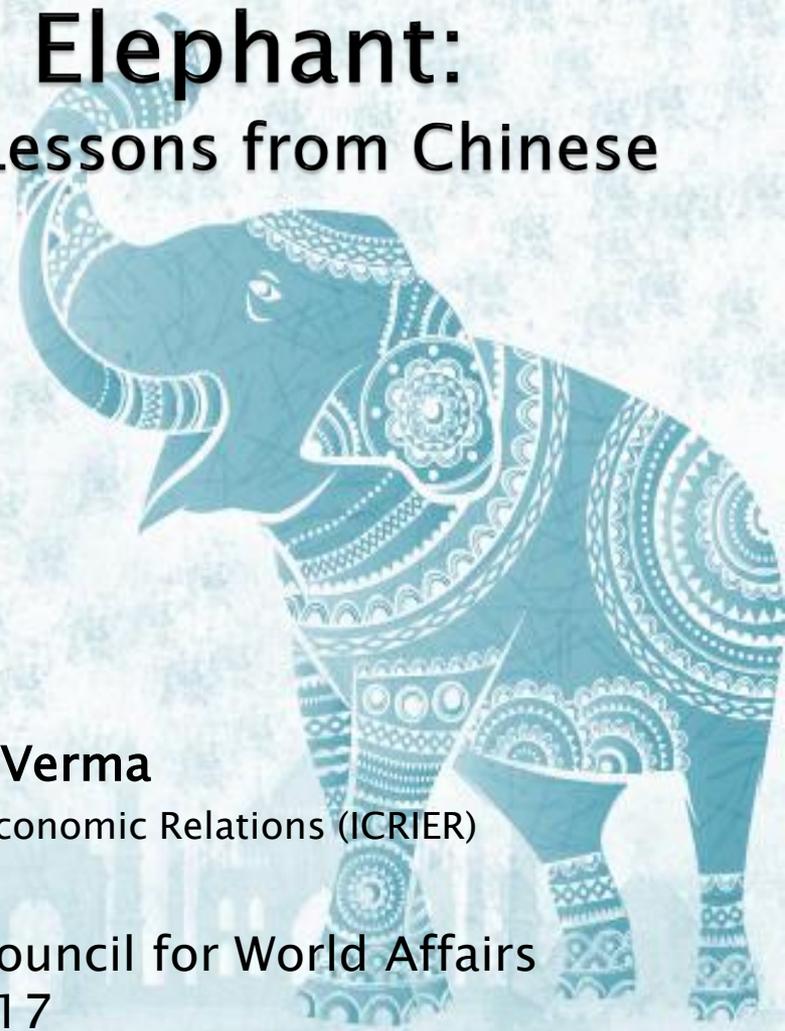


The Dragon & the Elephant:

Reforming India's Agriculture – Lessons from Chinese Reforms



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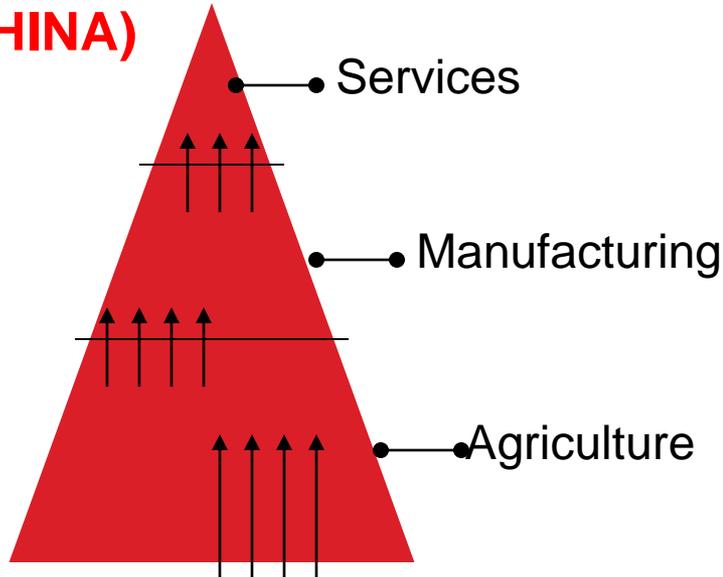
Outline

- ▶ **Economic reforms in China (Dragon) and India (Elephant)**– what does China’s story tell us? And Why we can and should learn from China?
 - ▶ PM Modi’s call for **Doubling farmers’ incomes (DFI)**: Is it a serious target or chasing a dream?
 - ▶ **How did China do it? Lessons for India**
- 

Economic Reforms: What does China story tell us?

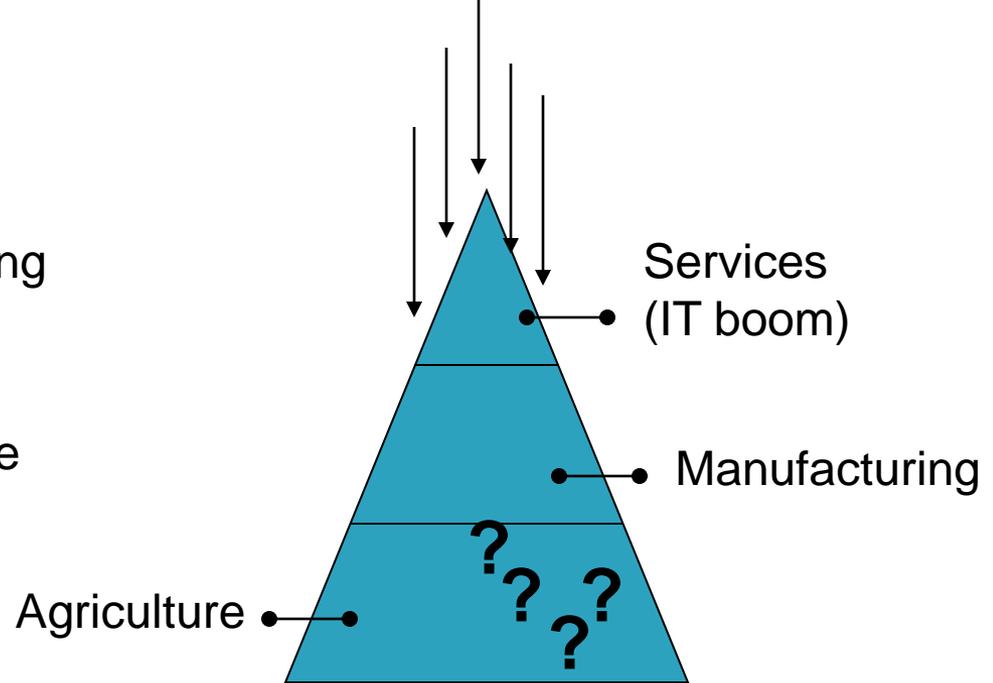
Start with Agriculture...else the trickle down will work very slowly.

