



INTERNATIONAL FOOD POLICY
RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty
Supported by the CGIAR

Global Diet Change

Implications for Agriculture and Nutrition

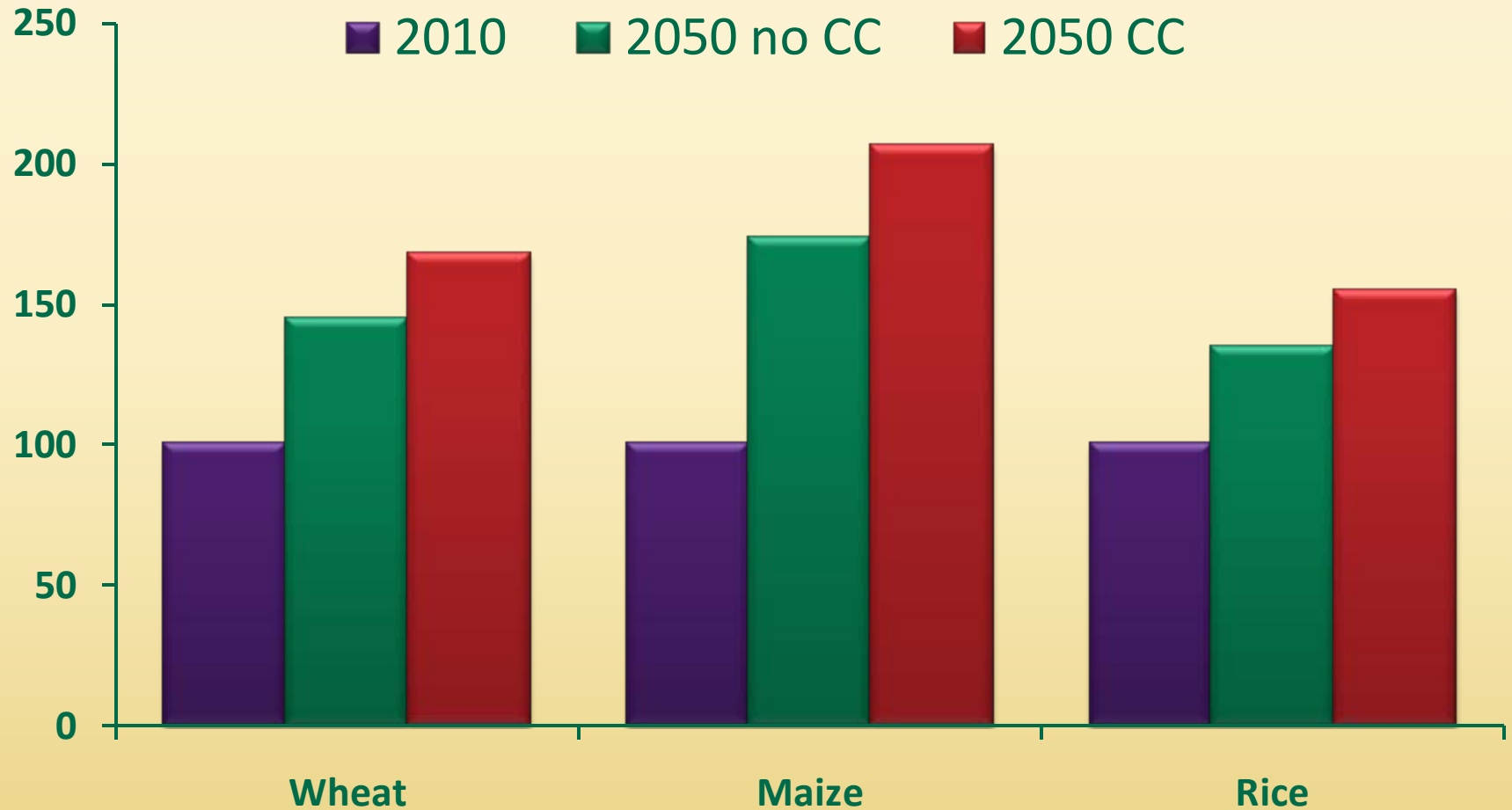
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Projected Food Prices: Increasing Scarcity

