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ROLE OF FINANCIAL INCLUSION IN BRINGING ECONOMIC INDEPENDENCE AMONG RURAL WOMEN OF HIMACHAL PRADESH

Dr. Kulwant Singh Pathania

Chairman & Professor, Department of commerce

Himachal Pradesh University, Shimla

Email: pathania_ks@yahoo.com

Mrs. Neha Dewan

Research scholar, Department of commerce

Himachal Pradesh University, Shimla

Email: nehadewan786@gmail.com

Abstract

Financial inclusion essentially refers to delivery of banking services at an affordable cost to the vast sections of disadvantaged and low income groups. As banking services are in the nature of public goods, it is essential that availability of banking and payment services to the entire population without discrimination, so that the sustainable development can be achieved. The 2030 Agenda for sustainable Development goals of the United Nations sets the ambitious objective to strengthen the economic development by providing universal access to financial services along with equal rights for women to open bank accounts, signifying financial products and services are the necessary part of an economic identity. Thus it has been globally recognized fact that financial inclusion can positively impact the economic status of women. This study has been undertaken with the aim of identifying the crucial components that influence the economic status of women with the help of financial inclusion. The two main districts of Himachal Pradesh were selected for the study i.e. Kangra and Mandi. A structured schedule has been framed to gather primary data from the respondents and tested using exploratory factor analysis. To check the reliability of the schedule cronbach's alpha technique was used and to check the compatability of analysis the KMO measure of sampling adequacy and Bartlett's test of sphericity was calculated. The major components were obtained using varimax rotation method.

Key words: Sustainable development, financial inclusion, economic status, factor analysis

Introduction

Advancement in any domain would be insufficient without equitable involvement of each and every section of society. It is very hard to comprehend a developed world without entitling women with uniform social and

economic rights. However, the most critical objective of financial inclusion is to include women in financial momentum and enhancing financial literacy among them. It will indeed provide them financial identity as well as economic independence. Financial inclusion basically refers to the universal access to a wide range of financial services at a reasonable cost. These include not only banking products but also other financial services such as insurance and equity products.¹ But initially introducing rural women to take part in formal financial system continues to be a big challenge globally because of many possible reasons. Women often bear the brunt of poverty and limited access to economic opportunity, including unfavourable financial access. Inequality is not just a moral issue – it is a macroeconomic issue. Growth has to be more inclusive and for this, finance has to be more inclusive, to close the gender and inequality gap.² When government deposits social welfare payments or other subsidies directly to women's bank account, the impact is amazing. Women gain decision making power and with more financial tools at their disposal they invest in their families' prosperity and help derive broad economic growth.³ Thus it has been widely accepted that financial inclusion of women not only benefits to individual but it brings prosperity to household and then society as well. Thus the need has been felt to study the role of financial inclusion in bringing economic independence among rural women of Himachal Pradesh.

Review of literature

Deka, P.P. (2015).⁴ inquired into women empowerment by virtue of constructive financial inclusion programs and financial literacy. Financial exclusion of women is particularly inducing societal disgrace to women's status as well. The study found out the major reasons of exclusion mainly lack of identification proof, lack of knowledge, bank branches are far away from their reach, no source of income, lack of asset ownership to get loan, high transaction costs etc. **Eton, M. et al (2018)**⁵ inquired into the contribution of financial inclusion on women empowerment. The study recommended that banks and financial institutions should cut down the costs of operating accounts for the inclusiveness of women, particularly from rural areas. Government should follow strict monitoring, regulating and supervising policies of financial service providers. Both formal and informal education and awareness programs should be provided to the women. **Arnold, J. (2019)**⁶ examined the techniques used to approach last mile societies and call attention to integrated and functional programming that can bring transformation in specific limitations faced by only women, illiterate and non-calculative people. This article also recommended engaging NGOs and development practitioners, banker and administrators, government and communities to allies together to deliver formal financial services that definitely will fulfill the expectations of poor women. **Cabeza, L., & Esther, B. (2019)**⁷ inquired that if women join the formal financial system the gender inequality can lessen to the great extent which further leads to the refinement of our society. The objective of the study was to assess the impact of female financial inclusion on the inclusive development worldwide. The study evidently provides the fact that there is positive impact on economic development with greater inclusion of women with respect to bank accounts and credit cards. **Manta, A. (2019)**⁸ explained that on one side financial

