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Social Media Adoption Among Rural Women in Haryana

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Abstract

Background: Social media can be used to provide rural women with information, government services, livelihoods and social connections, but these need to be supplemented by access to phones (either their own or shared) and access to the internet to be adopted at scale. Haryana has a large rural population and a long history of limitations on women's mobility, so the question of how rural women in Haryana are navigating the internet is a policy-worthy one.

Objective: To provide an overview of the usage of internet and mobile phones of the rural women of Haryana in comparison with India and urban Haryana and giving an overview of published evidence on their social media usage.

Methods: A descriptive secondary-data study. The figures have been taken from the National Family Health Survey (NFHS-4, 2015-16), the replies given to the Parliament in response to questions that were asked on female users of Internet and the rural digital literacy scheme (PMGDISHA), and published analyses and studies relating to Haryana. Since there is no official source to measure social media usage, internet use and personal ownership of a phone were used as indicators of access amongst women aged 15–49. Differences, urban–rural ratios and programme completion rates were calculated.

Results: In NFHS-5, 42.8% of rural women in Haryana had ever used the internet compared to 60.2% of urban women and 24.6% of rural women all over India. The urban–rural gap in Haryana (17.4 percentage points) is lower than India (27.2 points). On a national level, NFHS-6 found that women's self-owned phones increased from 45.9% to 63.6% from NFHS-4 to NFHS-6, and internet use by rural women grew from 24.6% to 58.6%, with the states that began with lower rates making the greatest strides. In NFHS-4, 50.1% of women in Haryana owned a mobile phone while in NFHS-5, the figure was 52.0%. Additionally, only 29.0% of women in Haryana had completed 12 or more years of schooling in NFHS-4 and 38.0% could go

outside the village alone in NFHS-4. The rural digital literacy scheme saw 18,57,815 candidates register in Haryana of which 11,90,337 were certified, which is similar to the national trend. According to a published study, among the girls and women of Haryana, WhatsApp was the top among the most used platforms followed by YouTube.

Conclusion: In conclusion, although the situation of rural women is better than that of rural women in India in general, they are still lagging behind the urban women and the use of personal phone has increased less rapidly than the use of internet. Various factors influence who takes up social media; they include devices, digital skills, schooling status and household permission, and training programmes do not measure how many women became certified then adopted social media. Data on the platform level in rural Haryana are very limited and a primary survey at the state level is required.

Keywords: social media; rural women; Haryana; internet use; mobile phone ownership; digital divide; NFHS; descriptive study

1. Introduction

Social media platforms like WhatsApp, YouTube, Facebook and Instagram are one of the primary sources of information sharing, news, acquiring skills and family connect among Indians. In rural communities, these platforms can have real-world implications – a self-help group might use the app to coordinate activities, a woman farmer can view a video on a crop issue on YouTube, and a small home business might sell via Facebook or Instagram. If they can get online or not, that will depend on whether or not rural women can participate in this. Women are much less likely than men to be connected across India. The fifth round of the NFHS (2019-21) revealed that 33.3 per cent of women and 57.1 per cent of men had ever used the internet, with the most disadvantaged women being found in rural areas, where 24.6 per cent had ever used the internet versus 51.8 per cent of urban women [1,5,6]. The results of NFHS-6 reveal an improvement in the latter, but there is still a disparity between women from rural areas and urban areas.

Haryana is comparatively a rich state, with almost full access to household electricity (as 99% of all households in NFHS-4 had access to electricity) and a large rural population (around 58% of the households surveyed in NFHS-4 were rural) [3]. Meanwhile, women's education and levels of travel and device control remain lower than would be expected from their income. For NFHS-4, only 29% of women aged 15-49 years had completed 12

years or more of schooling and only 38% were permitted to go to the market, health facility or outside the village alone [3]. All these conditions create a situation that restricts the right to own a smartphone and its use by some, thereby making Haryana a useful case in the study of rural women's use of the smartphone.

Official surveys in India measure the use of the internet and mobile phone, and report on whether women have ever used the internet or have their own mobile phone, but they do not measure which social media platforms women use and how frequently. Small studies provide evidence on social media. The paper therefore collates what can be confidently said about the women in the countryside of Haryana: the numbers of women who are online; how it compares with the women in the cities in Haryana and with the women in India; how rapidly access is growing; and what the published work shows about the use of platforms. It is used as a descriptive framework for future primary research.

1.1 Key concepts

Social media. Social media are web-based services which enable users to develop a profile and interact with other user and view and share content in a limited system [24]. Most commonly used services include messaging groups, video sharing sites and social networking sites, all of which are used primarily on mobile phones in rural India.

