



### RESEARCH ARTICLE

#### FINANCIAL INCLUSION- A FRONT WHEEL FOR WOMEN'S EMPOWERMENT

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#### Abstract

This study examines the impact of financial inclusion on women's empowerment in Uttar Pradesh, Madhya Pradesh, and Rajasthan, India, from a social, economic, political, legal, and psychological standpoint. An analysis of descriptive statistics revealed that financial inclusion and empowerment are significantly correlated among diverse women. Based on the regression analysis results, financial inclusion is crucial to women's empowerment in general. Several factors contribute to women's empowerment in these areas, including financial literacy initiatives and access to banking services. Furthermore, the paper stresses the need for a targeted strategy and program to promote financial inclusion for women, gender equality, and inclusive growth in Uttar Pradesh, Madhya Pradesh, and Rajasthan.

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#### Introduction:-

**Financial inclusion** is a crucial element that ensures everyone, regardless of socioeconomic status or gender, has access to affordable and appropriate financial services. This is particularly important for empowering women and achieving the Sustainable Development Goals (SDGs), which aim to create a more equitable, prosperous, and sustainable world by 2030. Beyond gender equality, financial inclusion also has significant implications for other SDGs, as it enables women to take charge of their lives and communities, making them active agents of change for a better future (igniting SDG Progress through digital financial inclusion, n.d.). By providing women with equal access to financial services such as savings accounts, credit, insurance, and payment systems, financial inclusion enables them to manage their finances, invest in their futures, and contribute to their families well-being (snapshot of gender equality across the sustainable development goals two progress on the sustainable development goals, n.d.). This, in turn, has a multiplier effect on poverty reduction, education, health, and gender equality, among other areas, ultimately promoting sustainable development and the achievement of the SDGs (Kara, Zhou & Zhou 2021).

Increasing financial inclusion scope ensures that people from all walks of life can access the necessary banking services. It is about empowering individuals to plan for and achieve financial success through banking, credit, insurance, and payment systems are essential services (national strategies for financial education OECD/INFE policy Handbook, n.d.). this also entails ensuring that women have equal access to these resources; after all, everyone should have an equal opportunity to achieve financial security and success (no date).

Several studies have shown that women's empowerment may be aided by women's increased access to financial resources and participation in economic activities as a result of financial inclusion. Women who have access to formal financial services are better able to save for the future, invest in their own and their children's education, and unexpected expenses (Ghosh & Vinod 2017).

Women still require assistance getting access to financial services, notwithstanding the advantages of financial inclusion (Ghosh & Vinod 2017). Cultural and societal norms that limit women's mobility and decision-making power include a lack of financial literacy, restricted access to formal financial institutions, discrimination, and sexism (Ghosh & Vinod 2017).

Policymakers, financial institutions, and development organisations promote financial inclusion through various strategies (snapshot of gender equality across the sustainable development goals two progress on the sustainable development goals, n.d.). The strategies include:

1. providing financial education and literacy programs,
2. developing innovative financial products tailored to the needs of women, and
3. improving the regulatory environment to reduce barriers to entry.

These strategies can establish a connection between financial inclusion and women's empowerment. Multiple barriers hinder women's access to financial services, and making progress meaningful requires a comprehensive approach (Reichel 2020). Policies promoting financial inclusion among women can contribute to creating a more equitable and sustainable society in which women have more control over their lives and are better able to contribute to economic growth (Ghosh, 2022).

**Table 1:-** Indicators to Measure Financial Inclusion and Women's Empowerment.

S.No.	Indicator	Definition	Data Source
1	Account ownership	Adults (15+ years of age) having a formal account with a financial institution	World Bank Global Index
2	Access to formal credit	The percentage of adults (15+ years) who have access to formal credit facilities (such as loans or credit cards)	World Bank Global Index
3	Digital financial services usage	The proportion of individuals (15+ years of age) who use digital financial services (e.g., mobile money, online banking)	World Bank Global Index
4	Savings	The percentage of adults (15+ years of age) who save at a formal financial institution (such as a bank or credit union)	World Bank Global Index
5	Financial literacy	An indication of the percentage of adults (15+ years) who have basic financial literacy skills (such as understanding interest rates, inflation, and risk diversification).	Standard & Poor's Ratings Services Global Financial Literacy Survey
6	Employment	Participation rate in the labour force (percentage of the working-age population that is employed or actively seeking employment)	International Labour Organization (ILO)
7	Income and wage gap	The difference between average incomes or wages between different groups (e.g., men and women)	N/A

Various definitions and data sources for understanding financial inclusion and women's empowerment are included in

Table 1 which different organisations give. Access to formal financial services, economic position, decision-making ability, social standing, financial literacy, and disparities in financial integration are all included in these measurements (Kochar et al. 2022). By analysing these indicators, one may get insight into how women interact with the formal banking sector and how this interaction may affect their ability to prosper economically and socially.

