Research Article

Financial Inclusion And Financial Empowerment of Women in Uttar Pradesh: Emerging Trends and Challenges

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Abstract

Financial empowerment of women constitutes an important dimension of inclusive economic and social development. It extends beyond access to a bank account and includes women's ability to use financial services, exercise control over economic resources, participate in household decisions, own assets, earn income and utilise emerging digital financial facilities. India has witnessed considerable expansion of formal financial inclusion, making it important to examine whether greater financial access is accompanied by progress in other dimensions associated with women's financial empowerment. The present study examines selected dimensions of women's financial empowerment in Uttar Pradesh using published information from the National Family Health Survey-5 (NFHS-5), 2019–21. The analysis retains the principal indicators in their published form and also presents a focused table of selected state-level values relevant to financial empowerment. NFHS-5 reports that 87.6 per cent of currently married women in Uttar Pradesh usually participate in three household decisions, 15.5 per cent of women worked during the preceding twelve months and were paid in cash, 51.9 per cent own a house and/or land alone or jointly, 75.4 per cent have a bank or savings account that they themselves use, and 46.5 per cent have a mobile phone that they themselves use. The corresponding NFHS-4 value for personally used bank or savings accounts was 54.6 per cent, indicating substantial expansion of formal financial access. At the same time, differences across the selected dimensions indicate that financial inclusion should not be equated with comprehensive financial empowerment. Financial literacy, productive economic opportunities, asset ownership, digital access and effective financial decision-making remain important for translating formal financial access into substantive financial empowerment.

Keywords: Women, Financial Empowerment, Financial Inclusion, Financial Literacy, Bank Account, Digital Finance, Uttar Pradesh.

1. Introduction

Women's financial empowerment has emerged as an important component of economic and social empowerment. Increased participation of women in economic activities, expansion of formal banking facilities, growth of Self-Help Groups (SHGs), financial inclusion programmes and rapid development of digital financial services have widened the opportunities available to women. Financial empowerment, however, involves more than the formal availability of financial services. It requires that women possess the opportunity and capability to access, understand and utilise financial resources and participate meaningfully in decisions concerning their economic lives. The concept consequently incorporates not merely access to money but also the ability to manage financial resources, make financial choices and use available economic opportunities in ways that improve financial security and independence.

Financial inclusion provides an important institutional foundation for this process. Access to a bank or savings account can enable women to save money securely, receive income and government transfers, undertake financial transactions and establish a direct relationship with the formal financial system. Access to credit can further facilitate entrepreneurship, investment and productive activity. Nevertheless, formal access does not necessarily establish effective control over financial resources. An account may exist without regular or independent use, while availability of credit may not necessarily result in financial autonomy if women have limited influence over the utilisation of borrowed resources. Financial inclusion and financial empowerment therefore need to be distinguished. Financial inclusion principally concerns access to and utilisation of financial services, whereas financial empowerment incorporates the wider capacity to make financial choices, exercise agency and attain greater economic security.

Financial empowerment may consequently be reflected through several interconnected dimensions, including control over income, participation in household and financial decisions, financial literacy, ownership of assets, access to formal financial institutions, productive economic participation and capacity to use digital financial services. These dimensions are closely related but are not interchangeable. A woman may possess a bank account but have limited employment opportunities, or she may own property jointly while exercising limited control over financial decisions. Similarly, access to digital technology can facilitate independent financial transactions, but its benefits depend upon financial knowledge, digital skills and actual availability of economic resources. A comprehensive understanding of women's financial empowerment therefore requires consideration of several aspects of women's economic position rather than dependence upon a single measure. India has undertaken extensive measures to expand financial inclusion among previously underserved sections of society. Expansion of banking infrastructure, simplified bank accounts, direct benefit transfers, SHGs, microfinance and digital financial services has increased women's interaction with the formal financial system. The spread of mobile technology and digital payments has further changed the nature of financial access by enabling financial transactions without frequent physical visits to banking institutions. These developments have increased opportunities for women to receive and manage funds directly, but differences in education, employment, digital access, financial literacy and control over household resources continue to influence the extent to which formal access can be converted into meaningful financial empowerment.

