NABARD

RURAL ECONOMIC CONDITIONS & SENTIMENTS SURVEY

Bi-monthly Survey Report

Round 5 (May 2025)

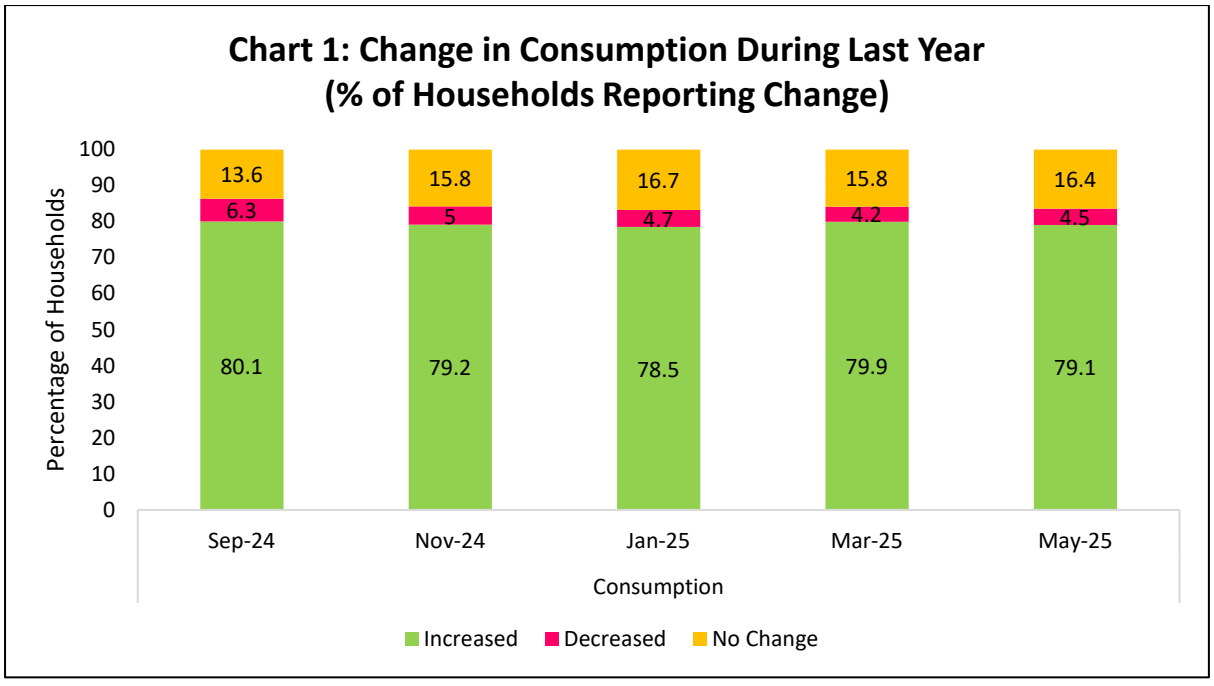
Rural Economic Conditions and Sentiments Survey[1]
(May 2025)

The May 2025 round of the Rural Economic Conditions and Sentiments Survey (RECSS) was conducted during the last week of April 2025 and the first week of May 2025. As in the previous rounds of the survey, it captures quantitative and qualitative data, both backward looking (economic conditions) and forward looking (household sentiments), on a limited set of key macro-financial parameters relating to the rural economy (please refer to Annex 1 for the survey methodology and sample coverage, and Annex 2 for the Survey Questionnaire).

Rural Economic Conditions

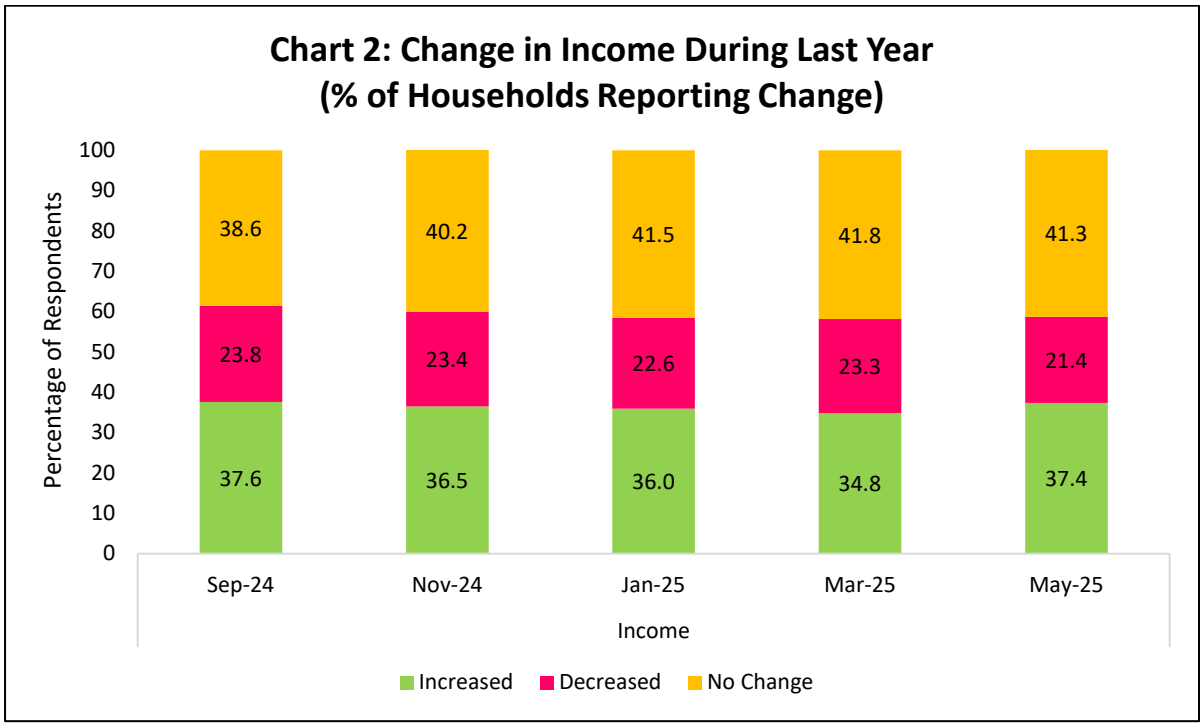
The current state of the rural economy could be assessed by looking at the trends in five key parameters of the survey in conjunction, *i.e.*, consumption, income, savings, investment and borrowings.

In the May 2025 round of the survey, 79.1% of the households reported an increase in their consumption, as against only 4.5% of the households reporting to have experienced decline in consumption, pointing to the sustained consumption-led buoyancy in rural demand. Over successive five rounds of the survey, close to 80% of the rural households have reported their consumption increasing in the last one year. Robust increase in production of foodgrains and horticulture output, above trend growth in agricultural GVA in 2024-25, moderation in rural inflation that increased the purchasing power of income and real rural wages, and fiscal transfers from the central and state governments have imparted resilience to rural demand (Chart 1; Table 2).



[1] The survey was commissioned by the Department of Economic Analysis and Research (DEAR), NABARD. Its findings do not reflect the views of NABARD.

In comparison with the last three rounds, more households have reported an increase in their income during the last year. Moreover, the percentage of households that reported a decline in their income was the lowest (at 21.4%) since the survey started. Together, they point to the income of rural households improving in the recent period (Chart 2; Table 2). As in the past rounds of the survey, however, a smaller percentage of households reported an increase in income compared with those who reported an increase in consumption, indicating the significance of monitoring household borrowings, changes in their savings/investment, and fiscal transfers to explain the observed asymmetry in income and consumption patterns.



As regards financial savings made during the last year, a majority of rural households (81.2%) reported either no change or a decline in savings (Chart 3, Table 2). 38.7% of the rural households reported to have increased their borrowings during the last year, but only 22.5 % indicated to have undertaken increased capital investments (Chart 4 and Chart 5; Table 2). Thus, one could infer that part of the consumption demand might have been sustained through higher borrowings or no increase in savings.

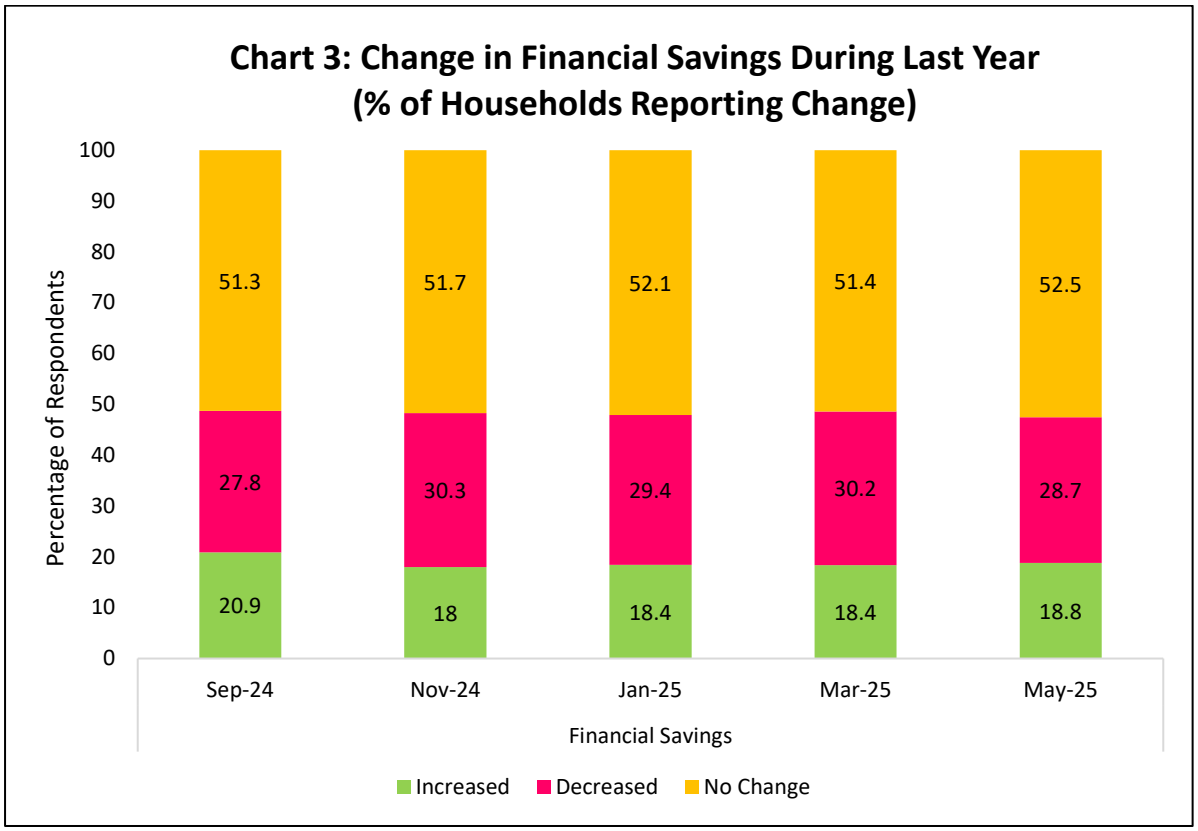


Chart 3: Change in Financial Savings During Last Year
(% of Households Reporting Change)
Percentage of Respondents
100
90
80
70
60
50
40
30
20
10
0
51.3
27.8
20.9
51.7
30.3
18
52.1
29.4
18.4
51.4
30.2
18.4
52.5
28.7
18.8
Sep-24
Nov-24
Jan-25
Mar-25
May-25
Financial Savings
Increased
Decreased
No Change

