



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Accelerating Agriculture Growth: *Moving from farming to Value chains*

Ashok Gulati

Director in Asia, IFPRI New Delhi
presentation at the conference on

India's Economy : Performance and Challenges

**India Habitat Centre
February 10, 2010**

Outline

- Why Agriculture is important, and what can the Elephant (India) learn from the Dragon (China)?
- Indian agriculture: Under crisis or under-performance?
- To accelerate growth in agriculture, we need to move from farming approach to value chains, and reform the three “I”s...Investments (subsidies), Incentives, and Institutions.



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Why Agriculture?

- “GDP growth originating in agriculture is at least twice as effective in reducing poverty as GDP growth originating outside agriculture” (WDR, 2008).
- The figures for China and Latin America are reported to be 3.5 times and 2.7 times, respectively (World Bank 2007a: 6).¹
- An average Indian still spends roughly half of its expenditure on food (NSSO, 2004-05)

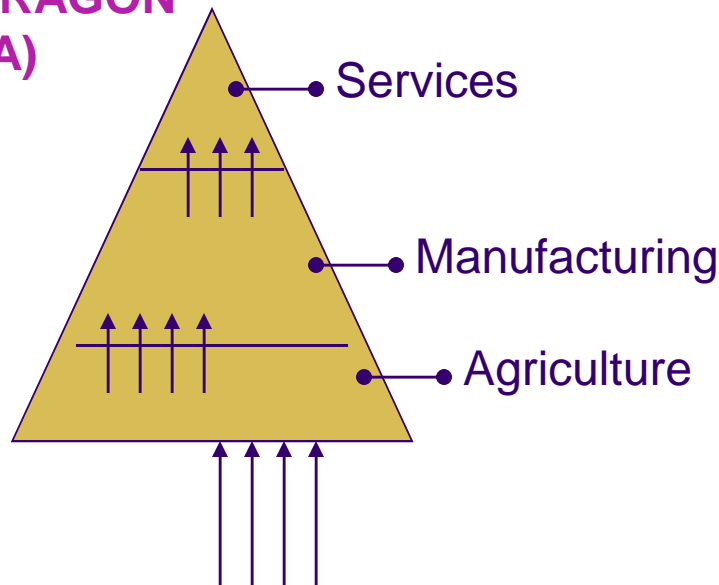


INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

What does China story tell us?

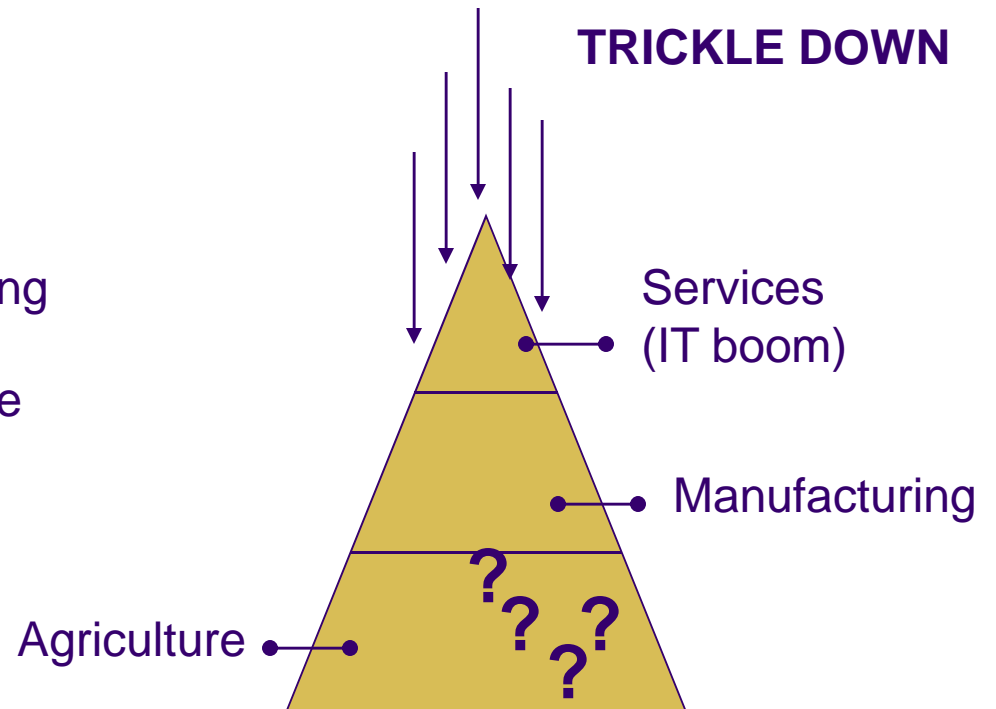
Start with Agriculture...else the trickle down will work very slowly

THE DRAGON (CHINA)