THE DRAGON (CHINA)



FIRING FROM THE BOTTOM

TRICKLE DOWN



**THE ELEPHANT
(INDIA)**

China took six yrs (1978-84) to half poverty, while India took 18 yrs (1993-2011)

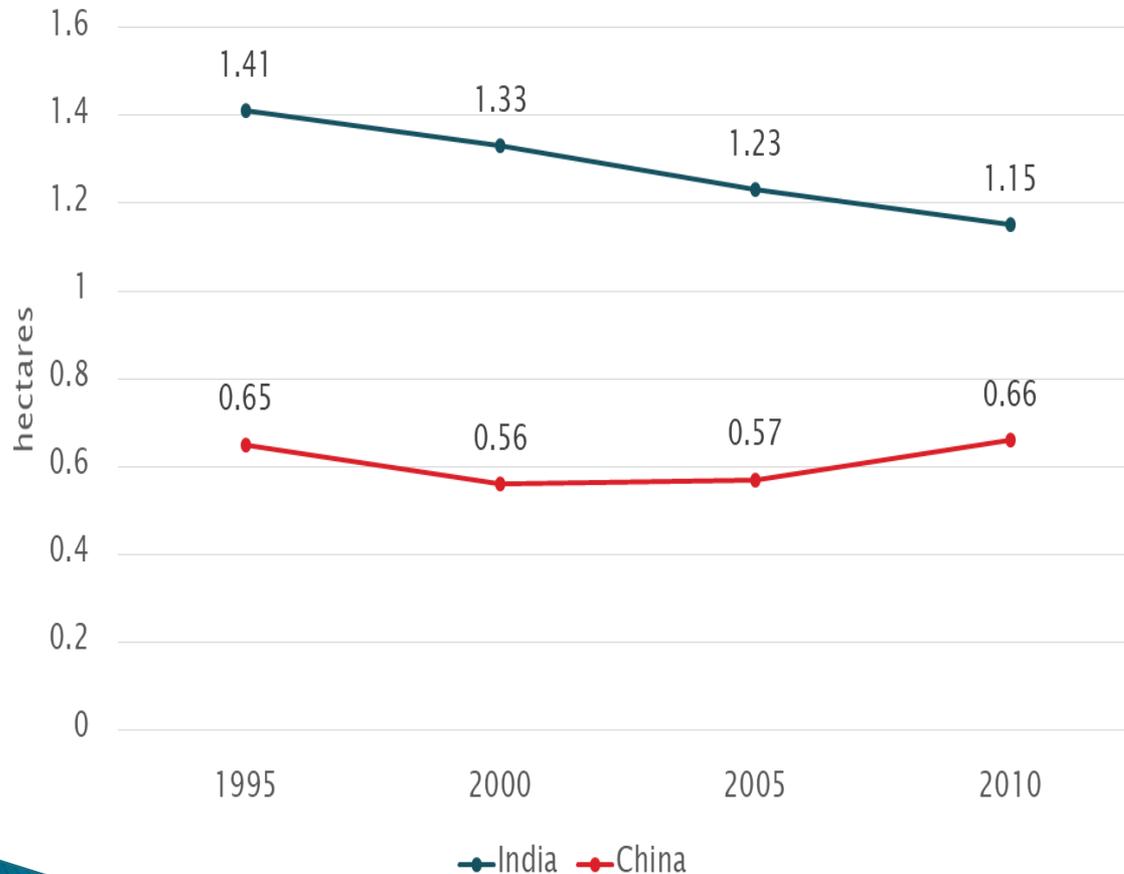
Economic Reforms....Chinese and Indian experiences

- ▶ **China:** 1978–84, focused on agri; agri–GDP increased by 7% p.a, but farmers incomes increased by 15% p.a in real terms as food prices were liberated;
- ▶ **China:** Poverty reduced from 33% to 15% in 6 years; gave political legitimacy for further reforms
- ▶ **India's reforms since 1991:** by stealth, under crisis, took 18 years to half poverty from 44% to 22% (1993–2011)

Last 25 years of Indian Reforms

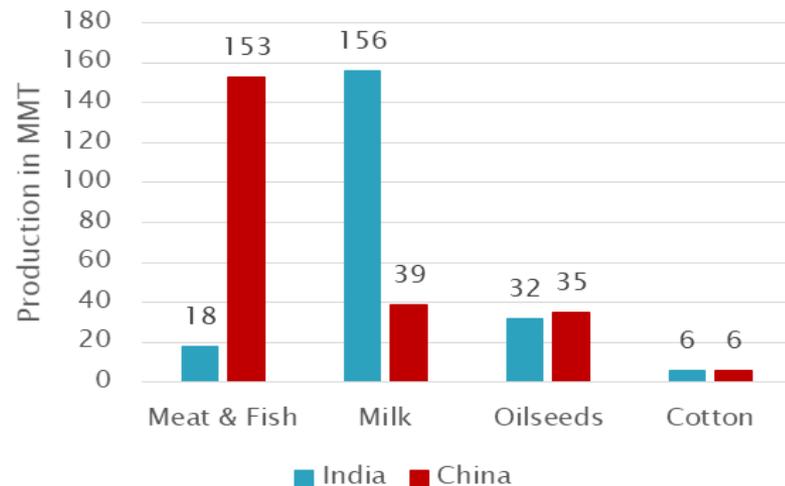
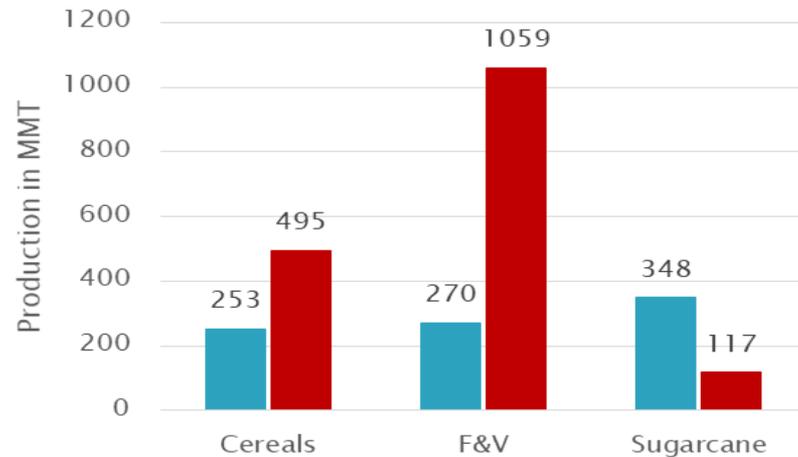
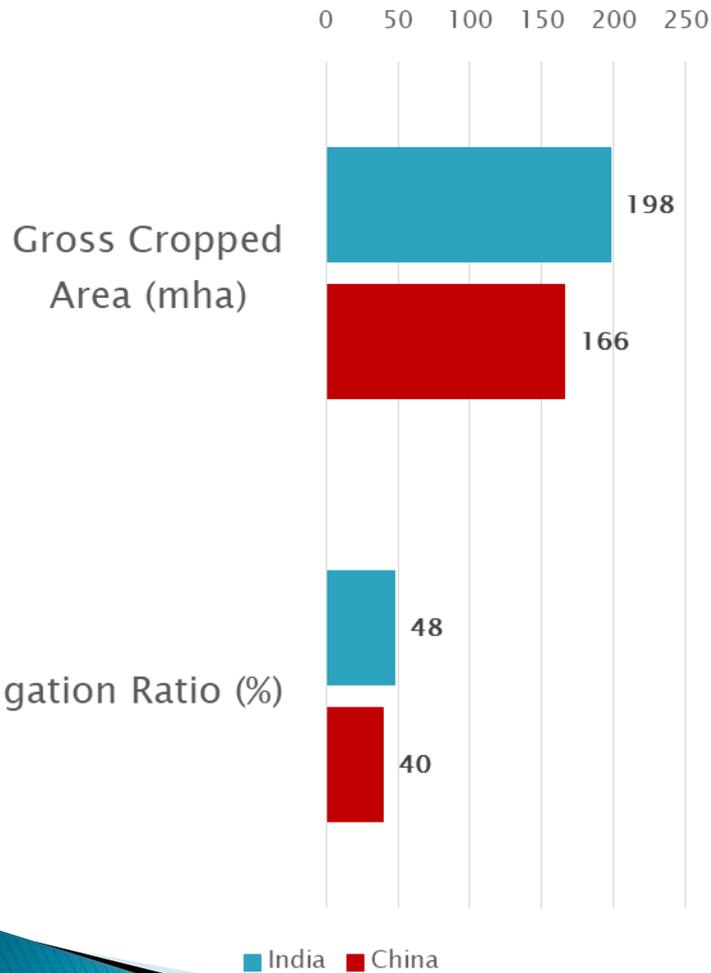
- ▶ Focused on exchange rate adjustments, reducing tariffs on industrial goods and de-licensing of Indian industry;
- ▶ Agriculture was never a part of comprehensive reform agenda; only tinkering of agri-food policies over 25 years;
- ▶ Nevertheless agri-gained from some indirect reforms, thru favorable terms of trade, rising private sector investments, and higher agri-exports
- ▶ No champion for agriculture in policymaking yet