Based on IFPRI IMPACT Scenarios

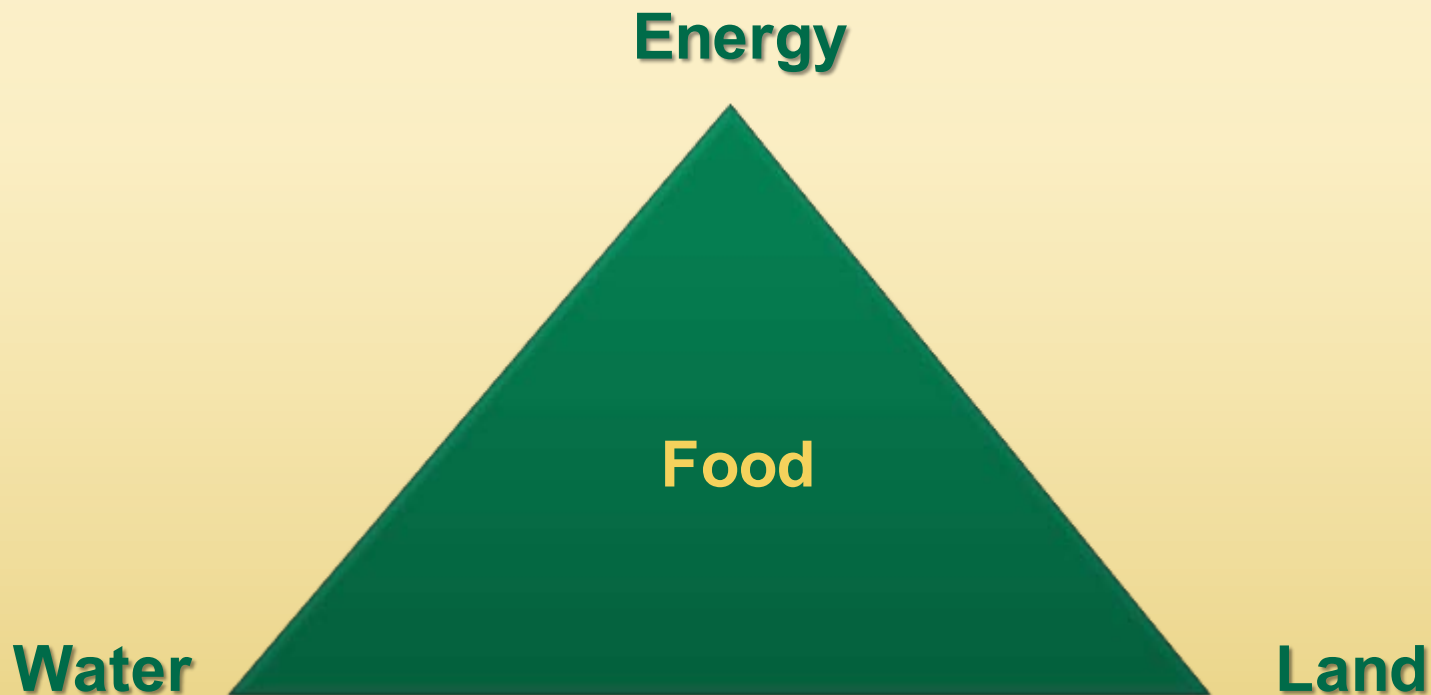


Notes: 2010 = 100; CC = climate change



Non-food Competitors in Production

- Demand for biofuels and bioenergy
- Emissions mitigation and carbon sequestration
- Conservation and biodiversity



Agricultural Growth and Food Security

Supply drivers

Climate change

Water and land
scarcity

Science and technology
policy

Investment in
agricultural research

Policy and governance
reform

Demand drivers

Population:
9 billion people in 2050

Income growth:
Africa, **not** just Asia and
Latin America

Urbanization:
in **2008** 50% urban
in **2050** 78% urban



Major Consequences

- Change in diets to convenience foods, fast foods
- Increased consumption of fruits and vegetables
- Higher food energy, more sugar, fats and oils
- Rapid growth in meat consumption and demand for grains for feed
- Half of growth in grain demand will be for livestock
- Intense pressure on land and water