These developments assume particular significance in Uttar Pradesh because of the state's large population and considerable rural-urban and socio-economic diversity. Women's access to employment, education, financial institutions, digital technology and productive resources varies across different social and economic settings. The National Family Health Survey provides useful information for examining these dimensions. Although NFHS is not exclusively a financial survey, its women's empowerment indicators include personally operated bank or savings accounts, ownership of house or land, personal mobile-phone use, cash-paid work and participation in important household decisions. Together, these indicators provide a useful factual profile of dimensions associated with women's financial empowerment.

2. Review of Literature

Chant (2014) critically examined the feminisation of poverty in relation to women's work and home-based enterprises in urban slums of the Global South. The study showed that women's increased involvement in income-generating activities does not automatically produce genuine economic empowerment because unpaid care responsibilities, labour-market inequalities, inadequate access to productive resources and restricted financial opportunities may continue to constrain their economic position. Home-based enterprises can provide income opportunities, but low productivity, inadequate formal finance, limited markets and weak institutional support restrict their capacity to generate sustained economic security. The study consequently demonstrates that financial empowerment involves not only income generation but also control over resources, decision-making capacity and access to supportive economic institutions.

Weber and Ahmad (2014) investigated the relationship between repeated participation in microfinance programmes and the empowerment of female borrowers. Using evidence from women borrowers of a Pakistani microfinance institution, the study found that women participating in higher loan cycles demonstrated greater empowerment than first-time borrowers. Continued participation was associated with improvements in financial decision-making, confidence, mobility, control over household resources and participation in family decisions. The findings suggest that empowerment may develop gradually through sustained engagement with financial institutions rather than arise immediately from obtaining credit. The study also recognised that credit by itself cannot guarantee empowerment in the absence of favourable social and institutional conditions.

Upadhyay et al. (2014) reviewed empirical research on women's empowerment and fertility and gave particular attention to the conceptualisation and measurement of empowerment. Their review identified household decision-making authority, economic autonomy, mobility, education and control over resources as important dimensions and showed considerable variation in the indicators used across studies. The authors emphasised that women's empowerment is multidimensional and context-specific and cannot be adequately represented through a single indicator. Although their principal subject was reproductive behaviour, the conceptual contribution is relevant to financial empowerment because it supports assessment through multiple dimensions such as economic independence, access to financial resources, control over resources and household autonomy.

Hameed et al. (2014) examined women's empowerment through independent and joint household decision-making. Their analysis distinguished economic decision-making, household decision-making and physical mobility and further differentiated decisions made independently by women from those made jointly by couples. The findings indicated the importance of women's participation in decision-making and demonstrated that joint household decisions can constitute a meaningful expression of agency in particular social settings. Although the study focused on reproductive behaviour, its conceptual treatment of decision-making is relevant to financial empowerment because financial agency should not necessarily be equated only with independent decision-making. Women's meaningful participation in joint household financial decisions may also reflect empowerment.

Brody et al. (2015) conducted a systematic review of Economic Self-Help Group programmes and women's empowerment in low- and middle-income countries. Evidence from quantitative and qualitative studies indicated that participation in economic SHGs contributed positively to women's control over financial resources, household decision-making, social mobility and community participation. The review further found that programmes combining financial services with financial literacy, business training and life-skills education produced stronger empowerment outcomes than programmes offering financial services alone. The findings demonstrate that access to financial resources can become more effective when accompanied by capacity-building measures that improve women's ability to manage resources and participate in economic decisions.

Moswete and Lacey (2015) examined women's empowerment through participation in cultural tourism enterprises in Botswana. The study found that tourism created employment, entrepreneurial opportunities and additional household income while also improving confidence, managerial capability and social participation. At the same time, persistent patriarchal norms restricted women's access to leadership and strategic decision-making. The findings demonstrate that economic participation and additional income do not necessarily produce comprehensive empowerment when social and institutional barriers continue to limit women's agency. Financial empowerment should therefore incorporate control over economic resources and decision-making authority alongside opportunities for income generation.

Kabeer (2017) investigated economic pathways to women's empowerment and active citizenship in Bangladesh. The study considered evidence relating to paid employment, microfinance, entrepreneurship and community organisations and emphasised that economic participation can strengthen women's agency when it improves control over resources and bargaining capacity. Economic opportunities are therefore important not merely because they generate income but because they can alter women's position in household and social decision-making. The study provides an important basis for viewing paid work, financial access and economic independence as related but distinct elements of women's empowerment.

