

*Sugar Summit - 2010*  
*New Delhi*



**Sanjeev Asthana**

# Presentation Flow

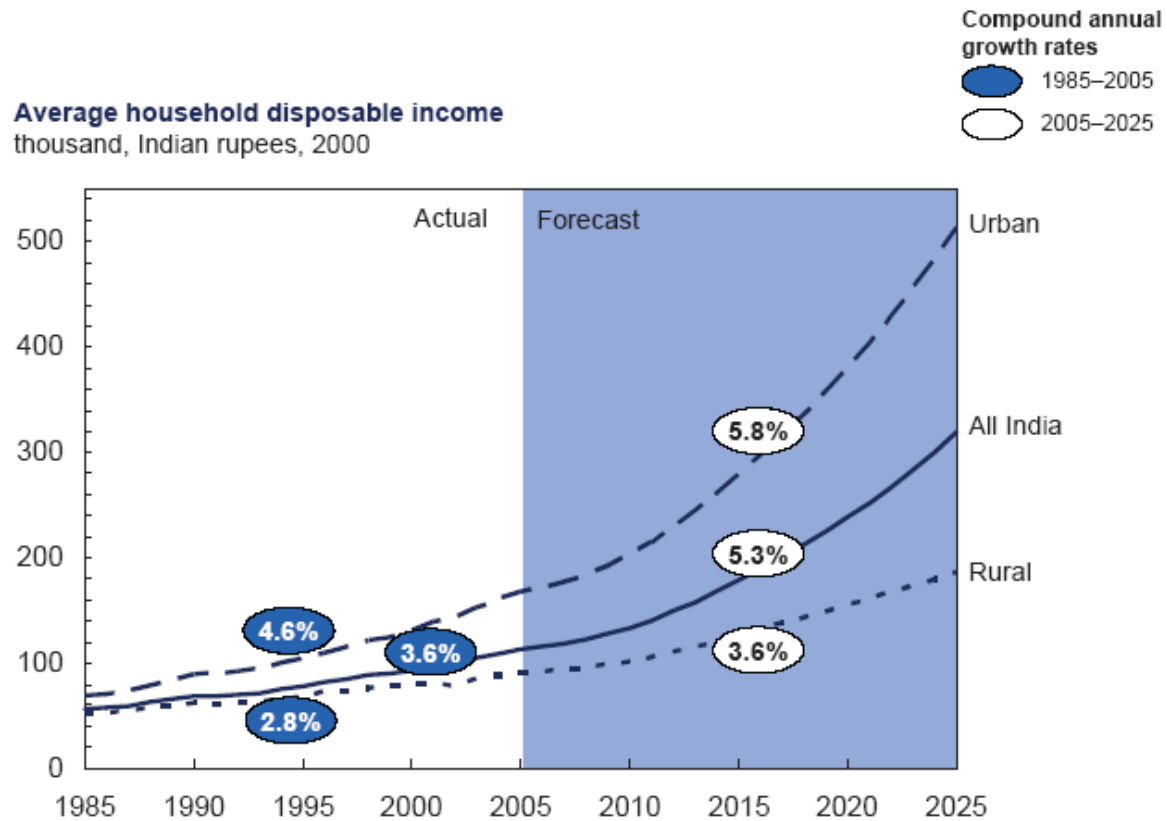
- India Demand Side Equation
  - Economy and Growth Momentum
- India Food, Retail & Agriculture
  - Growth, Challenges
  - Opportunities
- Sugar Scenario
- Futures Market

# India is growing



- **India will be the third largest economy by 2040**  
(Source: The Economist, IMF and Goldman Sachs)
- **India's GDP at current prices is estimated to be US\$ 1721 billion\* by 2015**  
(Source: Goldman Sachs)

