

The Dynamics of Beef Supply Chain in Indonesia



Helena J. Purba
Indonesian Center for
Agricultural Socio Economic and Policy Studies

SECTOR OVERVIEW

Population, production, consumption, import and prices

		2004	2005	2006	2007	2008	2009
Beef Production	(000 Ton)	447,57	358,70	395,84	339,47	392,50	404,52
Beef + Dairy cattle population	(000 head)	10897	10931	11244	11889	12714	13090
Beef and bufallo meat consumption	(kg/week)		0,01		0,01	0,01	
% of meat on HH daily expenditure	%	2,85	2,44	1,85	1,95	1,84	1,89
Meat - protein per capita per day	gram	2,54	2,61	1,95	2,62	2,40	2,22
Export	(000 tonnes)	0,02	0,10	0,01	0,05	0,06	
Import							
-Live cattle (DG data)	(000 head)	235,80	256,20	265,70	414,20	570,10	
-Live cattle (beef equivalent)	(000 tonnes)		55,10	57,10	60,80	80,40	72,80
-Beef	(000 tonnes)	11,80	21,50	25,90	50,20	57,20	64,10
-Offal	(000 tonnes)	36,50	34,70	36,50	13,80	12,90	10,60
Cattle meat - Producer price	(US \$/kg) (USD)	3,48	4,12	4,91	5,45		
Live cattle - Producer price	(US \$/kg) (USD)	1,74	2,06	2,46	2,73		
Population	(million)		220	223	226	229	231
GDP per capita	(constant 2000 US\$)	909	948	988	1038	1087	
Consumer price index (2005 = 100)		91	100	113	120	132	

How Indonesians eat beef

Consumed everywhere in Indonesia

- No Western cuts, no quality differentiation
- Slow cooking, served with rice/noodle
- Preferred characteristics: fresh, red, low fat, tender.



How Indonesians eat beef (continued)

- **Bakso:** meatball usually served in a bowl, like soup, with noodles, beancurds (tofu), eggs, steamed meat dumpling. It has a consistent homogeneous texture, and spices to it.
- **Abon:** Abon is minced beef that has been mashed, boiled, and then fried. Cooked with salt, bay leaves, coconut milk.

