

**WEALTH INEQUALITY IN INDIA ACROSS STATES DECLINED FROM 2019-21: PROCUREMENT & FREE DISTRIBUTION OF RICE & WHEAT ARE HAVING A PROFOUND IMPACT, PARTICULARLY FOR THE LOWEST WEALTH QUINTILES FOR LOW INCOME STATES**

Issue No. 53, FY23

Date: 09 Jan 2023

Notwithstanding India witnessing a sharp recovery post pandemic on most counts, critiques are still quoting a K-shaped recovery for India. According to Peter Atwater, a lecturer at Virginia-based William and Mary University, who popularized the term, a "K-shaped recovery" could be described as "stacked inequity on one side and stacked privilege on the other".

Though it is true that the strong rise in financial assets resulted in an increase in inequality in 2021. However, when correlated with short-run asset price movements, such fluctuations in inequality always prove transient. In 2022, asset prices have fallen already and a reversal of the 2021 trend can be expected. Importantly, according to Global Wealth Report 2022, a detailed analysis of median wealth within countries and across the world shows that **global wealth inequality has fallen this century due to faster growth achieved in emerging markets**. The average household has thus been able to build up wealth over the last two decades.

**Interestingly, studies in India have revealed (Gupta et. all, NBER, Dec 2021) that inequality declined during the pandemic.** In fact, the NBER study concludes that there was decline in income of the rich attributable to the high sensitivity of business income to aggregate fluctuations. Thus, in hindsight, the pandemic may have been a leveller in terms of inequality with the poor getting protected through measures such as food transfers. Bhalla et al, IMF WP 2022 concluded that pandemic support measures by government of India were critical in preventing extreme poverty in India and thereby prevented rise in inequality, with food transfers.

**Taking a cue from wealth distribution, we went a step further to test the hypothesis of how the free food grain distribution is impacting the distribution of wealth on population quintiles for the poorest of the poor, we did the following exercise.**

Data on Gini Coefficient was taken from the percentage distribution of the de jure population by wealth quintiles, according to residence and state/union territory, India, 2019-21, provided by National Family Health Survey (NFHS - 5), 2019-21. We analyzed the impact of share of Rice procurement (*since Rice is still the stable food for most of the people in India*), on Gini Coefficient for 20 States. We further analyzed the impact of share of wheat procurement on Gini Coefficient for 9 States.

**Our results show that relatively laggard states in terms of unequal distribution of wealth across different population quintiles, Rice Procurement and Wheat procurement in such states had a significant impact on reducing inequality through reduction in Gini coefficient. These states were Assam, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Uttar Pradesh, Uttarakhand and West Bengal . The impact of Rice and Wheat Procurement on % population for Lowest and Second quintiles of wealth, revealed a sharp decline in the percentage population in such quintiles of the population.**

**We believe there are 2 ways in which the procurement of cereals are lowering inequality.**

*First, a higher procurement, is benefitting the poorest of the poor in terms of subsequent free distribution of food grains.*

*Second, the procurement may have also put money into the hands of smaller and marginal farmers, with distributional impact. This also shows that the procurement of cereals of the Government over time may have become more efficient across states.*

**Interestingly, with food being provided free under NFSA, the cost actually paid by the households for the quantity obtained from the PDS will be zero. This lower of demand of cereals at market prices will concomitantly lower the mandi prices of cereals and this will have a sobering impact on the CPI food inflation.**

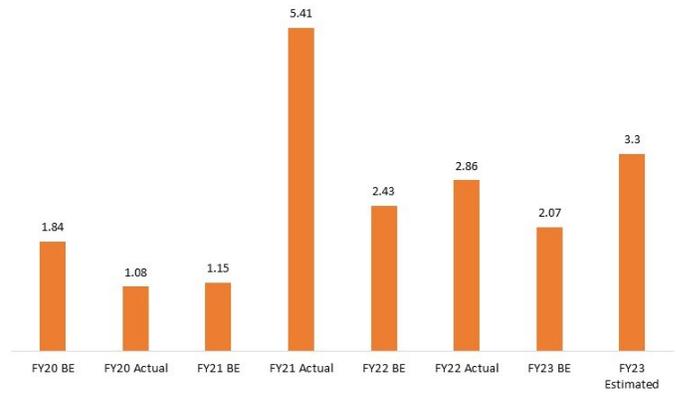
**We also find that several Government transfer payments for the poor are adding Rs 75,000 to a household per annum.**

Our results clearly substantiate that in the Indian context, it is an incorrect conjecture to assume that inequality has worsened during pandemic. **With a progressive growth in output across states as proxied by GSDP, it is clear that the fruits of such a growth have clearly reverberated and dovetailed into an inclusive growth. India has thus done quite well during pandemic in terms of navigating income shocks across deciles of population.**