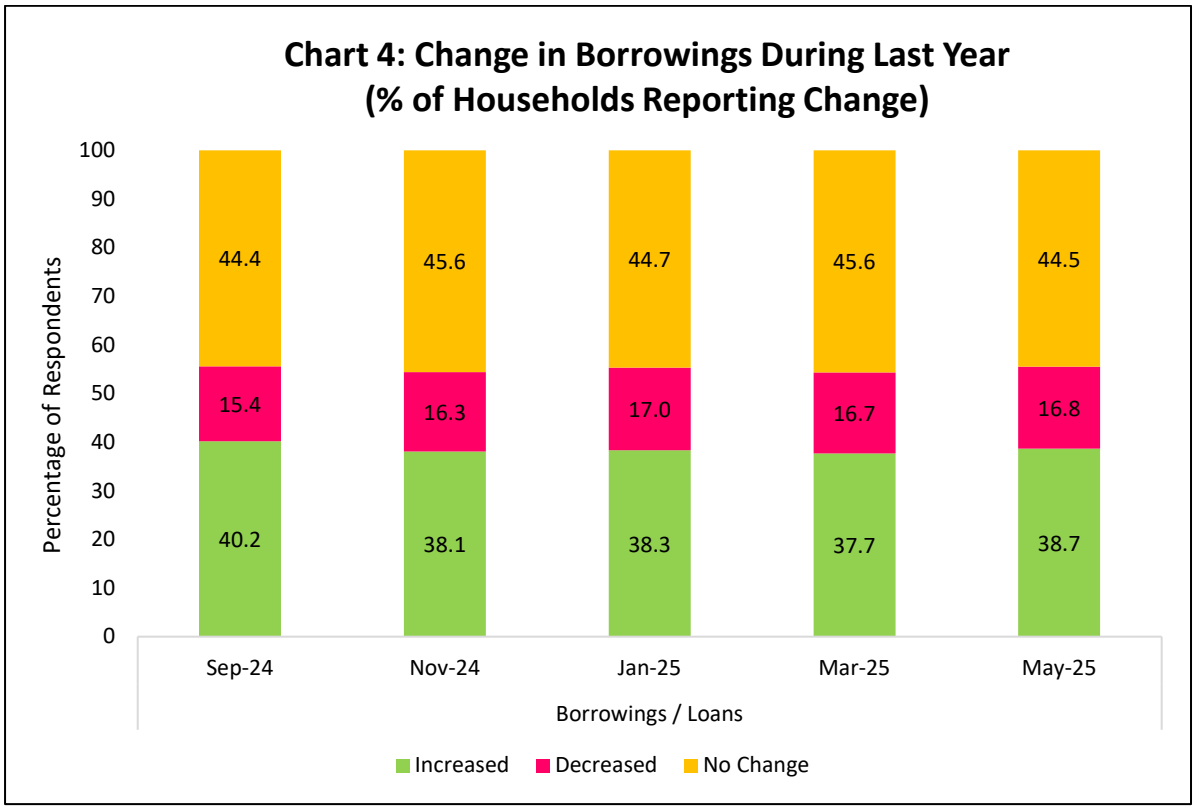
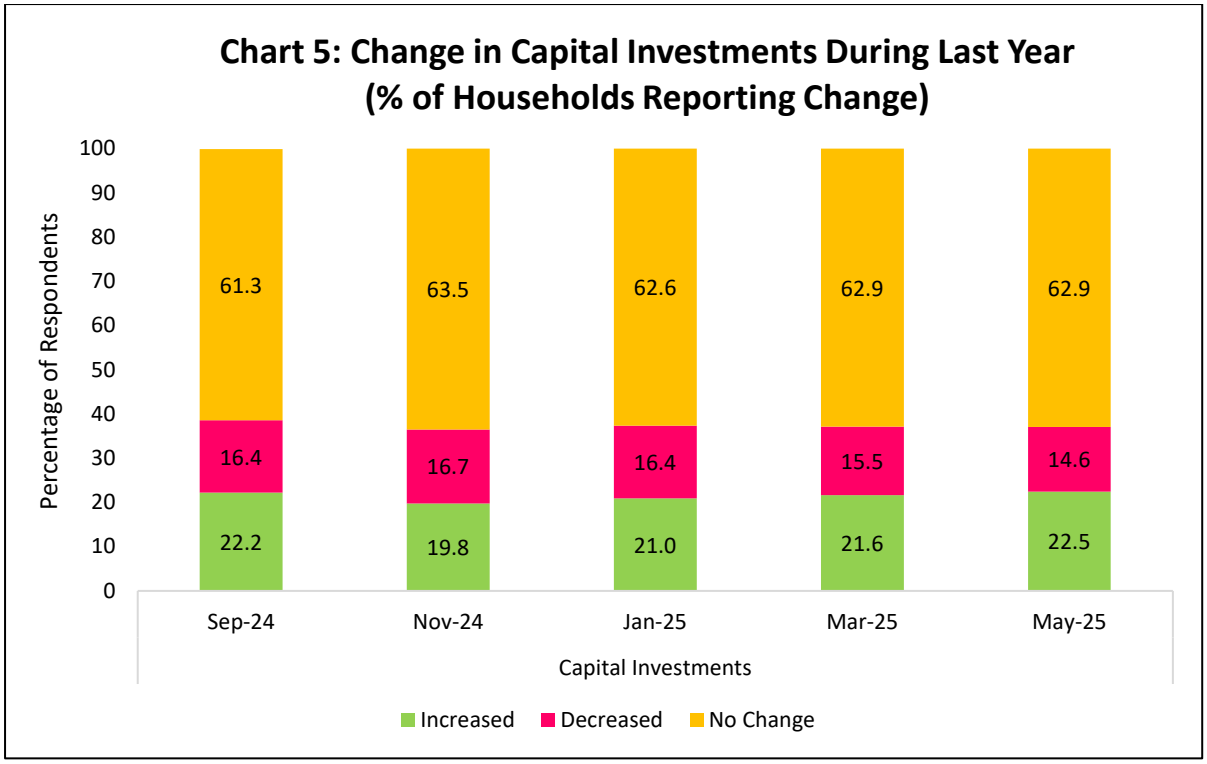
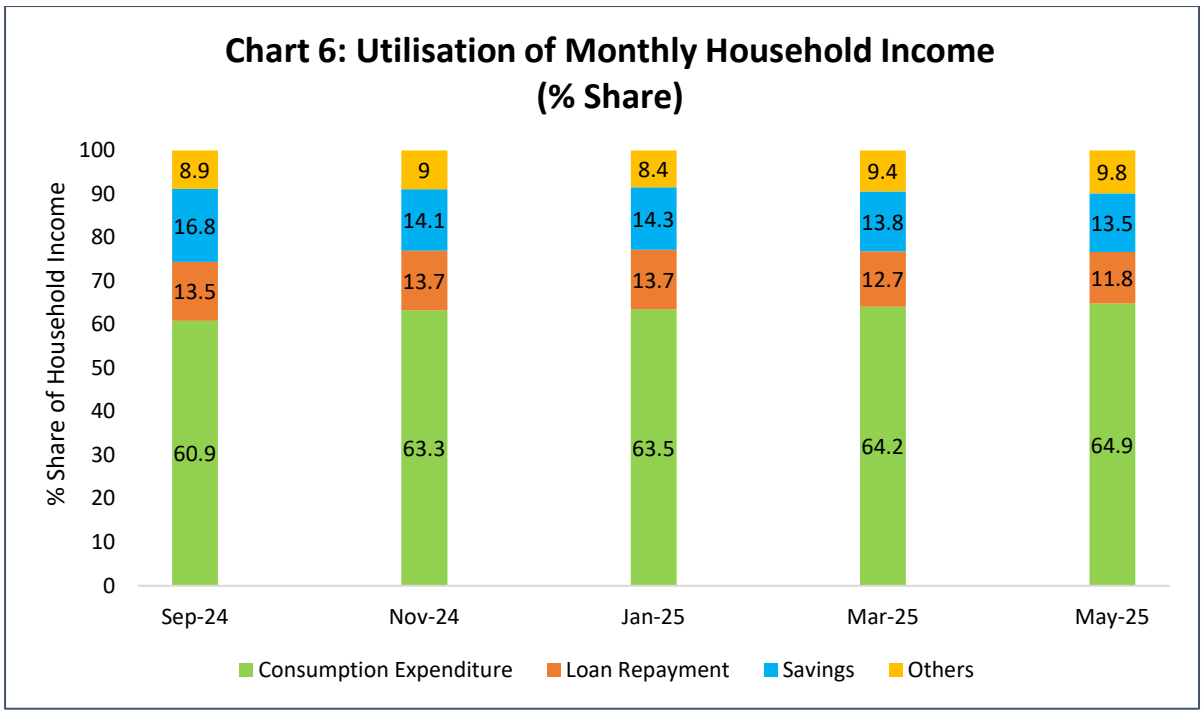


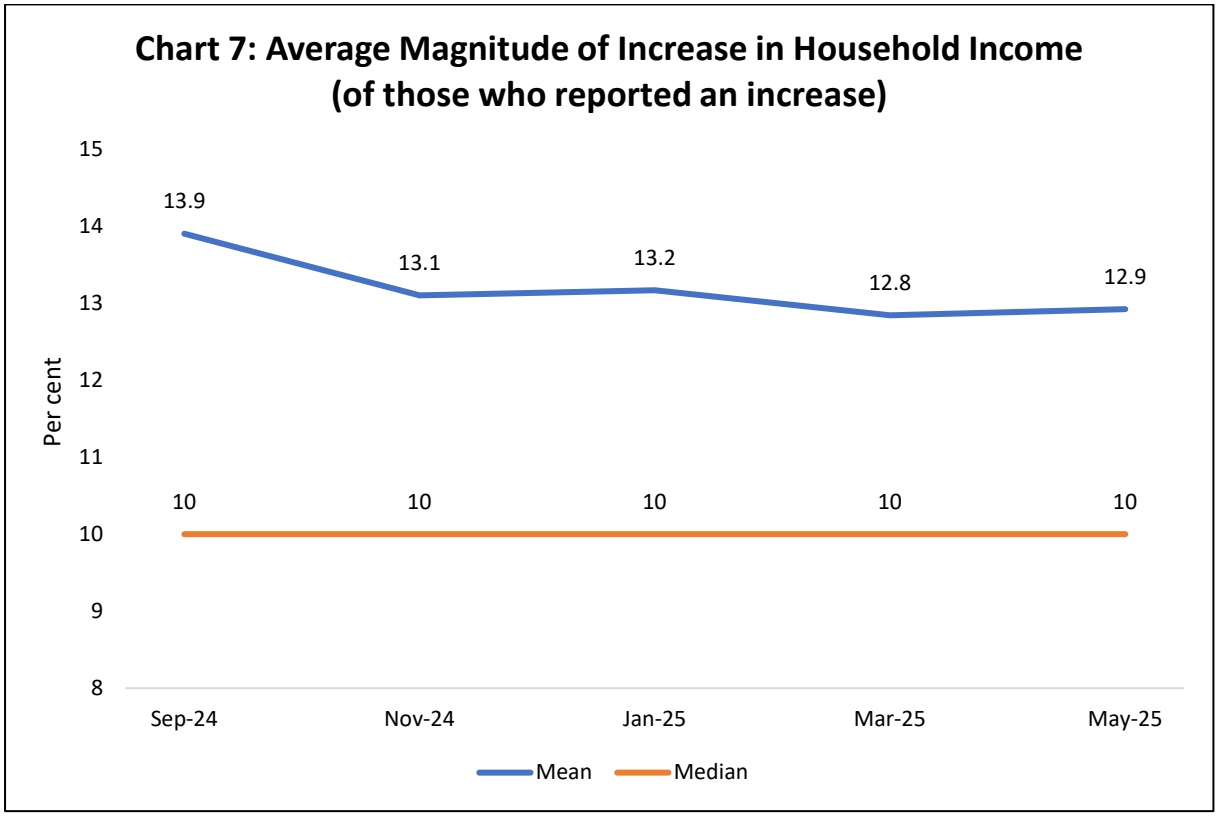
Chart 4: Change in Borrowings During Last Year
(% of Households Reporting Change)
Percentage of Respondents
100
90
80
70
60
50
40
30
20
10
0
44.4
15.4
40.2
45.6
16.3
38.1
44.7
17.0
38.3
45.6
16.7
37.7
44.5
16.8
38.7
Sep-24
Nov-24
Jan-25
Mar-25
May-25
Borrowings / Loans
Increased
Decreased
No Change