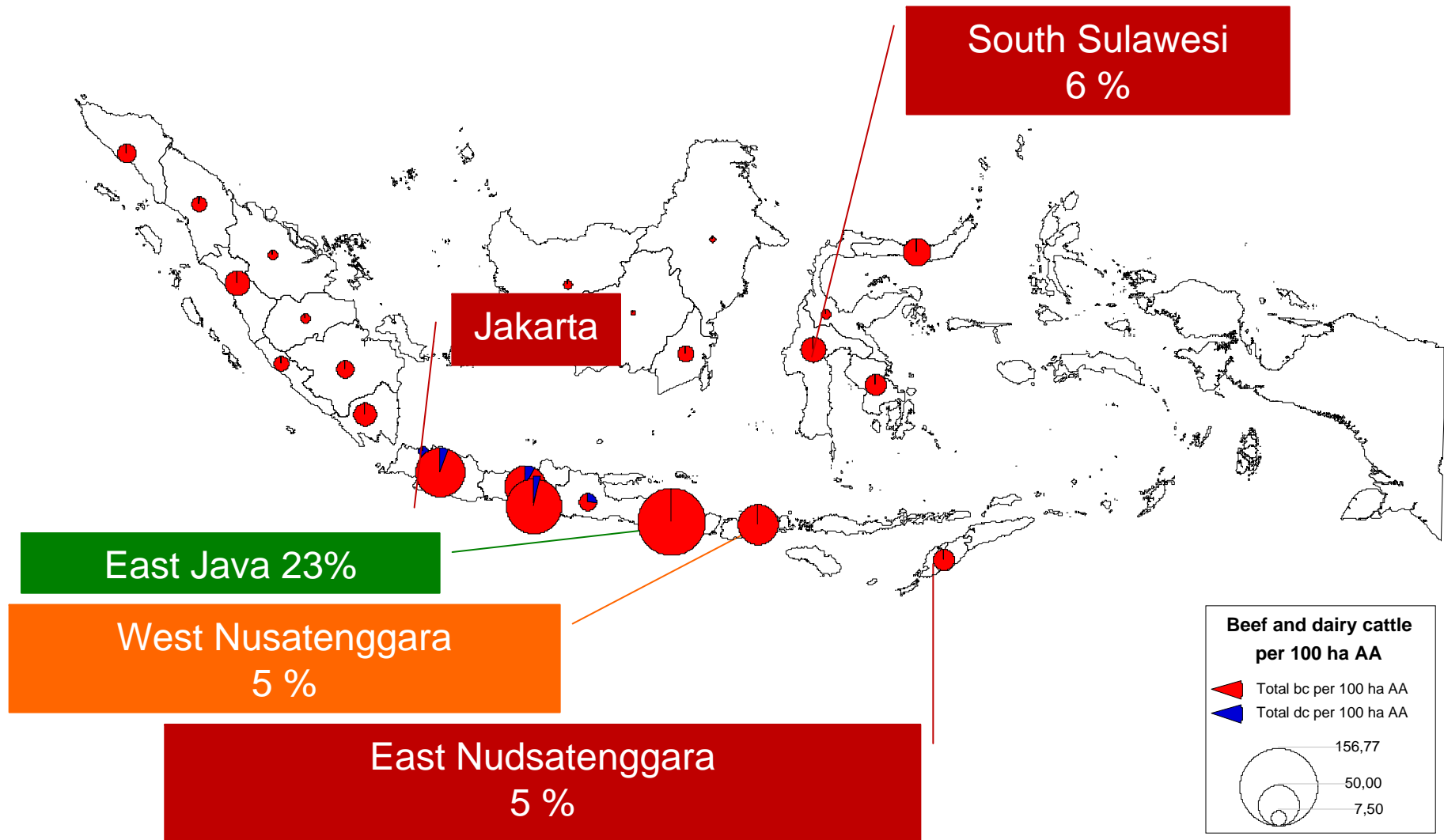


How Indonesians eat beef (continued)

- **Rendang:** Rendang is made from beef. It is slowly cooked in coconut milk and special spices for several hours until almost all of the liquid is gone, allowing the meat to absorb the spicy condiments.
- **Soto:** It is a traditional soup mainly composed of broth, meat and vegetables.

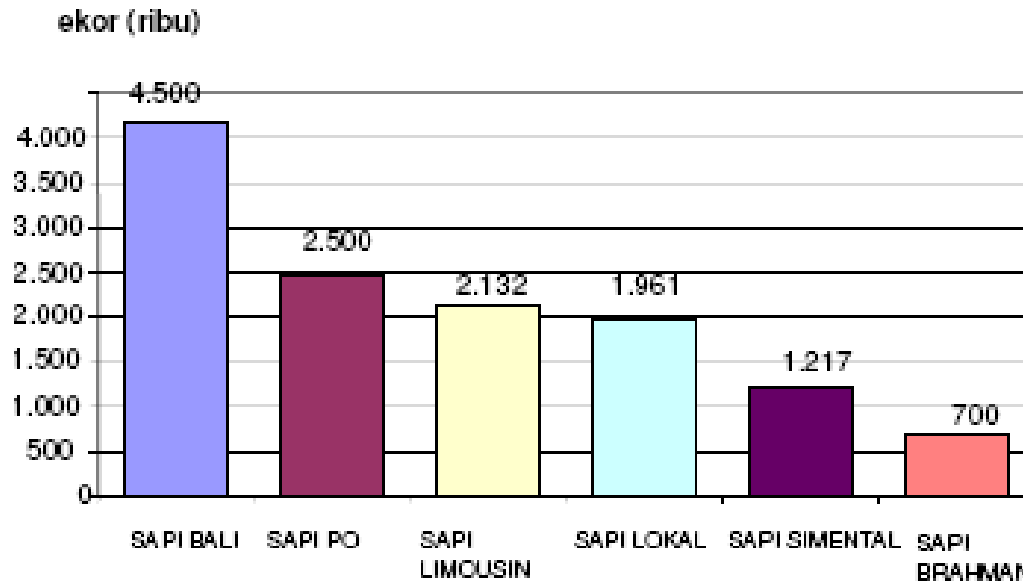


Where are the cattle



Where are the cattle (Continued)

Mainly beef cattle – local breeds (Bali, Madura, PO)



Bali cattle



Madura cattle



Ongol (PO) cattle

How is beef produced?