**FIRING FROM THE
BOTTOM**

TRICKLE DOWN

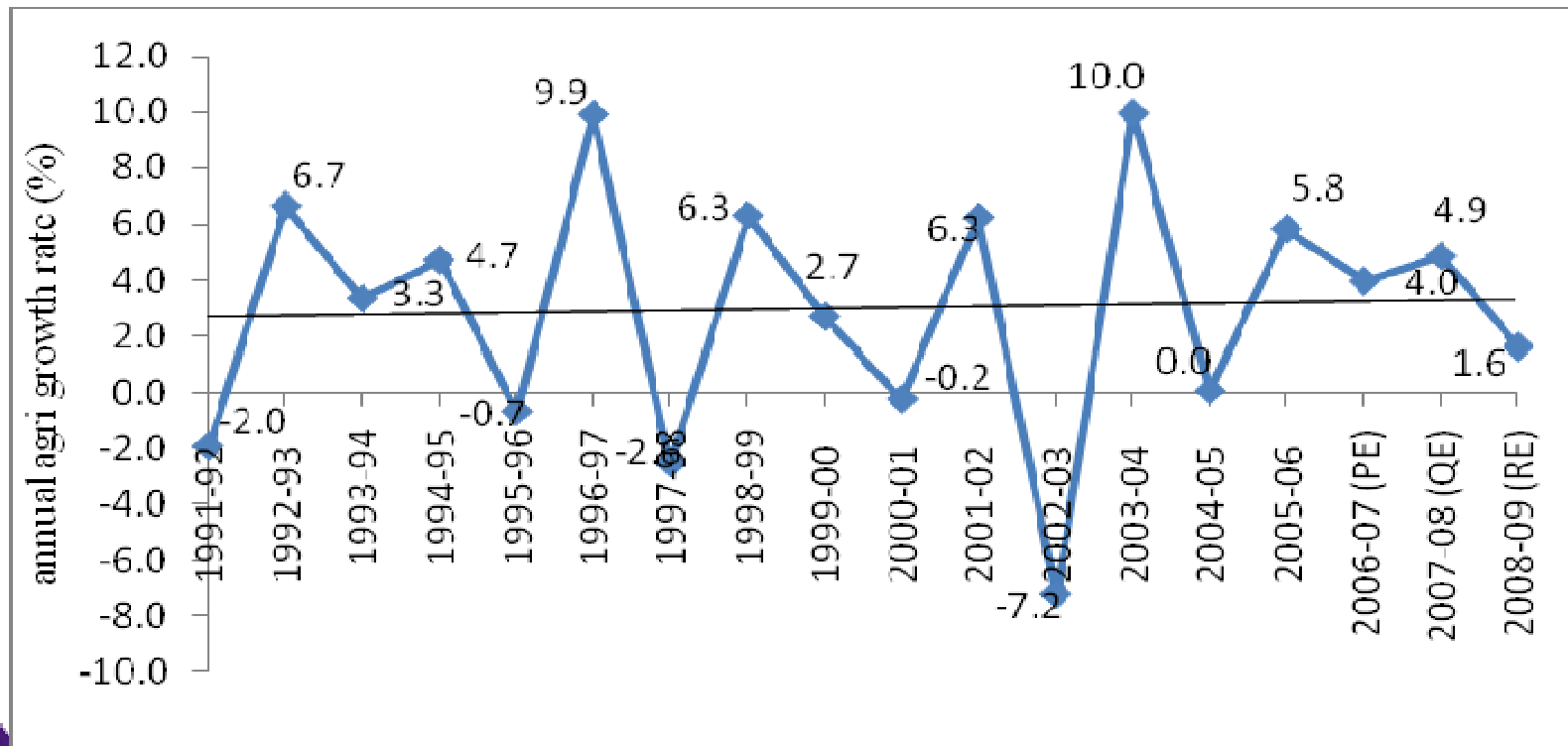


THE ELEPHANT (INDIA)



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Agriculture Performance: in crisis or under-performance? (avg. growth rate in agl.3%pa)



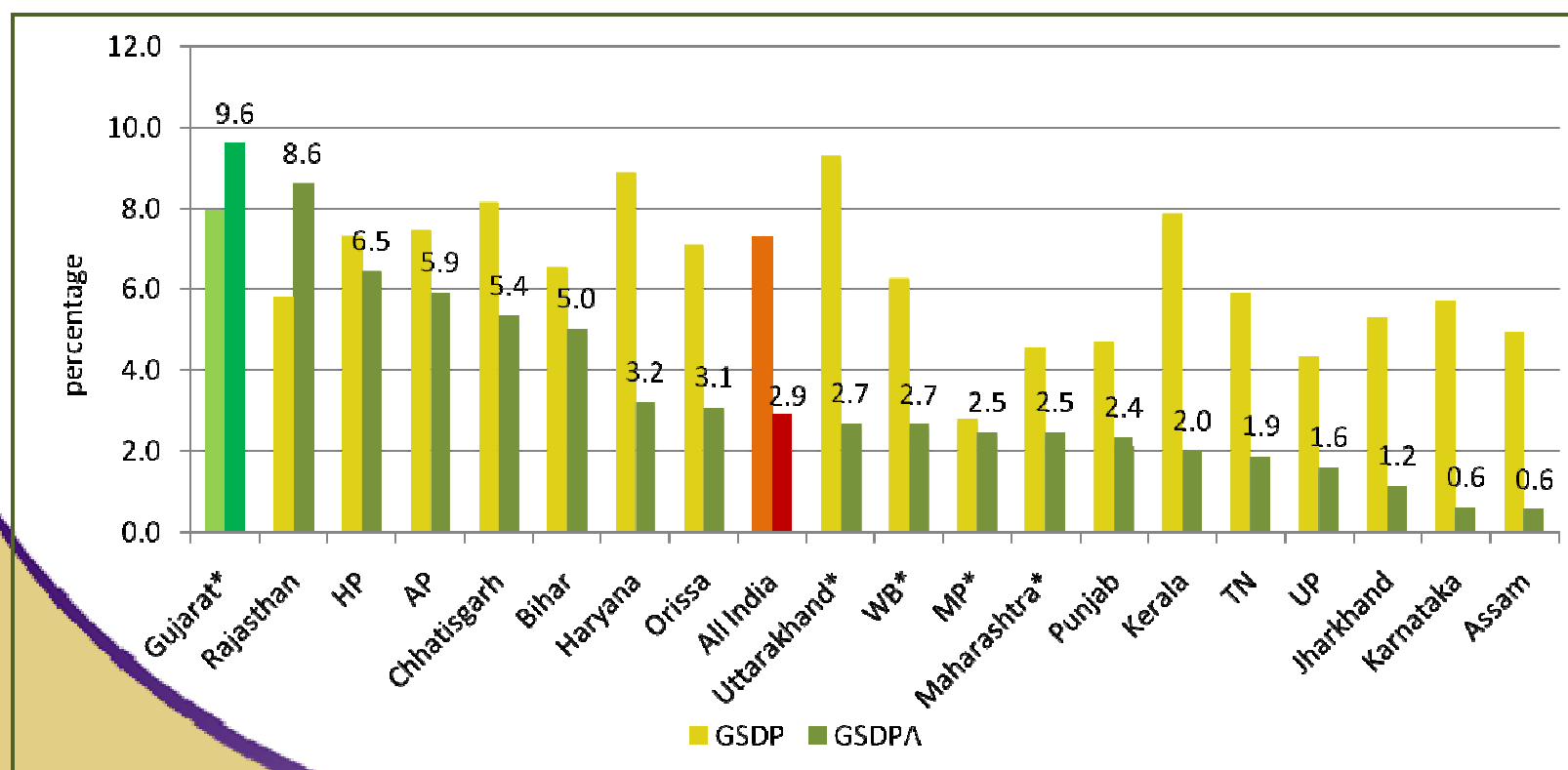
Source: Calculations are based on data published in National Accounts Statistics, CSO, Gol, various issues



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

But there are bright spots! Gujarat registering highest rate of growth in agriculture since 2000-01!

Average Annual Growth Rates of Gross State Domestic Product (GSDP) and Gross State Domestic Product from Agriculture (GSDPA): Major States and All India (%): 2000/01 to 2007/08



Source: Government of India, Central Statistical Organization (as of Feb 2009).

*Average annual growth rate is from 2000/01 to 2006/07, the latest year for which data is available.



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Occasionally, Indian agl. has risen to challenges...

