

## Long Term Agrif Security in Asia: Livestock and Emerging Markets

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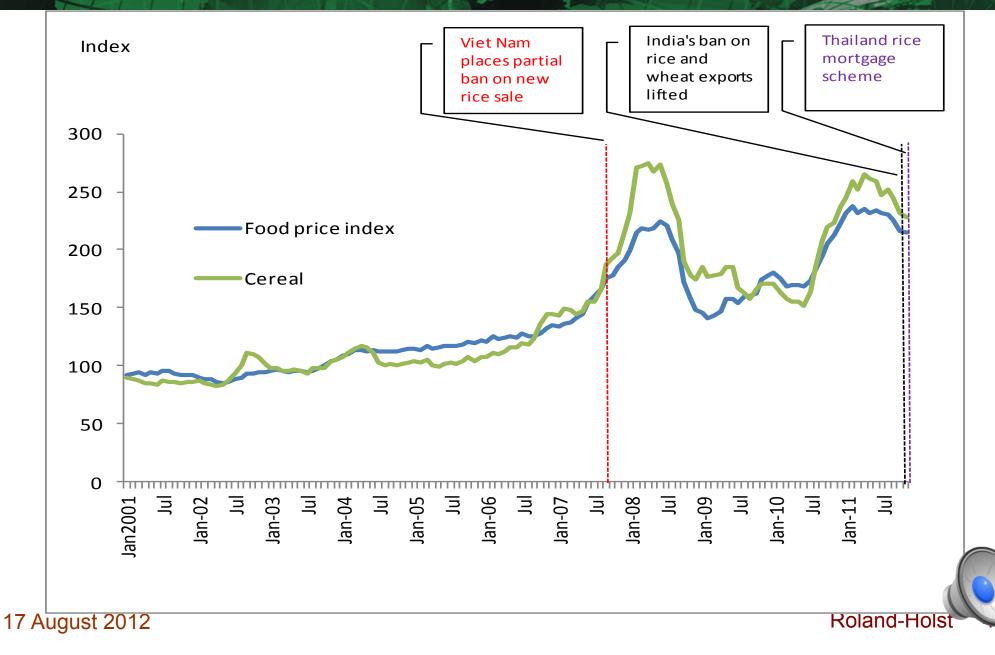
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#### Overview

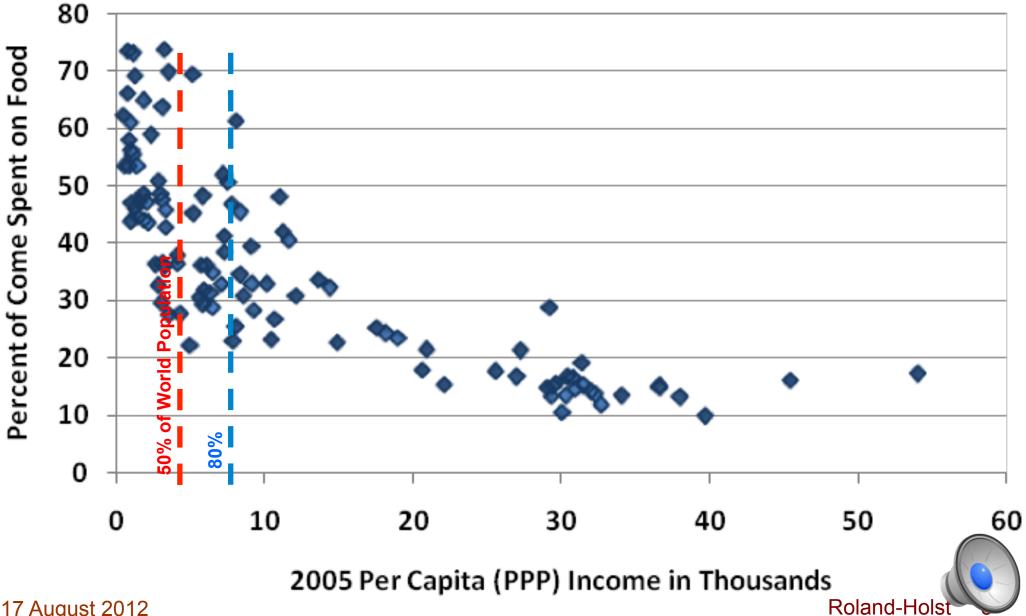
- Price trends over the last few years have threatened decades of improved global food security.
- Because the poor spend the majority of their income and effort on subsistence, food price uncertainty is a paramount livelihood risk.
- In Asia, rural poor majorities are smallholder farmers, largely confined to subsistence by market failures and access barriers.
- This compounds food insecurity for both producers and consumers and denies the Asian Region a potent catalyst for livelihoods improvement and sustainable growth.