Dietary and Food System Approaches to Improving Nutrition

Reducing post harvest losses

- 10% for grains; 25% for perishables
- Economic recoverability limited

Wasting less food

- 20% wastage in households

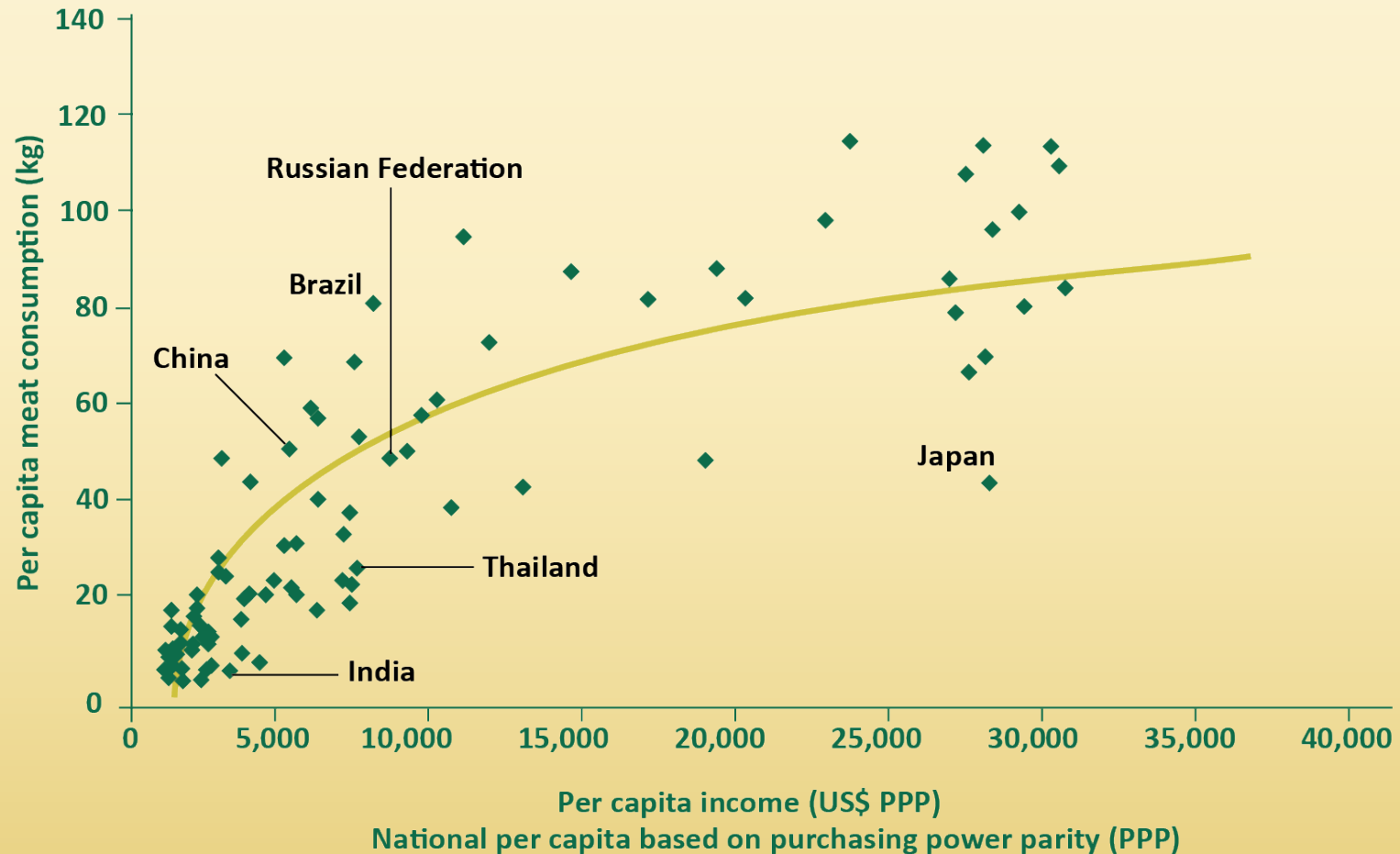
Consuming fish from sustainable stocks

Reducing consumption of meat and dairy products



Key Question

Would reduction in meat consumption in richer countries improve food security in developing countries?