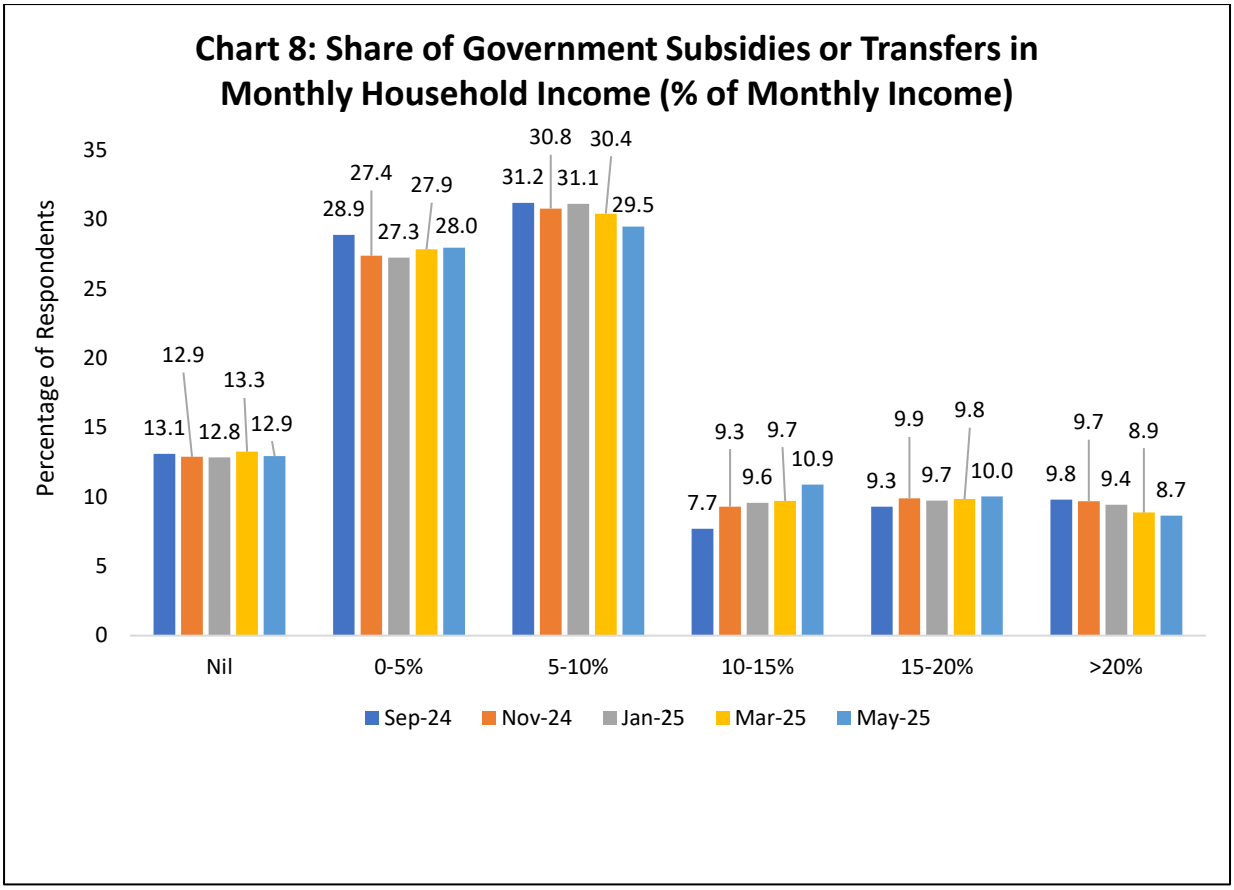
The utilisation pattern of monthly income also reveals the gradual shift taking place in the share of consumption relative to income used for savings, loan repayment and other purposes. The share of consumption in monthly household income has risen steadily to 64.9% in the May 2025 round of the survey, while the shares of savings and loan repayments have fallen to 13.5% and 11.8%, respectively (which are the lowest levels since the survey started) (Chart 6).



Moreover, for the households who reported experiencing an increase in their income during the last one year, the average (mean) magnitude of increase in income also seems to be decelerating over time (to 12.9% in the May 2025 round of the survey) (Chart 7; Table 3).



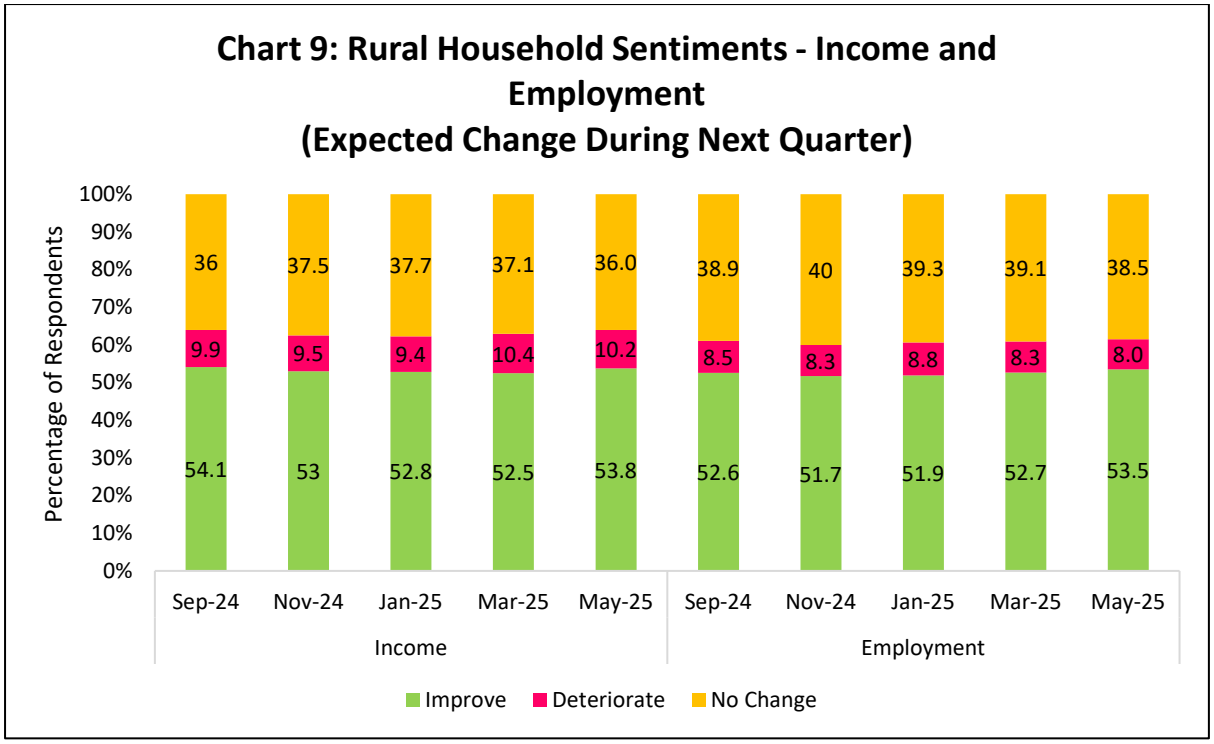
Income and consumption of the rural households are supported by several fiscal transfer schemes, in both kind and cash, by the central government and state governments, in the form of free/subsidized provision of food, water, electricity, cooking gas, fertilizer; interest subventions; school uniform, books and computers; public transportation; mid-day meal; student scholarships and pensions (for old age, widows, disabled, artisans, *etc.*). As reported through this survey by the rural households, such transfers are equivalent to about 10 % of their average (mean) monthly income, with a wide distribution, suggesting that a segment of the rural households depend more on such transfers relative to their income (Chart 8). Over the five rounds of the survey, the share has remained reasonably stable.



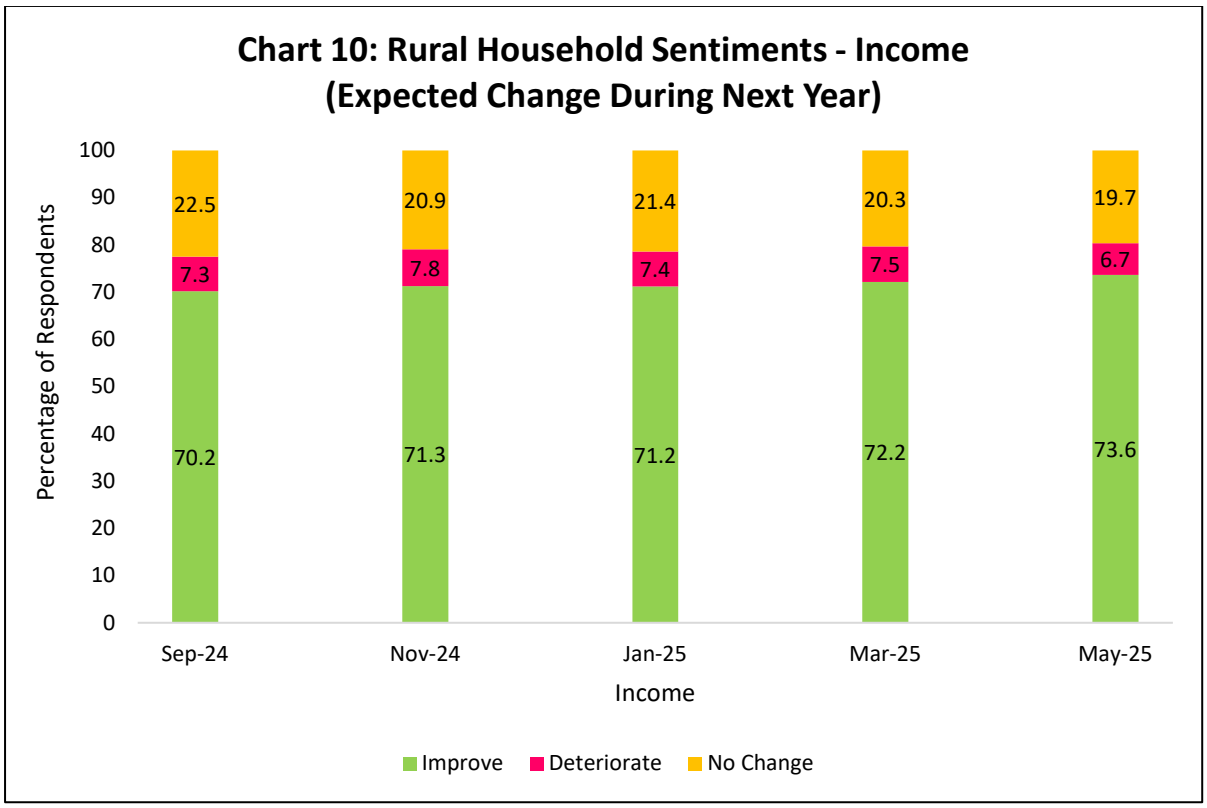
	Round 1 (Sept 2024)	Round 2 (Nov 2024)	Round 3 (Jan 2025)	Round 4 (Mar 2025)	Round 5 (May 2025)
Mean	9.75	10.09	10.3	9.9	10.0
Median	8	8	8	8	8

Rural Household Sentiments

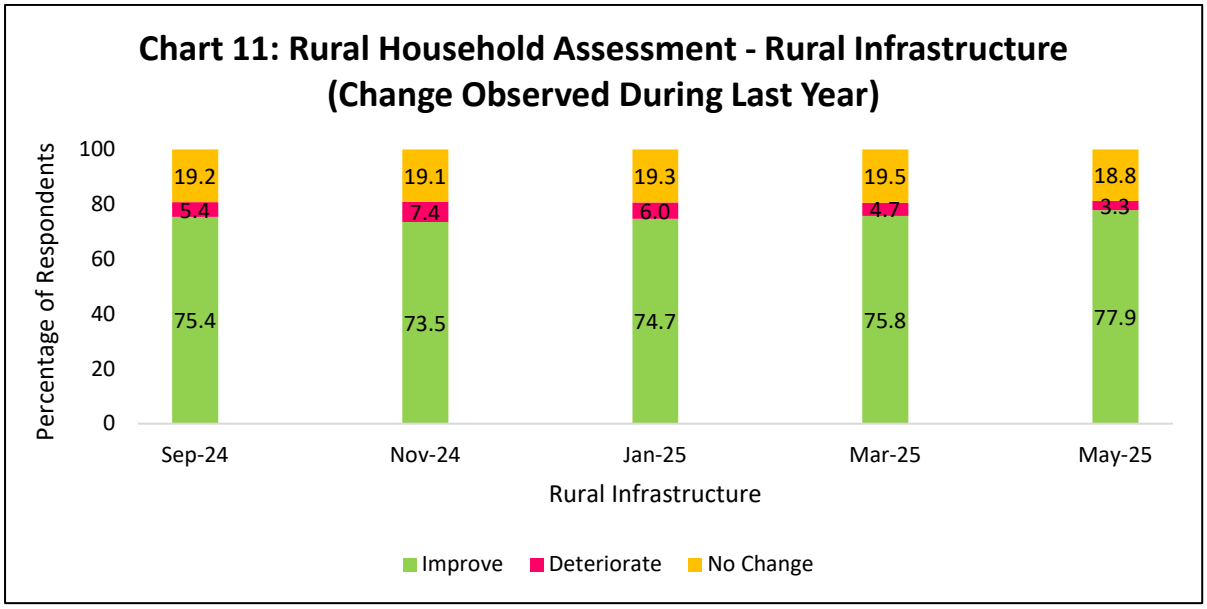
The near-term outlook for the rural economy is assessed in this survey by collecting information on perceptions and expectations of the rural households. Majority of the rural households expect their income and employment conditions to improve during the next quarter, with the share of those expecting deterioration remaining modest (Chart 9).



Rural households are more upbeat about their income growth prospects over the next year compared with what they perceive over the next one quarter. Since the survey started, maximum percentage of the rural households (73.6 %) exhibited optimism, expecting their income to increase over the next one year (Chart 10).