Bhatia and Singh (2019) examined the relationship between financial inclusion and women's empowerment among women residing in urban slums in Ludhiana, Punjab. Their study focused particularly on participation in the Pradhan Mantri Jan Dhan Yojana and associated social-security schemes. The findings indicated that access to formal banking services contributed to greater financial independence, increased household decision-making, improved awareness and greater confidence in managing financial resources. The authors nevertheless emphasised that mere possession of bank accounts is insufficient unless accompanied by financial literacy, awareness and effective utilisation of financial products. This distinction is particularly important in assessing whether increased banking access has translated into meaningful financial empowerment.

Atake and Ali (2019) examined women's empowerment and fertility preferences in four high-fertility Sub-Saharan African countries. Empowerment was assessed through household decision-making, attitudes towards gender-based violence and access to economic resources. Greater participation in household decisions and improved economic autonomy were associated with stronger empowerment outcomes, while education, wealth and urban residence also influenced women's position. Although the study addressed reproductive preferences, its multidimensional conception of empowerment is relevant to financial empowerment because it demonstrates the importance of considering economic autonomy, access to resources and decision-making power together rather than relying upon a single financial indicator.

Yu and Cui (2019) examined the impact of rural e-commerce on women's empowerment in China, particularly through women's participation in digital entrepreneurship. The expansion of e-commerce created opportunities for women to participate in entrepreneurial activities, access digital markets, increase household income and undertake flexible home-based business activities. However, the authors found that increased economic participation did not automatically transform underlying gender relations, as traditional norms continued to affect decision-making authority and the division of labour. The study therefore distinguishes economic opportunity from comprehensive empowerment and demonstrates the importance of considering women's control over financial resources and decision-making alongside access to digital economic opportunities.

Kumari, Azam and Khalidah (2020) examined the impact of financial literacy on the economic empowerment of poor rural women in Sri Lanka. Financial literacy was considered through financial awareness, knowledge, skills, attitude and behaviour, while economic empowerment incorporated decision-making, control over income and expenditure, time allocation, community leadership and financial well-being. The study found a statistically significant positive relationship between financial literacy and women's economic empowerment, with financial well-being showing a particularly strong association. The findings demonstrate that financial access needs to be complemented by knowledge and skills that enable women to understand, manage and utilise financial resources effectively.

Kulkarni and Ghosh (2021) examined gender disparities in the digitalisation of financial services in India. Their findings showed that although digital financial services had expanded access to formal finance, women continued to face barriers associated with lower mobile-phone ownership, inadequate internet access, limited digital literacy, insufficient financial awareness and socio-cultural restrictions. Women who actively used digital financial services demonstrated greater financial autonomy, improved control over household finances and increased confidence in financial decision-making. The study therefore establishes personal digital access and digital capability as increasingly important dimensions of financial empowerment in an environment where banking and payment services are progressively becoming technology based.

Anderson et al. (2021) reviewed evidence concerning the economic benefits of empowering women in agriculture. The review found that women's empowerment can contribute positively to agricultural productivity, household income, food security and nutritional outcomes, but the extent of these benefits varies according to social norms, institutional arrangements, asset ownership and intra-household bargaining power. Improvements in access to land, credit, education and agricultural inputs were more effective when women also possessed greater decision-making authority and control over productive resources. The study consequently demonstrates that access to economic resources and effective control over those resources should be distinguished when evaluating women's empowerment.

Kim (2022) examined mobile money as a means of improving financial inclusion among women in Nairobi. The study considered women's experiences with digital financial services and showed that mobile money can improve access to and utilisation of financial services by facilitating transactions and reducing some of the barriers associated with conventional banking. The findings highlight the potential of digital finance to strengthen women's financial participation while also recognising that technological access operates within broader socio-economic circumstances. The study is particularly relevant to the growing importance of personal mobile access in women's ability to use increasingly digital financial services.

Andriamahery and Qamruzzaman (2022) investigated access to finance, technical knowledge and financial literacy in relation to women's empowerment through entrepreneurial development in Bangladesh. Their findings showed that access to finance, financial literacy and technical capability positively influenced women's entrepreneurial development and empowerment. Women possessing stronger financial knowledge and better access to formal finance demonstrated greater business sustainability, income-generating capacity, confidence and participation in economic decision-making. The study also identified government support, family support and entrepreneurial training as complementary influences, indicating that credit provision becomes more effective when accompanied by financial education and technical capabilities.

