OVERVIEW OF THE KENYAN POULTRY SECTOR & ITS HPAI STATUS

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OUTLINE

- Motivation
- Context
- Livestock sector
- Poultry sector issues
  - Population
  - Distribution
  - Genotypes
  - Contribution
  - Linkage with other sectors
  - Structure
  - Production & consumption trends
  - Value chains
- Research gaps

MOTIVATION

- 1st HPAI outbreak in China 1997
- Reported in 67 countries
- Endemic in Indonesia, Egypt & Nigeria
- Reported in Sudan – neighbour
- Kenya lies on wild bird migratory
- Informal cross-border live bird marketing

⇒ not whether but when disease will occur

- Need to understand poultry sector
- Identify HPAI "hot spots" entry points
- Identify key players – impacts & control
- Design of pro-poor mitigation strategies

CONTEXT

- Kenya – 35 million (est.) – 3% grw rate
- GDP – US$57.7 billion (2007)
- Average GDP/capita/yr – US$1,084
- Agriculture mainstay of economy
  - 25% (US$14.4 billion in 2007)
  - 70% of employment
  - 25% through linkages with other sectors
  - 75% of industrial raw materials
  - Agric GDP growth rate – 2.4% to 4.6% btwn 2000 & 2006 respectively

LIVESTOCK SECTOR

- Contributes 12% to GDP & 38% to AG. GDP
- 11.5 million TLU valued at US$4.4 billion
- 84% of rural households keep livestock
- Most livestock keepers are in Eastern & RVP