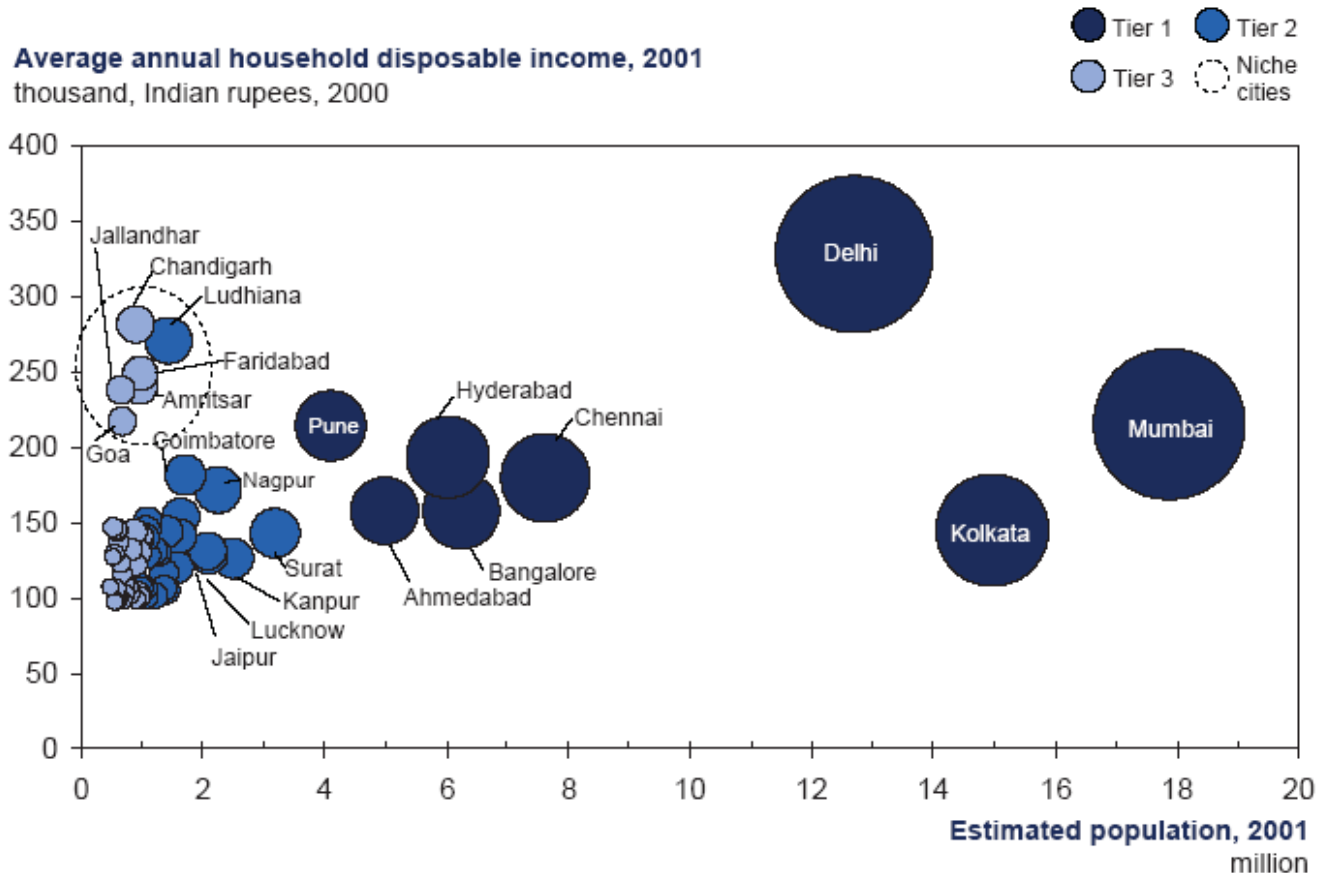
# Household Incomes Increasing



Source: Mckinsey Global Institute

- Household incomes in India to cross Rs 150,000 by 2010

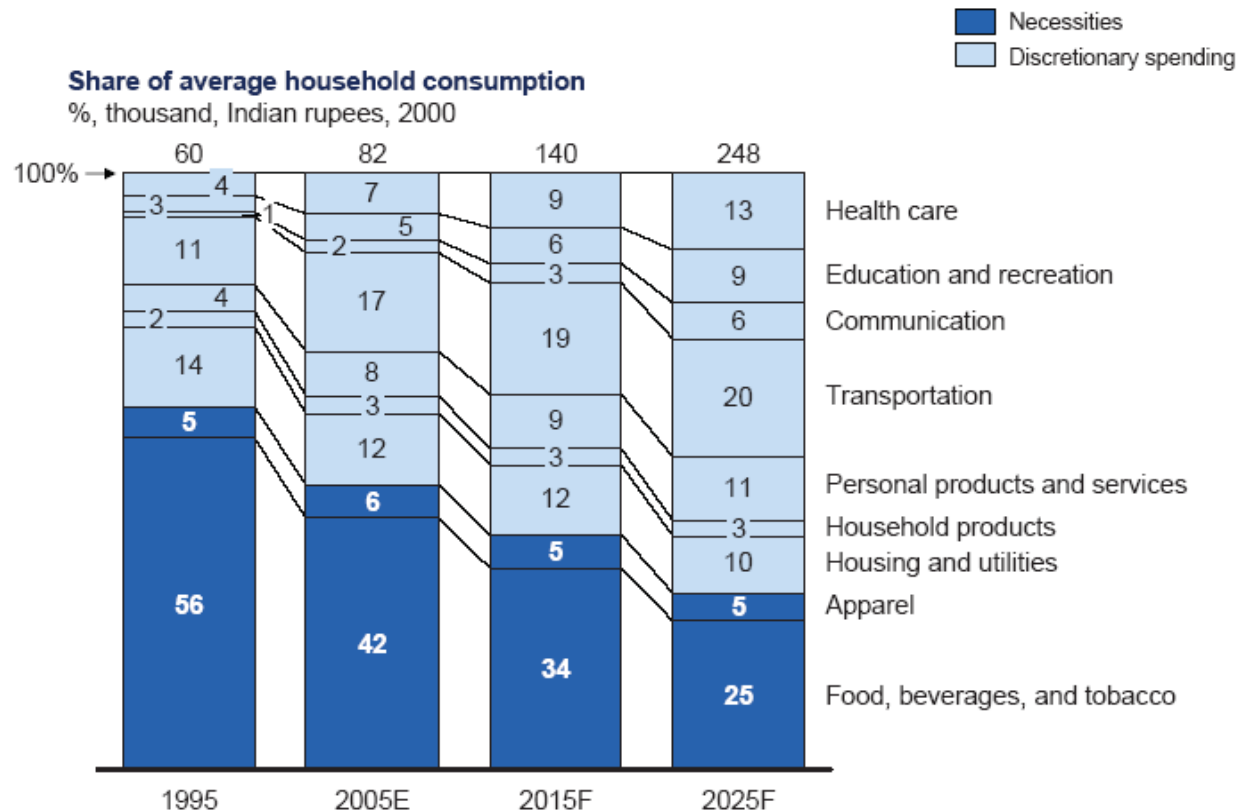
# Incomes-Changing Profile



Source: *The Great Indian Middle Class*, NCAER; MGI India Consumer Demand Model, v1.0; MGI analysis

- Emerging niche tier 3 cities are richer than most tier 1 and 2 cities

# Consumption Shifting

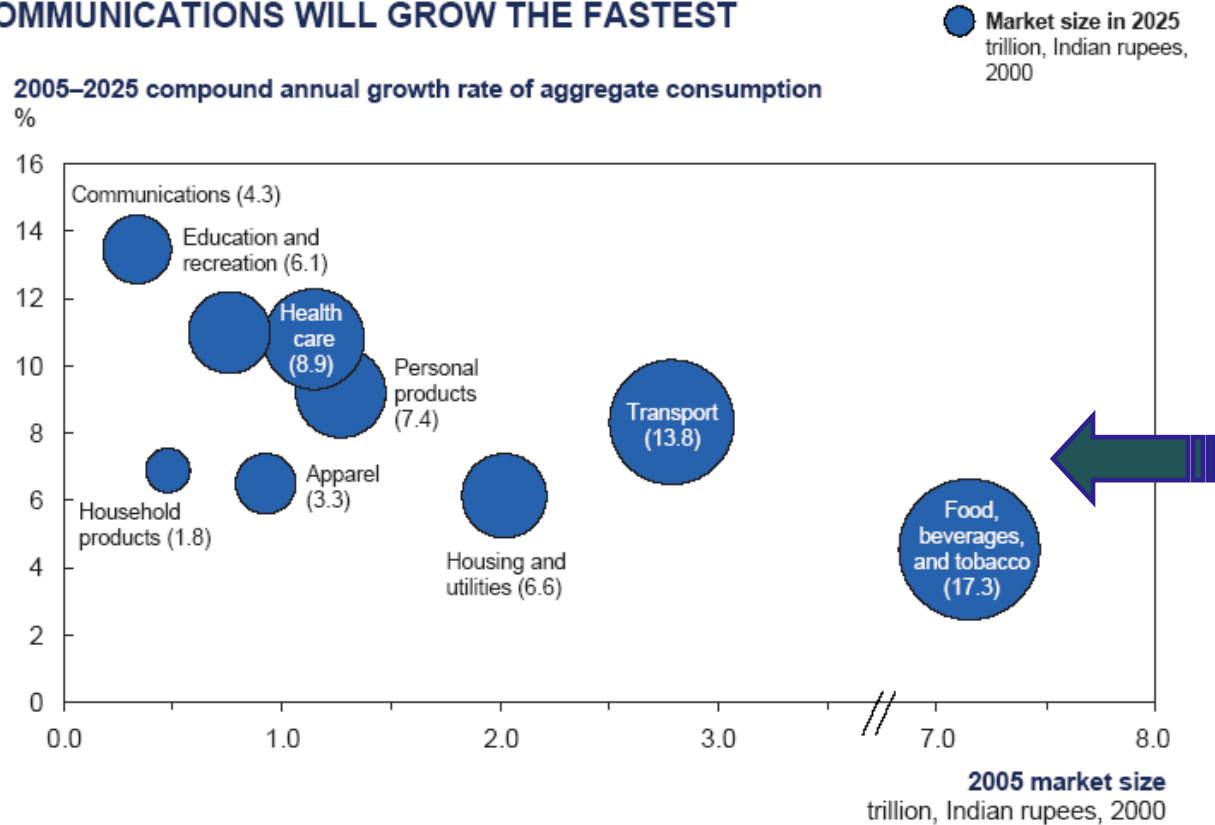


Note: Figures are rounded to the nearest integer and may not add up to 100%.  
 Source: Mckinsey Global Institute

- **Consumption is shifting from necessities to discretionary spending**

# Food is the Largest Category

## COMMUNICATIONS WILL GROW THE FASTEST



Source: Mckinsev Global Institute

- **Food, Beverages and Tobacco will remain the largest category**
  - **Estimated at Rs 17.3 trillion by 2025**

## **Part 2**

# **Indian Agriculture**

# Indian Agriculture - Snapshot

## We are a large producer and consumer of food

- ✓ All 15 major climates of the World are present in India
- ✓ 52% of total land is cultivable as against world average of 11%
- ✓ India is a multi crop country unlike major ag economies

### Fruits and Vegetables

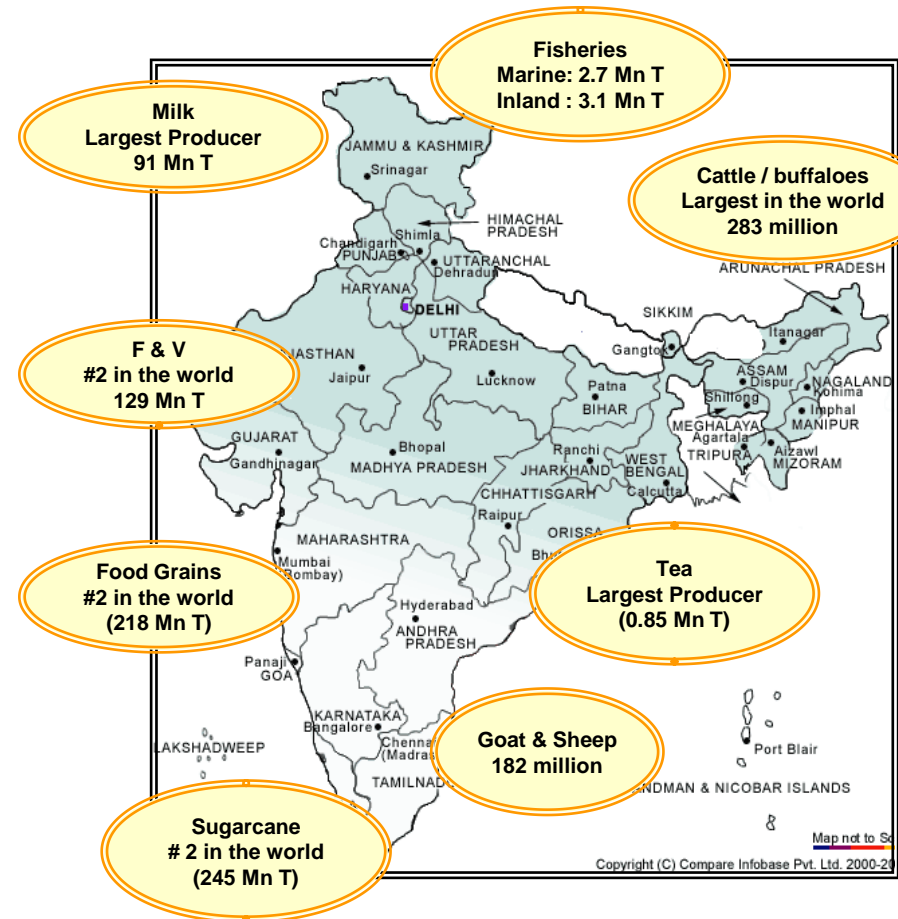
- 41% of mango
- 23% of Banana
- 24 % of cashew nut
- 10% of onion
- 30% of cauliflower
- 36% of Green Peas.