Adoption. Adoption is seen here as a process and not an event. A woman can become aware of a platform, then experiment with use, typically on a relative's telephone, then make use of it regularly for a couple of purposes, and then for more diverse ones like discovering, trading or participating in community events [19]. The NFHS indicators utilized here are just aspects of that process.

2. Aim and Objectives

Aim: To describe the level and pattern of internet access and social media use among rural women in Haryana, using published secondary data.

Objectives:

- To present the share of rural and urban women in Haryana who have ever used the internet, and compare it with India (NFHS-5).
- To measure the urban–rural gap in internet use in Haryana and in India.
- To describe the trend in women's mobile phone ownership and internet use in India across NFHS-4, NFHS-5 and NFHS-6, and in Haryana where data are available.
- To describe the social and educational conditions in Haryana that shape women's access to digital technology.

- To place Haryana in the context of other Indian states using NFHS data.
- To describe the rural digital literacy effort (PMGDISHA) in Haryana and compare it with India.
- To summarise published evidence on social media use among women in Haryana.

3. Methodology

3.1 Study design

A descriptive study with only secondary data. No respondents were surveyed and no primary data was collected. Information on all figures is taken from public reports and publications.

3.2 Data sources

Data were gathered in October 2026. The figures from the national and Haryana fact sheet of NFHS-5 (2019-21) [1,2,5] and published analyses of NFHS-4 (2015-16) results for India and some states [3,7] were also used. Data from government responses (12–16, 5): Parliamentary questions related to the Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA), and reply from the ministry of electronics and information technology to Rajya Sabha question on female Internet users. Percentages of NFHS indicators in tabular format by state/sex and rural/urban [6,8,9,11] and commentary on these tables. A published study on social media uses by girls and women in Haryana [10].

3.3 Indicators and calculations

The access that is required to adopt the social media was measured using two NFHS indicators. The first is the percentage of female population aged 15-49 that has used the internet at least once in their life. The second is the proportion of females (15-49) who use their mobile phones. We computed three derived measures:

- Urban–rural gap in percentage points (points) = urban percentage − rural percentage.
- Rural to urban ratio is the ratio of the rural percentage to the urban percentage times 100 that shows how close rural women are to the urban level.
- The programme completion rates are taken as candidates trained / candidates registered for PMGDISHA digital literacy programme and candidates certified / candidates trained for PMGDISHA digital literacy programme.

3.4 What the indicators can and cannot show

NFHS: Have you ever used the internet? If a woman has used it once, she answers yes, to indicate awareness and access, not regular use [9]. It also doesn't specify what applications were used and therefore is not a direct measure of social media use. These are mentioned in greater detail in

Section 8. No ethical approval was needed as the study was based on published aggregate data.

Table 1. Indicators and sources used in this study

Indicator	What it measures	Coverage	Source
Ever used the internet	Any past use by women aged 15–49	India, Haryana; urban and rural	NFHS-5 [2,5]
Own mobile phone	Phone the woman herself uses	India; Haryana (total)	NFHS-4, 5, 6 [3,5,7,11]
Schooling, bank account, mobility	Conditions that shape access	Haryana (total)	NFHS-4 [3]
Digital literacy programme counts	Candidates registered, trained and certified	Haryana and India	Parliamentary replies [12–15]
Platform and pattern of use	Platforms used by girls and women	Six divisions of Haryana	Published study [10]

Note: NFHS indicators cover women aged 15–49 years. Haryana figures for schooling, bank accounts and mobility are for all women in the state, not for rural women alone.

3.5 Source quality and comparability

The NFHS is a large household survey conducted by the International Institute for Population Sciences (IPS) on behalf of Ministry of Health and Family Welfare and is the best available data available to compare states and rural and urban areas on a common set of questions. It was conducted in two phases during the fifth round of fieldwork in Haryana due to the Covid-19 lockdown [2]. NFHS-6 results are based on published analyses and are not included in the full report, and are only employed for national comparisons and a few state comparisons. Programme activity, not later use of the internet, is reported in the PMGDISHA replies, as an administrative count. Sourced from different sources, with different definitions or years, these are presented individually and never aggregated in a calculation.

4. Review of Literature

Internet usage among women in India. The first round of NFHS-5 asked women and men if they had ever used the internet. It determined that 33.3% of women and 57.1% of men had used it, with urban women being approximately twice as likely as rural women (24.6%) to have used it; [1,5,8]. In the initial phase NFHS-5, the study revealed that less than 30% of the rural women had used the internet in 10 out of 17 States [9]. It was noted that the gender gap is not confined to the internet: Men in India were 15% more likely than women to own a mobile phone, and 33% more likely to use mobile internet in 2020 [6].