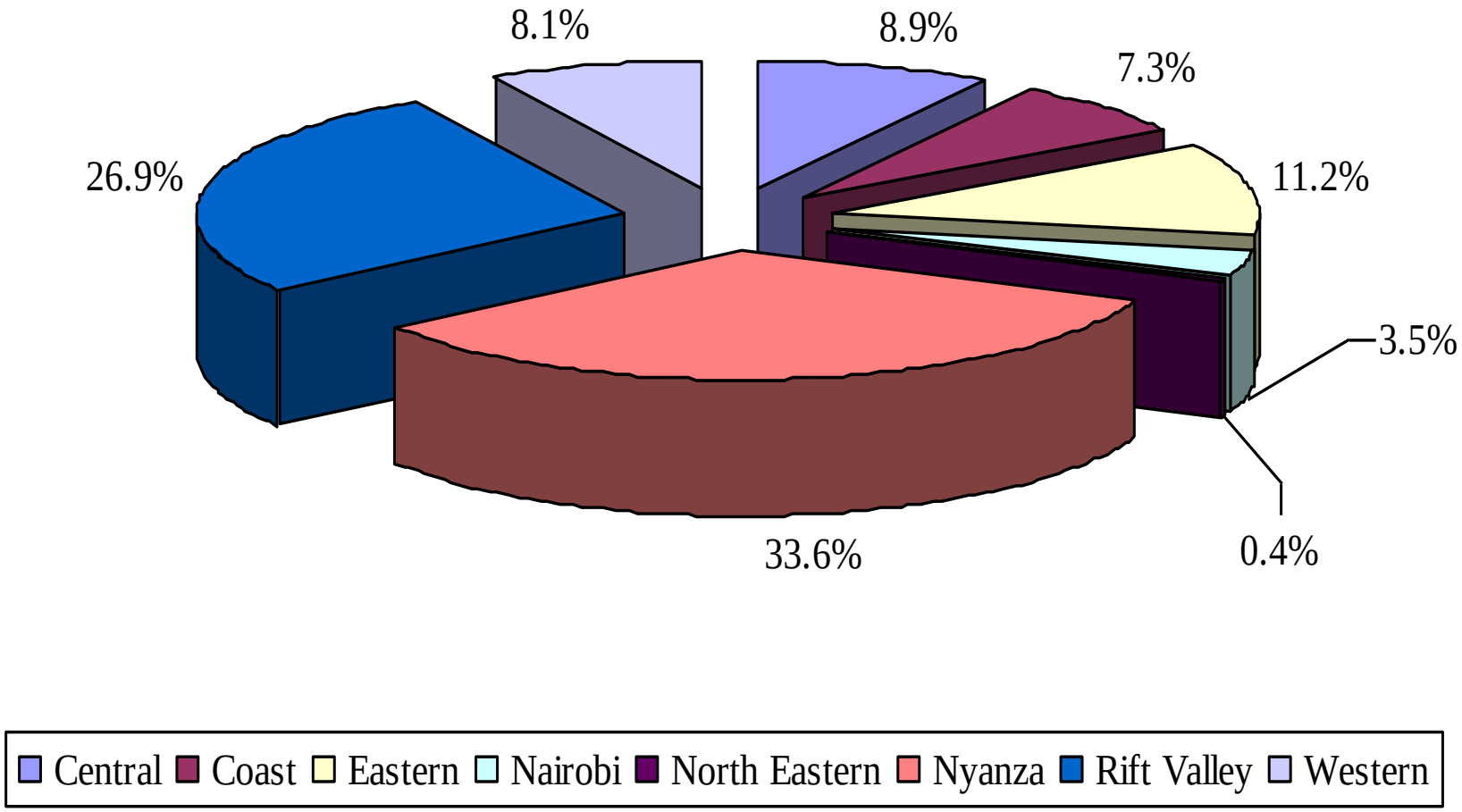
POULTRY SECTOR

POPULATION

Poultry type	No. (millions)	Percent (%)
Indigenous	31.4	84.1
Layers	3.1	8.3
Broilers	2.1	5.7
Others†	0.7	1.9
TOTAL	37.3	100

†Turkeys, ducks, guinea fowls, etc

POULTRY DISTRIBUTION



GENOTYPES

Type	Genotype
Indigenous	Rhode Island Red, Light Sussex, New Hampshire Red, Black Australorps, White leghorns, Plymouth Rock, barred Rock, buff Rock
Layers	Isa Brown, Ross
Broilers	Arbor Acres, Hybro, Cobb & Hypeco