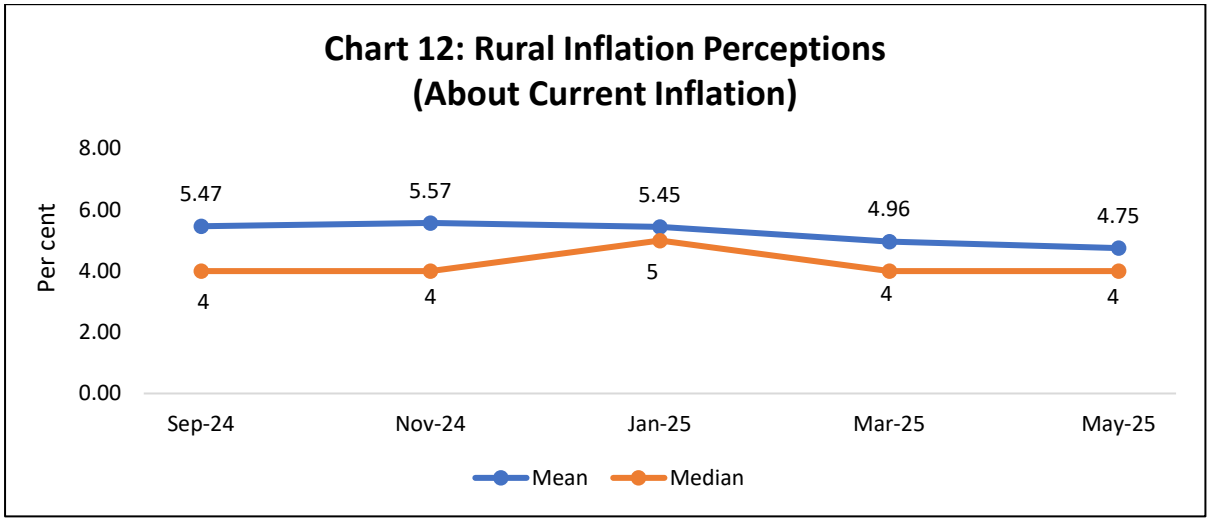


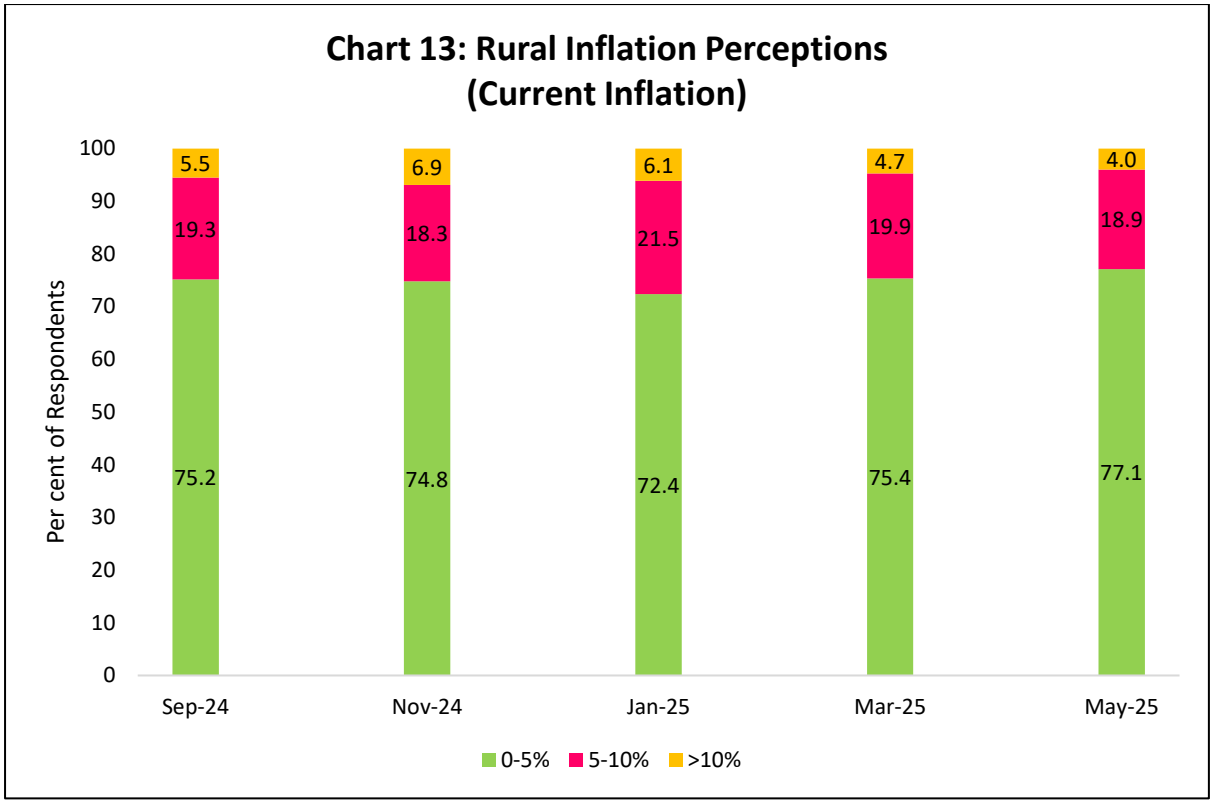
The assessment of households about the state rural infrastructure shows sequential improvement, after the dip in the November 2024 round of the survey (Chart 11).



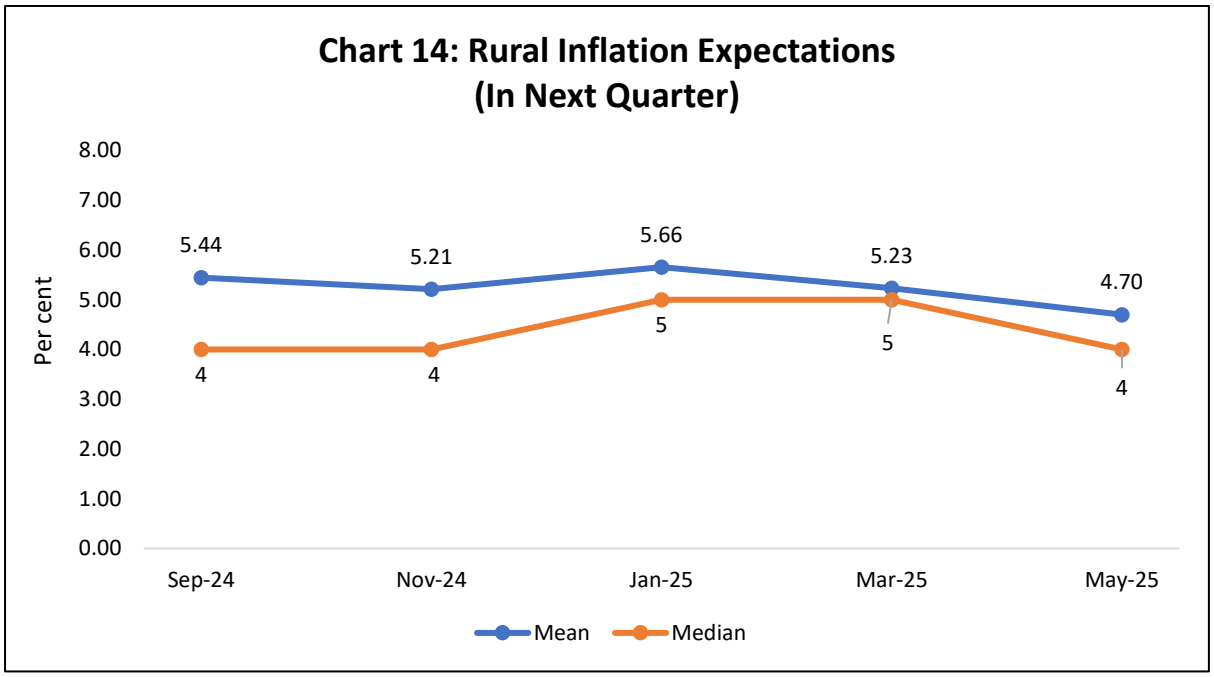
Rural Inflation Perceptions and Inflation Expectations

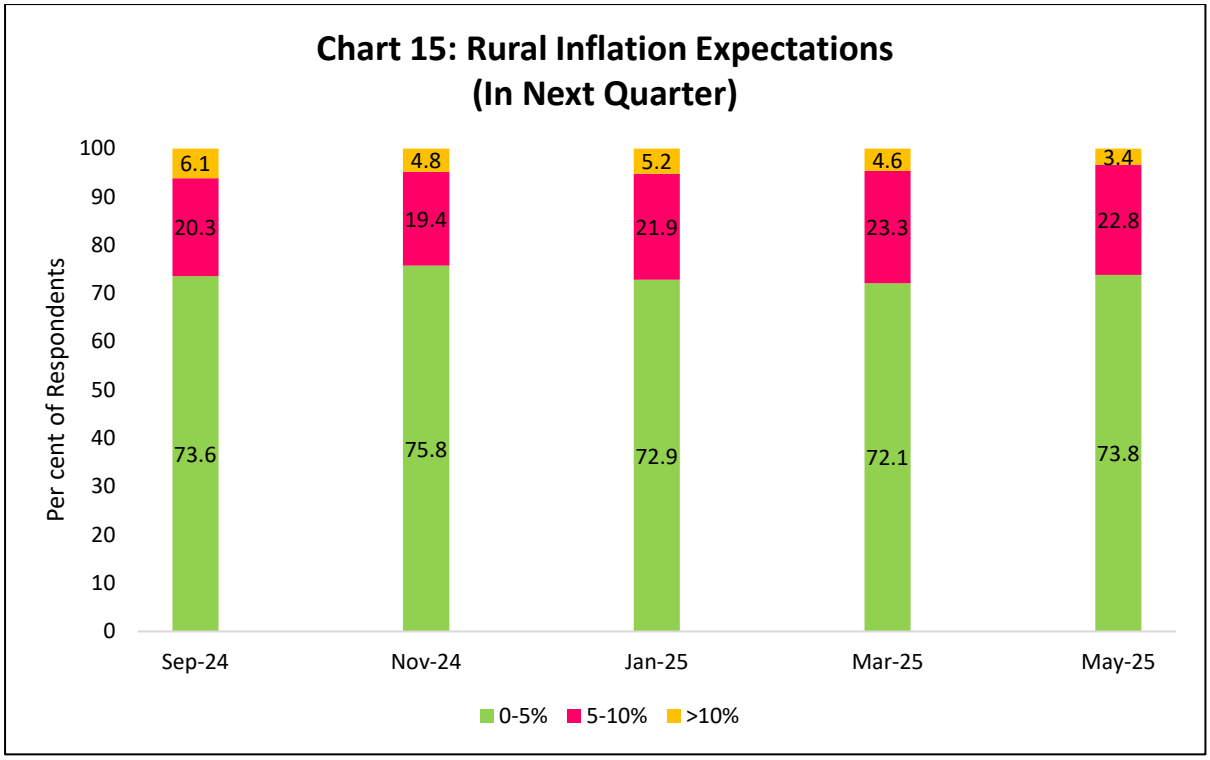
When the survey was conducted during the last few days of April 2025 and the first few days of May 2025, inflation data on CPI-rural inflation was available for the month of March 2025, which had declined to 3.25% from 3.79% in February 2025 and 4.59% in January 2025. In the May 2025 round of the survey, the average (mean) value of inflation perceptions of rural households moderated to 4.75%, but the median value remained unchanged. Since the November 2024 round of the survey, there has been a gradual decline in the average (mean) value of inflation perceptions (Chart 12). Since the survey started, the highest percentage of households (77.1%) perceive realised inflation to have been at 5% or below (Chart 13).