Mobile phones. The ownership of own-phone increased from 45.9% in NFHS-4 to 54.0% in NFHS-5. This urban–rural disparity was observed to be large, with 69.4% of urban women owning a phone compared to 46.6% of rural women in NFHS-5 [6] and 61.8% and 36.9% in NFHS-4 [7] respectively. The percentage of women owners of telephone did not increase over this period in Haryana [11].

Recent progress. The use of the internet by women grew by almost double to 64.3%, while personal mobile ownership rose to 63.6%, according to NFHS-6. Rural women's internet use rose from 24.6% to 58.6%, while urban women's rose from 51.8% to 77.3% [4]. In some states, such as Uttar Pradesh, Madhya Pradesh, Jharkhand, and Haryana, the number of people using the internet was higher than the number of people with their own mobile phone, which may indicate that some women use the internet on their family member's mobile phone [4].

Women use of social media in Haryana. The study surveyed all the six administrative divisions of Haryana to examine the usage of social media among rural and urban girls and women. It identified WhatsApp as the most popular platform among both the rural and urban samples, and found that women of all age groups were using social media, with significant differences between the rural and urban women in their social media use [10]. The study also examined the impact of social media on daily life, relationships in the family, mental and emotional health and the victimisation of girls through social media [10].

Policy support. The Government of India has initiated programmes for inclusion of rural women in the online world, such as the digital literacy scheme for rural households, women's participation as 'village-level entrepreneurs' at Common Service Centres (71,483 women across the country) and encouragement of women in self-help groups to take up these roles [5].

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Digital literacy programmes. The PMGDISHA scheme was initiated in February 2017 to make one person from every 6 crore rural households digitally educated. It trained on usage of digital devices, introduction to Internet, communication on Internet, citizen services and digital financial instruments like mobile banking, UPI [12,13]. The scheme ended on 31 March 2024, in which approximately 7.35 crore candidates were enrolled, 6.39 crore trained and 4.78 crore were certified throughout the country [15]. Slower implementation in certain places is attributed to government responses such as poor awareness of the benefits of digital literacy among people in remote areas and low internet connectivity in remote areas [16].

Theoretical lenses. The literature on this subject suggests that there are a number of theories that can account for the differences between women in the rural population and other women with respect to adoption. According to the Technology Acceptance Model (TAM), people accept a technology primarily because they think it can help them and is easy to use [17] and the unified theory of acceptance and use of technology (UTUT) includes social influence and facilitating conditions [18]. The decision to give a woman a phone in rural Haryana can be more important than her own—it's up to her husband or even an older family member. The diffusion of innovations theory explains the process of how new practice is disseminated in social networks and places emphasis on the importance of the practice being congruent with the existing values and others observing the practice [19]. Digital divide studies further indicate that access is not a simple process: motivation, access, skills and diverse uses are dependent on one another, and each is not equally accessible [20]. There are differences in skills even among connected users [21]. Research on gender and development places emphasis that women make strategic choices within boundaries they have set for themselves in their families and communities, accepting some constraints in order to secure their position [22] and that empowerment is not just about access to a tool, but also a genuine increase in the ability to make strategic choices [23].

Research gap. The national surveys provide similar access indicators by State and by rural and urban locale, and they do not include social media use. Programme information is kept on the number of women trained – but not what happened to them after training. There is one study conducted in Haryana, but it is of a small sample. There is no source reported which is representative of rural platform level use of the platform for Haryana by rural women. This is a paper that integrates all of

the elements available and a representative primary survey is still required.

5. Results

5.1 Internet use among women in Haryana and India, NFHS-5

Table 2 and Figure 1 provide a comparison between the Internet use rate of women compared to those who have never used the Internet. 48.4% of women in Haryana in the age group 15-49 had ever used the internet, which is 15.1 percentage points more than the national average of 33.3%. The advantage was highest among women in rural areas of Haryana (42.8%) compared to those in rural India (24.6%) with a difference of 18.2 percentage points; that is, rural women in Haryana were approximately 1.7 times more likely to have used the internet than rural women nationally. The gap was not as great among urban women (60.2% compared to 51.8%, or 8.4 points).