Sedai, Nepal and Jamasb (2022) investigated reliable electricity access and women's socio-economic empowerment in India. Using nationally representative data, the study found that reliable electricity improved women's economic autonomy, decision-making, mobility and overall agency and reduced the time devoted to domestic work, thereby facilitating greater participation in income-generating activities. The effects differed across socio-economic groups and were particularly important for some disadvantaged women. The study demonstrates that basic infrastructure can indirectly influence financial and economic empowerment because access to employment, information and increasingly digital financial facilities depends partly upon supporting infrastructure.

Pal, Gupta and Joshi (2022) examined the role of financial inclusion in promoting the social and economic empowerment of rural women in India. The study found that greater access to banking, savings, credit and other formal financial products contributed positively to financial independence, confidence and participation in household and community decision-making. It further identified social empowerment as an important pathway through which financial inclusion can strengthen economic empowerment. The authors therefore viewed financial inclusion not merely as expansion of banking access but as a mechanism capable of supporting wider empowerment when accompanied by financial capability and meaningful participation.

Gupta and Rathour (2024) examined financial empowerment of women through financial inclusion in a systematic review. The study treated formal financial inclusion as an important pathway towards women's access to resources, economic independence and greater financial decision-making. At the same time, it emphasised that the empowering effects of financial inclusion depend upon women's awareness and actual utilisation of financial services and upon the socio-economic circumstances in which financial access occurs. The study therefore reinforces the need to distinguish formal access from substantive financial empowerment.

Rohatgi, Gera and Nayak (2024) examined whether digital banking usage had reshaped the economic empowerment of urban working women. Their analysis connected active use of digital banking with financial autonomy, control over transactions and confidence in managing personal finances. The study also emphasised the relevance of financial literacy and institutional support in determining how effectively women can utilise digital banking facilities. The findings indicate that digital access becomes financially empowering when women possess the knowledge and practical capacity to use technology for independent financial management.

Bhatia and Dawar (2024) examined the impact of financial inclusion on women's social and political empowerment, with economic empowerment considered as a mediating factor. The study found that economic empowerment partially mediated the relationship between financial inclusion and wider empowerment. Access to formal financial services strengthened women's economic independence, which subsequently contributed to household, community and political participation. Financial inclusion alone, however, was insufficient where socio-economic disadvantages continued to constrain women's capabilities. The study consequently supports an integrated approach in which formal financial access, economic opportunity and capacity building operate together.

Dorfleitner and Nguyen (2024) examined mobile-money adoption and women's economic empowerment across countries in South Asia and Sub-Saharan Africa. The study found that mobile-money adoption positively influenced women's economic empowerment by improving financial access, facilitating savings and transactions and strengthening financial autonomy. Financial-management practices also partially mediated this relationship because women using mobile money demonstrated better budgeting, savings behaviour and financial planning. The effects were particularly pronounced among rural women, indicating the capacity of digital finance to reduce geographical and institutional barriers to financial participation.

The literature collectively demonstrates that women's financial empowerment is multidimensional. Formal banking access, credit and microfinance are important, but their empowerment effects depend upon actual utilisation, financial literacy, control over resources, paid economic opportunities, asset ownership, digital capability, infrastructure, entrepreneurship and participation in household economic decisions. The literature therefore provides a basis for examining the available Uttar Pradesh evidence through several complementary indicators rather than treating bank-account access as a complete measure of financial empowerment.

3. Need and Scope of the Study

The considerable expansion of formal financial inclusion among women makes it important to examine the relationship between financial access and broader dimensions of financial empowerment. Increasing numbers of women have become connected with formal banking institutions, while digital financial services have widened the mechanisms through which financial transactions can be undertaken. Formal access, however, needs to be considered alongside women's control over resources, economic participation, ownership of assets and financial agency. Uttar Pradesh provides an important context for such an examination because of its demographic size and socio-economic diversity. NFHS-5 reports a group of women's empowerment indicators covering formal financial access, household agency, asset ownership, personal mobile-phone use and cash-paid economic activity. These indicators provide a concise and internally consistent statistical base for examining different dimensions associated with financial empowerment without constructing derived statistical measures.

