NABARD

RURAL ECONOMIC CONDITIONS & SENTIMENTS SURVEY

Bi-monthly Survey Report

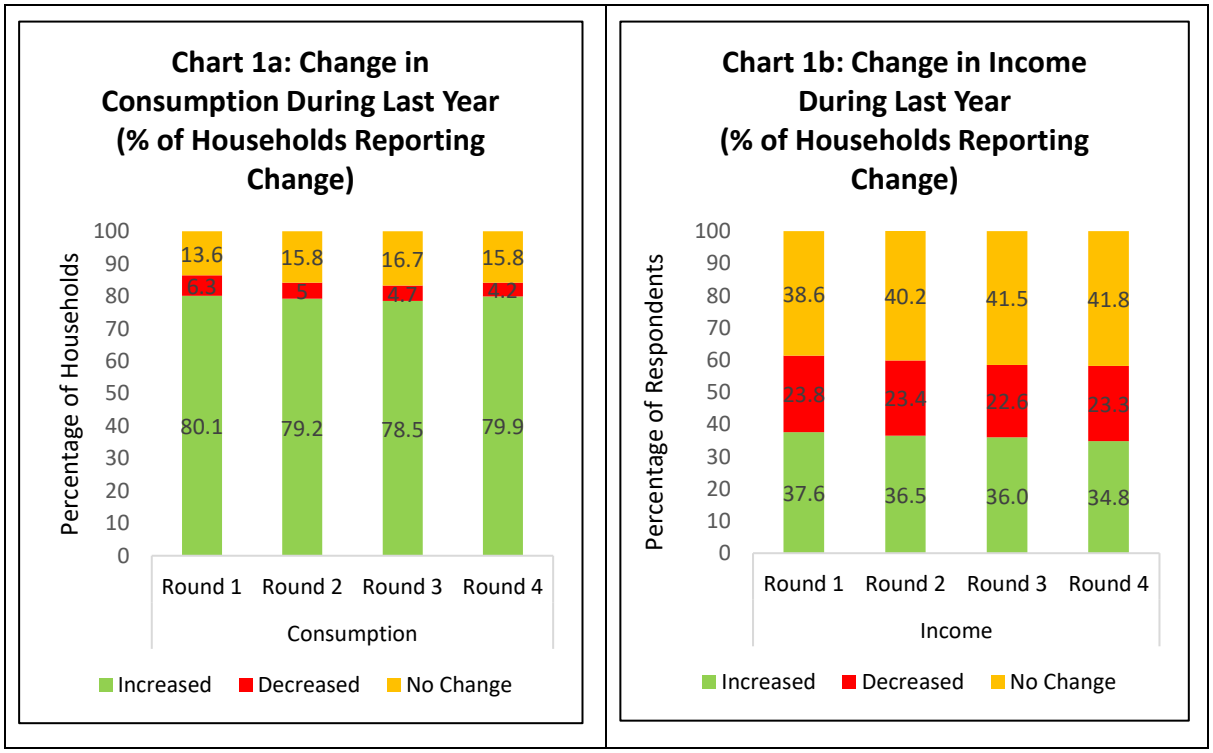
Round 4 (March 2025)

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

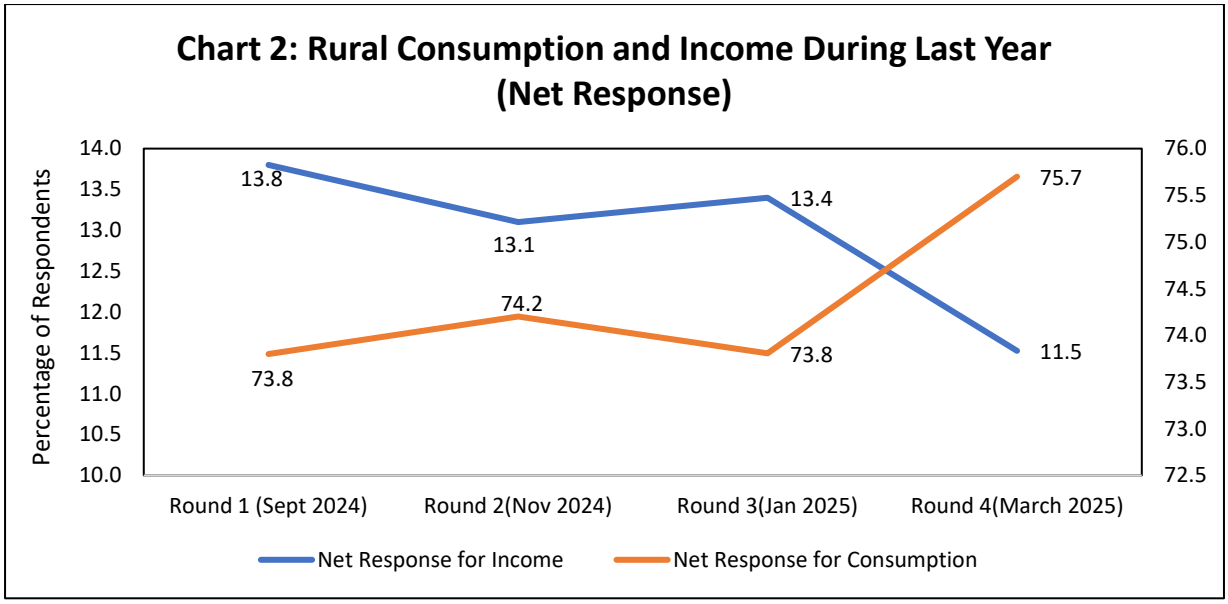
The March 2025 round of the Rural Economic Conditions and Sentiments Survey (RECSS) was conducted during the last week of February 2025 and the first week of March 2025. As in the previous rounds of the survey, it captures quantitative and qualitative data - both backward looking (economic conditions) 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