### Meat and Poultry

- 53% of world's buffalo
- 17% of goat
- Fifth in world egg production

### Cereals

- Largest Producer of Pulses
- Second largest producer of Food grains
- Second largest producer of Sugarcane



Source: FAO / NHB / Department of Animal Husbandry

# Big Concerns Today

- ✓ Supply – Demand Gap in commodities like oilseeds, pulses, etc
- ✓ Supply side equation in production
- ✓ Low farm realization
- ✓ Technology and methods out of step ....low yields
- ✓ Missing information links
- ✓ Lack of market led agri research
- ✓ Low investments in agriculture.....virtual collapse of infrastructure
- ✓ Distorted resource allocation
- ✓ The sub par quality and reach of credit flow
- ✓ Disjointed Supply Chain

# Supply-Demand Gap - Selected Foods

Unit – Million Metric Tonnes

Food Items	Gap (Supply-Demand)		
	2011	2021	2026
Rice	1.26	8.98	9.13
Wheat	21.21	27.33	32.04
Total Cereals	21.19	-2.94	-16.97
Pulses	-8.05	-24.92	-39.31
Edible oil	-6.66	-17.68	-26.99
Sugar	-4.31	-39.67	-74.13

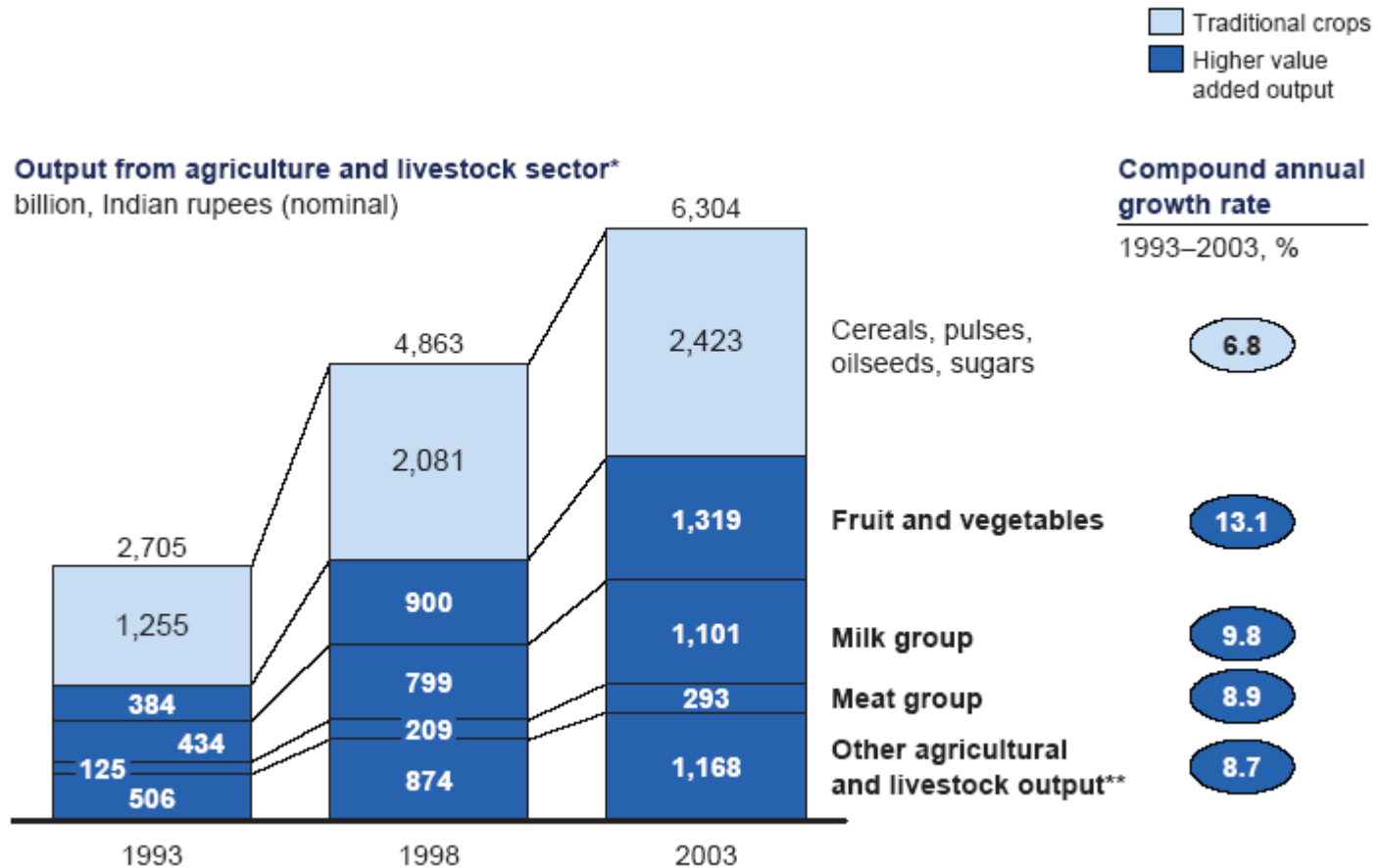
*Note: 10.2% is conversion factor of sugarcane to sugar and 33.9% is the average conversion factor of edible oilseed to edible oil. Demand scenario of GDP growth at 9% is considered here.*

*Source: ICRIER, Surabhi Mittal, Working Paper No-209*

***Emerging Food deficit, especially pulses & oilseeds is a matter of grave concern.....***

***Huge dependency in Veg oils & Pulses on imports***

# Diversifying Agriculture



- ✓ High value agriculture taking root over traditional crops
- ✓ Further increase in big imports as a consequence

# Low Yield

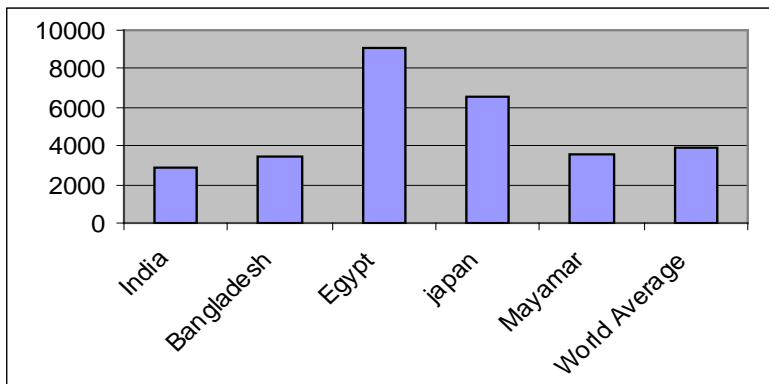
## Indian Ranking Globally on Area, Production and Productivity

Global Ranking	Area Ranking	Production Ranking	Yield Ranking
Rice	1	2	52
Wheat	1	2	38
Coarse Cereals	3	4	125
Pulses	1	1	138
Oilseeds	2	5	147
Cotton	1	4	77
Jute & allied	1	1	07
Sugarcane	2	2	31

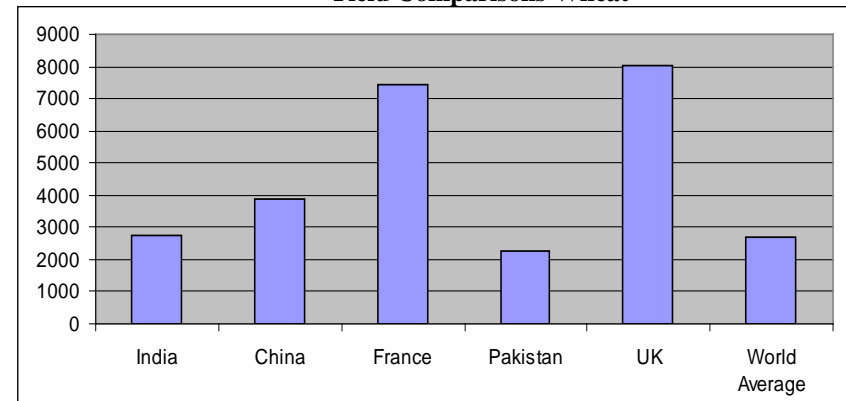
## Indian Yields compared to Global Averages

Crop	Yield India/ Yield World	Indian Yield / Top 5 Exporters
Rice	0.76	0.64
Wheat	0.98	0.81
Coarse Cereals	0.35	0.18
Pulses	0.77	0.29
Oilseeds	0.45	0.41
Cotton	0.41	0.28

Yield Comparisons Rice



Yield Comparisons Wheat



✓ Yields in Indian Agriculture are well below Global Benchmarks

Source: Economic Survey 2004-05

# Declining Share of Public Sector Outlays and Expenditure under Agriculture & Allied Activities

(Rs. Crore)