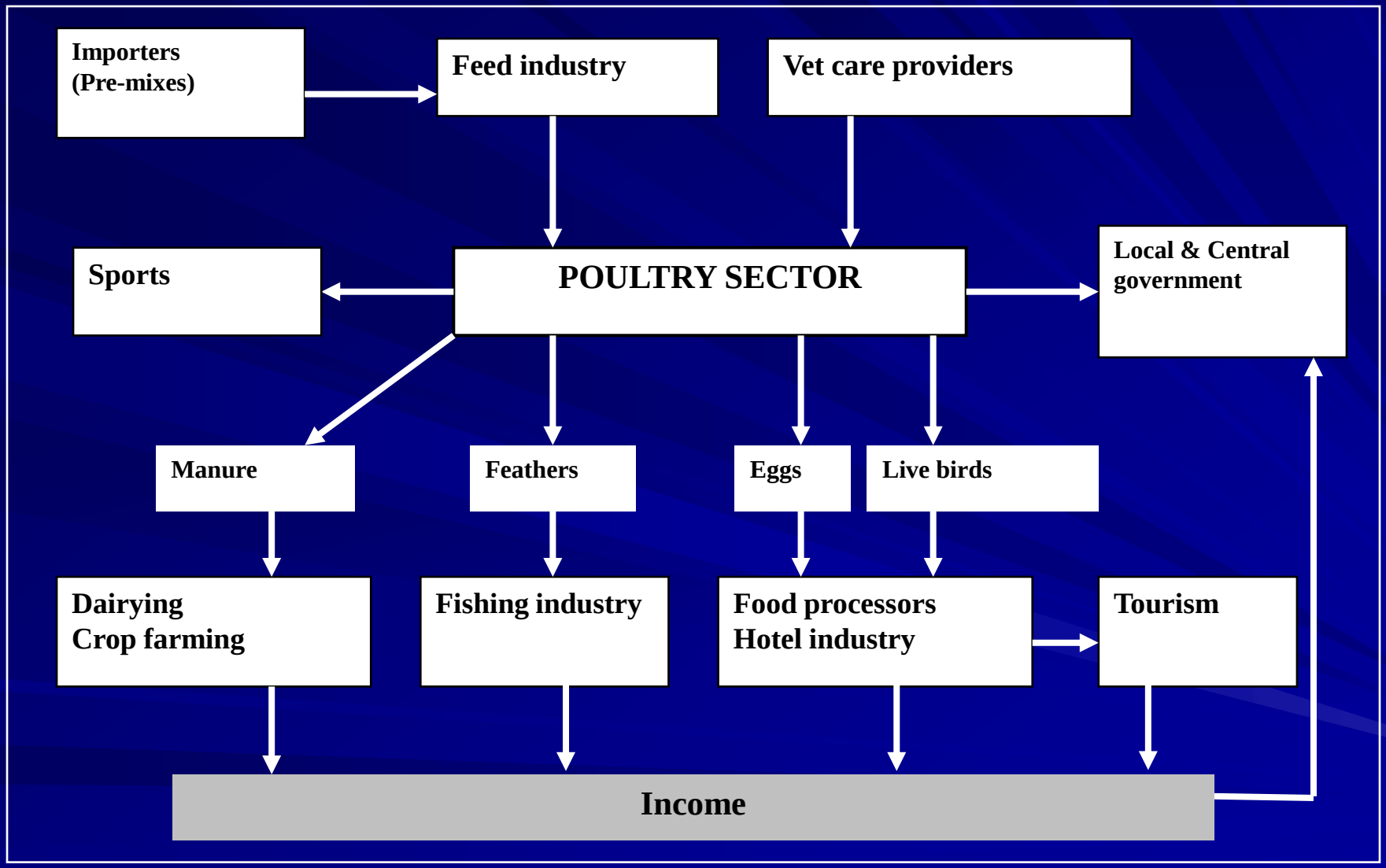
GENOTYPES…

Type	Genotype
Turkeys	Local: Small bronze & buff type Commercial: Large white & buff
Ducks	Muscovy type
Guinea fowls	Helmeted type

POULTRY CONTRIBUTION

- 6.1% to livestock GDP
- 2.3% to AG GDP
- 0.7% GDP
- 3.7% of per capita annual animal protein consumption
- Employs 3 million people
- Socio-cultural roles
- 20 chickens per household
- Indigenous poultry - reared in rural areas
- Commercial – peri-urban & urban areas

SECTORAL LINKAGES



STRUCTURE

Attribute	Sector1	Sector2	Sector3	Sector4
Production system	Industrial integrated	Commercial	Semi-commercial	Village/ Backyard
Bird & product marketing	Commercial processing	Commercial processing	Live birds	Little marketing; Live birds
Biosecurity	High	Moderate to high	Minimal to low	Minimal
Inputs	High use of external inputs	Moderate to high	Low	Little or none

Sector 1: Industrial integrated

- E.g. Kenchic Ltd
- Large-scale commercial
- Several thousand birds
- Upstream integration – DoCs production
- Downstream – contract farmers with 3-12000 birds + poultry meat outlets
- High bio-security measures at all points of production – slogan – "*From farm to fork*"

Sector 2: Hatcheries

- One found in Sector 1
- rear 10,000-12,000 layer breeders p.a.
- 10,000-18,000 broiler breeders p.a.
- Non-sector 1 hatcheries are not integrated
- High bio-security measures

Sector 2: Hatcheries…

Hatchery	Sector	Location
Kenchic	1	Nairobi
Muguku Farm	2	Kikuyu
Sigma	2	Nairobi
Kenbrid	2	Naivasha
Western Kenya	2	Webuye
Bixa	2	Mombasa
Lake Chick	2	Kisumu
Kim	2	Nakuru
Nyonjoro Nightngale (Turkey)	2	Naivasha
Maasai Ostrich Farm (Ostrich)	2	Kajiado
Ruaraka Duck Farm (Ducks)	2	Naivasha