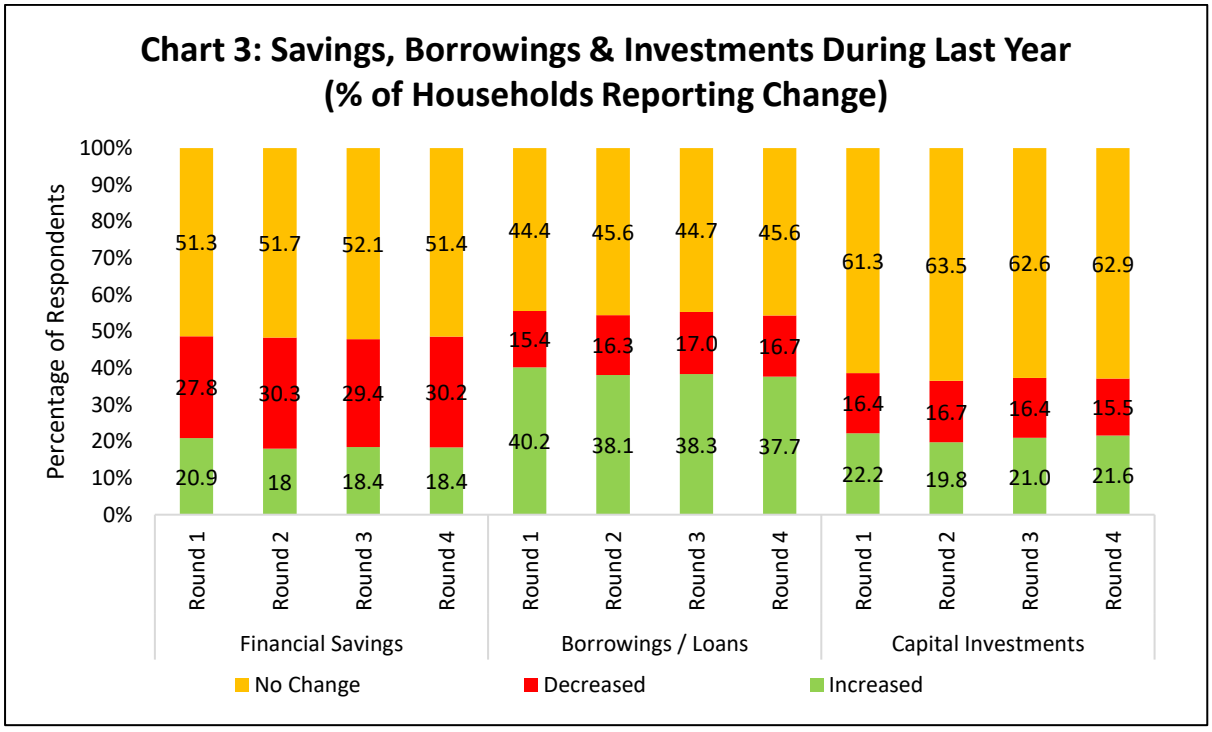
Consumption expenditure of the rural households remains upbeat, as evident from a higher percentage of them (79.9%) reporting increase in consumption expenditure during the last one year, and share of those reporting to have experienced a decline in consumption falling sequentially over the four rounds of the survey to only 4.2%. The percentage of households who reported to have witnessed an increase in income during the last one year (34.8%) showed further sequential moderation, and correspondingly the share of those who reported either stagnation or a decline in income increased modestly (to 65.2%) (Chart 1, Table 2). In terms of net response (*i.e.*, percentage of households who reported an increase minus percentage of households who reported a decrease), rural consumption demand improved while income conditions sagged (Chart 2, Table 2).



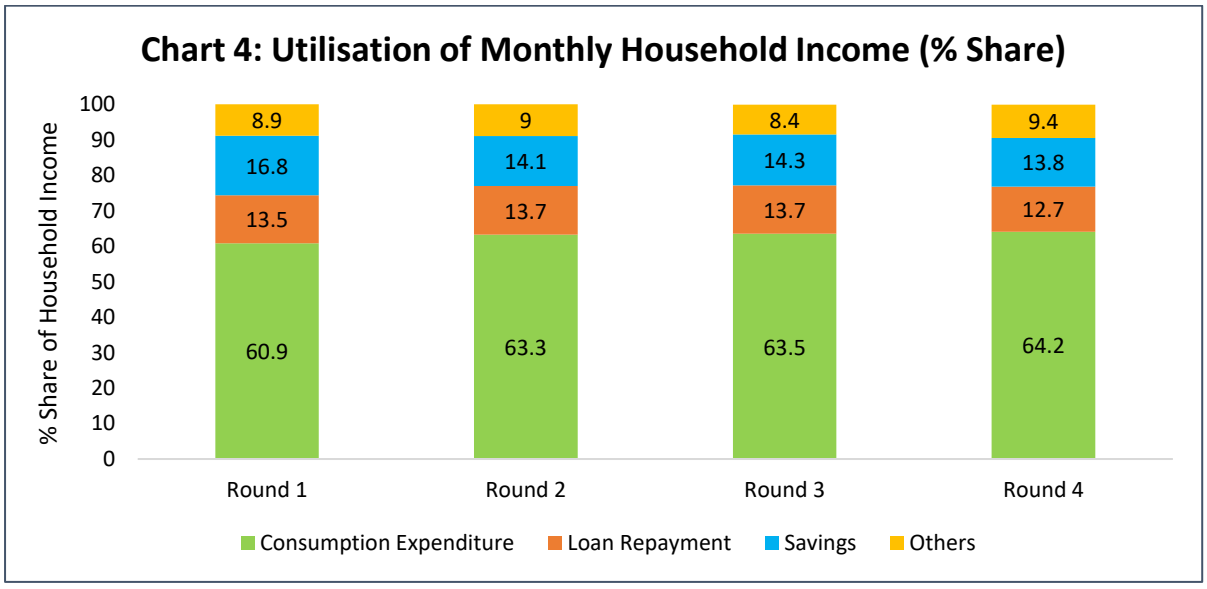
[1] The survey was commissioned by the Department of Economic Analysis and Research (DEAR), NABARD. Its findings do not reflect the views of NABARD.



