

India: The *kutchra* road to riches

Uneven development and what could be done about it

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RAND, ISB

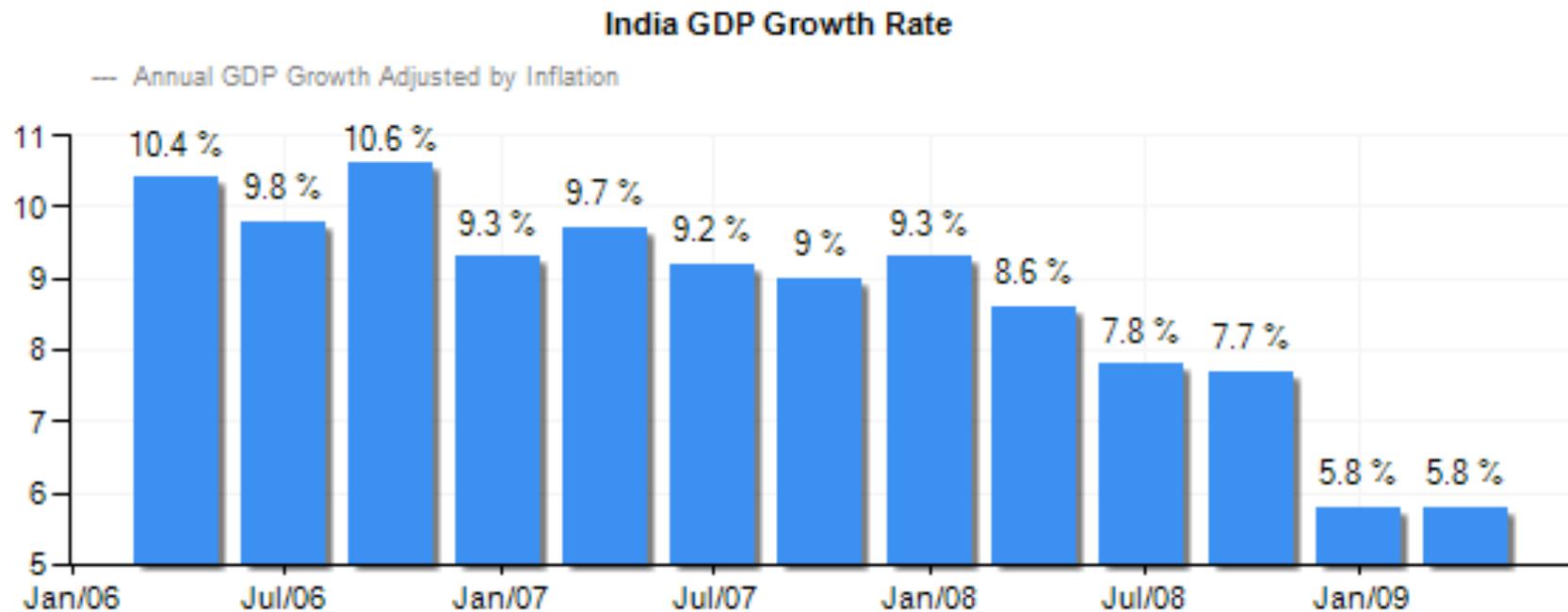
Manthan

June 12, 2009

Outline

- India is shining
 - But only for some
 - Huge sectoral and regional inequality
 - Addressing key challenges will aid overall growth as well as inclusiveness
 - Infrastructure, education, health
 - Strategies for development: microfinance and microinsurance, public-private partnerships
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Indian GDP growing rapidly



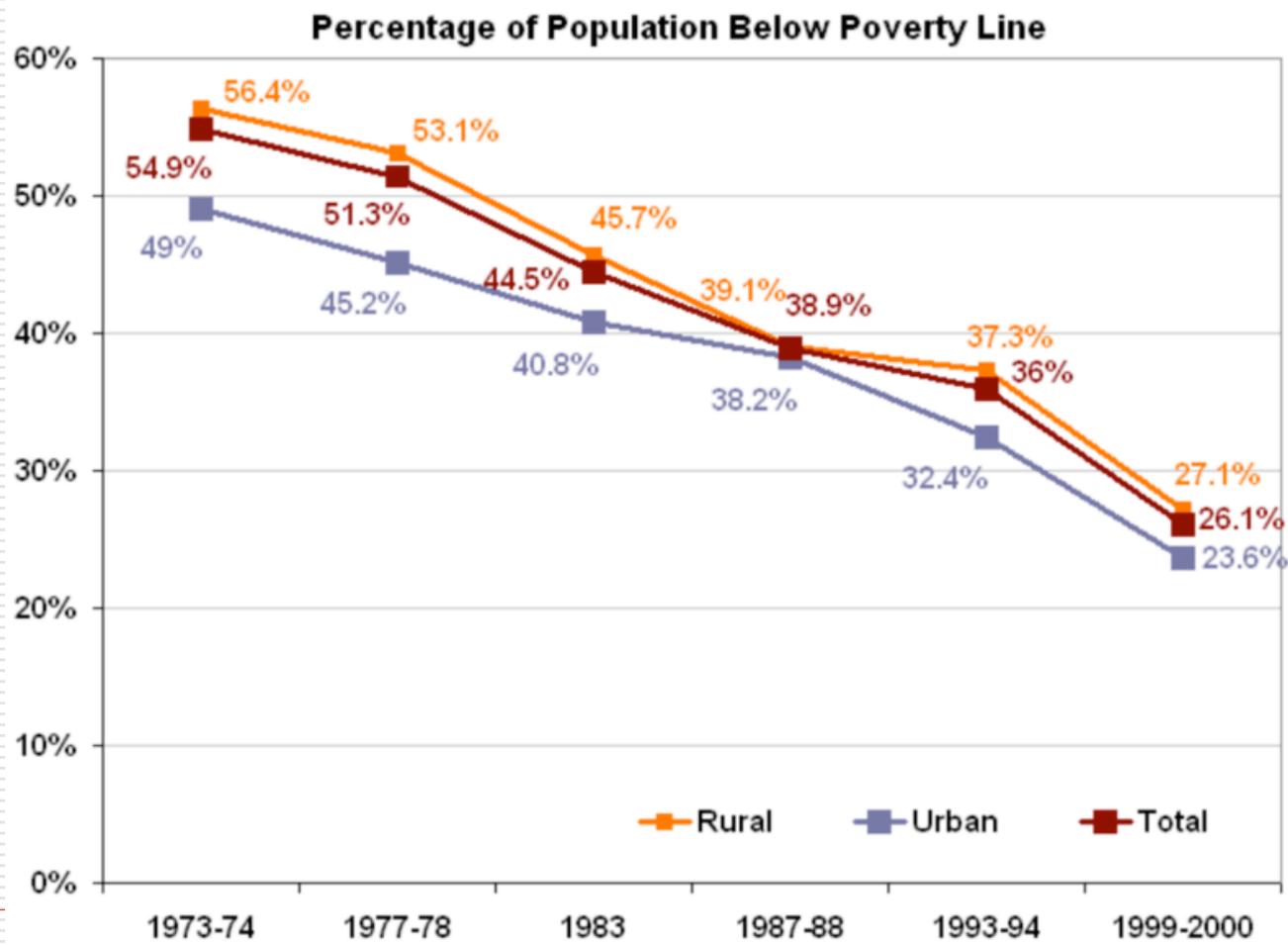
source: India Central Statistical Orga

www.tradingeconomics.com

An economic force to reckon with

- ❑ Twelfth largest economy by market exchange rates (\$1.2T)
 - ❑ Fourth largest measured on purchasing power parity (PPP) basis
 - ❑ Real per capita income was Rs 16,173 in 2000-01 and rose to Rs 24,295 by 2007-08. A rise of more than 50% over a seven-year period
 - ❑ A knowledge laboratory for the world
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Decline of % of population living on less than a dollar-a-day...



