

AGRICULTURE

Fourth Advance Estimates of Crop Production 2017-18

- As per the 4th Advanced estimates, foodgrain production is estimated to increase by 3.53% in 2017-18 over previous year to 284.83 Million Tonnes (MT) (Table 1).
- Production of rice is expected to increase by 2.92% to 112.91 MT and production of wheat is estimated to increase marginally by 1.2% to 99.70 MT.
- Production of pulses is estimated to increase by 9.38% to 25.3 MT.

Table 1 : Production of Foodgrains (MT)

Crop	2015-16	2016-17	2017-18 (4 th AE)
Rice	104.41	109.70	112.91
Wheat	92.29	98.51	99.7
Coarse Cereals	38.52	43.77	46.99
Pulses	16.35	23.13	25.23
Total Foodgrains	251.57	275.11	284.83

Source: 4th AE, Department of Agriculture, Cooperation & Farmers Welfare

- Production of sugarcane is estimated to increase by 22.8% to 3760.9 lakh tonnes (Table 2). Cotton production is estimated to increase by 7.1%.
- Production of Oilseeds is estimated to increase marginally by 0.1% to 313.1 lakh million tonnes.
- Production of Jute & Mesta is expected to decline by 7.4% to 101.4 lakh tonnes.

Table 2 : Production of Commercial Crops (Lakh Tonnes)

Crop	2015-16	2016-17	2017-18 (4 th AE)
Oilseeds	252.51	312.76	313.1
Cotton ^{\$}	300.05	325.77	348.9
Jute & Mesta [#]	105.24	109.62	101.4
Sugarcane	3484.48	3060.69	3760.90

Note: \$ Lakh bales of 170 Kgs each

Lakh bales of 180 Kgs each

Source: Department of Agriculture, Cooperation & Farmers Welfare, GoI

Third Advance Estimates of Horticulture Production 2017-18

- As per the 3rd advanced estimates of horticulture crops, horticulture production in the country is estimated to be 306.8 million tonnes during 2017-18, which is 2.05% higher than 2016-17 (Table 3)
- Production of fruits is estimated to increase by about 4.5% to 97 million tonnes.
- Production of vegetables is estimated to be about 179.7 million tonnes, which is about 0.9% higher than previous year.

- Onion production in the current year is likely to be around 22 million tonnes, as against 22.4 million tonnes in 2016-17.

Table 3 : Production of Horticulture Crops (MT)

Crop	2015-16	2016-17	2017-18 (4 th AE)
Fruits	90	93	97
Vegetables	169	178	179.7
Onion	20.9	22.4	22
Potato	43.4	48.6	48.5
Tomato	18.7	20.7	19.4
Total Horticulture Crops	286	300.6	306.8

Source: 3rd AE, Department of Agriculture, Cooperation & Farmers Welfare

- Potato production is estimated at 48.5 million tonnes, as against 48.6 million tonnes in 2016-17 thereby declining by about 0.2%
- Tomato production in the current year is likely to be around 19.4 million tonnes, as against 20.7 million tonnes in 2016-17.

LEVERAGING FOOD SYSTEMS FOR INCLUSIVE RURAL TRANSFORMATION

The *State of Food and Agriculture (SOFA)* report (2017) released by Food and Agriculture Organisation of the United Nations, emphasises encouraging agro-industrial development and strengthened rural-urban linkages as a mechanism for livelihood promotion in rural areas.

In developing countries, such as India, where industrialisation is lagging, providing meaningful employment to ever-expanding youth population in order to reap the benefits of demographic dividend will be a challenge in the coming years. Another crucial aspect that needs attention is the migration of rural population due to various 'push-factors' prevailing in rural India.

One mechanism to address these issues is to encourage food industries. Since food processing tends to be more labour-intensive and labour productivity is above average in the manufacturing sector, the food and beverages subsector has high potential for generating non-farm employment. Their expansion requires a balanced mix of infrastructure development and policy interventions in the form of agro-corridors, agro-clusters, agro-industrial parks, etc.

(Watch this space for more on SOFA 2017 in the forthcoming issues of EcoThink)

Source : <http://www.fao.org/3/a-i7658e.pdf>

ECONOMY Inflation

- **Consumer Price Index (CPI)** based inflation reduced to 3.69% in August 2018 from 4.17% in July 2018 (Chart 1), as against 3.28% in August 2017.
- Core CPI inflation moderated to 5.87% in August 2018, compared to 6.29% in July 2018.
- The main driver of reduced inflation was the declining food and beverages component. Inflation rates for all other components, except the fuel and light component, have also declined.
- In the miscellaneous group of the CPI, all components saw a decline in prices except the education sub-component.
- Rural inflation reduced to 3.41% in August 2018 from 4.11% in July 2018.
- Urban inflation reduced to 3.99% in August 2018 from 4.32% in July 2018.
- As seen in chart 3, there are 5 states and UTs (down from 7 in July 2018) where rural population faces higher prices compared to the urban population, i.e., rural inflation exceeds urban inflation.
- Consumer Food Price (CFP) inflation in August 2018 reduced to 0.29% from 1.30% in June 2018 (Chart 2). Urban CFP inflation was negative.
- Prices of pulses continued to decline for the 21st month in a row, with inflation at -7.76% in August 2018. This is despite the hikes in MSP announced earlier this year.
- **Wholesale Price Index (WPI) inflation** stood at 4.53% for the month of August, 2018 as compared to 5.09% for the previous month and 3.24% during August 2017.

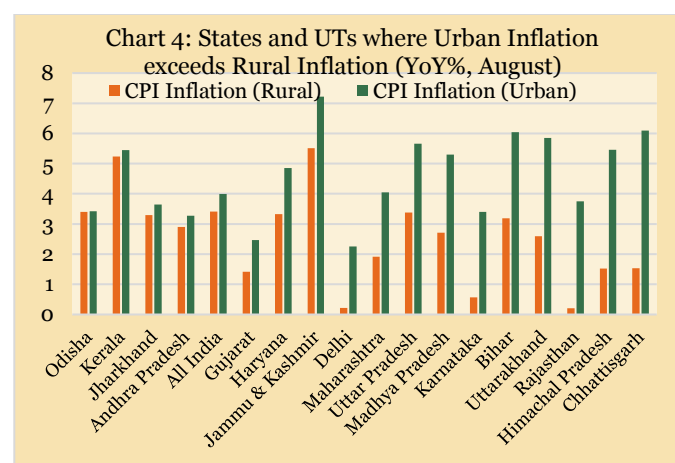
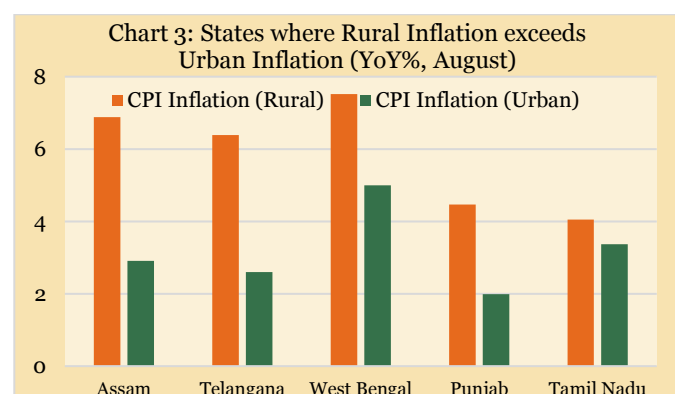
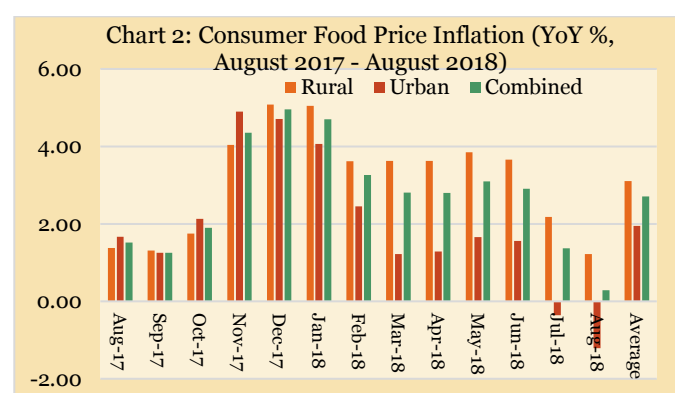
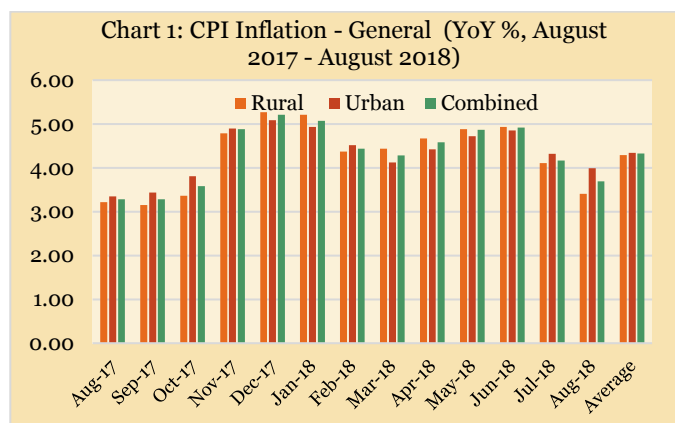


Table 4 : Ratios & Rates (%)		
	18 August 2017	17 August 2018
CRR	4.00	4.00
SLR	20.00	19.50
Credit-Deposit Ratio	72.20	75.35
Investment-Deposit Ratio	31.04	30.48
Incremental I-D Ratio	*	224.05
Policy Repo Rate	6.00	6.50
Reverse Repo Rate	5.75	6.25
MSF/ Bank Rate	6.25	6.75
Base Rate	9.0/9.55	8.75/9.45
MCLR (Overnight)	7.75/8.10	7.90/8.05
Call Money Rate (Weighted Avg.)	5.85	6.39
10-year G-Sec Par Yield (FBIL)	6.62	7.85

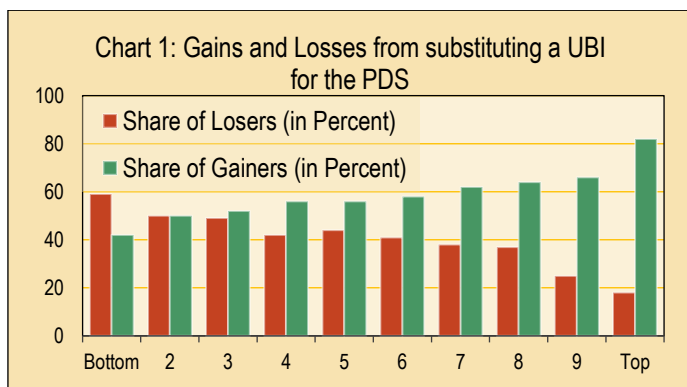
*denominator negative Source: RBI Weekly Statistical Supplements, August 24, 2018 and September 21, 2018

Source (Charts 1,2,3,4): MoSPI, GoI www.mospi.nic.in

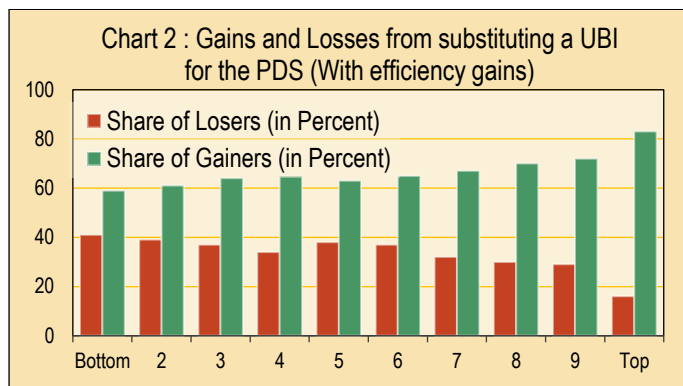
REPORT  **THINK**

This month's Report Think covers an IMF Working Paper on "Universal Basic Income in developing Countries: Issues, Options and Illustration for India". The research paper uses the National Sample Survey (NSS)-2011-12 data to analyse the impact of replacing the existing Public Distribution(PDS) system with Universal Basic Income(UBI). It also estimates the impact of replacing energy subsidies with UBI on households. Major findings of the study are listed below:

- Replacement of the PDS with a UBI would help in addressing the under-coverage of low income households under the former, but this gain would come at the expense of a slight increase in leakage of benefits to higher income groups.
- Using the 2011–12 National Sample Survey (NSS) data, the researchers estimate that on replacing the PDS with a UBI, 50 percent of households, on average, in the bottom four income deciles would face a 6 percent welfare loss, while the other 50 percent would gain 3 percent. (Refer to Chart 1)



- However, to the extent that the elimination of the PDS would also eliminate its inherent operational inefficiencies, and that these result in public expenditure savings, these savings could be returned to households as a more generous UBI and this in turn would help to mitigate the losses incurred by some households in lower income deciles, reducing the number of losers in the bottom four income deciles to around 33% percent (Refer to Chart 2).



- The losses could also be further reduced by relaxing the objective of universality by somehow excluding the top income groups from the UBI. For example, reallocating UBI transfers going to households in the top three income deciles, on top of the efficiency gains, would reduce the proportion of losers in the bottom four deciles from an average of 50 to 22 percent.
- On the other hand, replacing inefficient energy subsidies—raising domestic energy prices to efficient levels—would deliver unambiguous distributional gains as well as strong incentives for improving energy efficiency with the associated environmental and health gains.
- Energy subsidies are an extremely inefficient way of providing income support to the poor. Richer households benefit disproportionately from these subsidies reflecting that they consume a relatively high share of total energy consumed: while households in the bottom four income deciles receive 17 percent of total energy subsidies, households in the top four income deciles receive 69 percent.

Conclusion

Replacing these subsidies with a UBI in a budget neutral way would therefore result in a substantial redistribution of benefits from higher to lower income groups. While over 90 percent of households in each of the bottom four income deciles gain from the switch to a UBI, the losses of the 2% of households can be reduced if these households can reduce consumption of goods with relatively high price increases (including reducing wasteful use of energy).

¹<https://www.imf.org/en/Publications/WP/Issues/2018/07/31/Universal-Basic-Income-in-Developing-Countries-Issues-Options-and-Illustration-for-India-46079>

RESEARCH THINK

This month's Research Think covers a study by Dr. Ashok Gulati, Dr. Marco Ferroni and Dr. Yuan Zhou. In their recent book entitled 'Supporting Indian Farms the Smart Way', they have highlighted the need to urgently shift emphasis from input subsidies to public investments in the agricultural sector, as a smarter way of improving the state of agricultural sector in India. The major highlights of the study are as follows:

- The main policy instruments used for supporting Indian farms remain that of subsidising key farm inputs (such as fertilisers, power for irrigation, canal waters, agricultural-credit and crop insurance) on one hand, and minimum support prices (MSP) for major (23) crops, on the other. However, these policy measures have had some unintended undesirable consequences.
- Large increases in fertilizer consumption, often driven by highly subsidized fertilizer prices, especially urea, have inflicted significant costs as unduly low pricing of urea has led to imbalanced use of soil nutrients. This has resulted in soil degradation and deficiency of secondary macronutrients in soil. Similarly, subsidy on water for agriculture has resulted in inefficient usage of water resource in India (for both surface and ground water). This does not augur well for sustainability of Indian agriculture.
- The rapidly rising input subsidies to agriculture have squeezed public investments in agriculture. The trend shows that public investments in agriculture as a percentage of agricultural GDP has declined from 3.9 percent in 1980-81 to 2.2 percent in 2014-15, while input subsidies as a percentage of agricultural GDP have increased from 2.8 percent to around 8 percent over the same period.

- To understand the ideal strategy of public expenditure in order to attain higher agricultural-GDP growth or reduce poverty faster, an empirical exercise was conducted to estimate the impact of subsidies versus public investments on agricultural growth and poverty reduction.
- The results of the modeling exercise reveal that the marginal returns in terms of number of people brought out of income poverty or higher agricultural GDP growth are almost 5 to 10 times more if the public money is spent through investment in agricultural-R&D, or roads, or irrigation, etc compared to if the same money is spent as subsidies.

Table 5 : POVERTY EFFECTS OF GOVERNMENT INVESTMENT AND SUBSIDIES

	Number of People Brought out of Poverty per Rs million spent
Agri-R&D	328
Roads	130
Education	42
Fertiliser Subsidy	26
Power Subsidy	23
Irrigation	10

Source: Gulati,A, Ferroni,M and Zhou,Y (2018) Supporting Indian Farms the Smart Way

Table 6 : GROWTH EFFECTS OF GOVERNMENT INVESTMENT AND SUBSIDIES

	Returns in GDPA per Rs. Spent
Agri-R&D	11.2
Roads	1.10
Education	0.97
Fertiliser Subsidy	0.88
Power Subsidy	0.79
Irrigation	0.31

Source: Gulati,A, Ferroni,M and Zhou,Y (2018) Supporting Indian Farms the Smart Way

- The results indicate that, there is a strong case to increase investments in agriculture and contain input subsidies for faster alleviation of poverty and boosting growth in agricultural-GDP. Since all the changes cannot happen in one go, authors recommend steadily prioritising investments, rationalizing and converting subsidies into direct income transfers and invest in changing requirement of modern agriculture, especially agriculture-R&D.

Source: ICRIER Website (Accessed from http://icrier.org/pdf/Supporting_Indian_Farms_the_smart_way.pdf)