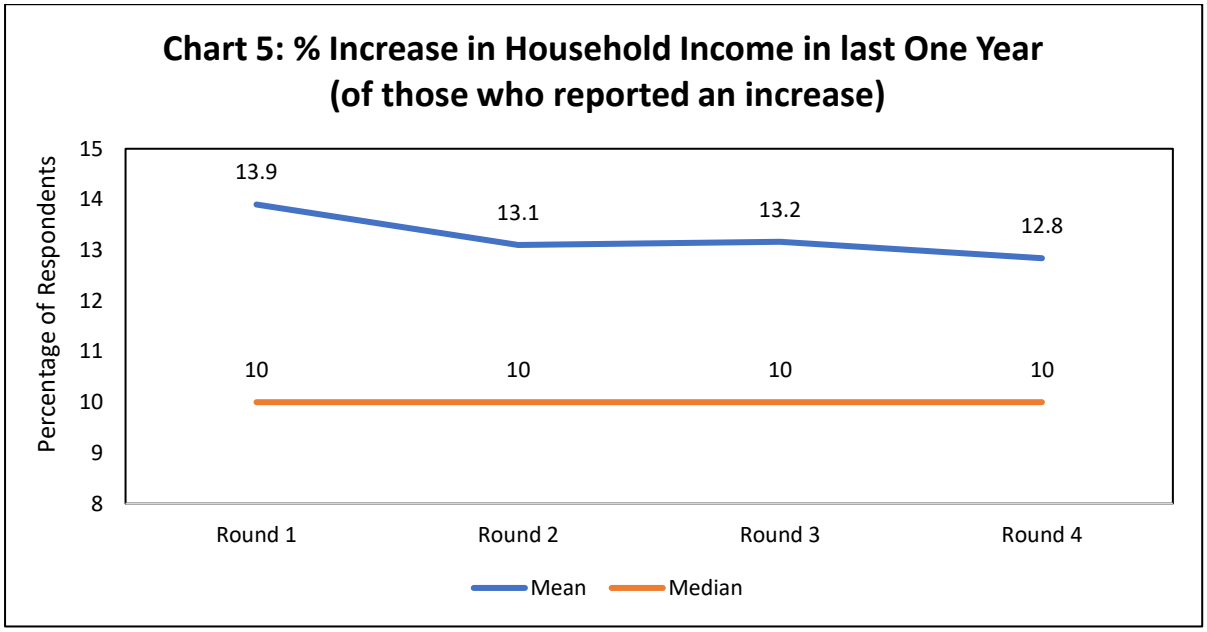
As in the previous rounds of the survey, the percentage of households that reported either a decline or no change in financial savings dominated (at 81.6%). The percentage of households who reported to have saved more during the last one year remained unchanged (at 18.4%). More households reported either no change or a decline in borrowings during the last year (62.3% as against 61.7% in the January 2025 round of the survey), pointing to some softening of credit demand in the rural economy. The share of households that reported to have increased spending on capital investments, however, rose sequentially to 21.6% (Chart 3; Table 2).



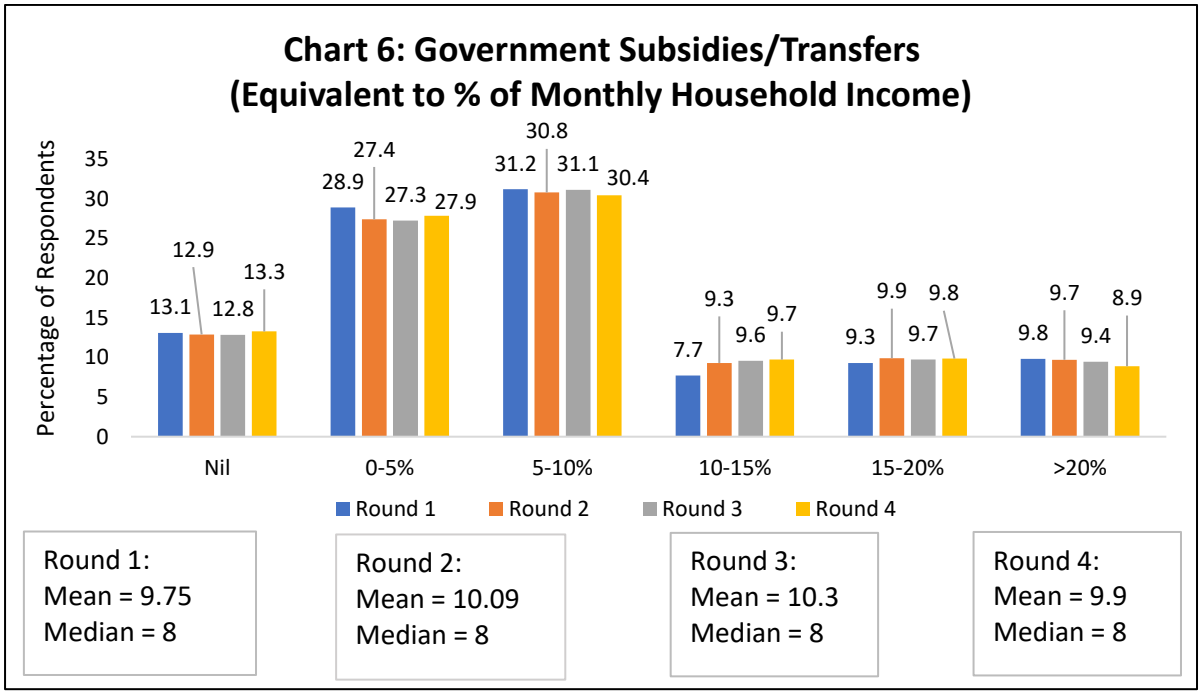
The share of consumption in monthly household income has steadily risen (to 64.2%), with a corresponding sequential decline in the share of income allocated to savings (13.8%). With a lower percentage of the households reporting increase in borrowings during the last year (Chart 3), the share of monthly household income allocated to loan repayments also declined (Chart 4, Table 5B).