The state-level evidence also provides a broader context for understanding financial empowerment among women in Aligarh Division. Aligarh, Etah, Hathras and Kasganj operate within the wider institutional and financial environment of Uttar Pradesh while possessing distinct economic and social characteristics. State-level information cannot substitute for region-specific empirical evidence, but it provides an appropriate background for understanding the wider financial and empowerment environment within which women in the Division function. The scope of the present study is consequently confined to selected published Uttar Pradesh indicators, with emphasis on formal banking access, household agency, asset ownership, personal mobile access and cash-paid economic participation.

4. Objectives of the Study

1. To examine the position of women in Uttar Pradesh with respect to selected indicators associated with financial empowerment.
2. To examine the change in women's access to bank or savings accounts that they themselves use between NFHS-4 and NFHS-5.
3. To assess whether formal banking access presents a comprehensive picture of women's financial empowerment when considered alongside economic participation, asset ownership, digital access and household decision-making.

5. Hypotheses of the Study

H01: There has been no improvement in women's access to bank or savings accounts that they themselves use in Uttar Pradesh between NFHS-4 and NFHS-5.

H11: There has been an improvement in women's access to bank or savings accounts that they themselves use in Uttar Pradesh between NFHS-4 and NFHS-5.

H02: Formal banking access presents a broadly uniform pattern with other selected dimensions associated with women's financial empowerment in Uttar Pradesh.

H12: Formal banking access does not present a uniform pattern with other selected dimensions associated with women's financial empowerment in Uttar Pradesh.

6. Research Methodology

The study is descriptive and analytical in nature and uses published statistical information relating to selected dimensions associated with women's financial empowerment in Uttar Pradesh. The principal statistical source is the National Family Health Survey-5 (NFHS-5), 2019–21, Ministry of Health and Family Welfare, Government of India. The Uttar Pradesh women's empowerment data report urban, rural and total values and also provide corresponding NFHS-4 total values for comparison. Five indicators are particularly relevant to the present analysis: participation of currently married women in three household decisions, women who worked during the preceding twelve months and were paid in cash, ownership of house and/or land, personally used bank or savings accounts and personally used mobile phones.

The published percentages have been retained in their reported form. Numbers of women have not been estimated from the percentages, nor has a composite financial-empowerment index been constructed from indicators measuring different dimensions. The original urban, rural, total and NFHS-4 values are first presented together so that the published information remains intact. A second table subsequently brings together the Uttar Pradesh total values of the same five indicators for focused interpretation. The analysis is based on descriptive comparison and interpretation of the published values, and the hypotheses are examined accordingly rather than through inferential significance testing.

7. Women's Empowerment Indicators in Uttar Pradesh

The NFHS-5 Uttar Pradesh data provide a compact group of indicators relevant to different aspects of women's empowerment. The figures distinguish urban and rural areas, provide the total for Uttar Pradesh and report the corresponding NFHS-4 total. Retaining these categories preserves the structure of the principal statistical source and simultaneously permits comparison between the two survey rounds.

Table 1: Women's Empowerment Indicators in Uttar Pradesh

NFHS Indicator	Urban	Rural	Total	NFHS-4 Total
119. Currently married women who usually participate in three household decisions (%)	90.1	86.8	87.6	81.7
120. Women who worked in the last 12 months and were paid in cash (%)	17.7	14.8	15.5	16.6
121. Women owning a house and/or land (alone or jointly with others) (%)	46.8	53.5	51.9	34.2
122. Women having a bank or savings account that they themselves use (%)	79.8	74.1	75.4	54.6
123. Women having a mobile phone that they themselves use (%)	59.9	42.4	46.5	37.1

Source: Ministry of Health and Family Welfare, Government of India, National Family Health Survey-5 (NFHS-5), 2019–21: Uttar Pradesh State Fact Sheet, 2019–21, Indicators 119–123.

Note: NFHS-4 comparison values relate to 2015–16.

The household decision-making indicator records 90.1 per cent for urban women, 86.8 per cent for rural women and 87.6 per cent for Uttar Pradesh as a whole, compared with an NFHS-4 total of 81.7 per cent. For women who worked during the preceding twelve months and were paid in cash, NFHS-5 reports 17.7 per cent in urban areas, 14.8 per cent in rural areas and 15.5 per cent for Uttar Pradesh as a whole, against an NFHS-4 total of 16.6 per cent. The distinction between rural and total values is important because 14.8 per cent represents rural Uttar Pradesh, whereas 15.5 per cent represents the state total.

