Transforming Indian Agriculture under Modi 2.0

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Outline

- Promises and Performance under Modi 1.0 and Aspirations under Modi 2.0
- Changing Goal Post midstream: Doubling Farmers Incomes by 2022-23
- Emerging Challenges and the Reform Agenda for Modi 2.0

Promises and Performance under Modi 1.0

- Remunerative prices for farmers by implementing Swaminathan Recommendation (MSP to be equal to Cost C2 plus 50 percent margin)

- Reform Public Distribution System (PDS) for food: Unbundle Food Corporation of India

FCI reforms…first high powered committee of Modi 1.0

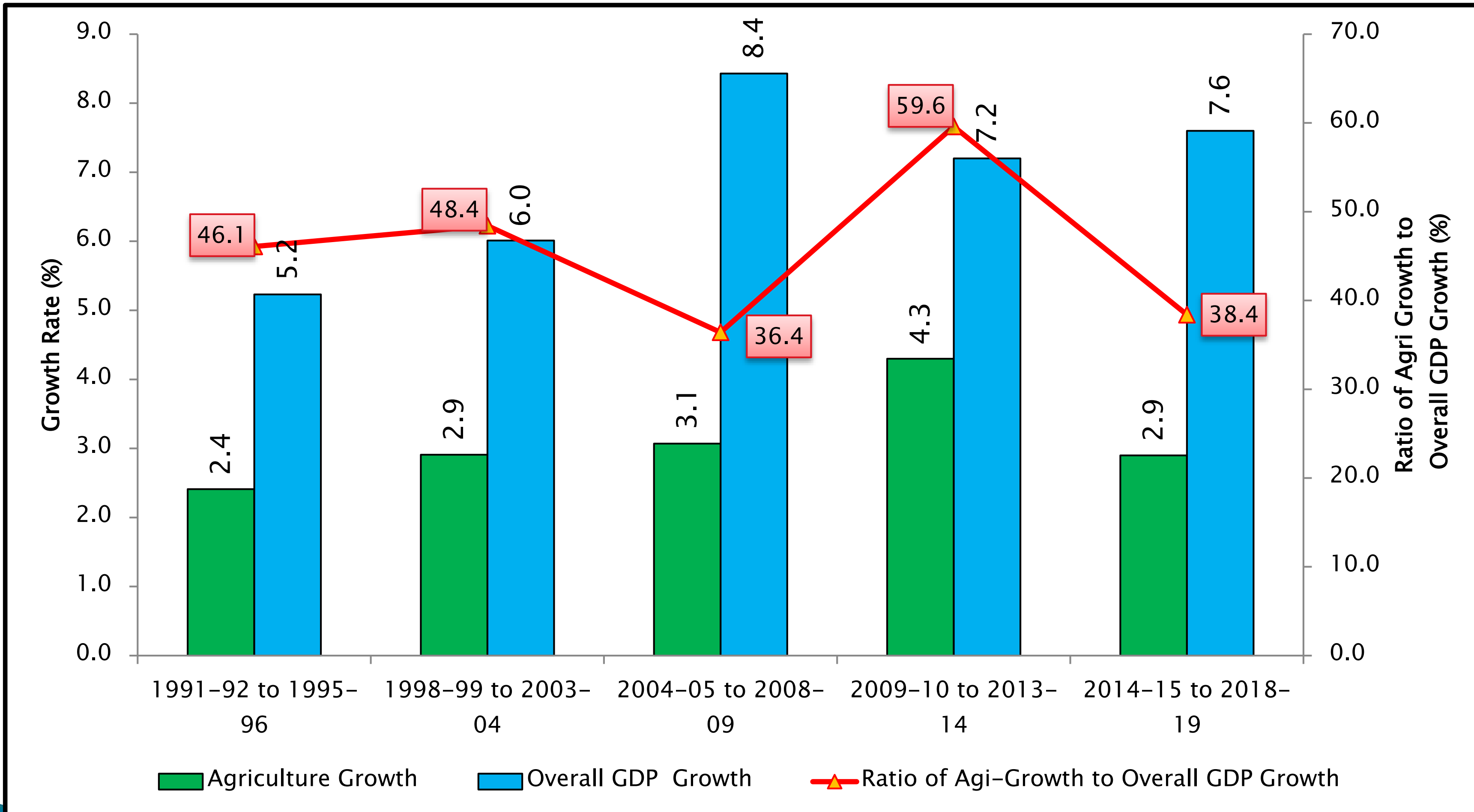
- **Key Recommendations of Shanta Kumar Panel**
  - Gradually cash transfers for food and fertilizer subsidy
  - Restricting food subsidy to 40 percent bottom population (instead of 67 percent under NFSA, 2013)
  - Keep only strategic stocks of 15-20 MMT;

- Progress: Except POS machines in PDS, food system remains as messy as ever
- (Food subsidy 1.84 lakh crore, pending bills of FCI even higher; stocks bulging, high inefficiency)

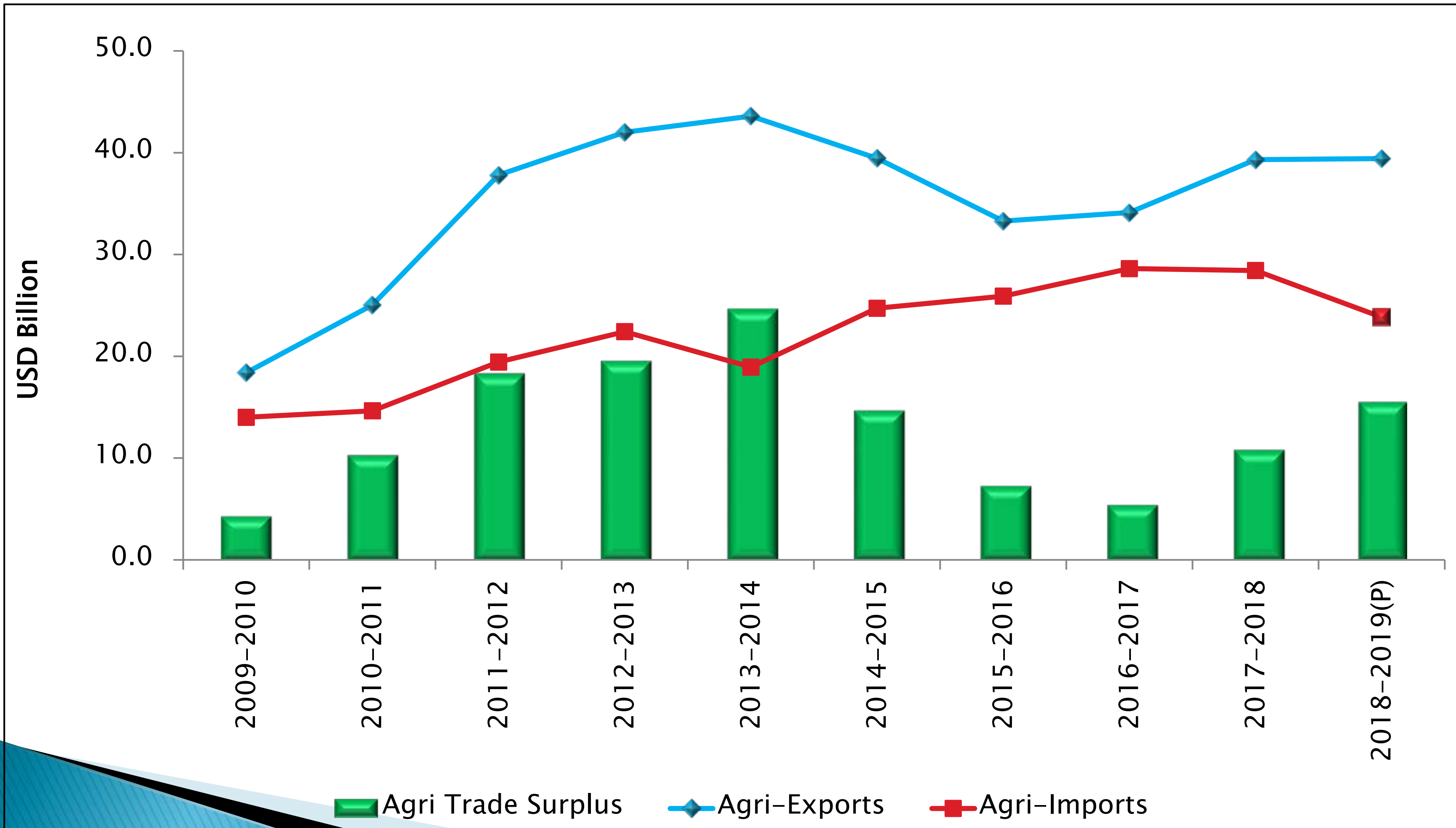
Implemenation of Swaminathan Formula?

