SBI Research: Special Report on Agriculture

Agricultural Policies are ushering in a greater tomorrow……>1.7x jump in farmer’s income since FY18 with a statistically decisive upward shift in mean income and no significant change in income inequality, Unleashing Ease of Agri Business across 6.13 lakh villages, Collectivisation through 74.3 lakh SHGs/FPOs across states, 1.5-2.3x increase in MSP, 74 million KCC…

Time for launching a Livelihood Credit Card by targeting at least a million farmers every year & an Omnibus Credit Guarantee Fund for a Rs 5 trillion Agri Credit push?

July 18, 2022

State Bank of India
Mumbai

Executive Summary

- The agrarian economy, central to country's aspirations to carve a niche place in a changing world order, has undergone some tectonic shifts of late, emerging as the anchor for broader economy during the tumultuous days of pandemic
  - Growth in the Agriculture sector was positive in FY21 even as all other sectors recorded negative growth. This trend has continued in FY22 (PE) too. This has, in turn, led to a higher share of agriculture in the country's GDP since March 2019
- Promoted through right policy prisms, agri exports zoomed upwards of $50 billion in FY22 and look all set to stake claim to a sizeable opportunity even as the country aims for $1 trillion merchandise goods export by 2030
- The eating habits and nutritional focus by different population groups are undergoing changes buoyed by shifting socio-economic-cultural patterns, thereby ensuring upgradation/rotation in cropping pattern across the country even as food security becomes central to a growing population imbibing varied demographics
- **Our study based on primary data of SBI agri portfolio across states containing granular data of various crops from agri-intensive branches analyses the change in income of farmers over the last five years**
- In principle, we have used a **<u>well-spread, well-represented, and probabilistic sample</u>** to estimate the change in income from FY18 to FY22 for all segments of farmers, large to small to marginal ones. Our statistical inferences using "t-test" and "F-test" as also "Lorenz Curve" probing increase in average income and diminution in inequality provide validity to our key findings

Executive Summary

- **Farmers' income doubled in FY22 as compared to FY18 for certain crops in some states (like Soyabean in Maharashtra and Cotton in Karnataka) while in all other cases it rose in the range of 1.3 -1.7 times**. Interestingly, increase in farmers' income engaged in cash crops has been more prominent compared to such farmers growing non-cash crops. **Also, allied / non-farm income showed significant increase of 1.4 -1.8 times in majority of states** in tandem with farm income during the same period. This substantiates the trend as per the 77th National Sample Survey that source of farmer income has become increasingly diverse apart from crops
- SHGs, crucial in imbibing an entrepreneurial spirit among farmers at the lower band of spectrum, in particular women have a high concentration in select states and within those states also they remain confined to certain districts though their performance in Aspirational Districts of NITI Aayog has been noticeable of late
- Launched by Prime Minister in January 2018, the Aspirational Districts programme aims to quickly and effectively transform 124 most under-developed districts across the country. We believe that this programme has been a **huge success** in just a period of 4 years at least in respect of SHG financing. **Of the total SHG financing in the country, 18% outstanding belongs to these 124 aspirational districts** with share in excess of 30% in select districts
- **Minimum Support Price (MSP), increasingly aligned with market linked pricing and increasing by 1.5-2.3 times since 2014,** has been pivotal in ensuring passage of better prices to farmers and has led to optimal price discovery, setting 'floor price benchmark' for multiple crop varieties (23 as on date), also encouraging farmers to gradually move over to crop varieties that have better yield/value
- **Despite much hype and political patronage, Farm Loan waivers by states have failed** to bring respite to intended subjects, sabotaging credit discipline in select geographies and making Banks / FIs wary of further lending. **Since 2014, out of ~3.7 crore eligible farmers, only ~50% of farmers received the amount of loan waiver** (till Mar'22), though in some of the states more than 90% of farmers received the debt waiver amount. Essentially, a '**self goal**' inflicted by the State on its subjects!

Executive Summary

- KCC scheme, continuously improved and revamped by GoI has been instrumental in bringing a large number of farmers under the ambit of formal credit mechanism at subsidized rate of interest from institutional players (**presently 7.37 crore active KCCs**)
- However, current regulatory norms allow KCC renewal every year with full repayment of principal and interest unlike other CC/OD loans where interest servicing is sufficient for renewal. The renewal for KCC loans with repayment of both principal and interest only makes the farmer eligible for interest subvention and an enhancement of 10% in the limit every year. **Given that each review could take up to 45 minutes, juxtaposing it for 7.37 crore KCC implies banks may have to spend a cumulative ~23 lakh man days to complete this process every year that otherwise could have been used for fresh lending to agriculture**
- **Thus simplifying the norms for 'Review/Renewal' mechanism with repayment of interest alone** should thus be the top agenda of the regulator, as also deepening use of technology by Banks (using satellite imagery data for real-time monitoring of crops, or utilizing third party approved agents for submitting field inspection reports through video-calling facility and separating the review from the Core Banking System, making it app based through digital channels) to ensure speedy 'review and renewal' practices
- A **Livelihood Credit Card (LCC)** encompassing a multi-purpose loan covering a rural household's entire activities for ease of doing KCC : At least targeting a million farmers to start with further reinvigorating rural demand
- Forming a comprehensive omnibus Credit Guarantee Fund Trust-Agri & Allied Sectors (CGFT-AAS) will act as a credit accelerator and ensure coverage of all fresh Agri loans including AVCF. **Our estimates show that a properly operational CGFT-AAS scheme could usher in an additional Rs 5.25 lakh crore agri credit with only an additional capital requirement of Rs 11,320 crore and a minimal fiscal support of Rs 6,450 crore for the 5-year period ending 2027!**
- **Myriad government welfare schemes may be brought under a single roof** for real-time monitoring, with participation from Digital Agri mitras (BC network and Digital Didis can be source points for this) to proliferate them
  - Technology, satellite imagery, weather prediction, crop insurance, start-ups participation can bring desired innovation going ahead

Farmers' Income

<u>How much has *it* increased – A Statistical Analysis</u>

Backdrop

- The goal set by Indian Government to double farmers' income by 2022-23 is central to promote farmers' welfare, reduce agrarian distress and bring parity between income of farmers and those working in non-agriculture profession, while pushing for a platform that ensures the leap of faith for the next phase of growth
- In order to achieve this target, Government has announced plethora of measures like increase in MSP, crop insurance, focus on KCC and soil health cards, boosting e-NAM and food parks, roping in NBFCs and MFIs for increasing the coverage of institutional credit as also aggregation and collectivisation measures (SHGs/FPOs)
- Though it is a tad difficult to measure the farmers' income in the absence of any model or enabling infrastructure, still with the help of farmers' details in SBI's Agriculture portfolio, we have endeavoured to do this exercise
- Concentrating on a select set of states and within those states for crops, we have taken a **well-spread, well-represented probabilistic sample** of farmers to estimate the change in income from FY18 to FY22
- As per the National Statistical Office's (NSO) Situation Assessment of Agricultural Households and Land and Livestock Holdings of Households in Rural India (SAS) 2019 survey, agricultural households' average monthly income increased by 59% to Rs 10,218 in the six years to FY19

Income Summary (in Lakh)

- Our well representative sample not only covers the large farmers but gives proper representation to small and marginal farmers

Maharashtra- Sugarcane

Fin. Year	Min Income	Max Income	Mean Income	Median Income
FY2018	0.63	9.60	2.79	2.36
FY2020	0.84	11.04	3.37	3.06
FY2022	0.90	11.52	3.89	3.60

Maharashtra- Soybean

Fin. Year	Min Income	Max Income	Mean Income	Median Income
FY2018	0.30	10.50	1.89	2.40
FY2020	0.37	21.00	3.35	3.33
FY2022	0.47	23.62	3.80	3.68

Karnataka- Cotton

Fin. Year	Min Income	Max Income	Mean Income	Median Income
FY2018	0.30	15.07	2.67	1.66
FY2020	0.36	17.10	3.11	1.84
FY2022	0.36	36.00	5.63	3.00

Karnataka- Paddy

Fin. Year	Min Income	Max Income	Mean Income	Median Income
FY2018	0.35	12.76	2.10	1.76
FY2020	0.42	16.24	2.40	2.00
FY2022	0.48	18.56	2.95	2.02

Rajasthan - Wheat

Fin. Year	Min Income	Max Income	Mean Income	Median Income
FY2018	1.00	4.00	1.97	1.80
FY2020	1.10	3.31	2.22	2.19
FY2022	1.22	4.21	2.47	2.42

Farmers’ Average Income has jumped by upto 1.7 times with evidence of doubling in income for some crops across some states

- The results indicate that:
  - For some of the crops in some states (like Soyabean in Maharashtra and Cotton in Karnataka) the farmers' income doubled in FY22 as compared to FY18
  - In all other cases it rose in the range of 1.3 times to 1.7 times
  - The increase in farmers engaged in cash crops is more prominent compared to the farmers growing non-cash crops

State	Crop	Farmers’ Average income (FY18)	Farmers’ Average income (FY22)	Times Increased
Rajasthan	Wheat	Rs 1.97 lakh	Rs 2.47 lakh	1.3x
Gujarat	Cotton	Rs 8.08 lakh	Rs 13.37 lakh	1.7x
	Groundnut	Rs 3.11 lakh	Rs 4.74 lakh	1.5x
Maharashtra	Soyabean	Rs 1.89 lakh	Rs 3.80 lakh	2.0x
	Sugarcane	Rs 2.79 lakh	Rs 3.89 lakh	1.4x
Karnataka	Cotton	Rs 2.67 lakh	Rs 5.63 lakh	2.1x
	Paddy	Rs 2.26 lakh	Rs 2.95 lakh	1.3x

Statistical Validation of Summary results

- Farmers' income in select states in select crops has increased in the range of 1.4 times to 2.1 times during the four-year period between FY18 and FY22

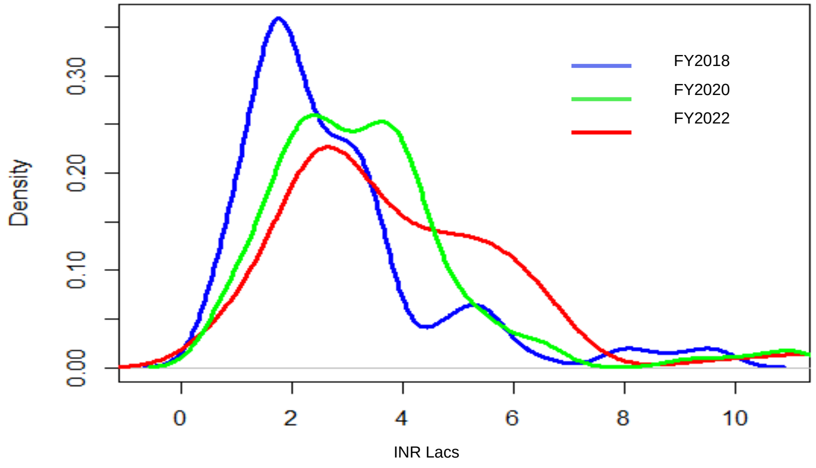
- However, two questions arise from these numbers:
  - **<u>First</u>**, is this increase in average income statistically significant?
  - **<u>Second</u>**, is this increase in average income also accompanied by increase / decline in inequality?