Table 2. Women aged 15–49 who have ever used the internet (%), NFHS-5

Area	**India**	**Haryana**	**Haryana minus India (points)**
Urban	51.8	60.2	+8.4
Rural	24.6	42.8	+18.2
All women	33.3	48.4	+15.1

Note: India figures from [5]; Haryana figures from the NFHS-5 state fact sheet [2]. Fieldwork for Haryana ran from January 2020 to April 2021 with a break for the Covid-19 lockdown, so the survey periods for India and Haryana are not identical. Differences calculated by the author.

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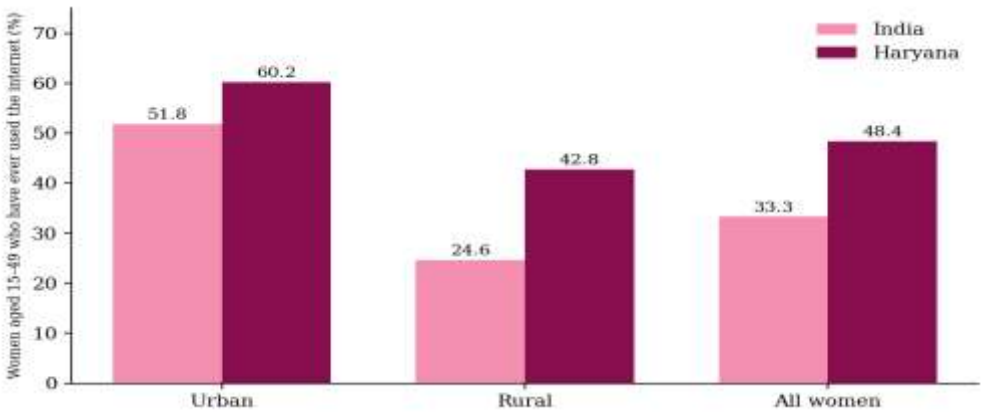


Figure 1. Women aged 15–49 who have ever used the internet (%), India and Haryana, NFHS-5. Sources: [2,5].

5.2 Urban–rural gap

The use of rural women was 71% of urban women with Haryana being 17.4 percentage points behind them. The gap for the whole of India was 27.2 points and the use of rural women was only approximately 47% of the use of urban women (Table 3, Figure 2). In other words, Haryana's rural women lag behind the urban women, but the gap between the two is not as large as the gap between rural and urban women of the nation. The disparity between rural and urban women further reduced in NFHS-6, to 18.7 points [4] at National level.

Table 3. Urban–rural gap in internet use among women (percentage points) and rural-to-urban ratio

Setting	Urban (%)	Rural (%)	Gap (points)	Rural as % of urban
India, NFHS-5 [5]	51.8	24.6	27.2	47
Haryana, NFHS-5 [2]	60.2	42.8	17.4	71
India, NFHS-6 [4]	77.3	58.6	18.7	76

Note: Gap and ratio calculated by the author. NFHS-6 figures are as reported in [4]; Haryana figures for NFHS-6 were not available in the sources used.

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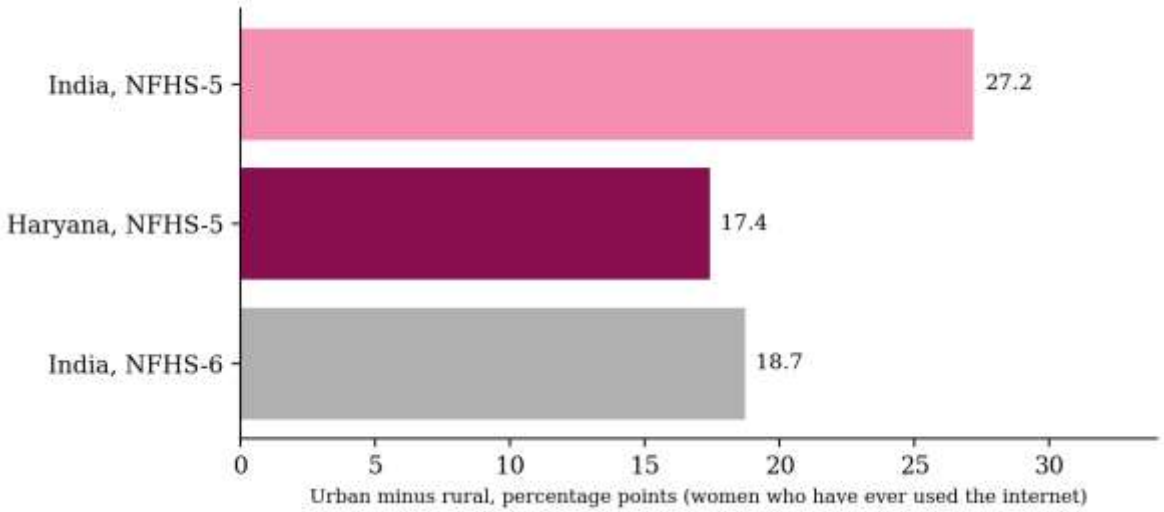


Figure 2. Urban–rural gap in the share of women who have ever used the internet (percentage points). Sources: [2,4,5].