Dietary Change Is Not Easy

CAMPAIGNS

Advocacy, educational, and public relations campaigns

PROMOTE LOW-MEAT MENUS

Cafeterias, schools, hospitals, and
other public-sector institutions

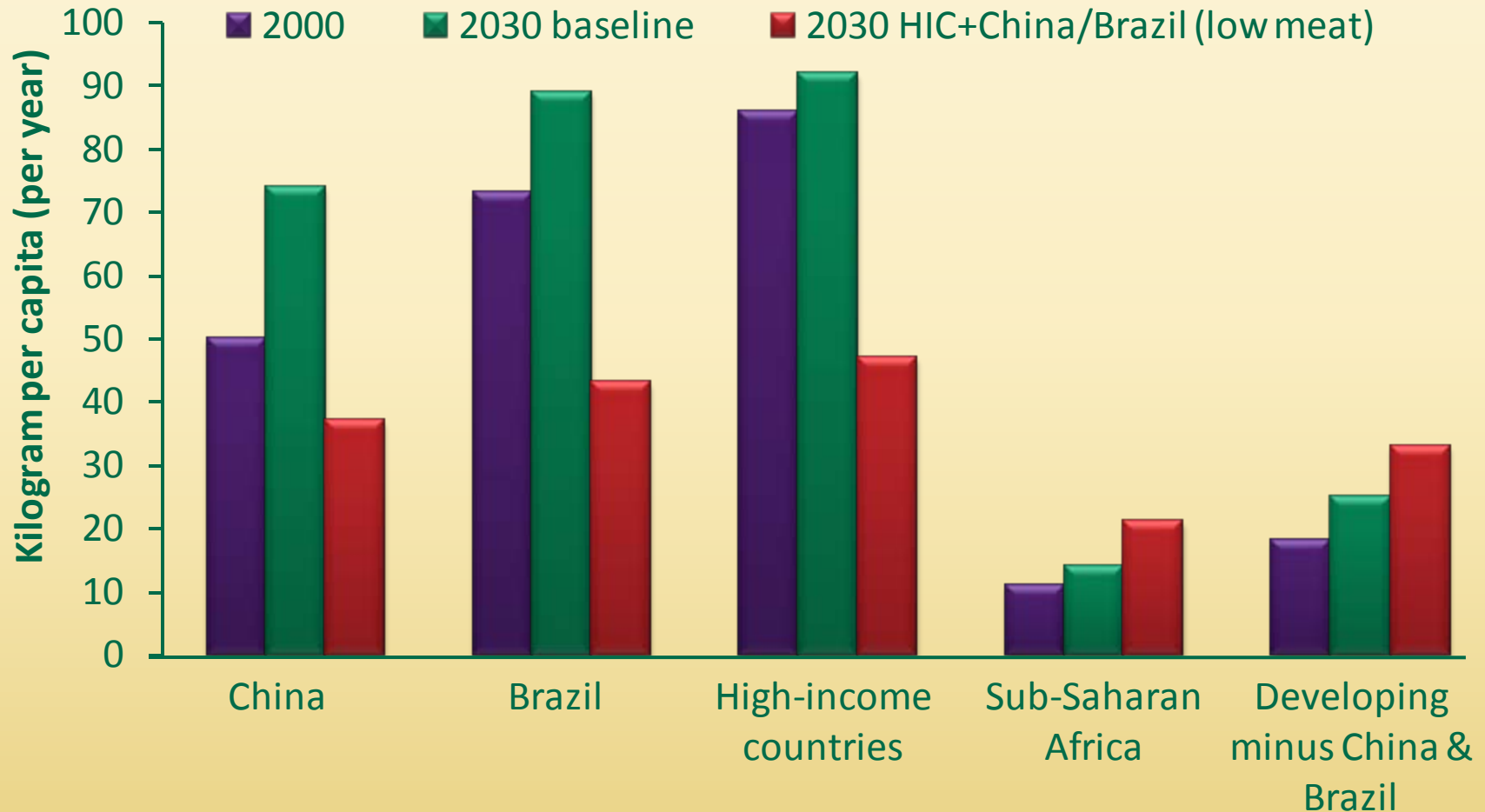
POLICIES

Taxation and subsidy policies to increase the cost of meat
compared to other food products