inclusion has been attributed towards poverty elimination and economic entitlement of women but on the other side accessibility of financial products and services to rural women is at its detrimental position. The discoveries of the study showed that the realization of real financial inclusion of women will persist ambiguous until and unless a gender specific perspective is chosen by the administrators. **Bhatia, S., & Singh, S. (2019)**⁹ studied the dimensions of women empowerment and initiates an evaluation to check if the dimensions change with financial inclusion or not. The study explored the positive impact of financial inclusion on economic status of women in urban slums. The study recognizes the fundamental need for the strong awareness campaign to strengthen the roots of financial inclusion. **Hendricks, S. (2019)**¹⁰ pin pointed the attention towards Bill and Melinda Gates foundation that has stressed on financial inclusion to enhance women social, political and economic status and focused on gender equality and supported with the foundation's view that life changing outcomes for women can be brought through financially inclusive society. The article concluded that G2P, Government to people transfer and digital financial services can act as an influential effort to bring women in formal financial mainstream and thereby leading the society towards development and prosperity. **Mathew, S. (2020)**¹¹ tried to investigate that whether women empowerment can be achieved through financial inclusion schemes in India or not and quoted the report of World bank economic forum, 2018 stated that India, out of 144 countries is on 139th position with 66 percent gender gap with respect to economic participation of women and also framed logical inference for low financial inclusion among women in India is most of the women are housewives and get nothing for their work thus their economic status is weak thereby leading to low decision making power and low participation in financial management. The study suggested that proper financial education and awareness programmes can work appropriately in this regard. **Yadav, Y. (2020)**¹² put an effort to comprehend that how can financial inclusion led to the empowerment of women by analyzing various schemes of financial inclusion under taken by Indian government and come to the conclusion that out of various programmes run by the government microfinance found to be most effective for the improvement of women's life. Author found that women were able to enhance their earnings as well as savings after having micro finance. More over women showed that there were improvement in their skills and awareness level also after getting benefitted with the micro finance scheme of government.

Objective of the study

To analyze the economic impact of financial inclusion on rural women of Himachal Pradesh.

Research Methodology

The study is basically primary in nature. To achieve the objective of the study, there were several stages in which the sampling procedure was carried out. First of all, the state was divided on the basis of districts. Out of 12 districts, two districts were selected on the basis of highest rural female population. Further districts were stratified on the basis of tehsils. Two tehsils from each district were selected, again on the basis of highest rural female population. Then tehsils were sub divided into villages. Four villages were randomly selected from each tehsil. Lastly, using proportionate sampling 10% of the population of each village was

taken as sample. A sample of 716 respondents has been derived. Data has been collected from respondents using schedules. In order to assess the impact, the data has been collected from the respondents on 5 point Likert scale ranging from 5 points for very high impact to 1 point for very low impact. The economic impact is measured through statements like development of saving habits, increase in income, increase in standard of living, food and health security, increase in physical and financial assets, construction of house etc. To test the reliability and internal consistency of schedule cronbach's alpha technique was applied. An effort has been made to extract the factors which put maximum economic impact of financial inclusion on the rural women of the state. The data archived has been appropriately classified and analyzed with the help of exploratory factor analysis. The appropriateness of analysis was determined by the Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test of sphericity. The extraction of factors was done using varimax rotation method of data normalization.

Analysis and results

1. Respondent's opinion about economic impact of financial inclusion schemes

Economic impact has been considered as a yardstick for assessing the caliber of financial inclusion with reference to rural women of Himachal Pradesh. The current analysis has been planned to scrutinize the components which put maximum impact on the respondents economically with reference to formal financial services of banks and various financial inclusion schemes they have subscribed.