- Skirted to 50 percent margin over Cost A2+FL…announced in the last year of Modi 1.0
- Cost A2+FL is about 38 percent lower than Cost C2
- Actual market prices remained 10–30 percent below announced MSPs…leading to shrinking margins

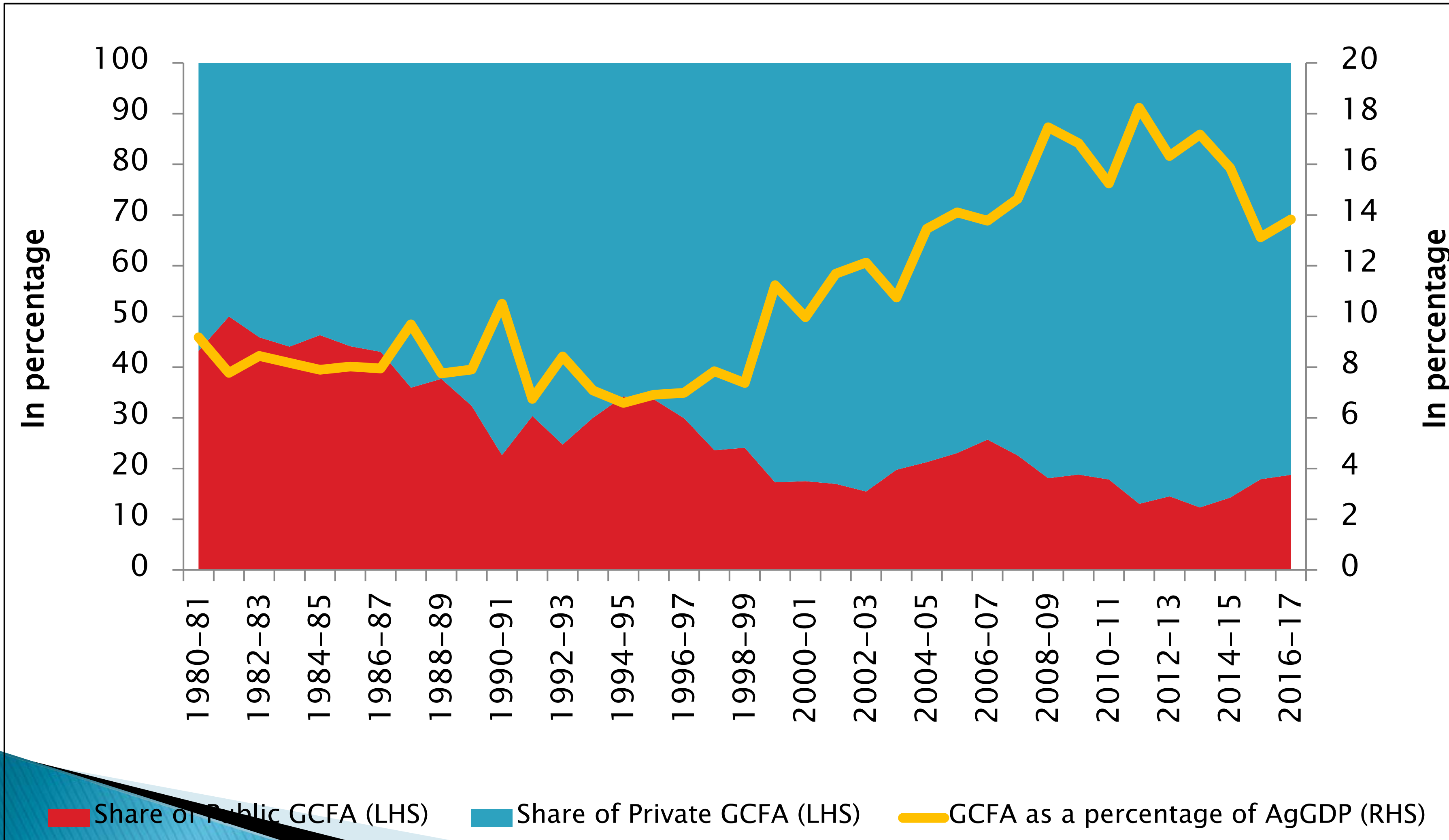
Performance: Growth trends–Overall and Agri–GDP
(Rao, Vajpayee, Manmohan, Modi)