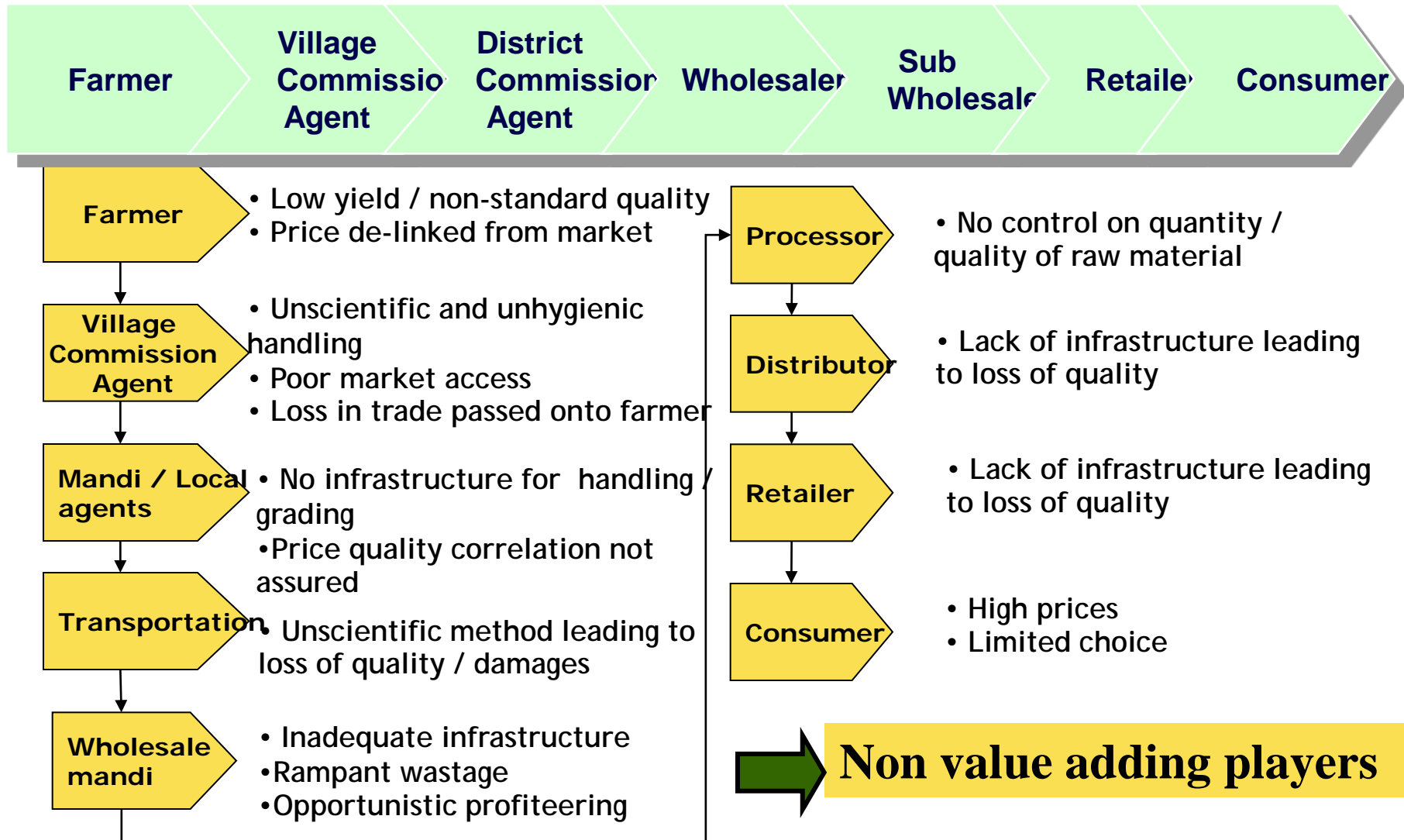
Five Year Plan/Annual Plan	Agriculture and Allied Activities*		Total		Percent Share of Agriculture and Allied Activities to Total	
	Plan	Actual	Plan	Actual	Plan	Actual
	Outlays	Expenditure	Outlays	Expenditure	Outlays	Expenditure
1	2	3	4	5	6	7
Ninth Plan (1997-02)	42462	37239	859200	941041	4.9	4.0
Tenth Plan (2002-07)	58933	56997	1525639	1489395	3.9	3.8
Eleventh Plan (2007-12)	136381	NA	3644718	NA	3.7	NA
Annual Plan (2007-08)#	8558	8544	319992	292337	2.7	2.9
Annual Plan (2008-09)##	10075	NA	375485	NA	2.7	NA

Source: Planning Commission, New Delhi

- ✓ Declining Public Investments
- ✓ Resource appropriated by subsidies
- ✓ Limited Private sector investment

***Positive Impact of recent Govt programs being felt.....***

# Disjointed Supply Chain



# Indian Sugar Sector

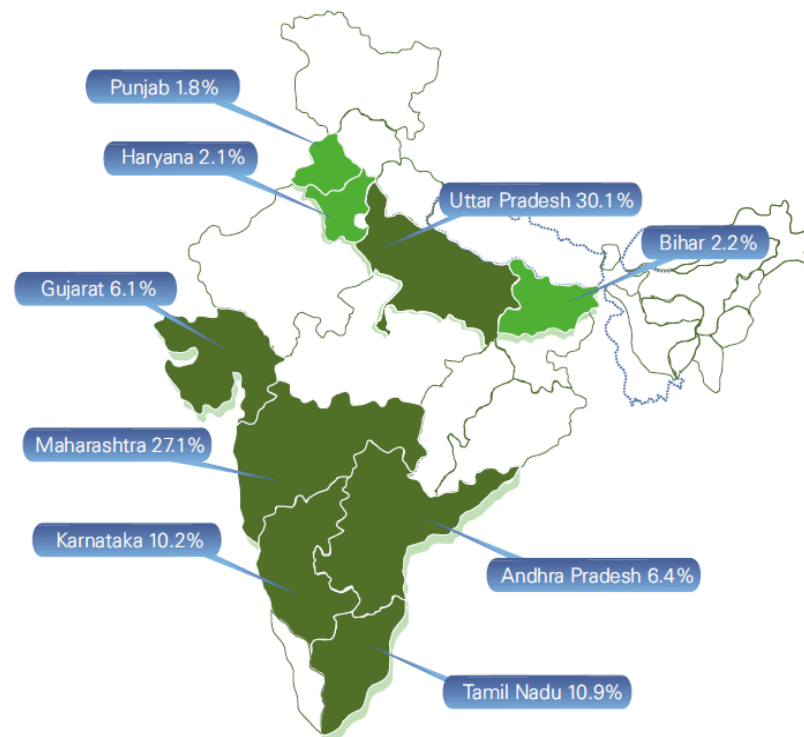
# Production & Prices

Particulars	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Open Stocks	5.6	7.91	6.6	5.61	6.9	9.34	10.66	11.32	11.61	8.5	4	3.9	9.2	8	2.2
Production	16.45	12.91	12.86	15.54	18.2	18.51	18.53	20.14	14	13	19.1	27.4	26.33	15	19
Imports	0	0	0.94	1	0.4	0	0	0.04	0.55	2.07	0.67	0	0	5	6.5
Availability	22.05	20.81	20.39	22.15	25.51	27.85	29.19	31.5	26.13	23.57	23.77	31.3	35.53	28	27.7
Consumption	13.12	13.79	14.72	15.22	16.1	16.2	16.78	18.38	17.5	17.14	18.5	19.5	22.5	23	24
For Exports	1.02	0.42	0.07	0.02	0.07	0.99	1.09	1.5	0.29	0.1	1.37	1.3	4.96	2.8	0
Net exports	1.02	0.42	-0.87	-0.98	-0.33	0.99	1.09	1.46	-0.26	-1.97	0.7	1.3	4.96	-2.2	-6.5

Source: Indian Sugar Mills Association (2010)