...but a long way to go toward poverty eradication

- ❑ 80% of population lives on less than 2 dollars a day, twice the rate of China's
 - ❑ Comparable to the rate in sub-Saharan Africa
 - ❑ Literacy rate of 66% compared to China's 91%
 - ❑ Only half of female population is literate
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China has lower poverty by all measures

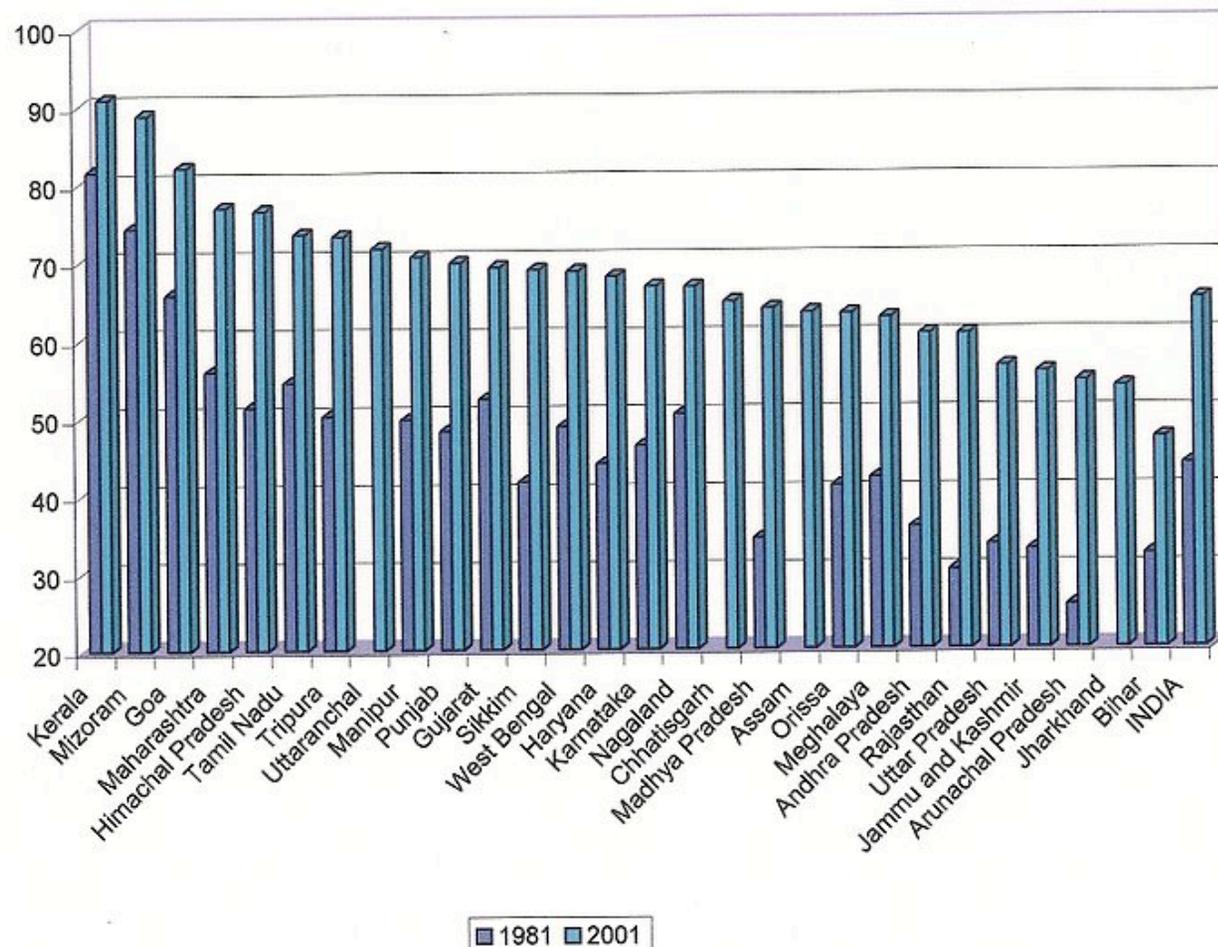
(Source: Borooah et al, 2005)

Poverty Line	India	China
1/2 median income	17.2%	12.4%
2/3 median income	29.4%	25.3%
Dollar a day	36.7%	17.6%

Wide disparity in literacy rates

(Source: India 2005)

India - Literacy Rates (%)

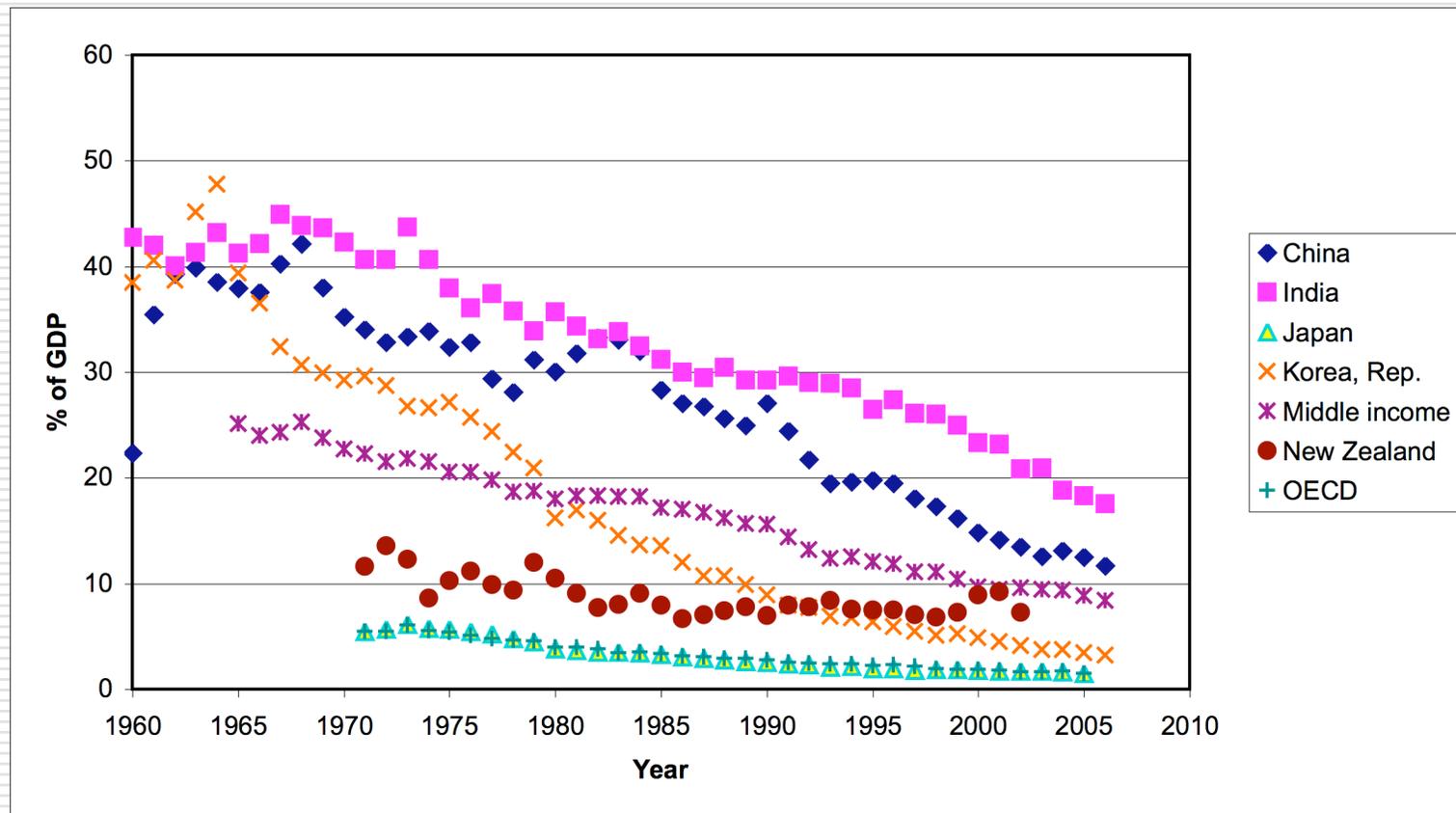


Why does inequality matter?