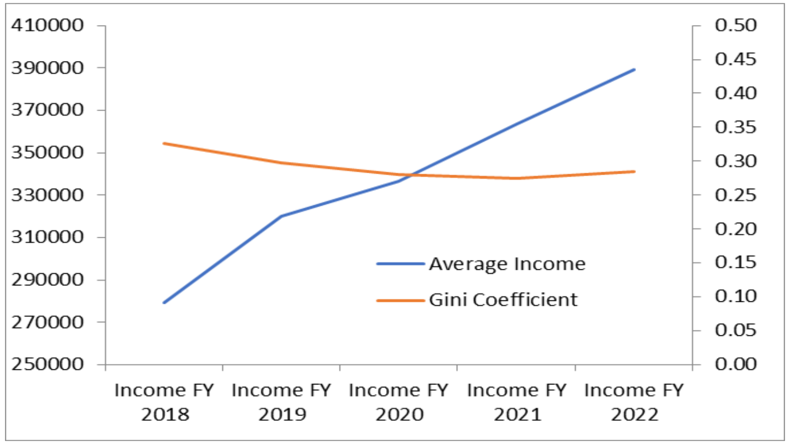
- In order to answer the first question, we performed the "**<u>t-test</u>**" and the "**<u>F-test</u>**". A t-test is a type of inferential statistic used to determine if there is a significant difference between the means of two groups across two different time periods. F test can be defined as a test that uses the F test statistic to check whether the variances of two samples are equal to the same value

- To answer the second question, we have constructed the "**<u>Lorenz Curve</u>**". The Lorenz curve is a graphical representation of the distribution of income or wealth in a society. Basically, the farther the curve moves from the baseline represented by the straight diagonal line, the higher the level of inequality

- The results are indicated in the subsequent slides

Income Distribution shows a distinct shift of the average income over the years with a rightward shift of the peak





Rise in mean income with no significant change in Gini Coefficient implying better distribution of income across different deciles

Hypothesis Testing to check differences among means

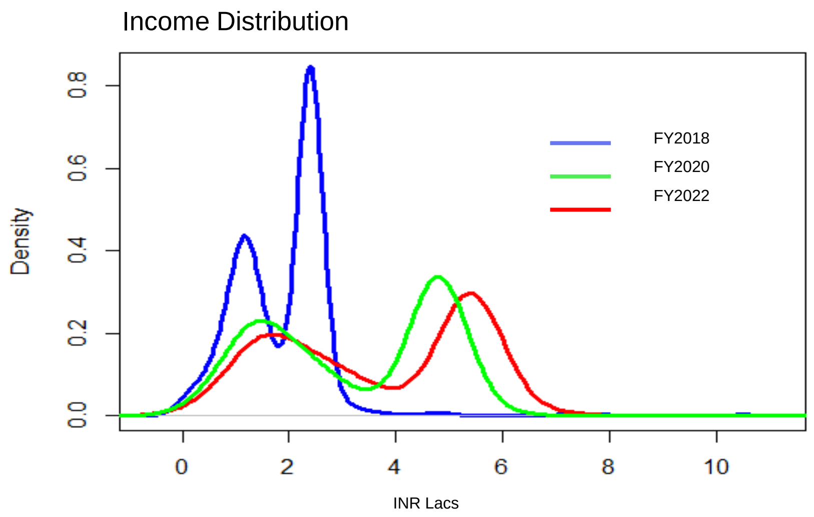
F	*P-value*	*F crit*
4.93	0.00	2.39

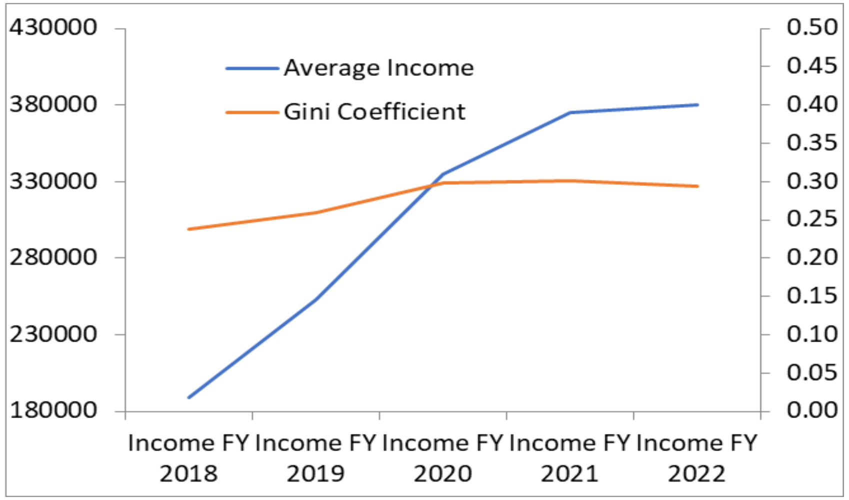
There is difference among means that is statistically significant

t test	*Income FY 2018*	*Income FY 2022*
Mean	279093	389311
t Stat	-7.936	
P(T<=t) one-tail	0.000	
t Critical one-tail	1.660	

There is rise in income in last 5 years that is statistically significant

Statistical Analysis: Maharashtra - Soybean





Rise in mean income with no significant change in Gini Coefficient

Hypothesis Testing to check differences among means

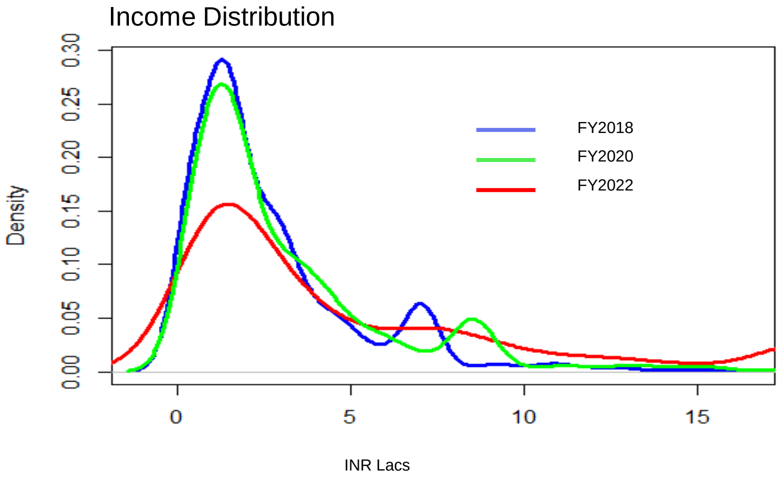
F	*P-value*	*F crit*
95.18	0.00	2.38

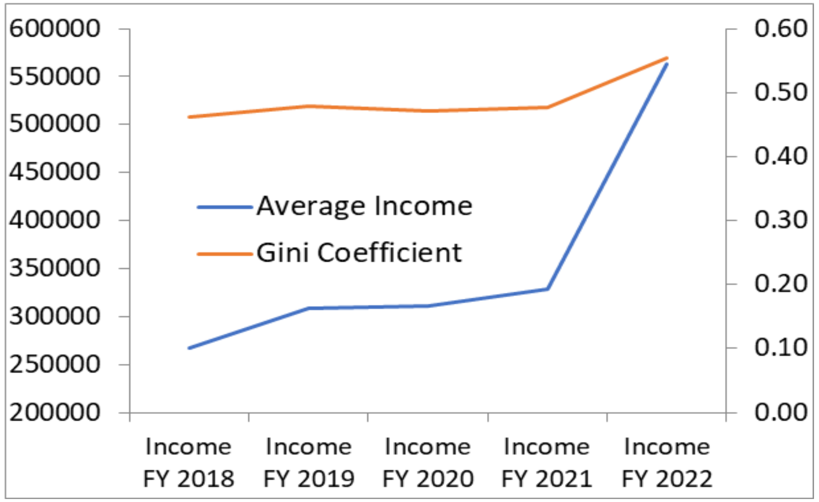
There is difference among means

t test	*Income FY 2018*	*Income FY 2022*
Mean	188706	380292
t Stat	-17.004	
P(T<=t) one-tail	0.000	
t Critical one-tail	1.647	