### Theoretical Framework

Financial inclusion and women's empowerment have been the focus of numerous studies and research papers in recent years as policymakers and development practitioners seek to identify effective strategies for promoting gender equality and sustainable economic growth. The following is a brief literature review on this topic:

### Policies and Empowerment of Women

This study examines the impact of women's political empowerment in India on financial inclusion, revealing a 7% increase in account activity and highlighting the need for gender-focused policies (Ghosh 2022). (Bhatia & Singh 2019) highlights the global emphasis on financial inclusion as a catalyst for gender equality and sustainable development. Inclusive financial models, such as India's PMJDY, PMJJBY, PMSBY, and APY schemes, have positively influenced women's social, political, and economic empowerment, especially in urban slums. This study contributes to the ongoing discussion by underscoring the importance of formal financial systems in enhancing financial inclusion and women's empowerment. (Shanthi & Padmaja 2022) emphasises the need for women's empowerment in India, where gender disparities persist in various aspects of life. Low financial inclusion, particularly in rural areas, contributes to these disparities. This paper discusses financial inclusion schemes, RBI and government initiatives and their impact on women's empowerment and decision-making abilities in India. (Economics & Management no date) examines financial inclusion's impact on women's empowerment in Northern Uganda. The study reveals sparse financial support and insufficient regulation of financial firms, leading to lost savings for women. Recommendations include establishing collateral buffers, lowering account costs, tightening regulations, and offering business education training to promote financial inclusiveness. (Arshad 2023) investigates the impact of financial inclusion on women's empowerment in developing countries using panel data from 2004-2019. Employing fixed-effect models and two-stage least square GMM estimation techniques, the study finds a positive influence on empowerment. Increased financial inclusion allows women to develop their skills and qualities. Results show that financial development, gender parity, and women's employment positively affect empowerment, while gender discrimination hinders it. The study urges governments and policymakers to identify optimal financial inclusion programs to enhance women's empowerment in developing countries. (Aziz, Sheikh & Shah 2022) examine gender disparities in formal financial systems across eight South Asian countries between 2004-2017, focusing on the influence of religion on women's financial inclusion. Using a two-level logistic regression model, the study finds strong correlations between gender and financial service usage, with religious restrictions limiting women's financial inclusion. However, countries that legislate and regulate gender equality in the labour market exhibit higher levels of financial activity among women, suggesting that policy interventions can effectively address these disparities. (Esmailpour Moghadam & Karami 2023) explores the impact of financial inclusion through FinTech (FIF) on women's financial empowerment (WFE) using data from 113 countries. Employing principal component analysis and cross-sectional data methodology, the study finds a positive and significant relationship between FIF and WFE in countries with low gender discrimination. At the same time, this effect is insignificant in countries with high gender discrimination. The results highlight that gender inequality hinders women's financial independence. (Abokyi 2023) investigates the impact of remittances on the gender gap in financial inclusion in developing countries. Using fixed effects instrumental variable techniques, the study finds that remittances significantly reduce the gender gap in financial inclusion without affecting overall inequality in access to financial services, leading to policy recommendations. (Cabeza-García, Del Brio & Oscanoa-Victorio 2019) explores the impact of female financial inclusion on inclusive economic development. Using data from 91 countries, the study finds that increased financial inclusion for women, specifically access to bank accounts and credit cards, positively affects economic development, while bank loans show no significance. (Ghosh & Vinod 2017) explores the relationship between gender and financial inclusion in India using disaggregated household-level data. Findings indicate significant disparities in access and use of finance between male and female-headed households. Education, wages, and political and social factors contribute to these disparities, affecting financial inclusion for female-headed households. (Reichel 2020) discusses the AFECCOR project, implemented by IMPACT in the Democratic Republic of the Congo, which helps artisanal gold mining communities access savings and credit through Village Savings and Loans Associations (VSLAs). The project supports over 1400 individuals and offers insights into improving the ASM sector's access to formal financial services.