For the households that reported an increase in income during the last one-year (Chart 1b), the average (mean) magnitude of increase in income appears to have moderated (to 12.8%), though the median value remains unchanged at 10% (Chart 5, Table 5A).



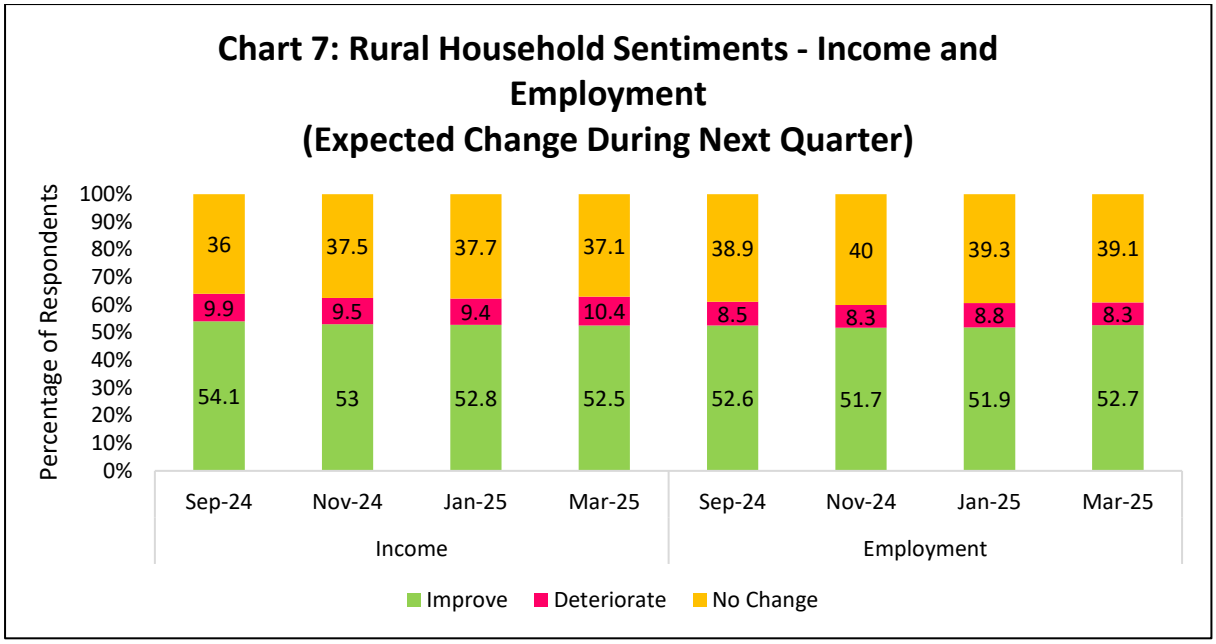
Rural household income and expenditure is supplemented by subsidies/transfers (in both cash and kind) [2] from the central as well as state governments, and this survey tries to capture the information on the quantum of subsidies/transfers received directly from the survey respondents. The median number for subsidies/transfers as percentage of monthly income has remained stable at 8% over the four rounds of the survey (Chart 6, Table 5A).



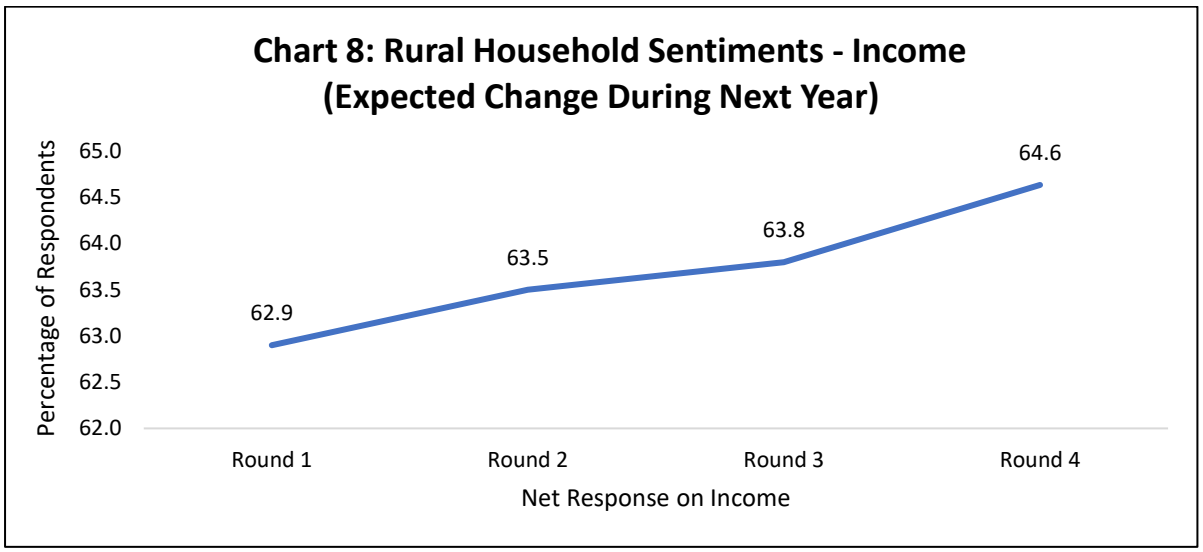
Rural Household Sentiments

The survey collects forward-looking information in terms of household sentiments about their expected change in income and employment conditions during the next quarter and next one year. As in the previous rounds of the survey, a majority of the households (more than 50%) continue to expect an improvement in their income and employment conditions during the next quarter. The percentage of households expecting a deterioration in their income outlook increased modestly, and exceeded 10% for the first time compared with the earlier three rounds of the survey (Chart 7; Table 1 and 3).