5.3 Trends in women's phone ownership and internet use in India

Table 4 and Figure 3 provide an indication of the rate of change of women's access. The proportion of women who own their own mobile phone increased from 45.9 per cent in NFHS-4 to 54.0 per cent in NFHS-5 (an additional 8.1 points) and 63.6 per cent in NFHS-6 (an additional 9.6 points). The own-phone ownership rate improved in urban areas from 61.8% to 77.6% from NFHS-4 to NFHS-6, while the rural–urban gap in own-phone ownership decreased from 24.9 points to 22.8 points between NFHS-4 and NFHS-5 respectively. The use rate of the Internet increased at a much quicker pace: the figure for NFHS-6 was almost double what it was at NFHS-5 (33.3% to 64.3%), and the figure for women in rural areas increased by 34.0 points, from 24.6% to 58.6% [4].

Table 4. Women's own mobile phone ownership and internet use in India (%)

Indicator	NFHS-4 (2015–16)	NFHS-5 (2019–21)	NFHS-6
Own mobile phone, all women	45.9	54.0	63.6
Own mobile phone, urban	61.8	69.4	77.6
Own mobile phone, rural	36.9	46.6	–
Ever used internet, all women	–	33.3	64.3
Ever used internet, urban	–	51.8	77.3
Ever used internet, rural	–	24.6	58.6

Note: Sources are [4,6,7]. – = not reported in the sources used (NFHS-4 did not ask about internet use; rural NFHS-6 phone ownership was not available).

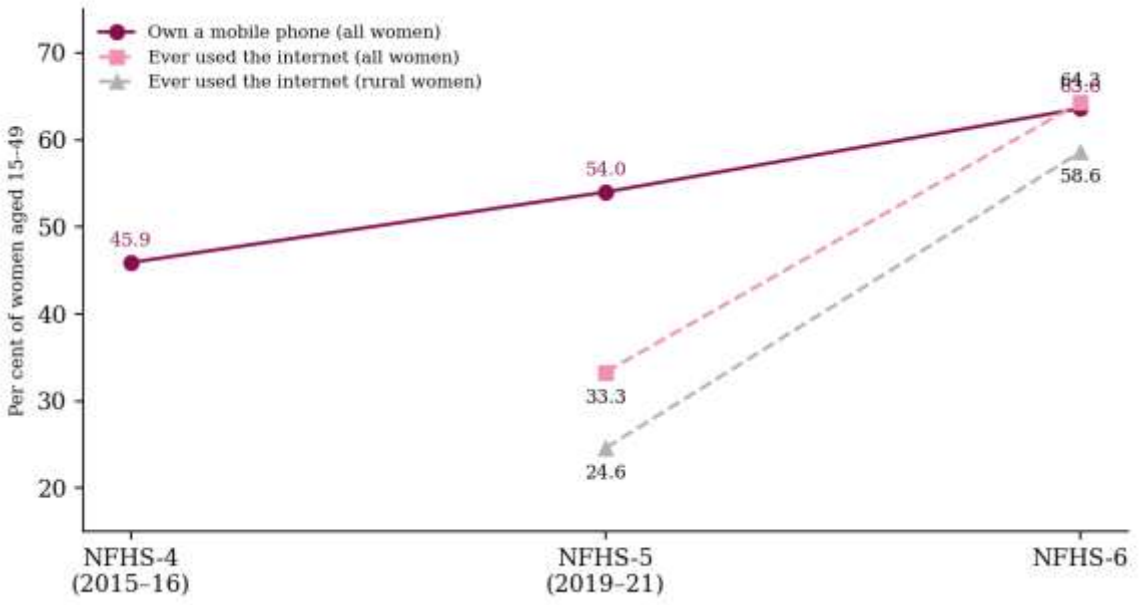


Figure 3. Women's own mobile phone ownership and internet use in India across NFHS rounds. Sources: [4,6,7].