**PRADHAN MANTRI GARIB KALYAN YOJANA (PMGKAY) MERGED WITH NATIONAL FOOD SECURITY ACT (NFSA): WIN-WIN FOR ALL THE STAKEHOLDERS**

- ◆ The Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) was introduced by the Central Government during the first nationwide lockdown due to Covid-19 in March 2020. Under this scheme, the center provided 5kg of free food grains per month to the poor.
- ◆ This was over and above the food grain allocated at 5 kg per person per month for the priority households (PPH) category and 35 kg per family per month for Antodaya Anna Yojna (AAJ) families at a subsidised prices of Re 1, Rs 2, and Rs 3 per kg for coarse cereals, wheat, and rice, respectively under the National Food Security Act (NFSA) to families covered under the Public Distribution System (PDS).
- ◆ The PMGKAY scheme was extended several times and now central Government has approved to end the scheme with effective from 01 Jan'23 and merged with NFSA.
- ◆ The NFSA scheme will now provide free ration of 5 kg food grains per person to PHH beneficiaries and 35 kg per household to Antyodaya Anna Yojana (AAJ) beneficiaries (poorest of the poor), which will benefits 81.35 crore beneficiaries.
- ◆ The central pool of stocks is the lowest in five years as on December 1, 2022. According to the latest data from FCI, the stock was at 19.02 million tonnes, which was the lowest since December 2016. However, it is higher than the buffer requirement of 13.8 million tonnes, which the government needs to maintain for ensuring food security. So, this move will ease the subsidy burden along with the pressure on food grain stocks under central pool.
- ◆ Further, Government's paddy procurement for the central pool rose 9.58% to 541.90 lakh tonne so far (till 31.12.2022) in the ongoing 2022-23 kharif marketing season and the government aims to procure 775.72 lakh tonne of paddy in ongoing season (October-September). Procurement of wheat next season would commence from April 2023 and increase in MSP coupled with fairly good climatic conditions, it is expected that the production and procurement of wheat during next season shall remain normal.

**Food Subsidy over the Years (Rs lakh crore)**



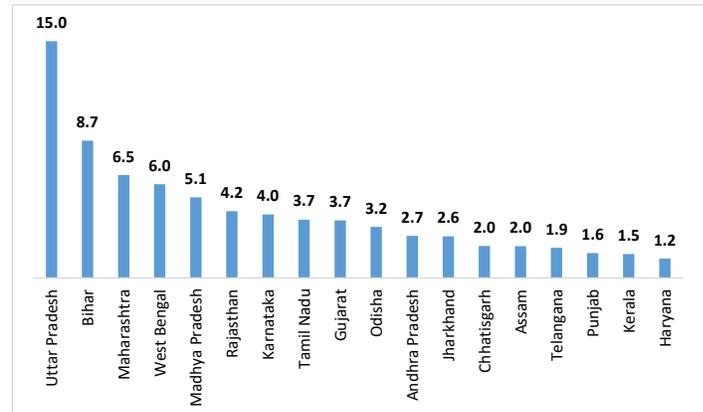
Source: SBI Research

**Food grain Stocks in Central Pool (in mn tonnes)**

	01 Jan'23	Buffer Norm	Excess over Buffer in %
Rice	11.54	7.61	51.64
Wheat	19.02	13.80	37.83

Source: FCI, \* buffer norms as on January 01, each year

**State-wise Beneficiaries (in crore)**



Source: SBI Research

**Procurement of Wheat and Rice (Lakh metric Tons)**

	FY17	FY18	FY19	FY20	FY21	FY22	FY23*
Wheat	230	308	358	341	390	433	188
Rice	381	382	444	518	602	593	356
Paddy	568	568	660	771	896	882	531
Total	1179	1258	1462	1631	1887	1908	1075

Source: SBI Research; \*till 01.01.2023

- ◆ With the multiple extension of the PMGKAY, the food subsidy Bill for the year stands at Rs 3.3 lakh crore compared with the BE of Rs 2.07 lakh crore. This means that an additional Rs 1.23 trillion has already been spent till December 2022 on PMGKAY and NFSA in FY23.
- ◆ If PMGKAY scheme was continued beyond December 2022, another at least Rs 40,000 crore would have got spent for Q4FY23. In contrast, by making NFSA free, the extra outgo would be just around Rs 3,750 crore (at Rs 1,250 crore per month). This clearly is a huge win-win for a government in reducing subsidy and free food grains.

**IMPACT ON STATE FINANCES**

- ◆ During 2021-22, around 300 lakh tonnes of wheat and 313 lakh tonnes of rice was taken by states under NFSA. By assuming the rate of Rs 3/kg and wheat Rs 2/Kg, the Centre would have received Rs 6,000 crore for wheat and Rs 9,390 crore for rice from the state governments. Many states don't charge anything from the beneficiaries and bear the cost as state food subsidy.
- ◆ With the free ration by center, states will save this amount but the central government will bear an additional food subsidy of about Rs 15,390 crore. There is apprehension that States may demand more food grains to distribute among their people. If they purchase it from FCI through auction, it will be a much costly state of affairs. Rather the States can subsidise and provide other food grains which are not under PDS, based on the preference of the citizens of that geography. Further, States can use these funds on public services, viz., health, sanitation, roads and education.

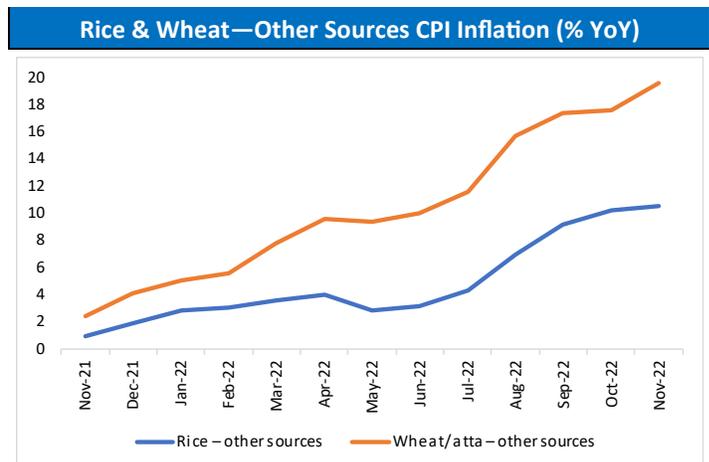
**IMPACT ON CPI INFLATION WILL BE LOWER**

- ◆ The prices of rice/wheat (other sources) increased significantly in the last one year. Though there is no direct impact of this measure of free ration on CPI inflation, indirectly it will lower CPI.
- ◆ Both the National Account Statistics (NAS) and Consumption Expenditure Survey (CES) value estimates for the items in the rice and wheat groups represent the expenditure actually incurred on the items.

Price at Fair Price Shops: Some Selected States		
States	Rice	Wheat
Andhra Pradesh	1	-
Chhattisgarh	1	-
Jharkhand	Free	Free
Karnataka	Free	Free
Kerala	Free	Free
Madhya Pradesh	1	1
Odisha	1	1
Rajasthan	-	2
Tamil Nadu	Free	Free
Telangana	1	1
West Bengal	Free	Free

Source: Dept of Food & Public Distribution

- ◆ The quantity available from the Public Distribution System (PDS) is evaluated at the administered price in the NAS, while the cost actually paid by the households for the quantity obtained from the PDS are recorded in the CES. The Government has given free food under PDS, so there will be no cost for households.
- ◆ The lower of demand of cereals at market price will lower the mandi prices of cereals and this will have a sobering impact on the CPI food inflation.



Source: SBI Research

**EMPIRICAL RESULTS: IMPACT OF RICE AND WHEAT PROCUREMENT ON GINI COEFFICIENT**

- ◆ Data on Gini Coefficient is taken from the % distribution of the de jure population by wealth quintiles, according to residence and state/union territory, India, 2019-21, provided by National Family Health Survey (NFHS - 5), 2019–21.
- ◆ We analyzed the impact of share of Rice Procurement (*since Rice is still the stable food for most of the people in India*), on Gini Coefficient for 20 States. We further analyzed the impact of share of wheat Procurement on Gini Coefficient for 9 States.
- ◆ For the cross section data of 2019-20 (latest available under NFHS), we have analyzed the impact through linear regression model with robust standard errors.
- ◆ Our results show that relatively laggard states in terms of inequal distribution of wealth across different population quintiles, Rice Procurement and Wheat procurement in these states had a significant impact on reducing inequality through reduction in Gini coefficient.
- ◆ As per our results, 1% increase in share of rice procurement in 18 states by FCI lowers Gini coefficient by 0.0007803 and is statistically significant. 1% increase in share of wheat procurement in 9 states by FCI lowers Gini coefficient by 0.0009199. and is statistically significant. Rice procurement impact is more quantified than impact of wheat procurement.
- ◆ We believe there are 2 ways in which the procurement of cereals are lowering inequality. First, a higher procurement, that is free of cost is benefitting the poorest of the poor in terms of subsequent free distribution of food grains. Second, the procurement may have also put money into the hands of smaller and marginal farmers with distributional impact. This also shows that the procurement of cereals of the Government over time may have become more efficient across states.
- ◆ Our results show, inequality is significantly declining in states of Assam, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Uttar Pradesh, Uttarakhand and West Bengal with the rice and wheat procurement.
- ◆ The impact of Rice and Wheat Procurement on % population for Lowest and Second quintiles of wealth, revealed a sharp decline in the percentage population in such quintiles of the population.