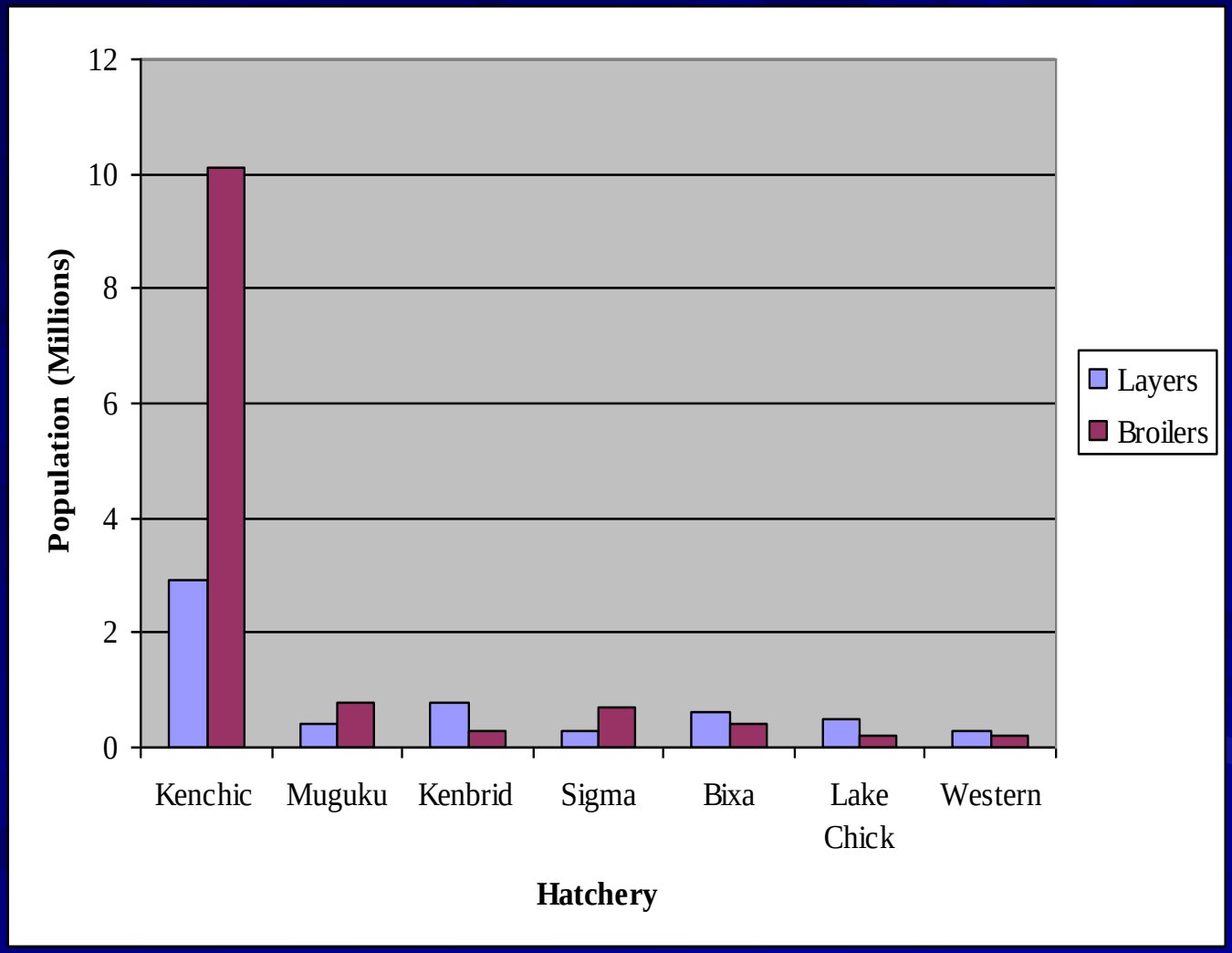
Sector 3: Semi-commercial

- Dominated by small-scale producers
- 23,661 broiler & 11,311 layer farms (2006)
- Derive 73% of income from poultry
- 100-4,000 layers and 300-2,000 broilers kept
- Some are contract farmers with Kenchic Ltd
- DOC bought from hatcheries
- Contract farmers get DOC, vetcare & market from Kenchic Ltd
- Minimal to low biosecurity except Kenchic farmers – income & level of awareness