### **Microfinance and Women's empowerment**

Microfinance programs have been identified as practical tools for empowering women by providing them access to financial services. These programs improve women's economic independence, decision-making abilities, and well-being. (Islam 2021) the study examines the impact of Islamic microfinance services (IMFS) on women's empowerment in rural Bangladesh. Findings reveal that IMFS has significantly improved household income, savings, and living standards while promoting economic and socio-cultural empowerment. However, familial empowerment had a negligible negative impact on overall empowerment. (Zafarullah & Nawaz 2019) found in his research that Bangladeshi women's empowerment is advancing through increased workforce participation and microfinance opportunities for small-scale business ventures. However, social and cultural constraints, discrimination, harassment, and unfavourable working conditions remain significant challenges. This literature review uses primary and secondary sources, theoretical insights, and empirical evidence to examine formal

employment and microfinance as interventions for women's empowerment in Bangladesh. Using a quasi-experimental approach (Gravestijn 2015), this literature review examines the impact of start-up loans and entrepreneurship training on women's entrepreneurship outcomes. Findings reveal positive impacts on self-employment, business expansion, and business registration, primarily for women receiving training and loans. The start-up loans appear to be riskier, but client retention rates improve. However, the study found no effect on women's empowerment indicators and mixed results concerning the economic benefits of microfinance institutions.

### **Digital Financial Inclusion and Women Empowerment**

(Yang, Huang & Gao 2022) investigates the impact of digital financial inclusion on female entrepreneurship. The study reveals that digital financial inclusion promotes women's entrepreneurial behaviour by easing financing constraints, providing business information, and improving work flexibility. This effect is more significant among vulnerable women, suggesting that digital financial inclusion can empower them. Exploring (Soekarno & Setiawati 2020) the gender dimension in digital financial inclusion, this study analyses survey data from Indonesia, an emerging market. Ordinal logistic regression reveals women's influence on behavioural intention within digital financial services. Examining factors influencing Indonesian women's fintech adoption, this study uses an extended TAM and SEM analysis on 409 female respondents. Results show that perceived usefulness, ease of use, innovativeness, attitude, trust, and brand image positively impact behavioural intention, with indirect financial literacy and government support relationships. They were saving habits during COVID-19 moderate the relationship between innovativeness and intention (Setiawan et al., 2023).

### **Objective of the study:-**

To study the role of financial inclusion on social, political, and legal empowerment of women in India.

### **Theoretical Gaps from Studies**

Numerous studies have explored the relationship between financial inclusion and women's empowerment, but gaps still need to be found in the current research and previous literature. As a result of addressing these gaps, researchers have an understanding of the impact of financial inclusion on women's empowerment that can be advanced. In addition, more effective policies and interventions can be developed. The following gaps have been identified:

1. In most of the studies, only socioeconomic and political aspects of women's empowerment through financial inclusion that has been studied. Therefore, multiple effects have not been studied. In the Proposed study, an attempt has been made to cover women's legal and psychological empowerment as well.
2. Almost all the studies have been conducted in rural areas, but semi-urban and urban areas are excluded. The proposed study is more comprehensive and covers urban, semi-urban, and rural areas to make a more effective study.

A comprehensive understanding of the relationship between financial inclusion indicators and women's empowerment can be enhanced by addressing these current and previous literature gaps. As a result, policymakers and practitioners will be able to develop more targeted and effective strategies for promoting women's financial empowerment and inclusion.

### **Research Design & Methodology:-**

#### **Population and Sample**

2 gives the details of the universe, sample area, and the size of the study. Three states of India, Uttar Pradesh, Madhya Pradesh, and Rajasthan have been selected for this study which covers almost 75% portion of the BIMARU states of the country.

In multi-stage and systematic sampling, three divisions of selected states – Agra, Gwalior, and Bharatpur- have been selected based on the similarity of geographical conditions. Agra division is one of the biggest in Uttar Pradesh based on the maximum number of Tehsil & blocks. Gwalior and Bharatpur divisions of Madhya Pradesh and Rajasthan have almost similar living conditions, and their geographical boundaries are well contacted with the Agra division.

In the next stage of the sampling process, Agra, Gwalior, and Dholpur Districts have been selected (out of other districts of divisions) based on the maximum number of villages in the district.

In the last stage of the sampling process, Fatehabad tehsil of Agra district and division of Uttar Pradesh has been selected based on the maximum number of villages in this Tehsil. In the same way, Gwalior and Dholpur tahsils has been selected from Madhya Pradesh and Rajasthan, respectively.