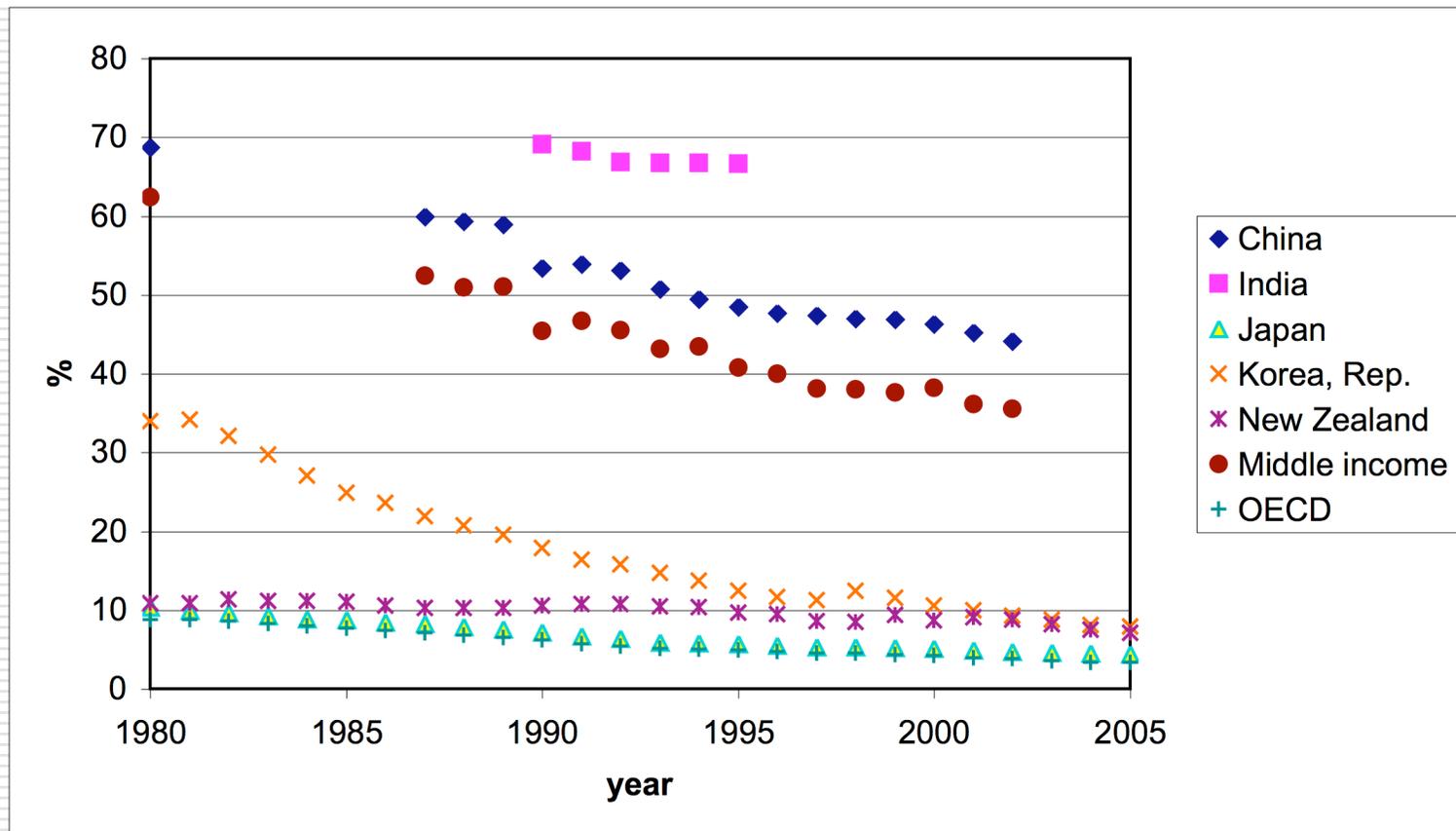
- A moral imperative
 - A political imperative
 - Stability
 - Progress of reforms
 - Examine inequality along the lines of
 - Sectors
 - Regions
-

Value added by agriculture as % of GDP decreasing

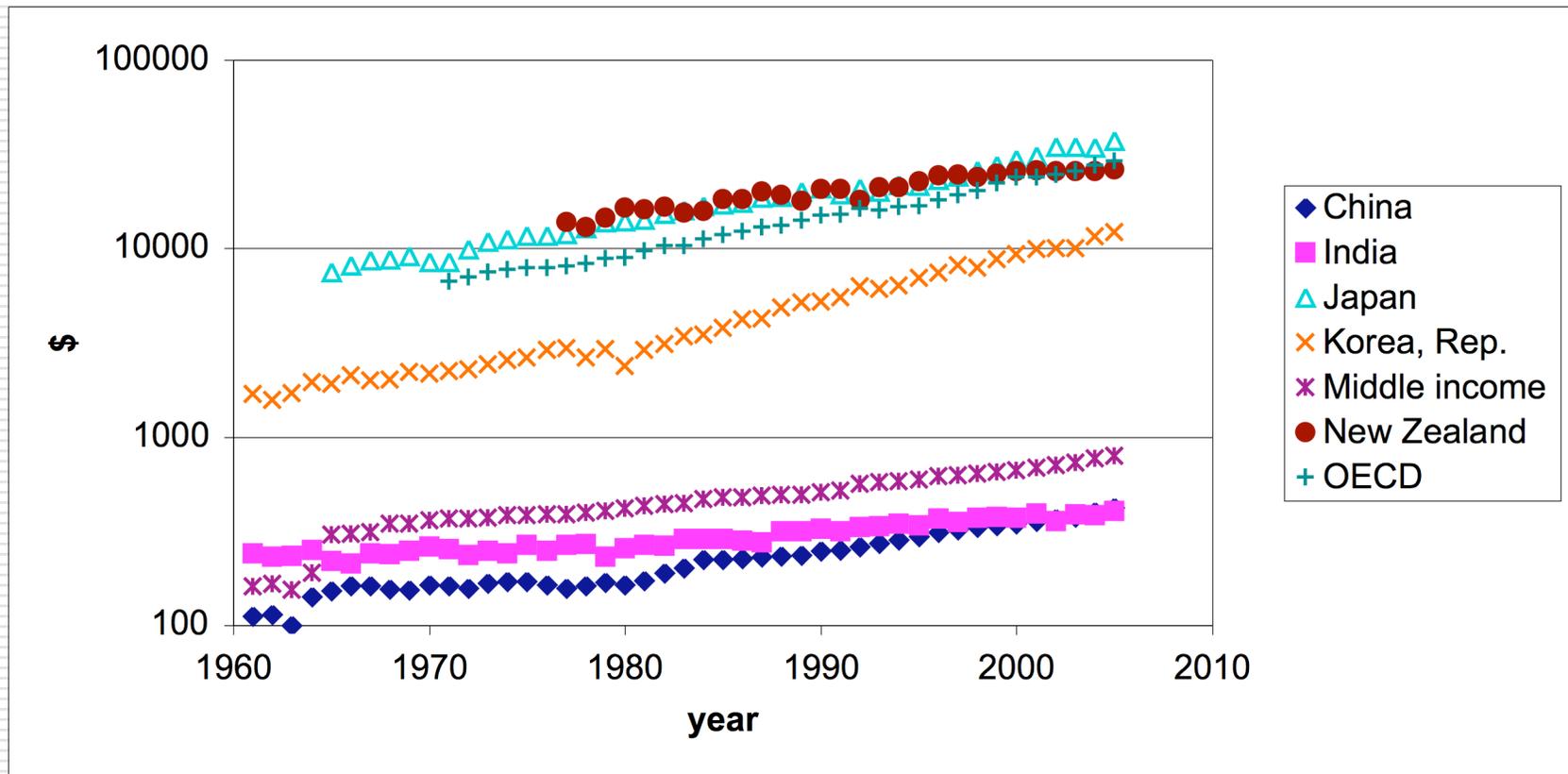
(Source: WDI, Kumar 2008)