Why we can learn from China?



- Both India & China – **smallholder agricultural economies**
- Both produce **large quantities and vast varieties** of agri-commodities
- India is likely to go China's way – thus opportunity to learn to **“produce more of better quality” with less but in a sustainable manner**

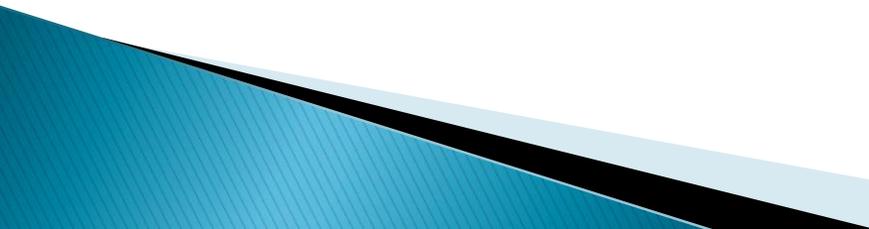
China dominates in production of cereals, fruits & vegetables and meat & fish (India: 2016-17; China 2015)



Agri-trade: Is India heading China's way?

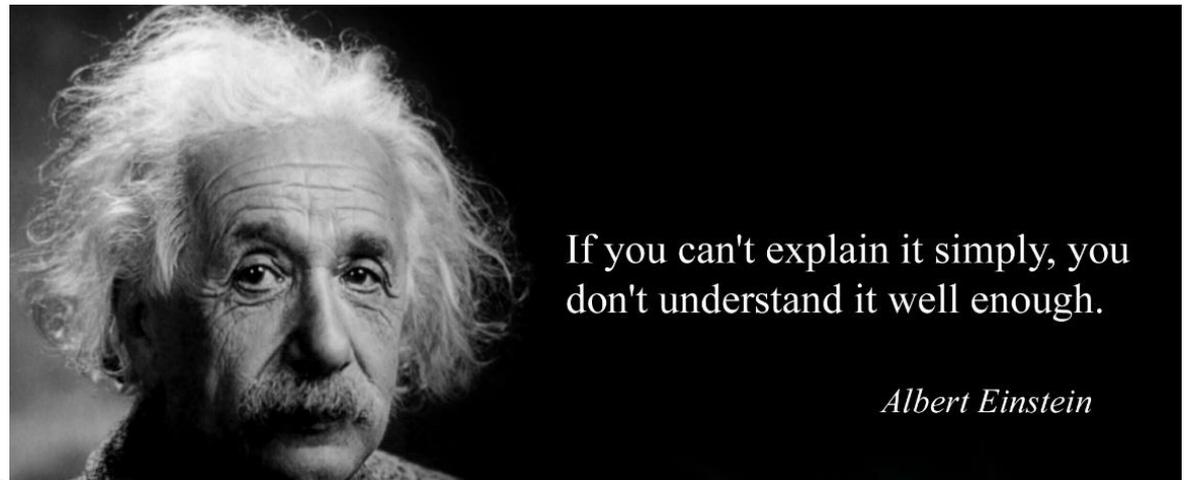


Doubling farmers' income (DFI) by 2022 – PM Modi's dream or a serious target?

- ▶ PM shared his dream in a kissan rally in Bareilly on 28th Feb, 2016
 - ▶ FM mentioned in his budget of FY17, and again in FY18
 - ▶ April 13, 2016, Gol set up a Committee to DFI by 2022 (chaired by Ashok Dalwai)
- 

Dalwai Committee Report on DFI by 2022

- ▶ 14 volumes expected of which 4 (718 pages) released on August 14, 2017...(all may have more than 2000 pages and 300 recommendations!)
- ▶ Quite a challenge for PM and FM to read through and make sense of it for policy action