**Table 2:-** Details of the States according to Division, District, Tehsil, Block and Village Wise.

S. N.	States	Division	District	Total tehsil in distric ts	Total Blocks in District ts	Total Villag es in Distri ct	Tehsil	Block	No. of Villag es in Select ed Block	% of Villag es to Total Villag es in Distri ct
1	Uttar Pradesh	Agra	1. Agra	6	15	905	1.Fatehabad	Fatehabad	95	10.5
		District s - 4	2.Firozaba d	4	9	639	2.Firozabad	Firozabad	96	15.0
		Tehsil- 16	3.Mainpuri	3	9	603	3.Bhaongaon	Bewar	102	16.9
		Blocks - 43	4.Mathura	3	10	645	4.Mathura	Mathura	104	16.1
2	Madhya Pradesh	Village s- 2792								
		Gwalior	1.Ashokna gar	7	4	894	1.Ashoknagar	Mungaoli	248	27.7
		District s- 5	2. Datia	5	3	668	2. Datia	Datia	251	37.8
		Tehsil- 30	3.Guna	7	7	1303	3. Guna	Guna	289	22.2
		Blocks- 28	4. Gwalior	3	4	652	4. Gwalior	Gwalior	332	50.9
		Village s- 4875	5. Shivpuri	8	8	1439	5. Shivpuri	Pohri	250	17.3
3	Rajasthan	Bharatp ur	1. Bharatpu r	11	10	1525	1. Bharatpur	Bayana	196	12.9
		District s- 4	2. Dholpur	6	5	813	2. Dholpur	Baseri	207	25.5
		Tehsil- 31	3. Karauli	7	6	880	3.Karauli	Karauli	200	22.7
		Blocks- 28	4. Sawai Madhop ur	7	5	811	4. Sawai Madhopur	Sawai Madhopur	152	18.7
Total				77	95	11777			2522	21.5

In short,

Table 3 gives the details of the selected sample area (States, divisions, districts, and tehsils & blocks) and the sample size of the study.

**Table 3:-** Details of Selected Tehsil, Blocks, Number of Villages and respondents of each district.

S.n	States	Division	Districts Taken in the	Tehsils	Blocks	No. of Villages	No. of respondents from each	Incomplete Questionnaire	Questionnaire included in study
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			study				village		
1.	Uttar Pradesh	Agra	Agra	Fatehabad	Fatehabad	95	25	508	1867
2.	Madhya Pradesh	Gwalior	Gwalior	Gwalior	Gwalior	332	25	1357	6943
3.	Rajasthan	Bharatpur	Dholpur	Dholpur	Baseri	200	25	418	4582
Total						627	15675	2283	13392

Thus, the study has been based on 15675 respondents from 627 villages in 3 states, i.e., Uttar Pradesh, Madhya Pradesh, and Rajasthan. However, while collecting the data from the respondent, only 13392 questionnaires were suitable for the analysis of the study. Rest 2283 questionnaires were incomplete and did not fit to include in the study.

### Hypotheses testing

**Ho:** There is no significant relationship between women's empowerment and financial inclusion.

**HA:** There is a significant relationship between women's empowerment and financial inclusion.

### Data Analysis Techniques:

Descriptive and inferential statistics were used to analyse the quantitative data. The statistical analysis summarises the data, while inferential analysis, i.e., regression analysis, examines the relationships between financial inclusion and women's empowerment.

### Results:-

#### Descriptive Statistics

**Table 4:-** Awareness among women.

S.N.	State, Division, Tehsil & Block	Uttar Pradesh (Agra- Fatehabad) (N=1867)		Madhya Pradesh (Gwalior) (N=6943)		Rajasthan (Bharatpur- Dholpur- Baseri) (N=4582)		Combined Mean
		Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	
1	Awareness about Inclusive Growth.	3.03	0.974	2.97	1.016	3.42	0.783	3.13
2	Awareness about financial inclusion	3.1	0.966	3.17	0.969	3.56	0.904	3.29
3	Financial inclusion leads to Inclusive growth	2.79	1.126	3.12	1	3.25	0.98	3.12
4	I think that the government of India working for financial inclusion	3.08	1.178	3.3	0.807	3.17	0.783	3.22
5	I think for financial inclusion, microfinance and microinsurance act as a useful tool	3.15	0.681	3.2	1.068	3.07	1.063	3.15
<b>Combined Mean &amp; SD</b>		<b>3.03</b>	<b>1.0078</b>	<b>3.152</b>	<b>0.982</b>	<b>3.294</b>	<b>0.926</b>	<b>3.182</b>

**Source:** Survey Analysis

Table 4 presents women's awareness of financial inclusion and inclusive growth. The combined mean is calculated as the average of the three regions' means.

The data indicate that overall awareness among women is slightly higher in Rajasthan (mean = 3.294) compared to Madhya Pradesh (mean = 3.152) and Uttar Pradesh (mean = 3.03). The combined mean for all three regions is 3.182, suggesting moderate awareness levels.

Among the five aspects, the highest mean awareness score is related to "Awareness about financial inclusion" (combined mean = 3.29), followed by "Perception of the Indian government working for financial inclusion" (combined mean = 3.22). The lowest mean awareness score is for the statement "Financial inclusion leads to inclusive growth" (combined mean = 3.12).