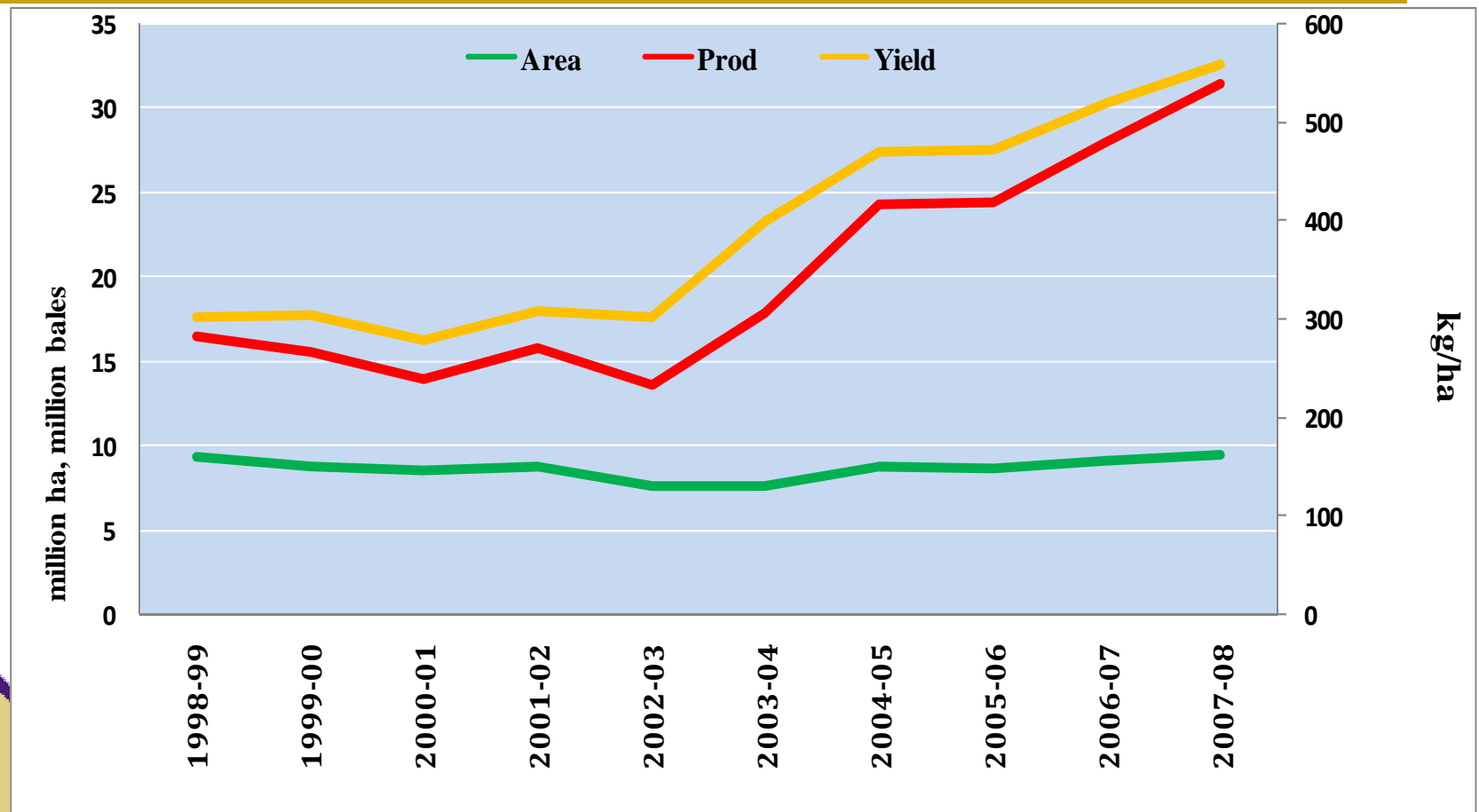
- Surge I: Green revolution in late 1960s and 1970s (driven by Govt in close collaboration with international centers);
- Surge II: White Revolution in 1970s and 1980s (driven by linking cooperatives to demand centres, heavily supported by Govt investments)
- Surge III: Blast of Bt Cotton and Hybrid Maize (2002 onwards) (driven largely by the private sector)