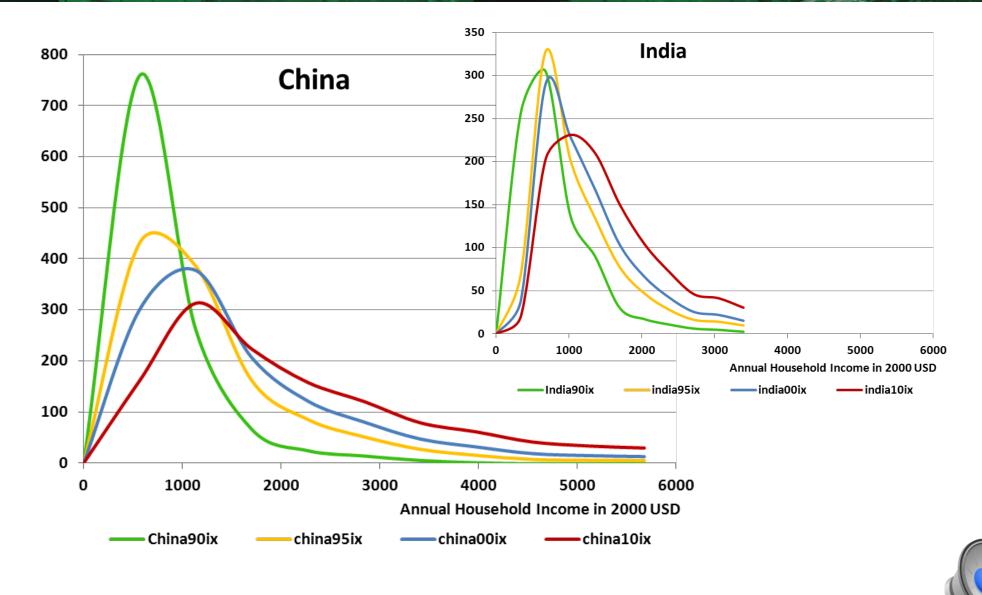
#### Food Price Index and Cereal Prices 2001-2011