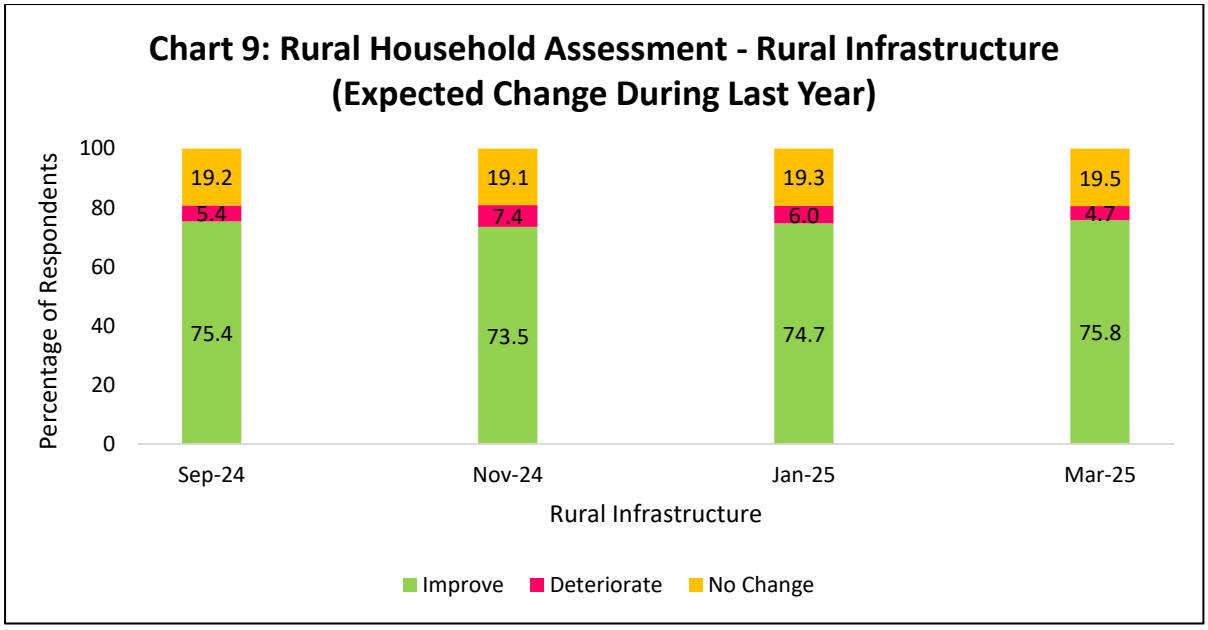
[2] Such as free or subsidized provision of rice and wheat, cash transfers to farmers, old age pension (excluding regular pension after serving in any organization), subsidized cooking gas, interest rate subventions, etc.



In terms of net response, rural household sentiments about their expected income outlook during the next year appear to be improving sequentially over the four rounds of the survey (Chart 8, Table 1 and 3).



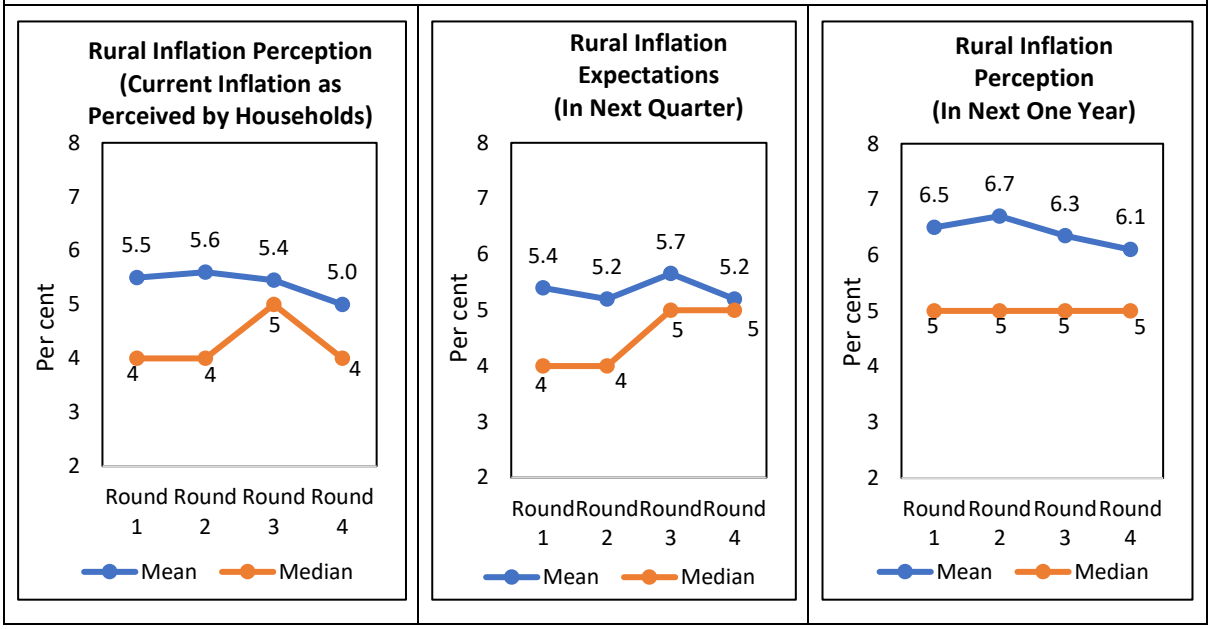
The perception of rural households about rural infrastructure conditions improved further, with a higher percentage of households reporting improvement (75.8%) and lower percentage of households indicating deterioration (4.7%) (Chart 9, Table 2).