Production systems

Majority are **smallholders farmers** – each own less than 2- 5 cattle

Cut and carry

Intensive: always in barn/shed/pens

Semi-intensive: partially in pen/shed (night) with feeding
partially outside grazing (day)

Grazing

Extensive: permanent grazing
(sometimes with overnight in pen w/o feeding)



How is beef produced?

1. Smallholders farmers



Farmer has : 2-4 head (avg)



Source: DG livestock, 2009

How is beef produced? (Continued)

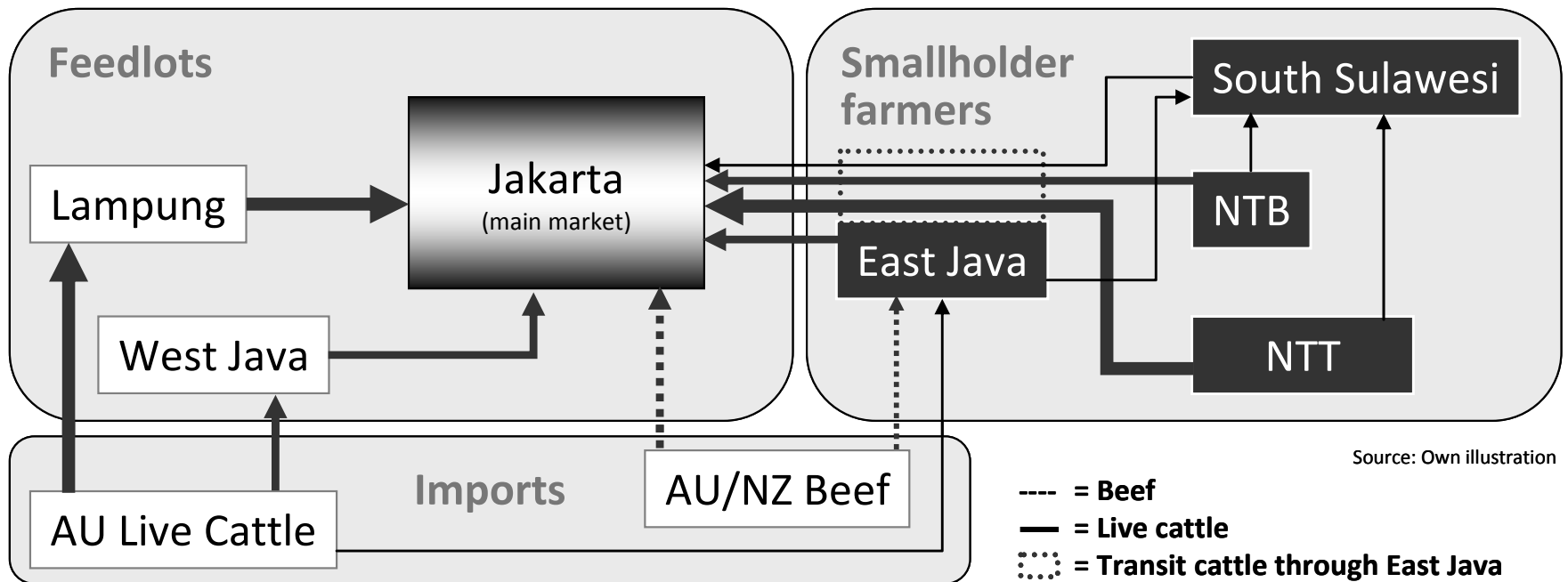
2. Feedlot operations

14 feedlots → Lampung, East and West Java



Source: www.abc.net.au

How domestic live cattle is traded

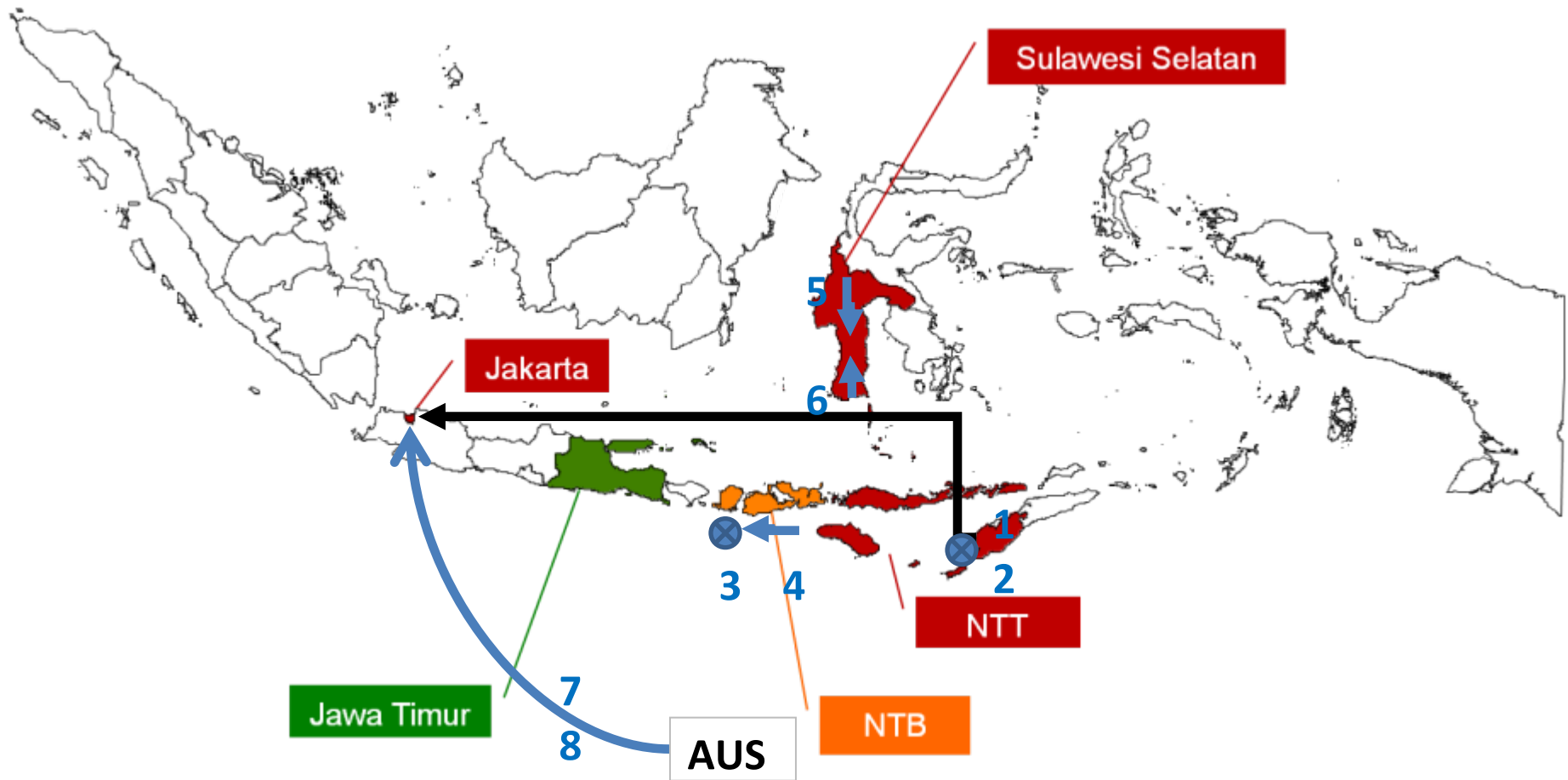


How domestic live cattle is traded

- From Eastern Indonesia (NTT) to Jakarta (consumption centre)
- Some animals were kept in Kupang quarantine prior to be loaded to the boat, but some were not (directly from farmer's/ trader's property to boat).