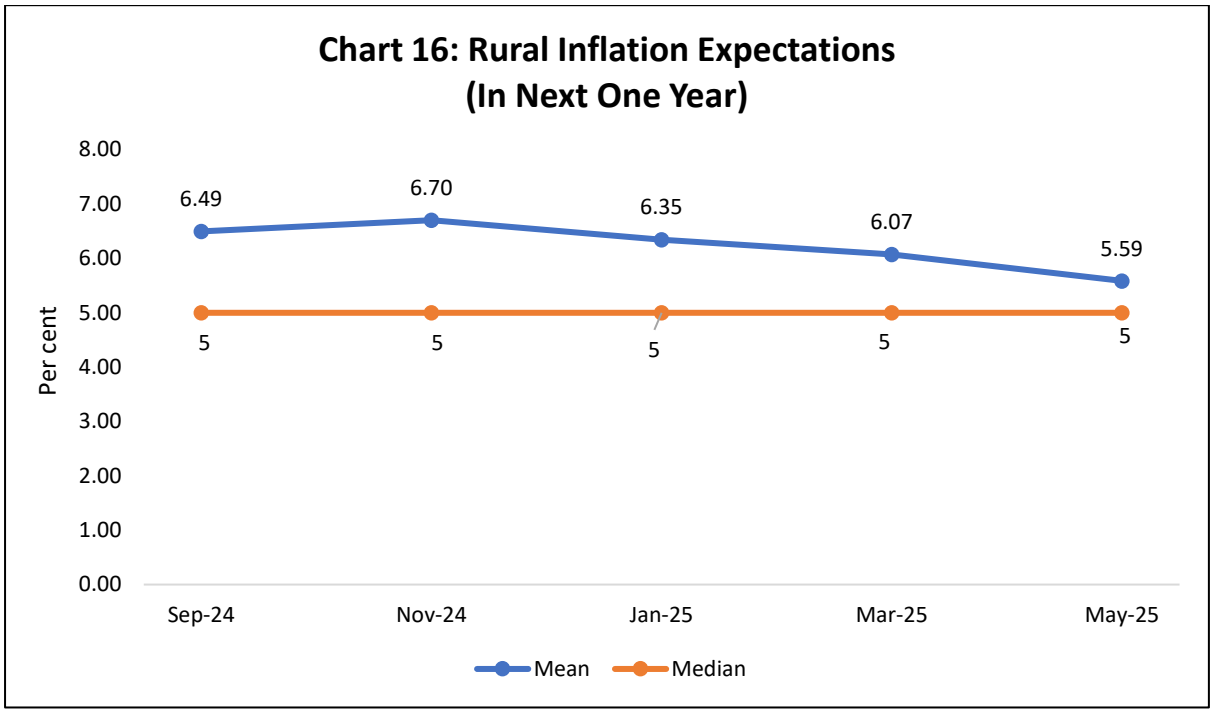


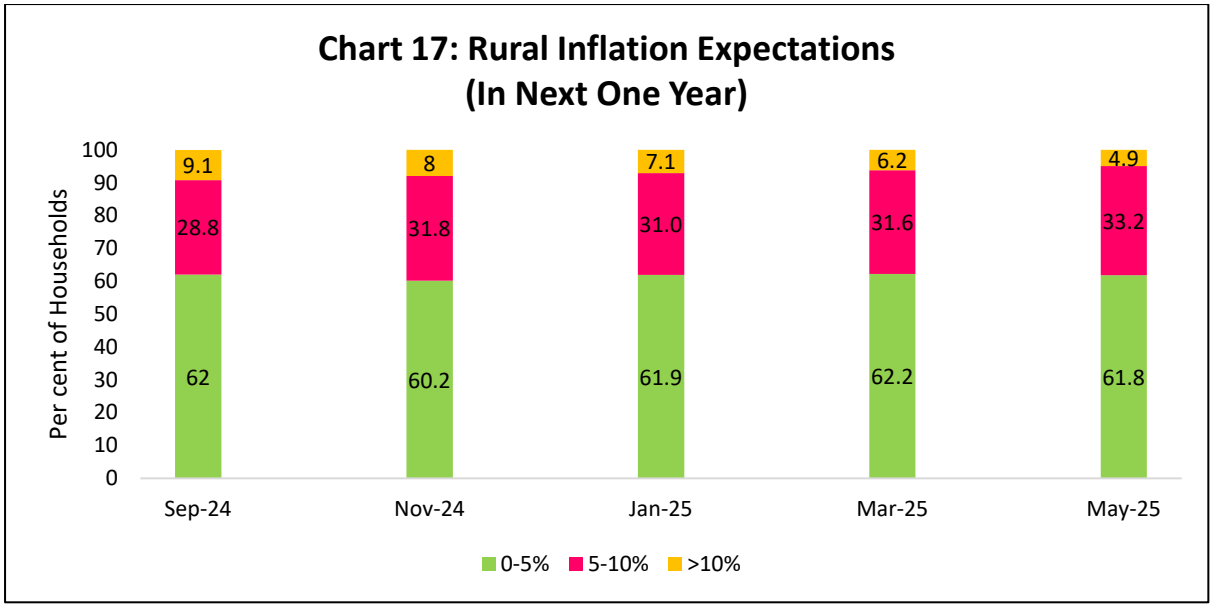
Inflation expectations for the next quarter softened significantly (by 53 basis points) to 4.70%. The median value of inflation expectations moved back to 4% from 5% in the previous two rounds of the survey (Chart 14). The majority of the respondents (73.8%) expect inflation to remain at or below 5% in the next quarter (Chart 15).





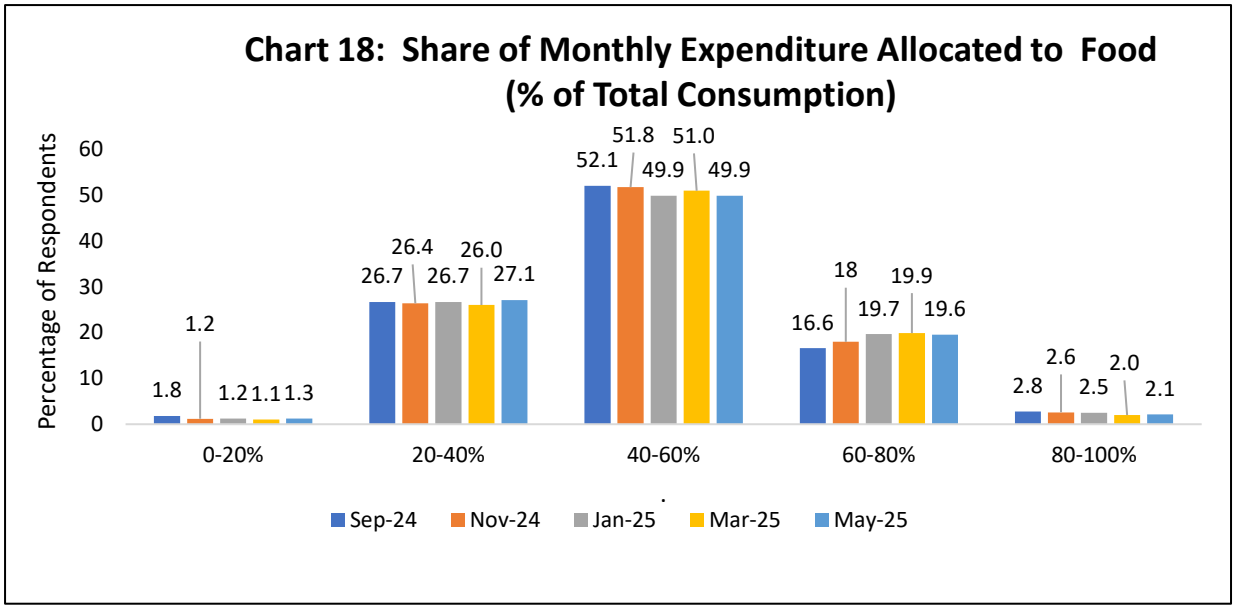
Inflation expectations for the next one year also moderated by 48 basis points (mean value), exhibiting sustained softening since the November 2024 round of the survey. The median value of inflation expectations, however, remained unchanged at 5% (Chart 16). 38.2% of the households expect inflation to be above 5 % in the next one year (Chart 17).





Share of Food in Monthly Consumption Expenditure

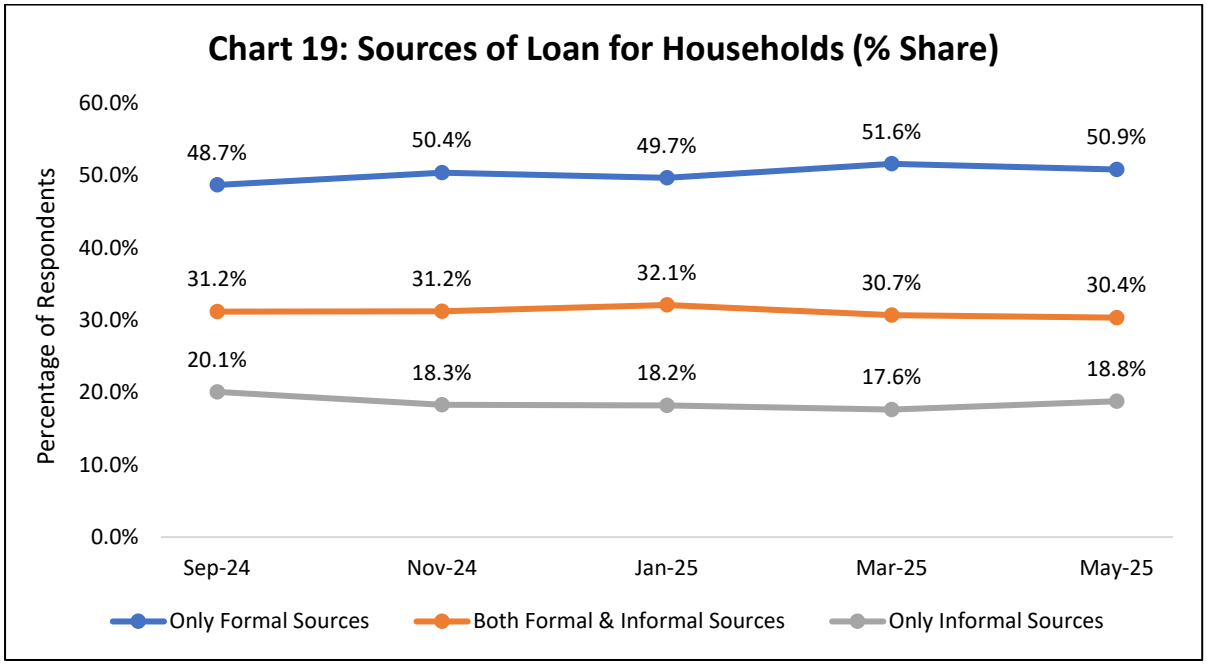
A majority of the rural households (about 50-52%) revealed that they allocate 40-60% of their monthly consumption expenditure to food. Despite moderation in food inflation in recent months, households reported the share of consumption allocated to food remaining high at 52.5% in the May 2025 round of the survey (Chart 18).

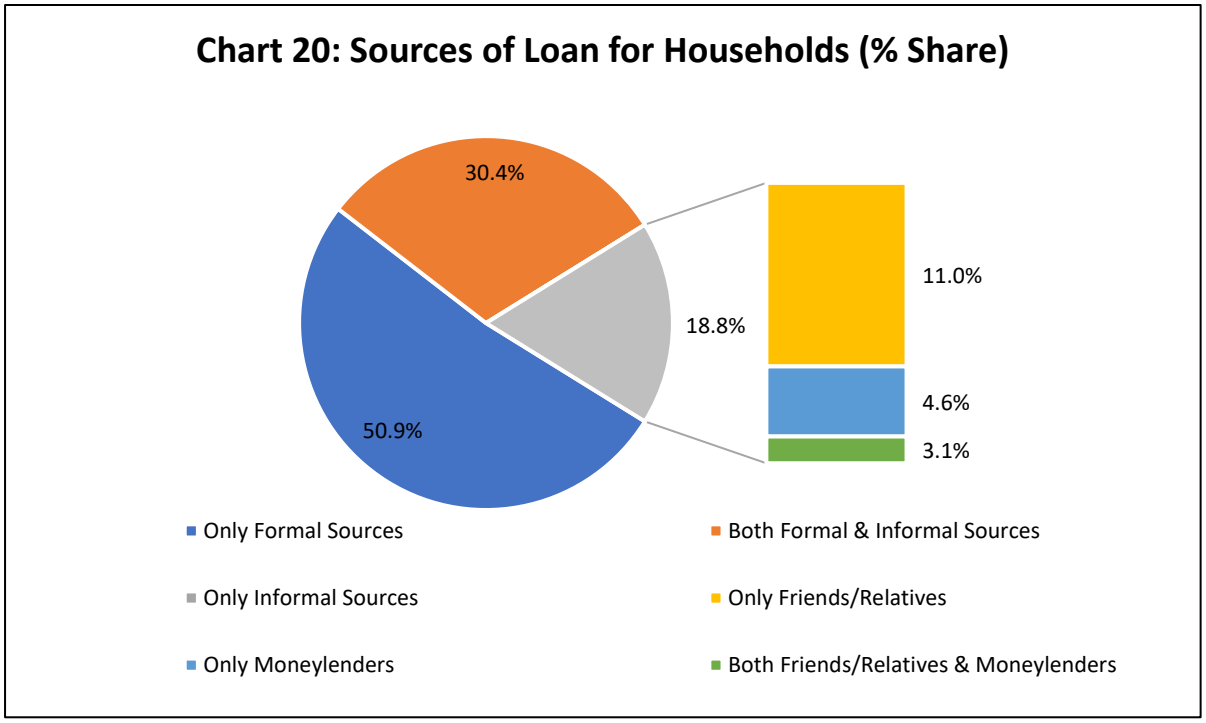


	Round 1 (Sept 2024)	Round 2 (Nov 2024)	Round 3 (Jan 2025)	Round 4 (Mar 2025)	Round 5 (May 2025)
Mean	52.4	53.5	53.6	53.2	52.5
Median	50	50	50	50	50