Table 1 - Descriptive analysis

S.No.	Statements	Mean	Std. deviation
1	Development of saving habit	4.2874	1.39089
2	Increase in income	4.6466	.82850
3	Financial independence	4.0014	1.32654
4	Increase in financial assets	3.9267	1.39643
5	Food and health security	3.9598	1.26313
6	Increase in standard of living	3.9569	1.34148
7	Able to start new business	3.8678	1.29183
8	Got better dwelling of house	3.6609	1.28409
9	Easy access to credit facilities	4.0733	1.35883
10	Contribution towards household expenses	4.2313	.87963
11	Control over household budget	3.8448	1.35245
12	Increase in physical assets	3.9856	1.20899

Source : Data collected from schedules.

The descriptive analysis of economic impact of financial inclusion on rural women has been exhibited in table 1. It reveals from the table that increase in income is the most important economic impact which positively affects the respondents as this variable has the highest mean score 4.6466 with standard deviation 0.82850. However construction or repair of house has the lowest mean 3.6609 with standard deviation 1.28409.

2. Factor analyses: Data suitability test Factor analysis is a procedure used to lessen the multivariate data into fewer interpretable components. This is an efficient way to extract most common variances from all the variables and place them in a common carton. This technique is considered because it does not need any prior operational relationships and is a commonly applied technique of data reduction.

2 (a) Reliability test First of all the reliability of scale is determined by computing the coefficient of cronbach alpha which confirms the intrinsic consistency of the scale. The value of coefficient alpha 0.7 or higher is acceptable.¹³

Cronbach's alpha	Number of items
.939	12

Table 2 summed up the cronbach's alpha for given items in the scale. The outcome specifies that scale is having good reliability with alpha value 0.939 for 12 statements in the scale.

2 (b) KMO and Bartlett's test of sphericity: The subsequent table is conveying the results of two tests namely KMO measure of sample adequacy and Bartlett's test of sphericity. Kaiser's Measure of statistical adequacy is a measure of degree to which each variable can be predicted by all other variables. An overall adequacy of .80 or higher is very good and adequacy under .50 deemed poor. Bartlett's test of sphericity measures the correlation of variables and is another piece of information of the strength of relationship among variables. A significance level below 0.05 suggests that there is substantial correlation in the data. A value greater than .10 indicates that the data is not suitable for factor analysis.¹⁴

Kaiser's Measure of statistical adequacy		.861
Bartlett's test of sphericity	Approx. Chi square	6849.105
	Df	66
	Sig.	.000

Here, value of KMO = .861 which indicates that the sample is adequate and we can proceed with factor analysis. With regard to Bartlett's test, the approximate of chi square is 6849.105 with 66 degree of freedom which is significant at 0.05 level of significance i.e. sig = .000, consequently there is considerable correlation in the data. Therefore factor analysis is observed as a relevant technique of further analysis of data.

3. Factor analysis; Communalities: Communalities indicate the proportion of variance explained by the common factor. Higher the value of communality, higher the variable has been considered by the factor and lower of it is dropped out. The communalities are presented by table 3.

S.No.	Statements	Initial	Extraction
1	Development of saving habit	1.000	.597
2	Increase in income	1.000	.898
3	Financial independence	1.000	.748
4	Increase in financial assets	1.000	.760
5	Food and health security	1.000	.824
6	Increase in standard of living	1.000	.650

7	Able to start new business	1.000	.634
8	Got better dwelling of house	1.000	.719
9	Easy access to credit facilities	1.000	.820
10	Contribution towards household expenses	1.000	.905
11	Control over household budget	1.000	.846
12	Increase in physical assets	1.000	.774

Extraction Method: Principal Component Analysis

4. Factor analysis; Total variance explained

The Eigen values, variance percent and cumulative variance description for our factor solution has been illustrated in table 4. The first panel depicts the initial eigen values, the second panel depicts the extraction sums of squared loadings and the third panel presents the rotation sum of squared loadings.