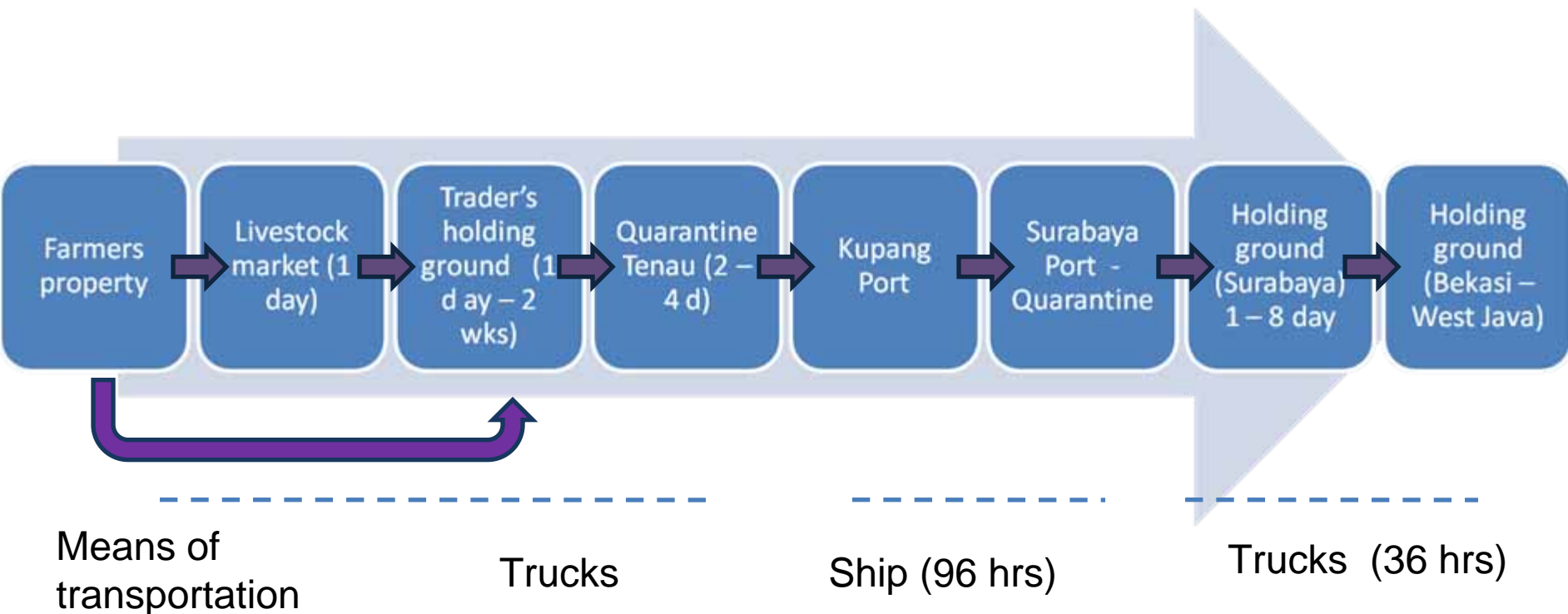
How domestic live cattle is traded

Case: from NTT to Jakarta



How domestic live cattle is traded

Case: from NTT to Jakarta



How the beef is turned into meat

Abattoir traditional vs. modern

3 types of abattoir ownership and related management:

- Regional Technical Service Unit (UPTD) – **non profit** oriented , belongs to the **Government**
- Regional State Business Enterprise (BUMD) – **profit** oriented, belongs to the **Government**
- **Private** Business Enterprise-→ modern