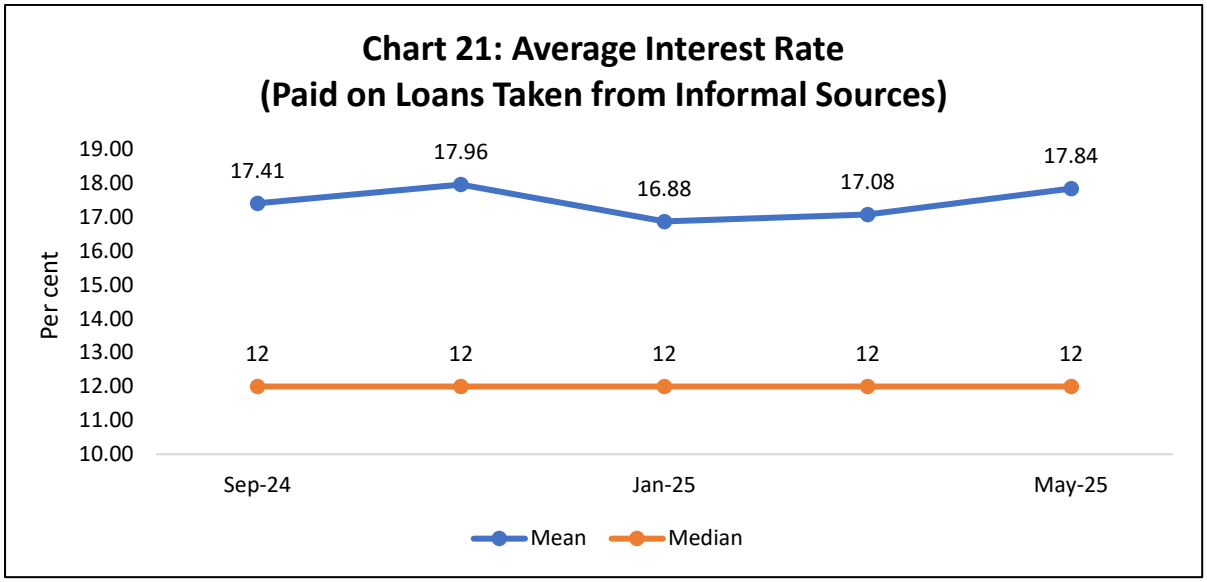
Rural Credit Conditions

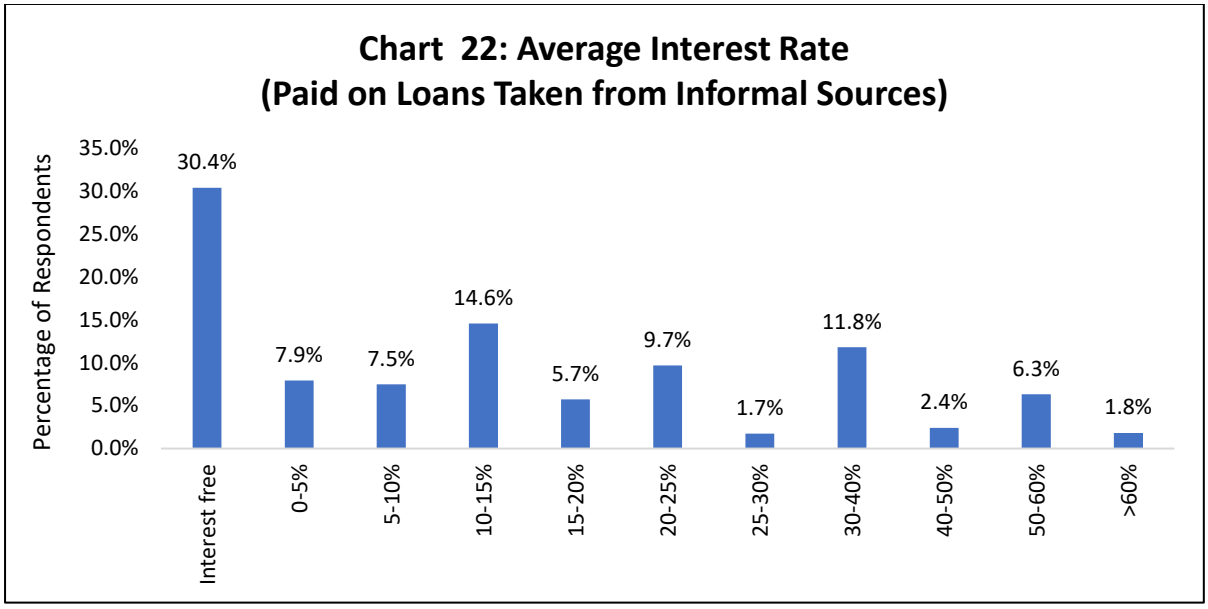
For the rural households, because of sustained policy thrust on financial inclusion, credit sourced from formal institutional sources dominates, but 18.8% of them indicated getting credit from only informal sources. Compared with the September 2024 round of the survey, the share of households accessing only informal credit has declined modestly. Among various informal sources of credit, the share of friends and relatives was more than the share of moneylenders (Chart 19 and Chart 20).





The average interest rate paid on informal credit has hovered at around 17 to 18%, with signs of some hardening since the January 2025 round of the survey (Chart 21). The median interest rate on such loans, however, remains unchanged at 12%. While about 30% of the households, possibly those taking loans from family and friends, pay no interest, about 34% of the households seem to pay a high interest rate in excess of 20% (Chart 22).





Rural Economic Development Performance Ranking

As in the previous rounds of the survey, rural roads emerged as the top ranked area of rural development, with majority (50.8%) of rural households expressing satisfaction about improving conditions of rural roads, followed by drinking water facilities (10.8%) and education (9.2%) (Chart 23; Table 7).

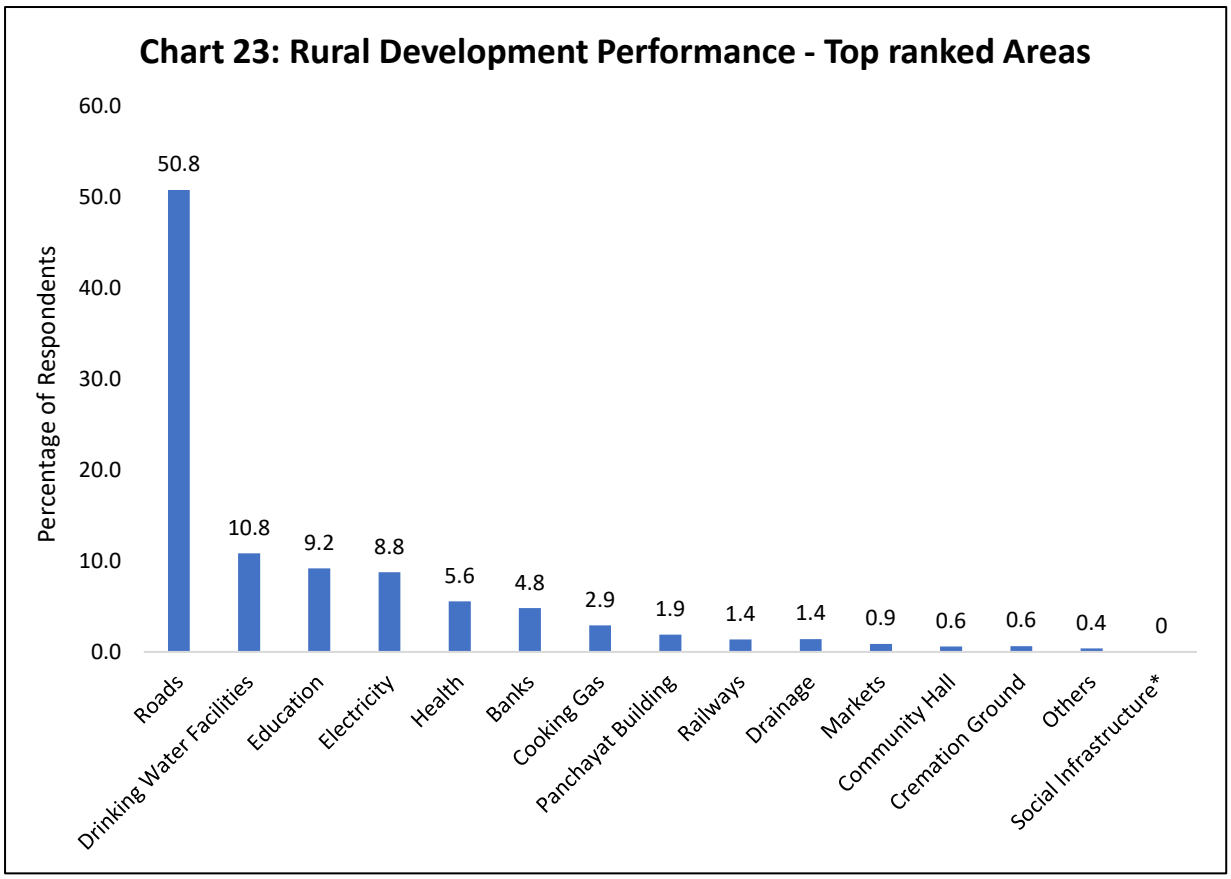


Table 1 presents a summary assessment of the changes in the perceptions and sentiments of the rural households over the two consecutive rounds of the survey. Other than financial savings, in terms of net responses, the May 2025 round of the survey suggests positive economic conditions and sentiments continuing (depicted through green arrows).

Table 1: Key Highlights Based on Net Responses on Various Economic Parameters

	Main Variables	Reference Period	Mar-25	May-25	Change
Qualitative – Economic Conditions	**Income**	Last 12 Months	11.5	16.0	↑
	Consumption	Last 12 Months	75.7	74.6	↓
	Financial Savings	Last 12 Months	-11.9	-9.9	↑
	Borrowings	Last 12 Months	21.0	21.8	↑
	Capital Investments	Last 12 Months	6.1	7.9	↑
	Infrastructure Situation	Last 12 Months	71.1	74.6	↑
Qualitative – Household Sentiments	**Employment Situation**	Next One Quarter	44.4	45.4	↑
	Income Outlook	Next One Quarter	42.1	43.6	↑
	Income Outlook	Next One Year	64.6	66.9	↑

↑ Positive Sentiments with sign of improvement compared to last round	↑ Negative Sentiments with sign of improvement compared to last round
↓ Positive Sentiments with sign of deterioration compared to last round	↓ Negative Sentiments with sign of deterioration compared to last round
↔ Positive Sentiments with no change compared to last round	↔ Negative Sentiments with no change compared to last round

NOTE: In view of the seasonality in some of the economic parameters in rural areas, and possible unevenness in the initial rounds in explaining the questions to the survey participants from 600 villages spread across the country, the survey findings may take some time to stabilise. Experience gained from the initial rounds will be considered while conducting the survey in future, with the aim of generating a time series of information on the select parameters that can help in assessing the changing dynamics in the rural economy.

The Survey questionnaire (Annexure 2) was designed in the Department of Economic Analysis and Research (DEAR), NABARD, keeping in view the requirement of regular flow of information for monitoring developments in the rural economy, and the Academy of Management Studies (AMS) conducted the survey, after finalising the sampling design (Annexure 1) in consultation with DEAR.