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5.4 Mobile phone ownership in Haryana

In Haryana, about half of all women aged 15–49 owned and used a mobile phone in NFHS-4 (2015–16) [3], and the figure was 50.4% in NFHS-5 [5,11]. This is in contrast to national increase from 45.9% to 54.0% in the same period and one comment made in NFHS-5 pointed out that Haryana did not achieve the same improvement as many other states [11]. Our NFHS-6 analysis found that more women in Haryana used the internet than owned their own cell phone [4], implying that the sharing of phones with family members is prevalent. No data for phone ownership in rural and urban areas was found for Haryana.

5.5 Conditions that shape access in Haryana

Table 5 shows the NFHS-4 indicators for women in Haryana which are most closely linked with digital access. Power supply is not likely to be a barrier since almost all households had electricity. Schooling and independence of women is a different story: only less than three out of ten women had completed 12 years of schooling; less than half of all women had an account of their own at the bank; less than four out of ten women would go to the market, a health facility or out of the village alone. For the women who are unable to leave the village alone, they also might not have as much voice in the household's smartphone or fewer opportunities to learn to use one.

Table 5. Selected NFHS-4 indicators for Haryana relevant to women's digital access

Indicator	Value	Reference
Households with electricity	99%	[3]
Households in urban areas	42%	[3]
Women aged 15–49 with 12 or more years of schooling	29%	[3]
Women with a bank or savings account they operate themselves	46%	[3]
Women allowed to go to the market, health facility and outside the village alone	38%	[3]
Women who own and use a mobile phone	About half	[3]
Mean age at first marriage, women aged 20–49	19.5 years	[3]

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Note: Figures are for all women in the state, not for rural women alone. Source: NFHS-4 Haryana summary [3].

5.6 Haryana in the context of other Indian states

NFHS-6 state figures reported in [4] show that states with low starting points gained fastest. Women's internet use in Andhra Pradesh rose from 21.0% to 63.6%, in Uttar Pradesh from 30.6% to 70.0% and in Bihar from 20.6% to 58.4%, against a national rise from 33.3% to 64.3% (Table 6). Other states with high levels, like Delhi, Chandigarh and Goa, showed smaller increases [4]. Haryana's NFHS-5 figure was 48.4% which was higher than all three of these states as well as India with NFHS-5, while the NFHS-6 figure was not available in the sources used, it is unclear whether Haryana has continued to outperform the other three states or whether those states that began lower have caught up.

Table 6. Women aged 15–49 who have ever used the internet (%), selected states and India, NFHS-5 and NFHS-6

Setting	NFHS-5	NFHS-6	Change (percentage points)
Haryana	48.4	–	–
Uttar Pradesh	30.6	70.0	+39.4
Bihar	20.6	58.4	+37.8
Andhra Pradesh	21.0	63.6	+42.6
India	33.3	64.3	+31.0

Note: NFHS-5 figure for Haryana from [2]; other figures as reported in [4]. Change calculated by the author. – = NFHS-6 figure for Haryana not available in the sources used.

5.7 The rural digital literacy programme in Haryana

Haryana's performance under PMGDISHA which targeted making one person in every household in rural areas digitally literate is depicted in Table 7

and Figure 4. By 24 November 2021, 17,18,241 candidates in Haryana had registered, 14,54,522 had been trained and 10,95,505 had been certified [13]. When the scheme concluded on 31 March 2024, the figures were 18,57,815 registered, 15,77,109 trained and 11,90,337 certified [12]. Thus the number certified has increased by 94,832 or 8.7% in that period. 84.9% of the registered were trained and 64.1% were certified. The national pattern was almost the same: 86.9% of those enrolled were trained, 65.0% were certified and 74.8% of those trained were certified [15].

Table 7. PMGDISHA digital literacy scheme: candidates registered, trained and certified

Setting	Registered	Trained	Certified	Trained as % of registered	Certified as % of trained
Haryana, 24 Nov 2021 [13]	17,18,241	14,54,522	10,95,505	84.7	75.3
Haryana, scheme end, Mar 2024 [12]	18,57,815	15,77,109	11,90,337	84.9	75.5
India, scheme end, Mar 2024 [15]	7.35 crore	6.39 crore	4.78 crore	86.9	74.8

Note: One crore = 10 million; one lakh = 100,000. Percentages calculated by the author from the counts reported. India figures are rounded in the source.