Components	Initial eigen values			Extraction Sums of Squared Loadings			Rotation sum of squared loading		
	Total	Variance Percent	Cumulative percent	Total	Variance Percent	Cumulative percent	Total	Variance Percent	Cumulative percent
1	6.814	56.783	56.783	6.814	56.783	56.783	4.141	34.511	34.511
2	1.323	11.029	67.811	1.323	11.029	67.811	3.300	27.500	62.010
3	1.039	8.659	76.471	1.039	8.659	76.471	1.735	14.460	76.471
4	.673	5.604	82.075						
5	.594	4.953	87.028						
6	.429	3.571	90.599						
7	.285	2.377	92.975						
8	.247	2.055	95.031						
9	.198	1.654	96.685						
10	.167	1.393	98.078						
11	.130	1.085	99.163						
12	.100	.837	100.000						

Extraction Method: Principal Component Analysis

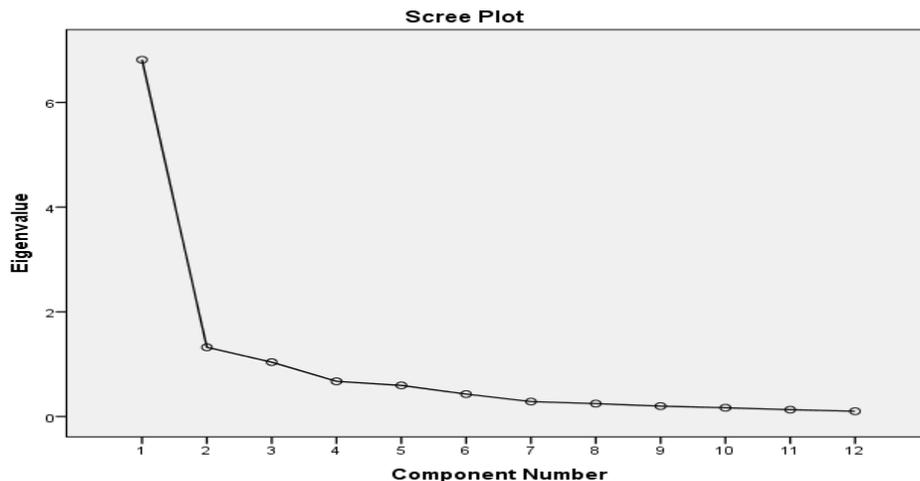
Eigen value constitutes the total variance defined by each variable. Eigen value more than 1 will be chosen as components. In the present study only 3 components are extracted by collaborating the material variables. The total column furnishes the quantity of variance of each variable. In a good factor analysis, there are few components that explain a lot of variance and few explain small amount of variance. Only those variables are considered whose eigen value is more than 1 and the remaining variables whose amount of variance is very small are not considered by the analysis. In the present study 3 components have been obtained from 12 variables, representing economic impact of financial inclusion schemes on rural women. The first component explains 56.783 percent of variance, second factor 11.029 percent and third factor 8.659 percent of variance. All the remaining variables are not remarkable.

The extraction sum of squared loading provides details about extracted factors. These values are always same as displayed under initial eigen values. Further rotation sum of square loadings are also displayed. This column emerged when we choose the rotation of factors. In the current study varimax rotation solution has

been used. The percentage of variance displayed by the rotated sum of square loadings are different for the selected components but the cumulative percentage for the group of three factors are always same i.e. 76.471.

5. Scree plot

The graphical representation of factor analysis is known as scree plot. The scree plot exhibits the association between number of variables and their respective eigen value as is portrayed in figure 1



The scree plot portrays the eigen value against each variable. This graph is helpful to determine number of variables to be retained. The point of concern is where the curve starts to flatten. We can see in the graph that after 3 components, there is a sharp change in the curvature of the scree plot. This shows that after third component the variance accounts for smaller and smaller.

6. Rotated component matrix

The rotated component matrix usually referred to as the loadings, is the crucial findings of principal component analysis. It covers the extent of the correlation between individual variable and the extracted components.