There is rise in income in last 5 years

Statistical Analysis: Karnataka - Cotton





Rise in mean income with moderate change in Gini Coefficient

Hypothesis Testing to check differences among means

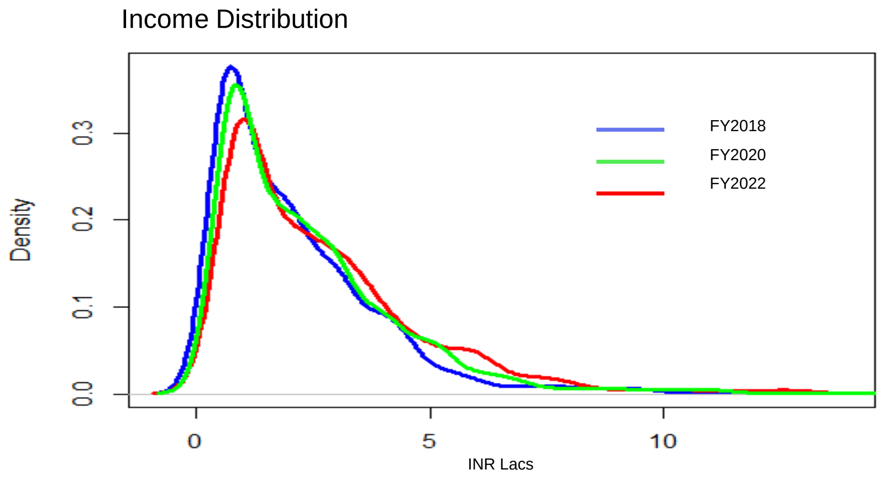
F	*P-value*	*F crit*
43.84	0.00	2.38

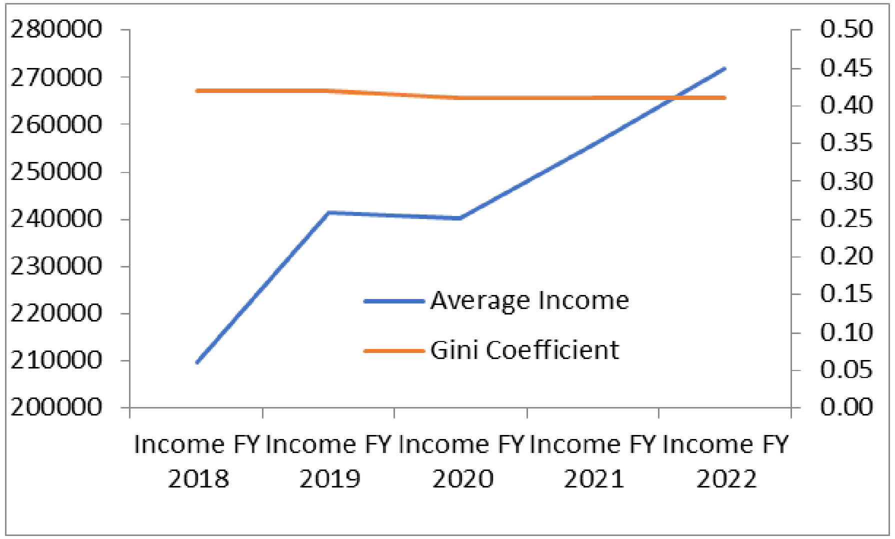
There is difference among means

t test	*Income FY 2018*	*Income FY 2022*
Mean	267380	562926
t Stat	-15.381	
P(T<=t) one-tail	0.000	
t Critical one-tail	1.648	

There is rise in income in last 5 years

Statistical Analysis: Karnataka - Paddy





Rise in mean income with no significant change in Gini Coefficient

Hypothesis Testing to check differences among means

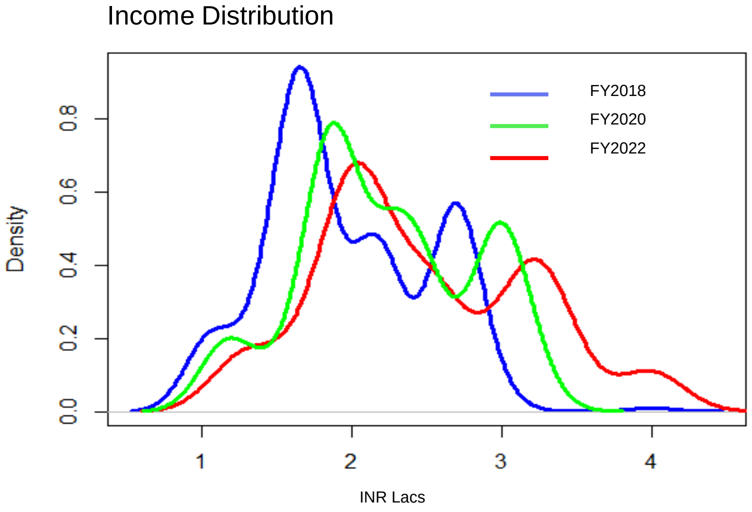
F	*P-value*	*F crit*
11.68	0.00	2.37

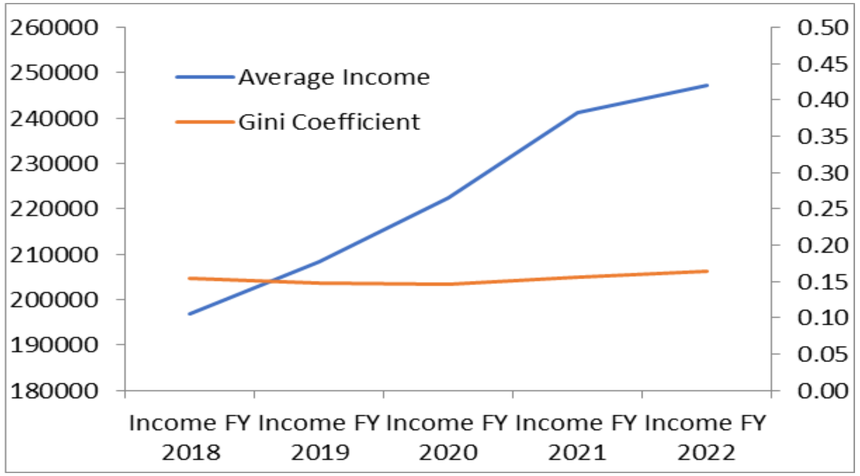
There is difference among means

t test	*Income FY 2018*	*Income FY 2022*
Mean	226359	294835
t Stat	-3.273	
P(T<=t) one-tail	0.001	
t Critical one-tail	1.646	

There is rise in income in last 5 years

Statistical Analysis: Rajasthan - Wheat





Rise in mean income with no significant change in Gini Coefficient

Hypothesis Testing to check differences among means

F	*P-value*	*F crit*
34.84	0.00	2.38

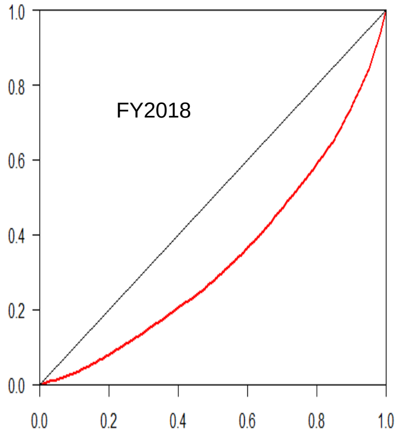
There is difference among means

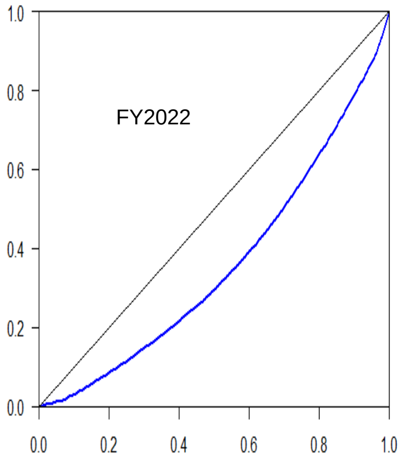
t test	*Income FY 2018*	*Income FY 2022*
Mean	196908	247232
t Stat	-9.502	
P(T<=t) one-tail	0.000	
t Critical one-tail	1.648	

There is rise in income in last 5 years

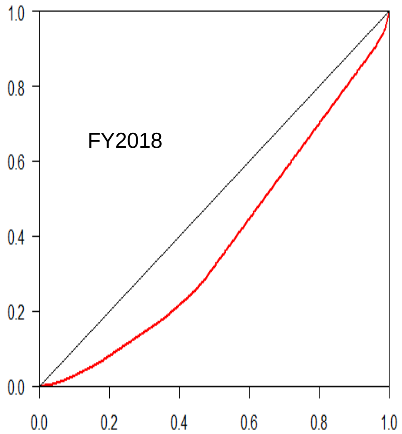
Income Inequality – Lorenz Curve shows no significant difference