#### Why this is risky.

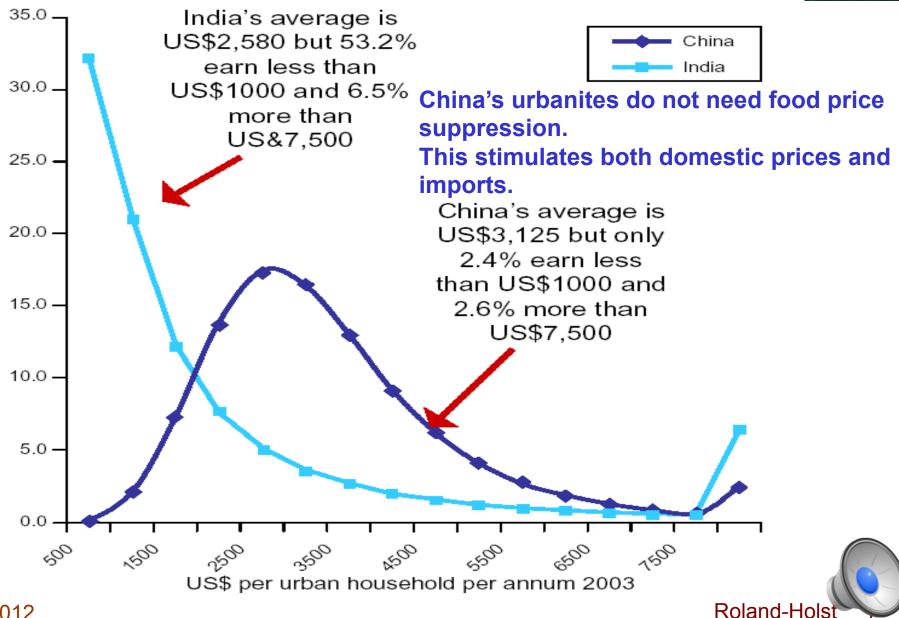


#### Poverty Alleviation in China and India

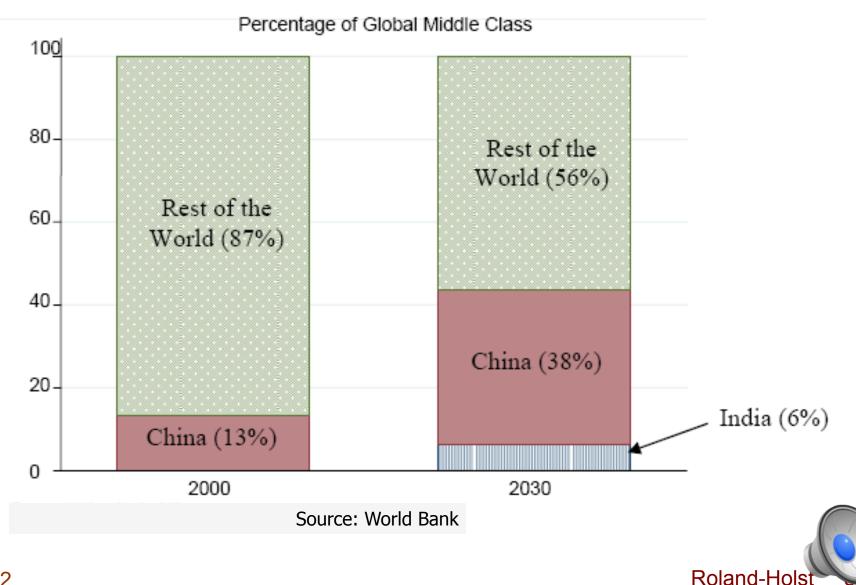


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#### Completely Different Consumer Societies: Urban Income Distribution in India and China