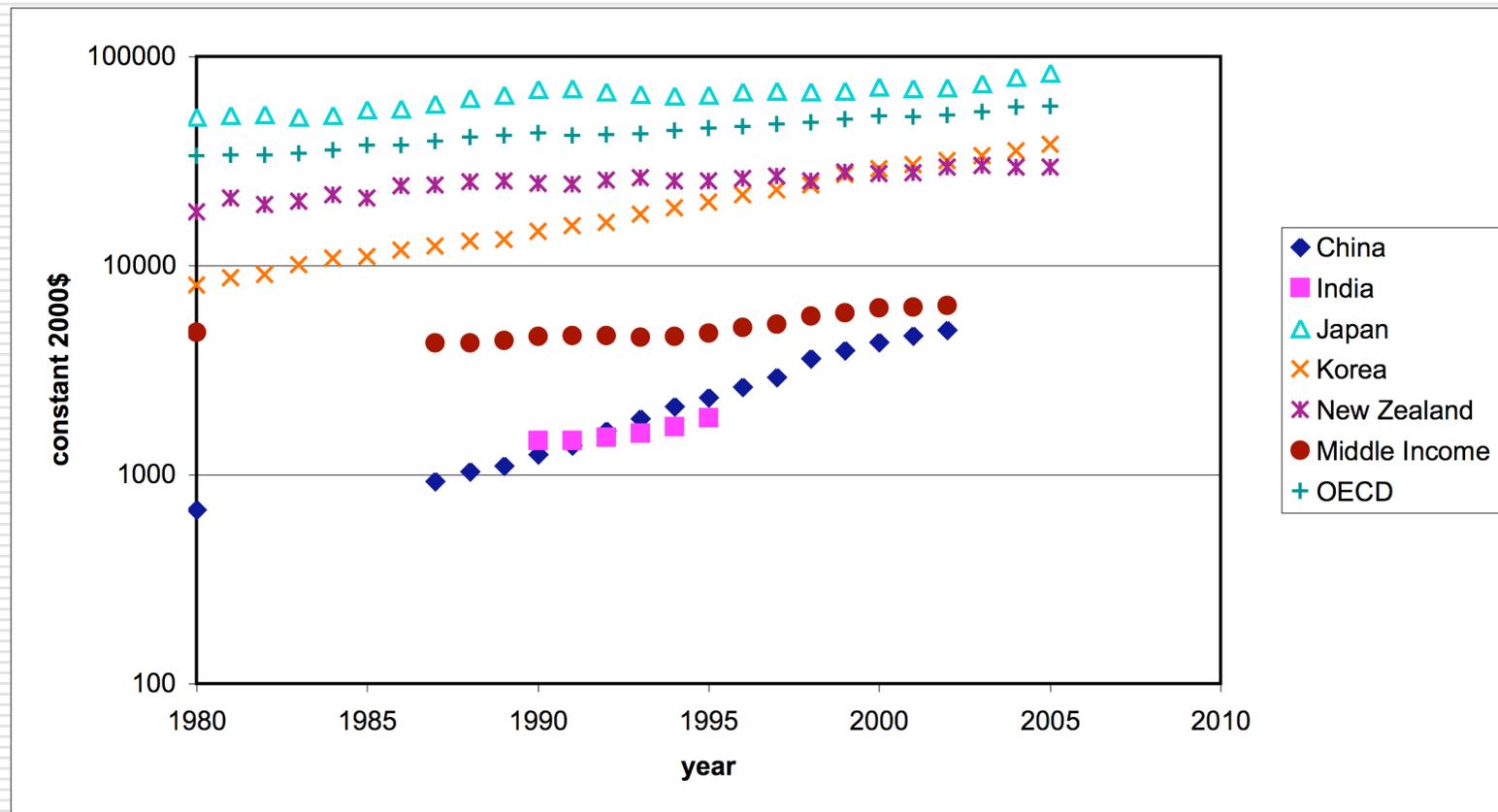
But employment in agriculture (as % of labor force) too high



Low value added per worker in agriculture, 2000\$ (log scale)



Value added per worker in industry higher, 2000\$ (log scale) (Kumar, 2008)



Marked sectoral growth differences

Table 1: Real GDP Growth (%)

Sector	Q1		Q2		Q3		April-December	
	(April-June)		(July-September)		(October-December)		2007-08	2008-09
	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09		
Agriculture	4.4	3.0	4.4	2.7	6.9	-2.2	5.5	0.6
Industry	8.5	5.2	7.5	4.7	7.6	0.8	7.9	3.5
Services	10.7	10.2	10.7	9.6	10.1	9.5	10.5	9.7
Overall	9.1	7.9	9.1	7.6	8.9	5.3	9.0	6.9

Source: Central Statistical Organisation (CSO).

Agriculture: lagging productivity

(Herd and Dougherty, 2000)

Table 6. Labour productivity by institutional sector in India

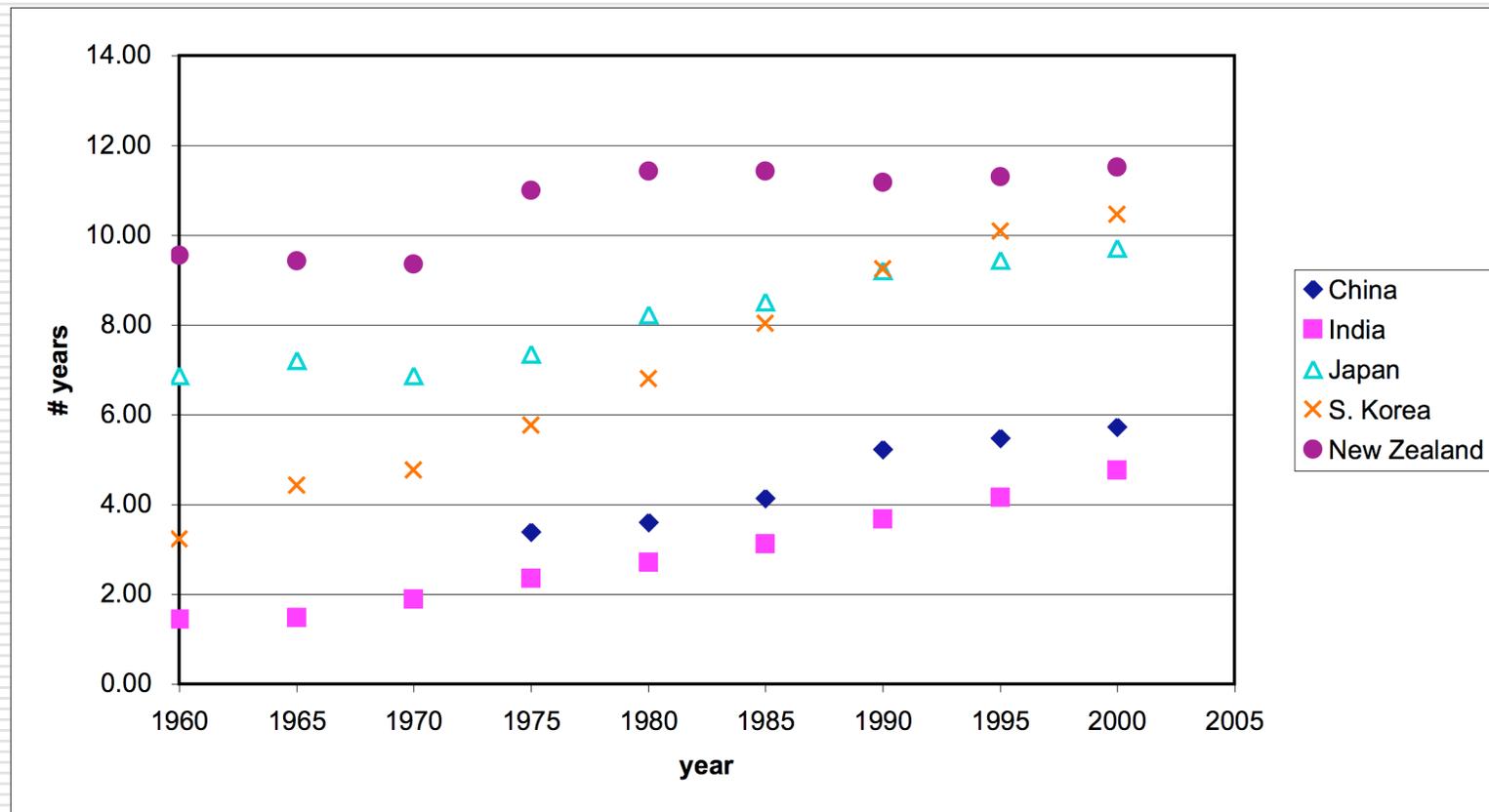
	1993	1998	1999	2000	2001	2002	average growth % per year
Constant 1993 rupees per worker							
Informal sector							
Agriculture	934	1104	1090	1101	1128	1033	1.1
Non-agriculture	2041	2756	2597	2397	2350	2545	2.5
Formal sector							
	9441	13822	15212	16288	17679	19520	8.4