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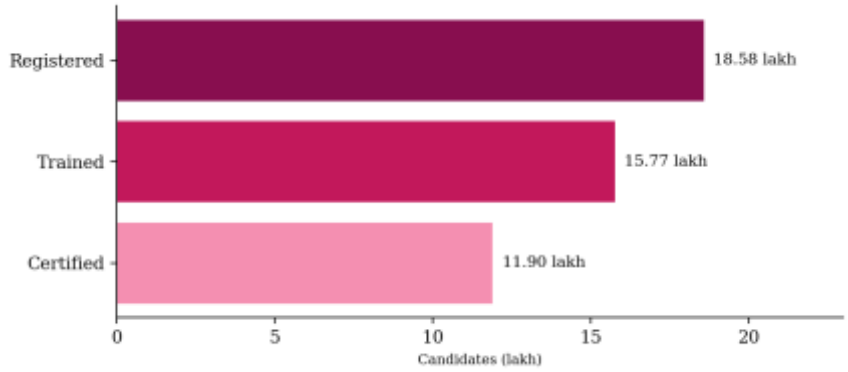


Figure 4. PMGDISHA in Haryana: candidates registered, trained and certified (lakh), at the end of the scheme in March 2024. Source: [12].

Women are a large share of the national totals. The number of female candidates enrolled was approximately 3.56 crore (53.7%) and the number of certified female candidates was approximately 2.39 crore (56.6%) in a parliamentary reply [14]. In the sources used, there was no separate break up in the case of Haryana. While these figures demonstrate that the scheme reached many, they do not translate into the number of rural women using social media. There are three reasons for this: first, the scheme was targeting men, who also use social media, as well as rural women; second, women's use of social media is not uniform across the population; and third, not everyone in the scheme is necessarily rural women. The target was one person per household, the course was digital services in general and not social media, and there are no data reported about later use.

5.8 Social media use among women in Haryana

There is no official source data of the platforms of usage for rural women in Haryana. Only one published study was found that included data for all six divisions and rural and urban girls and women [10]. The most preferred platform was WhatsApp, followed by YouTube among both the rural and urban respondents, but there were significant differences between the social media that rural and urban women used, and women of all age groups were using social media. The benefits and risks associated with the use of social media were reported, such as impacts on family relations and emotional well-being, and the research looked at social media victimisation of girls [10]. These findings are indicative only as the sample size of the study is small and not

representative of the women in the rural areas of Haryana.

6. Discussion

Rural women of Haryana are better than the other rural women in the country. 42.8% women in rural area of Haryana have used the internet, which is higher than the national figure for rural India of 18.2 points. These may be due to Haryana having a higher income level, almost universal electricity access and its comparatively close proximity to Delhi, but these are factors that can only be speculated upon based on the data available here.

However, there is still an urban–rural divide and flat rates of phone ownership. The proportion of rural women to the urban level was 71%. The most interesting finding was that the proportion of women who owned a phone remained the same (around 50%) in both the NFHS-4 and NFHS-5 surveys, and increased in India [3,5,12]. When women are accessing online content via a husband's, son's or household phone, their use of social media will be subject to another's permission and time. This coincides with the findings by NFHS-6 that there is more internet use than own phones in Haryana [4].

Access is the first step, skills and norms are the next. Less than one-third of the women in Haryana had completed 12 years of schooling; and only 38% of women could leave the village without anyone else's company [3]. Furthermore, digital literacy, language, confidence and attitudes of the family are likely to play a role in adoption of social media, as well as devices. Such programmes as the rural digital literacy scheme and women entrepreneurs at the village level at Common Service Centres are aimed at this but there was no data available on the number of women that have benefitted from this in Haryana [5].

There is no use without risk. The study in Haryana concluded with both positive and negative impacts of social media such as impact on family relationships, emotional health and girl victimisation [10]. This implies digital literacy for women in the rural area should involve not just how to use a telephone, but also privacy settings, reporting inappropriate content, and checking information.

Understanding the national increase. The increase in the use of internet in rural areas between NFHS-5 and NFHS-6 at national level is huge, growing from 24.6% to 58.6% [4]. Part of it is due to actual expansion in low-cost data and low-cost smartphones. Part may also be influenced by the broad definition of 'ever used' which includes one use. Where detailed NFHS-6 figures are available,

they should be looked at in the context of Haryana's own data.

Haryana is one of the Indian states. The good fortune of Haryana in NFHS-5 might have been due to the timing. The growth of internet usage among women in these larger and poorer states was more than double over a short period of time, having started at low rates [4], the same applies to those who begin at a higher rate who have less room to grow. The more relevant question for Haryana is what have been the progress made towards bridging the gender gap between rural and urban women within the State.

What programmes demonstrate and do not demonstrate. Haryana's about 11.9 lakh Haryana record certified people, indicates that there was a good training drive to rural areas of the state and the completion rate was similar to the national average. It does not indicate who the trainees were and if they used the internet afterwards. Limited access and low awareness of benefits have been cited as barriers to training [16] and the training may not have as much impact as has been expected given that skills and access to a device are cumulative [20,21].