How the beef is turned into meat

Abattoir service

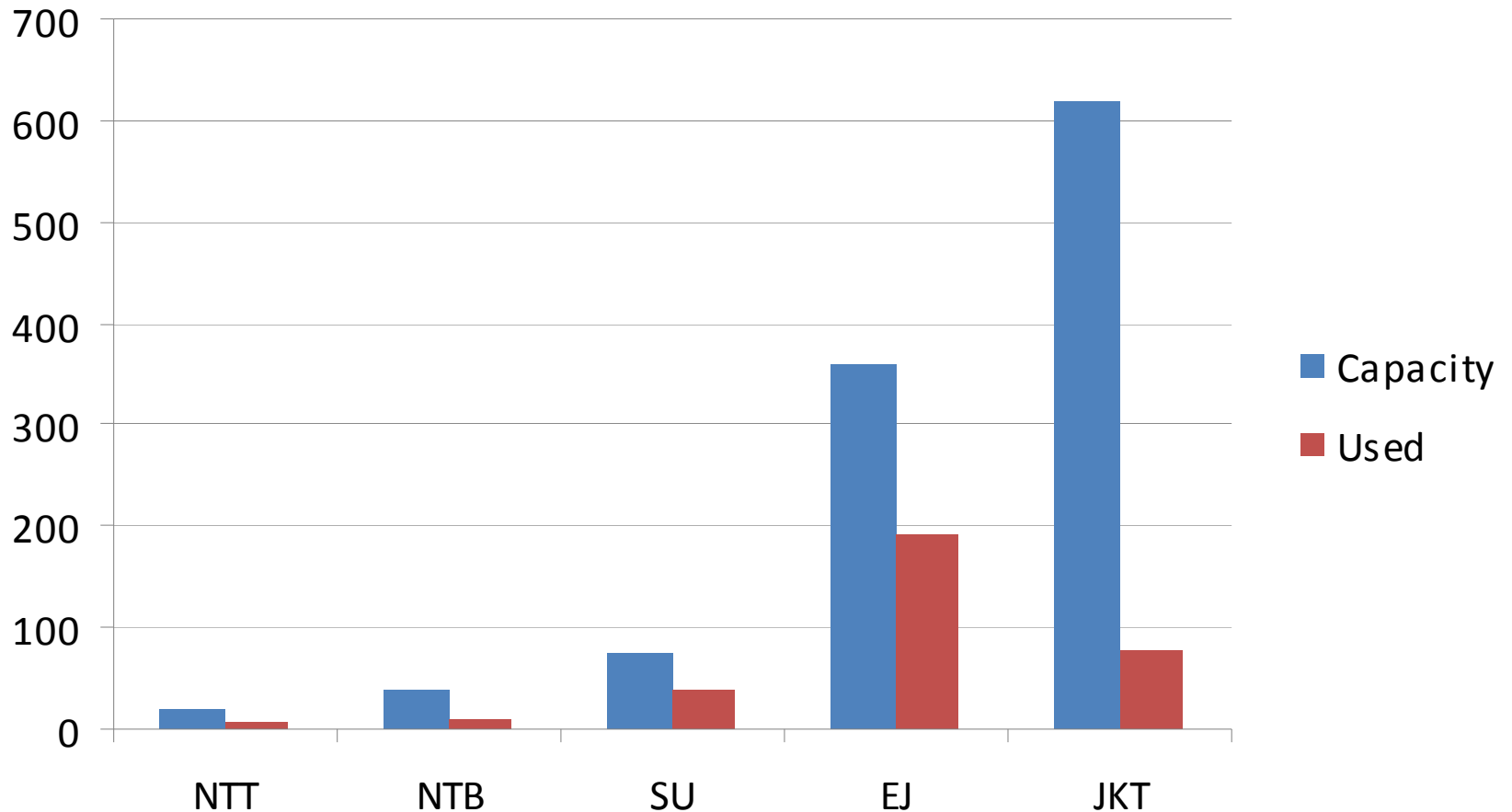
Business service:

- Kill-only service → government
- Buy; sell live animals; and process → private

Traders are charged with a fee for each head of cattle they killed in the facility.

How the beef is turned into meat

Abattoir capacity and usage



Where Indonesians buy beef

Wet market vs. supermarket

Typical source	DKI annual consumption tons	Supermarket			Wet market		
		Absolute figure tons	% to total supermarket %	% to total year consumption %	Absolute figure tons	% to total wetmarket %	% to total year consumption %
Import - frozen meat	61,000	48,800	80%	70%	12,200	20%	17%
Local abattoir	9,000	1,800	20%	3%	7,200	80%	10%
Total	70,000	50,600	100%	72%	19,400	100%	28%

Where Indonesians buy beef

Food peddler



Wet market



Super market



Where Indonesians buy beef (continued)

Wet market

Cattle slaughtered
at night - sold next
morning fresh meat!

Hygiene is an issue



Where Indonesians buy beef

Supermarket

1. Improvements wanted by consumer: better hygiene
2. Beef as more as complement/ not a profit center
3. Beef as marketing tool (cheaper than wet market)



The big picture

the domestic cycle

2002-2008

Beef prices up + 55%

Per capita income doubled in IDR and US\$

Consumer price index + 50%

Increasing beef demand
(mainly population growth)