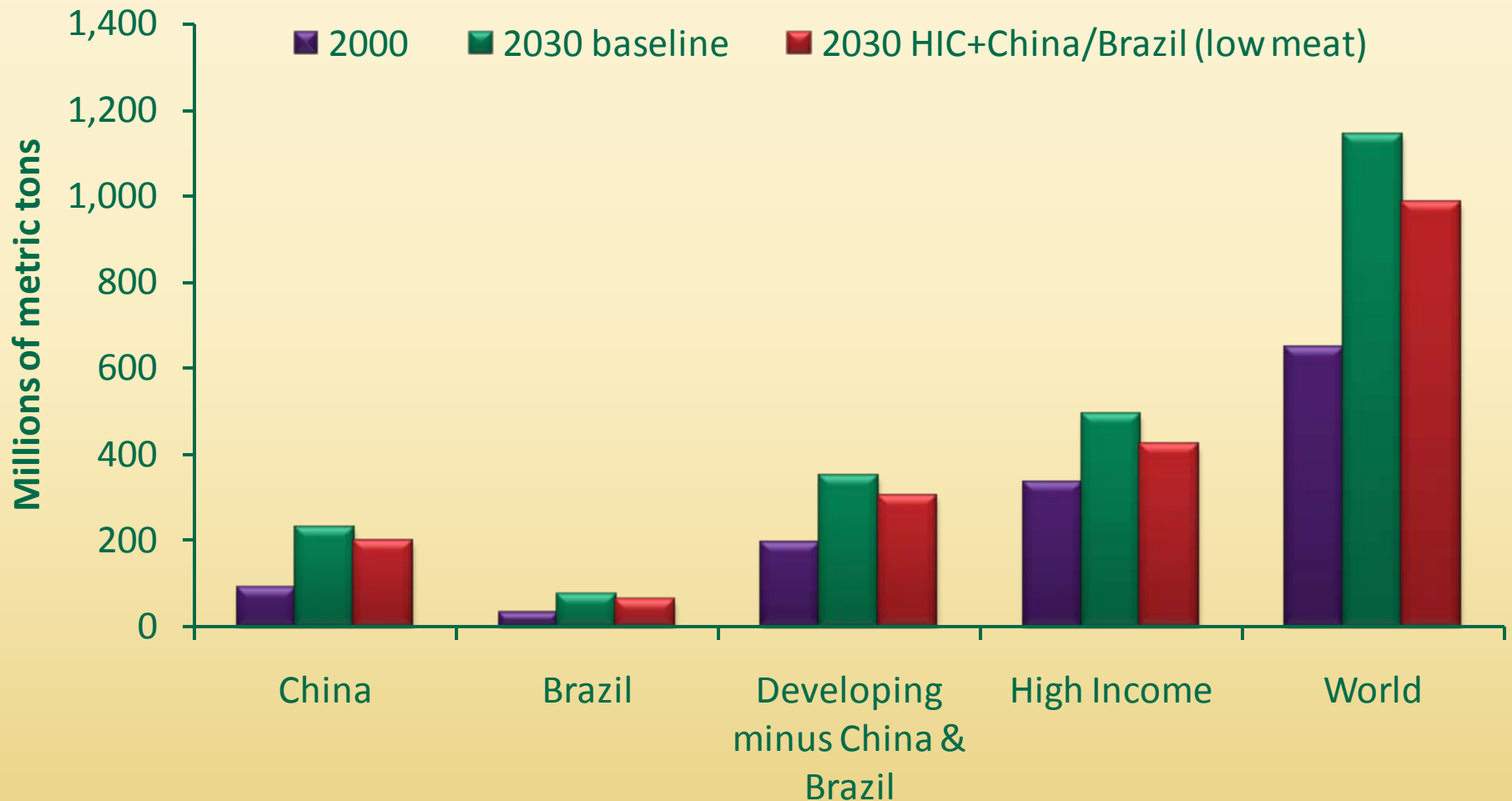
Per Capita Meat Consumption

Less meat in rich countries = more in developing countries



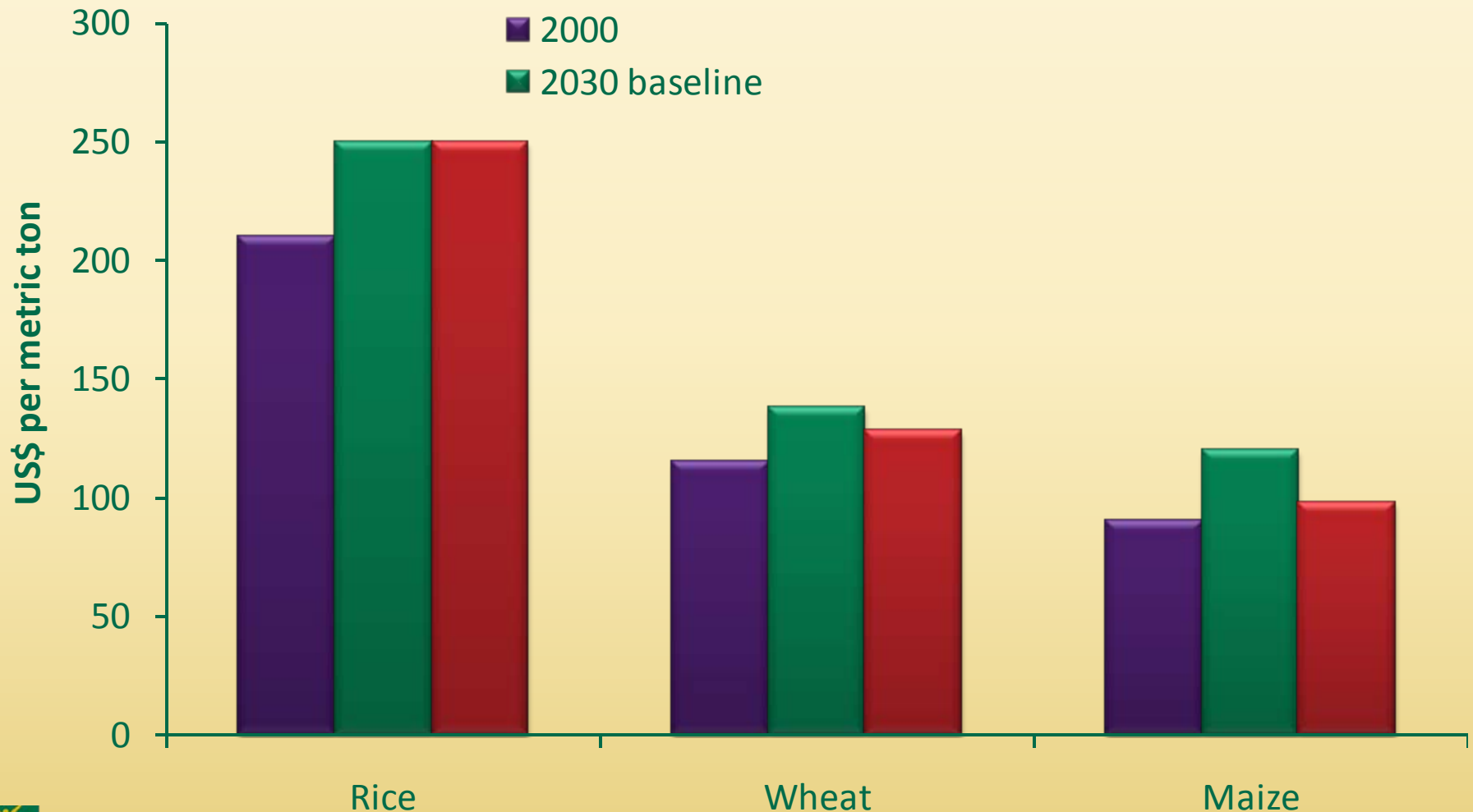
Feed Demand for Coarse Grains

Less meat = Lower feed-grain demand



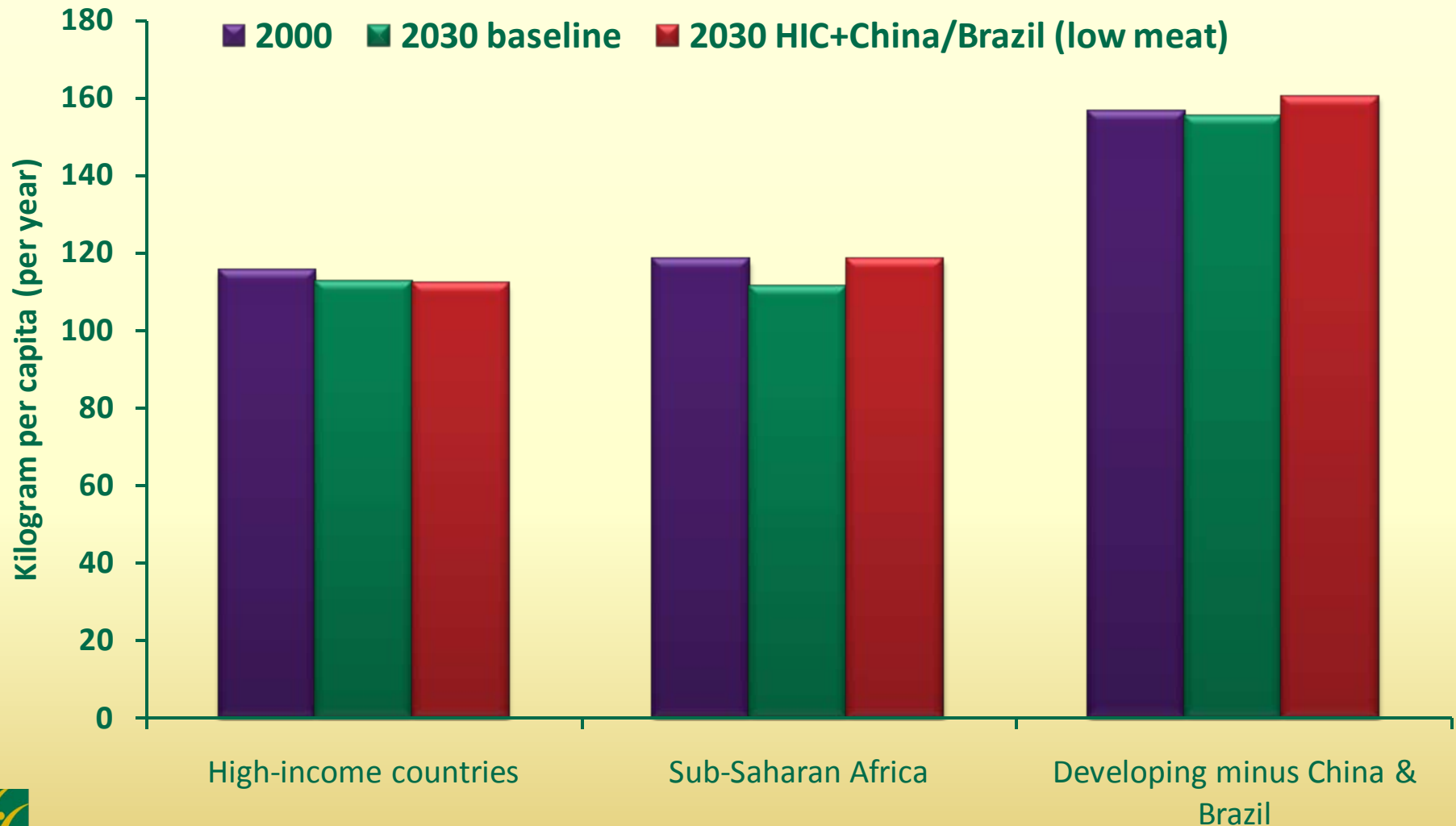