Table 2: Economic Conditions - Change in Last One Year (% of all households)				
	Increased	**Decreased**	**No Change**	**Net Response (Increase – Decrease)**
INCOME				
Sept 2024	37.6	23.8	38.6	13.8
Nov 2024	36.5	23.4	40.2	13.1
Jan 2025	36.0	22.6	41.5	13.4
Mar 2025	34.8	23.3	41.8	11.5
May 2025	37.4	21.4	41.3	16.0
CONSUMPTION				
Sept 2024	80.1	6.3	13.6	73.7
Nov 2024	79.2	5.0	15.8	74.2
Jan 2025	78.5	4.7	16.7	73.8
Mar 2025	79.9	4.2	15.8	75.7
May 2025	79.1	4.5	16.4	74.6
FINANCIAL SAVINGS				
Sept 2024	20.9	27.8	51.3	-6.9
Nov 2024	18.0	30.3	51.7	-12.3
Jan 2025	18.4	29.4	52.1	-11.0
Mar 2025	18.4	30.2	51.4	-11.9
May 2025	18.8	28.7	52.5	-9.9
BORROWINGS				
Sept 2024	40.2	15.4	44.4	24.8
Nov 2024	38.1	16.3	45.6	21.8
Jan 2025	38.3	17.0	44.7	21.4
Mar 2025	37.7	16.7	45.6	21.0
May 2025	38.7	16.8	44.5	21.8

CAPITAL INVESTMENT				
Sept 2024	22.2	16.4	61.3	5.8
Nov 2024	19.8	16.7	63.5	3.0
Jan 2025	21.0	16.4	62.6	4.6
Mar 2025	21.6	15.5	62.9	6.1
May 2025	22.5	14.6	62.9	7.9
INFRASTRUCTURE SITUATION				
	Improved	**Deteriorated**	**No Change**	**Net Response (Improved – Deteriorated)**
Sept 2024	75.4	5.4	19.2	70.0
Nov 2024	73.5	7.4	19.1	66.0
Jan 2025	74.7	6.0	19.3	68.7
Mar 2025	75.8	4.7	19.5	71.1
May 2025	77.9	3.3	18.8	74.6

Table 3: Average Increase in HH income in the last 1 year (of those who reported an increase in income) (In per cent)

	0-5%	5-10%	10-15%	15-20%	>20%	Mean	Median
Sep-24	23.4	40.5	13	9.9	13.2	13.9	10
Nov-24	21.9	38.3	15	11.2	13.6	13.1	10
Jan-25	22.4	38.9	14.5	11.4	12.8	13.2	10
Mar-25	23.1	38.7	14.8	11.5	11.9	12.8	10
May-25	21.9	40.5	15.6	12.0	10.0	12.9	10

Table 4: Household Sentiments (% of all households)				
	Improve	**Deteriorate**	**No Change**	**Net Response (Improve - Deteriorate)**
EMPLOYMENT OUTLOOK (Next One Quarter)				
Sept 2024	52.6	8.5	38.9	44.1
Nov 2024	51.7	8.3	40.0	43.3
Jan 2025	51.9	8.8	39.3	43.1
Mar 2025	52.7	8.3	39.1	44.4
May 2025	53.5	8.0	38.5	45.4
INCOME OUTLOOK (Next One Quarter)				
Sept 2024	54.1	9.9	36.0	44.1
Nov 2024	53.0	9.5	37.5	43.5
Jan 2025	52.8	9.4	37.7	43.4
Mar 2025	52.5	10.4	37.1	42.1
May 2025	53.8	10.2	36.0	43.6
INCOME OUTLOOK (Next One Year)				
Sept 2024	70.2	7.3	22.5	63.0
Nov 2024	71.3	7.8	20.9	63.5
Jan 2025	71.2	7.4	21.4	63.8
Mar 2025	72.2	7.5	20.3	64.6
May 2025	73.6	6.7	19.7	66.9

Table 5: Inflation Perceptions and Expectations												
	Current Perceptions				One Quarter Ahead Expectations				One Year Ahead Expectations			
	Mean		Median		Mean		Median		Mean		Median	
	Estimate	SE	Estimate	SE*	Estimate	SE	Estimate	SE*	Estimate	SE	Estimate	SE*
Sept 2024	5.47	0.0002	4.0	0.0003	5.44	0.0002	4.0	0.0003	6.49	0.0002	5.0	0.0003
Nov 2024	5.57	0.0004	4.0	0.0005	5.21	0.0004	4.0	0.0004	6.70	0.0004	5.0	0.0005
Jan 2025	5.45	0.0003	5.0	0.0003	5.66	0.0003	5.0	0.0004	6.35	0.0003	5.0	0.0004
Mar 2025	4.96	0.0002	4.0	0.0002	5.23	0.0002	5.0	0.0002	6.07	0.0002	5.0	0.0003
May 2025	4.75	0.0002	4.0	0.0003	4.70	0.0002	4.0	0.0002	5.59	0.0002	5.0	0.0002

SE: Standard error of mean
SE: Standard error of median = SE * 1.2533*

Table 6A: Quantitative Indicators												
	Increase in Income During Last One Year (% per annum)				Average Interest Rate Paid on Informal Sources of Borrowings (% per annum)				Income Supplemented by Transfers from the Government (% of income)			
	Mean		Median		Mean		Median		Mean		Median	
	Est.	SE	Est.	SE*	Est.	SE	Est.	SE*	Est.	SE	Est.	SE*
Sept 2024	13.90	0.0014	10.0	0.0017	17.41	0.0024	12.0	0.0030	9.75	0.0006	8.0	0.0008
Nov 2024	13.07	0.0012	10.0	0.0015	17.96	0.0029	12.0	0.0036	10.09	0.0007	8.0	0.0008
Jan 2025	13.17	0.0011	10.0	0.0013	16.88	0.0027	12.0	0.0034	10.28	0.0007	8.0	0.0009
Mar 2025	12.84	0.0013	10.0	0.0017	17.08	0.0026	12.0	0.0033	9.89	0.0007	8.0	0.0008
May 2025	12.92	0.0014	10.0	0.0018	17.84	0.0027	12.0	0.0034	10.00	0.0007	8.0	0.0009

Est. – Estimate of mean and median
SE: Standard error of mean
SE: Standard error of median = SE * 1.2533*

Table 6B: Quantitative Indicators				
Spending Pattern of Monthly Income (% of monthly income)				
	Consumption	**Savings**	**Loan Repayment**	**Others**
September 2024	60.87	16.77	13.49	8.87
November 2024	63.26	14.09	13.70	8.95
January 2025	63.54	14.34	13.67	8.44
March 2025	64.15	13.78	12.68	9.38
May 2025	64.85	13.51	11.82	9.82
Monthly Consumption Pattern (% share of monthly expenditure)				
	Food	**Fuel (Cooking plus Transportation)**	**Education and Health**	**Others**
September 2024	52.36	16.28	24.50	6.86
November 2024	53.55	16.57	24.07	5.81
January 2025	53.60	17.17	23.54	5.69
March 2025	53.21	18.40	22.29	6.09
May 2025	52.46	18.42	22.49	6.64
Sources of Borrowings (% of total outstanding borrowings)				
	Only Formal /Institutional	**Only Informal (Relatives/Friends/ Business Partners /Money Lenders**	**Both Formal & Informal**	
September 2024	48.72	20.09	31.19	
November 2024	50.43	18.34	31.23	
January 2025	49.69	18.19	32.11	
March 2025	51.65	17.65	30.71	
May 2025	50.86	18.77	30.37	

Table 7: Development Indicators (% of Households) (Ranking of Satisfaction Level Expressed by Households, based on their experience of last few years)									
Area	**Round-3**			**Round-4**			**Round 5**		
	Rank 1	**Rank 2**	**Rank 3**	**Rank 1**	**Rank 2**	**Rank 3**	**Rank 1**	**Rank 2**	**Rank 3**
Banks	4.6	1.8	1.6	4.8	1.7	2.8	4.8	1.6	1.7
Roads	44.7	13.1	7.6	50.5	12.9	7.4	50.8	13.7	8.4
Railways	1.6	1.6	1.5	2.0	1.9	1.5	1.4	1.2	1.8
Education	10.0	15.0	12.7	11.0	16.6	11.2	9.2	17.6	12.3
Health	6.8	12.8	12.0	4.7	12.8	10.7	5.6	12.7	11.5
Electricity	9.9	19.1	14.1	7.6	16.2	15.4	8.8	15.0	14.9
Cooking Gas	3.1	5.1	6.3	2.7	3.8	5.5	2.9	5.9	5.7
Markets	1.4	2.0	3.3	0.8	2.6	3.6	0.9	2.6	2.7
Other Social Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Panchayat Building	3.3	6.1	6.7	3.0	7.2	7.1	1.9	5.9	6.2
Community Hall	0.8	1.8	2.7	1.1	2.5	2.8	0.6	2.1	2.1
Drinking Water Facilities	11.0	15.9	19.1	9.2	15.3	19.2	10.8	16.3	19.6
Drainage	1.5	3.3	7.7	1.3	4.7	7.4	1.4	4.0	7.7
Cremation Ground	0.8	1.5	2.7	1.0	1.4	3.8	0.6	1.2	2.8
Others	0.5	0.8	2.1	0.3	0.5	1.6	0.4	0.4	2.6
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

**Each household was asked to report the top three as per own experience.*

Annexure 1: Sampling Design of the Survey

Survey Frequency and Periodicity: The survey is designed to be carried out as 6 bi-monthly rounds per year, with the first round starting from August/September 2024. The interviews of each round shall be conducted during the last week of a particular month and the 1st week of the subsequent month. Accordingly, the said surveys shall be carried out in August-September, October-November, December-January, February-March, April-May, and June-July every year. The 1st round of the survey was conducted during 27 August 2024 to 05 September 2024.

Sample Size: For each round of the RECSS, the sample size will be 600 villages covering 6000 households (10 households from every sample village).

Geographical coverage: Due to the very short duration of the survey for each round, it has been decided to select the villages from 28 States and 1 Union Territory (viz. Jammu & Kashmir) of India. These 28 States and 1 UT together account for 99.15% of the total rural population of the country.

Sampling Frame: The list of districts and villages in these 28 States and 1 UT will constitute the sampling frame. The population of the villages were first updated with the population figures available in the Mission Antyodaya (MA) database for 2020. Next, for the remaining villages populations were estimated using the projected population of 2018 published by the Office of the Registrar General & Census Commissioner, India (ORGI). However, for the newly formed villages (i.e. those not available either in Census 2011 or in Mission Antyodaya), the population was estimated as the average of the population of newly formed villages available in the Mission Antyodaya database for the state/ UT.

Sample Allocation to States and UT

Drawing insights from the approach adopted by the National Sample Survey Office (NSSO), it was decided to represent all the NSS-Regions falling in 28 states and 1 UT. An NSS-Region is a group of Districts within each State and Union Territory having similar agro-economic conditions. Altogether, there are 80 NSS-Regions covering 28 States and the Union Territory of Jammu & Kashmir.

600 sample villages were allocated to 28 States and 1 UT in proportion to their population, ensuring a minimum sample allocation of 2 districts per NSS region and 2 villages per sample district. While doing this, it was observed that in Jammu & Kashmir and in 10 states (Uttarakhand, Himachal Pradesh, Tripura, Meghalaya, Manipur, Nagaland, Arunachal Pradesh, Goa, Mizoram, and Sikkim), due to their comparatively lower total population, the proportional allocation approach did not meet the minimum sample requirement of 2 villages per sample district. Hence, for these 10 states and 1 UT, 2 villages were purposely allocated to each of the 2 sample districts in every NSS region to ensure minimal sample to estimate their key parameters. Accordingly, a total of 60 villages were allocated to these 10 states and 1 UT. Thereafter, the remaining 540 villages were distributed across 18 bigger states in proportion to their population. The final sample allocation for RECSS is depicted in Table 1.

Table 1: Sample Allocation for the States/UTs

SN	State	Total NSS Regions	Allocated Number of Sample Districts	Allocated Number of Sample Villages
1	Uttar Pradesh	5	10	111
2	Bihar	2	4	63
3	West Bengal	5	10	45
4	Maharashtra	6	12	37
5	Madhya Pradesh	6	12	35
6	Rajasthan	5	10	33
7	Tamil Nadu	4	8	32
8	Karnataka	4	8	23
9	Andhra Pradesh	3	6	22
10	Gujarat	5	10	22
11	Odisha	3	6	21
12	Assam	4	8	18
13	Jharkhand	2	4	17
14	Kerala	2	4	15
15	Telangana	2	4	13
16	Haryana	2	4	12
17	Chhattisgarh	3	6	12
18	Punjab	2	4	9
19	Jammu & Kashmir (UT)	3	6	12
20	Uttarakhand	1	2	4
21	Himachal Pradesh	2	4	8
22	Tripura	1	2	4
23	Meghalaya	1	2	4
24	Manipur	2	4	8
25	Nagaland	1	2	4
26	Arunachal Pradesh	1	2	4
27	Goa	1	2	4
28	Mizoram	1	2	4
29	Sikkim	1	2	4
	TOTAL	**80**	**160**	**600**

Sampling Design and Approach Adopted for Sample Selection

Outline of Sampling Design: A stratified multi-stage sampling design was adopted for the RECSS survey. The RECSS will cover all NSS-regions across 28 States and 1 UT of J&K. The districts within each NSS region constitute the First-stage Sampling Units (FSUs). The census villages in the selected districts constitute the Second-stage Sampling Units (SSUs). To ensure representation of all socio-economic strata within each sample village, in consultation with knowledgeable local persons, the hamlets within the village were classified (to the extent possible) in three economic categories (i.e., well-off, middle-income, low-income) and were considered as the Third-stage Sampling Units (TSUs). Finally, the households in the selected hamlets were considered as the Ultimate-stage Sampling Units (USUs).