House and/or land ownership, either alone or jointly with others, is reported at 46.8 per cent in urban areas and 53.5 per cent in rural areas, producing a state total of 51.9 per cent compared with an NFHS-4 total of 34.2 per cent. For personally used bank or savings accounts, NFHS-5 reports 79.8 per cent in urban areas, 74.1 per cent in rural areas and 75.4 per cent for Uttar Pradesh as a whole, compared with 54.6 per cent in NFHS-4. Personal mobile-phone use is reported at 59.9 per cent among urban women and 42.4 per cent among rural women, resulting in an overall state value of 46.5 per cent against an NFHS-4 total of 37.1 per cent.

8. Selected Dimensions of Financial Empowerment

For focused examination, the Uttar Pradesh total values of the same five NFHS-5 indicators are presented together in Table 2. The table permits direct consideration of the state-level position across household agency, paid economic participation, asset ownership, formal banking access and personal mobile access without creating any new statistical measure.

Table 2: Selected Dimensions Associated with Women's Financial Empowerment in Uttar Pradesh, NFHS-5

Selected Indicator	Uttar Pradesh Total (%)
Currently married women who usually participate in three household decisions	87.6
Women who worked in the last 12 months and were paid in cash	15.5
Women owning a house and/or land (alone or jointly with others)	51.9
Women having a bank or savings account that they themselves use	75.4
Women having a mobile phone that they themselves use	46.5

Source: Ministry of Health and Family Welfare, Government of India, National Family Health Survey-5 (NFHS-5), 2019–21: Uttar Pradesh State Fact Sheet, 2019–21, Indicators 119–123.

The selected values demonstrate considerable variation across different dimensions. Household decision-making participation is reported at 87.6 per cent among currently married women. Formal banking access is also comparatively widespread, with 75.4 per cent of women having a bank or savings account that they themselves use. The corresponding NFHS-4 total of 54.6 per cent indicates substantial improvement between the two survey rounds. On the basis of this published comparison, H01 is rejected and H11 is supported.

Ownership of house and/or land alone or jointly is reported for 51.9 per cent of women, while personal mobile-phone use is reported for 46.5 per cent. The percentage of women who worked during the preceding twelve months and were paid in cash is 15.5 per cent. This should not be interpreted as the female labour-force participation rate because it represents the specific indicator reported by NFHS. The considerable variation among these state-level indicators indicates that formal banking access does not provide a uniform picture of the wider dimensions associated with women's financial empowerment. H02 is therefore rejected and H12 is supported.

9. Discussion

The evidence indicates substantial expansion of women's formal banking access in Uttar Pradesh. The increase in personally used bank or savings accounts from 54.6 per cent in NFHS-4 to 75.4 per cent in NFHS-5 represents an important development because it expands women's direct connection with formal financial institutions. The literature supports the significance of this development but also cautions against equating account access with complete empowerment. Bhatia and Singh (2019) found that financial inclusion can strengthen financial independence and household decision-making but stressed financial literacy and actual utilisation, while Pal, Gupta and Joshi (2022) demonstrated that formal financial inclusion can contribute to both economic and social empowerment. Gupta and Rathour (2024) similarly treated financial inclusion as an important pathway towards financial empowerment while recognising the importance of awareness and effective utilisation.

Digital access represents another important dimension. The original NFHS data report personally used mobile phones for 59.9 per cent of urban women but only 42.4 per cent of rural women, producing a state total of 46.5 per cent. Kulkarni and Ghosh (2021) identified mobile ownership, internet access, digital literacy and financial awareness as important barriers to women's effective digital financial inclusion. Kim (2022) demonstrated the potential of mobile money to improve financial access, while Rohatgi, Gera and Nayak (2024) linked active digital-banking usage with financial autonomy and control over transactions. Dorfleitner and Nguyen (2024) further showed that mobile-money adoption can strengthen empowerment partly through improved budgeting, saving and financial planning. The NFHS mobile indicator does not measure digital banking itself, but personal access to mobile technology constitutes an increasingly relevant enabling condition for participation in digital finance.