Internet connectivity, social media. The transition from Internet usage to social media is not automatic, but is short given that messaging and video platforms do not require much reading and can be utilized in a neighborhood language. This is supported by the result obtained from the Haryana study that found that WhatsApp and YouTube are the top two apps in both rural and urban regions [10]. Who has access to the account is not as obvious. While more women than men in Haryana use the internet, many rural women might use social media through a family phone, making it more visible to family members and requiring more approval from family members. This is an interpretation and not a finding.

7. Public Health and Policy Implications

In light of the data presented here, the following actions are suggested:

- Prioritize personal access, rather than connections. Providing women with their own phones (through SHGs, for instance) would help overcome the lag that women in Haryana face in phone ownership.
- Introduce skills to villages. Women who cannot travel far can be reached by women trainers and women village-level entrepreneurs to deliver training. [5]
- Utilize platforms women are already using. Since WhatsApp and YouTube are the most popular platforms [10] information on agriculture, health and self-help group programmes can be disseminated in Hindi and Haryanvi via these platforms.

- Make safety a part of training. Training on privacy, reporting harassment and identification of fake information as risk identified in Haryana study [10] should be conducted.
- Involve families. Accessibility for women to mobile devices and control over them is also constrained [3] and thus phone use for women could be easier with outreach to the husband and mothers-in-law.
- Collect better data. The results of a State-wide survey of rural women asking which platforms were used, their frequency of use, and the purpose for their use, reported by district would fill the gap identified in this paper.

These actions would be easier to target and evaluate with the improvement of better data. The indicators listed in table 8 could be incorporated in current surveys or reported by programmes.

Table 8. Proposed indicators for monitoring rural women's digital adoption

Indicator	Why it matters	Possible source
Women with a smartphone of their own, rural and urban, by district	Separates personal access from shared use	NFHS or a state survey
Women who use the internet weekly or daily	Separates regular users from those who ever tried it	Added question in NFHS or a state survey
Platforms used and purposes of use	Links access to actual social media adoption	State survey of rural women
Women among certified digital literacy trainees, by district	Shows whether programmes reach women	Programme records
Women reporting online harassment or misuse of accounts	Tracks risks alongside benefits	State survey or helpline data

Note: Compiled by the author. These are suggestions and do not describe existing data.

8. Limitations

There are some limitations in this study. Firstly, it is secondary data, and may only confirm numbers to the sources available. Second, it is important to note that there is no official source that measures social media use, therefore internet use and phone ownership were used as proxies. Third, the NFHS question is whether a woman has ever used the internet so they cannot differentiate regular and occasional users. Fourth, NFHS only represents women between the ages of 15 and 49, and does not cover older women or younger girls. Fifth, indicators from the sources used were not available for NFHS-6 and rural–urban phone ownership in Haryana, and some indicators in Haryana were for all women in the state and not just rural women.

9. Directions for Future Research

It is hoped that four paths of work will follow this paper. First, it is necessary to conduct a representative state-wide survey of rural women to find out what platforms they use, how often, on which telephone and for what purpose? and report the results of the survey by district. Second, qualitative research involving husbands and mothers-in-law, as well as women would reveal how permission to use a phone is negotiated in households, and the access indicators would not do this. Third, women who had completed digital literacy training would be followed up to see if they continue to use digital literacy, and if so, if it has resulted in benefits including access to services and income. Fourthly, an update on enhancing Haryana's NFHS-6 results will indicate if the gains have trickled down to rural Haryana, and by how much it has reduced the rural–urban divide.

10. Conclusion

Rural women in Haryana are in a better position than rural women in India – 42.8% of women in rural areas of Haryana had used internet once in their lifetime compared to 24.6% of women in rural areas of all states and UTs, and the difference between rural and urban women in Haryana is less than in the country as a whole. Despite this, the situation of rural women is still worse than the urban, with only half of Haryana's women having their own telephone in both NFHS-4 and NFHS-5, and restricted access to schooling and freedom of movement. Some 11.9 lakh persons were certified under the rural digital literacy scheme in the State, however, the details do not reveal what they did after the certification. There is limited evidence of the use of WhatsApp and YouTube as platforms used more than others, as well as benefits and drawbacks. The national data indicate rapid access and it is likely that access among rural women in Haryana has improved since NFHS-5. This will

take time to confirm as we need the data from NFHS-6 for Haryana and primary research that directly brings the information of the platforms used by rural women and the reasons for their use.

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