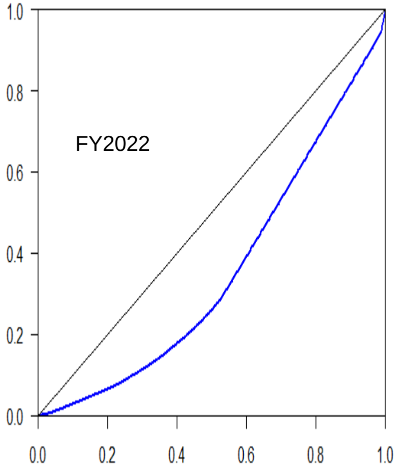
Maharashtra- Sugarcane



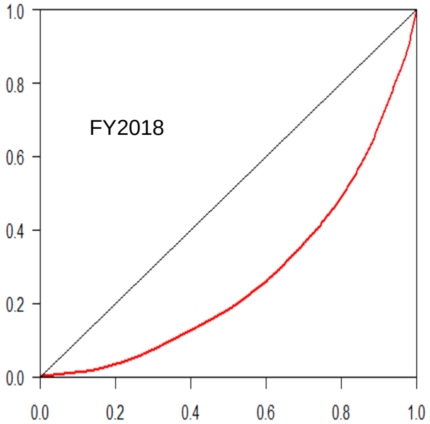


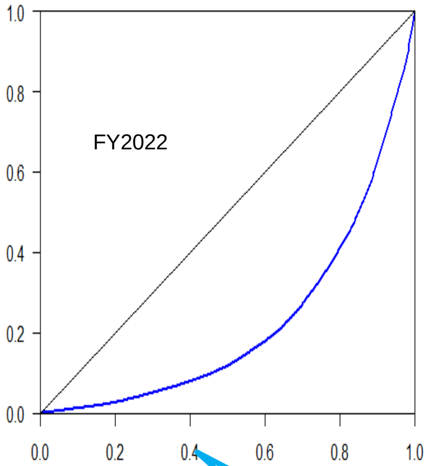
Maharashtra- Soybean



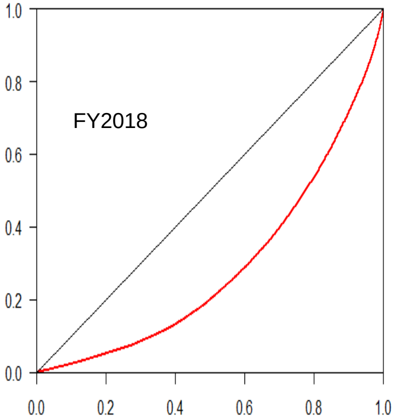


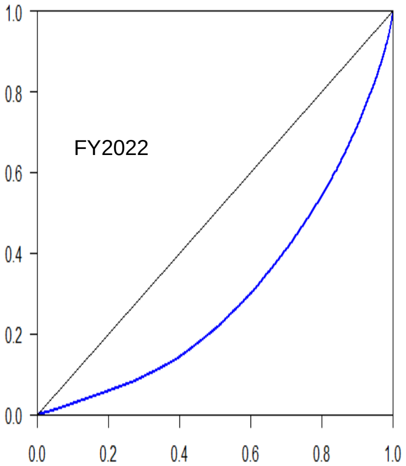
Karnataka- Cotton



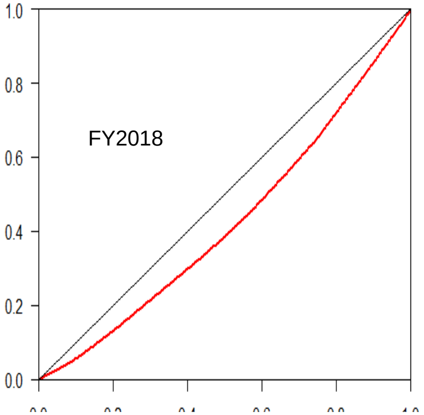


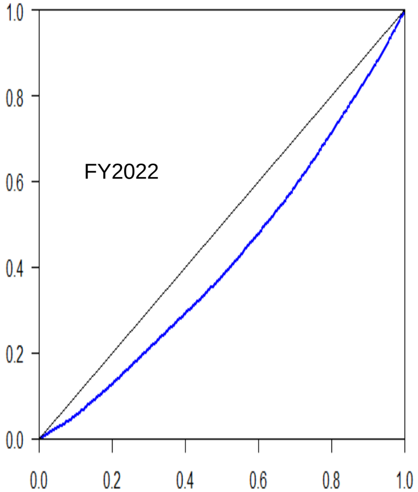
Karnataka- Paddy





Rajasthan- Wheat

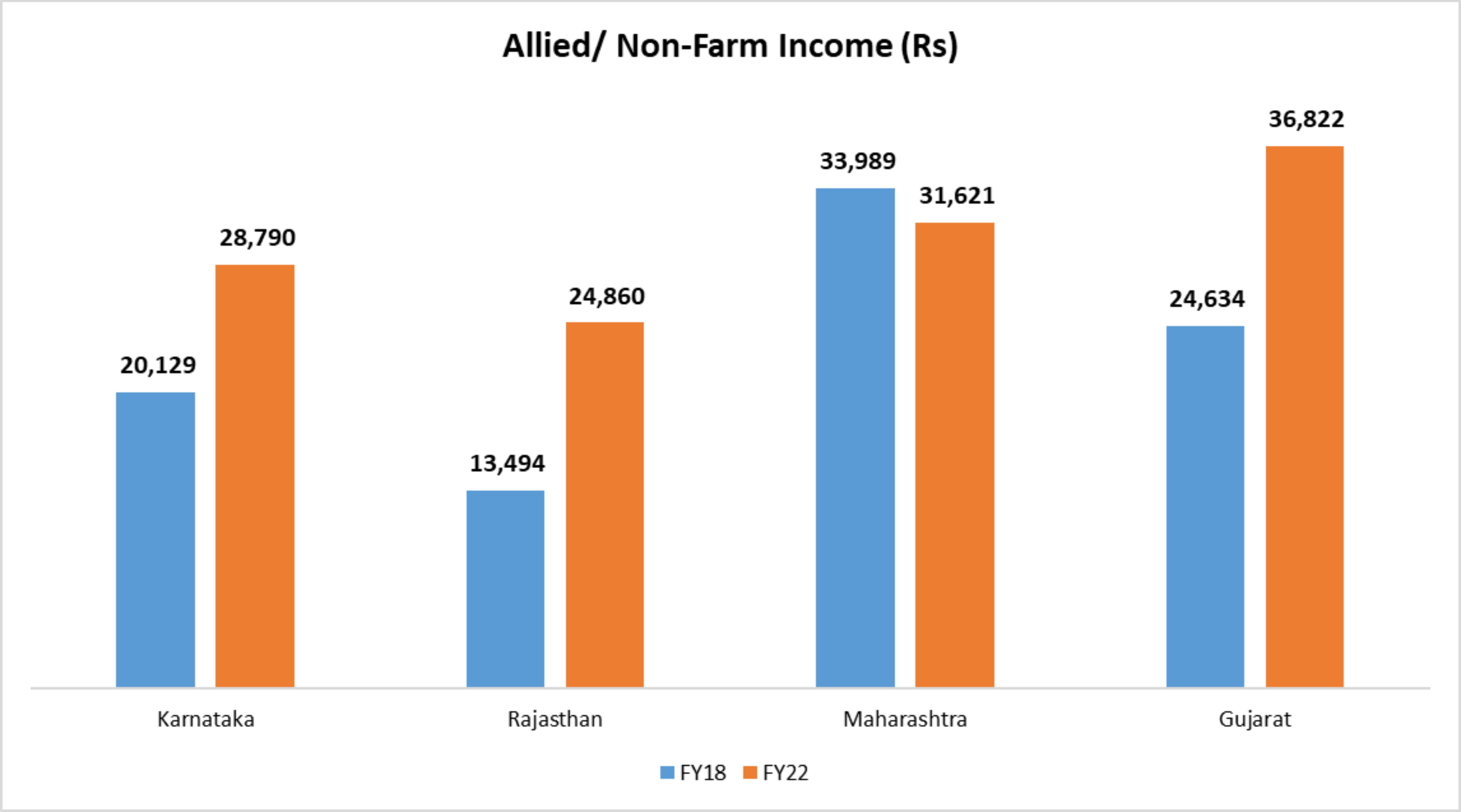




Inequality increased moderately here only and everywhere there has been no significant change

Farmers' Allied/ Non-Farm Income also increased by 1.4-1.8 times in tandem with increase in farm income

- Apart from farmers' farm income, we have also analysed farmers' allied/non-farm income over a period of FY18 to FY22
- While for Maharashtra the non-farm income declined marginally, it increased 1.8 times in Rajasthan, 1.5 times in Gujarat and 1.4 times in Karnataka



MSP price increases has helped in better price discovery and containing inflation spikes: FY23 could be a challenge

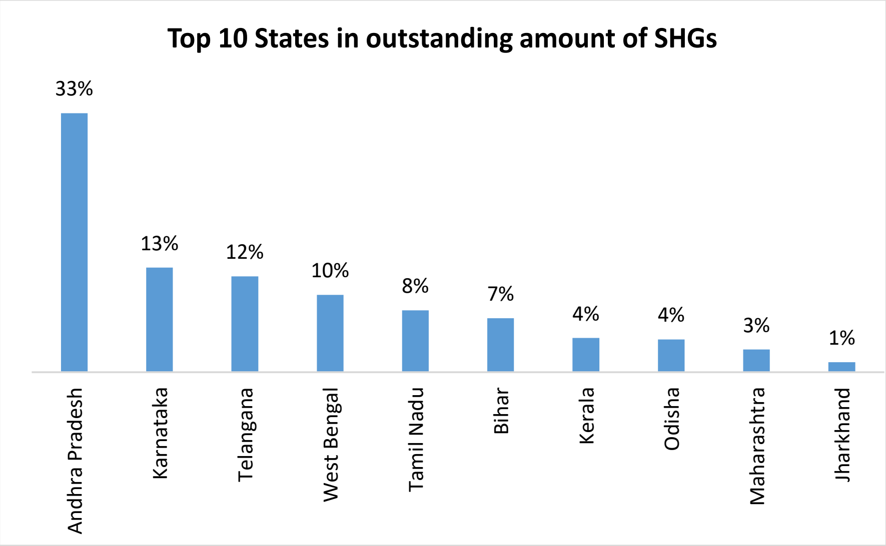
CROP		MSP		GROWTH (over 14-15)
	2014-15	2021-22	2022-23	
Paddy (Common)	1360	1940	2040	**1.50**
Paddy (Grade A)	1400	1960	2060	**1.47**
Jowar (Hybrid)	1530	2738	2970	**1.94**
Bajra	1250	2250	2350	**1.88**
Ragi	1550	3377	3578	**2.31**
Maize	1310	1870	1962	**1.50**
Tur (Arhar)	4350	6300	6600	**1.52**
Moong	4600	7275	7755	**1.69**
Urad	4350	6300	6600	**1.52**
Groundnut	4000	5550	5850	**1.46**
Sunflower Seed	3750	6015	6400	**1.71**
Soyabean (Yellow)	2560	3950	4300	**1.68**
Cotton (Long Staple)	4050	6025	6380	**1.58**