## Different Prices Trends in Sugar Complex

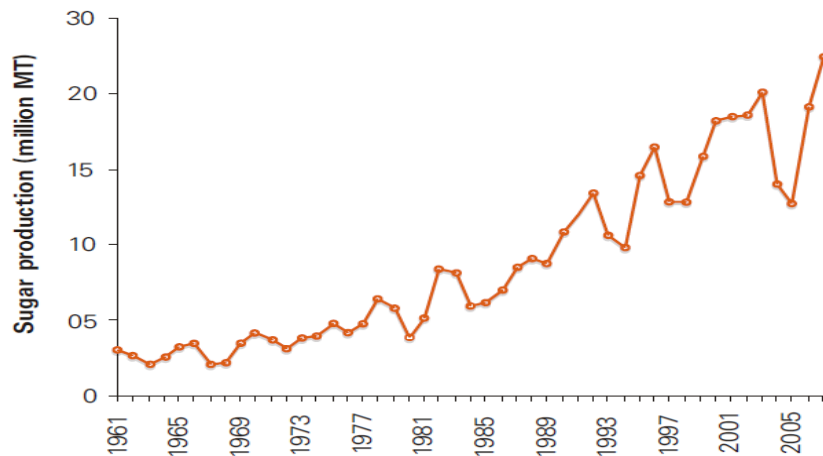
Years	MSP (Rs/t)	Linked to basic recovery	Premium on every 0.1 % increase 0.2 in recovery	Price Paid by Mills (Rs/t of cane)	Sugar Free Market Price (Rs/t)
2000-01	595	8.5	0.70	860- 950	13100-16500
2001-02	621	8.5	0.73	925-1000	12850-16300
2002-03	695	8.5	0.82	695-1000	11470-15750
2003-04	730	8.5	0.85	730-1340	13200-15350
2004-05	745	8.5	0.88	745-1650	14100-18400
2005-06	795	9	0.88	795-1841	15500-19900
2006-07	803	9	0.90	1250 1300	11000-18300
2007-08	812	9	0.90	1300- 1400	11400-14250
2008-09	812	9	0.90	1500-1550	17000-18000
2009-10	1298	9.5	1.37	2400-2500	30000-32000
2010-11	1391	9.5	1.46		



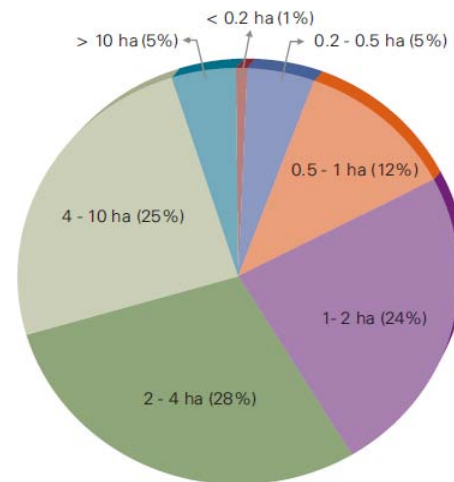
## HUGE VARIANCE IN PRODUCTION AND TRADE FLOWS

■ States with annual production > 1million MT  
 ■ States with annual production < 1million MT

# Production



**Distribution of area under sugarcane for different size of landholding**

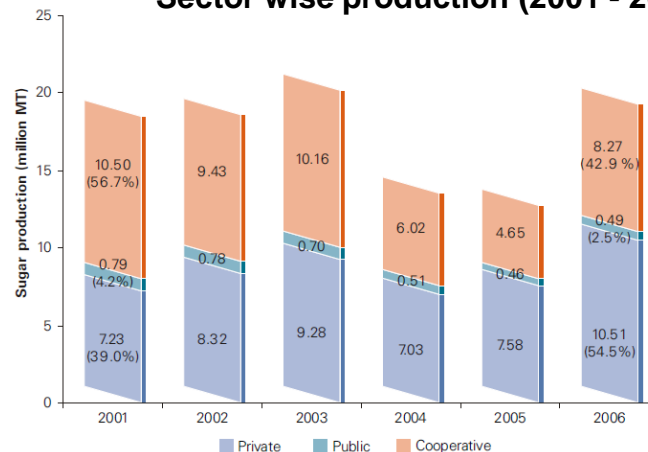


**Sector wise number of mills in operation (2001 - 2006)**



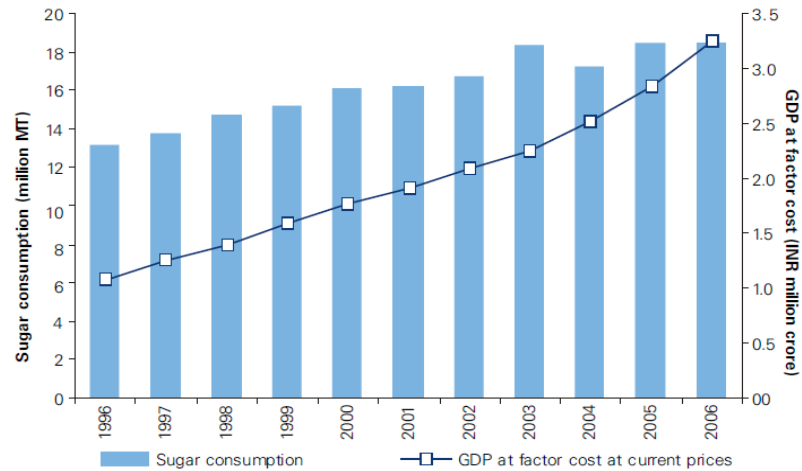
Source: ICRA sector analysis "The Indian Sugar Industry" July 2006, AC Nielson, KPMG analysis

**Sector wise production (2001 - 2006)**

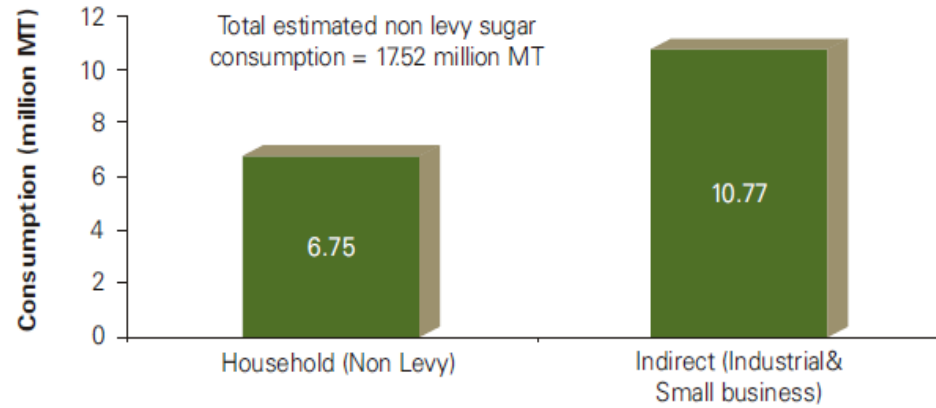


- Production of sugarcane in smaller landholding, almost 47% in less than 2 hac. Affecting farm profitability and increasing mills operational costs
- Private participation increasing both in volumes and number of mills. (Would lead to better risk management practices).

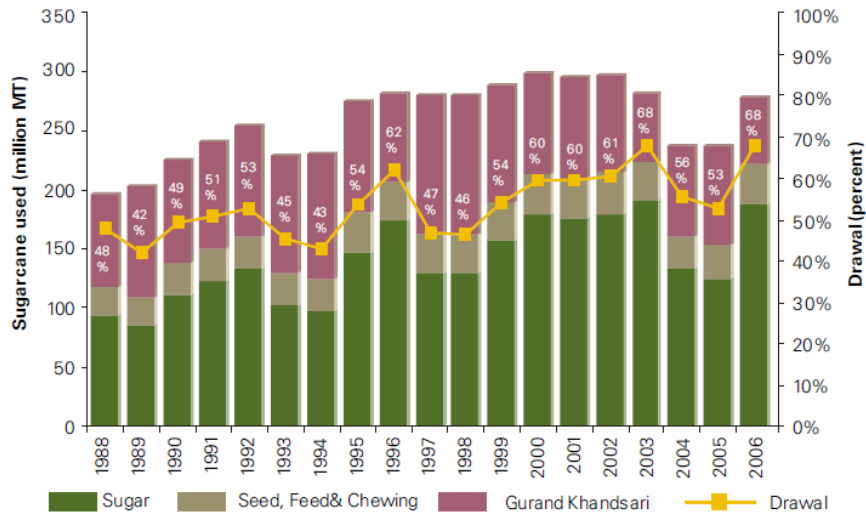
## Sugar consumption and GDP (1996 - 2006)



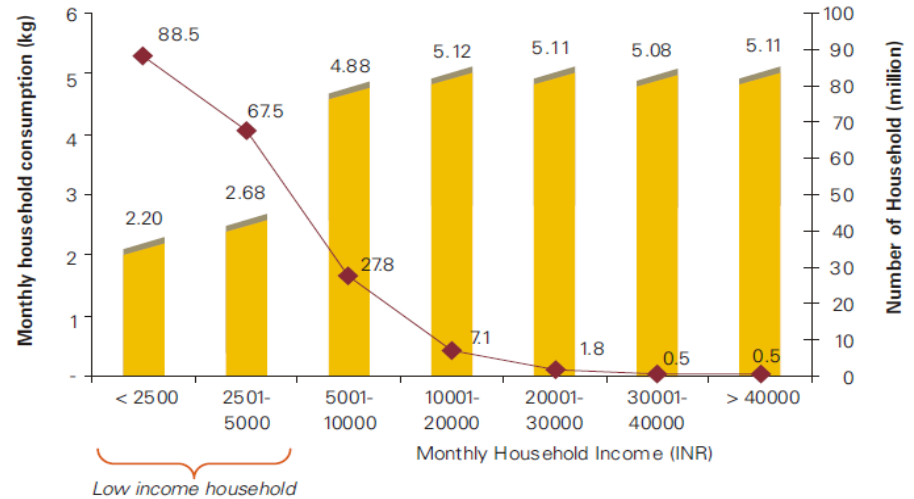
## All India non levy sugar consumption (2006-07)