Selection of Districts (FSUs): Sample districts (FSUs) have been selected using Circular Probability Proportional to Size (Circular PPS) sampling method, where size is taken as the estimated current population of the FSUs. Using this method, 2 districts have been sampled from each NSS region. For selection of the FSUs from each NSS region, they were first arranged (sorted) by District Code used in Census 2011. Having arranged the FSUs in this order, the required number of sample FSUs were selected following Circular PPS sampling method. Accordingly, a total of 160 districts were sampled across 80 NSS-regions falling in the sample frame. One NSS region, namely Kuchchh in Gujarat, had just 1 district. Therefore, as a special case, we treated its sub-districts as FSUs and selected 2 sub-districts using the Circular PPS sampling method.

Selection of Villages (SSUs): All the villages within the sample frame of the selected districts were arranged in order of the Village Code allocated to them as per Census 2011. After this, the allocated number of villages to each NSS region were divided proportionately between its two selected districts. Thereafter, the allocated number of villages were sampled from each selected district using Circular PPS approach. Using this approach, a total of 600 villages were sampled from 160 districts sampled in the preceding stage.

Selection of Hamlets (TSUs): When the field survey started, the investigators visited the sampled villages and held consultations with the Panchayati Raj Institution (PRI) members and other knowledgeable local persons of the community to identify the boundaries of each selected village and prepare a rough map showing the location of various hamlets within the village. A structured format was used to capture the details of all hamlets within the village along with the number of households within each hamlet. Further, the investigators also consulted with the knowledgeable local persons to categorize these hamlets on the basis of the general economic status of the households residing therein. Thus, all hamlets in each selected village will be categorized into 3 strata, namely, low-income, middle-income and the well-off. Finally, from each of the 3 strata, 1 hamlet was selected using Simple Random Sampling approach.

Selection of Households (USUs): After the selection of 3 hamlets, the allocation of 10 households among these 3 were made in proportion to the total households in their respective strata. Thereafter, the allocated number of households were sampled from each hamlet using Systematic Random Sampling method. The first sample household in the hamlet was selected randomly from the centre of the hamlet. A sampling interval (say 'n') was calculated by dividing the total number of households

in the respective hamlet by the number of households sampled. After the first household, the investigators selected every n^{th} household following a right-hand rule for movement between households.

Sampling shall involve a mix of panel (without replacement) and cross-sectional (with replacement) data. Out of the 6000 sample households surveyed in every round, 50% of the households (i.e., 3000 households) shall remain fixed in every round of the survey (forming a panel without replacement) while the remaining 50% of the households shall be replaced with new households in every round of the survey (forming a cross-sectional data with replacement). At the village level, out of the 10 households to be surveyed in every sample village, 5 households shall remain fixed and the remaining 5 households shall be replaced with new households in every round of the survey.

Calculation of Weights Based on Probability Proportional to Size (PPS) Sampling: When a household is selected from a village, a village from a district, and a district from an NSS region, each can be selected with a probability that is proportional to the size (of the village, district and the NSS region for which the population numbers are available). The sample survey results, therefore, need to be adjusted, based on probability of each sample unit, to accurately reflect the response of the entire population. Probability proportional to size (PPS) sampling is widely used to correct for possible imperfections / biases in survey data.

If a unit is included in the sample with probability p_i, then its base weight, denoted by w_i, is:

$$w_i = 1/ p_i$$

For multi-stage sampling designs, the base weights must reflect the probabilities of selection of units at each stage:

$$p_{ij} = p_i * p_{j(i)}$$

This survey involved a multi-stage sampling design, and the related step-by-step process of weight calculation for arriving at the estimates (i.e., findings reported as mean/median) is presented below.

1. Estimation of Probability of Selection of Districts

In the first step, 2 districts are sampled from each NSS Region. The districts [First Stage Units (FSUs)] are selected using Circular Probability Proportional to Size (Circular PPS) sampling method, where the estimated current population of the FSUs is taken as indicative of size. Thus, a total of 160 districts are sampled across 80 NSS regions in the country. The formula used for calculating the probability of selection of a district is as follows:

$$\text{Probability of the District being selected} = \frac{\text{Estimated Population of the Selected District}}{\text{Estimated population of the respective NSS Region}} \times \text{Number of Districts to be selected from this NSS Region}$$

2. Estimation of Probability of Selection of Villages

In the next stage, a total of 600 villages (Second-stage Sampling Units (SSUs)) are sampled from 160 districts using Circular PPS sampling approach. In this stage also the population of the villages is taken as an indicator for size while applying circular PPS sampling approach. For calculating the probability of selection of villages, the following formula is used:

$$\text{Probability of the Village being selected} = \frac{\text{Estimated Population of the Selected Village}}{\text{Estimated population of the respective Sampled District}} \times \text{Number of Villages to be selected in the Sampled District}$$

3. Estimation of Probability of Selection of a Household

In each SSU village, the investigators are required to list down the details of all hamlets along with the estimated number of households in each, as well as classify them based on the general economic condition of the households residing therein in consultation with local knowledgeable persons. The hamlets in each selected village are categorized into 3 strata based on economic profile of households – low income, middle income, and high-income hamlets. Since income threshold for such a classification could vary across villages, no uniform threshold is used, and investigators used local information to achieve the goal of covering households under three different income brackets. From each of the 3 strata, 1 hamlet is selected using Simple Random Sampling approach. After the selection of 3 hamlets, the 10 households to be sampled from the village are distributed across three strata in proportion to the total households in their respective strata. Finally, the required number of households are sampled from each hamlet using Systematic Random Sampling method. The formula used for calculating the probability of household selection is as follows:

$$\text{Probability of the HH being selected} = \frac{\text{Number of HHs Surveyed from a selected hamlet of a respective strata}}{\text{Estimated Households in all hamlets of a respective strata}}$$

4. Estimation of Joint Probability and Survey Weight

After calculating the probability of selection of units at all stages of sample selection, a joint probability is calculated for each household using the following formula -

$$\text{Joint Probability} = \text{Probability of Selection of a District} \times \text{Probability of Selection of a Village} \times \text{Probability of the Selection of a Household}$$

The survey weight (or the factor) is calculated as an inverse of the joint probability of selection of a sample household. The factor thus calculated has been duly integrated into the cleaned dataset, which are used to generate weighted estimates (of mean/median) for all key indicators in the survey.

Survey Weight = 1 / Joint Probability

By using PPS sampling, how the mean and median numbers for inflation perceptions and inflation expectations change between unweighted and weighted data could be seen from Table A. The assessment presented in this report is based on weighted estimates for all variables (Table 3).

Table A: Inflation Perception and Expectations (Sept 2024)

	Unweighted				Weighted			
	Mean	SE	Median	SE	Mean	SE	Median	SE
Current Inflation Perception	5.58	0.0468	4	0.0587	5.47	0.0002	4	0.00026
Inflation Expectations in next quarter	5.53	0.0466	4	0.0584	5.44	0.0002	4	0.00027
Inflation Expectations in next year	6.56	0.0516	5	0.0647	6.49	0.0002	5	0.00030

Note: Please refer to Annex 1 for calculation of weighted and unweighted averages.

An example showing how the survey estimates have been adjusted is set out below: Bijnor district of Uttar Pradesh is one of the districts in the NSS region of Northern Upper Ganga Plains from which 2 districts are selected as samples for this survey. The probability of selection of Bijnor district from the NSS region of Northern Upper Ganga Plains (P1) is given by:

$$\text{Probability of Bijnor District being selected (P1)} = \frac{\text{Estimated Population of Bijnor}}{\text{Estimated population of Northern Upper Ganga Plains NSS Region}} \times \text{Number of Districts selected from Northern Upper Ganga Plains NSS Region}$$

P1 = (3650839/ 18001239) *2 = 0.4056208575

In the district of Bijnor, Kamala is one of the 5 villages selected as sample for the survey. The probability of selection of Kamala village from Bijnor district (P2) is given by:

$$\text{Probability of Kamala Village being selected (P2)} = \frac{\text{Estimated Population of Kamala Village}}{\text{Estimated population of Bijnor District}} \times \text{Number of sample Villages selected in Bijnor District}$$

P2 = (2127 / 3650839) *5 = 0.0029130290

In the village of Kamala, 5 households of middle-income strata are selected as samples for the survey. The probability of selection of any one of these households (P3) is given by:

$$\text{Probability of a HH being selected (P3)} = \frac{\text{Number of HHs Surveyed from middle-income strata of Kamala village}}{\text{Estimated number of HHs in middle-income strata in Kamala village}}$$

P3 = 5 / 175 = 0.0285714286

Now, the joint probability of selection of this household in Kamala village of Bijnor district in the NSS region of Northern Upper Ganga Plains is given by:

$$\text{Joint Probability} = \text{Probability of Selection of Bijnor District} \times \text{Probability of Selection of Kamala Village} \times \text{Probability of the Selection of a Household}$$

Joint Probability = P1 * P2 * P3 = 0.0000337596

Finally, the weight used to adjust the response of each of such household is given by:

Survey Weight = 1 / Joint Probability = 1 / 0.0000337596 = 29621.2207334274

Annexure 2: Questionnaire Used for the Survey

Rural Economic Conditions – Qualitative Information

1. Income (change during last 12 months):
    - Increased
    - Decreased
    - No Change
2. Consumption (change during last 12 months):
    - Increased
    - Decreased
    - No Change
3. Financial Savings (change during last 12 months):
    - Increased
    - Decreased
    - No Change

4. Borrowings, from formal and informal sources (loans taken during last 12 months):
    - Increased
    - Decreased
    - No Change

5. Capital investment made (in agriculture/business/construction of house) during last 12 months:
    - Increased
    - Decreased
    - No Change

Rural Economic Conditions – Quantitative Information

6. Percent of Average monthly income spent on:
    a. Loan Repayment:
    b. Savings:
    c. Consumption:
    d. Others (please mention):

(Please ensure that the responses to 6 (a) to 6 (d) add up to 100 for each respondent)

7. Percent of monthly income supplemented by subsidies/ transfers from the government in cash/kind?

Enter your answer

8. Percent of monthly consumption spending on:

    a. Food
    b. Fuel (Cooking plus Transportation)
    c. Education and health
    d. Others

(Please ensure that the responses to 8 (a) to 8 (d) add up to 100 for each respondent)

9. Percent of loan, if any, taken from:

    a. Formal Sources - Banks/NBFCs/RRBs/Urban and Rural Cooperatives/SFBs and MFIs
    b. Informal Sources - Relatives/friends/business partner
    c. Informal Sources - Moneylenders/others

(Please ensure that the responses to 9 (a) to 9 (c) add up to 100 for each respondent)

10. Average interest rate paid on loans taken, if any, from informal sources (in per cent per annum):

Enter your answer

(Please ensure that the EMI or monthly/quarterly rate of interest are adjusted as per the annual rate of interest applied to the loan value)

Rural Household Sentiment

11. Employment Outlook (Next One Quarter):

    - Expect to Improve
    - Expect to Deteriorate
    - Expect to Remain Unchanged

12. Income Outlook (Next One Quarter):

    - Expect to Improve
    - Expect to Deteriorate
    - Expect to Remain Unchanged

13. Income Outlook (Next One Year):

    - Expect to Improve
    - Expect to Deteriorate
    - Expect to Remain Unchanged

14. Your assessment of rural infrastructure situation in last One Year (Roads, Warehouses, Electricity Supply, Schools/Colleges, Hospitals/Health Centres, Drinking Water Supply):

    - Improving
    - Deteriorating
    - Remains Unchanged

15. What was the extent of increase in your income (salary/wage/business/farming) from all sources in last One Year (in per cent)?

Enter your answer

16. What is the current rate of inflation (year on year increase in prices) for your monthly consumption basket (in per cent)?

Enter your answer

17. Inflation Expectations in Next One Quarter (in per cent):

Enter your answer

18. Inflation Expectations in Next One Year (in per cent):

Enter your answer

19. What are the three areas where you have noticed major improvements in the last few years (Banks, roads, railways, education, health, electricity, cooking gas, markets, social infrastructure, etc.)?

Enter your answer