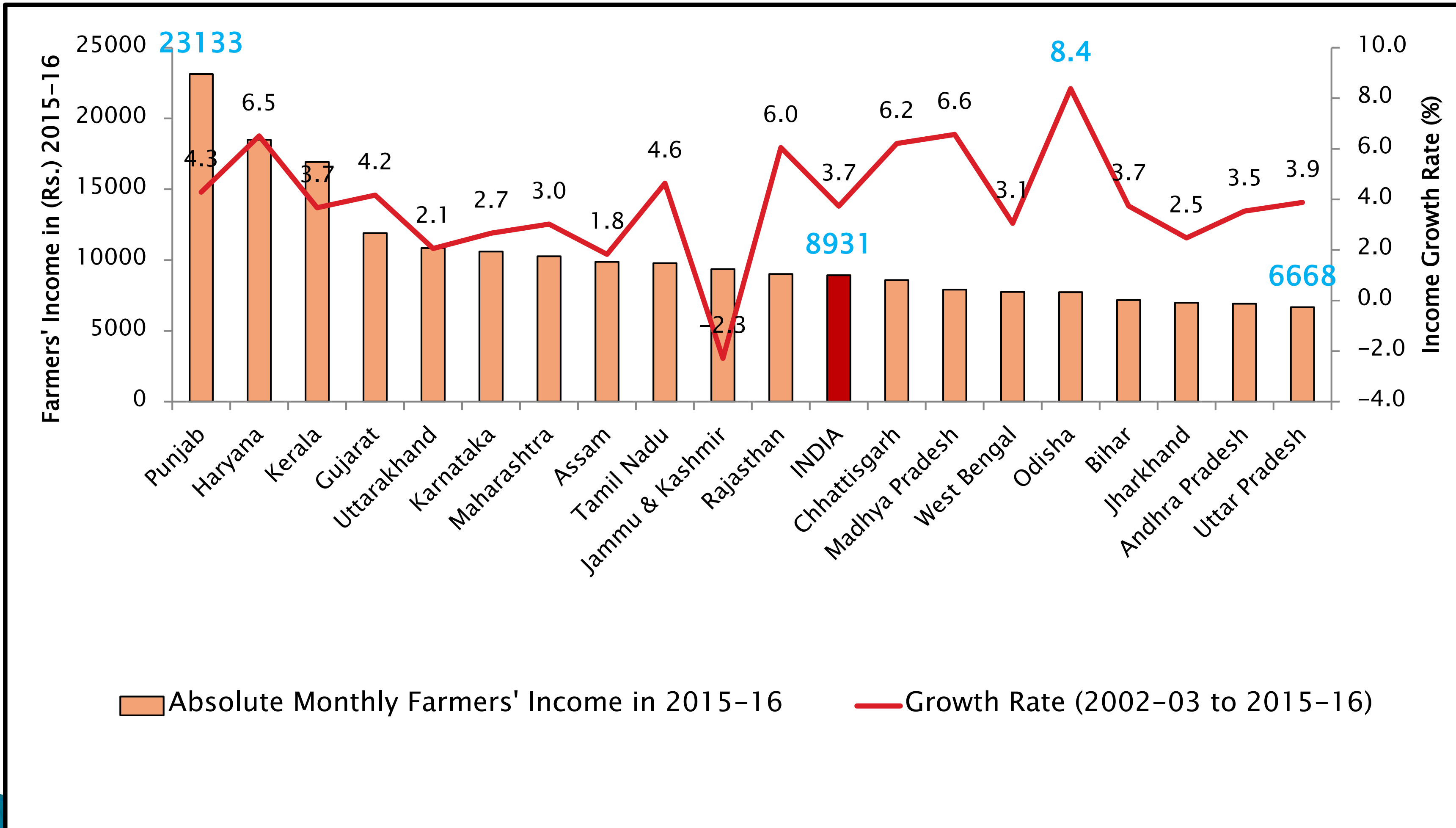
Agri-trade surplus declined sharply under Modi 1.0, though India still remains a net exporter



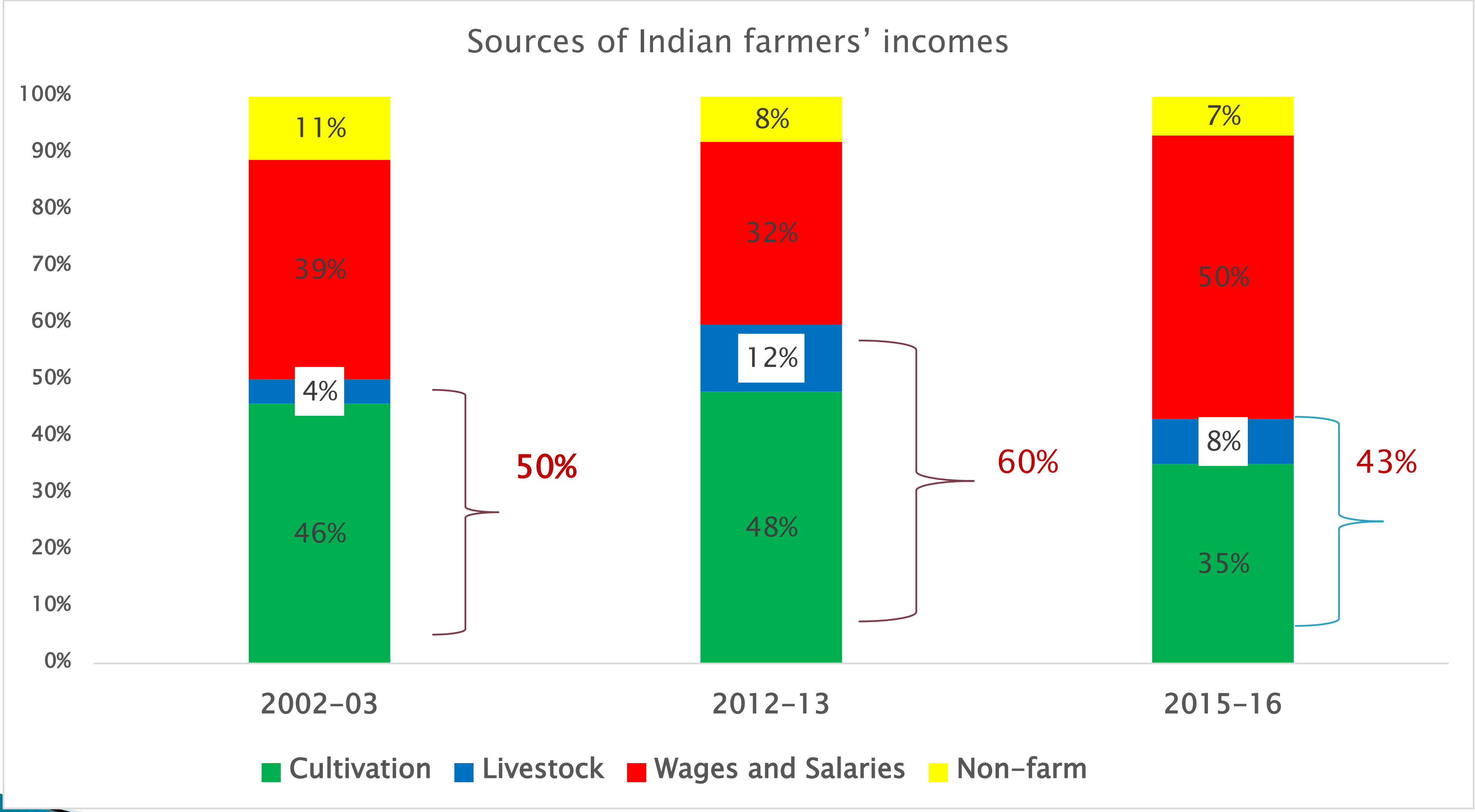
Sagging Gross Capital Formation in Agriculture as percentage of agri-GDP