## Utilisation of sugarcane (1988 - 2006)

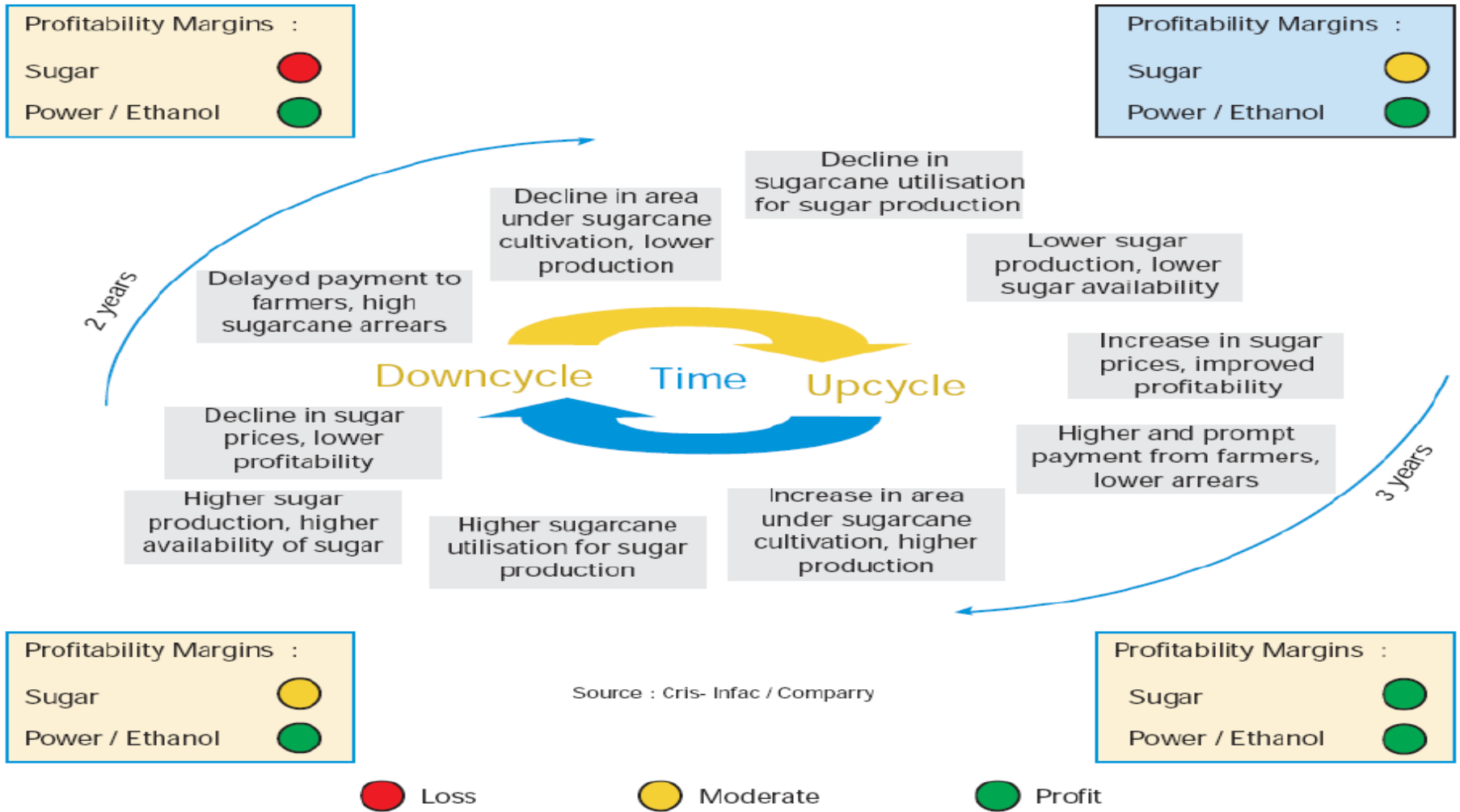


## Per capita consumption of low income segments is nearly half that of high income segments



Huge upside demand headroom.....

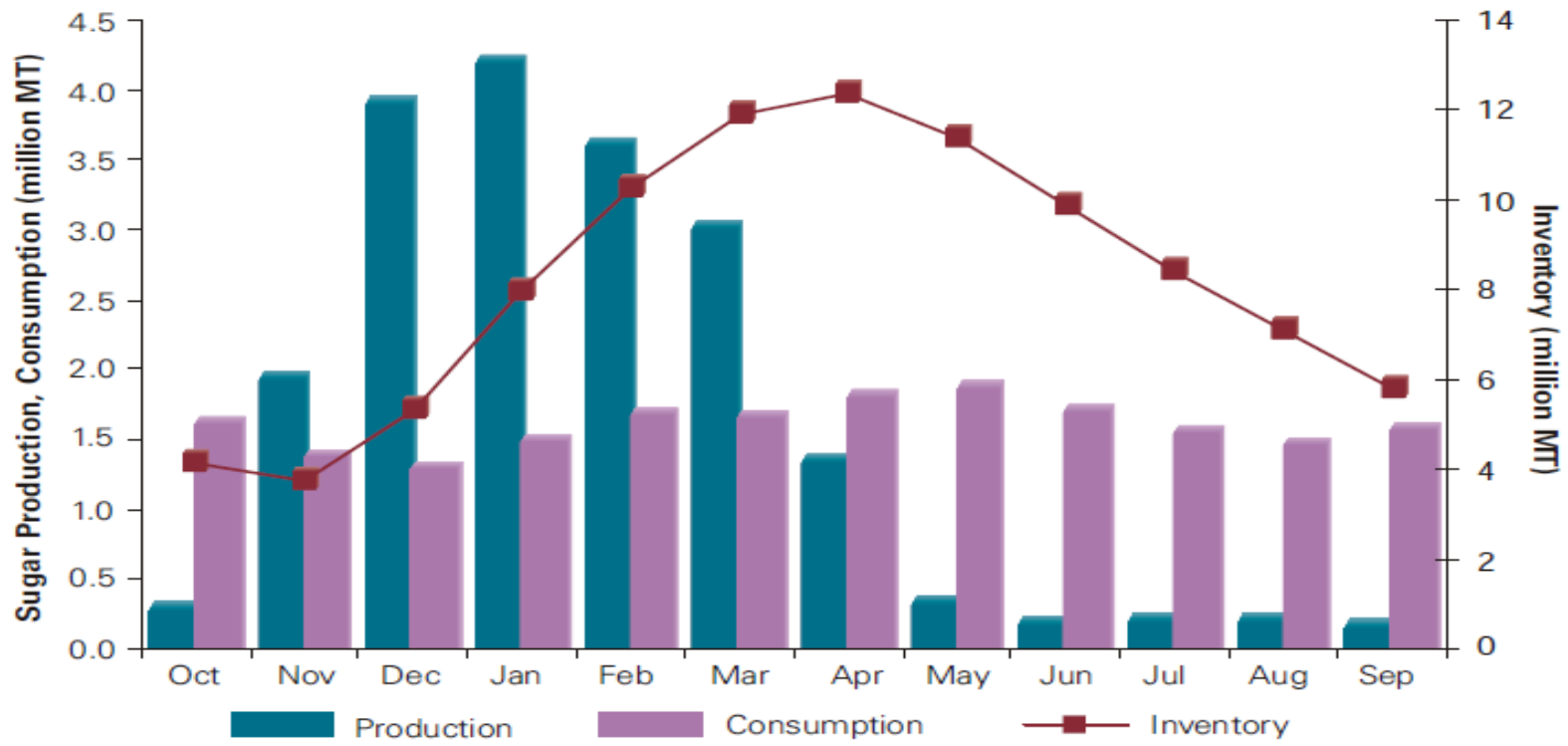
# Profit challenge



**Big issue around profit objectives**

# Seasonality: inventories exposed to a price risk

Month wise inventory (2006)



Hedge options are critical for risk management

# Banks - Present Scenario

- Not allowed to trade on commodity exchange
- Not allowed to do margin financing against commodities
- Bank lending to commodities remained very low
  - ***Commodity a 'sensitive sector'***
  - ***Not under priority sector lending***
  - ***Credibility of Warehouse receipts***
  - ***Reliability of the warehouse***
  - ***Hedging not possible***

## Banks as aggregators

- Institutions with good rural presence and sufficient financial expertise and infrastructure
- Banks can hedge their agri and corporate loans
- Banks as market makers for price stabilization
- Role similar to the role of RBI for stabilization of dollar prices
- Banks as dealers in commodity markets