It is evident from the standard deviation values that there is some variability in the data, with respondents showing varying levels of awareness. There is a need to increase awareness of the benefits of financial inclusion among women in these regions, which suggests improvement.

**Table 5:-** Financial Inclusion Schemes Awareness among women.

S.N.	State, Division, Tehsil & Block	Uttar Pradesh (Agra- Fatehabad) (N=1867)		Madhya Pradesh (Gwalior) (N=6943)		Rajasthan (Bharatpur- Dholpur- Baseri) (N=4582)		Combined Mean
	Schemes/Yojana	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	
1	Pradhan Mantri Jan Dhan Yojana	4.5	0.762	3.97	0.988	4.52	0.957	4.23
2	Pradhan Mantri Jeevan Jyoti Bima Yojana	4.02	1.013	4.23	1.289	3.95	0.985	4.10
3	Pradhan Mantri Suraksha Bima Yojana	3.91	0.957	4.06	0.98	4.08	1.028	4.05
4	Atal Pension Yojana	4.48	1.009	4.18	1.396	4.44	1.14	4.31
5	Pradhan Mantri Vaya Vandana Yojana	4.19	0.919	3.8	1.139	3.92	1.03	3.90
6	Pradhan Mantri Mudra Yojana	3.68	1.095	3.6	1.204	3.71	1.113	3.65
7	Stand Up India Scheme	4.23	0.845	4.29	0.586	4.21	0.939	4.25
8	Pradhan Mantri Adarsh Gram Yojana	3.96	1.046	3.96	0.947	4.15	1.085	4.03
9	National Urban Livelihood Mission (NULM)-DeenDayalAntyodaya Yojana	4.24	1.216	4.08	1.458	4.08	1.249	4.10
10	National Social Assistance Scheme	3.79	1.152	3.99	0.884	3.99	1.086	3.96
11	National Rural Livelihood Mission (NRLM)-DeenDayalAntyodaya Yojana	4.38	0.747	4.47	0.64	4.33	0.65	3.80
<b>Combined Mean &amp; SD</b>		<b>4.12</b>	<b>1.0421</b>	<b>4.058</b>	<b>1.232</b>	<b>4.123</b>	<b>1.085</b>	<b>4.038</b>

**Source:** Survey Analysis

Based on data collected from three different regions of India, Table 5 provides information regarding women's awareness of different financial inclusion schemes. Each region is represented by the mean and standard deviation (SD) for 11 financial inclusion schemes.

Overall, the data indicate that women are more aware of financial inclusion schemes in Rajasthan (mean = 4.123) than in Uttar Pradesh (mean = 4.12) and Madhya Pradesh (mean = 4.058). There is a moderate level of awareness in all three regions, as indicated by a combined mean of 4.038.

Among the 11 schemes, the Pradhan Mantri Jan Dhan Yojana has the highest mean awareness score (combined mean = 4.23), followed by the Atal Pension Yojana (combined mean = 4.31). Regarding awareness, the lowest mean score is for the National Rural Livelihood Mission (NRLM)- DeenDayalAntyodaya Yojana (combined mean = 3.80).

According to the standard deviation values, there is some variability in the data, with respondents displaying varying levels of awareness of the different schemes. The data suggest that women in these regions have much room to improve their awareness of financial inclusion programs.

**Table 6:-** Percentage of Women Enrolled in Number of Schemes/Yojana.

States		Uttar Pradesh (Agra-Fatehabad) (N=1867)				Madhya Pradesh (Gwalior) (N=6943)				Rajasthan (Bharatpur-Dholpur- Baseri) (N=4582)			
S.N	Scheme s	N	%	% of Cases	Ran k	N	%	% of Cases	Ran k	N	%	% of Cases	Ran k
1	PMJDY	1867	11.40	100.00	1	6692	12.40	96.40	1	4582	11.10	100.00	1
2	PMJBY	1616	9.90	86.60	2	6692	12.40	96.40	1	4071	9.90	88.80	3
3	PMSBY	1323	8.10	70.90	8	6268	11.60	90.30	5	4174	10.10	91.10	2
4	APY	1611	9.80	86.30	3	6569	12.20	94.60	4	3981	9.60	86.90	4
5	PMMY	1591	9.70	85.20	4	6581	12.20	94.80	3	3930	9.50	85.80	5
6	SUIS	1505	9.20	80.60	5	4588	8.50	66.10	6	3713	9.00	81.00	8
7	PPVVY	608	3.70	32.60	12	2400	4.50	34.60	11	1931	4.70	42.10	
8	PMAGY	1192	7.30	63.80	9	2052	3.80	29.60	12	2011	4.90	43.90	11
9	NULM-DDAY	923	5.60	49.40	11	4016	7.50	57.80	9	2670	6.50	58.30	9
10	NSAS	1212	7.40	64.90	10	4036	7.50	58.10	8	3849	9.30	84.00	7
11	NRLM-DDAY	1452	8.90	77.80	7	4016	7.50	57.80	9	2438	5.90	53.20	10
Total		16393	100.00	878.00		53846	100.00	775.50		41264	100.00	900.60	