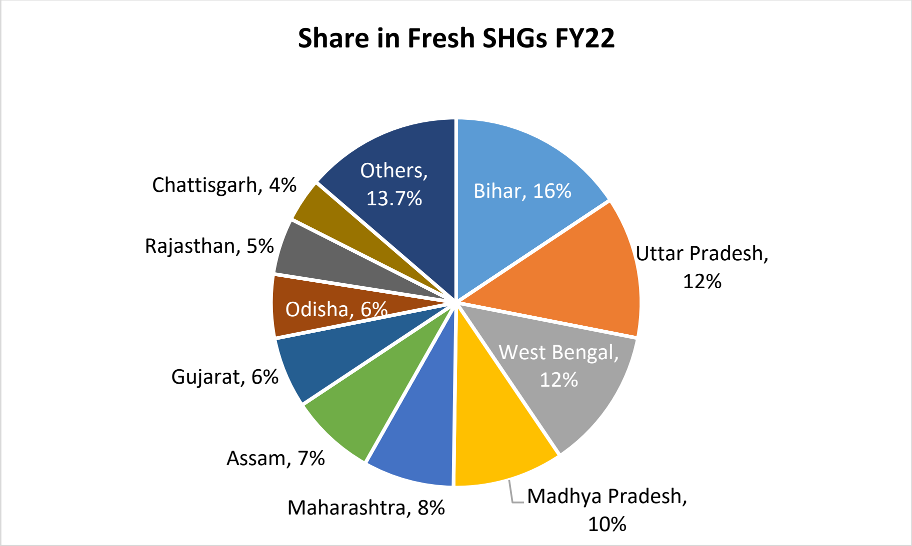
Minimum Support Price (MSP), increasingly aligned with market linked pricing, has been pivotal in ensuring passage of better prices to farmers and has in many cases led to optimal price discovery, setting floor price benchmark for multiple crop varieties (23 now), also promoting farmers to gradually move over to crops / crop varieties that have better yield/value

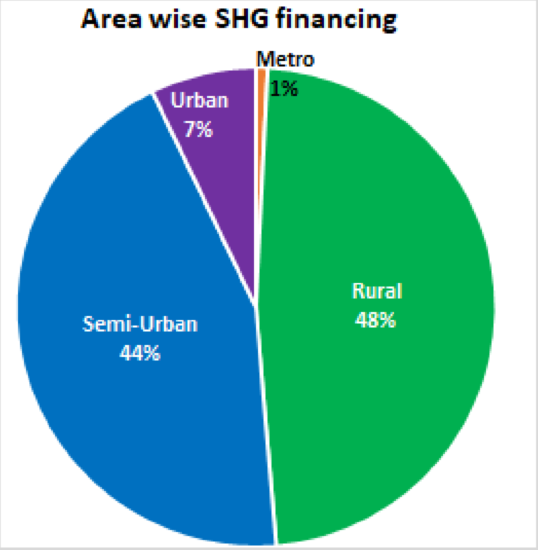
Self Help Groups (SHGs)

A key policy initiative has been the proliferation of SHGs across states: beneficiary SHGs though concentrated: Top 10 states account for 95% of total SHG financing

- SHGs penetration and proliferation remain concentrated with top states accounting for 95% of the total outstanding amount disbursed to SHGs in the country. It is mainly concentrated in rural and semi urban areas
- SHGs are engaged not merely in agriculture, but in other micro activities covering non-agricultural activities and petty trade. A granular national data base to monitor the activities and economic value of the same may be enabled at DAY-NRLM end to gauge the efficacy of SHG financing and to hand hold them to the next stage of growth
- Of the total 8 lakh fresh number of SHGs financed in FY22, Bihar has the maximum share, followed by Uttar Pradesh, West Bengal, Madhya Pradesh, Maharashtra and Assam







Top 5 Districts in Top 5 States: Huge Concentration in Karnataka

- District-wise analysis of Top 5 states indicates that in some of the states the concentration of Top 5 districts is very high

- In Karnataka, top 5 districts accounted for 83% of total SHG financing of state

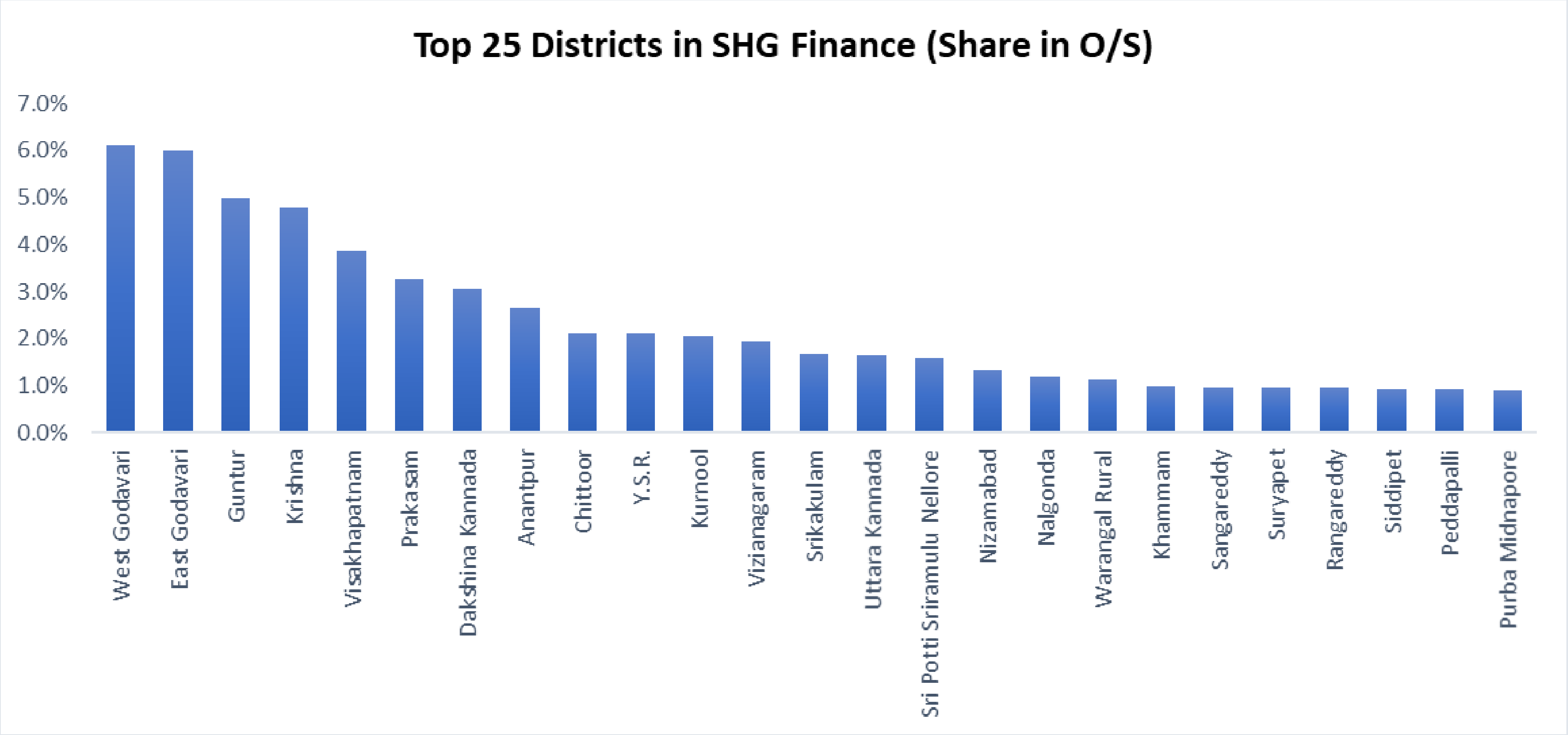
- Similarly, top 5 districts in Andhra Pradesh and Tamil Nadu accounted for more than 50% share

Share of Top 5 Districts in State SHG Financing (in O/S)

State	Share of Top 5 Districts in State	Name of Top 5 Districts (in decreasing order)
Andhra Pradesh	60%	West Godavari
		East Godavari
		Guntur
		Krishna
		Visakhapatnam
Karnataka	83%	Dakshina Kannada
		Uttara Kannada
		Tumakuru
		Chamarajanagara
		Mysuru
Telangana	28%	Nizamabad
		Nalgonda
		Warangal Rural
		Khammam
		Sangareddy
West Bengal	43%	Purba Midnapore
		24 Parganas South
		Hoogly
		Paschim Midnapore
		Purba Burdwan
Tamil Nadu	52%	Villupuram
		Thanjavur
		Erode
		Salem
		Chengalpattu

Top 25 Districts accounted for 60% share; Even Distribution essential for Penetration & Impact

- Top 25 districts in India accounted for ~60% share in total SHG financing (in terms of outstanding)
  - Top 5 accounted for 25%
  - Top 10 accounted for 40%
  - Amaravati and Telangana districts alone account for majority of SHG finance and the viability of the model employed in these two states may be studied for suitable replication elsewhere



The good thing… SHG Financing in Aspirational Districts – A HUGE Success

- Launched by the Prime Minister in January 2018, the Aspirational Districts programme aims to quickly and effectively transform 124 most under-developed districts across the country
- And, we believe, that this programme has been a **HUGE SUCCESS** in just a period of 4 years at least in respect of SHG financing
- Of the total SHG financing in the country, 18% outstanding belongs to these 124 aspirational districts
- In some of the districts the performance of aspirational districts is quite impressive (share is more than 30%)
- FPOs formation can be modelled along SHGs, learning from the success of SHGs in select states and promoting SHG team members to up move towards FPO formation to leverage the expertise further