## FII presence

- |  |   |
|--|---|
| <ul style="list-style-type: none"><li>• Benefits<ul style="list-style-type: none"><li>– More liquidity<ul style="list-style-type: none"><li>• Broaden and deepen markets</li></ul></li><li>– Help in the utilization of capital</li><li>– Global experiences</li><li>– Research</li><li>– Best practices</li></ul></li></ul> | <ul style="list-style-type: none"><li>• Issues involved<ul style="list-style-type: none"><li>– Concentration and control over prices of crucial commodities</li><li>– Physical delivery</li><li>– Withdrawal from the country</li></ul></li></ul> |
|--|---|

## Involvement of Mutual Funds

- Mutual Funds can bring liquidity and professional skill in the commodity market
- Mutual Funds can mobilize small savings and invest in commodities and commodity derivatives
- Easiest route for retail investment

## Options and indices

- Options
  - Provides benefit of upside
  - Substitute MSP of government
  - Not allowed under FCRA
  - Need for changes in the Act
- Indices
  - Weather indices
  - Regulatory changes needed

# Role of an Exchange

- Anonymous auction for price discovery
- Neutrality - conflict of interest avoided
- Transparent real time price dissemination
  - Benchmark reference price
  - Liquidity to participants
- Risk Management in a volatile market
  - Robust Clearing & Settlement systems - counter party credit risk mitigated
  - Fair, safe, orderly market - rigorous financial standards and surveillance procedures

# Benefits of trade on Futures Market

- Risk transfer platform from actual users to traders / speculators
  - Helps hedgers concentrate on core activity
- Long term price signals help
  - Farmers to decide cropping pattern
  - Corporate managers to take investment / capital expenditure decisions
    - Cover sales and raw materials risk
    - Cost of Capital reduced
  - A good investment option
    - Arbitrage opportunities

# Myths about commodity exchanges

- Commodity exchanges are speculative markets not meant for actual users
  - Speculators infuse liquidity to enable hedgers to transfer their price risk
- If commodity exchanges do not enable physical delivery, they are then only for speculators
  - Exchanges are meant for price discovery and physical delivery is only incidental

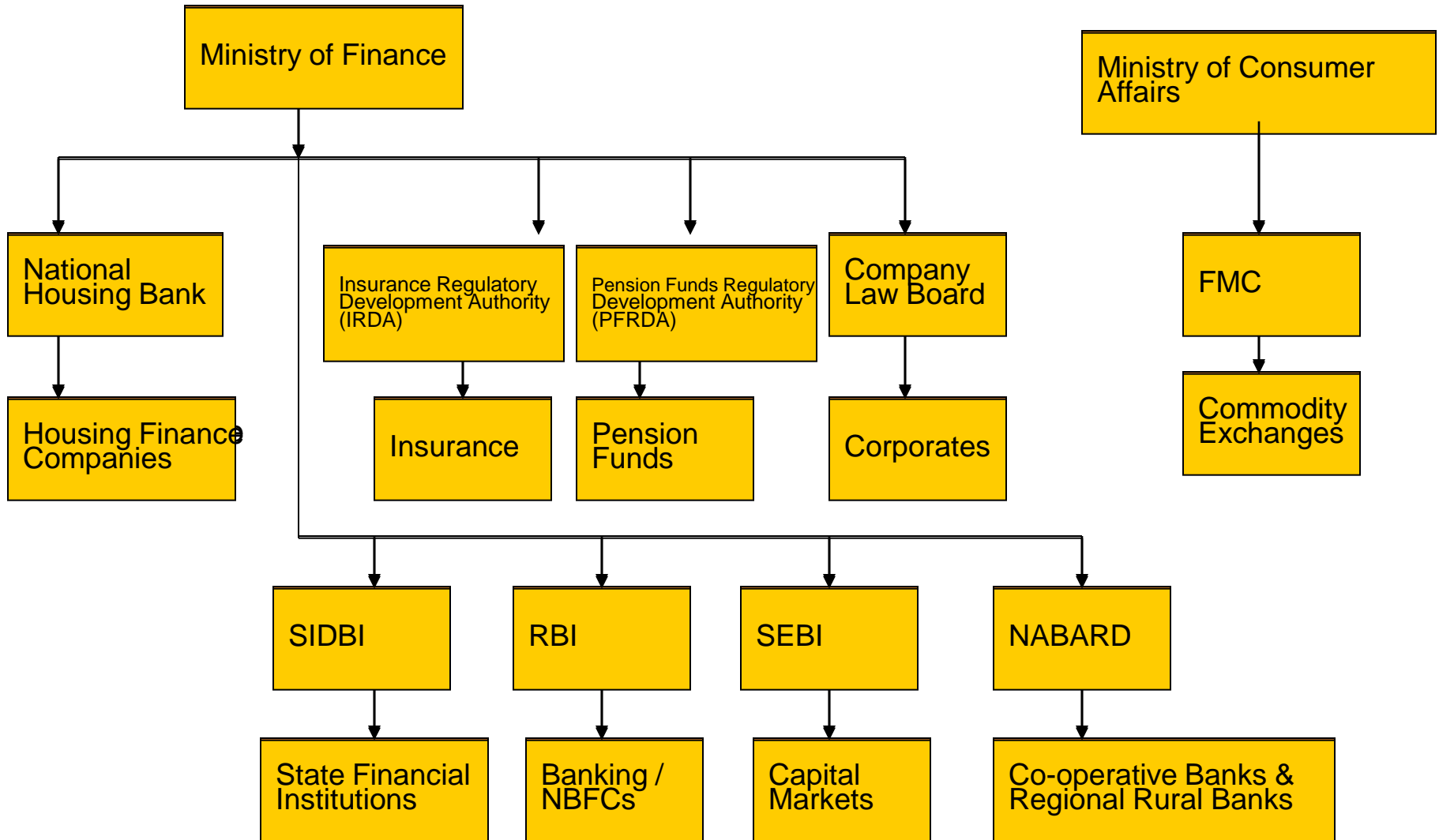
*As Exchanges gain liquidity actual users will separate hedging from physical delivery*

# Evolution of Commodity markets in India

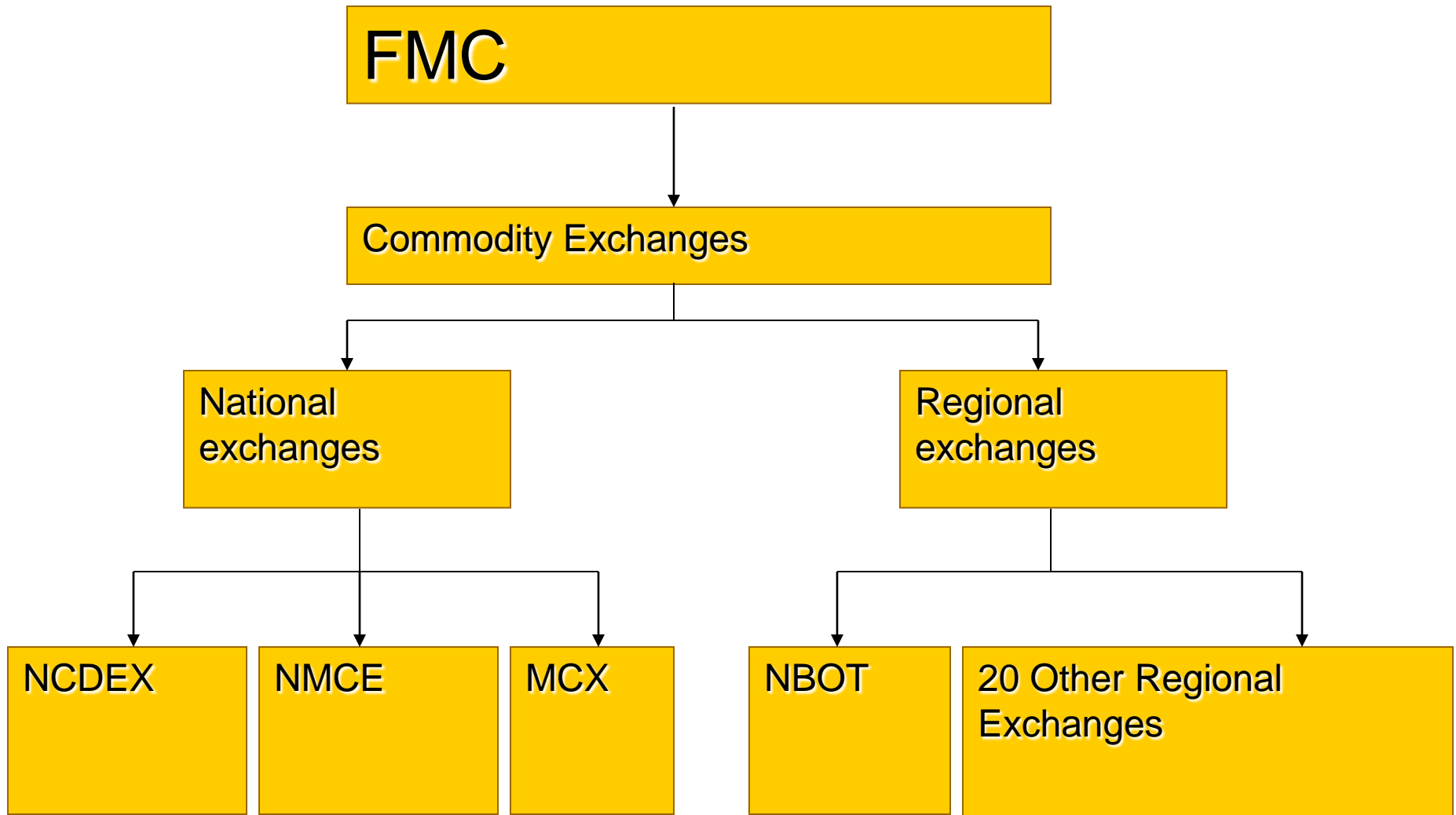
- Ban in forward trading in mid-sixties
- Emergence of national level online multi-commodity exchanges
  - 3 National level and 21 regional
  - Trade in 60 commodities compared with just 8 in 2000
  - Volumes of Rs 571,000 crores in 2004-05
    - Volume first two months of 2005-06 reached 1,90,000 crores (800 % growth over 25,000 crores in 2004-05)