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

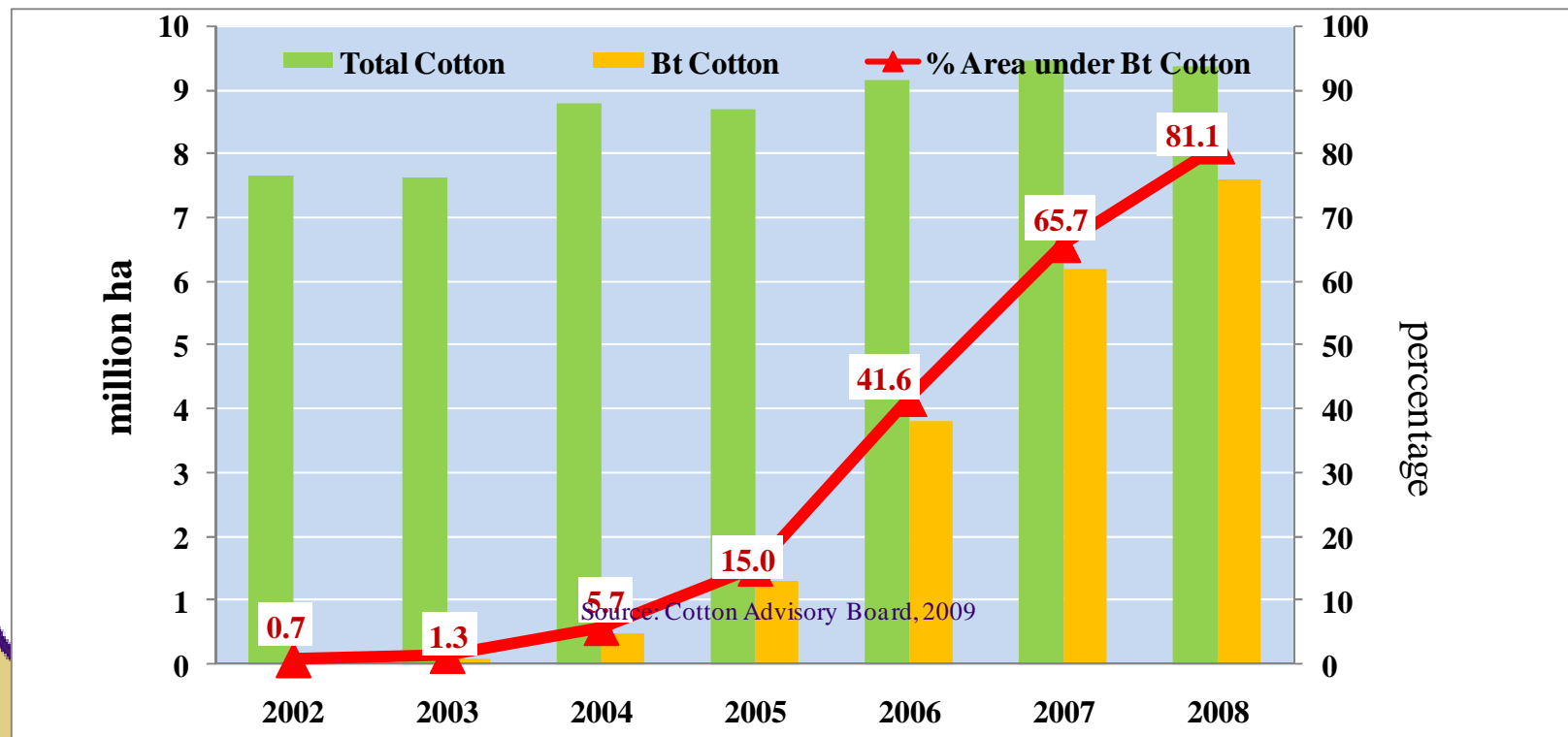
Surge III: A Blast of Bt Cotton

~pioneered by the corporate sector



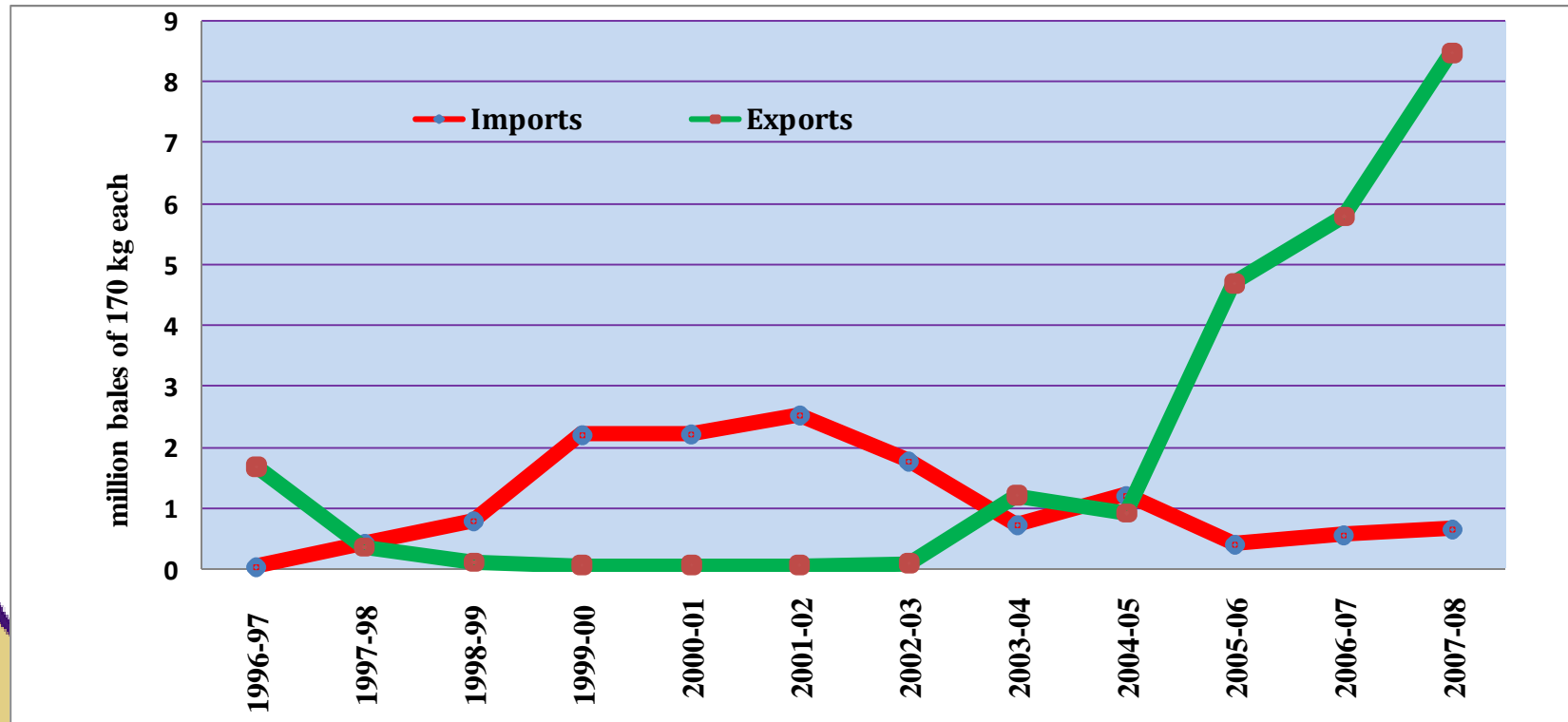
INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Rising share of Bt cotton in India



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Impact: India emerged as 2nd largest exporter of cotton