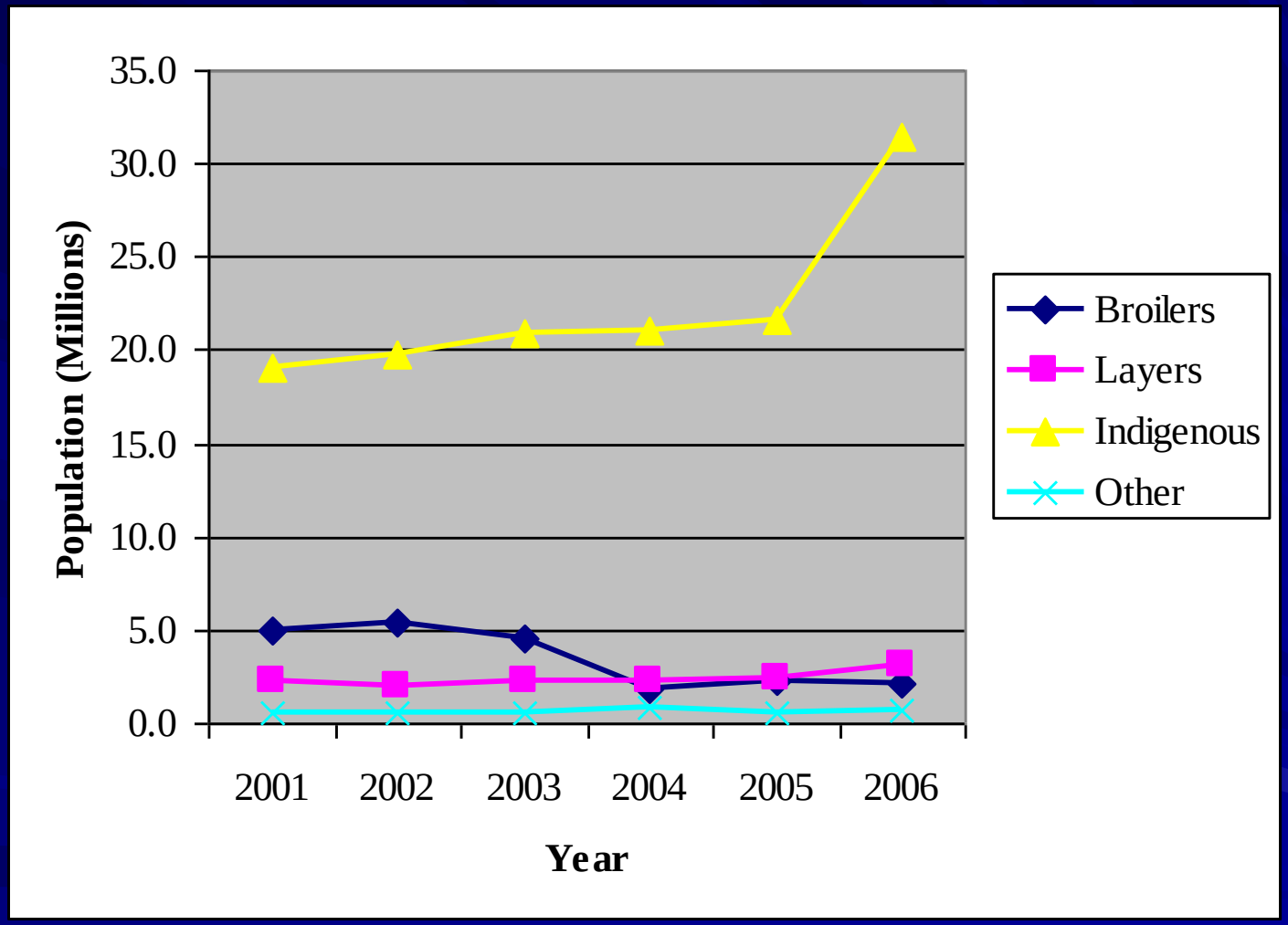
Sector 4: Village/Backyard poultry

- 1.5 million households – 31.4 million (2006)
- 20.8 chickens per household
- Subsistence-oriented
- Low-input – little or no purchased inputs
- Low-output – 1.6kg at 225 days; 3 clutches/yr 33-42 eggs/hen/yr; 40-49g/egg; 75-85% hatchability; 55% chick survival
- Low bio-security; chickens share houses with humans
- Transport by foot, bicycle or public vehicles