Traded volume in 2004-05 around 20% of India's GDP

# Regulatory Structure in India

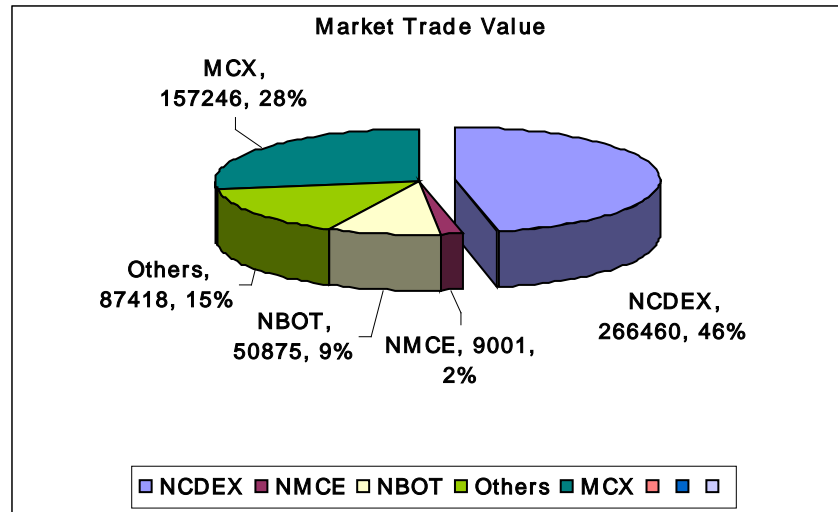


# Structure of Indian Commodity Futures Exchanges



# Volumes of Indian Commodity Exchanges

Rs Crores



# Raw material intensive industry

Industry	Ratio of Raw materials/Net sales
Soyabean products	92.2
Vanaspati	89.6
Vegetable oils	88.0
Refinery products	86.2
Petroleum products	85.8
Steel wires	85.5
Gems and jewellery	84.9
Textile products	76.7
Bakery and milling	73.7
Aluminium products	73.8
Polymers	70.0
Automobiles	68.3

Source: CMIE

# Conducive drivers

Beginning of the Bull phase after 20 years of Bear market

- Escalating commodities demand from Asia, especially China
- Depreciating dollar – shift to hard currencies like Gold
- Inflationary pressures build-up
- Surging energy prices – leading to energy crisis
- Rise in commodity demand with economic recovery

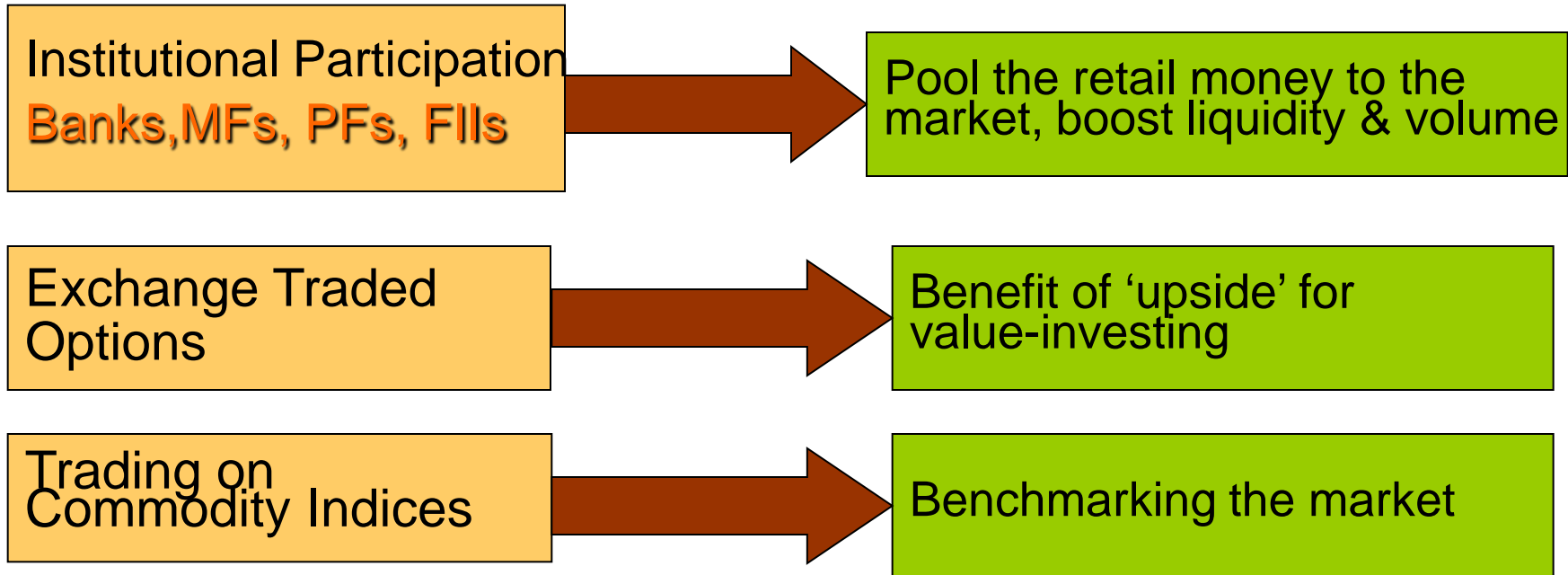
# Portfolio diversification & value investing

- Low co-relation between stocks/bonds and the commodities market
  - Better diversification of portfolio
- Commodity markets are less risky compared with stock market.
  - Reduces risks in a diversified portfolio

# Risk-Adjusted Returns:1997-05

Portfolio structure	Abs Cumulative Returns	Risk of portfolio	Risk Adjusted Return
100% Stock Portfolio	73.70%	24.43%	3.017
Stocks (50%) & Gold (50%) Portfolio	47.80%	14.37%	3.326
Stocks (50%) & Silver (50%) Portfolio	48.30%	13.29%	3.634
100% Gold Portfolio	21.80%		2.001
100% Silver Portfolio	22.90%		1.742
100% Bonds Portfolio	25.20%	7.92%	3.182
Bonds (50%) & Gold (50%) Portfolio	23.50%	8.79%	2.673
Bonds (50%) & Silver (50%) Portfolio	24.00%	6.58%	3.647

# Regulatory Facilitation



# Banks - Present Scenario

- Not allowed to trade on commodity exchange
- Not allowed to do margin financing against commodities
- Bank lending to commodities remained very low
  - **Commodity a ‘sensitive sector’**
  - **Not under priority sector lending**
  - **Credibility of Warehouse receipts**
  - **Reliability of the warehouse**
  - **Hedging not possible**

*Bank lending against commodities was only Rs 9,952 cr out of Rs 8,64,143 cr i.e. 1.1% as on March'04*

# Involvement of Banks

- Banks as aggregators
  - Institutions with good rural presence and sufficient financial expertise and infrastructure
- Banks can hedge their agri and corporate loans
- Banks as market makers for price stabilization
  - Role similar to the role of RBI for stabilization of dollar prices
- Banks as dealers in commodity markets



# FII presence

- Benefits

- More liquidity
  - Broaden and deepen markets
- Help in the utilization of capital
- Global experiences
- Research
- Best practices

- Issues involved

- Concentration and control over prices of crucial commodities
- Physical delivery
- Withdrawal from the country

# Involvement of Mutual Funds

- Mutual Funds can bring liquidity and professional skill in the commodity market
- Mutual Funds can mobilize small savings and invest in commodities and commodity derivatives
- Easiest route for retail investment

# Options and indices

- Options
  - Provides benefit of upside
  - Substitute MSP of government
  - Not allowed under FCRA
  - Need for changes in the Act
- Indices
  - Weather indices
  - Regulatory changes needed

# Thank You!