Source: Cotton Advisory Board, 2009



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

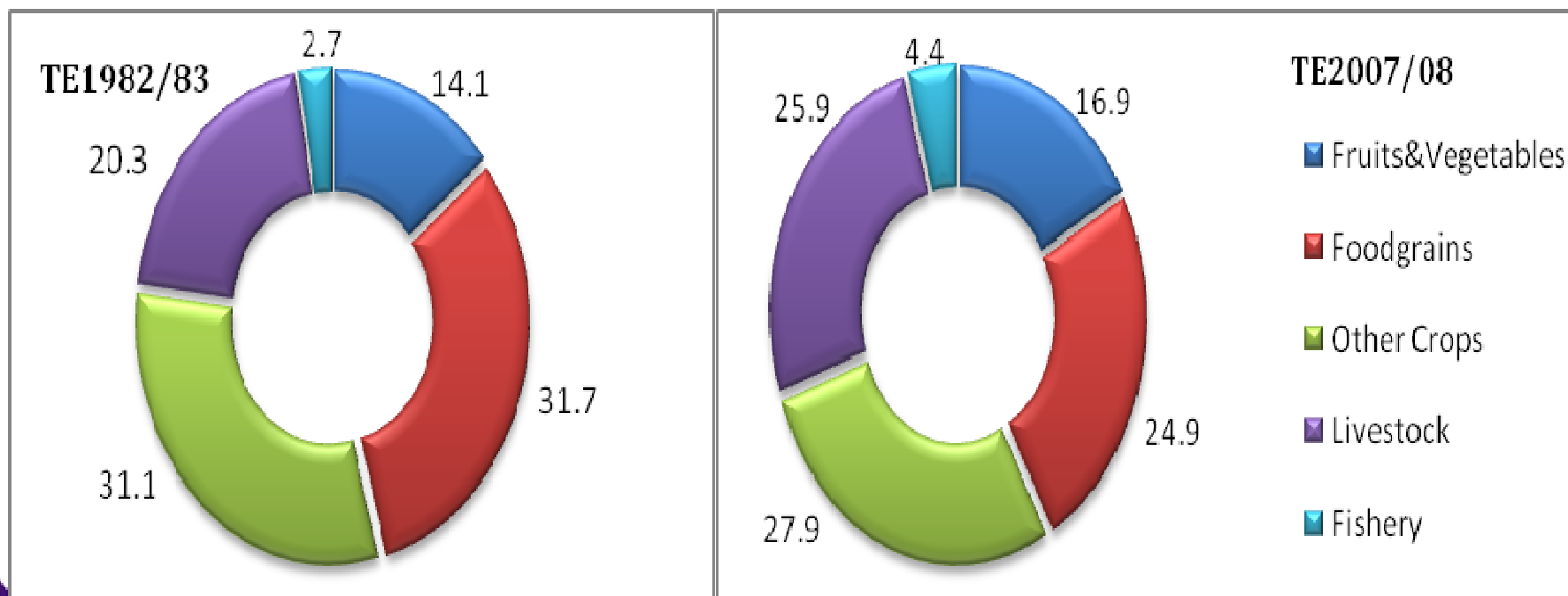
Next Surges could be in Hybrid Maize, Bt Brinjal??, and so on??

- Production of maize increased by 60% b/w 2000/01 to 2007/08; role of hybrid maize; and India exported about 3 mt of maize in 2007-08.
- Mahyco's Bt brinjal next? It has gone through several hops of government trials and now stuck at political level...
- There are several other biotech crops that are at field trial stage; cabbage, cauliflower, okra, potato, rice, etc.
- If the experience of other Bt crops is like that of cotton, global markets of several crops may be impacted



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Food security and Diversification towards High Value Agl. (livestock, F&V, and fishery)

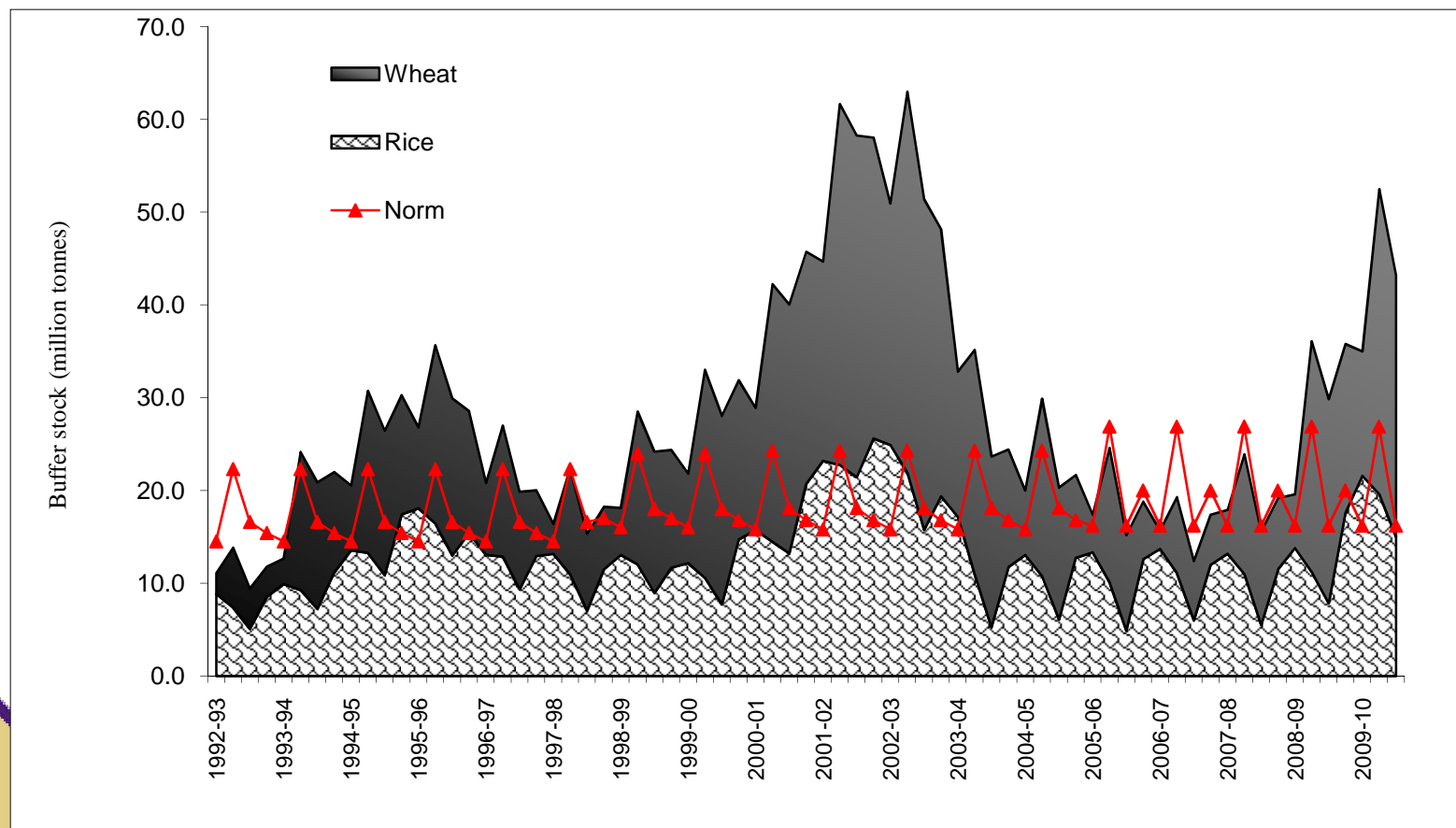


Source: National Accounts Statistics, Central Statistical Organization, GoI 2007 & 2009