Changing Goal post: Doubling farmers' income by 2022-23 (Level of Income of Agri-HHs (2015-16)-Nafis and growth rates in real Incomes (2002-03 to 2015-16)



Sources of farmers' incomes

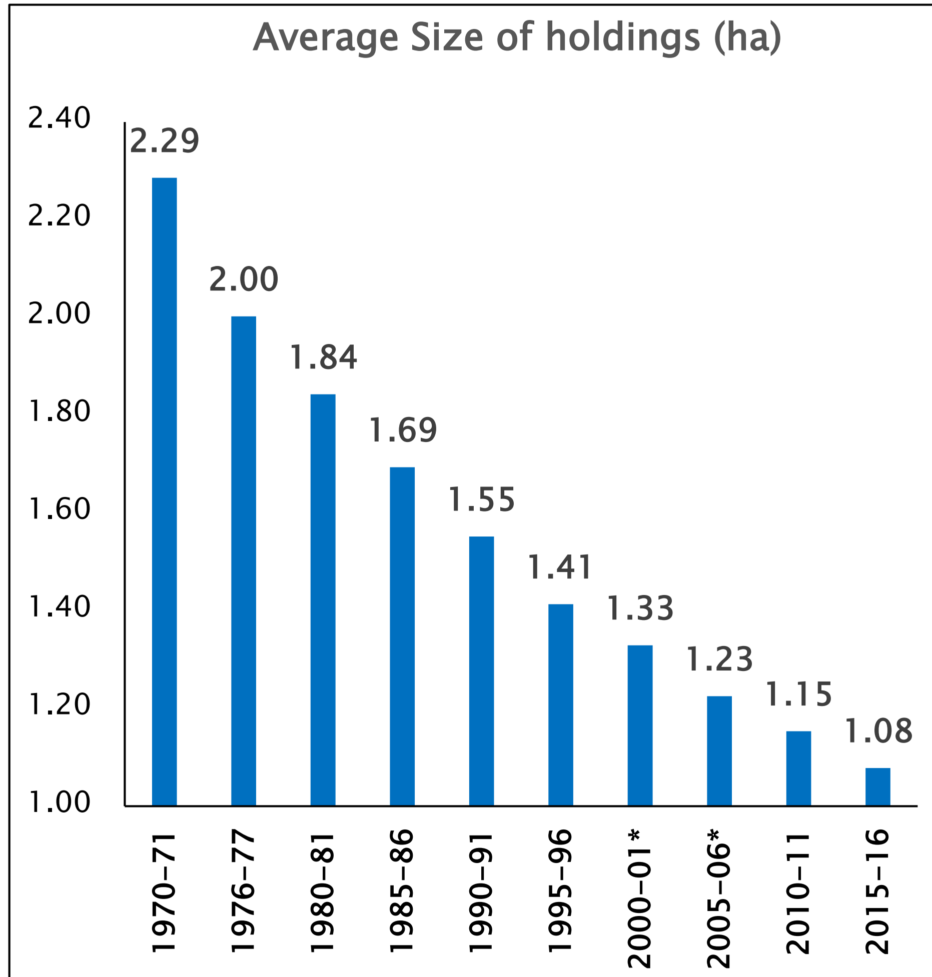


Likely future: 10-15 years

- India likely to surpass China's population of 1.44 billion by 2024;
- Overall GDP growth hovering around 7 percent;
- Increasing urbanisation: 600 million by 2030
- Demand pressures for more and better food, feed, fiber with limited land and depleting water tables
- agri-GDP will have to/can grow at 4-5 percent provided we undertake some fundamental reforms

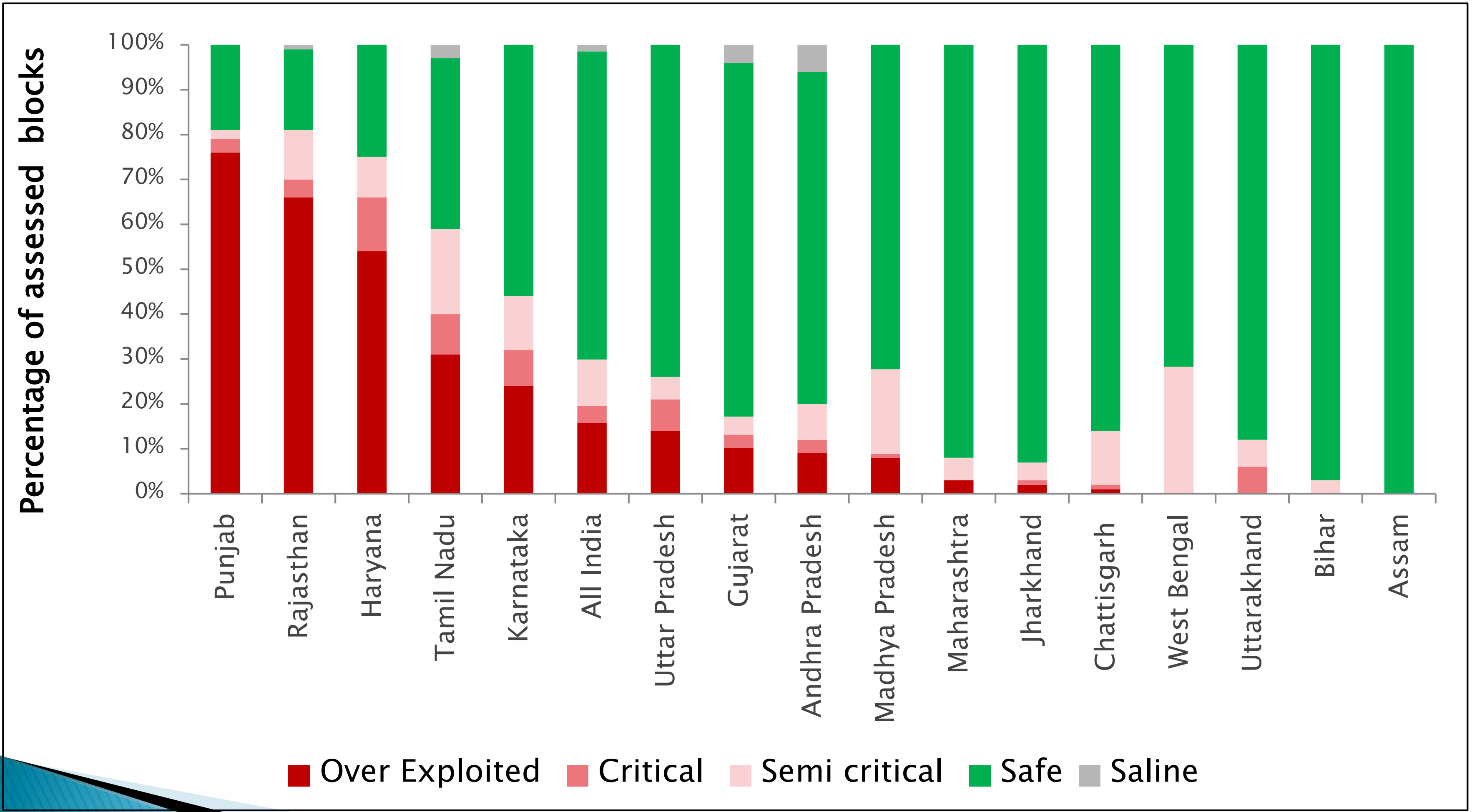
Challenge: Shrinking holding size & swelling bottom

- Number of agri-holdings more than doubled, from around 71 million in 1970-71 to 145.7 million in 2015-16.
- Average holding size fallen from 2.3 hectares in 1970-71 to 1.1 in 2015-16.
- In 2015-16, 86% of holdings were small and marginal (<2 ha) operating 47 percent area.