Source: Survey Analysis

According to

Table 6, most women in three states of India are enrolled in various financial inclusion schemes or Yojanas.

Across all three states, Pradhan Mantri Jan Dhan Yojana (PMJDY) is the most popular scheme among women. Uttar Pradesh and Rajasthan have the highest enrollment percentages, followed by Madhya Pradesh with 96.4%.

State-by-state, the second most popular scheme varies. With 86.6% enrollment in Uttar Pradesh, Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJBY) is the second-highest enrollment program, followed by Madhya Pradesh with 96.4%. On the other hand, Pradhan Mantri Suraksha Bima Yojana (PMSBY) has 91.1% enrollment in Rajasthan.

With 32.6% enrollment, the Pradhan Mantri Vaya Vandana Yojana (PPVVY) is the least popular scheme among women in Uttar Pradesh. With 29.6% enrollment in Madhya Pradesh, it is the Pradhan Mantri Adarsh Gram Yojana (PMAGY).



Due to the possibility of women enrolling in multiple programs, the total percentages exceed 100%. Generally, the data indicate that financial inclusion schemes are widely adopted by women in these states, although there may be regional variations in the popularity of specific schemes.

**Table 7:- Product of Financial Inclusion Benefited the Women Most.**

S.N.	States	Uttar Pradesh (N=1867)		Madhya Pradesh (N=6943)		Rajasthan (N=4582)		Combined Mean
	Parameters	Mean	Rank	Mean	Rank	Mean	Rank	
1	Frill account	3.23	8	3.42	9	3.27	10	3.34
2	Micro insurance scheme	3.12	9	3.49	8	3.97	5	3.60
3	Mobile Banking	2.46	11	2.53	11	3.08	11	2.71
4	Micro Saving schemes	3.73	5	4.19	5	4.12	2	4.10
5	Micro credit	3.28	7	3.97	6	3.95	6	3.87
6	Pension plans	3.41	6	4.49	1	4.12	2	4.21
7	Electronic fund transfer	2.87	10	2.82	10	3.29	9	2.99
8	Credit and debit cards	3.88	2	4.20	4	4.01	4	4.09
9	Overdraft facility	3.74	5	4.22	3	3.85	7	4.03
10	Payment and remittance services	3.93	1	3.78	7	3.67	8	3.76
11	Financial market	3.81	3	4.32	2	4.32	1	4.25
<b>Combined Mean</b>		<b>3.41</b>		<b>3.77</b>		<b>3.79</b>		<b>3.72</b>

**Source:** Survey Analysis

According to this

Table 7, financial inclusion products positively impact women in Uttar Pradesh, Madhya Pradesh, and Rajasthan. Each product is evaluated based on its mean score and combined mean in each state. The combined means of Pension Plans and the Financial Market are the highest (4.21 and 4.25, respectively), while Mobile Banking is the lowest (2.71). The combined mean scores for the three states are 3.41 for Uttar Pradesh, 3.77 for Madhya Pradesh, and 3.79 for Rajasthan, resulting in an overall combined mean of 3.72. Based on survey analysis, the data show that financial inclusion products have varying effectiveness in empowering women in different Indian states.

**Table 8:- Socio-economic, Political and Personal Empowerment of Women by Financial Inclusion.**

S. N.	Parameters	Uttar Pradesh (N=1867)		Madhya Pradesh (N=6943)		Rajasthan (N=4582)		Combined Mean (Before)	Combined Mean (After)
		Before Financial Inclusion	After Financial Inclusion	Before Financial Inclusion	After Financial Inclusion	Before Financial Inclusion	After Financial Inclusion		
		Mean	Mean	Mean	Mean	Mean	Mean		
EI	<b>Economic Improvement</b>								
	Access to financial services	2.34	4.03	3.40	4.31	3.78	4.20	3.17	4.18
EI 1	Increase in saving	3.76	4.5	4.15	4.29	3.88	3.99	4.00	4.22
EI 2	Expansion of Income	4.02	4.03	3.63	4.02	3.55	3.5	3.66	3.84
EI 3	Access to credit	3.84	3.91	3.43	4.15	3.08	4.22	3.37	4.15
EI 4	Creation of business opportunities/Employ	3.43	4.48	3.32	3.84	3.89	4.15	3.95	3.62

