size per HH (holding capacity of the area) and reducing high mortality rates through veterinary services (10.8 per cent increase in Bihar and 17.1 per cent in case of Odisha)
- Market linkages should be an important part of the projects to enable farmers to link farmers to traders/potential markets
- Export markets and retail chains also present very significant untapped markets

Recommendations for Policy Makers/Development Projects

Constraint	Issues	Intervention	Stake holder
BREED DEVELOPMENT	<ul style="list-style-type: none"> Breeding policy of small ruminants is either absent or very generalised. 	Develop a sound breeding policy based on scientific information and improve implementation	DAH
	<ul style="list-style-type: none"> High prevalence of non descript breeds, limited access to good quality breeding bucks, poor breeding practices at farmers level. 	Develop a and implement a comprehensive approach to breed development	NGO/ Donor Agencies
HEALTH	<ul style="list-style-type: none"> At village level health services are either available from medical store or from quacks. 	<ul style="list-style-type: none"> Improving coverage of animal health services to small ruminants by formalizing CAHWs in the veterinary health system 	DAH/ NGOs/Don or Agencies
	<ul style="list-style-type: none"> Poor awareness and access to vaccines and de-worming for goats. 	<ul style="list-style-type: none"> Improve supply of medicines/vaccines, cold chain and diagnostic facilities at field level as well as at state level Organize regular programs for vaccination 	DAH/ vaccine manufacturers/ NGOs/Don or

Recommendations for Policy Makers/Development Projects

Constraint	Issues	Intervention	Stakeholder
EXTENSION	<ul style="list-style-type: none"> Weak or non-existent extension system, with narrow focus covering only large ruminants. 	<ul style="list-style-type: none"> Develop a comprehensive policy for enhancing extension services and identify approaches to ensure maximum outreach through ICT and implementing partners 	DAH/ NGO/ Donor Agencies
FEED & FODDER	<ul style="list-style-type: none"> Reliance only on common pastures for fodder due to limited land holdings; seasonal constraints Lack of awareness on feed management 	<ul style="list-style-type: none"> Develop a focused policy for fodder management for small ruminants and promote good feeding practices like mineral mixtures supplementation etc. Promote plantation of fodder trees on bunds and wasteland of farmers Train farmers on best practices like straw enrichment, azolla feed supplementation, silage making to improve quality of fodder for livestock 	DAH/ Other departments

Recommendations for Policy Makers/Development Projects

Constraint	Issues	Intervention	Stake holder
MARKETING	<ul style="list-style-type: none"> • Distress sale leading to sub-optimal price realization • Poor selling method through weight estimation rather than actual weighing of goats. • No record of prices at various levels 	<ul style="list-style-type: none"> • Implement good practices like weighing goats at sale points • Link farmers with financial institutions like SHG saving and credit to avoid distress sale of goats • Create the relevant market infrastructure and link farmers and buyers/traders. • Formalize price system 	Govt. Agencies / NGO
HOUSING	<ul style="list-style-type: none"> • Lack of proper housing facilities leads to unhygienic conditions, higher disease incidence and loss due to adverse weather conditions. 	<ul style="list-style-type: none"> • Create awareness on best practices in shed construction like use of locally available materials and raised flooring within the shed. • Support housing through schemes 	DAH