World Prices of Grains

Reduced feed grain demand = Lower grain prices



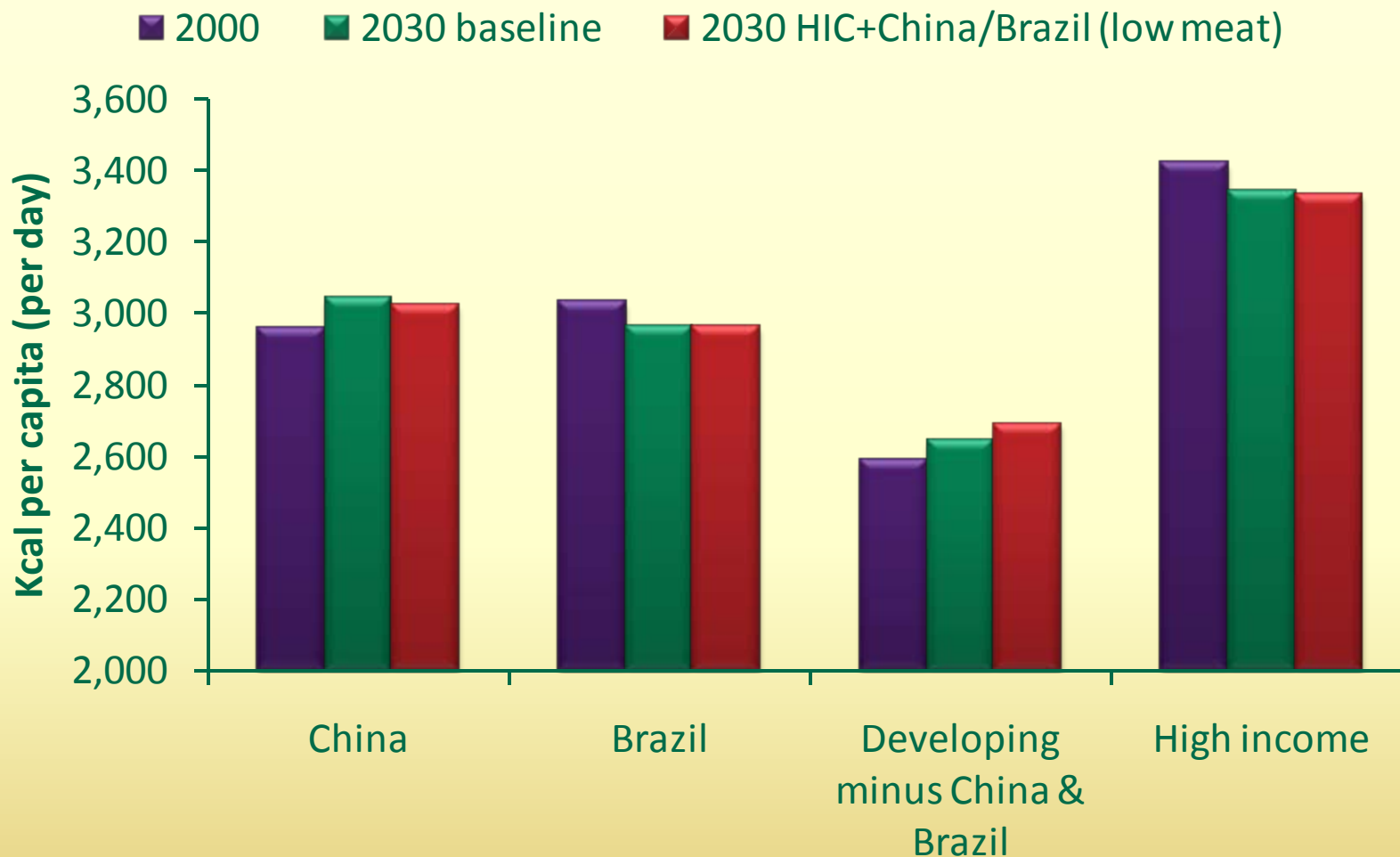
Per Capita Food Grain Consumption

Lower grain prices increases demand



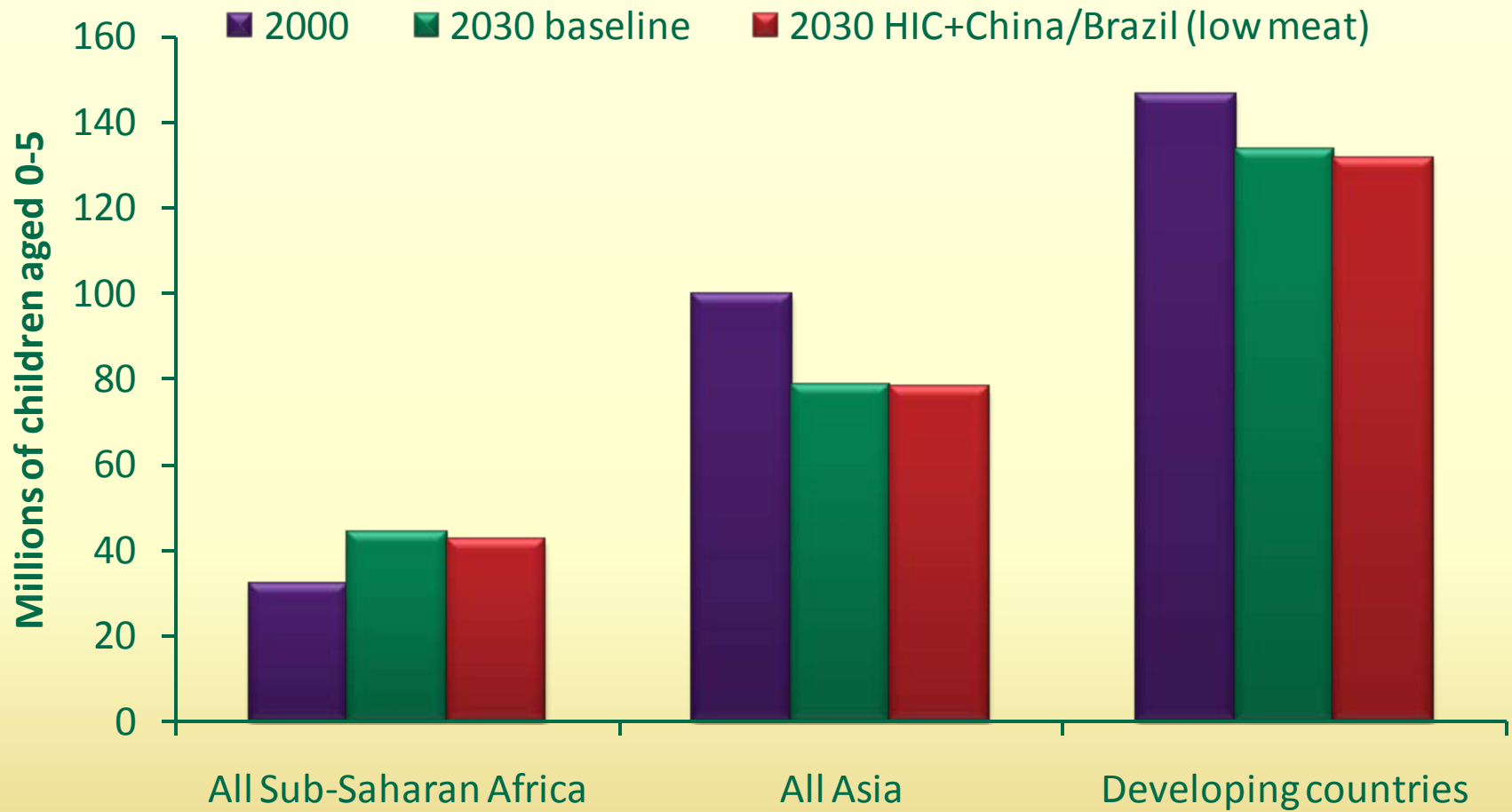
Per Capita Calorie Availability