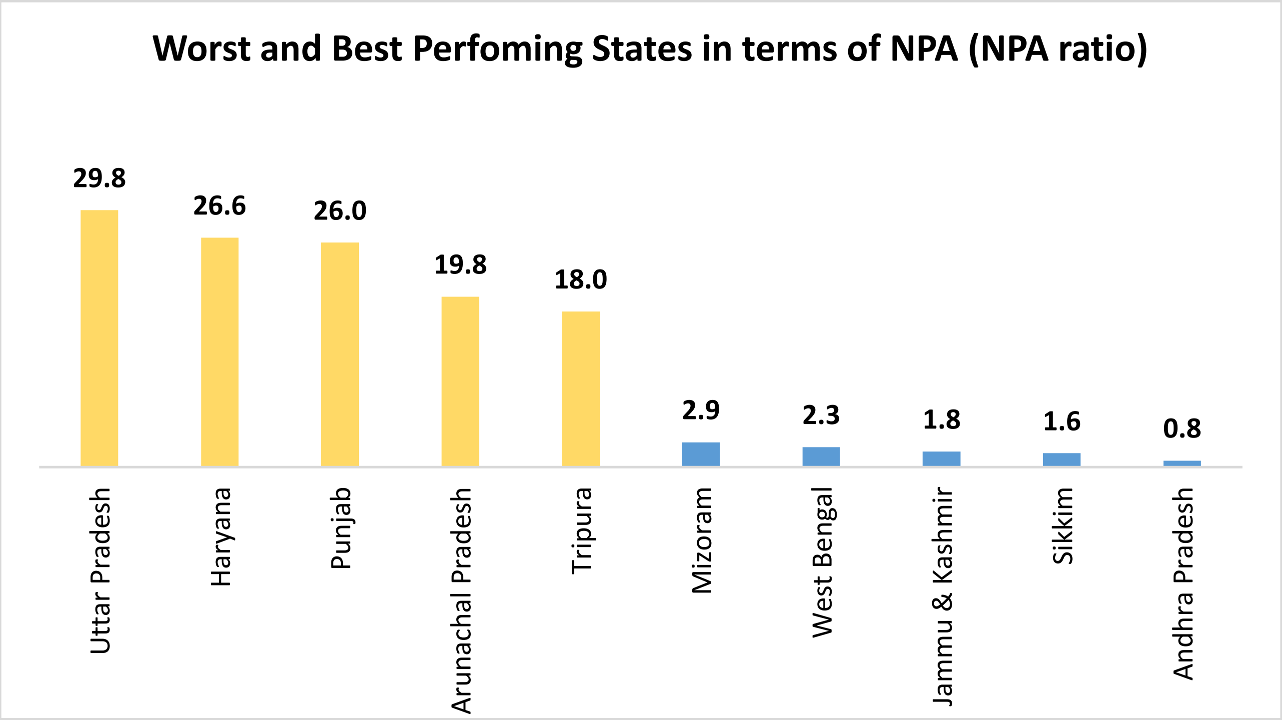
Share of Aspirational Districts in SHG Financing

State	Total Aspirational	Share of Aspirational Districts in	
		Outstanding	Account
Andhra Pradesh	3	18%	20%
Assam	7	21%	23%
Bihar	13	32%	32%
Chhattisgarh	10	41%	38%
Gujarat	3	5%	4%
Jammu & Kashmir	2	0%	1%
Jharkhand	19	85%	83%
Karnataka	4	3%	6%
Madhya Pradesh	8	16%	17%
Maharashtra	6	23%	27%
Odisha	10	27%	31%
Punjab	2	5%	5%
Rajasthan	6	23%	23%
Sikkim	2	30%	34%
Tamil Nadu	2	1%	1%
Telangana	5	13%	13%
Uttar Pradesh	8	37%	33%
Uttarakhand	2	17%	12%
West Bengal	3	10%	11%
Rest of the States	9	3%	3%

NPA of SHGs – Eight states have NPA ratio more than 10%

- Certain states like Uttar Pradesh, Haryana and Punjab have NPA ratio of more than 25%

- On the other hand, Andhra Pradesh has lowest NPA ratio of 0.8%



Farm Loan Waiver

Farm Loan Waivers are destroying credit culture

- The instances, frequency and scale of farm loan waivers have seen an unprecedented increase since 2014
- This surge in loan waivers is entirely driven by state governments - states have announced loan waivers aggregating Rs 2.5 trillion since 2014
- We analysed the performance of 10 farm loan waivers based on SBI & ASCB data
- As per our calculation, out of ~3.7 crore eligible farmers only ~50% of farmers received the amount of loan waiver (till Mar'22), though in some of the states more than 90% of farmers received the debt waiver amount

Status of Various Farm Loan Waivers

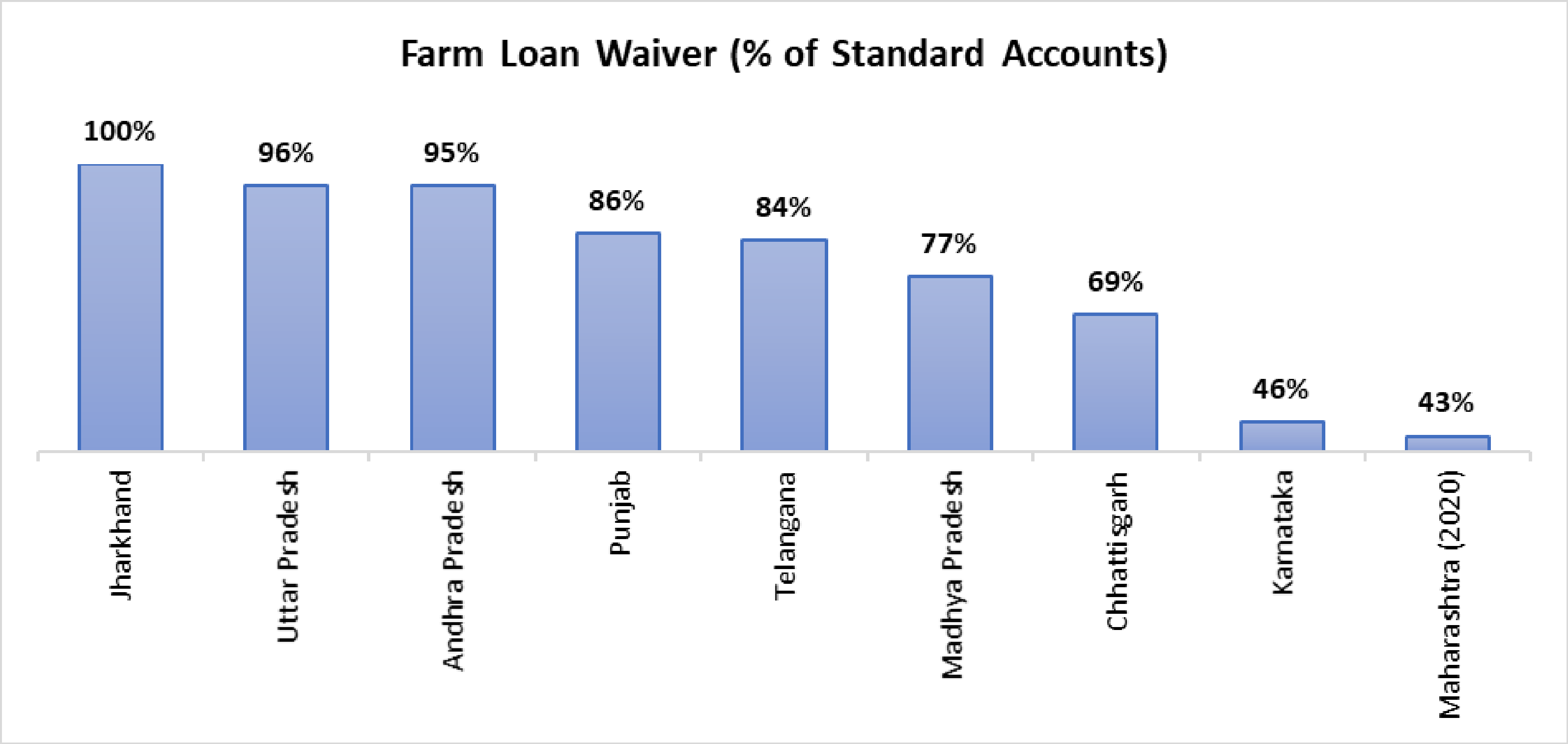
	Year of Loan Waiver	Amount of Loan Waiver (Rs crore)	Eligible Farmers (in lakh)	% of Farmers Loan Waiver Received (till Mar'22)
Uttar Pradesh	2017	36,000	39	52%
Maharashtra	2017	34,000	67	68%
	2020	45,000	44	91%
Andhra Pradesh	2014	24,000	42	92%
Karnataka	2018	44,000	50	38%
Punjab	2018	10,000	8	24%
Madhya Pradesh	2018	36,500	48	12%
Chhattisgarh	2018	6,100	9	100%
Telangana	2014	17,000	51	5%
Jharkhand	2020	-	9	13%
Total (10 instances)	-	2,52,600	368	51%

Source: SBI Research

- Possible reasons for low percentage could be: (a) rejection of claims by State Governments, (b) limited or low fiscal space, and (c) change in Government in subsequent years

Strikingly, Farm Loan Waivers are given to standard accounts!

- Loan waivers destroy the credit culture which may harm the farmers' interest in the medium to long term and also squeeze the fiscal space of governments to increase productive investment in agriculture infrastructure
- Of the total accounts eligible for farm loan waiver, most of the accounts (more than 80% in some states) were in standard category, bagging a question whose interest rampant waivers *actually* serve?
- This indicates that farm loan waivers essentially and ultimately serve a 'self goal'



Kisan Credit Card (KCC)

KCC: Current Status

- Kisan Credit Card (KCC) provides adequate and timely bank credit to farmers under a single window for cultivation and other requirements, including consumption, investment, and insurance

Kisan Credit Card (KCC) Scheme								
Banks/FIs	Number of Operating KCC (in Lakh)				Amount Outstanding (in Rs Crore)			
	2019	2020	2021	2022	2019	2020	2021	2022
Co-operative Banks	304.14	289.38	301.83	-	127436	136734.7	146980.7	-
RRBs	122.53	121.97	128.91	-	127071.8	136695.1	149415.8	-
Commercial Banks	236.32	241.44	306.96	268.71#	413670.4	470143.54	456736.33	476283
Total	663.23	652.79	737.70	-	668256.3	743573.34	753132.83	-
Source: RBI (# represents only active accounts, without NPA)								