Rural Inflation Perceptions and Inflation Expectations

When the survey was being conducted, actual latest data on CPI rural inflation was available for the month of January 2025, which was at 4.64 per cent (and declined from 5.76 % recorded in December 2024). Inflation perception of the rural households also eased, in terms of both mean and median values of the range of perceptions reported by them. Partly reflecting the backward-looking inflation expectations process, the average inflation expectations for one quarter ahead (mean value) of the rural households moderated by 50 basis points to 5.2% in the March 2025 round of the survey compared with the preceding round, though the median value remained unchanged at 5%. Average inflation expectations for one year ahead (in terms of the mean value) softened by 20 basis points, but continued to remain above 6 per cent (at 6.1 per cent). One year ahead median value of inflation expectations has remained stable at 5 per cent over the four successive rounds of the survey (Chart 10, Table 4).

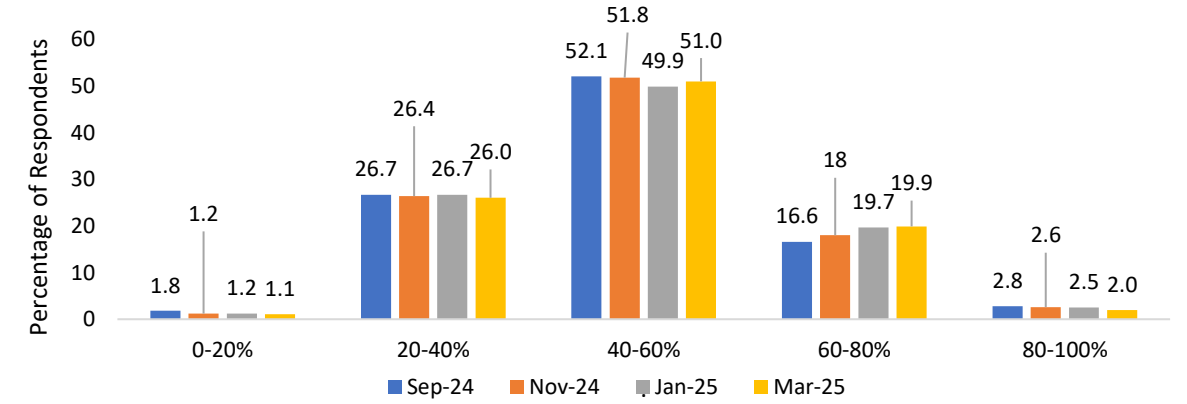
Chart 10: Inflation Perception and Expectations



Share of Food in Monthly Consumption Expenditure

The average share of food in monthly consumption of rural households has remained stable in terms of the median value (at 50%), while the average (mean) values have been marginally higher generally, at 53.2% in the March 2025 round of the survey. The majority of households (51%) seem to allocate 40-60% of their monthly consumption to food (Chart 11, Table 5B).

Chart 11: Share of Food in Monthly Consumption Expenditure (% of Total Consumption)



Round 1:
Mean = 52.4
Median = 50

Round 2:
Mean = 53.5
Median = 50

Round 3:
Mean = 53.6
Median = 50

Round 4:
Mean = 53.2
Median = 50

Note: As per the Household Consumption Expenditure Survey 2023-24, the share of food in the average monthly consumption expenditure increased from 46.38% in 2022-23 to 47.04% in 2023-24 for rural areas (and from 39.17% in 2022-23 to 39.68% in urban areas).

Rural Credit Conditions

As per the March 2025 round of the survey, 51.6% of the rural households relied on only formal sources for taking a loan while 17.7% took recourse to only informal sources, of which 11.6% was from friends and relatives. Remaining 30.7% got credit from both formal and informal sources. The percentage of households borrowing from informal sources only has dropped from 20.1% (September 2024) to 17.6% (March 2025) (Chart 12 and 13, Table 5B).

Chart 12: Sources of Loan for Households that Borrowed (% Share)