#### Asian Middle Class Emergence

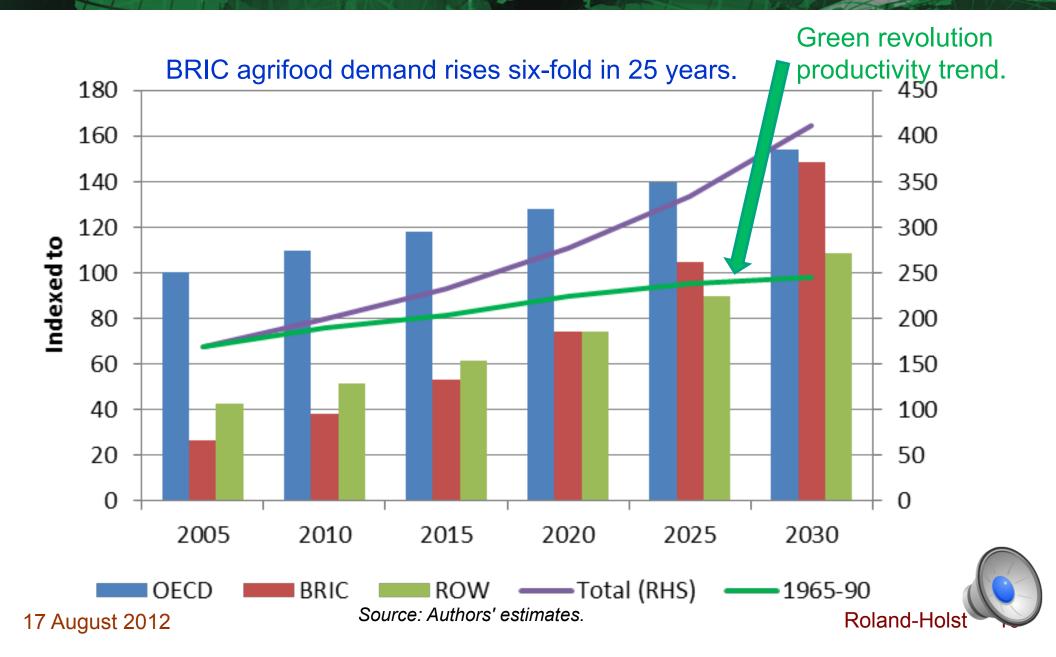


#### The Asian Food Security Narrative is Changing: From Basic Needs to Sustainability

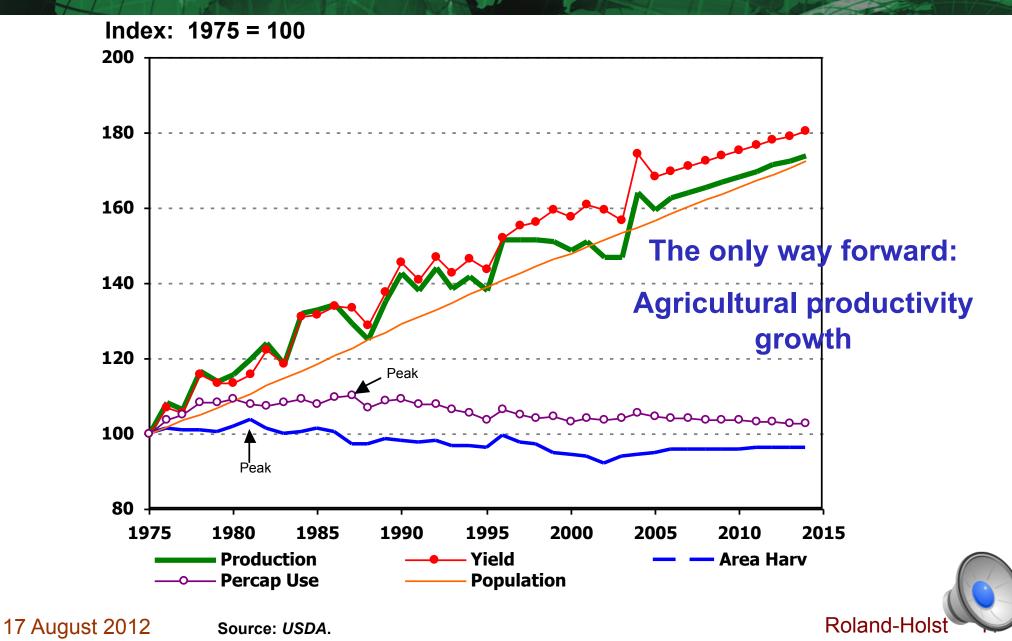




#### **Global Agrifood Demand**

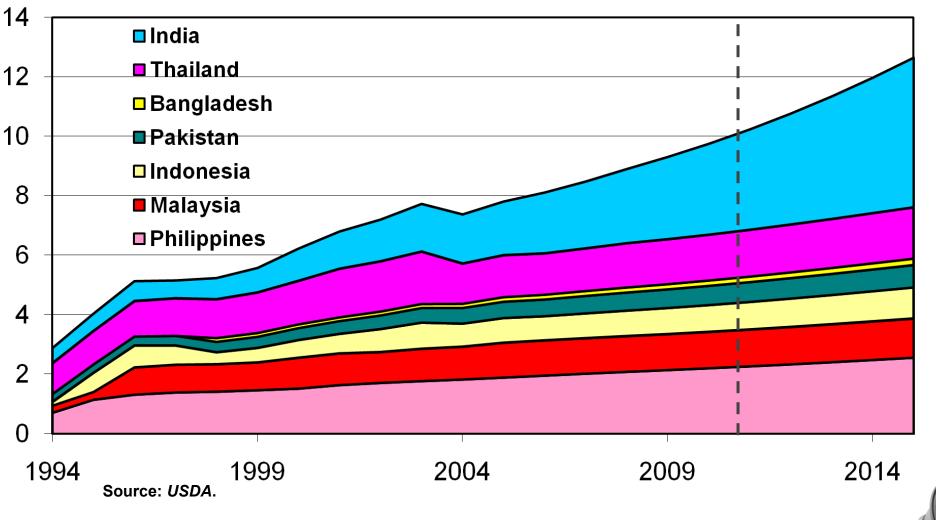


#### How we got here and how we go forward Total World Grain and Oilseeds



#### Livestock as a Primary Driver of Trade and Growth Asia Pork and Poultry Production

#### Million metric tons

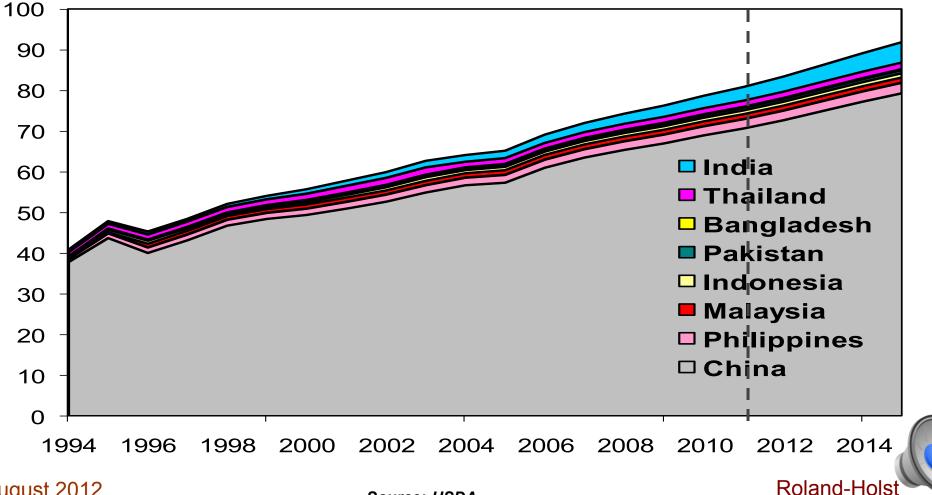


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#### All Asia Pork and Poultry

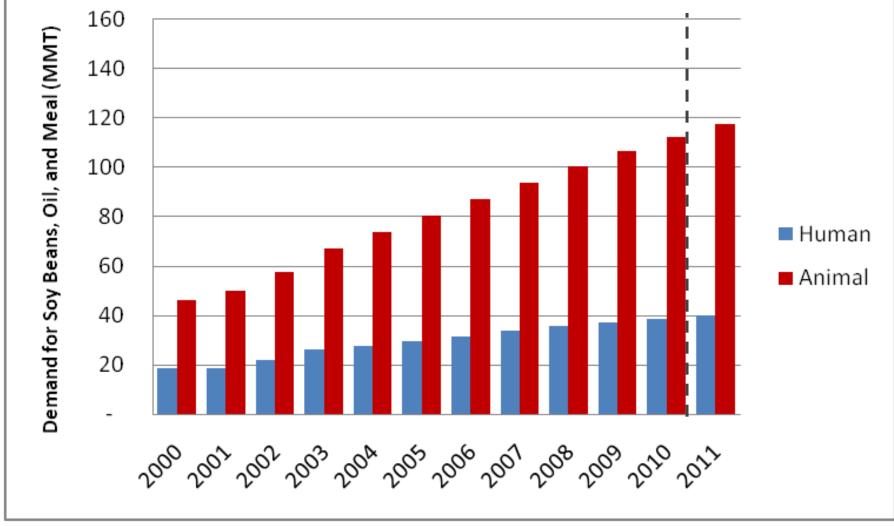
Clearly, the impact of any imbalance in China's meat economy will fall on the price system.