Indian hare, Indian tortoise

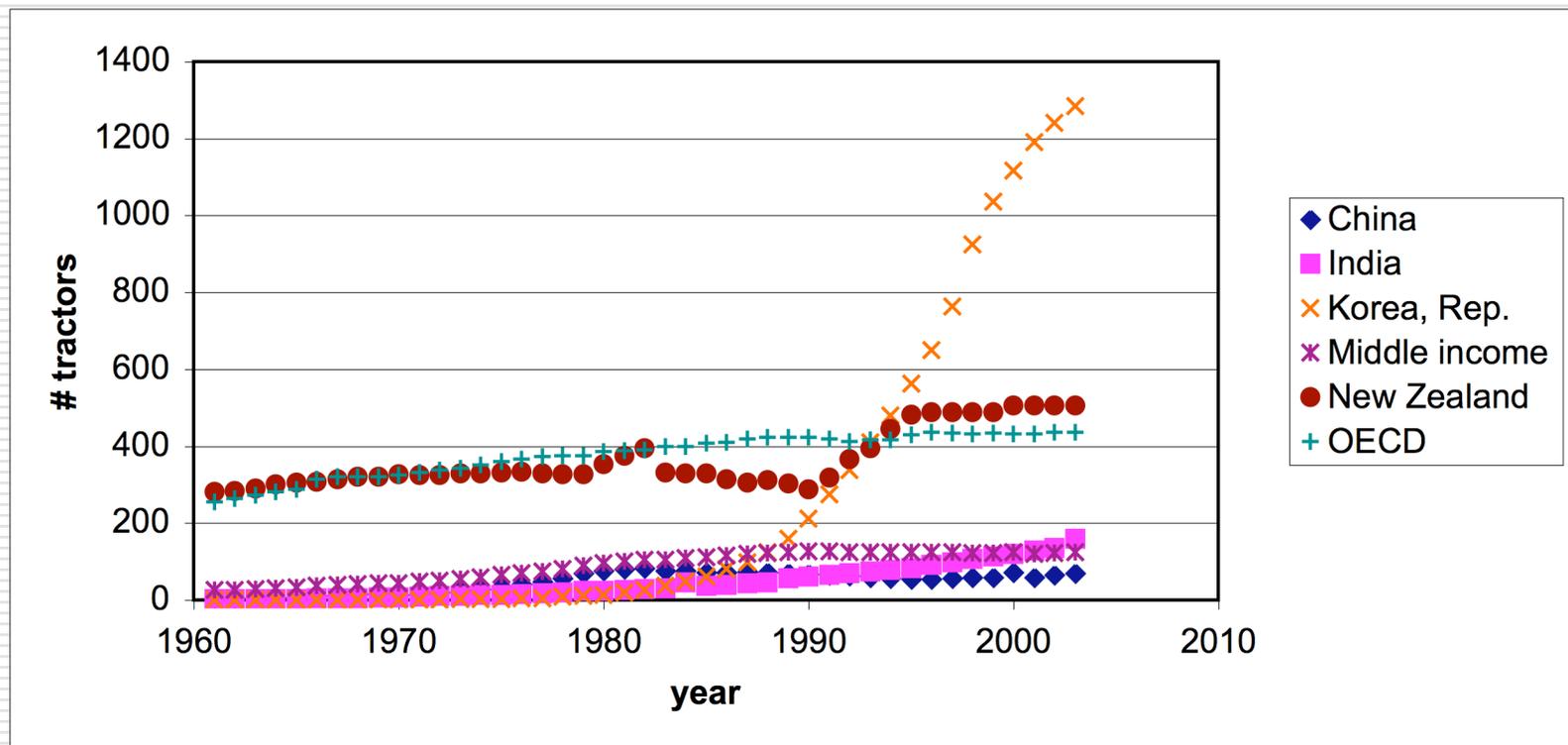
- Productivity gap in agriculture much more pronounced
 - How to address low agriculture productivity?
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Education differences parallel productivity differences

(Source: Barro-Lee)

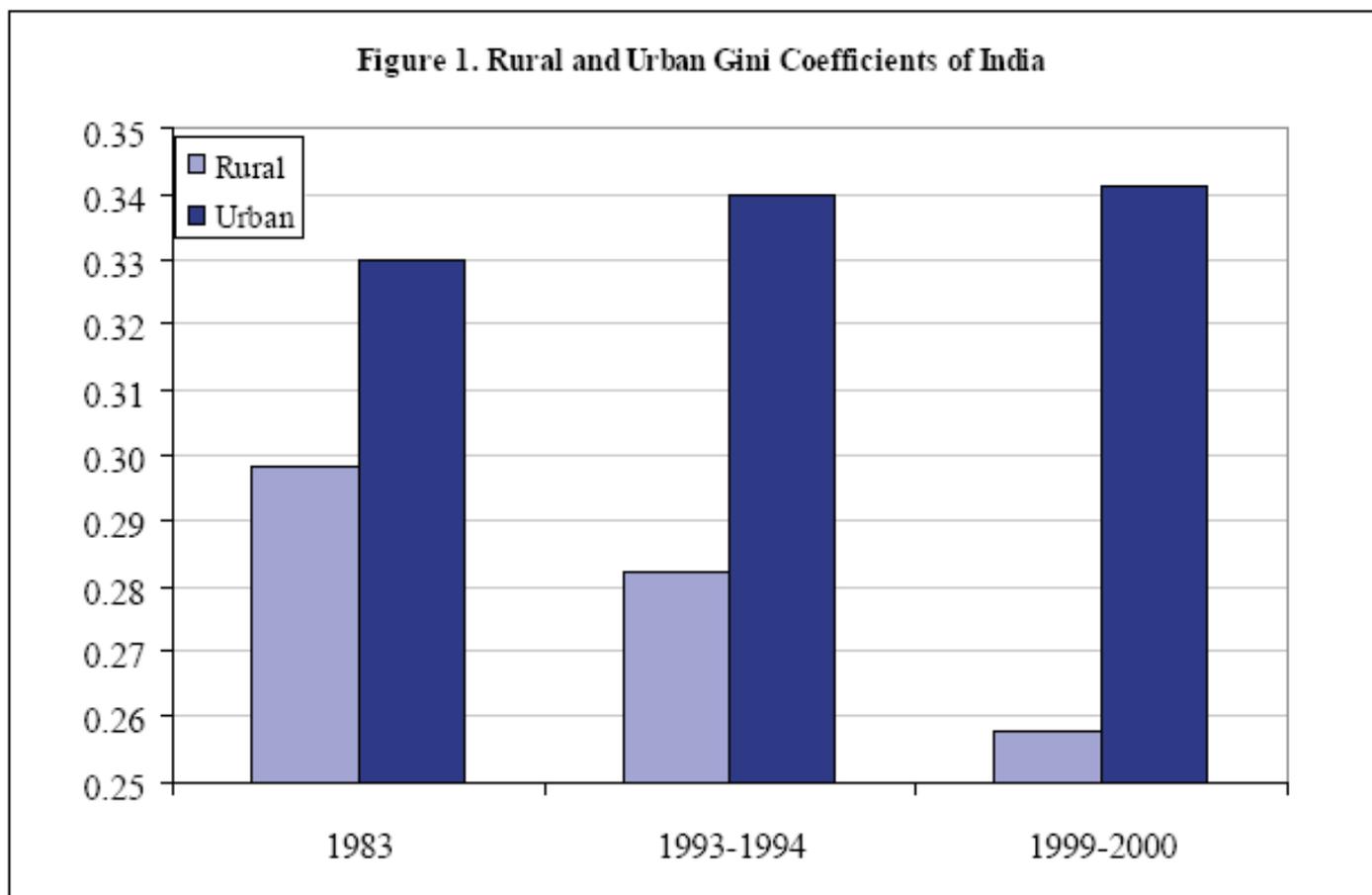


Physical capital (tractor usage per 100 sqkm) also low



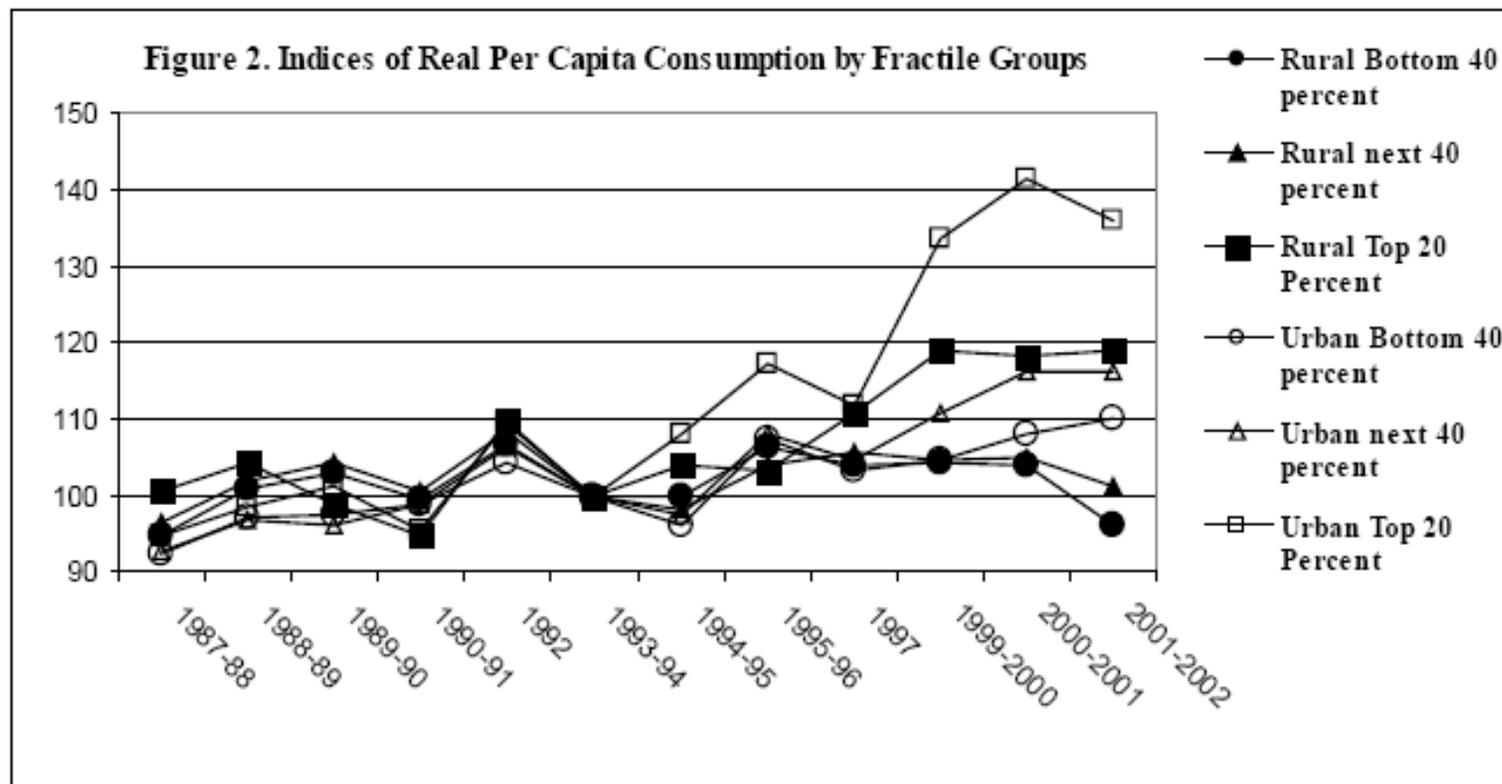
Declining rural inequality; increasing urban inequality

(Pal and Ghosh, 2007)



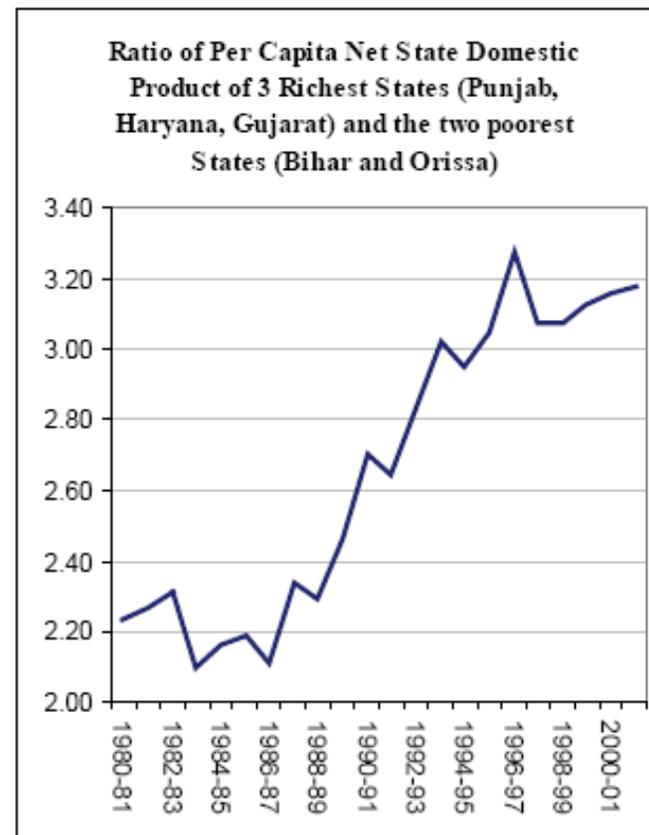
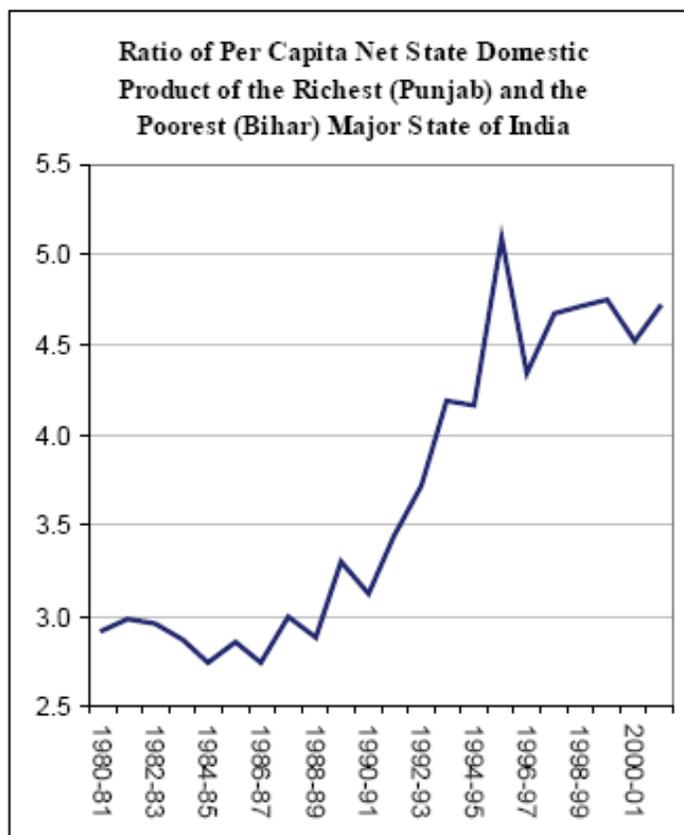
Source: Government of India, National Human Development Report (2001).

Increasing consumption of upper tail



Source: Sen and Himanshu (2005).

Widening disparity between poorest and richest states



Source: Banerjee and Piketty (2001).

Regional income disparity: India and China

(Source: Borooah, Gustafsson, Shi, 2005)

Table 1
Per-Capita Household Income in China and in India, by Region

	<i>Central</i>	<i>South</i>	<i>West</i>	<i>East</i>	<i>North</i>	<i>National</i>
India: Mean Income (PPP \$)	606	769	850	536	774	680
China: Mean Income (PPP \$)	706		555	1352		904

Three great challenges for India and policy options

- Infrastructure
 - Education
 - Health
-

The trouble with India

(Business Week, 2007)

- ❑ "If our infrastructure gets delayed, our economic development, job creation, and foreign investment get delayed. Our economic agenda gets delayed—if not derailed." N.R. Narayana Murthy
- ❑ Without reliable power and water and a modern transportation network, the chasm between India's moneyed elite and its 800 million poor will continue to widen, potentially destabilizing the country.
- ❑ Jagdish N. Bhagwati, a professor at Columbia University, figures gross domestic product growth would run two percentage points higher if the country had decent roads, railways, and power.

Infrastructure investment lags China's

(Postigo 2008)

Table 2. Major investment indicators in China and India.

	China	India
Gross fixed capital formation as % of GDP	44.2% (2003) ¹	22.7% (2003) ¹ 33.8% (2005) ⁴
Investment in all infrastructure sectors as % of GDP (all sources)	7.3–10.6% (2003) ^{2, 3}	3.5% (2004) ^{2, 4}
Investment in road infrastructure as % of GDP (all sources)	3.5% (2003) ^{2, 5}	0.5% (2004) ²
Cumulative investment transport projects with private participation 1990–2004 (US\$ billion)	21.9 (1990–2004) ⁶	3.2 (1990–2004) ⁶

Source: (1) World Bank (2007b); (2) Johnson (2006); (3) ADB/JBIC/WB (2005); (4) ADB (2005a, 2007); (5) World Bank (2007a); (6) World Bank (2006).

The *kutchra* road to riches

Table 1. Road infrastructure in China and India.

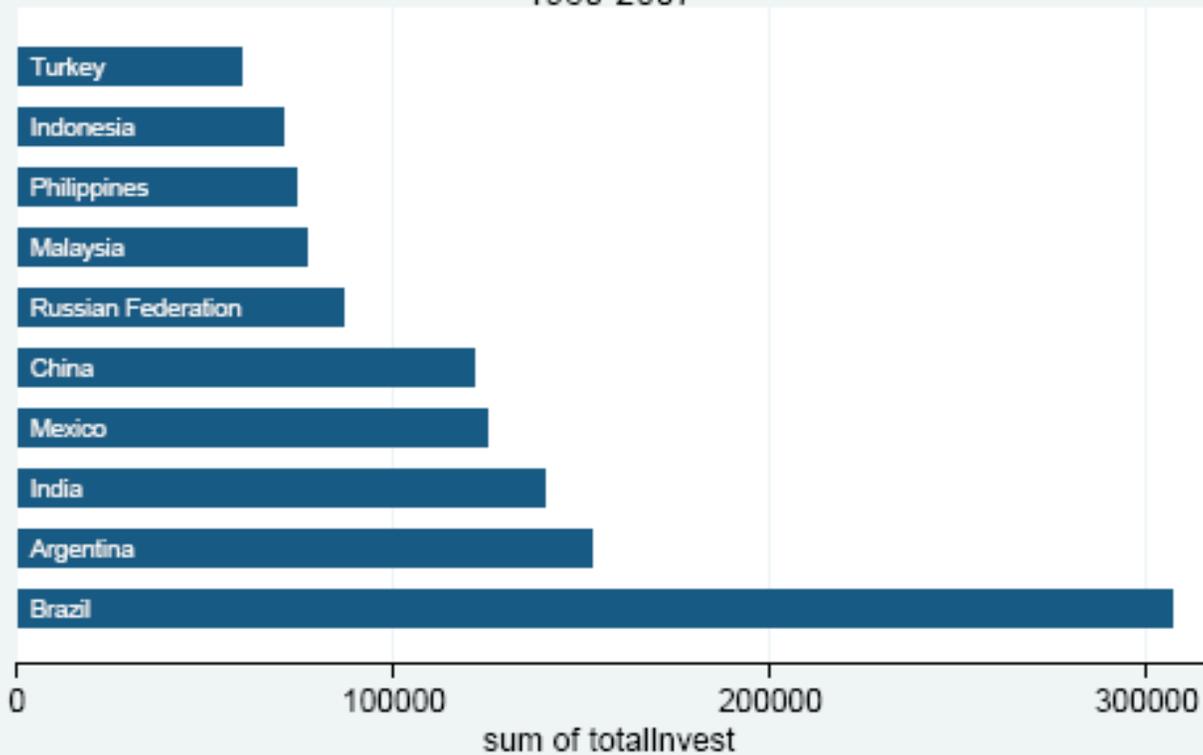
	China	India
Kilometres of network (million)	1.87 (2004) ¹	3.34 (2005) ²
% of expressways	1.83% (2004) ¹	0.003% (2005) ³
	Approx. 40,000 km	Approx. 300 km
% of unpaved roads	21% (2002) ⁴	53% (2002) ⁴
	18% (2005) ⁴	
Business perception of the quality of roads (scale 1–7, 1 worst)	4.6 (2000) ⁵	3.0 (2000) ⁵

Source: (1) GOC (2005); (2) GOI (2006, 2007a, 2007b); (3) Bahadur (2006); (4) World Bank (2004, 2007b). 2002 is the last year available for India; (5) Estache and Goicoechea (2005).

Public-Private Partnerships: One way out?

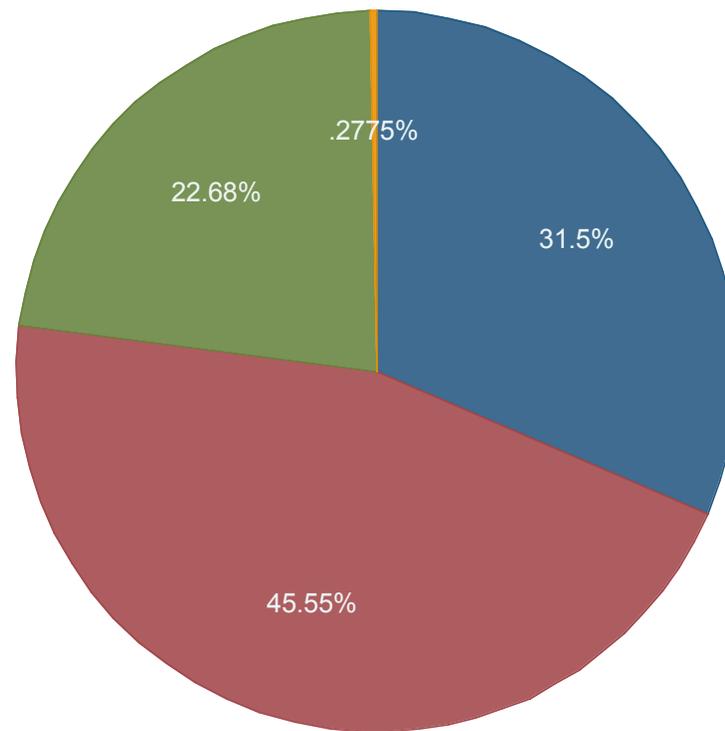
(Source: World Bank PPI database)

Top ten countries with the highest PPI in millions of US\$
1980-2007



PPI by sector

Total PPI investment in millions of US\$ by primary sector



Education and inclusiveness

(Liu and Kumar, 2008)

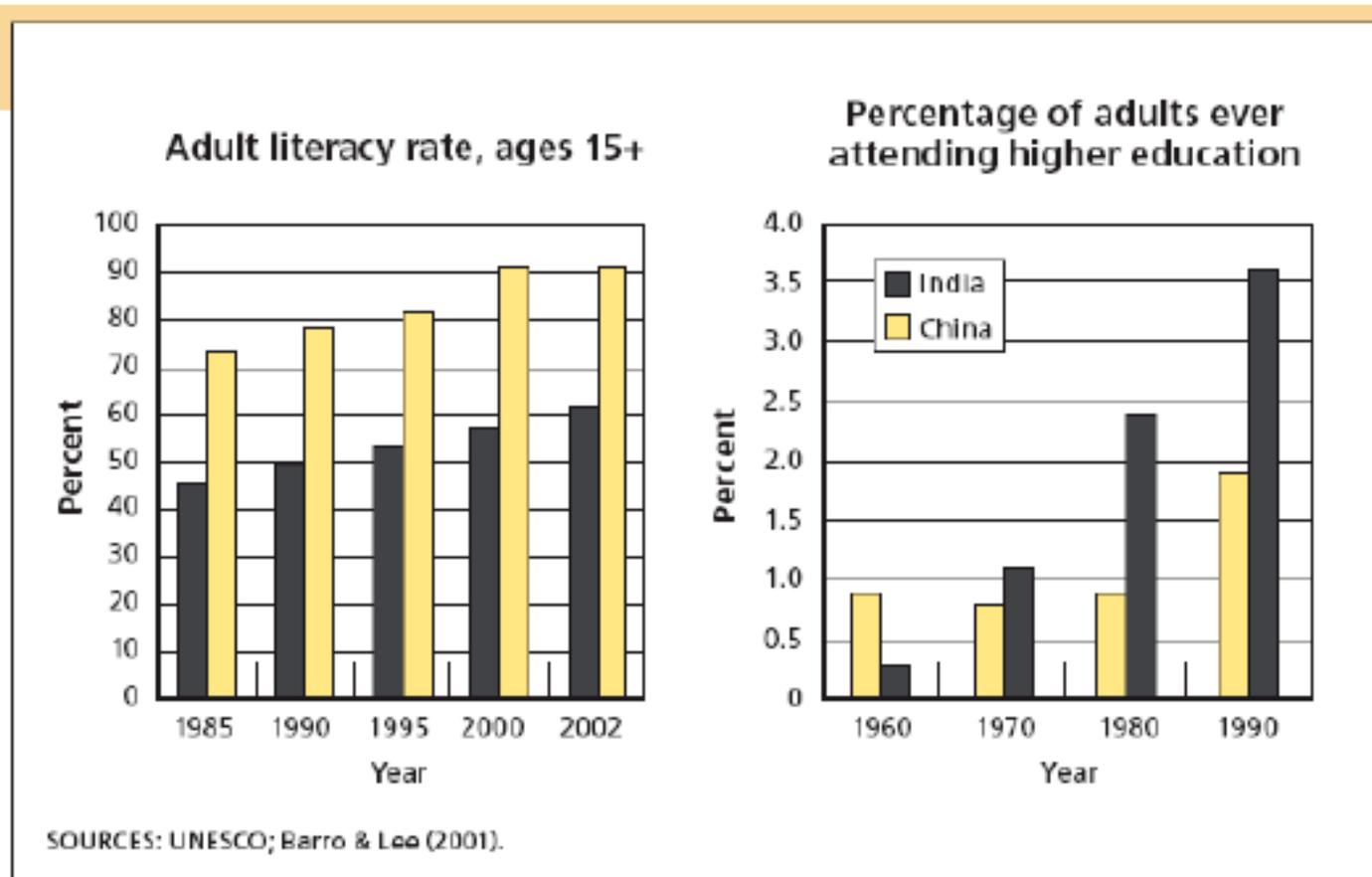


Figure 1. "Wide" vs. "Deep"