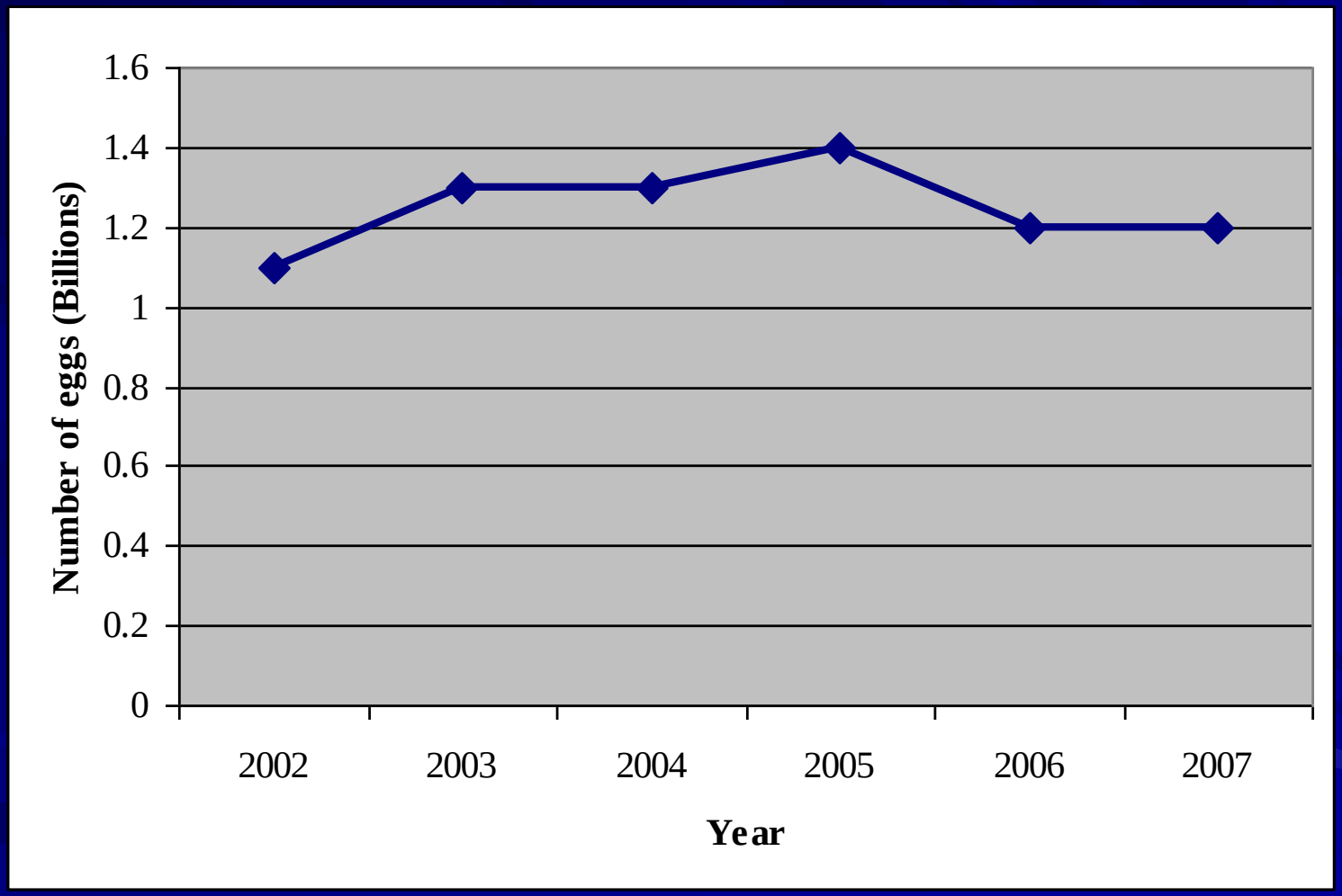
Production trends: 1. DOCs



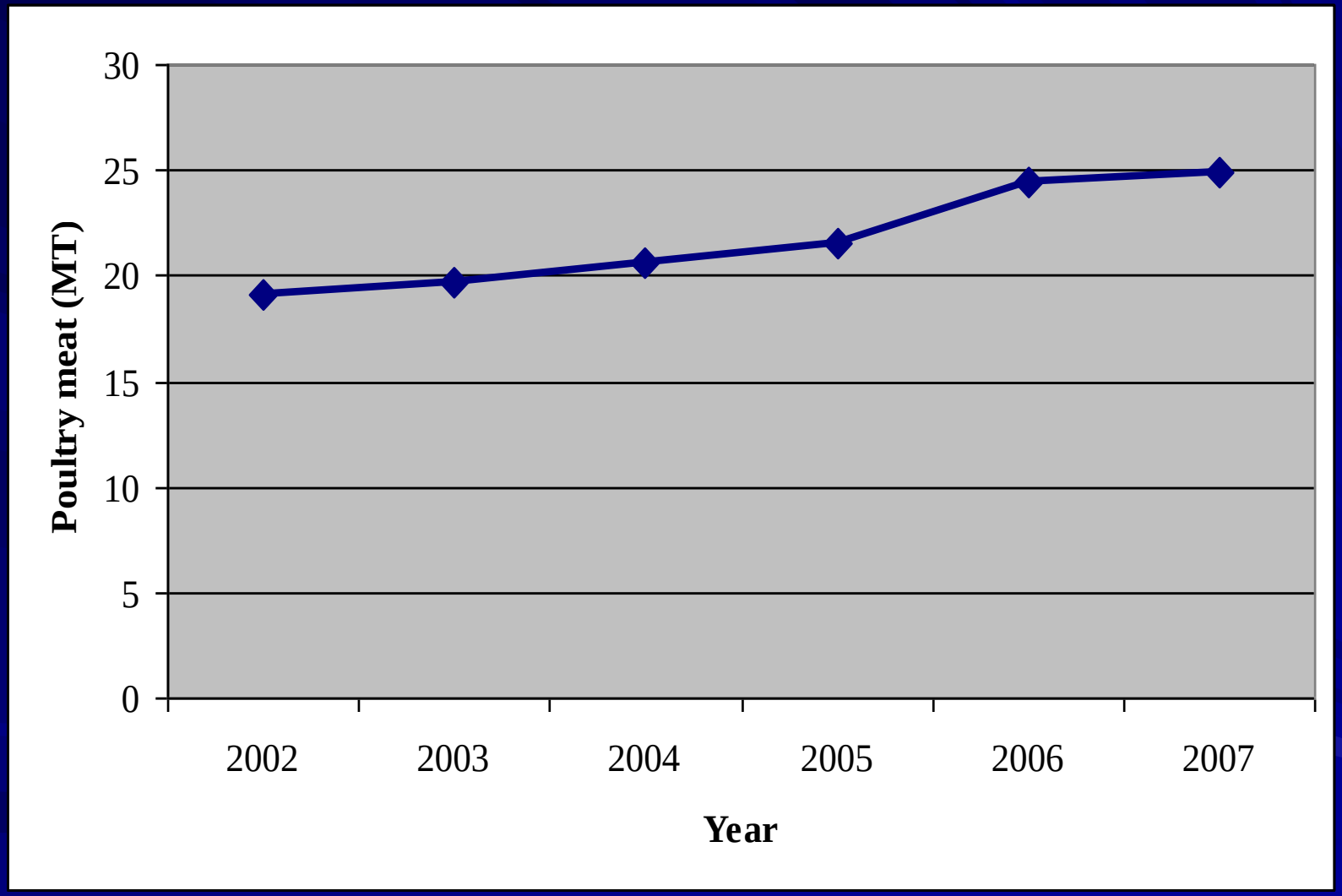
Production Trends: Live birds



Production Trends: Eggs



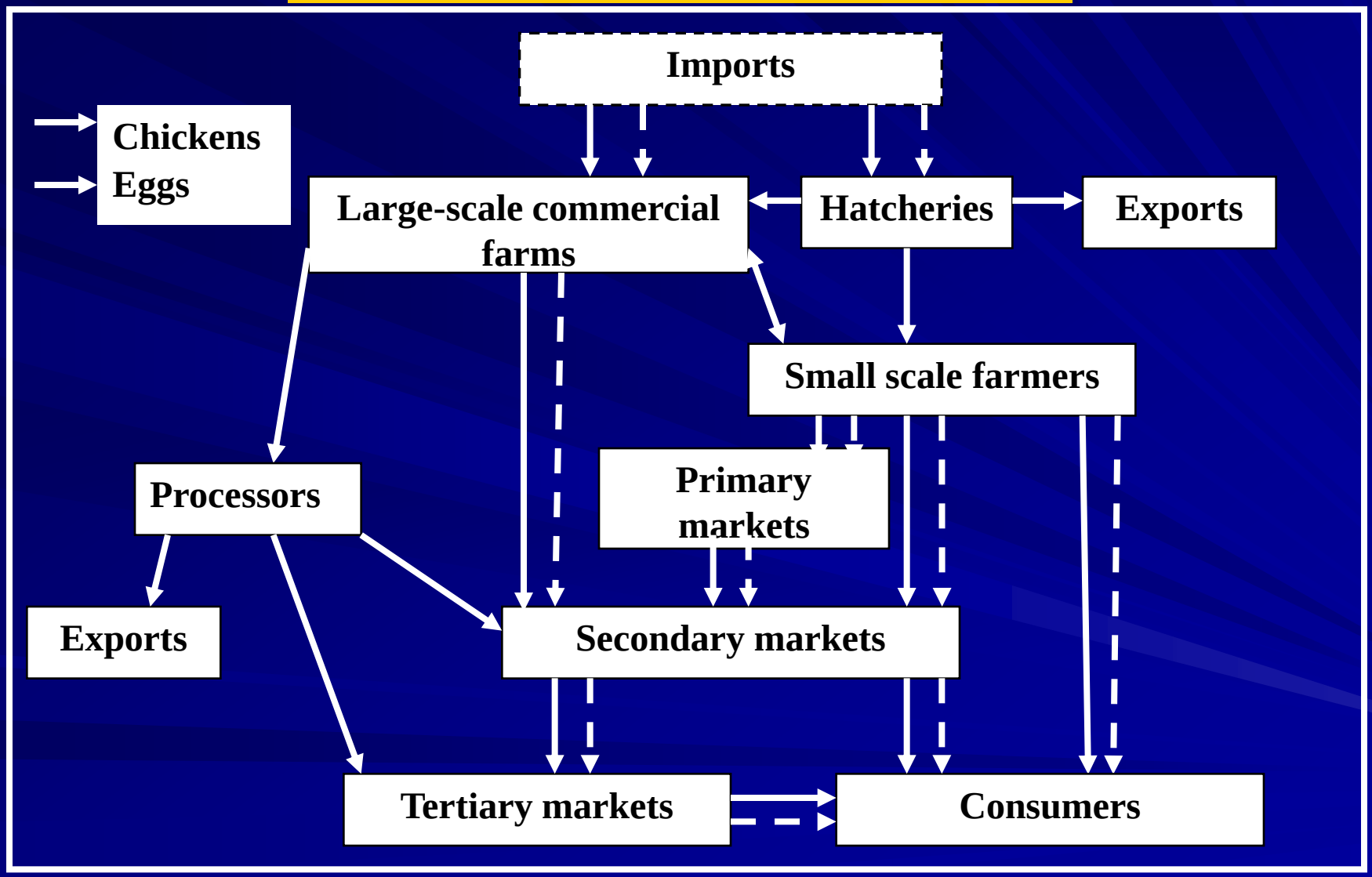
Production Trends: Poultry meat



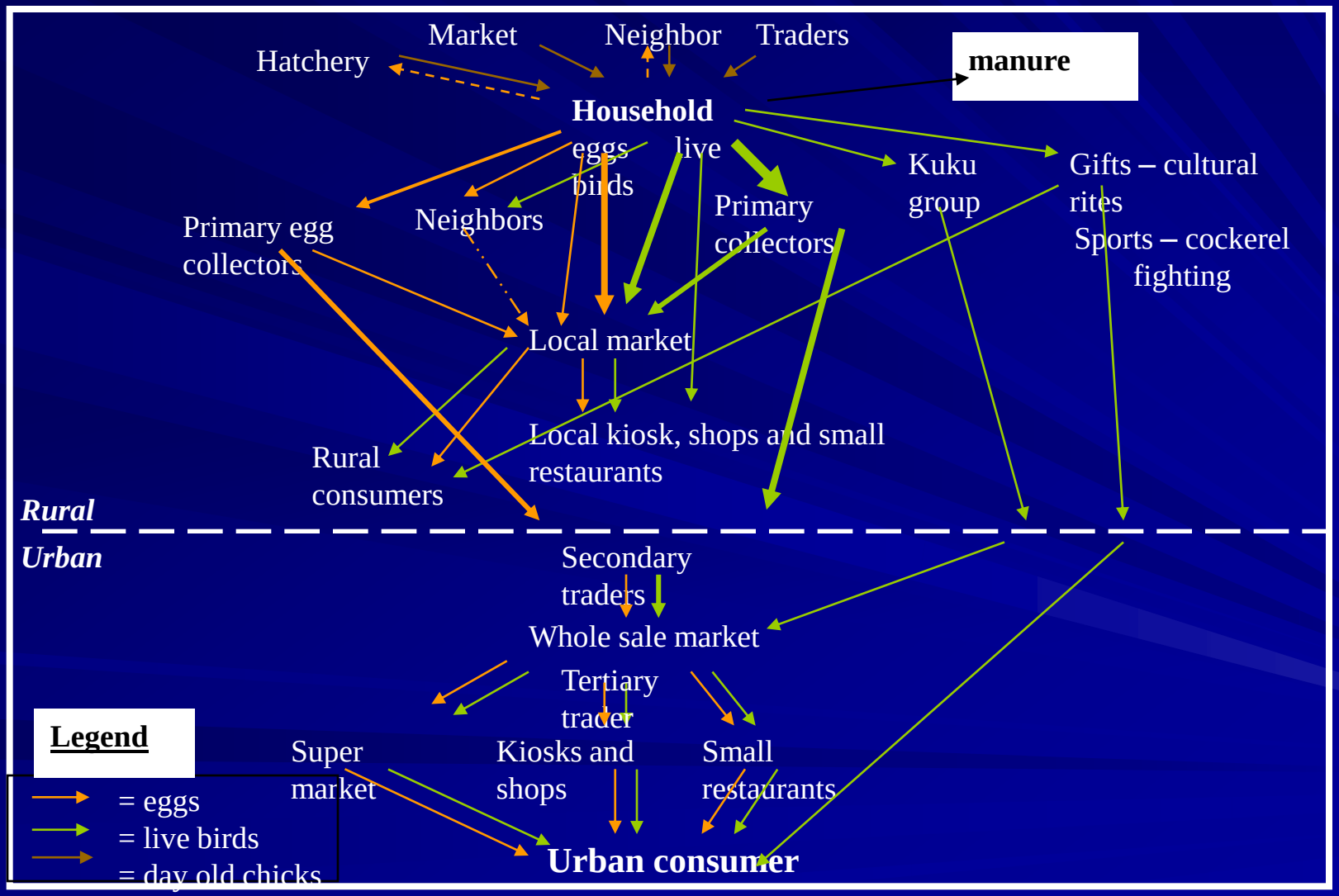
Consumption, exports & imports

- Consumption:
  - 1.1kg per capita p.a. – poultry meat
  - 37.5 eggs per capita p.a.
- Major exports:
  - DOCs – UG, TZ, ET, SO
  - Poultry meat – TZ, SU, ET, Ghana, RW
- Major imports:
  - Hatching eggs – US, UK, Holland, SA
  - DOCs - UG

VALUE CHAINS – COMMERCIAL CHICKENS & EGGS



VALUE CHAINS – INDIGENOUS CHICKENS & EGGS



RESEARCH GAPS

1. Economic & social impacts of HPAI in Kenya
2. Poultry policy development & implementation
3. Data issues – quality, dissemination
4. Margins & volumes at each stage of v/chain
5. Location of key players
6. Consumption & price data
7. Compensation strategies/mechanisms
8. Awareness of HPAI risk – consumers & producers
9. Role of institutions in governance/regulation

Thank You