Source: Agricultural Census of India

Challenge of Climate change & Fast depleting groundwater (2013)



Source: CGWB, 2017

Basic challenge on Policy Front:

Dual (but conflicting) objectives of agri-food policies

Remunerative prices for **farmers**

Access to food to **consumers** at affordable prices

Regulation of Domestic Markets & MSP pricing (ECA, APMC, MSP etc.)

Budgetary payments (Input subsidies)

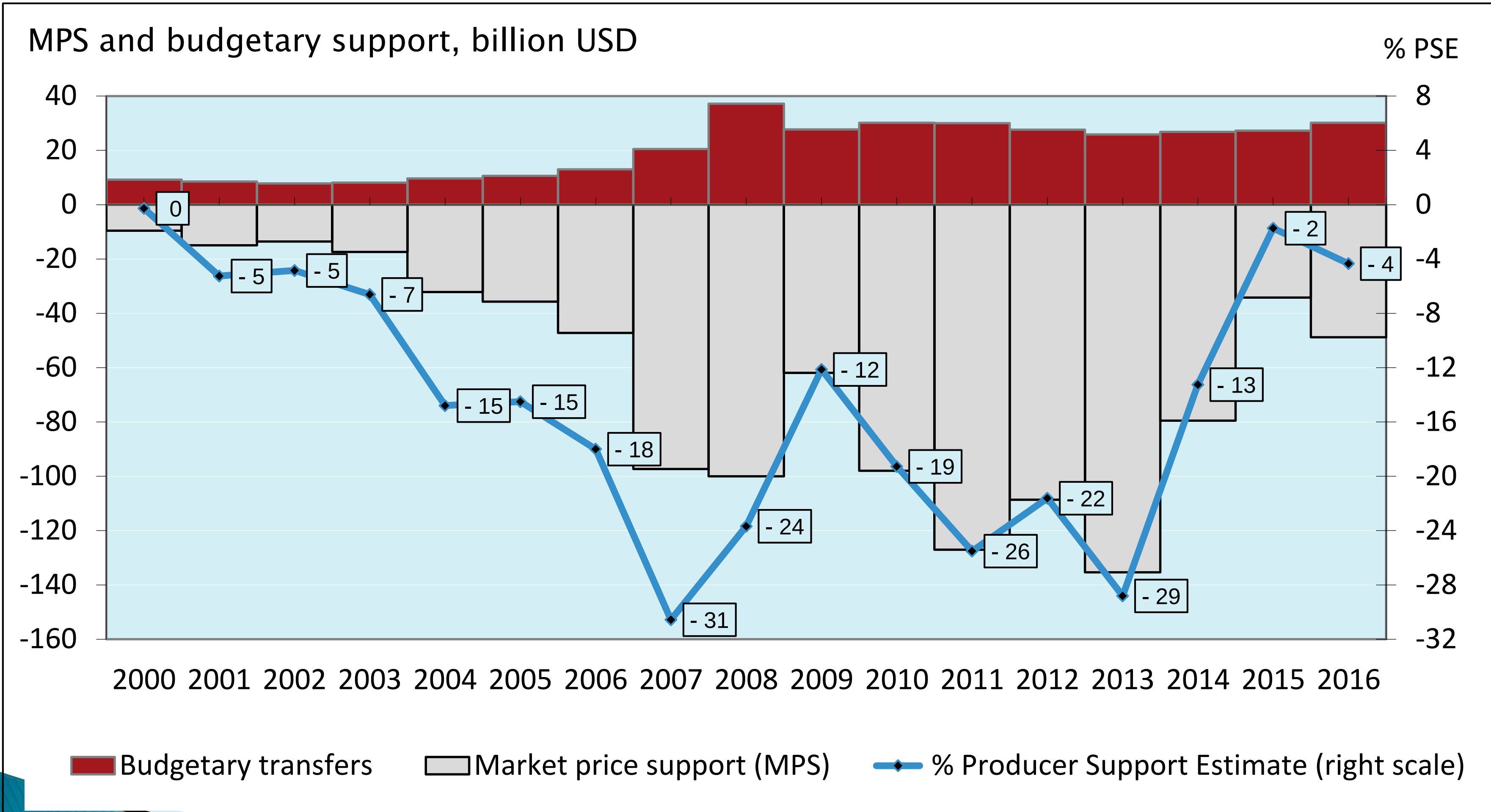
General Support Services

Food Subsidies

Net Effect: India taxes its farmers and subsidies its consumers (OECD/ICRIER, 2018)

Source: Gulati (2019)

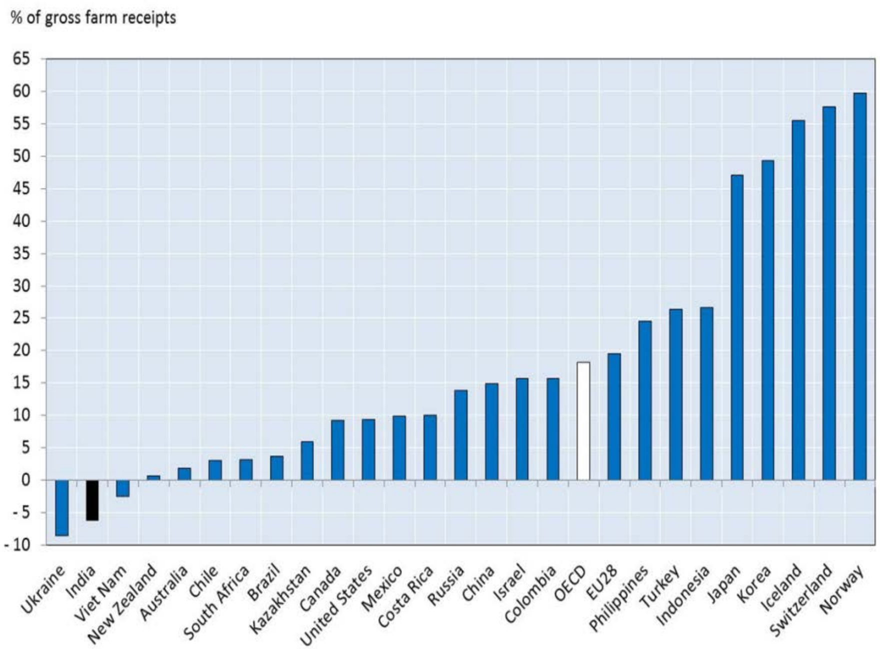
India "implicitly taxes" its agriculture…large input subsidies do not fully offset the effect of price-depressing policies (on average, taxation amounted to 14 percent of gross farm receipts, 2000-01 to 2016-17)