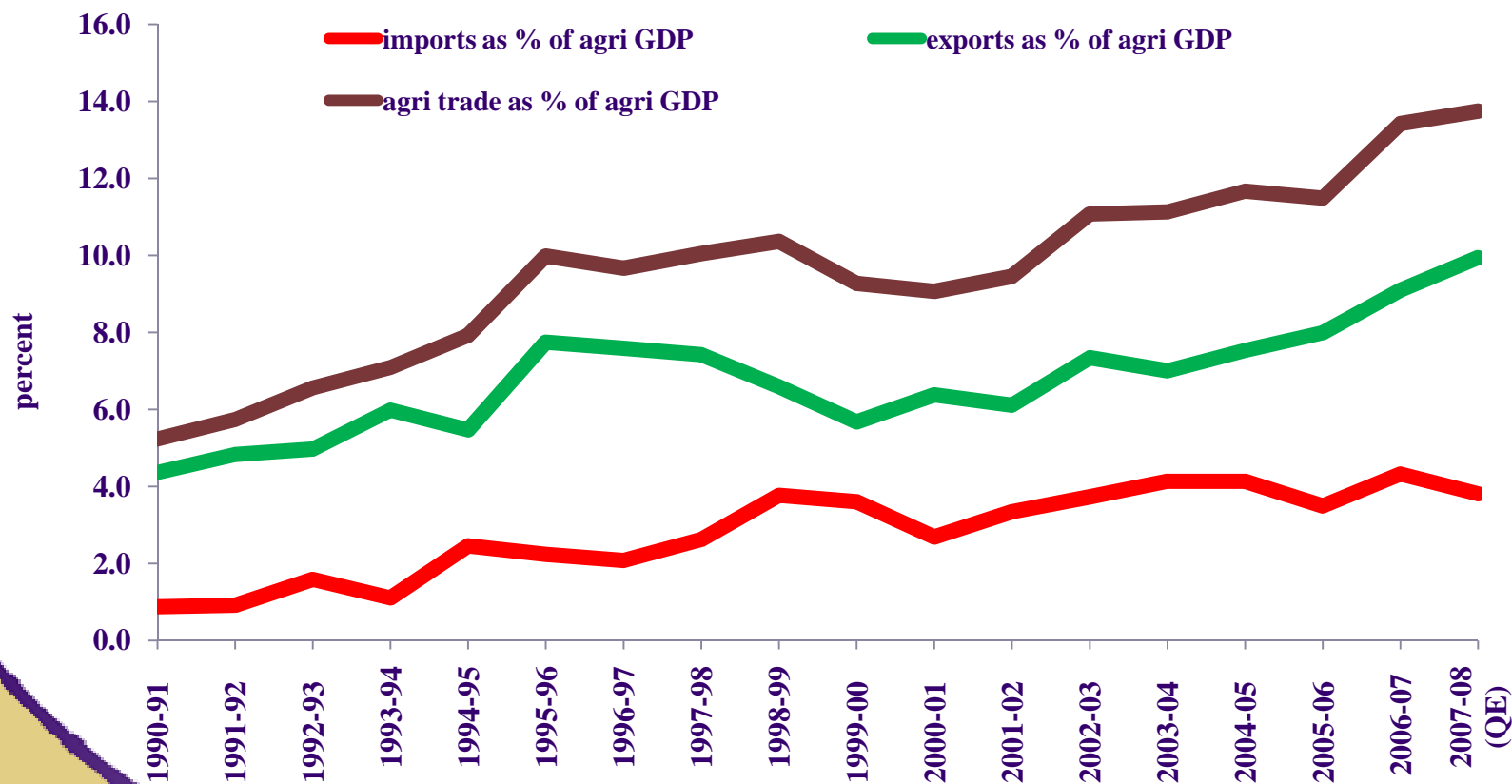
INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Rice & Wheat Stocks in the Central Pool



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Gradual Integration with world economy: Increasing share of agri trade in agri GDP



Source: Agricultural Statistics at a Glance, GoI 2008



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

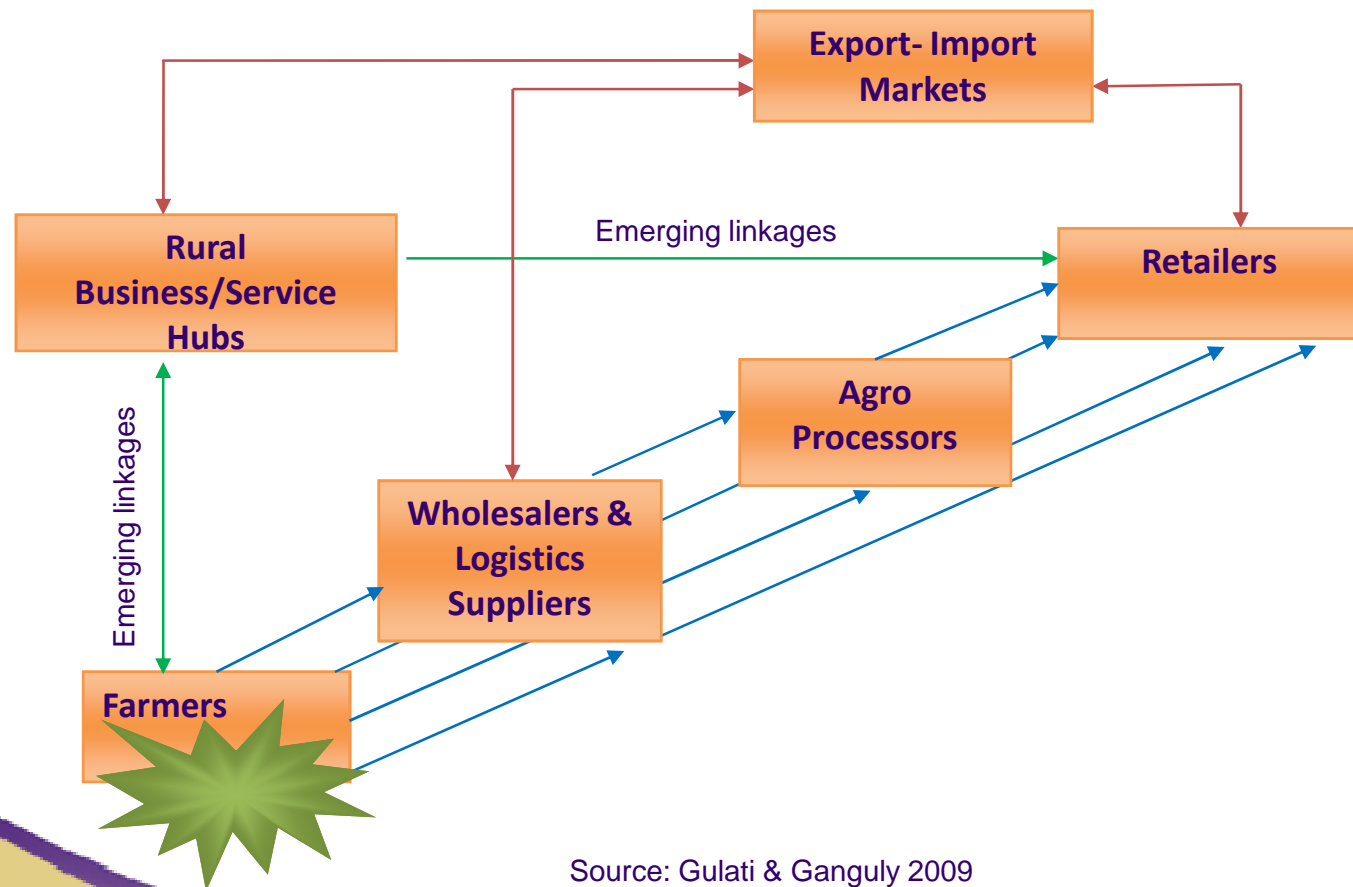
Rising Role of Corporate Players in HVCs