Kisan Credit Card (KCC): Objectives, Present Status & Issues

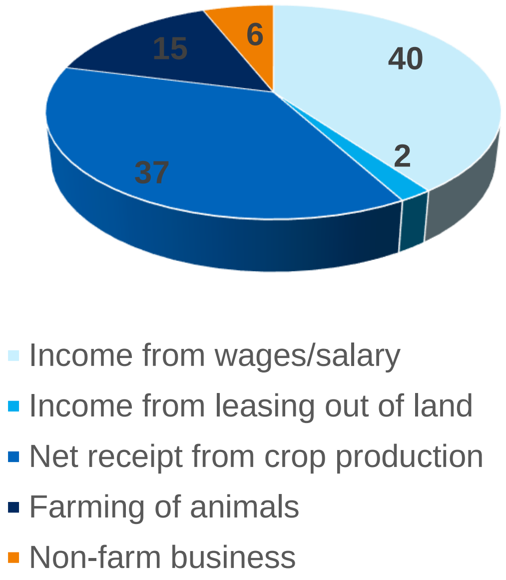
- KCC scheme was introduced in 1998 for farmers based on their holdings for uniform adoption by the banks so that farmers may use them to readily purchase agriculture inputs such as seeds, fertilizers, pesticides etc. and draw cash for their production needs
- The scheme was further extended for the investment credit requirement of farmers viz. allied and non-farm activities in the year 2004
- On 18 December 2020, Prime Minister launched the Revised KCC Scheme which aims at providing adequate and timely credit support from the banking system under a single window to the farmers for their cultivation and other needs:
  - All charges (processing, documentation, inspection and folio) have been waived off
  - A uniform application form has been prescribed for all banks
  - Collateral-free loan limit increased to Rs 1.6 lakh by RBI, however collateral security obtained by banks for loans above Rs 1.60 lakh
  - Animal husbandry and fisheries farmers have been brought under the fold of KCC with interest subvention and PRI benefit targeted
- Under Interest Subvention Scheme (ISS), interest subvention @ 2% for short term crop loan and Prompt Repayment Incentive (PRI) of 3% is inbuilt. Thus, effective rate of interest comes at 4%. Some states further subvent the interest. From FY 22-23, GoI has decided to extend only the Prompt Repayment Incentive

Gap between KCC and PM-KISAN Beneficiaries needs to be resolved at the state level through tenancy certificates

- PM-KISAN is a Central scheme launched on 24th February 2019 to supplement financial needs of land holding farmers through Direct Benefit Transfer (DBT) mode
- The scheme was initially meant for small and marginal farmers (SMFs) having landholding upto 2 hectares, but scope of the scheme was extended to cover all landholding farmers with effect from 01.06.2019
- Under the PM Kisan scheme, about 11.78 crore farmers and funds amounting to Rs 1.82 lakh crore in various installments have been released to the eligible beneficiaries of this scheme across India
- There is gap between 11.78 crore PM KISAN beneficiaries and ~7.4 crore farmers having KCC. Thus, the remaining ~4 crore could be land owning cultivators and at least 2-3 crore of such could be tenants/lessees/landless farmers
- Currently, such tenant farmers are not formalised into the credit delivery mechanism. As of now, it requires state interventions for tenancy certificates which is only available in Andhra Pradesh and we must hasten this process across states

Time to move onto a Livelihood Credit Card (LCC) For Agriculture for Ease of Doing KCC?

- The total average monthly income of an agricultural household: Rs 10,218*
- It is seen that income from crop cultivation constitutes only about 40% of the total household income
- As the sources of income are diverse, not merely from crops, a flexi loan may be thought off



Incidence of Indebtedness in Rural Areas

All-India Figures (in %)	Cultivator	Non-cultivator	All
Institutional only	21.2	13.5	17.8
Non-Institutional only	10.3	10.0	10.2
Both	8.8	4.7	7.0
All	40.3	28.2	35.0

*Source: The 77th round of the National Sample Survey

Key Recommendations

Suggestions to Include PM-KISAN Beneficiaries under KCC

- Intensive Monitoring at all levels supported with state of art technology solutions, through Aadhaar in line with PM-KISAN
- Village level mobilization campaigns to be initiated through Sarpanch or Bank Sakhi attached with the Bank under NRLM
- All KISAN beneficiaries may declare their KCC status with credit limit of Rs 1.6 lakh by providing desired documents
- Campaign to ensure that the farmers get KCC easily which will prevent them from borrowing from money lenders
  - Complete coverage about the date of village level camp through public announcements to create awareness
  - House visits
  - Corner meetings
  - Folk shows in mandis
  - Mobilisation through anganwadi
  - Youth clubs to be involved to mobilise farmers
  - Krishi Vigyan Kendras (KVKs) to conduct special media and interpersonal level campaigns

Agri Livelihood Credit Card (LCC): Can Run Parallelly to KCC initially

- Overdraft/Revolving credit / Like a credit card - up to **Rs 1 Lakh**
- Multi-purpose loan covering a rural household's entire activities and preference for households not indebted to the formal sector/the survey shows potential for further formal credit penetration. Regular interest-servicing + routine credits/debits will keep the account standard and Easy Assessment based on landholding/farm animals/other income
- Mandatory linking to social security covers like PMJJBY, PMSBY & APY
- Better credit terms for the rural households - a Flexi loan with no Scale of Finance rigidities like for KCC loans
- Easier options for interest servicing on a monthly basis
- Assuming 10 lakh beneficiaries with an average loan of Rs 50,000 each - Total loan disbursements would be Rs 5000 crore in a year. Further, if loans are covered under Credit Guarantee Scheme, risk weightage will be zero for the covered portion
- There is a gap in formal loan delivery which Banks can tap. Lower credit costs for Banks / Lesser repayment load for borrowers eventually a low cost, multipurpose loan with relaxed repayment terms of interest alone to reinvigorate rural demand

Comparison – AVA (Average Value of Assets), AOD (Average Amount of Debt) & DAR (Debt to Asset Ratio) – All-India (NSS report)

All-India Figures	AVA (Rs)	AOD (Rs)	DAR (%)
Rural	15,92,000	60,000	3.8
Urban	27,17,000	1,20,000	4.4

LCC: Details of Interest servicing load (without reckoning interest subsidy)

Amt (Rs)	1,00,000.00	1,00,000.00	50,000.00
RoI (%)	8.00	9.00	9.00
Tenor (Yr)	1	1	1
Interest (Rs, Annual)	8000.00	9000.00	4500.00
Monthly Payout (Rs)	666.67	750.00	375.00

Proposing Omnibus Credit Guarantee Fund for Agriculture: A Value Multiplier

SBI
The banker to every Indian

- The Omnibus Agriculture Credit Guarantee Fund Trust-Agri & Allied Sectors (CGFT-AAS 'आस'), may be modelled on the aegis of CGTMSE; could push up fresh agri lending exponentially, giving Financial Intermediaries confidence to look at agri proposals without apprehensions of piling up of sticky assets
- Assuming Corpus for the proposed CGFT-AAS at Rs 5,000 crore initially, and an average leverage of 15 (to be increased suitably later):
  - Fresh Loans that can be guaranteed through this fund - Rs 5.25 lakh crore
- At present there are three Guarantees in operation in Agri Sector;
  - Small Farmers' Agri-Business Consortium (SFAC)
  - NABSanrakshan Trustee Company Private Limited (by NABARD)
  - Agri Infrastructure Fund
- The proposed Omnibus Agriculture Credit Guarantee Fund Trust – Agri & Allied Sectors can be handled by enhancing the role and responsibilities of NABARD through existing NABsanrakshan Scheme covering all incremental loans in Agri segment (Loans not covered by the existing schemes)
- The limits on claims may be varied depending on the category of loans in future though keeping a single tier of 75% for loans up to Rs 3 lakh initially should go a long way in providing hassle free financial assistance to eligible farmers on lower band of spectrum
- ***Going by the performance trend of CGTMSE, this fund can be expected to be in surplus corpus-wise. This will act as a Credit Accelerator and ensure coverage of all Agri loans including Agri Value Chain Financing (AVCF). Also, the inherent and innate flaws in CGTMSE scheme, which in its two decades existence has been able to cover only ~10% of eligible SME advances, should not be repeated in CGFT-AAS by making it near compulsory for all institutions to invariably onboard fresh loans on platform***

Credit Guarantee Fund Trust-Agri & Allied Sectors (CGFT-AAS): Unlocking Value, Anchoring Expectations: Rs 5.25 lakh crore disbursement with a minimal fiscal cost at Rs 6450 crore and minimal capital requirement at Rs 11,320 crore

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Amount (in Crore)	2023	2024	2025	2026	2027	Cumulative
Capital	5000	5000	7500	7500	10000	
Gross Income# (A)	1000	1250	1500	1800	2000	
Admin and Op Expenditure (B)	10	10	12	15	15	
Provision Opening Balance (C)	--	250	500	800	1000	
Provision made during the year (D)	1000	1250	1500	2000	2000	
Claims paid out during year (E)	750	1000	1200	1800	1700	6450
Closing Balance (C+D-E)	250	500	800	1000	1300	
Leverage (F) (Times of Capital/Corpus)	15	15	15	15	15	
Envisaged credit Growth (G)	75000	75000	112500	112500	150000	525000
Capital Required Presently for (G) (@ 75% RW x Regulatory Capital 11.5%)	6469	6469	9703	9703	12938	
75% Guaranteed Amount Proposed	56250	56250	84375	84375	112500	
Capital requirement after CGFT-AAS	1617	1617	2426	2426	3234	11320

Renewal of KCC can be made conditional only on interest payments by RBI

- The review and renewal of KCC accounts has remained a grey area, with plethora of technicalities embedded since ages and multiple cumbersome processes making it a quagmire that stakes claim to humongous time, effort and resources of Banks' human power
- At present, a KCC loan, otherwise Standard, needs to be reviewed and renewed by concerned branch every year to ensure it remains a Standard asset in the Book and eligible benefits (auto enhancement in limits / processing of interest subvention upon time bound repayment) can be passed on to the borrowers. If both principal and interest are not repaid, the KCC account will become an NPA in due course
- Small and marginal farmers mostly deal in cash and therefore find it difficult to route all their transactions through the KCC account. As per the KCC scheme, farmers are only eligible for interest subvention and an enhancement of 10% in the limit every year, upon successful completion of renewal/review. However, the stipulation that principal and interest should be repaid creates difficulties and conditions for default
- Additionally, the process requires interventions in Core Banking System/Loan Processing system(s) as also obtaining of relevant papers physically. The review is preceded by a 'physical' inspection of the agricultural fields on which 'standing crop' has been financed by the branch official. Visit to far off villages requires time and planning whereas most of the branches in RUSU areas of Banks operate with smaller number of human power which makes it difficult to allocate time for meaningful inspection of agri fields
- Any delay in carrying over inspections in time *inter-alia* ensures that Review / Renewal can not be processed in the system, resulting in a huge slush pile of 'unreviewed' accounts wherein the intended benefits can not be passed till such time
- **On average, a KCC would take anywhere between 45 minutes to a few hours for 'review and renewal' in core system. Juxtaposing it for 7.37 crore KCC implies banks spend a cumulative 23 lakh man days to complete the process every year that otherwise could have been used for fresh lending to agriculture**
- Simplifying the 'Review/Renewal' mechanism may be thus the top the agenda of the regulator, and simultaneously also deepening use of technology by banks (using satellite imagery data for real-time monitoring of crops, or utilizing third party approved agents for submitting field inspection reports through video-calling facility the records/footage of which should be preserved for at least two crop seasons) and separating the review from the Core Banking System (it can be done separately through digital channels as most Banks have brought their apps / web versions of services offered and Core Banking System can fetch relevant data only from that)