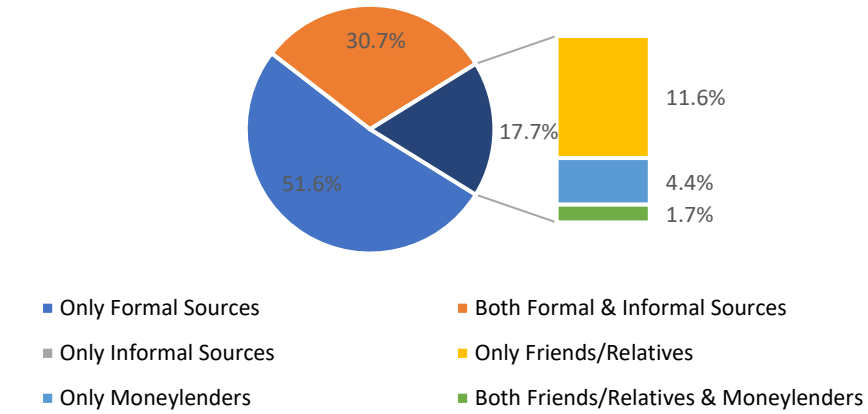
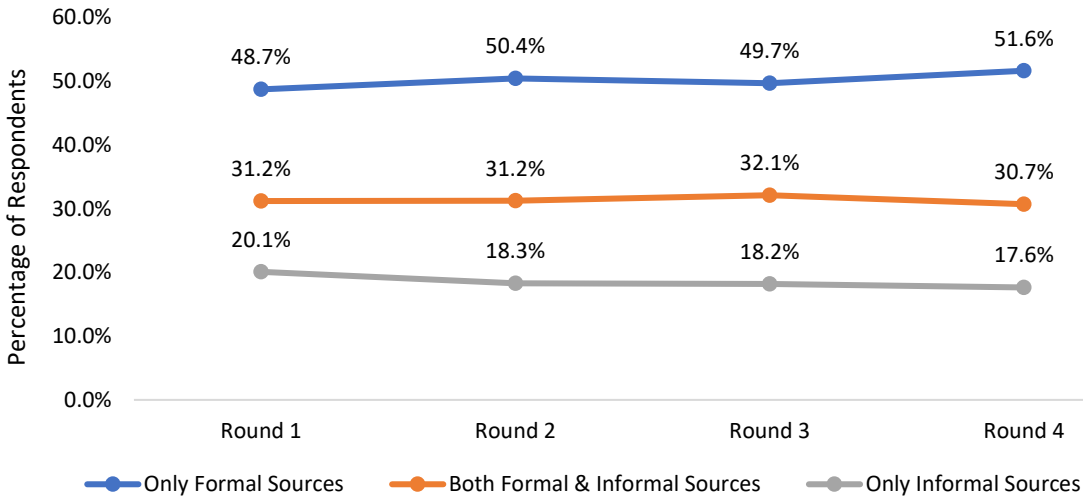
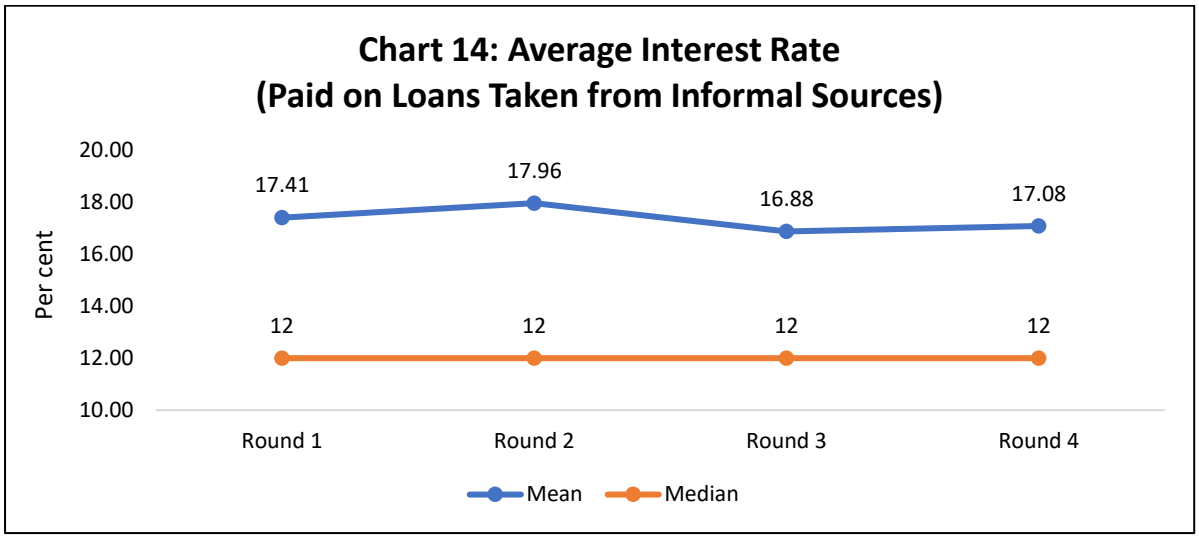
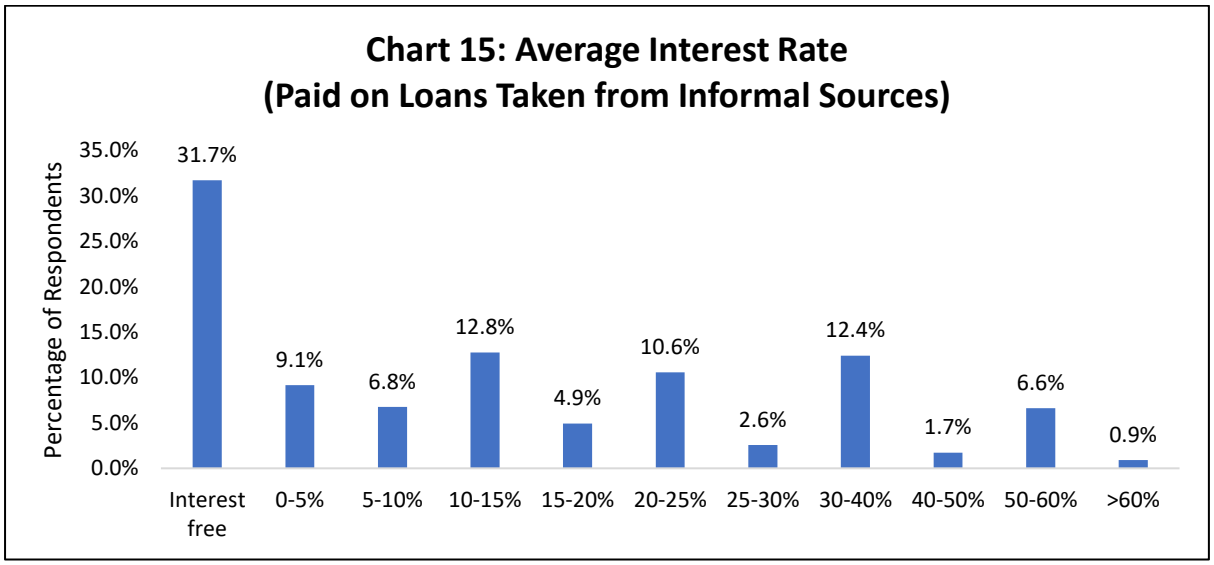


Chart 13: Sources of Loan for Rural Households (% Share)



The median value of interest rates paid on informal loans remains unchanged at 12%, though the mean value has been higher at 17.08% (Chart 14, Table 5A), suggesting that a smaller percentage of the rural households pay significantly higher interest rates on informal loans, while more than 30% of households pay no interest (as the source of such informal borrowings may be from relatives and friends) (Chart 15).