	ment/ potential Earning								
EI 5	Cover the emergency expenditures (risk occurs)	3.06	3.68	2.83	3.99	3.72	3.87	3.85	3.22
	Digital financial services	2.21	3.78	2.30	4.56	3.31	4.67	2.61	4.33
<b>Combined Mean</b>		<b>3.62</b>	<b>4.12</b>	<b>3.47</b>	<b>4.06</b>	<b>3.62</b>	<b>3.95</b>	<b>3.77</b>	<b>3.81</b>
SI	<b>Social Improvement</b>								
SI 1	Equal status, participation & power of decision making in community and in village	4.02	4.23	3.68	4.1	4	4.18	3.84	4.16
SI 2	Expansion of social security & equality	3.84	4.19	3.84	4.02	4.15	4.36	3.95	4.22
SI 3	Opportunity to develop social contact with people & officials	4.02	4.03	3.94	3.98	3.51	4.04	3.80	4.02
SI 4	Regularly attend Village Meetings	3.84	3.96	2.81	4.36	3.9	4.51	3.33	4.38
SI 5	Gender Equality	3.43	4.24	3.59	4.08	3.63	4.21	3.58	4.17
<b>Combined Mean</b>		<b>3.83</b>	<b>4.13</b>	<b>3.57</b>	<b>4.11</b>	<b>3.84</b>	<b>4.26</b>	<b>3.70</b>	<b>4.19</b>
PE	<b>Political Empowerment</b>								
PE 1	Increase status, participation & power in decision making process to unprivileged people in democratic institutions (Panchayat, Block office)	3.06	3.79	4.07	4.19	3.38	4.47	3.69	4.28
PE 2	Political Awareness	4.02	4.38	3.29	3.9	3.45	4.19	3.45	4.12
PE 3	Participation and Recognition in political activity	3.91	4.38	3.93	4.26	4.05	4.37	3.97	4.33
PE 4	Creations of political opportunities/ power	3.84	4.04	3.34	3.74	3.24	4.25	3.38	4.05
<b>Combined Mean</b>		<b>3.71</b>	<b>4.15</b>	<b>3.66</b>	<b>4.02</b>	<b>3.53</b>	<b>4.32</b>	<b>3.62</b>	<b>4.19</b>
LE	<b>Legal Empowerment</b>								
LE 1	Legislation for gender equality in financial services	4.04	4.38	2.61	4.42	3	3.94	3.22	4.25
LE 2	Legal provisions for equal access to credit	3.33	3.84	2.04	3.87	2.28	3.46	2.55	3.72
LE 3	Laws supporting women's property rights	3.61	4.43	2.87	3.37	3.26	4.13	3.25	3.98
LE 5	Legislation for equal pay for equal work	3.11	3.78	2.49	3.10	2.74	3.90	2.78	3.59
LE	Laws protecting	3.67	4.02	3.23	3.98	2.67	3.96	3.19	3.99

5	women from financial abuse								
<b>Combined Mean</b>		<b>3.55</b>	<b>4.09</b>	<b>2.648</b>	<b>3.748</b>	<b>2.79</b>	<b>3.878</b>	<b>3.00</b>	<b>3.91</b>
PF I	<b>Personal, Family and psychological Improvement</b>								
PF I 1	Better awareness of health, education environment	4.02	4.11	3.73	3.81	4.62	4.71	4.07	4.32
PF I 2	Improve financial literacy	3.91	4.34	3.47	3.65	3.81	3.98	3.65	3.92
PF I 3	Improve communication and leadership skill	3.59	4.23	2.99	3.88	3.4	4.65	3.21	4.33
PF I 4	Empowerment of the Individual decision making of household affaires	4.19	4.31	3.33	3.99	3.89	4.26	3.64	4.17
PF I 5	Feel recognised in family	4.03	4.04	3.54	3.86	3.55	3.64	3.61	3.77
PF I 6	Clean cooking and eating habits	3.84	4.04	3.91	3.99	4.02	4.15	3.94	4.08
PF I 7	Improvement in living condition	3.43	4.11	3.56	4.28	3.31	3.64	3.46	3.92
PF I 8	Increase in household income	3.06	4.08	4.04	4.15	3.19	4.73	3.61	4.44
PF I 9	Improve decision making power	3.69	4	3.74	4.28	3.32	3.85	3.59	4.02
PF I 10	Peace of mind	3.52	4.41	3.91	3.96	3.27	4.22	3.64	4.16
PF I 11	Have acquired new skills	2.91	4.96	3.84	4.33	3.94	4.6	3.74	4.56
PF I 12	Confident in moderating group meetings	4.01	4.59	3.63	2.82	3.82	4.2	3.75	3.78
PF I 13	Change in quality of life	3.69	4.01	3.21	3.91	3.38	4.04	3.34	3.99
<b>Combined Mean</b>		<b>3.68</b>	<b>4.25</b>	<b>3.61</b>	<b>3.92</b>	<b>3.66</b>	<b>4.21</b>	<b>3.63</b>	<b>4.11</b>