Key highlights of Dalwai Committee Report

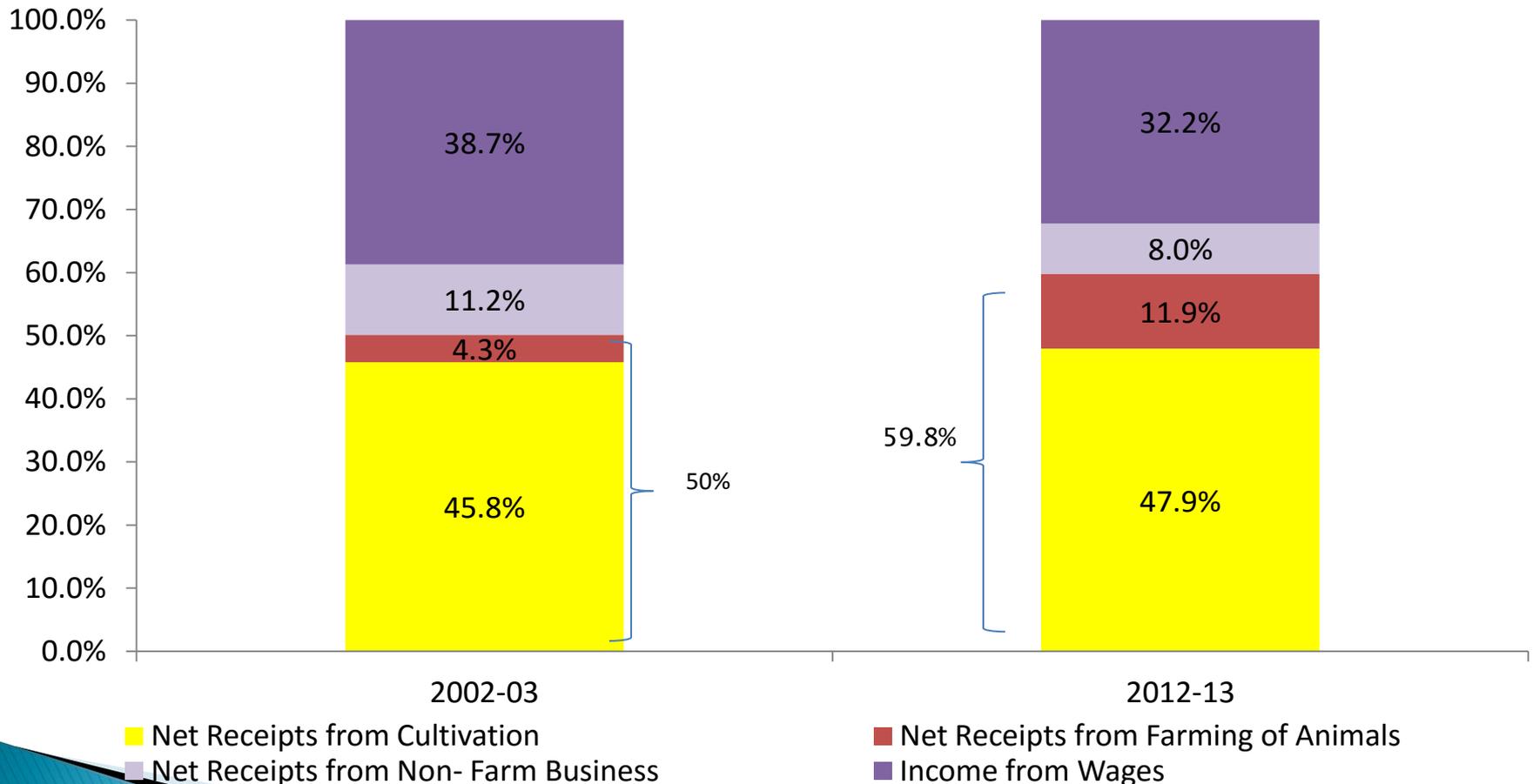
- ▶ Target is over **7 years**, with base 2015–16 (not 5)
- ▶ Target is to raise **real incomes**, not nominal (CAGR needed is **10.4%**)
- ▶ Additional Investment needed **Rs 640,000 crores (at 2011–12 prices)** (growth of 22.2% p.a in real terms at 2011–12 prices)
- ▶ **80 percent of this additional investment to come from govt** (in agri, irrigation, rural roads, rural energy, and rural development)
- ▶ **Raise share of agri in farmers' income from 60% to 69%** (in one place it says even **80 percent**)

Evaluation in brief...

- ▶ Lot of useful info, but several inconsistencies (reader feels as if left hand does not know what right hand was writing)
- ▶ Silent on where the resources (Rs 6.4 lakh cr at 2011–12 prices) will come from?
(In a season of loan waivers, and mounting subsidies and welfare programs, investments likely to shrink)
- ▶ Even if investments made and agri-growth triples, **who will absorb the agri-surpluses?**

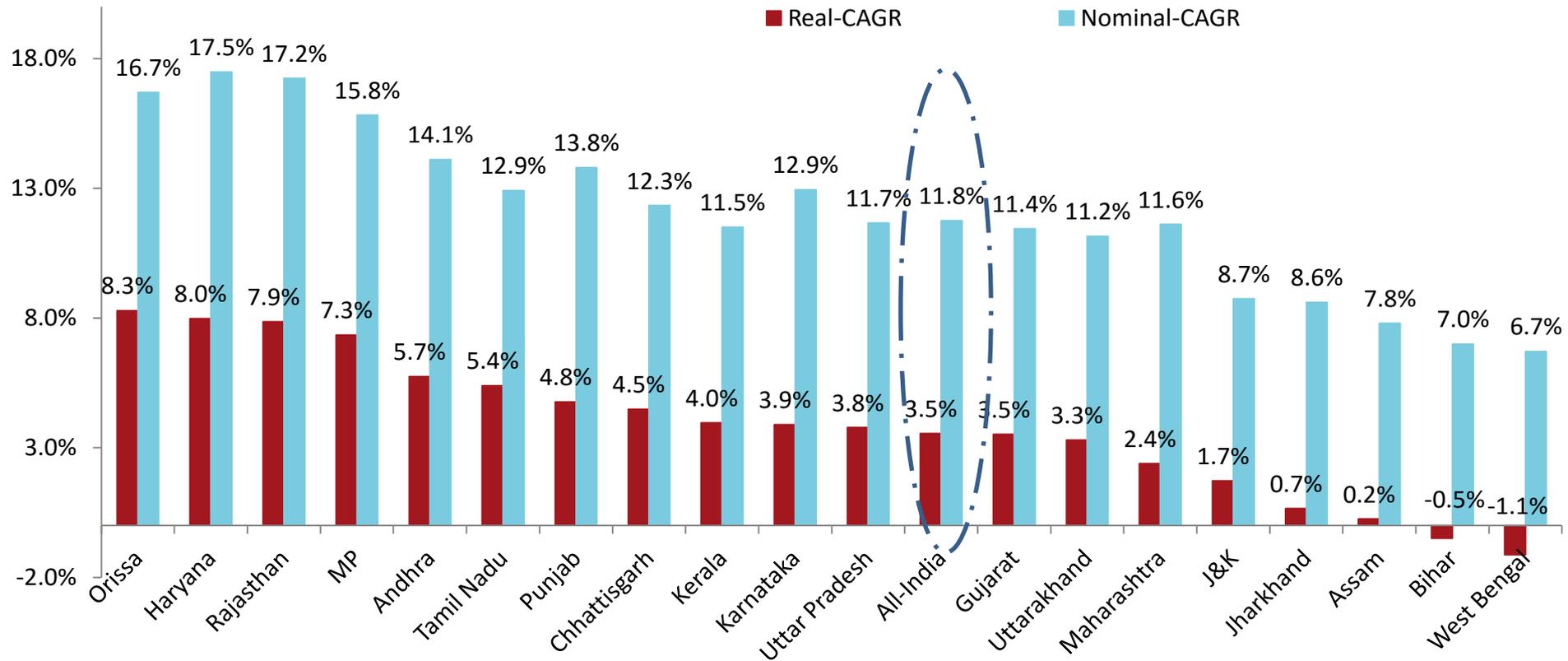
Structure of Farmers' Incomes:

agriculture accounts for 60%; CDFI wants to raise this to 69% (80%); (agri-HHs 9 cr out of 14 cr rural HHs)



Growth in Farmers' Income

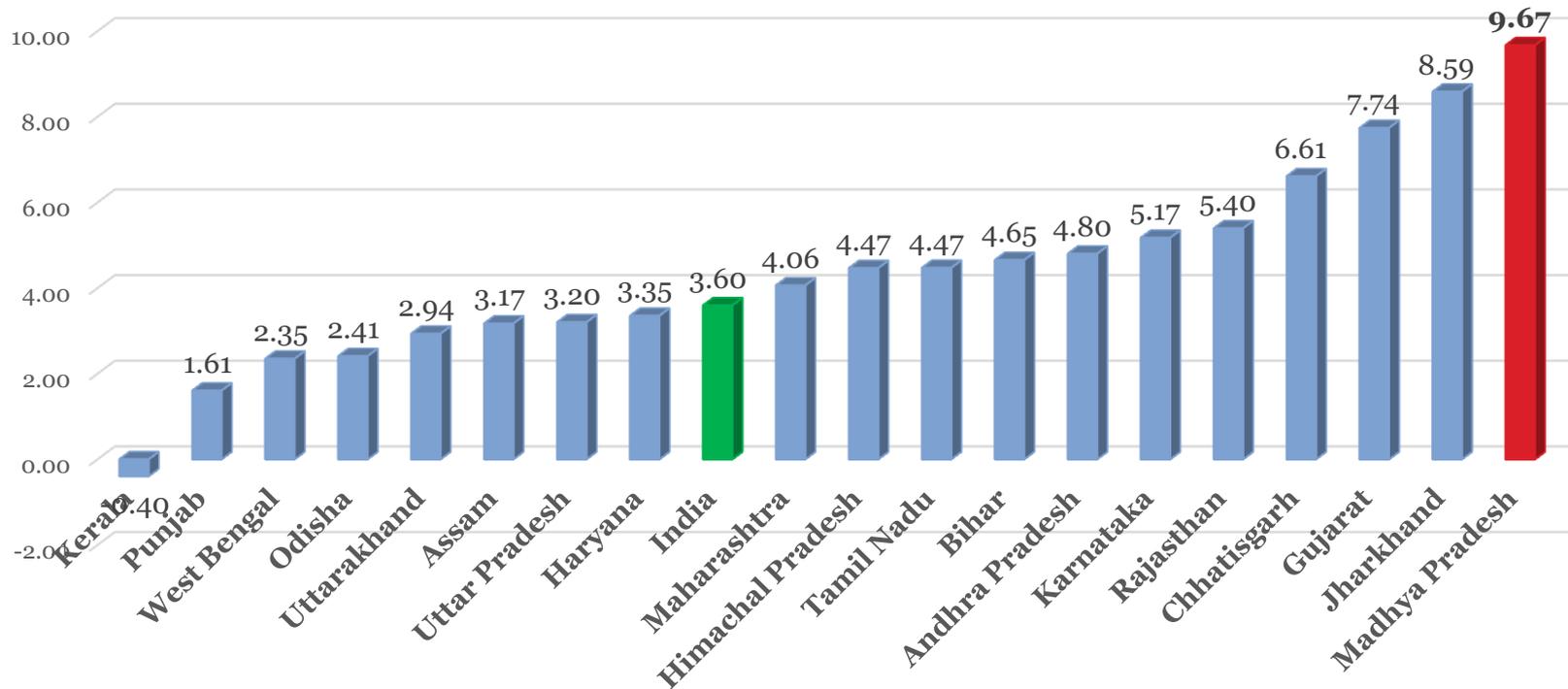
(CAGR %) Farmers' Income between 2002-03 and 2012-13



But a ten year perspective better...

State-wise agri-GDP growth rates

AVG Agri-GDP growth between 2005-06 to 2014-15
(at constant 2004-05 prices)



Source: Government of India, Central Statistical Organization. GSDP at Factor cost in 2004-05 prices

*Note that data for Gujarat, Kerala and Himachal Pradesh is available only till 2013-14.

Can Modi govt do a vault jump?

- ▶ Raising farmers' income from CAGR of 3.5% to 10.4%...3-times higher jump!!
- ▶ Has it been done anywhere else earlier?
 - Yes, China during 1978–84, farmers incomes increased by 15% p.a. and halved poverty...
 - But China did not write a 2000 pages report for it, instead changed incentives for farmers

How did China achieve this? (1 / 3)