Financial literacy provides an important connection between formal access and effective financial capability. Kumari, Azam and Khalidah (2020) established a positive relationship between financial literacy and women's economic empowerment, while Andriamahery and Qamruzzaman (2022) demonstrated that financial literacy, access to finance and technical capability can jointly support entrepreneurial development and empowerment. Weber and Ahmad (2014) similarly showed that empowerment associated with microfinance can develop through sustained engagement rather than arise immediately from the initial availability of credit. These findings suggest that formal financial inclusion can become more meaningful when women possess the knowledge, experience and confidence required to use financial resources independently.

Asset ownership also constitutes an important aspect of women's economic position. NFHS-5 reports house and/or land ownership alone or jointly for 51.9 per cent of women in Uttar Pradesh, with the rural figure of 53.5

per cent exceeding the urban figure of 46.8 per cent. Anderson et al. (2021) showed that access to land, credit and productive resources produces stronger economic outcomes when women also possess decision-making authority and effective control over those resources. The NFHS ownership indicator combines sole and joint ownership and therefore cannot be interpreted as establishing independent control in every case. Nevertheless, it provides useful evidence concerning women's participation in ownership of significant household assets.

Paid economic participation presents a different pattern. Women who worked during the preceding twelve months and were paid in cash constitute 15.5 per cent of the Uttar Pradesh total in NFHS-5, compared with 17.7 per cent in urban areas and 14.8 per cent in rural areas. The corresponding NFHS-4 total was 16.6 per cent. Chant (2014) demonstrated that increased participation in income-generating activity does not necessarily produce economic empowerment when women's access to productive resources and decision-making remains restricted. Kabeer (2017) similarly emphasised the importance of paid economic activity while linking its empowering effect to women's control over resources and agency. The contrast between the considerable expansion of personally used bank accounts and the relatively low cash-paid-work indicator reinforces the distinction between financial infrastructure and women's participation in income-generating economic activity.

SHGs, microfinance and entrepreneurship can provide mechanisms for connecting financial access with productive activity. Brody et al. (2015) found that economic SHGs improved women's control over financial resources and household decision-making, particularly when financial services were combined with financial literacy and business training. Weber and Ahmad (2014) demonstrated that sustained microfinance participation can improve financial decision-making and control over household resources. Andriamahery and Qamruzzaman (2022) showed that access to finance, technical capability and financial literacy can strengthen entrepreneurship and empowerment. These findings indicate that financial inclusion is more likely to contribute to sustained empowerment when it is connected with opportunities for women to generate income and develop financial and entrepreneurial capabilities.

Household agency also deserves consideration. The NFHS household decision-making indicator records the highest state total among the selected indicators at 87.6 per cent. Hameed et al. (2014) demonstrated the importance of distinguishing independent from joint decision-making and showed that meaningful joint participation can constitute an important form of agency. Upadhyay et al. (2014) and Atake and Ali (2019) likewise conceptualised empowerment as multidimensional, incorporating economic autonomy and decision-making rather than relying upon a single indicator. The NFHS measure should therefore not be interpreted as an exclusively financial measure, but it provides relevant evidence concerning women's participation in significant household decisions.

The social and institutional environment influences all these dimensions. Moswete and Lacey (2015) showed that economic opportunities may coexist with continuing social constraints, while Yu and Cui (2019) found that digital entrepreneurship can increase women's economic participation without necessarily transforming underlying gender relations. Sedai, Nepal and Jamasb (2022) demonstrated the role of infrastructure in expanding women's economic opportunities and agency. Bhatia and Dawar (2024) further showed that economic empowerment can mediate the relationship between financial inclusion and wider empowerment. Taken together, these studies reinforce the need to understand women's financial empowerment as the outcome of interaction among access to finance, productive opportunities, capabilities, technology, ownership, agency and wider socio-economic conditions.

10. Major Findings

The study reveals substantial expansion of women's formal banking access in Uttar Pradesh. Women having a bank or savings account that they themselves use increased from 54.6 per cent in NFHS-4 (2015–16) to 75.4 per cent in NFHS-5 (2019–21). The corresponding NFHS-5 values are 79.8 per cent in urban areas and 74.1 per cent in rural areas. The first null hypothesis is therefore rejected. The evidence establishes improvement in women's direct connection with formal banking institutions, although the indicator represents personally used bank accounts rather than the complete range of capabilities associated with financial empowerment.