Million metric tons



Source: USDA.

#### **China Soy Demand**

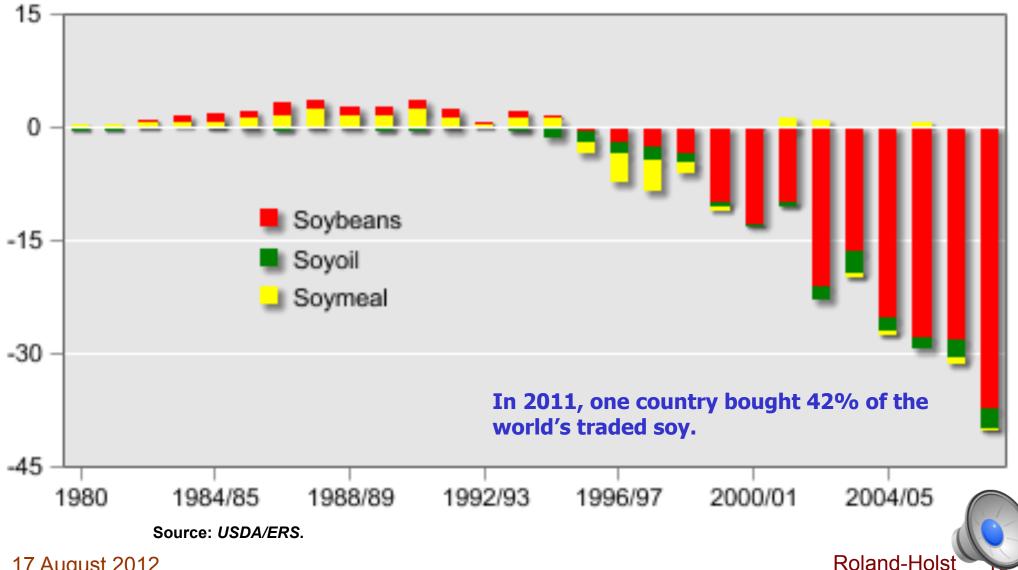




Source: USDA.

#### Trade: China's Soy Tsunami

#### Net trade in soy products (Million MT)

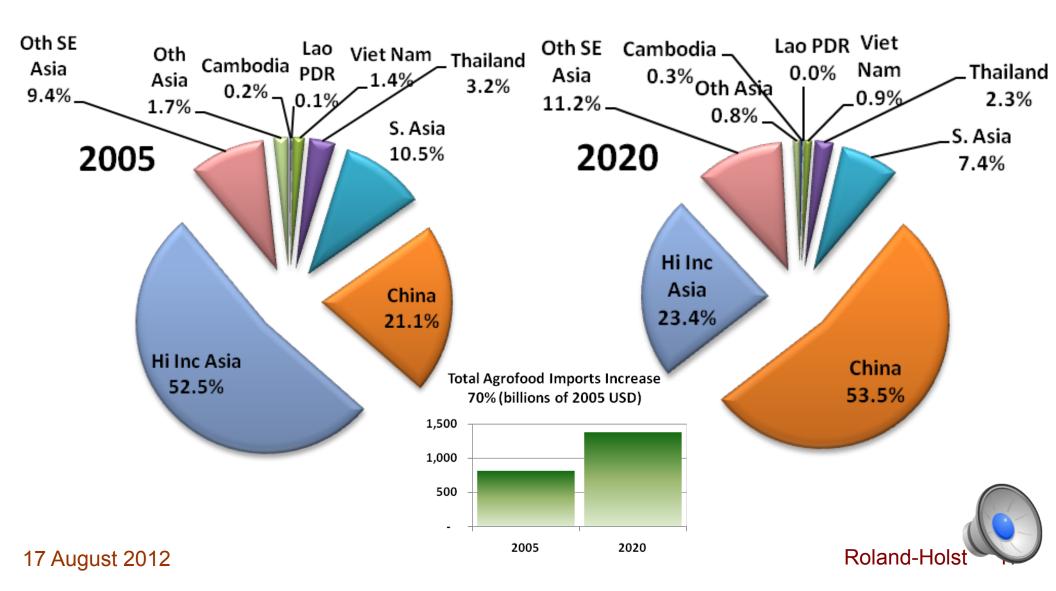


## Demand-Driven Growth Opportunities in Asian AgriFood

- With 20 percent of population, 7 percent of world farmland, 5 percent of renewable fresh water, and the fastest growing middle class,
- China's Agrifood balances are beginning exert enormous influence on global trade
- If import trends continue, there will be significant opportunities to alleviate rural poverty at home and across the region.



#### Composition of Regional Agrifood Import Demand: Baseline



## Long-term Strategies for Asian Food Security and Poverty Reduction

To elucidate the potential for agrifood development in the Asia, we used a long-term forecasting model to assess three types of policy:

- 1. Facilitation of trade and market access
- 2. Agrifood productivity growth
- 3. Regional investment and supply chain integration



# Agricultural Productivity and Economywide Growth

- 1. Increases in farm income and profitability, resulting in improved welfare of farmers and the rural poor
- 2. Declining food prices, benefiting poor rural and urban consumers, including small farmers who might be net purchasers of food
- 3. Reductions in the nominal wage, consistent with increases in the real wage, allowing the industrial sector to reduce costs
- 4. Increases in the domestic demand for industrial output
- 5. Increasing competitiveness of both agricultural and industrial exports, with positive impact on hard currency earnings
- 6. Expansion of the domestic industrial sector, pulling "surplus" labor out of agriculture

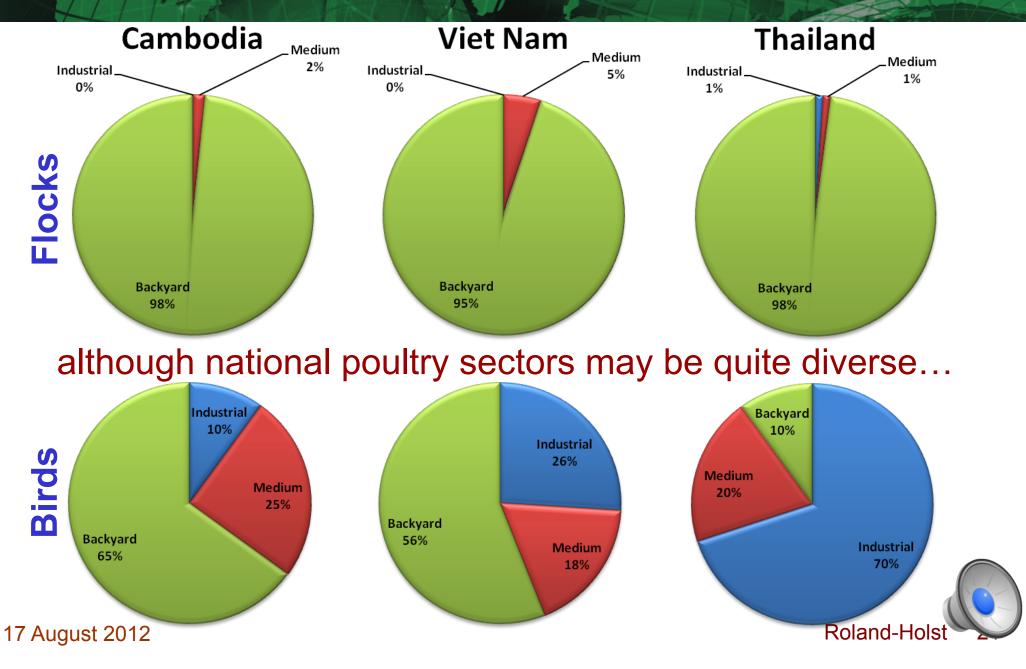


# Market access is the gateway out of poverty for most of the world's poor.

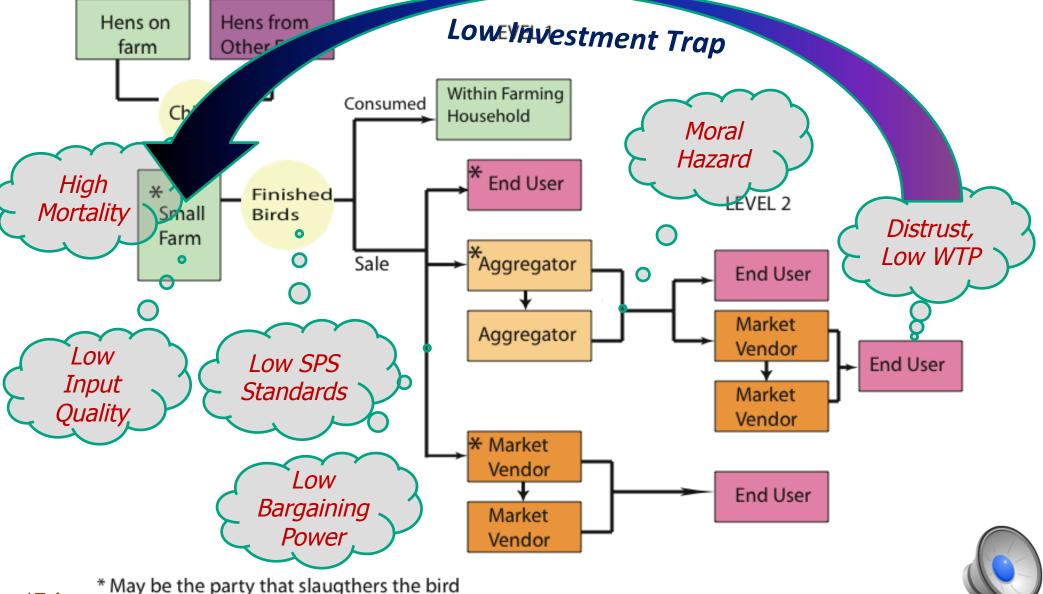
- Across emerging Asia, rural poor majorities are smallholder farmers that live behind logistical and institutional "walls" restricting market access.
- As long as trade and distribution margins remain high, they are trapped in low-level equilibrium by deficient savings and/or incentives to invest in higher value, marketable agrifood products like livestock and specialty crops.
- Conversely, lowering market access costs and related margins can expand the horizon of profitable trade, increasing commerce, capturing more value added, and promoting self-directed poverty reduction.