Table 5 - Rotated component matrix

S.No.	Variables	Components		
		1	2	3
1	Easy access to credit facilities	.873	.219	.099
2	Able to start a new business	.754	.252	-.055
3	Increase in income	.747	.402	-.007
4	Development of saving habit	.711	.188	.237
5	Increase in financial assets	.688	.283	.311
6	Increase in physical assets	.680	.493	.233
7	Better dwelling of house	.627	.595	.166
8	Contribution towards household expenses	.276	.896	.160
9	Control over household budget	.273	.863	.163
10	Financial independence	.365	.781	.067
11	Food and health security	.011	.038	.947
12	Increase in standard of living	.368	.392	.731

Extraction method: Principal component analysis; Rotation method: Varimax with Kaiser normalization.

The objective of rotation is to reduce the number of variables on which the statement under investigation has high loadings. Actually rotation does not make any difference but facilitates the interpretation. The above table presents rotated component matrix and intimates the factor loading for each variable after rotation. The correlation between the items and the rotated factors is represented by each number. This correlation assists us to simplify the association between variables and factor. With the help of above rotated component matrix various variables have been clubbed in three factors.

7. Naming the factors

Factor 1: Transforming lives

This factor measures the respondents' opinion about the impact of financial inclusion schemes on their income, savings, security and asset creation. The key variables extracted under this factor are “easy access to credit facilities” (.873 factor loading), “able to start new business” (.754 factor loading), “increase in income” (.747 factor loading), “development of saving habit” (.711 factor loading), “increase in financial assets” (.688 factor loading), “increase in physical assets” (.680 factor loading) and “better dwelling of house” (.627 factor loading). Hence the highest rating has been given to easy access to credit facilities. Financial inclusion schemes are encouraging the delivery of suitable financial products and services at suitable time which in return transforming the lives of rural women by tapping new opportunities in farm as well as nonfarm sectors. Therefore they get source of income, they save money in the banks in the form of recurring deposit and fixed deposit which increases their financial assets and gradually their physical assets also tend to increase. Thus financial inclusion is providing source of livelihood to the rural women and help in transforming their lives in a prosperous manner.

Factor 2: Financial independence

Financial independence is the ability of meeting financial obligations by one without taking help from family members. The key variable extracted under this factor is “contribution towards household expenses” (.896 factor loading), “control over household budget” (.863 factor loading) and “financial independence” (.781 factor loading). Hence the highest rating has been given to contribution towards household expenses. Thus it is clear that financial inclusion has not only provide source of livelihood to the rural women but has made them independent enough that they do not need to depend on their family members for fulfillment of their needs rather they are now able to contribute equally towards their family expenditure and can effectively look into the household budget.

Factor 3: Vulnerability reduction

One of the primary aims of financial inclusion is to eliminate extreme poverty and to ensure the fulfillment of basic requirement of people without any discrimination. This extracted factor of economic impact of financial inclusion is the sum of two variables namely “food and health security” (.947 factor loading) and “increase in standard of living” (.731 factor loading). Thus financial inclusion leads to fulfill physiological needs of the people and contributes to enhance their standard of living.

Conclusion

The study concludes that real objective of financial inclusion is not restricted to opening of bank account only but to reduce poverty and bring equality the effective utilization of banking products and services must be ensured. Those rural women who are financially included they have experienced favourable impact of financial inclusion, as inclusion has empowered them economically as well as socially and further refined their individuality and standard of living. Financial inclusion has successfully upgrade their lives economically by providing easy access to credit facilities, increase in their income, development of saving habits, increase in their physical and financial assets. Thus it can be said that financial inclusion play significant role in making rural women self-independent by providing them a platform to earn and save. Three major components that we have extracted from the study indicating the contribution of financial inclusion towards economic independence of rural women are transforming lives, financial independence and vulnerability reduction. These three factors put significant economic impact on rural women and introducing betterment in their lives.

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