The other indicators present a varied picture. Currently married women's participation in the three specified household decisions stands at 87.6 per cent for Uttar Pradesh, with urban and rural values of 90.1 and 86.8 per cent respectively. House and/or land ownership alone or jointly is reported for 51.9 per cent of women, with 46.8 per cent in urban areas and 53.5 per cent in rural areas. Personal mobile-phone use is reported for 46.5 per cent of women, with a considerable difference between the urban value of 59.9 per cent and rural value of 42.4 per cent. Women who worked during the preceding twelve months and were paid in cash constitute 15.5 per cent of the Uttar Pradesh total, compared with 17.7 per cent in urban areas and 14.8 per cent in rural areas. The corresponding NFHS-4 total for this indicator was 16.6 per cent.

The selected dimensions therefore do not display a uniform pattern, and the second null hypothesis is rejected. The evidence, considered together with the reviewed literature, supports a multidimensional understanding of women's financial empowerment in which formal banking access is important but operates alongside financial literacy, productive economic opportunities, digital capability, asset ownership and meaningful financial agency.

11. Suggestions and Policy Implications

The considerable expansion of women's formal banking access provides a strong institutional foundation for further financial empowerment in Uttar Pradesh. Policy attention should increasingly extend from account ownership to informed and effective utilisation of financial services. Financial literacy programmes can provide practical understanding of savings, credit, interest, insurance, digital payments, financial planning and protection against financial fraud. Such knowledge can improve women's capacity to evaluate financial choices independently and utilise formal financial services in accordance with their economic requirements.

Digital financial capability also requires sustained attention. NFHS-5 indicates that personal mobile-phone use among women is considerably less widespread than personally used bank accounts, particularly in rural areas. As financial transactions become increasingly technology based, personal access to mobile technology and the ability to use digital services safely can influence independent financial participation. Digital literacy and financial literacy should therefore complement one another, while suitable physical and technological infrastructure is necessary to ensure that women in different geographical and socio-economic settings can benefit from digitalisation.

Productive economic opportunities need to expand alongside financial inclusion. Access to financial services becomes more meaningful when women have opportunities to earn, save, invest and undertake productive activities. Skill development, entrepreneurship support, suitable credit facilities and market access can strengthen this connection. SHGs can continue to provide an important institutional mechanism where savings and credit activities are integrated with financial education, capacity building and enterprise development. Women's participation in ownership and effective control of assets should similarly receive attention because property and productive resources can contribute to longer-term economic security.

Regional differences should also be recognised. State-level indicators provide a broad picture of Uttar Pradesh, but women's financial circumstances may differ considerably across districts and between rural and urban settings. Detailed evidence from Aligarh Division can identify specific constraints relating to financial literacy, employment, banking behaviour, digital access, asset ownership and control over economic resources and thereby provide a more precise basis for understanding women's financial empowerment in the regional context.

12. Conclusion

Women's formal financial inclusion in Uttar Pradesh has expanded substantially. NFHS-5 (2019–21) reports that 75.4 per cent of women have a bank or savings account that they themselves use, compared with 54.6 per cent in NFHS-4 (2015–16). This represents an important improvement in women's direct connection with formal financial institutions. The complete NFHS women's empowerment data, however, provide a broader perspective. Currently married women's participation in three household decisions is reported at 87.6 per cent for Uttar Pradesh, house and/or land ownership alone or jointly at 51.9 per cent, personal mobile-phone use at 46.5 per cent and work during the preceding twelve months accompanied by cash payment at 15.5 per cent.

These indicators represent distinct aspects of women's position and should not be treated as interchangeable measures. The evidence consequently supports a multidimensional conception of financial empowerment. Banking access provides an important institutional foundation, but substantive empowerment also depends upon women's ability to utilise financial services, understand financial choices, participate in productive economic activity, access digital technology, own and control resources and exercise meaningful agency over economic decisions. The literature supports this broader understanding through evidence concerning financial inclusion, microfinance, financial literacy, SHGs, digital finance, entrepreneurship, asset ownership, infrastructure and household decision-making.

The Uttar Pradesh evidence provides an appropriate wider context for examining women's financial empowerment in Aligarh Division. The interaction between banking access, financial literacy, employment, digital-finance usage, asset ownership, household decision-making and control over financial resources requires detailed regional examination. Understanding these interrelationships can contribute to a more comprehensive assessment of financial empowerment by moving beyond formal access towards women's effective capability to utilise financial and economic resources for greater security, autonomy and participation.

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