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#### Example: Poultry in the Greater Mekong Sub-region Smallholder Production is Ubiquitous



#### Smallholder Poultry Market Imperfections



## Productivity Growth in Agriculture and Related Food Industries

- Because of Asian economic diversity, agricultural yields and productivity vary tremendously across the region.
- In most Asian economies, agrifood production remains far below its ultimate potential.
- Because of relatively small-scale land tenure, significant livelihood improvements will not occur unless output per hectare increases substantially
- To assess this growth potential, we examine a scenario where total factor productivity grows by 4%/yr across the region.



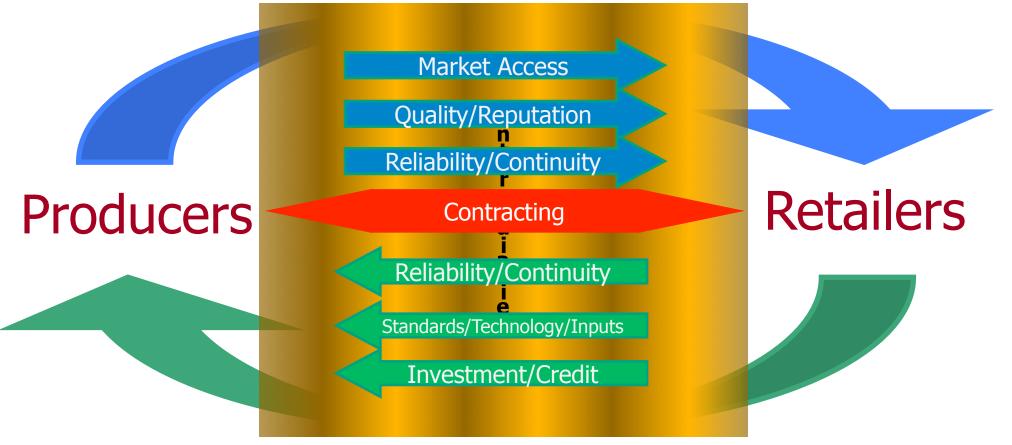
#### **Regional Supply Chain Integration**

- One of the defining characteristics of low-income economies everywhere is limited reserves of domestic saving, which in turn limits development by restricting investment in productive assets and enterprise expansion.
- Globalization has changed the nature of this constraint with the advent Supply Chain Integration (SCI) that allows low-income countries to leverage regional savings for domestic investment, technological change, and growth.
- Across Asia, SCI should be promoted to take full advantage of diversity in regional enterprise systems and markets.

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#### What Supply Chain Integration can Offer: Contracting Example

