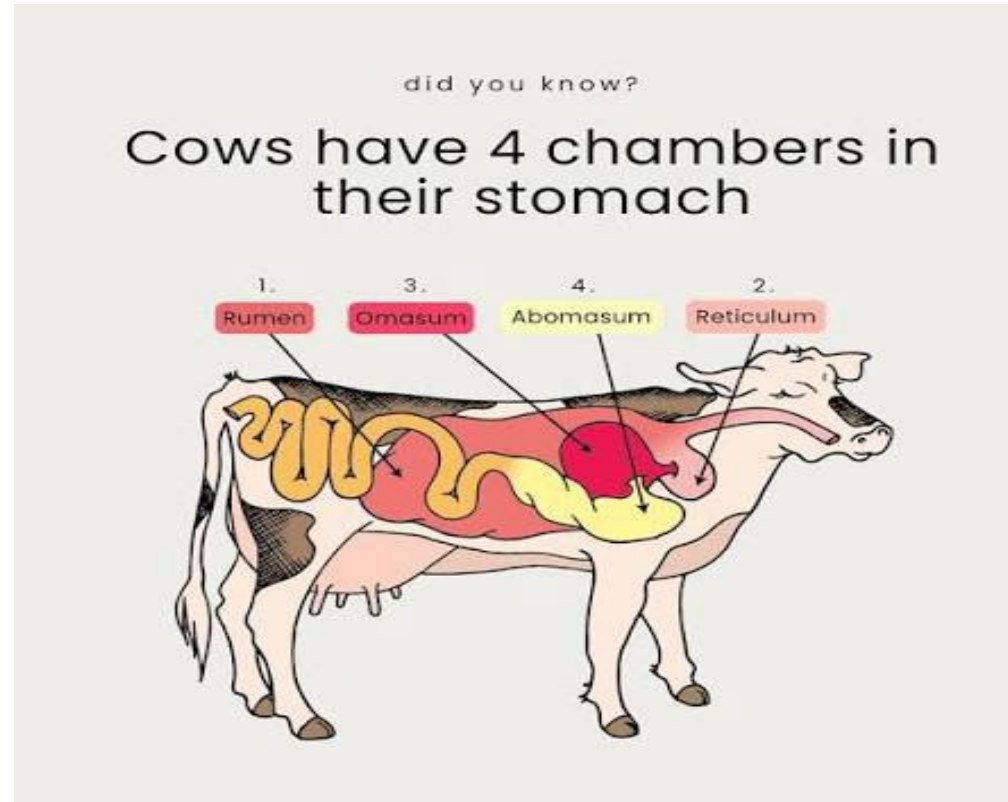


CONTROLLING METHANE FROM CATTLE IN THE GLOBAL SOUTH



Robert Paarlberg

Salata Institute for Climate and Sustainability

October 16, 2026

Methane from Cattle: Facing Realities in the Global South

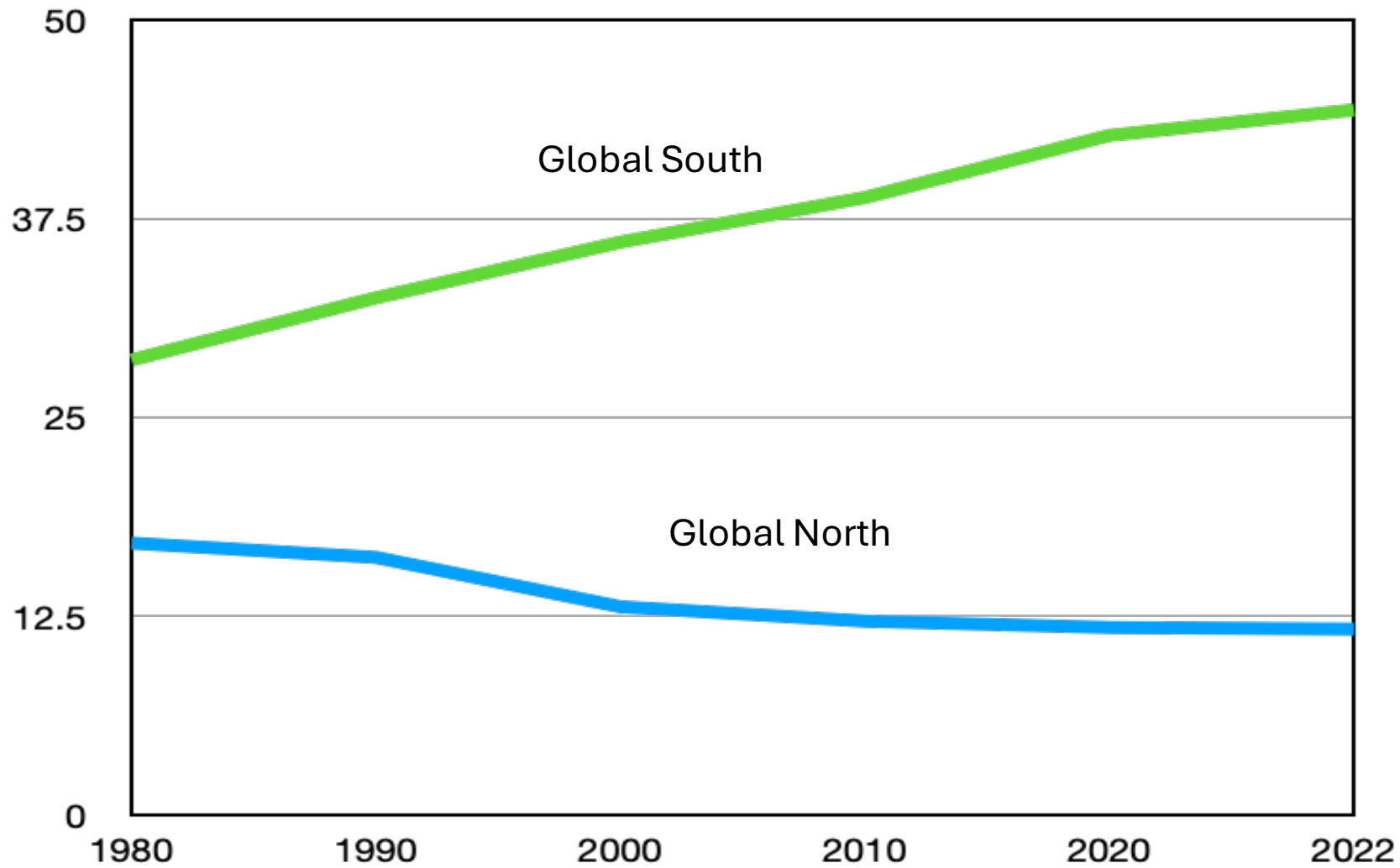
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FOOD POLICY

Methane Emissions from Non-Dairy Cattle in Kilotons, 1980-2022



Source: FAOSTAT (www.fao.org/faostat/en/#data/GLE/visualize)

Methane Emissions from Cattle in the Global South

**71 Percent of world total in
dairy**



**76 Percent of world total in
beef**



Methane Intensity: Emissions *Per Unit of Product*

India Dairy

- Emissions from dairy **ten times** as high as in USA

Brazil Beef

- Emissions from beef **three times** as high as in USA

LEVERAGE POINTS TO LOWER METHANE INTENSITY

1. High energy feeds, versus pasture grass
2. Improved genetics,
versus traditional breeds
3. Modern veterinary care



Barriers to Reducing Methane Intensity in the Global South

- Low cost options for pasture expansion
- Restrictions on international investment
 - In feed industry
 - In supermarkets
 - In breed improvement
- Resistance from environmental and animal welfare advocates
 - Failure to distinguish beef and dairy (ruminant) systems from pig and chicken CAFOs

Animal Welfare in Modern Beef Systems

- Beef animals are not confined
 - On pasture for most of their lives
 - In feedlots—which are still outdoors—for last 6 months.