- Nestle working with more than one lakh farmers in Punjab for its dairy operations; Private sector likely to overtake co-operatives in the dairy sector by 2012... & many more
- Pepsi working with 11000 farmers in West Bengal, Maharashtra, Punjab etc. for its potato chips operations;
- Mahindra Shubhlabh Services Limited (MSSL) largest grape exporter in 2008
- Bharti Del Monte largest exporter of baby corns in 2008/09.



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Challenges: Structural Transformation of Agri-food System - Consolidating top and fragmenting bottom

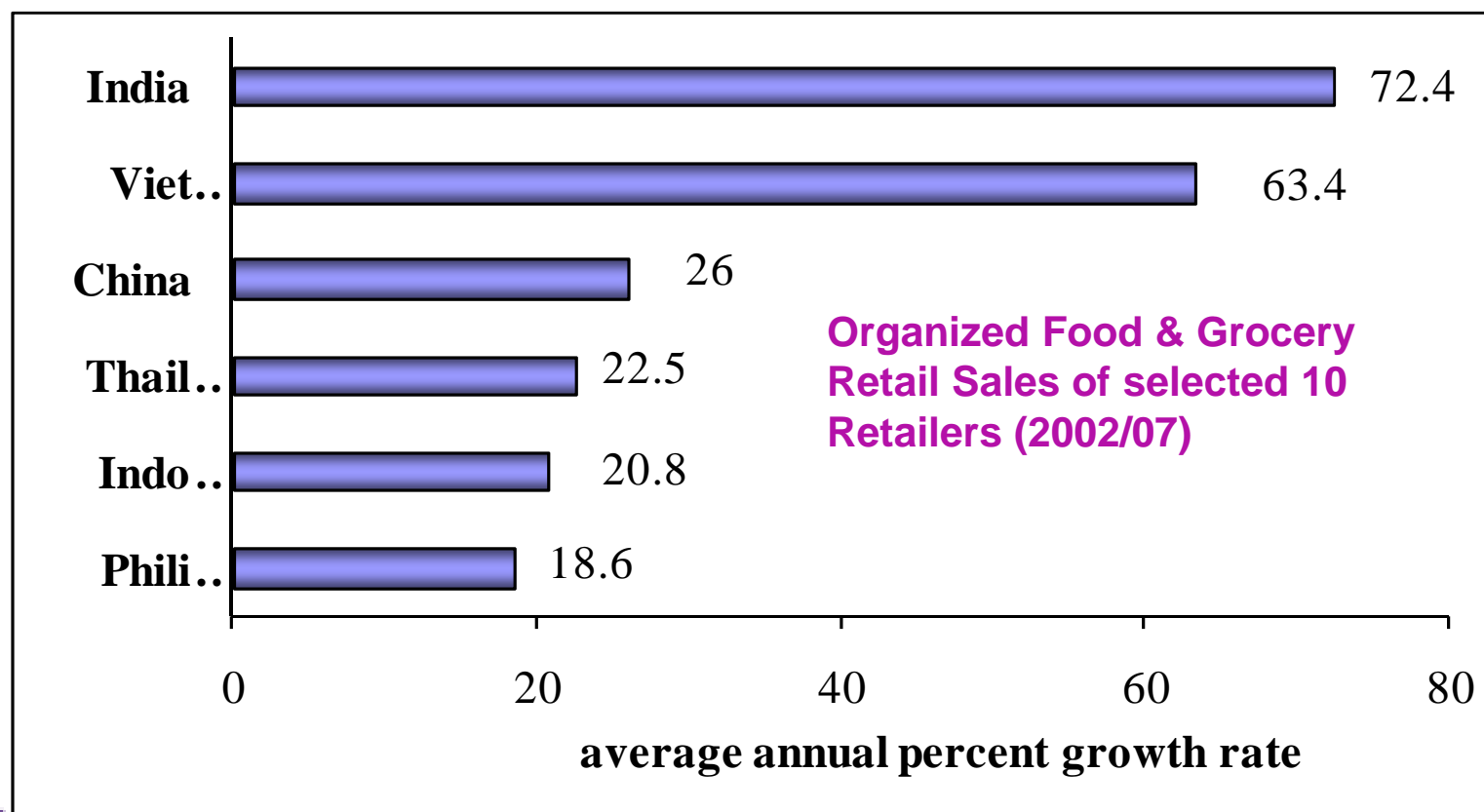


Source: Gulati & Ganguly 2009



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Retail Surge: Growth of Organized Food & Grocery Retail highest though from a low base