Linear Regression Model			
Dependent Variable: Gini Coefficient			
Number of observations: 20			
Prob>F = 0.0105			
R-squared = 0.2801			
Explanatory Variable	Coefficient	Robust S.E.	P value
Share of Rice Procurement	-0.0007803	0.0002733	0.011**
Constant	0.2084049	0.0170786	0.000***
Dependent Variable: Gini Coefficient			
Number of observations: 9			
Prob>F = 0.0187			
R-squared = 0.4343			
Explanatory Variable	Coefficient	Robust S.E.	P value
Share of Wheat pro-	-0.0009199	0.000302	0.019**
Constant	0.1941945	0.0147525	0.000***
Source: SBI Research			
*** Significant at 1% level			
** Significant at 5% level			
* Significant at 10% level			

Combined Impact of Rice & Wheat Procurement on Inequality in States are statistically significant		
States	Gini	New Gini
Assam	0.25	0.21
Bihar	0.22	0.19
Chhattisgarh	0.20	0.15
Gujarat	0.19	0.19
Haryana	0.12	0.12
Jharkhand	0.27	0.20
Madhya Pradesh	0.22	0.16
Odisha	0.23	0.16
Rajasthan	0.18	0.18
Uttar Pradesh	0.21	0.18
Uttarakhand	0.17	0.13
West Bengal	0.25	0.20
Source: SBI Research		

**GOVERNMENT TRANSFER PAYMENTS ARE ALSO INCREASING SUBSISTENCE RURAL INCOME ABOVE EXTREME POVERTY**

- ◆ For a average annual rural wage of Rs 318 per day and for a work availability of at least 150 days, creating a rural wage of 47,700 per annum for family results into Rs 662 per person per month rural income, for a family of 5 persons,.
- ◆ Schemes like PM KISAN, MGNAREGA (average wage 182), MGNAREGA wage increase, Ujjwala Yojana, and PMGKAY are increasing the per person per month rural income by Rs 437.
- ◆ When the per person per month rural wages (INR 662) are combined with transfer payments (Rs 437) received from government through various schemes results into per person per month rural income of Rs 1099, which is above the rural poverty line number, resulting into government’s efforts of removing extreme poverty.

Impact of Transfer Payments on Rural Income			
Scheme	Per Annum FAMILY	Per Month FAMILY	Per Month Person
PM KISAN	6000	500	100
MGNREGA WAGES	18200	1516.7	303.3
Ujjwala Yojana	1138	94.8	19.0
SAVINGS from PMGKAY	-	-	15.0
Total Per Month Per Person Increase	25338	2111.5	437.3
Rural wages	47700	3975	662.5
<b>Rural Income</b>	<b>73038</b>	<b>6086.5</b>	<b>1099.8</b>

Source: SBI research

Impact of Wheat and Rice procurement on Wealth Quintiles							
Impact on Lowest Quintile							
Explanatory Variable	Coefficient	Robust S.E.	P value	Explanatory Variable	Coefficient	Robust S.E.	P value
Share of Rice procurement	-0.166	0.0785475	0.049**	Share of Wheat Procurement	-0.187	0.1172823	0.154
Constant	24.5	5.550053	0.000***	Constant	19.6	6.840989	0.024**
Impact on Second Quintile							
Explanatory Variable	Coefficient	Robust S.E.	P value	Explanatory Variable	Coefficient	Robust S.E.	P value
Share of Rice procurement	-0.085	0.0412227	0.053*	Share of Wheat Procurement	-0.162	0.0467325	0.010***
Constant	22.1	2.1	0.000***	Constant	20.8	2.375538	0.000***

Source: SBI research; \*\*\* Significant at 1% level, \*\* Significant at 5% level, \* Significant at 10% level

\*\*\*\*\*

**Disclaimer:** The Ecowrap is not a priced publication of the Bank. The opinion expressed is of Research Team and not necessarily reflect those of the Bank or its subsidiaries. The contents can be reproduced with proper acknowledgement. The write-up on Economic & Financial Developments is based on information & data procured from various sources and no responsibility is accepted for the accuracy of facts and figures. The Bank or the Research Team assumes no liability if any person or entity relies on views, opinion or facts & figures finding in Ecowrap.

**Contact Details:**

Dr. Soumya Kanti Ghosh  
Group Chief Economic Adviser  
State Bank of India, Corporate Centre  
M C Road, Nariman Point, Mumbai - 400021  
Email: soumya.ghosh@sbi.co.in,  
gcea.erd@sbi.co.in  
Phone:022-22742440  
 : kantisoumya