Agri Value Chain Financing (AVCF): The Architecture of New Possibilities*

Collectivization and Aggregation have become the new mantras in enhancing agri output, providing smaller farmers platforms at both Pre and Post harvest significant stages, enabling scale of finance and price discovery while also ensuring food safety and nutritional availability for a growing population whose eating habits are undergoing massive changes. **Some suggestions to accelerate Agri Value Chain Financing and ensure seamless financing to major intermediaries that may be implemented by RBI:**

- ***Finance to input suppliers like fertiliser dealers, seed suppliers, dealers of agricultural machinery/implements and for aggregation or procurement by all types of collectives of farmers***

- NABARD (having domain experience) and banks (having physical presence and direct lending experience) to identify at least 15 commodities in the agro / food processing sector for proper mapping of the value chain and suggest durable credit funding models for stakeholders

- In States where land records are digitised and Banks are given a provision to record their loan interest on the digitised land portal, the regulator may mandate Banks to lend up to Rs. 3 lakhs without collateral, for any activity (including crop loans) within the Agri Value Chain. At present, the mandated amount for collateral-free loan is Rs 1.6 lakhs

- As MSP which is an output price is common across the country, there is sufficient rationale to move towards One Nation/One Scale of Finance for the 23 commodities covered by the MSP system. This will be a major reform in Agri Value Chain financing particularly for crop cultivation

- Simultaneously, the long-pending request of the commercial banks and the IBA for enablement of the Ease of doing of KCC business for both lenders and borrowers, for regulatory changes to allow interest-servicing alone being a sufficient condition for renewal of KCCs (for loans limit up to Rs 3 lakh at least) must be implemented immediately as small and marginal farmers mostly deal in cash and therefore find it difficult to route all their transactions through the KCC account

**Adapted from report of the Working Group on Agriculture Value-Chain Finance, Dec 2021 submitted to Ministry of Finance*

Digitisation of Land Records & Management (DILRMP) should be continued in a mission mode

- Digitisation will help in unique identification of land parcels
- Efficient use of land resources is a strong imperative; States will be encouraged to adopt Unique Land Parcel Identification Number to facilitate IT-based management of records
- The facility for transliteration of land records across any of the Schedule-VIII languages may also be rolled out
- The adoption or linkage with Natural Generic Document Registration System (**GDRS**) with the "One-Nation One -Registration Software" should be promoted as an option for uniform process for registration and "anywhere registration' of deeds & documents
- Digital India Land Records Modernization Programme (DILRMP) under Department of Land Resources, Ministry of Rural Development (GoI) promoting computerization of land records (6.13 lakh villages), automation of Sub-registrar offices (4885 SROs) integration of land records and property registration (3951 SROs), putting records of rights on the web (31 states), timely completion of surveys / re-surveys, digitisation of cadastral maps (1,13,80,401) , textual and spatial data integration, setting up data centres at states (22) and modern record rooms at Tehsils (2706) promise to revolutionize the entire ecosystem, bringing enhanced 'Ease of Doing Business' for all stakeholders. However, the pace of Digitisation needs to be accelerated bringing all the states on the same pedestal

Annexures

Proposed Financials of CGFT-AAS

1. Capital to be infused through GoI, NABARD and SCBs in the ratio of 50%, 25%, 25% (or, as decided by the stakeholders jointly as per evolving situation/targets set)

2. RIDF Corpus (close to Rs 4.20 lakh crore now) may be used for transfer (on revolving basis) for this purpose to augment the Capital to desired level.

3. All incremental KCC loans (including fresh allied activities KCC loans) and some part of existing KCC loans to be covered under the proposed guarantee fund

4. Gross income taken as One time guarantee fee, annual guarantee and service fee, recoveries from MLIs transferred to guarantee fund in subsequent years and investment income going forward

5. To stabilise the guarantee fund initially and to incentivise recovery efforts at MLIs, Claim payment in initial years to be locked at two times the guarantee income from individual MLIs

6. Provisions made are taken along the lines of CGTMSE, keeping in mind the limitation in claim settlement for individual MLIs annually

(*CGTMSE had made a provision of Rs 2073 crore during FY 2020-21, against Outstanding guarantees of Rs 1.10 lakh crore (liability against outstanding guarantee confined to the tune of Rs 78,924 crores through different tiers ranging from 75-85%) but actual pay out during the year remained at Rs 703 crore only)*

6. Leveraged amount is taken keeping the CGTMSE example in mind, and on-boarding of fresh as well as existing KCC loans in part on guarantee platform

7. Amount guaranteed by the fund is taken at 75% initially (unlike tiered structure of CGTMSE), for all loans up to Rs 3 lakh as of now

8. Risk weight for agri portfolio (as per Basel III) taken at 75%, under regulatory retail portfolio, and capital calculated at 11.5% of RWA

9. Capital conserved for MLIs through saving can anchor fresh loans in agri segment (i.e. loan leverage) in the same proportion (@75% RWA and capital requirement of 11.50%)

10. Over a period of time, the incremental loans through guaranteed fund can lessen the dependence of PM-KISAN from upwardly affluent sections going forward

Existing Government Schemes having Subsidies / Subvention

Scheme	Description
Modified Interest subvention scheme for short Term loan for Agriculture & Allied activities availed through KCC	• 3% PRI (Prompt Repayment Incentive) for those farmers repaying on time
Pradhan Mantri Kisan SAMPADA	• 35% capital subsidy for General and 50% for NE states
Animal Husbandry Infrastructure Fund	• Interest subvention @3 % up to Rs.100 crore • -Credit Guarantee Fund for Animal Husbandry and Dairying (CGFADIDF) cover @25% up to Rs.100 crore
Agri Infrastructure Fund	• Rs 1,00,000 crore for creation of post harvest infrastructure (warehouses and cold storage houses) • Operational from 2020-21 to 2029-30 • Interest subvention 3%, Interest rate 7.95% up to Rs 2 crore • Credit Guarantee Cover up to Rs 2 crore under CGTMSE
Fisheries and Aquaculture Infrastructure Development Fund	• Interest subvention @3% up to Rs. 2 crore • New Agricultural Marketing Infrastructure (AMI) Scheme • -Capital subsidy of @25-33.33% available for entrepreneurs

Existing Major Government Schemes (1)

Scheme	Description
Jan Samarth: National Portal For Govt Sponsored Schemes	• One Stop Digital Portal linking thirteen Credit Linked Government schemes on a single platform. **It is a first of its kind platform which directly connects beneficiaries to lenders** • Beneficiaries can digitally check eligibility, apply online and receive digital loan approval
PM KSY : Pradhan Mantri Krishi Sinchayee Yojana	• Outlay Rs. 50,000 crore for a period of 5 years (2015-16 to 2019-20) • To ensure access to some means of protective irrigation to all agricultural farms in the country - to produce 'per drop more crop' • To focus on end-to end solution in irrigation supply chain, viz. water sources, distribution network, efficient farm level applications, extension services etc • To cover drip /sprinkler irrigation, water carrying pipes, water storage ponds, small size ponds/tanks
Agri Clinics and Agri Business Centres (ACABC)	• To provide expert services and advice to farmers • To create gainful self-employment opportunities to agricultural graduates, agricultural diploma holders, intermediate in agriculture and biological science graduates with PG in agri-related courses • Provide a loan up to Rs.20 lakh per borrower to establish Agri Clinic / Agri Business Centres • As on date more than 50,000 Agricultural graduates and diploma holders trained by MANAGE (National Institute for Agri Extension Management) • Established more than 21,000 Agri-ventures as on date
E-NAM : Electronic National Agri Markets	• Digital /electronic integration of mandis/markets across the country • Online trade of Agri commodities for price discovery: 1.73 crore farmers registered • Rs 1.67 lakh crore business achieved as on March 2022

Existing Major Government Schemes (2)

Scheme	Description
Mission Organic Value Chain Development For North-Eastern Region	• "Mission Organic Value Chain Development for North-Eastern Region" for implementation in the states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura • The scheme aims at development of certified organic production in a value chain mode to link growers with consumers and to support the development of entire value chain starting from inputs, seeds, certification, to the creation of facilities for collection, aggregation, processing marketing and brand building initiative
Paramparagat Krishi Vikas Yojna (PKVY)	• India is home to 30% of the total organic producers in the world • To reduce dependence on chemical fertilisers/ pesticides • To promote the use of biofertilizer /bio pesticides • To make farming sustainable
National Horticulture Mission	• Covers the scheme for construction /expansion /modernisation of cold storage, new garden, green house cultivation and drip irrigation • Encourage entrepreneurs/farmers to growth horticulture crops for sustained income • Mission provides subsidy, advisory and hybrid seeds/ quality planting material • Covers fruit, flower, vegetables, plantation, aromatic/ medicinal plants • Achieved 320.28 MT (FY2021) surpassing food grain production (308 MT) with area of 25.66 million hectares
National Mission On Edible Oils – Oil Palm (NMEO-OP)	• To augment the availability of edible oil in the country by harnessing area expansion increasing crude palm oil production with the aim to reduce the import burden • The total approved cost of the NMEO (Oil Palm) Scheme is ₹ 11,040 crore • Assessed around 28 lakh hectares potential for oil palm cultivation

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thank you

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