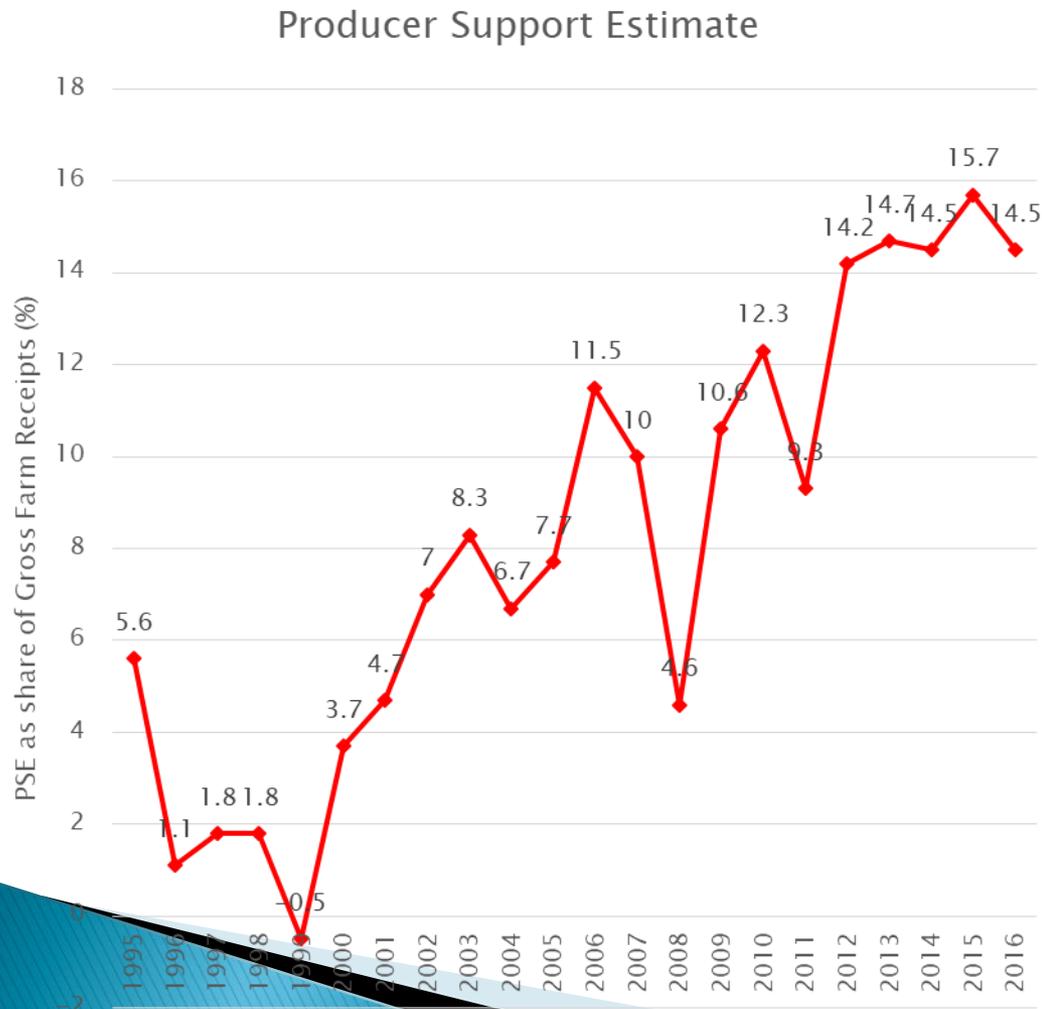
- 1) Incentives:** High support to farmers through
- ▶ *Higher support prices for major crops*
 - ▶ *Input subsidies on fertilizers, seeds, insurance, farm machinery etc.*

(2015)	Average Minimum Purchase Price in China (USD/Tonne)	Average Minimum Support Price in India (USD/Tonne)
<i>Paddy (Rice)</i>	415 (Indica) 477 (Japonica)	347
<i>Wheat</i>	390	244
<i>Maize (Corn)</i>	371	212

Note: Exchange rates used: 1 RMB = 0.15 USD and 1 INR = 0.016 USD

Agricultural support in China (PSE)

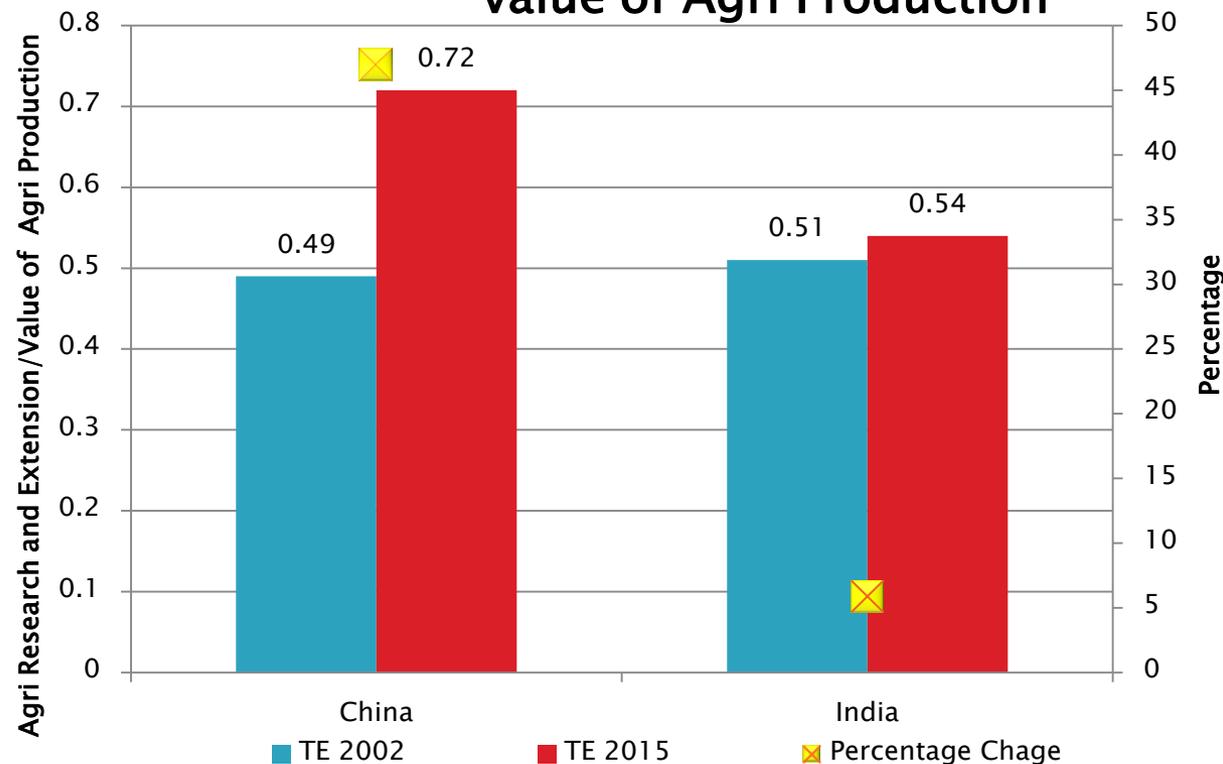
(output pricing and input subsidies)



- The share of potentially most distorting forms of support (based on output and variable input use) accounts for 74% of PSE in 2014-16
- Prices received by farmers in China nearly 13% above world prices in 2014-16