OECD/ICRIER Study, 2018

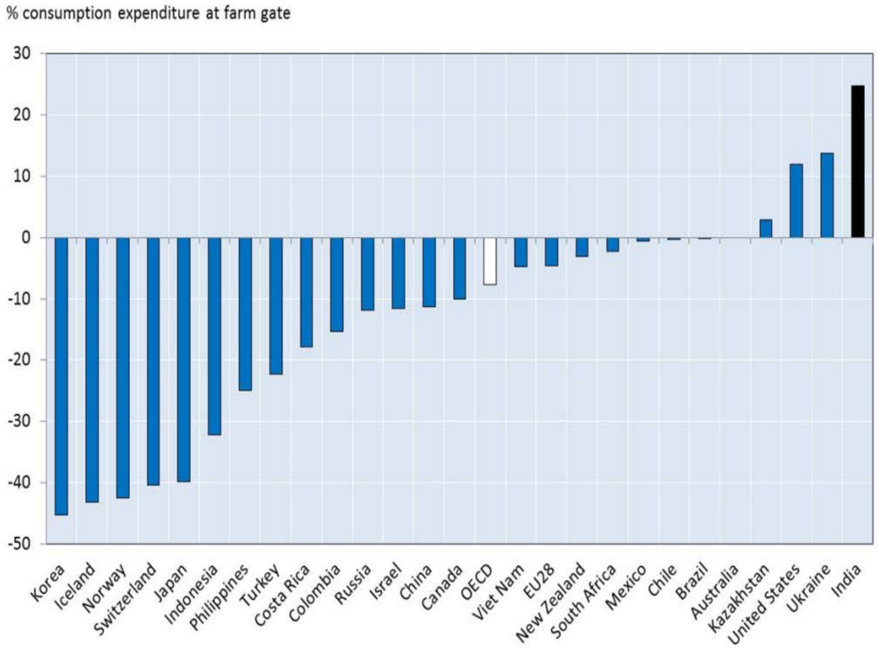
How does India compare with OECD and other emerging economies?

Producer Support Estimate (PSE): India taxes its farmers



Negative PSE in India as **producers receive prices below those on world markets**

Consumer Support Estimate (CSE): India heavily subsidises its consumers

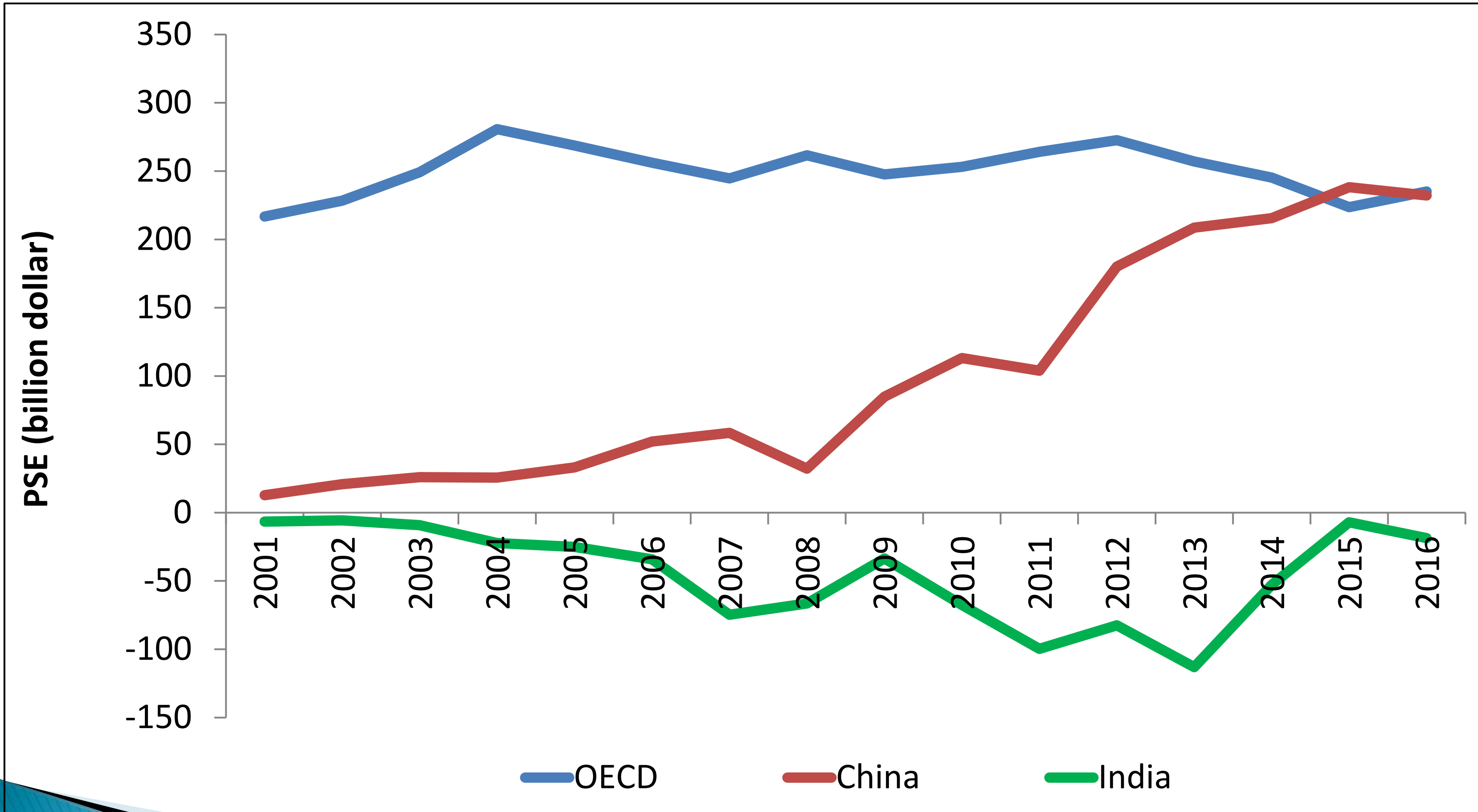


Policies that depressed farm prices together with food subsidies **reduced consumption expenditure** by 25% on average across all commodities

OECD/ICRIER Study, 2018

PSEs of India, China and OECD

(India implicitly taxes its agri thru restrictive trade and marketing policies)



OECD/ICRIER Study, 2018

Plundering of Indian farmers…

Cumulative loss of about USD 700 billion during 2000-01 to 2016-17

What the farmer is owed

Implicitly taxed through restrictive marketing and trade policies, farmers need a stable income policy

ASHOK GULATI

THE NARENDRA MODI government is entering its proverbial "last 10 overs". All the stops are being pulled to win over targeted segments of society that could potentially bring the BJP/NDA back to office.

One important segment, perhaps the largest one, is that of farmers. The attempt to woo them by announcing higher minimum support prices (MSPs) based on 50 per cent margin over paid out costs plus imputed value of family labour (cost A2+FL) has fallen flat on its face as market prices of most of those commodities remain 20 to 30 per cent below MSPs. Procurement by government agencies has been limited, as they already have overflowing stocks that they cannot offload without incurring massive losses. The meagre budgetary provisions under the PM's AASHA scheme to lift market prices have, therefore, failed to erase farmers' *nirasha* (gloom). In any case, as highlighted in my last article ('An answer to rural distress', IE, January 7), the MSP policy cannot reach more than 20 per cent of peasantry even with augmented procurement of pulses and oilseeds, and, therefore, cannot be a solution to farmers' distress.

The loan waiver, which the Congress president is promising, will also not benefit more than 30 per cent of the peasantry, who have access to institutional credit. Already, the bill from loan waivers announced by some state governments is touching about Rs 1.8 trillion (lakh crore). The policy of zero-interest on loans too is riddled with loopholes, leading to massive diversion of funds out of agriculture.

So, now, many state governments are trying to innovate with new ways of reaching the largest number of farmers. Telangana's Rythu Bandhu scheme, which gives Rs 4,000/acre to land-owning farmers for two seasons in a year, is costing the state exchequer roughly Rs 12,000 crore per annum. It appears to have reached more than 90 per cent farmers, and yielded political dividends. Many experts have criticised it, saying that it is pro-big farmers and neglects tenants.

The KALIA (Krushak Assistance for Livelihood and Income Augmentation) scheme of Odisha attempts to respond to this criticism and accordingly promises to include not only land-owning farmers (up to 5 acres) but also tenants and agri-labourers. While land-owning small and marginal farmers, 30.17 lakh in number, accounting for 92 per cent of farming households in Odisha, will get Rs 5,000/family for five seasons, the tenants and agri-labourers (estimated to be 10 lakh in number) who have no land records will get one-time payment of Rs 12,500/family, and vulnerable families (another 10 lakh) will get one-time payment of Rs 10,000/family. With some support for life insurance and interest-free loans up to Rs 50,000, the scheme is likely to cost about Rs 10,180 crore over three years. There is the major challenge of identifying who is a tenant and who is an agri-labourer, as tenancy is not legally allowed in Odisha. So, no legal records exist. Only time will tell how efficiently this identification is done. But given that it is just a one-time payment for them, it will have only a limited impact. Efforts are on to ensure that first payment is made in January 2019 itself.

It is important to track and evaluate the performance of these two schemes (Rythu Bandhu and KALIA) as they have not only important budgetary implications but are also a pointer towards a new policy innovation. West Bengal and Jharkhand are also moving in this direction, and media reports suggest that Centre too is contemplating a variant of a similar scheme. If it does so, it would indicate a tectonic shift in policy from promising higher MSPs or loan waivers to direct income/investment support to farmers. This shift will be better for the country as it is more predictable and less market distorting.

Macroeconomists and investors, however, are worried about how much this will cost. Will it be fiscally sustainable? What impact will it have on investments in due course? Will these election time "doles" do more harm in medium to long term? Is India not becoming a welfare state even before generating enough wealth? All these concerns are very legitimate and need some discussion. Let me elaborate.

In several pieces in this newspaper in recent months, I have indicated these are not "doles" but atonement for not reforming agriculture sector, especially its marketing and trade policies, which remain highly distorted, restrictive and pro-consumer, often at the cost of farmers. One of the key findings of a mega ICRIER-OECD study on agricultural policies in India (2018), which I co-lead with Carmel Cahill for more than two years, is that the producer support estimate (PSE) for India was minus (-) 14 per cent of gross farm receipts, on an average for the years 2000-01 to 2016-17. What this implies is that Indian farmers have been "implicitly taxed" through restrictive marketing and trade policies that have an in-built consumer bias of controlling agri-prices.

If one calculates the sum involved in this "implicit taxation", it amounts to Rs 2.65 trillion (lakh crore) per annum, at 2017-18 prices, for 2000-01 to 2016-17. Cumulatively for 17 years, this comes to roughly Rs 45 trillion at 2017-18 prices. No country in the world has taxed its farmers so heavily during this period. This is nothing short of plundering of farmers' incomes. Until India reforms its agri-marketing laws and frees agri-markets, it is time to atone through a structured and stable income policy for farmers for at least the next five years.

It may be worth noting that the PSE methodology is a standard one that OECD adopts for 52 major countries that produce more than three-fourths of the global agri-output. And these numbers have gone through a rigorous review by OECD members and others at a global level and are now in the public domain.

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Gulati is Infosys Chair Professor for Agriculture at ICRIER

The Indian EXPRESS Mon, 21 January 2019 epaper.indianexpress.com/c/35969584

● FROM PLATE TO PLOUGH

ACCORDING TO AN ICRIER-OECD STUDY, FARMERS GOT 14% LESS INCOME— AND THAT IS AN EFFECTIVE TAX—BY NOT BEING ALLOWED TO SELL AT MARKET PRICES BETWEEN 2001 AND 2017

Over ₹45 lakh crore plundered from farmers

ASHOK GULATI

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THE MODI GOVERNMENT is entering its proverbial phase of the 'last ten overs' before the Election code of conduct kicks in. All plugs are being pulled off to win over the targetted segments of society who could potentially bring BJP/NDA back to power.

One important segment, perhaps the largest one, is that of farmers. Attempts to woo them by announcing higher minimum support prices (MSPs) based on 50% margins over paid out costs plus imputed value of family labour (cost A_2+FL) have fallen flat on its face as market prices of most of those commodities remain 20-30% below MSPs. Procurement by government agencies has been limited as they already have overflowing stocks that they cannot offload without incurring massive losses. The meagre budgetary provisions under PM's AASHA scheme to lift market prices have therefore failed to erase farmers' *nirasha* (gloom). In any case, as highlighted in my last piece (*bit.ly/2HiWcJg*), MSP policy cannot reach more than 20% of peasantry even with augmented procurement of pulses and oilseeds and, therefore, cannot be a solution to farmers' distress.

The loan waiver, which the Congress president is promising, will also not benefit more than 30% of peasantry, who have access to institutional credit. Already, the bill of loan waivers for the state governments that have announced loan waivers is touching about ₹1.8 trillion (lakh crore). The policy of zero interest on loans, too, is fraught with loopholes leading to a massive diversion of funds out of agriculture.

So, now, many state governments are trying to innovate with new ways of reaching the largest number of farmers. The Rythu Bandhu scheme of Telangana that involves the giving of ₹4,000/acre to land owning farmers for two seasons in a year is costing roughly ₹12,000 crore per annum to the state exchequer. It seems to have reached more than 90% of farmers, and has given good political outcomes. Many experts have criticised it saying that it is for big farmers and neglects tenants.