Source: Survey Analysis

In this

Table 8, we present the socioeconomic, political, legal, and psychological empowerment of women in three Indian states through financial inclusion:

As part of the Economic Improvement category, financial inclusion has improved access to financial services, savings, income growth, credit access, and business opportunities across the three states. In this category, the combined mean increased from 3.77 before financial inclusion to 3.81 after inclusion.

Several parameters have improved after financial inclusion in the Social Improvement (SI) category, including equal status and decision-making power in communities, a more comprehensive range of social security options, the opportunity to establish social contact, regular attendance at village meetings, and gender equality. In this category, the combined mean increased from 3.70 before financial inclusion to 4.19 after.

After financial inclusion, all parameters related to Political Empowerment (PE) improved, including increased participation and decision-making power in democratic institutions, political awareness, participation and recognition in political activities, and creation of political opportunities. As a result of financial inclusion, the combined mean for this category increased from 3.62 to 4.19.

Legislation that promotes gender equality in financial services, equal access to credit, property rights for women, equal pay for equal work, and financial abuse protection have all improved after financial inclusion in the Legal Empowerment (LE) category. Before financial inclusion, this category's combined mean was 3.00; after that, it was 3.91.

In the Personal, Family, and Psychological Improvement (PFI) category, the parameters of better awareness of health, education, and environment; improved financial literacy, communication, and leadership skills; empowerment of individual decision-making in household affairs; increased recognition in the family; clean cooking and eating habits; improvement in living conditions; increased household income; improved decision-making power; peace of mind; acquisition of new skills; confidence in moderating group meetings; and change in the quality of life all improved after financial inclusion. As a result of financial inclusion, the combined mean for this category has increased from 3.63 to 4.11.

Across the three states of Uttar Pradesh, Madhya Pradesh, and Rajasthan, the data indicate that financial inclusion has improved various aspects of women's lives, including economic, social, political, legal, and personal.

### Hypotheses testing

Ho: There is no significant relationship between women's empowerment and financial inclusion.

**Table 9:-** Hypotheses Testing.

Variable	Coefficient	Standard Error	t-value**	p-value*
Intercept	0.567	0.034	16.617**	< 0.001*
Women's Empowerment	0.872	0.042	20.896**	< 0.001*
Financial Inclusion	0.345	0.038	9.123**	< 0.001*

Notes: \*p < 0.05, \*\* T-values in parentheses

Source: Author's calculation

Women's empowerment and financial inclusion are significantly linked. In accordance with

Table 9 above, women's empowerment and financial inclusion are associated with significant positive relationships ( $p < 0.001$ ). Thus, financial inclusion increases women's empowerment. As a result, the null hypothesis has been rejected according to the test.

### Conclusion:-

In conclusion, financial inclusion contributes to women's empowerment, resulting in positive outcomes in various aspects of their lives. By providing access to formal banking services, credit, and financial education, financial inclusion initiatives assist women in taking control of their financial resources, improving their decision-making capabilities, and enhancing their economic opportunities.

Including women in the financial system can further contribute to their social empowerment by increasing their participation in community-based savings groups, household decision-making processes, and the governance of local financial institutions. Women's financial stability and independence are further enhanced by implementing legal reforms that support gender equality in financial services, property rights, and equal pay for equal work.

Research indicates that financial inclusion is essential in promoting women's psychological empowerment. Women can better make informed financial decisions by accessing financial services and resources. Consequently, it leads to an increase in self-confidence, self-esteem, and self-efficacy. As a result of financial inclusion, women are psychologically empowered, which can positively impact their well-being, social standing, and overall quality of

life. A significant contribution to women's empowerment and gender equality can be made by policymakers and stakeholders who prioritise financial inclusion initiatives.

Financial inclusion is significant in fostering gender equality and women's empowerment, resulting in a more equitable and prosperous society. In order to contribute to a brighter future for women and their communities, we must prioritise financial inclusion initiatives and address the barriers they face to accessing financial services.

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