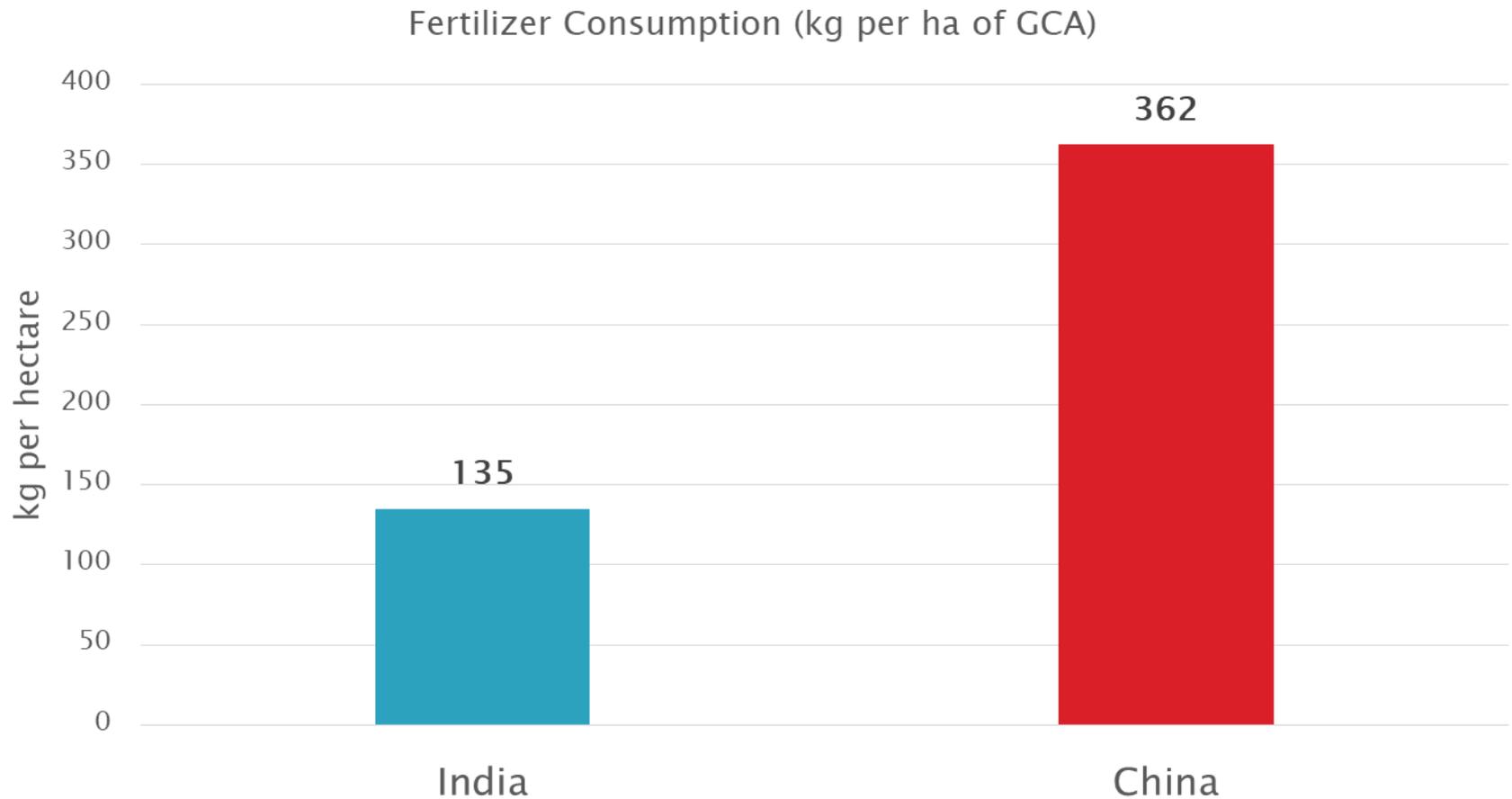
Public Exp. on Agri- R&E as percent of value of agri-output

Agriculture Research and Extension as a percentage of value of Agri Production

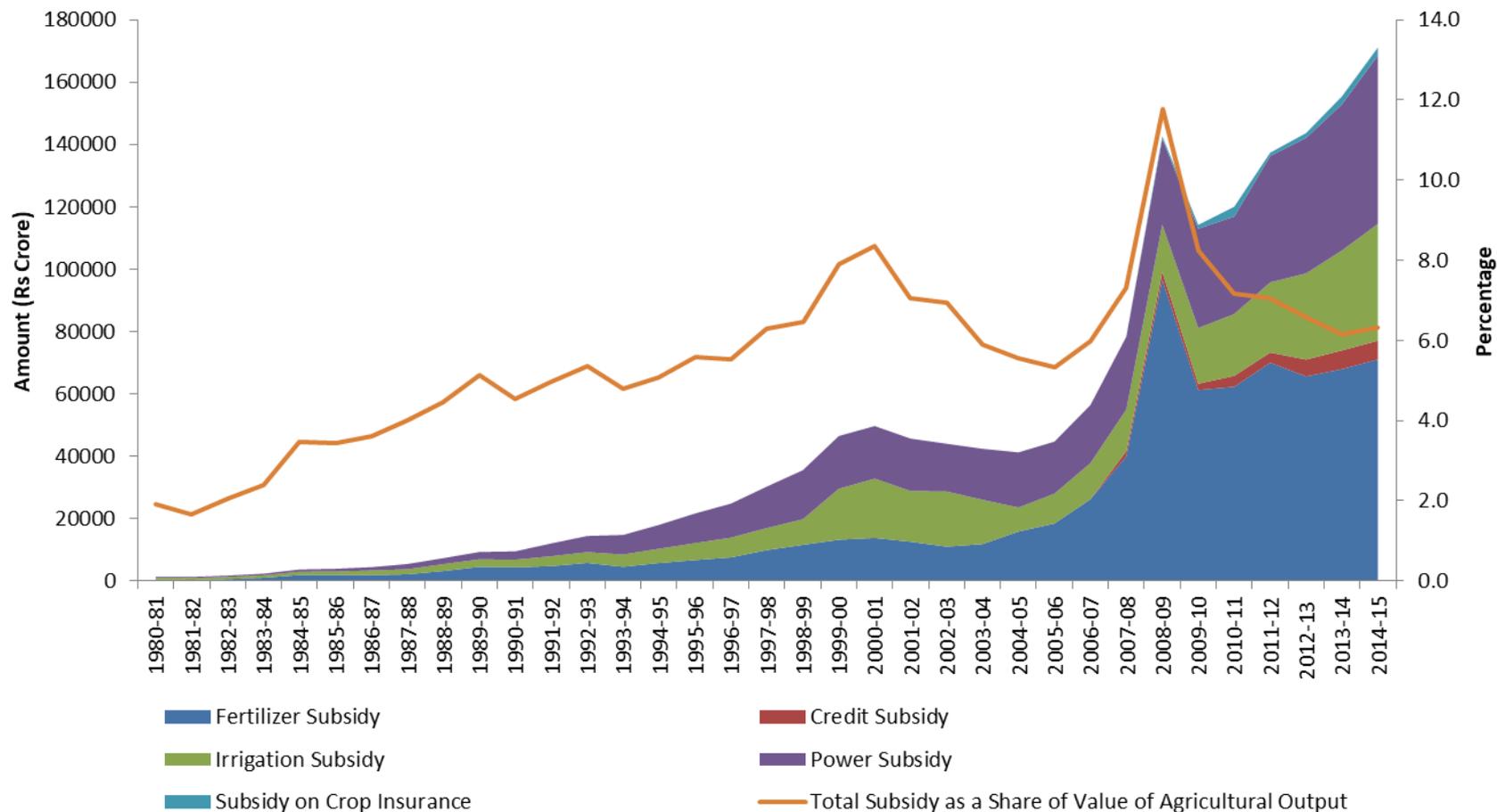


Source: Combined Finance and Revenue Accounts of the Centre and State, CAG, National Accounts Statistics, and Agricultural Policy and Monitoring Evaluation, OECD