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Until India structurally reforms its agri-economy, a stable income policy for farmers is required, for at least the next five years

It is important to track and evaluate the performance of these two schemes (Rythu Bandhu and Kalia) as they have not only important budgetary implications, but are also a pointer towards a new policy innovation. West Bengal and Jharkhand are also moving in this direction, and media reports suggest that the Centre, too, is contemplating some variant of the scheme. If indeed it does so, it would indicate a tectonic shift in policy from promising higher MSPs or loan waivers to direct income/investment support to farmers. This shift will be better for the country as it is more predictable and less market distorting.

Macroeconomists and investors, however, are worried how much it would cost. Will it be fiscally sustainable? What impact will it have on investments in due course? In brief, will these election time 'doles' do more harm in the medium- to long-term? Is India not becoming a welfare state even before generating enough wealth? All these concerns are very legitimate and need some discussion. Let me elaborate.

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THE FINANCIAL EXPRESS Mon, 21 January 2019 epaper.financialexpress.com/c/35966564

Attempts to change…Output pricing

Pradhan Mantri Annadata Aay Sanrakshan Abhiyan (PM-AASHA)

Price Support Scheme (PSS)	• To ensure physical procurement of agri-commodities
Price Deficiency Payment Scheme (PDPS)	• To compensate for the difference between MSP and selling/modal price • **Case Study: Bhavantar Bhugtan Yojana (BBY) – Government of Madhya Pradesh**
Pilot of Private Procurement and Stockist Scheme (PPPS)	• To allow private agencies to procure commodities at MSP whenever market prices fall below notified MSP

Policies and Innovations needed

- Free up agri-markets, remove in-built consumer bias
- Produce more with less- towards precision farming, especially to save water
- Uberization of farm machinery; open up land lease markets
- Shift from price policy to income policy approach; rationalise subsidies and invest in agri-R&D, and shift focus from tonnage centric to farmer centric

Innovations on the horizon… Transforming Agriculture

Wheat & Rice – Bio-fortification (from food to nutritional security)

Milk – Selective Sexed Semen Technology

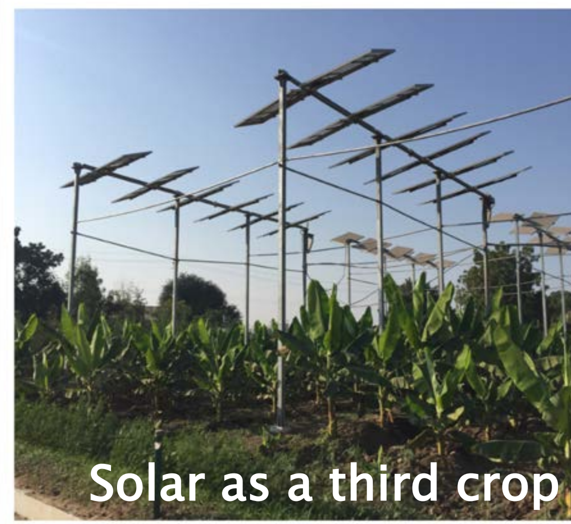
Fisheries– Cage Farming & Shrimp cultivation

Poultry – Vertically integrated operations for commercial & Low-input technology for backyard

Cotton – Bollgard II with Herbicide Tolerance(Monsanto)

Fruits & Vegetables – Entry of startups in post harvest management & processing

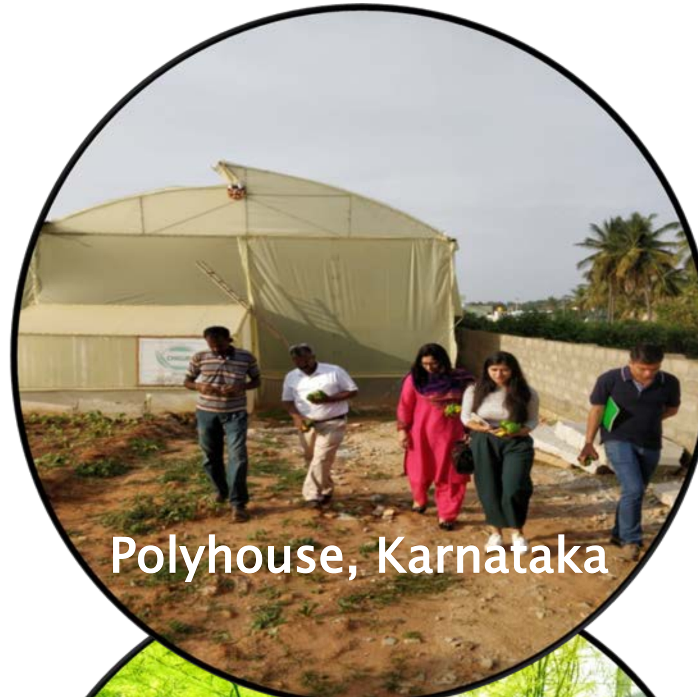
Innovations in water management: more crop per drop (about 10 m ha under micro irrigation)



Innovations in Farm Mechanization – Custom Hiring and Uberization Model

- **Based on 'pay as per use' principle:** Efficient use of capital with small-holder economy
- **Govt. subsidy @ 40%** under Sub-Mission on Agricultural Mechanization (SMAM) Scheme: 1420 CHCs as on 2017-18
- **Uberization Model:** Privately driven by companies like Trringo (Mahindra & Mahindra); EM3 Agri services; TAFE, FarMart, Claro energy etc.

Innovations in Protected Agriculture



Globally, Innovations in Precision Agriculture unleashing…can India catch up fast?

Precision Technologies	What they do
Geographical Information System (GIS) (guidance systems)	Efficient field coverage, reduce fuel and other input costs
Sensors (Yield, Nitrogen, Moisture)	Facilitate variable rate application of inputs
Unmaned Aerial Vehicles (UAV's)/Drones	Surveillance, imagery, spraying pesticides
Artificial Intelligence	Machine learning for assessing real time information
Big Data, Internet of Things	Analysis of data collected on field, facilitates planning

Innovations in Budgetary Transfer policies

Direct Income Transfer – A tectonic shift in incentives

PM KISAN (Govt. of India)	Rs 6000 per year to small & marginal farmer families (upto 5 acres)
Rythu Bandhu (Govt. of Telangana)	Rs 4000 per acre, per season, to farmers (landowners) for FY 2018-19
KALIA (Govt. of Odisha)	Rs 5000 per farm family (small & marginal) per cropping season for 2018-20*
Mukhyamantri Krishi Aashirwad Yojana (Govt. of Jharkhand)	Rs 5000 per acre per year to 22.76 lakh poor and marginal farmers (upto 5 acres)
Krishak Bandhu Scheme (Govt. of West Bengal)	Rs 5000 (upto 1 acre) per year*

* Scheme has other components also

Concluding Remarks

If we get our policies right, agriculture can still give the best results…

- **Only three policy changes:**

- Setting the output, input and factor markets free
  - pruning of ECA & APMC laws; tappig e-commerce; opening land lease markets

- Rationalisation of subsidies, increase investments & **shift towards Direct Income Transfers**

- **Encourage Innovations in Production Technologies to give more from less in a sustainable manner (Raise TFP)**