Catching up on basic education

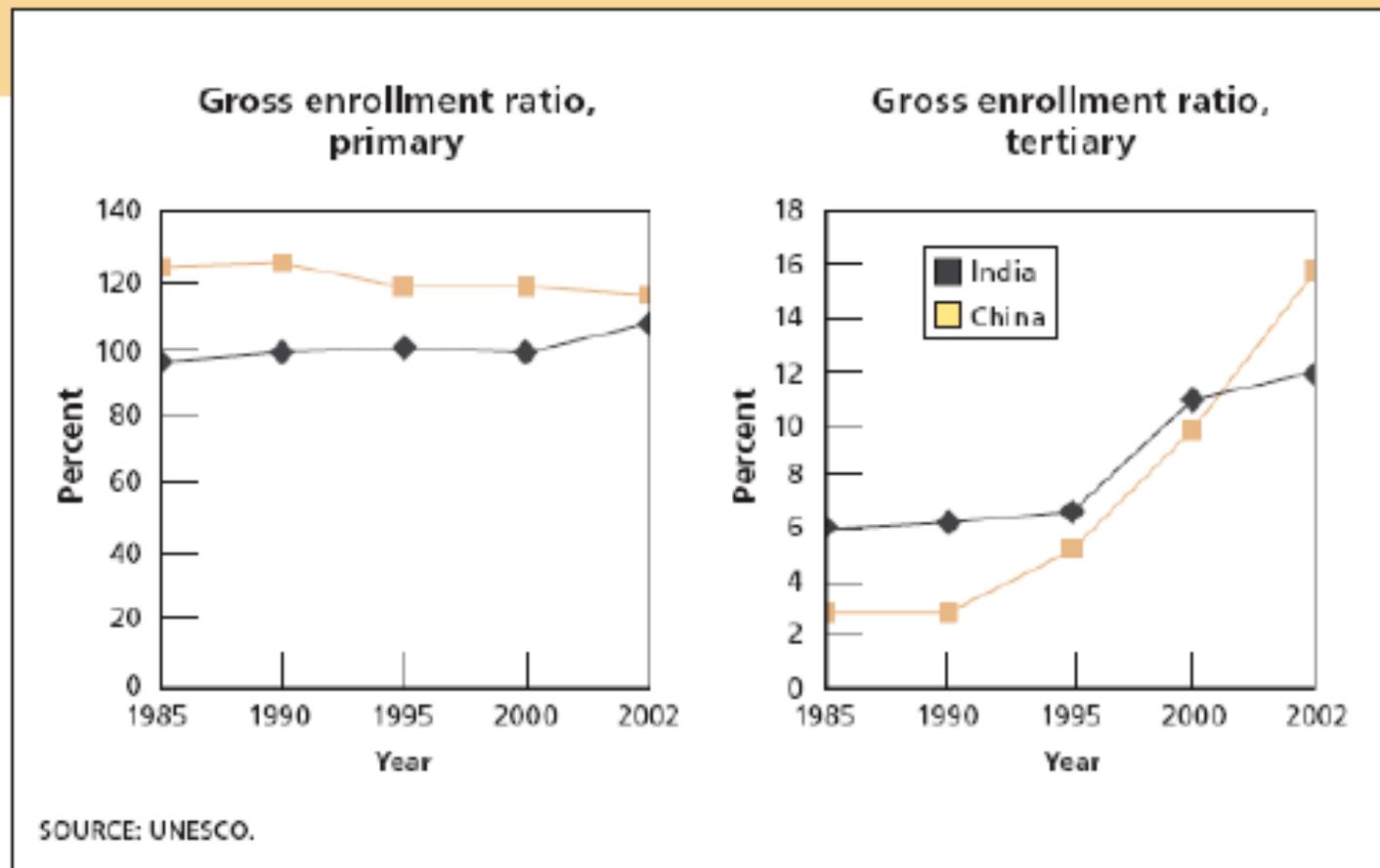


Figure 2. Converging Trends in Primary and Higher Education

The need for adult education / training

- Quality of schools, reducing teacher absenteeism
 - Rigid salary structures; lack of infrastructure; monitoring
 - Decentralization and incentives
 - Primary education has picked up, but what to do about the large number of illiterate adults?
 - Adult education / vocational training
 - Public-private partnership with manufacturing?
-

Can other sectors pull agriculture along?

- Industrial and services sector -- especially agro-business and retail – can play an active role in integrating the agricultural sector into the global economy and improving its productivity?
 - Emerging evidence recent liberalization of the organized retail sector has brought about an integration of farmers into organized supply chains and given rise to increases in agricultural productivity
-

Health outcomes

(Ma and Sood, 2008)

Table 1. Key Health Indicators

	Life Expectancy			Probability of Dying (per 1,000)						Maternal Death Rate	Low-Birthweight Rate
	Both sexes	Male	Female	0-1 Years Old	Under 5 years old			15-60 Years Old		(per 100,000)	(%)
				Both Sexes	Both sexes	Male	Female	Male	Female	2000	1999
China	72	70	74	27	31	27	36	158	99	56	6
India	62	61	63	58	85	81	89	275	202	540	30

SOURCE: World Health Organization. *The World Health Report 2005: Working Together for Health*, 2006, and other WHO statistics

Health policy levers

Table 2. China and India: Policy Levers Used in Health Systems

Policy Lever	Indicator	China	India
Financing	Total expenditure on health per capita ^a (2003)	\$61	\$27
	% of GDP (2003)	5.6%	4.8%
	Out-of-pocket as a % of total medical spending (2003)	56%	73%
	General government input as a % of total medical spending (2003)	36%	25%
	Health insurance	Reliance on public insurance	Emerging private micro-insurance
Payment	FFS	Dominant; governments set price	Dominant; providers set own price
Organization	Public providers	96%	30%
	Private providers	4%	70%
Regulation	Enforcement	Many regulations, little enforcement	Fewer regulations, little enforcement
	Regulatory structure	Diffuse	Very diffuse
Behavior	Education and promotion campaigns	Somewhat effective	Limited by illiteracy

^aPer capita total expenditure in U.S. dollars at average exchange rates.

Challenges

- ❑ Reduce out-of-pocket expenditures
 - ❑ Make quality assessment and evaluation an integral part of healthcare
 - ❑ Improve access by focusing on primary provision of preventive and basic curative care
 - ❑ Improve coordination across government entities for surveillance and control of communicable diseases
-

Microfinance in India

(Source: Ghate 2007)

Table A.1 Fact sheet on coverage and growth of Indian microfinance, 2006-07

1	Total number of SHG members	26.3 million ¹
2	Total number of MFI borrowers	10.5 million ²
3	Total number of microfinance borrowers	36.8 million
4	Total number of poor SHG members	13.4 million ³
5	Total number of poor MFI borrowers	3.2 million ⁴
6	Total number of poor microfinance borrowers	16.4 million
7	Growth of outreach of the SHG programme in 2006-07	31 percent
8	Growth of loans outstanding under the SHG programme in 2006-07	48 percent
9	Growth of outreach of MFIs in 2006-07	42 percent ⁵
10	Growth of loans outstanding of MFIs in 2006-07	76 percent ⁶
11	Average loans outstanding, SHG members	Rs 4000 ⁷
12	Average loans outstanding, MFI borrowers	Rs 3400 ⁸

Microfinance characteristics and issues

- Aimed at the bottom of the pyramid
 - Scaleable?
 - Reaches new borrowers or those who might have been covered anyway?
 - Is formalization a boon or a problem?
 - Microinsurance is extension of idea to health, livestock insurance etc. at village level
-

The road ahead

- ❑ The greatest challenge: simultaneously address high-tech growth and inclusive growth
 - ❑ Redistribution is not the answer
 - ❑ Capitalism / entrepreneurship is a tool for the poor to prosper
 - ❑ Policies should be aimed at facilitating participation by all in this global economy
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