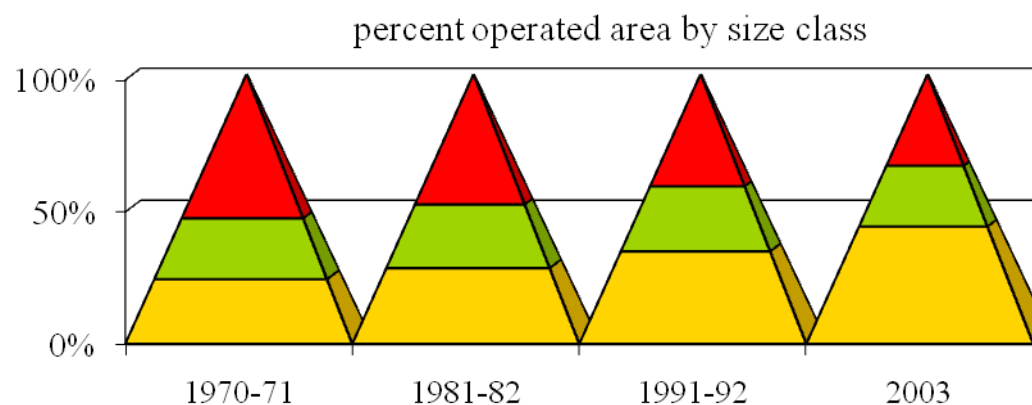
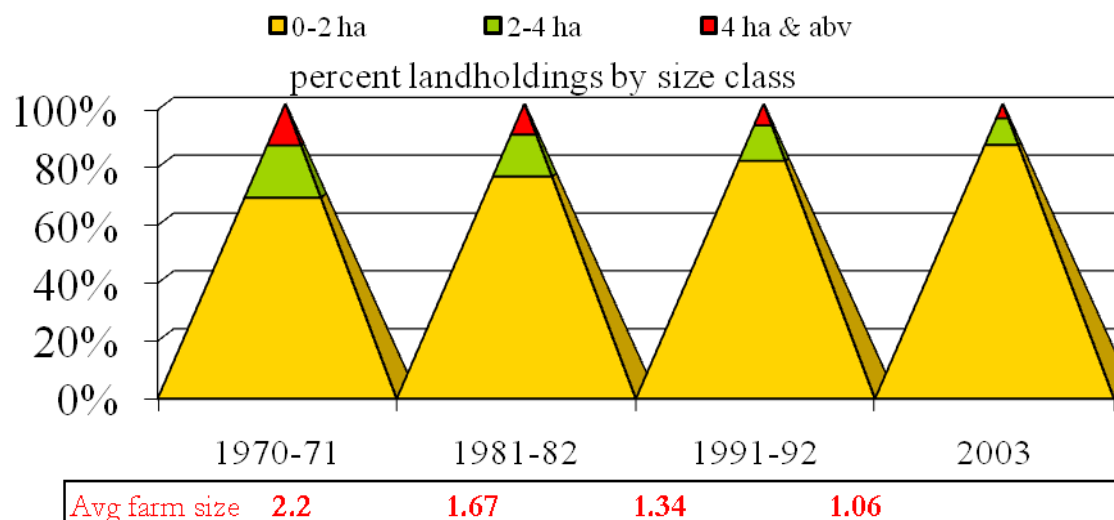
Note: Food sales include food, beverages, tobacco products, drugstore items and small everyday non-foods household goods.

Source: Planet Retail website, Accessed on 20th May, 2008



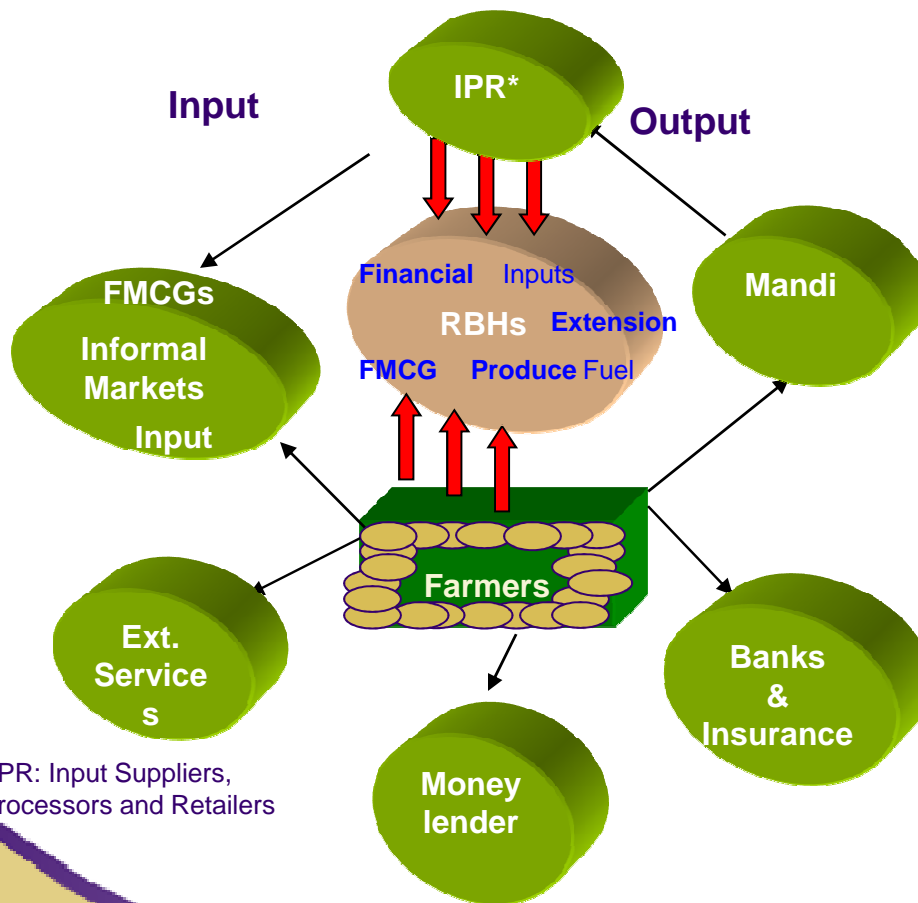
INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Fragmenting Farm Sector ~swelling bottom



But back end is weak...

~emergence of RBHs to take up this challenge



*IPR: Input Suppliers, Processors and Retailers

- Tata Kisan Kendra (1998)
Tata Kisan Sansar (2004)
- ITC E-Choupal 2000
ITC Choupal Saagar 2004
- DSCL Hariyal Kisan Bazaar 2002
- Godrej Aadhar 2003
- Others: Triveni 2005; IOCL 2006, Reliance??
- PPPP: CII & MoPR 2004
- Mega Food Park 2007

Source: Gulati & Gupta, 2008



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Some Key Policy Choices: Three “I”s

Increase **Investments** and Rationalizing subsidies

Table : Returns in Growth to Investments and Subsidies

	1960s-70s	1980s	1990s
<i>Returns in Agricultural GDP (Rs per Re. Spending)</i>			
Roads	19.99	8.89	7.66
Education	14.66	7.58	5.46
Irrigation Investment	8.00	4.71	4.37
Irrigation Subsidies	5.22	2.25	2.47
Fertilizer Subsidies	1.79	1.94	0.85
Power Subsidies	12.06	2.25	1.19
Credit Subsidies	18.77	3.00	4.26
Agricultural R&D	8.65	7.93	9.5



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Source: Shenggen Fan, Ashok Gulati, and Sukhadeo Thorat 2008.

Some Key Policy Choices (contd...)

■ Reform **Institutions**

- Implementation of the amended APMC Act
- Abolishing ECA that restrict movement of selected agri commodities
- Create a vibrant land lease market

■ Re-adjust **Incentives**

- Delink procurement price from MSP
- Downsize the role of FCI, encourage private sector participation
- Promote social safety net & livelihood programs, Eg; NREGS



INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty