ISSN: 2249-7862 (Print) : 2455-877X (Online)
www.aureoleonline.in

Digital Financial Inclusion of Women in India: An Inter-State Analysis

Zarina Abdulkhader
Research Scholar, Department of Economics
Sree Sankara College, Kalady, Kerala, India
Email: zarinaabdulkhader@gmail.com

Abstract

Digital financial inclusion plays a key role in promoting inclusive growth in India, especially by improving women's access to formal financial services. Although there are nation-wide efforts to promote digital finance, large differences remain between Indian states in women's access to technology and financial services. This study examines inter-state differences and trends in women's digital financial inclusion in India using state-level data from National Family Health Survey (NFHS-5, 2019-21 and NFHS-6, 2023-24) for 27 states. It compares women's use of their own bank accounts, ownership of a mobile phone that they themselves use and internet use. The study also compares urban-rural differences. Changes between NFHS rounds are calculated in percentage points. Mobile phone use for financial transactions is analyzed for NFHS-5 only; the indicator is reported among women who own a mobile phone and is not included in the NFHS-6 comparison. Internet use increased in all 27 states between two NFHS rounds, while own-use bank account access and mobile-phone ownership increased in 26 states each. Andhra Pradesh recorded the largest increase in internet use (42.6 percentage points) and mobile phone ownership (15.2 percentage points); Nagaland recorded the largest increase in bank account access (22 points). In NFHS-5, mobile phone financial transactions ranged from 6.9% in Tripura to 48% in Goa among women who owned a phone. Urban percentages exceeded rural percentages for internet use and financial transactions in every state. The findings show that access to bank accounts, phones and internet does not necessarily correspond to women's digital financial transactions. Access and actual use should therefore be examined separately.

Keywords: Digital financial inclusion, women, digital financial access, secondary data, India

Introduction

Digital Financial Inclusion means being able to access and use financial services through digital tools such as mobile phones and online platforms. For women, these services may support greater control over money and participation in financial decisions. However, having a bank account, a phone or internet access does not necessarily mean that a woman uses digital payments. India has expanded access to formal financial services through initiatives such as the Pradhan Mantri Jan Dhan Yojana, while digital payment systems such as Unified Payments Interface have made electronic transactions more

widely available. Yet women's access to financial and digital tools varies across states. Comparing states can help to show where progress has been made and where gaps remain. It can also reveal how women's access to financial and digital services differs between urban and rural areas.

This study examines women's financial inclusion across 27 Indian states using NFHS-5 (2019-21) and NFHS-6 (2023-24) data. It compares women's use of their own bank or savings accounts, ownership of a mobile phone for personal use and internet use. The NFHS-5 data also include an indicator of women's use of a mobile phone for financial transactions. Because this payment-use indicator is not available in the NFHS-6 state data used in this study, it is examined only for NFHS-5. Manipur is excluded because comparable NFHS-6 state data were unavailable for this analysis.

The study describes differences between states, changes between two survey rounds and urban-rural gaps. By examining these indicators separately, the study considers access to financial and digital tools separately from women's reported use of mobile phones for financial transactions.

Literature Review

Digital financial inclusion involves both access to digital financial services and their use. Khera et al. (2021) reflect this distinction in their index of digital financial inclusion, which combines indicators of access and use across developing and emerging economies. This distinction is relevant to the present study: having a bank account, a mobile phone or internet access indicates access to resources that may support digital finance, but does not by itself, establish that a woman makes digital financial transactions.

Research also documents gender differences in financial inclusion. The World Bank's Global Findex Database 2017 reported a gender gap in account ownership across developing countries. In India, Mukherjee et al. (2022) examine women's digital financial inclusion in MSME sector, considering access to financial services, use of digital services, and digital and financial literacy. Their focus on women in MSMEs offers evidence on a specific group; the NFHS data used in the present study provide a broader state-level view of women aged 15-49.

Duvendack, Sonne and Garikipati (2023) show that the growth of digital finance does not necessarily benefit women and men equally. Their study highlights the need to distinguish between access to digital services, their use and women's experiences with them.

The NFHS provides comparable state-level indicators relevant to this distinction. NFHS- 5 reports women's use of their own bank or savings accounts, personal use of a mobile phone and mobile phone use for financial transactions. The indicators available in NFHS-5 state data used in this study cover bank account use, personal mobile phone use and internet use; the financial transaction indicator is available only for NFHS-5. Accordingly, present analysis compares the first three indicators across 27 states and survey rounds, examines urban-rural differences, and analyzes mobile phone financial transactions for NFHS-5 only. This offers a descriptive comparison of women's access across

states while keeping the distinct and more direct measure of transaction use separate.

Objectives of the Study

The specific objectives of the study are

- To assess the levels of women's access to bank accounts, mobile phones and internet use across 27 Indian states using NFHS-5 and NFHS-6 data.
- To examine changes in these indicators between NFHS-5 and NFHS-6 across selected states.
- To assess urban-rural differences in these indicators across selected states.
- To describe state level differences in women's use of mobile phones for financial transactions using NFHS-5 data and discuss their implications for women's digital financial inclusion.

Research Methodology

Research Design

This study adopts a quantitative, descriptive - comparative research design based on secondary data from the National Family Health Survey (NFHS). It compares state level estimates from NFHS-5 (2019-21) and NFHS-6 (2023-24) to describe patterns and changes in women's access to financial and digital resources. The unit of analysis is the state.

For the current study, data are drawn from:

- NFHS-5(2019-21) State Fact Sheets
- NFHS-6 (2023-24) State Fact Sheets
- NFHS-5 (2019-21) State Reports

These surveys are conducted by the International Institute for Population Sciences (IIPS) under the Ministry of Health and Family Welfare, Government of India and are widely used in academic and policy research. Supplementary information on digital financial inclusion comes from publications by the Reserve Bank of India (RBI) and NPCI. This information offers a conceptual background for India's digital payments system.

Selection of States

This study analyses 27 Indian states for which comparable NFHS data were available for the indicators examined. The states span India's major geographical regions and include variation in women's bank account use, mobile-phone ownership, internet use, and digital financial transactions. The study compares the states in the dataset and does not claim that the 27-state sample represents every Indian state. Manipur was excluded because comparable NFHS- 6 data were unavailable for this analysis.

Variables and Indicators

Women's digital financial inclusion is assessed using indicators of financial access, device access, internet use, and digital financial transactions. Financial access is measured by the percentage of women aged 15-49 who have a bank or savings account that they themselves use. Device access is measured by the percentage who have a mobile phone that they themselves use. These two indicators are compared across NFHS-5 and NFHS-6. Internet use is measured by the percentage who have ever used internet and is compared across NFHS-5 and NFHS-6; it is treated as an enabling condition for digital financial inclusion, not as evidence of financial service use. Digital financial transactions are measured using the NFHS-5 state report indicator for the percentage of women who own a mobile phone and use it for financial transactions. Because a comparable measure is not available in the other survey rounds, this indicator is reported for NFHS-5 only and is not used to assess change over time.

Method of Analysis

The analysis compares state level percentages between NFHS-5 and NFHS-6 for bank account use, mobile phone access and internet use. Changes are calculated in percentage points by subtracting the NFHS -5 value from the NFHS-6 value. Digital financial transactions are compared across states using NFHS-5 figures only. Where comparable urban and rural values are available, these are presented separately from the state total.

Ethical Considerations

The study uses publicly available secondary data. As no primary data collection or human subject involvement is done, ethical concerns regarding privacy or consent do not arise.

Limitations of the study

Certain limitations of the study are:

- The study covers 27 states; comparable NFHS-6 data for Manipur was unavailable.
- State-level results may hide differences among women within each state.
- Account, phone and internet indicators measure access, not the full extent of digital financial activity.
- The financial transaction indicator is available only for NFHS-5, so change over time cannot be assessed.
- The descriptive comparison does not establish causes or statistical significance.

Findings of the study

The NFHS-5 data show that bank-account access is generally higher than internet use or mobile-phone financial transactions, and the differences between states are large.

- Internet use: Sikkim has the highest state total at 76.7%, followed by Goa (73.7%), and Mizoram (67.6%). Bihar is lowest (20.6%).
- Bank account use: Tamil Nadu is highest (92.2%); Nagaland is lowest (63.7%)
- Own-use mobile phones: Goa is highest (91.2%). Madhya Pradesh is lowest (38.5%).
- Mobile – phone financial transactions: Goa is highest (48.0%), followed by Karnataka (43.0%) and Arunachal Pradesh (38.4%). Tripura is lowest (6.9%), followed by Bihar (10.4%) and West Bengal (12.8%).

The indicators don't move together uniformly. Odisha has high bank account use (86.5%), but lower internet use (24.9%) and mobile phone financial transactions (17.3%). Mizoram has relatively high internet use (67.6%) but lower transaction use (17.2%). This shows that access to an account or the internet, does not by itself show active use of digital financial services.

Urban-rural differences are also pronounced. Internet use is 35.8 percentage points higher in urban areas in Mizoram and 35.1 points higher in Jharkhand. Mobile phone financial transaction use has a particularly large urban-rural gap in Himachal Pradesh (45.5% urban versus 14.1% rural). Bank-account use is less consistently higher in urban areas. It is higher in rural areas in Goa and Odisha.

NFHS-6 Analysis

The 27 states show substantial variation in women's internet use and own-use mobile phones, while bank account use is substantially high across the states.

- Internet use: Goa is highest at 94.0%, followed by Sikkim (90.3%) and Kerala (87.3%). Tripura is lowest (48.8%).
- Own-use bank accounts: West Bengal is highest (95.3%), followed by Karnataka (94.7%) and Mizoram (93.6%). Meghalaya is lowest (81.5%).
- Own-use mobile phones: Sikkim is highest (91.6%), followed by Mizoram (90.9%) and Arunachal Pradesh (90.3%). Chhattisgarh is lowest (47.8%), just below Madhya Pradesh (48.5%).

The differences between urban and rural regions are particularly striking when it comes to internet usage and mobile phone ownership. Internet usage in urban regions in Karnataka is higher by 29 percentage points, while in Gujarat, it is 27 percentage points. As for the ownership of mobile phone, the greatest difference between urban and rural areas can be seen in Chhattisgarh and Maharashtra (both at around 29 percentage points). The difference in bank account use is relatively small, and in some states, there are more people using accounts in rural regions than urban such as, Himachal Pradesh (93.5% rural; 89.3% urban) and Punjab (89.4% rural; 85.5% urban).

Table 1. NFHS-5 Indicators (2019–21)

Sl. No.	State	Women who have ever used internet (%)			Women having a bank or savings account that they themselves use (%)			Women having a mobile phone that they themselves use (%)			Among women who own a mobile phone, percentage who use it for financial transactions (%)		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
1	Kerala	64.9	57.5	61.1	78.9	78.2	78.5	86.2	86.9	86.6	23.8	21.5	22.6
2	Tamil Nadu	55.8	39.2	46.9	92.7	91.7	92.2	81.2	68.9	74.6	32.3	21.3	26.9
3	Karnataka	50.1	24.8	35	90.2	87.7	88.7	74.2	53.4	61.8	52.9	33.7	43
4	Uttar Pradesh	50.2	24.5	30.6	79.8	74.1	75.4	59.9	42.4	46.5	25.1	14.9	18
5	Bihar	38.4	17	20.6	79.1	76.2	76.7	61.8	49.3	51.4	12.7	9.8	10.4
6	West Bengal	48.1	14	25.5	83.9	73.2	76.5	71.9	39.1	50.1	19.6	6.5	12.8
7	Assam	49	24.4	28.2	81.9	77.9	78.5	75.4	53.9	57.2	23	18.2	19.2
8	Gujarat	48.9	17.5	30.8	73.5	67.5	70	66	36.2	48.8	26.4	15.4	21.7
9	Rajasthan	56.1	30.8	36.9	81.7	79	79.6	65.5	45.3	50.2	31.9	14.7	20.1
10	Maharashtra	54.3	23.7	38	75	70.9	72.8	68.2	43.1	54.8	38.1	18.3	29.8
11	Andhra Pradesh	33.9	15.4	21	86.7	79.6	81.8	67.4	40.9	48.9	25.8	18.3	21.4
12	Arunachal Pradesh	70	49.6	52.9	86	76.7	78.2	81.9	75.3	76.4	46.6	36.6	38.4
13	Madhya Pradesh	46.5	20.1	26.9	78.5	73.3	74.7	58.8	31.4	38.5	32.3	17.5	23.3
14	Chhattisgarh	44.5	20.8	26.7	77.9	81.1	80.3	61.2	34	40.7	34.1	18.4	24.3
15	Goa	78.1	68.3	73.7	85.1	92.4	88.3	94.5	87.1	91.2	55.6	37.7	48
16	Haryana	60.2	42.8	48.4	76.3	72.4	73.6	65.1	43.4	50.4	39.2	24.3	30.5
17	Himachal Pradesh	78.9	45.2	49.7	88.8	82.2	83.1	90.9	77.8	79.5	45.5	14.1	18.8
18	Jharkhand	57.8	22.7	31.4	79.2	79.8	79.6	65.2	43.7	49	32.9	13.5	20
19	Meghalaya	57.8	28	34.7	78	68.2	70.4	78.2	64.3	67.5	23.9	12.9	15.8
20	Mizoram	83.8	48	67.6	85.4	75	80.7	91.8	70.6	82.3	21.3	10.6	17.2
21	Nagaland	66.5	40.3	49.4	77.9	55.4	63.7	93	76.3	82.5	27.4	14.4	19.7
22	Odisha	39.7	21.3	24.9	82.8	87.4	86.5	58.8	48	50.1	30	13.5	17.3
23	Punjab	64.1	48.8	54.8	80.9	82.1	81.6	71	54.9	61.2	35.8	25.3	30.1
24	Sikkim	90	68.1	76.7	76	76.7	76.4	96.9	83.3	88.6	45.6	27.1	35.1
25	Telangana	43.9	15.8	26.5	83	85.2	84.4	75.2	50.6	60	27.7	15	21.1
26	Tripura	36.6	17.7	22.9	74.9	77.7	76.9	66.2	48	53.1	9.2	5.7	6.9
27	Uttarakhand	58.4	39.4	45.1	81.3	79.8	80.2	73.1	55.7	60.9	23.1	16.3	18.7

Note: The digital transaction percentage is among women who have a mobile phone.

Table 2. NFHS-6 Indicators (2023–24)

Sl. No.	State	Women who have ever used internet (%)			Women having a bank or savings account that they themselves use (%)			Women having a mobile phone that they themselves use (%)		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
1	Kerala	89.4	85.2	87.3	92.6	90.9	91.7	89.9	88.3	89.1
2	Tamil Nadu	67.9	52.8	59.5	90	90	90	83.4	71.6	76.8
3	Karnataka	74.1	45.1	57.9	94.4	95	94.7	85.9	61.7	72.4
4	Uttar Pradesh	79	67.3	70	81	84.3	83.5	67.1	53.1	56.4
5	Bihar	70.3	56.8	58.4	89.1	91.1	90.9	70.9	61.7	62.8
6	West Bengal	71.6	54.1	59.3	94.7	95.6	95.3	78.4	59.5	65.1
7	Assam	70.2	51.1	53.5	93.4	91.4	91.7	82.8	64.5	66.8
8	Gujarat	81.3	54.3	65.7	82.1	82.2	82.2	76	49.2	58.8
9	Rajasthan	83.2	60.7	66.3	88.6	89.3	89.1	75.1	56.4	61.1
10	Maharashtra	78.1	50.8	62.6	85.3	83	84	80	50.8	63.5
11	Andhra Pradesh	73.7	58.3	63.6	91.5	92.8	92.3	76.7	57.5	64.1
12	Arunachal Pradesh	82.3	68.7	73.4	90.6	91.5	91.2	92.7	89.1	90.3
13	Madhya Pradesh	78.1	55.9	62	93.1	91.7	92.1	69.2	40.6	48.5
14	Chhattisgarh	74.4	49	54.4	91.2	94	93.4	71	41.5	47.8
15	Goa	95.2	92.4	94	90.9	91.5	91.1	92	87.1	89.9
16	Haryana	84.9	67.3	74	84.7	85.4	85.2	76.6	57.8	64.9
17	Himachal Pradesh	82.1	74.6	75.4	89.3	93.5	93	86.2	84	84.3
18	Jharkhand	84.5	64.2	68.6	87.9	91.6	90.8	72.2	54.6	58.4
19	Meghalaya	76.7	54.6	59	83.3	81	81.5	90.3	78.2	80.6
20	Mizoram	92.8	72.1	82.5	93.9	93.3	93.6	96.2	85.5	90.9
21	Nagaland	81.6	73.5	76.6	88.6	83.9	85.7	92.7	85.9	88.5
22	Odisha	66.7	49	51.8	89.4	90.8	90.6	79	60.7	63.6
23	Punjab	78.2	72	74.5	85.5	89.4	87.9	80	67.9	72.6
24	Sikkim	94.6	88.5	90.3	90.6	91.8	91.4	93.9	90.7	91.6
25	Telangana	80.3	58.9	64.8	92.6	92.2	92.3	80.5	60.2	65.8
26	Tripura	68.1	43.7	48.8	91.6	91.5	91.6	79.5	61.7	65.5
27	Uttarakhand	85.3	73.1	76.9	88.9	91.9	91	77.3	70.4	72.5

A comparison of NFHS-5 and NFHS-6 state estimates shows an increase in women's internet use in all 27 states. Andhra Pradesh recorded the largest rise (42.6 percentage points), while Tamil Nadu recorded the lowest (12.6%). Women's use of their own bank account increased in 26 states, with the largest gain in Nagaland (22 points). Tamil Nadu showed a decrease of 2.2 points. Own- use mobile phone ownership also increased in 26 states led by Andhra Pradesh (15.2 points), while Goa showed a decrease of 1.3 points. These figures show changes in the reported state- level percentages between NFHS-5 and NFHS-6.

Table 3. Change from NFHS-5 to NFHS-6

Sl. No.	State	Internet use change (percentage points)	Bank account use change (percentage points)	Own-use mobile phone change (percentage points)
		Total	Total	Total
1	Kerala	26.2	13.2	2.5
2	Tamil Nadu	12.6	–2.2	2.2
3	Karnataka	22.9	6	10.6
4	Uttar Pradesh	39.4	8.1	9.9
5	Bihar	37.8	14.2	11.4
6	West Bengal	33.8	18.8	15
7	Assam	25.3	13.2	9.6
8	Gujarat	34.9	12.2	10
9	Rajasthan	29.4	9.5	10.9
10	Maharashtra	24.6	11.2	8.7
11	Andhra Pradesh	42.6	10.5	15.2
12	Arunachal Pradesh	20.5	13	13.9
13	Madhya Pradesh	35.1	17.4	10
14	Chhattisgarh	27.7	13.1	7.1
15	Goa	20.3	2.8	–1.3
16	Haryana	25.6	11.6	14.5
17	Himachal Pradesh	25.7	9.9	4.8
18	Jharkhand	37.2	11.2	9.4
19	Meghalaya	24.3	11.1	13.1
20	Mizoram	14.9	12.9	8.6
21	Nagaland	27.2	22	6
22	Odisha	26.9	4.1	13.5
23	Punjab	19.7	6.3	11.4
24	Sikkim	13.6	15	3
25	Telangana	38.3	7.9	5.8
26	Tripura	25.9	14.7	12.4
27	Uttarakhand	31.8	10.8	11.6

Urban- Rural Differences

NFHS-5 data show higher urban than rural percentages for women's internet use in all 27 states and for mobile-phone financial transactions in all 27 states. The largest urban-rural gaps in internet use are observed in Mizoram, Jharkhand and West Bengal, while the largest gap in financial transactions is in Himachal Pradesh. Urban percentages for women's use of their own bank accounts are higher in 19 states, but rural percentages are higher in the remaining eight. Own-use mobile phone usage is higher in urban areas in 26 states; Kerala is the only state where rural percentage is slightly higher. The details are as follows:

- Internet use: The urban percentage is higher in all 27 states. The largest gaps are in Mizoram (35.8 percentage points), Jharkhand (35.1), and West Bengal (34.1). Kerala has the smallest gap (7.4).
- Bank-account use: The urban percentage is higher in 19 states, rural percentage is higher in eight. The largest urban advantage is in Nagaland (22.5 points). The largest rural advantage is in Goa (7.3 points).
- Own-use mobile phones: The urban percentage is higher in 26 states. Kerala is the exception, where rural ownership is 0.7 points higher. The largest urban gaps are

in West Bengal (32.8 points) and Gujarat (29.8 points).

- Mobile phone financial transactions: The urban percentage is higher in all 27 states. The largest gap is in Himachal Pradesh (31.4 points); the smallest is in Kerala (2.3).

This suggests that the urban-rural divide is most consistent for internet use and financial transactions. Bank-account use shows a different pattern: rural percentages exceed urban ones in several states.

Table 4. Change in Rural and Urban Areas NFHS-5

Sl. No.	State	Internet use change (percentage points)			Bank account use change (percentage points)			Own-use mobile phone change (percentage points)			Among women who own a mobile phone, percentage who use it for financial transactions (%)		
		Urban	Rural	Diff.	Urban	Rural	Diff.	Urban	Rural	Diff.	Urban	Rural	Diff.
1	Kerala	64.9	57.5	7.4	78.9	78.2	0.7	86.2	86.9	–0.7	23.8	21.5	2.3
2	Tamil Nadu	55.8	39.2	16.6	92.7	91.7	1	81.2	68.9	12.3	32.3	21.3	11
3	Karnataka	50.1	24.8	25.3	90.2	87.7	2.5	74.2	53.4	20.8	52.9	33.7	19.2
4	Uttar Pradesh	50.2	24.5	25.7	79.8	74.1	5.7	59.9	42.4	17.5	25.1	14.9	10.2
5	Bihar	38.4	17	21.4	79.1	76.2	2.9	61.8	49.3	12.5	12.7	9.8	2.9
6	West Bengal	48.1	14	34.1	83.9	73.2	10.7	71.9	39.1	32.8	19.6	6.5	13.1
7	Assam	49	24.4	24.6	81.9	77.9	4	75.4	53.9	21.5	23	18.2	4.8
8	Gujarat	48.9	17.5	31.4	73.5	67.5	6	66	36.2	29.8	26.4	15.4	11
9	Rajasthan	56.1	30.8	25.3	81.7	79	2.7	65.5	45.3	20.2	31.9	14.7	17.2
10	Maharashtra	54.3	23.7	30.6	75	70.9	4.1	68.2	43.1	25.1	38.1	18.3	19.8
11	Andhra Pradesh	33.9	15.4	18.5	86.7	79.6	7.1	67.4	40.9	26.5	25.8	18.3	7.5
12	Arunachal Pradesh	70	49.6	20.4	86	76.7	9.3	81.9	75.3	6.6	46.6	36.6	10
13	Madhya Pradesh	46.5	20.1	26.4	78.5	73.3	5.2	58.8	31.4	27.4	32.3	17.5	14.8
14	Chhattisgarh	44.5	20.8	23.7	77.9	81.1	–3.2	61.2	34	27.2	34.1	18.4	15.7
15	Goa	78.1	68.3	9.8	85.1	92.4	–7.3	94.5	87.1	7.4	55.6	37.7	17.9
16	Haryana	60.2	42.8	17.4	76.3	72.4	3.9	65.1	43.4	21.7	39.2	24.3	14.9
17	Himachal Pradesh	78.9	45.2	33.7	88.8	82.2	6.6	90.9	77.8	13.1	45.5	14.1	31.4
18	Jharkhand	57.8	22.7	35.1	79.2	79.8	–0.6	65.2	43.7	21.5	32.9	13.5	19.4
19	Meghalaya	57.8	28	29.8	78	68.2	9.8	78.2	64.3	13.9	23.9	12.9	11
20	Mizoram	83.8	48	35.8	85.4	75	10.4	91.8	70.6	21.2	21.3	10.6	10.7
21	Nagaland	66.5	40.3	26.2	77.9	55.4	22.5	93	76.3	16.7	27.4	14.4	13
22	Odisha	39.7	21.3	18.4	82.8	87.4	–4.6	58.8	48	10.8	30	13.5	16.5
23	Punjab	64.1	48.8	15.3	80.9	82.1	–1.2	71	54.9	16.1	35.8	25.3	10.5
24	Sikkim	90	68.1	21.9	76	76.7	–0.7	96.9	83.3	13.6	45.6	27.1	18.5
25	Telangana	43.9	15.8	28.1	83	85.2	–2.2	75.2	50.6	24.6	27.7	15	12.7
26	Tripura	36.6	17.7	18.9	74.9	77.7	–2.8	66.2	48	18.2	9.2	5.7	3.5
27	Uttarakhand	58.4	39.4	19	81.3	79.8	1.5	73.1	55.7	17.4	23.1	16.3	6.8

Policy Implications

The findings point to the need for policies that address differences in women's financial and digital access across states and between urban and rural areas. Programs should support women's access to personal mobile phones and reliable internet, particularly in areas where these indicators are lower. Access should be accompanied by practical digital and financial literacy support, along with clear guidance on safe use of digital services. Since the NFHS-5 data show that the access to accounts and phones does not always correspond with mobile-phone use for financial transactions, policy efforts should also

encourage women's active and informed use of digital financial services. These recommendations are based on descriptive patterns and should be adapted to local needs.

Conclusion

This study compared women's access to bank accounts, mobile phones and the internet across 27 Indian states using NFHS-5 and NFHS-6 data. It also examined urban-rural differences and described women's use of mobile phones for financial transaction using NFHS-5 data. The findings show that women's access varies across states and between urban and rural areas. They also underline that access to a bank account, phone or internet does not necessarily mean that a woman uses digital financial services.

These findings support the need for policies that respond to local differences and help women access and use digital financial services. Future research could use individual level data to examine factors associated with women's digital financial inclusion and investigate why patterns differ across states. When comparable transaction-use data become available across survey rounds, researchers could also study changes in women's digital payment use over time. Since this study is descriptive and based on state level estimates, further research could test these relationships and assess the effects of specific policies.

References

Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution*. World Bank. https://doi.org/10.1596/978-1-4648-1259-0

Duvendack, M., Sonne, L., & Garikipati, S. (2023). Gender inclusivity of India's digital financial revolution for attainment of SDGs: Macro achievements and the micro experiences of targeted initiatives. *The European Journal of Development Research, 35*(6), 1369–1391. https://doi.org/10.1057/s41287-023-00585-x

International Institute for Population Sciences. (2026). *National family health survey (NFHS-6), 2023–24: India and state/UT fact sheets*. https://www.nfhsiips.in/nfhsuser/assets/National%20Family%20Health%20Survey%20%28NFHS-6%29%202023-2024%20Fact%20Sheets.pdf

International Institute for Population Sciences, & ICF. (2021). *National family health survey (NFHS-5), 2019–21: India*. https://www.iipsindia.ac.in/content/national-family-health-survey-nfhs-5-india-report

Khera, P., Ng, S. Y., Ogawa, S., & Sahay, R. (2021). *Measuring digital financial inclusion in emerging market and developing economies: A new index* (IMF Working Paper No. 21/90). International Monetary Fund. https://doi.org/10.5089/9781513574196.001

Mukherjee, A., Mukherjee, E., Dutta, S., & Pal, S. (2022). *Digital financial inclusion of women in MSMEs: G20 and India*. ICRIER–NABARD. https://icrier.org/publications/digital-financial-inclusion-of-women-in-msmes-g20-and-india/