Production technology: China's fertilizer/ha consumption more than twice that of India (fertilizer subsidy along with other inputs given on per ha basis)



Input subsidies in Indian agriculture (India's price support in output is negative)



Source: Calculated and constructed using the data in National Accounts Statistics, CSO; Expenditure Budget, GoI; Power division, Planning Commission

How did China achieve this? (2 / 3)

2) Institutional Reforms

- ▶ China liberalized its factor markets, esp land
- ▶ Farmland in China is collectively owned; parceled out in 30-year long leasing contracts
- ▶ To promote efficient large-scale farms: guidelines issued in Nov, 2016 – farmers can transfer land rights to individuals, conglomerates; separate land ownership, contract and operating rights
- ▶ Farmers can sub-lease, swap or transfer land-use rights

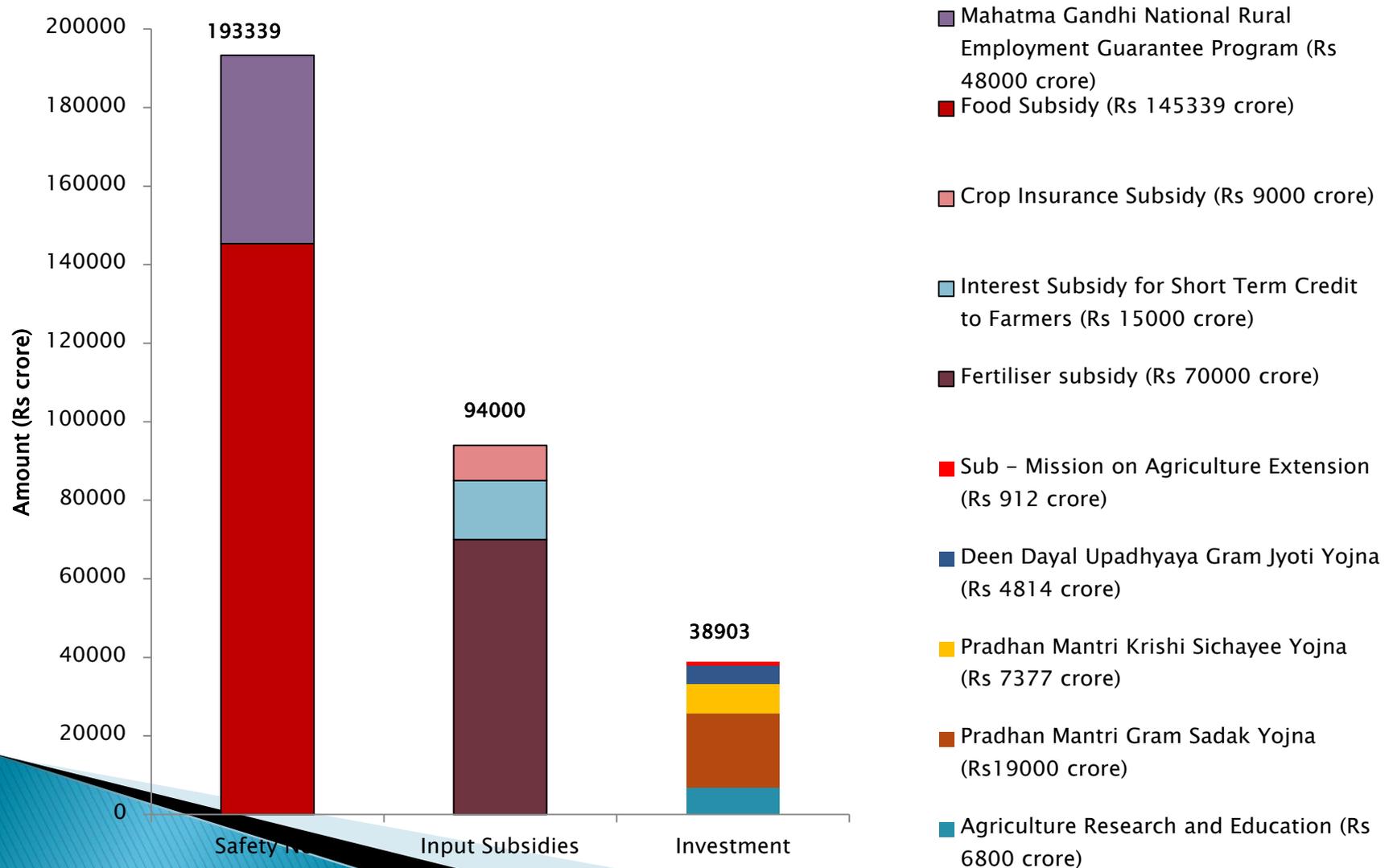
How did China achieve this? (3 / 3)

3) Investments

- ▶ Agri-R&D as a share of agri-value of output = 0.65% (2016) from 0.23% in 1993
- ▶ China has sought to actively promote public-private-partnerships (PPP) in GM crop technology (Chem China taking over Syngenta, (USD 43 billion) supported by Govt)
- ▶ Global leader in hybrid rice
- ▶ India: Inadequate R&D funds – ICAR total budget less than USD 1 billion compared to Monsanto alone spending USD1.7 billion

The reality check on investments in India

Cart before the horse? Budgeted Expenditures FY18



Boosting investments requires rationalization of subsidies

- ▶ 85 percent of public resources going to agri go as subsidies (fertilizer, power, canal irrigation, credit, insurance, etc) and only 15% as investments....need to reverse this
- ▶ Introduce DBT in all subsidies (inputs as well as food)...large savings and put those in water and R&D
- ▶ Jan Dhan and Aadhaar can be the twin pillars for DBT.

Way Forward: Focus on 4 “I”s

- ▶ **Incentives:** Get the market right (APMC, ECA, rationalize commissions and taxes/cess etc)
- ▶ **Investments:** public investments especially in Water and agri-R&D; private sector all along the value chains of horticulture and livestock
- ▶ **Institutions:** land, credit, FPOs, organized retailing
- ▶ **Innovations:** e.g., solar based irrigation, solar as second crop, solar cold storages...

Thank you!