Rising beef prices

Increasing demand for slaughter cattle

Increased number of cattle slaughtered

Selling incentive: cash requirement

Decrease of slaughter weights

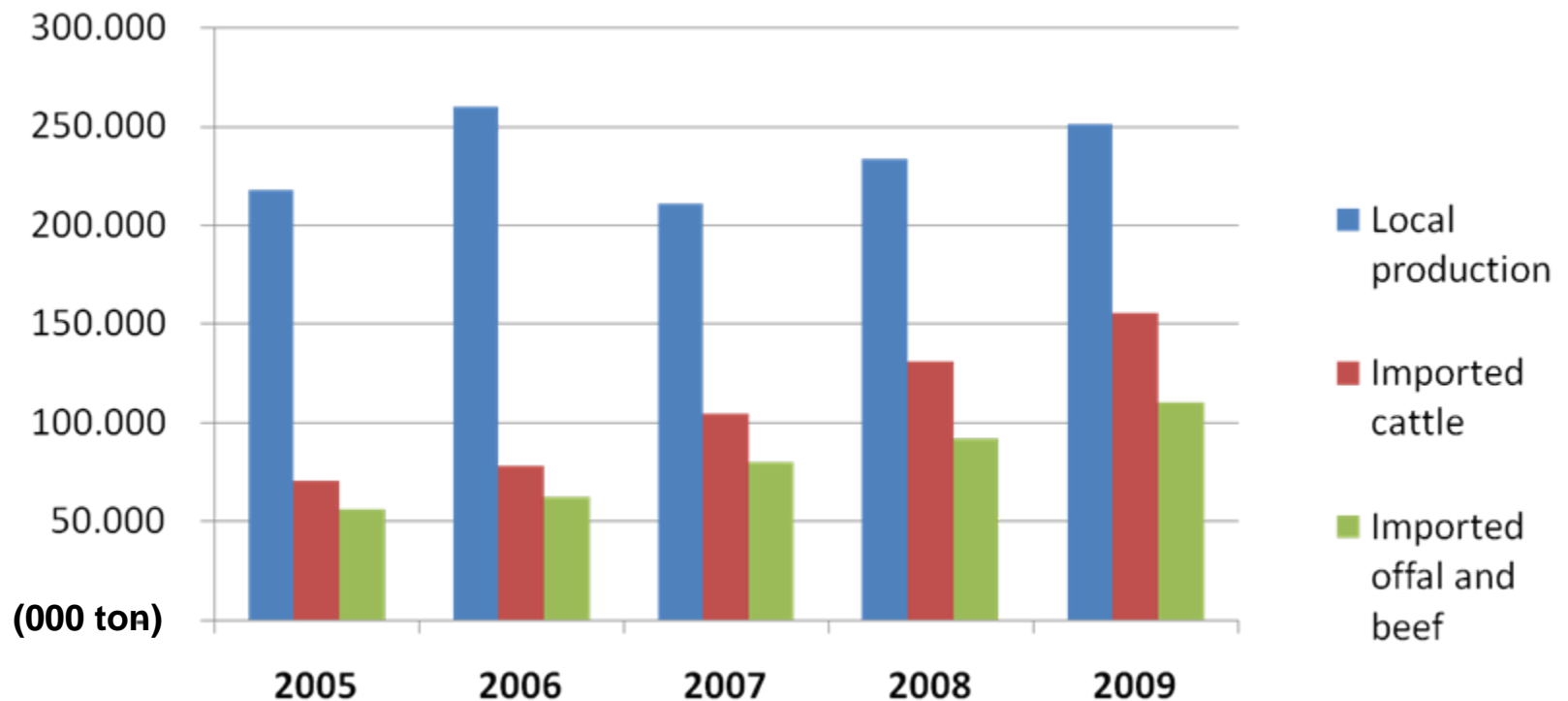
Slaughter of productive females

Decrease of cattle numbers

The big picture

the domestic cycle

Despite government effort to be self-sufficient in beef, imports of beef and live cattle are increasing



Source: APFINDO (feedlot association)

Changes over 5 years:

- Inventories and issues (strong demand, slaughter of female, declining herd and quality etc.)
- Increasing imports of beef and live cattle
- Self-sufficiency policy and its prospects
- Preference shifting away from local origin and towards hygiene
- Less importance of local cattle in Jakarta (the capital) but increasing in other areas (Kalimantan, and Eastern Indonesia)

THANK YOU

Terima Kasih

1. Claus Deblitz and Teddy
2. Australian Centre for International Agricultural Research
ACIAR