Lower prices increase calorie access

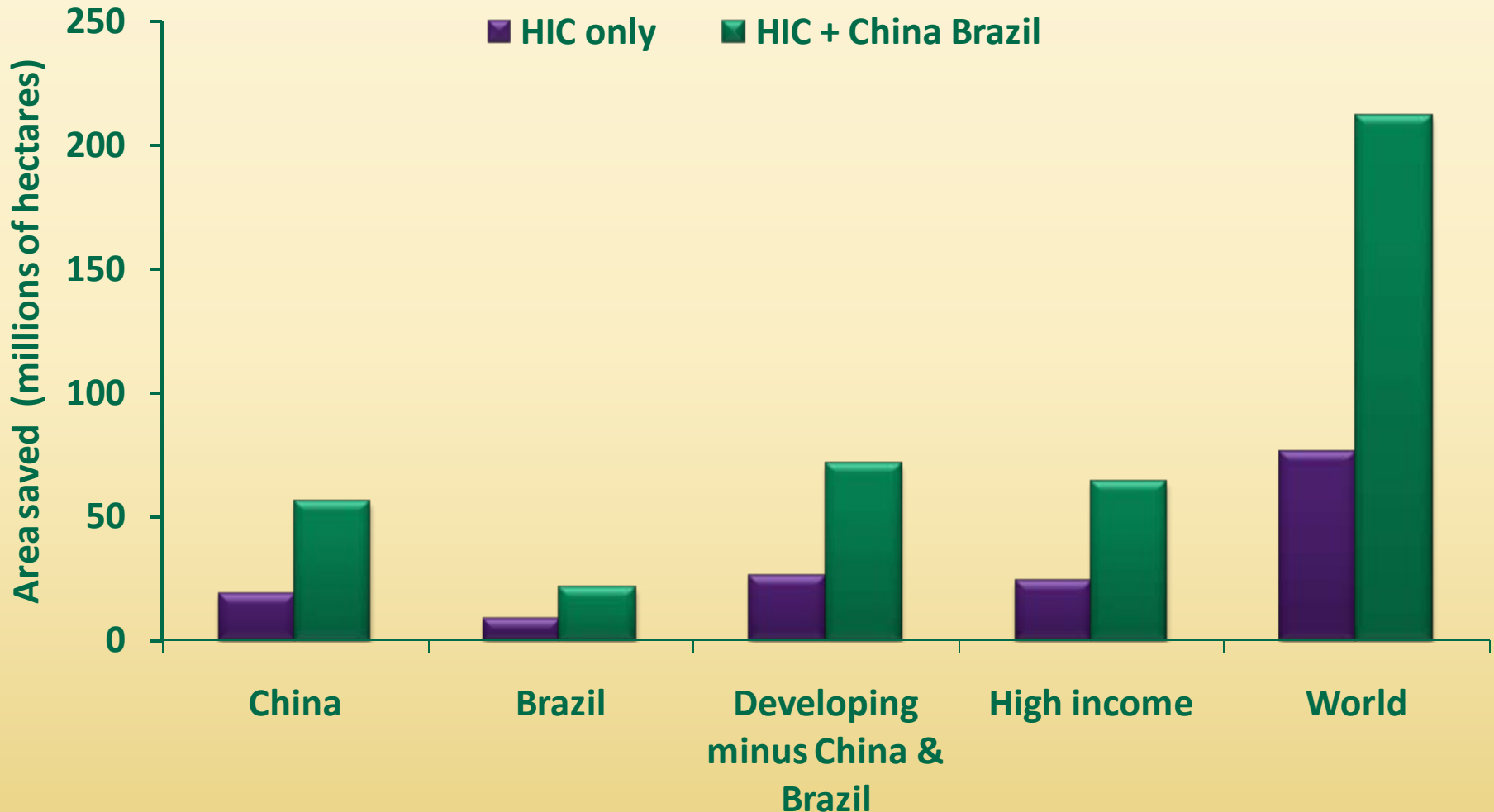


Child Malnutrition

Small improvement



Lower Meat Production Saves Large Areas of Pasture and Cropland



Conclusions

- **Halving of meat consumption in richer countries has**
 - small nutrition benefits in developing countries
 - big land saving impacts
- **Dietary change is a useful tool for improved food security and nutrition**
- **But transformative progress requires much broader investment in agricultural and rural development**