Rural Economic Development

Like in the previous rounds, rural road emerged again as the top ranked area of rural development as per the assessment of the rural households, with majority (50.5%) of them expressing satisfaction, followed by education (11%) and drinking water facilities (9.2%) (Chart 16; Table 6).

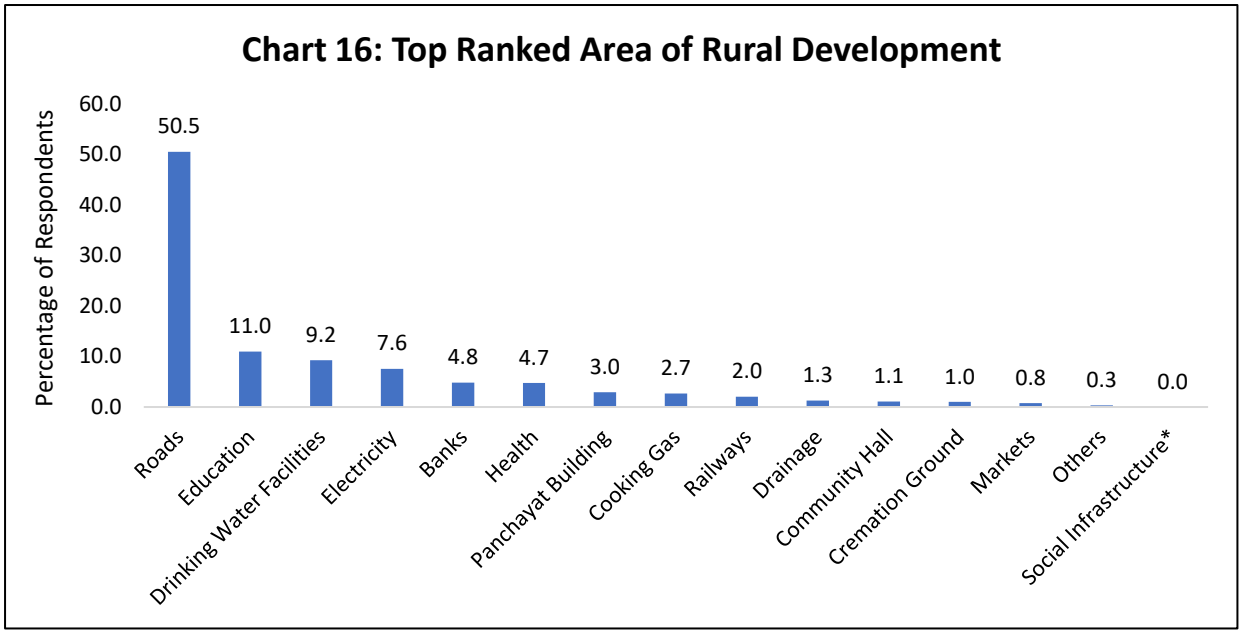


Table 1 presents a summary assessment of the changes in the perceptions and sentiments of the rural households over the two consecutive rounds of the survey. Other than financial savings, in terms of net responses, the March 2025 round of the survey suggests positive economic conditions and sentiments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

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

	Main Variables	Reference Period	Jan-25	Mar-25	Change
Qualitative – Economic Conditions	**Income**	Last 12 Months	13.4	11.5	⬇
	Consumption	Last 12 Months	73.8	75.7	⬆
	Financial Savings	Last 12 Months	-11.0	-11.9	⬇
	Borrowings	Last 12 Months	21.4	21.0	⬇
	Capital Investments	Last 12 Months	4.6	6.1	⬆
	Infrastructure Situation	Last 12 Months	68.7	71.1	⬆
Qualitative – Household Sentiments	**Employment Situation**	Next One Quarter	43.1	44.4	⬆
	Income Outlook	Next One Quarter	43.4	42.1	⬇
	Income Outlook	Next One Year	63.8	64.6	⬆

⬆ 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
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
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
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
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
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

Table 3: 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
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
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

Table 4: 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

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

Table 5A: 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

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

Table 5B: 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
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
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	

Table 6: Development Indicators (% of Households)
(Ranking of Satisfaction Level Expressed by Households, based on their experience of last few years)

Area	Round-2			Round-3			Round-4		
	Rank 1	Rank 2	Rank 3	Rank 1	Rank 2	Rank 3	Rank 1	Rank 2	Rank 3
Banks	5.0	5.1	2.1	4.6	1.8	1.6	4.8	1.7	2.8
Roads	43.2	11.9	9.0	44.7	13.1	7.6	50.5	12.9	7.4
Railways	1.8	2.0	1.4	1.6	1.6	1.5	2.0	1.9	1.5
Education	14.0	16.0	11.9	10.0	15.0	12.7	11.0	16.6	11.2
Health	8.2	13.8	12.0	6.8	12.8	12.0	4.7	12.8	10.7
Electricity	10.8	17.4	14.7	9.9	19.1	14.1	7.6	16.2	15.4
Cooking Gas	1.9	3.6	5.8	3.1	5.1	6.3	2.7	3.8	5.5
Markets	1.0	2.6	2.2	1.4	2.0	3.3	0.8	2.6	3.6
Other Social Infrastructure	0.0	1.2	4.0	0.0	0.0	0.0	0.0	0.0	0.0
Panchayat Building	2.5	5.2	6.9	3.3	6.1	6.7	3.0	7.2	7.1
Community Hall	0.4	1.5	2.3	0.8	1.8	2.7	1.1	2.5	2.8
Drinking Water Facilities	8.4	13.5	18.4	11.0	15.9	19.1	9.2	15.3	19.2
Drainage	1.1	4.4	5.6	1.5	3.3	7.7	1.3	4.7	7.4
Cremation Ground	1.1	1.4	2.5	0.8	1.5	2.7	1.0	1.4	3.8
Others	0.5	0.4	1.3	0.5	0.8	2.1	0.3	0.5	1.6
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

**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:

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

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