Animal Welfare in Modern Dairy Systems

Dairy animals are under cover but open to the air

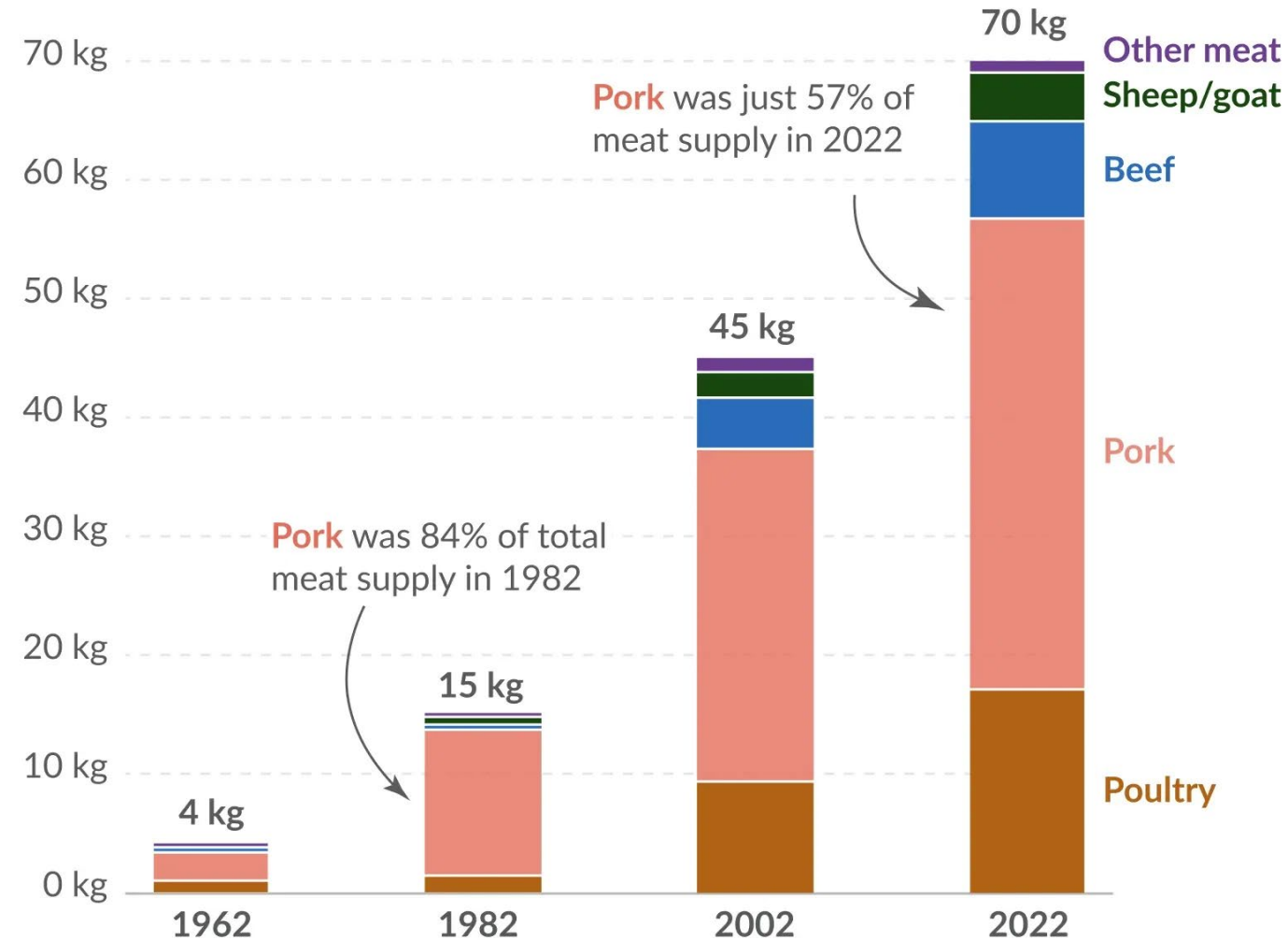
- They walk freely to milking parlor 2-3 times a day
- Often free to graze on pasture in summer months



China's meat consumption has increased rapidly and diversified in the last 60 years

Our World
in Data

Per capita meat supply in kilograms per person per year.
This measures the amount of meat available for consumption.



Data source: UN Food and Agriculture Organization (2024)

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Angus beef
cattle in
roofed feedlot
in Tongliao,
China



Promoting Controlled Feeding in Brazil



Environmental Advocates Campaign Against Controlled Feeding

- In 2024, 100 environmental advocacy organizations called on global private banks to “address their role in financing industrial livestock production.”
- The NGOs suggested, as an alternative to modern methods, “reducing the number of animals in global supply chains.”

Best Way to Reduce Cattle Numbers?

The US today produces 23 percent more beef than in 1970s

Every pound of production today requires:

- 30 percent fewer animals
- 12 percent less water
- 33 percent less land
- And generates 18 percent less manure

Source: Judith L. Capper, “The Environmental Impact of Beef Production in the United States: 1977 Compared with 2007,” *Journal of Animal Science* 89, no. 12 (2011):4249-61.

C. Alan Rotz, et al., “Fifty years of progress for beef cattle production in the United States,” *Journal of Animal Science*, 3 June, 2026.