#### Supply Chain – Resource Flow

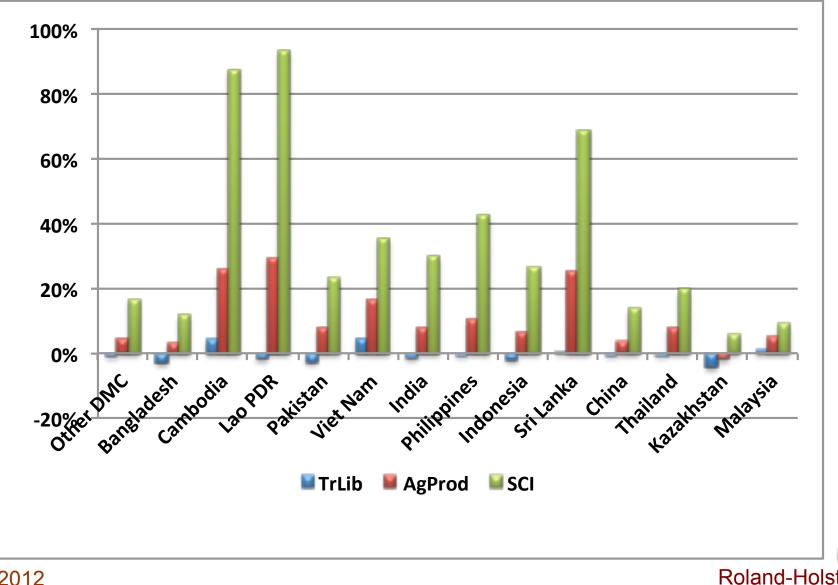


Value Chain – Income Flow

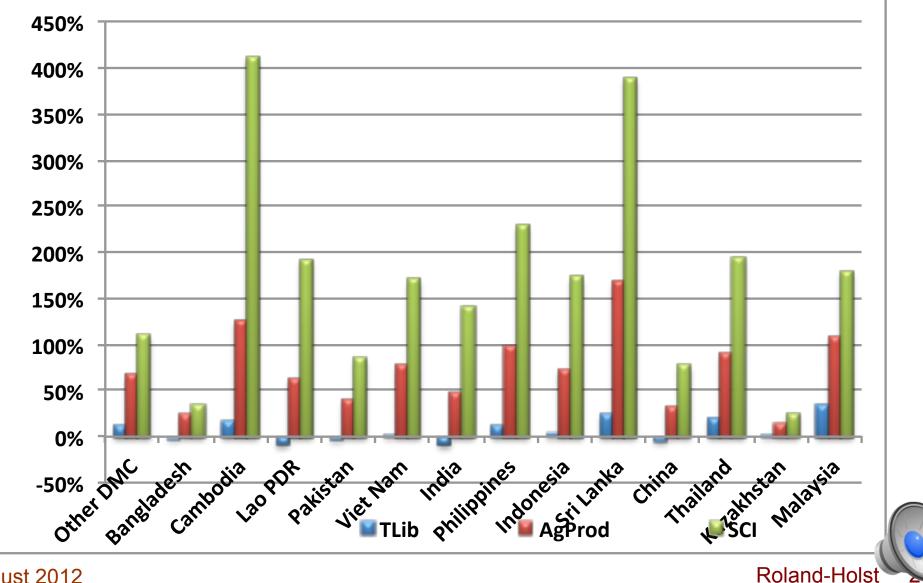


## Agrifood Investment is a Potent Catalyst for Regional Growth

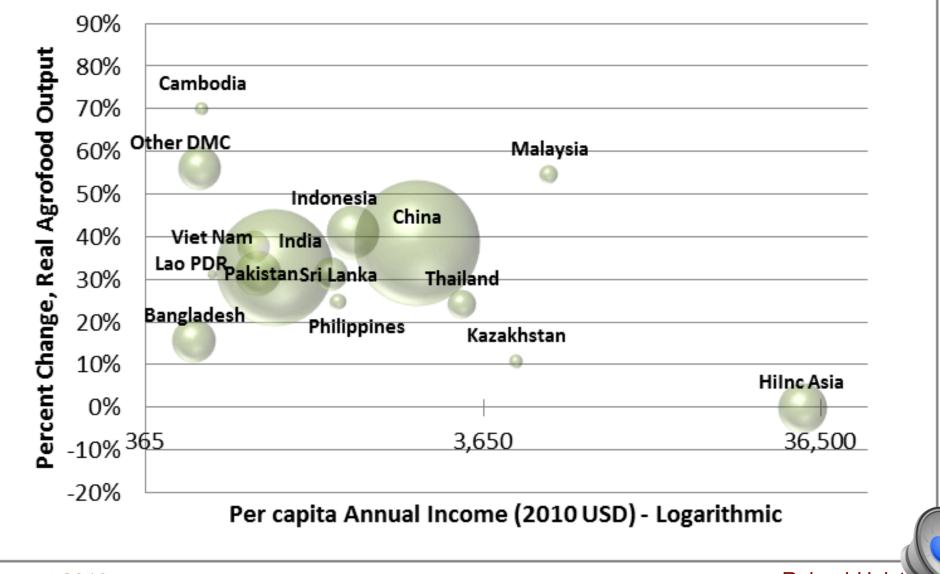
Change in 2010-2030 cumulative real GDP



# Agrifood Output Growth: 2010-2030 Cumulative



# Agrifood Productivity Growth can be Pro-poor



17 August 2012

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#### Conclusions

- Across Asia, emerging demand will pose unprecedented challenges and opportunities for agrifood production, particularly in livestock products.
- Rural poor majorities in the region face serious constraints on market access, productivity, and savings resources for enterprise development.
- Policies that overcome these would significantly increase the region's food output, and they are also good for growth, good for every country, and even better for the poor.
- By increasing rural incomes and lowering food costs for urban populations, these policies make a dual contribution to food security.





# Thank you

