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# LOOKING BEYOND TRADITIONAL ENTREPRENEURSHIP: DECODING THE ROLE OF ACCESS TO FINANCE, BUSINESS SUPPORT, SAVINGS PRACTICES, AND SKILL DEVELOPMENT FOR WOMEN AGRO-ENTREPRENEURS

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# **ABSTRACT**

Services provided by microfinance institutions are becoming widely recognized as effective means of ending poverty and empowering women. Nonetheless, fewer women than men operate and handle businesses in many parts of the world. This research examines how agro-women's business growth in Bihar, India, is affected by microfinance services. A standardized five-point likert scale questionnaire was used to gather data from 240 respondents, SPSS 21 and AMOS 23 were used for analysis. In order to evaluate the concept validity and measurement reliability, confirmatory factor analysis was done. The theories on the impact of microfinance institutions on agro-women's entrepreneurial growth were formerly tested using a structural equation model. The study's findings revealed a positive and significant impact of access to finance, savings, and business support, although there is a need for improvement in skill development for agro-women entrepreneurs.

**Keywords**: Agro Women's Entrepreneurs, Micro Finance Institutions, Financial Services, Non-Financial Services

1. INTRODUCTION

Microfinance has gained popularity in developing countries such as India as a method of enabling women to create their enterprises. Microfinance has enormous promise for women's empowerment in India, where socio-cultural constraints, educational inequalities, and limited access to money are among the long-standing barriers limiting women from engaging in the economy. However, when combined with non-financial services, microfinance's efficacy in promoting women's entrepreneurship is substantially enhanced. This all-encompassing strategy, which incorporates financial and non-financial help, has been linked to sustained firm success and overall socio-economic progress (Chakraborty & Gupta, 2020). Microfinance institutions (MFIs) generally focus on ensuring affordable loans to women in rural and semi-urban regions, recognising that women are far more inclined to engage in businesses that enhance their family's economic situation (Kumar, 2018).

There is growing consensus that when combined with non-financial services, microfinance may significantly boost women's entrepreneurial success. With a population of over 1.3 billion, India has a massive unorganised economy where women often work as entrepreneurs in their businesses. Due to social customs, mobility restrictions, and conventional roles of gender which hinder their willingness to engage in economic activities, women in rural areas confront considerable barriers while pursuing entrepreneurship. Despite these challenges, microfinance has offered many women the potential to start small businesses and raise funds. Microfinance programs have been crucial in empowering women, according to Singh and Mishra (2018), by giving them the tools they need to launch their own companies, boost their revenue, and achieve financial independence. But it's becoming more widely acknowledged that these programs' non-financial services are essential to their long-term viability. Microfinance initiatives targeting female entrepreneurs in India have culminated in a variety of outcomes. Although financial inclusion is a crucial initial move towards granting women more economic power, relying solely on credit-based initiatives has drawbacks. Women usually struggle to sustain their businesses after getting their first loan. According to a Sinha and Jha (2019) study on women entrepreneurs, a few of the core barriers to the expansion of women-led businesses include a lack of financial literacy, a lack of business training, and a lack of market competence. This means that an enhanced strategy integrating both financial and nonfinancial assistance is required to accelerate corporate success, rather than capital exclusively (Rani & Singh, 2020). The services that are not financially offered by microfinance programs—such as networking opportunities, skill development, mentorship, and business training are intended to provide women with the information and resources they need to thrive in cutthroat marketplaces. The ultimate goal of these services is to boost the management abilities, market dynamics comprehension, and financial literacy of women, all of which are essential for maintainin2wg and expanding their enterprises (Gupta, 2018). As a component of microfinance initiatives, non-financial services tackle several important problems that hinder female entrepreneurs. These services include training in financial planning, networking, leadership, and company management. Non-financial services can also support women's entrepreneurial attitudes and confidence-building, which are frequently weakened by the social and cultural barriers they encounter (Sharma, 2017). In addition to microloans, offering non-financial services improves company results, according to Kumari and Sharma (2020). This is because women are more adept at handling the intricacies of operating a business, such as handling cash flow and product marketing. Financial literacy is one substantial field in which non-financial services have an impact. Although an abundance of Indian women are eligible for microcredit, their poor financial literacy makes it difficult for them to effectively manage money wisely. Research indicates that women participating in microfinance programs who get financial literacy training are more skilled at managing their loans, keeping tabs on their spending, and making wise investment choices (Rani & Singh, 2020). Because of this, these women had a higher chance of maintaining their companies over time and avoiding the debt cycle that sometimes ensuared micro-entrepreneurs with little financial expertise.

Women who got business training as part of microfinance programs were more likely to see their businesses develop, hire more staff, and diversify their product offers, according to a 2019 study by Sinha and Jha. Networking and mentoring are equally important non-financial service components. Particularly in rural locations, women entrepreneurs sometimes do not have access to professional networks that might offer chances for cooperation, support, and guidance (Singh & Mishra, 2018).

Finally, the data emphasises the critical importance of non-financial services, even if microfinance has played a big role in fostering women's entrepreneurship in India, particularly in rural areas such as Bihar. Microfinance initiatives can promote a more holistic approach to entrepreneurship development by combining non-financial and financial assistance. This method might address not just the economic barriers that women face, but also the social and cultural ones. The inclusion of non-financial services is critical to the future of microfinance in India. This will enable women entrepreneurs to build long-term businesses, achieve financial independence, and contribute to the nation's overall economic and social success. There are several serious gaps in the research on how microfinance helps women in Bihar, India, build their businesses. A thorough examination of non-financial services like networking, coaching, and training is frequently neglected in favour of research that primarily concentrates on financial services like savings accounts and loans. Insufficient study has been done to determine which non-financial services help women entrepreneurs in Bihar the most. Furthermore, the efficiency of these services may be impacted by the paucity of studies specifically designed for Bihar's distinct socioeconomic and cultural setting.

There is a dearth of research on the long-term effects of non-financial services on the sustainability and growth of businesses, which emphasises the need for longitudinal studies. It has also not been thoroughly studied how state and municipal policies affect the efficacy and manner in which non-financial services are provided. Research draws comparisons between Bihar and other areas may shed light on regional issues and effective practices. A better comprehension of the service effect may be possible through qualitative research that documents the individual experiences of women entrepreneurs. There is still a lot of untapped potential for technology advancements to improve non-financial services. By filling in these gaps, programs to encourage women's entrepreneurship in Bihar may become more focused and successful.

# 2. WOMEN'S ECONOMIC EMPOWERMENT IN BIHAR AGRICULTURE AND ALLIED DOINGS

Rural women in Bihar are primarily engaged in farming and animal husbandry, contributing to the state's self-sufficiency in food grain production. Important food crops include rice, wheat, maize, and pulses; commercial crops include potatoes, sugarcane, oilseeds, tobacco, and jute. Bihar is a major producer of milk, and horticulture pays more than other agricultural pursuits. The whole agricultural potential of the region is, however, limited by issues with production, storage, and transportation. Despite the primary sector's contribution to Bihar's GDP has decreased over the past four years, a sizable share of the labor force—particularly women—continues to work in it. According to an IHD poll, just 10% of rural women in Bihar are employed in industry or services; the majority, almost 90%, are engaged in farming and animal husbandry. For almost all of these women, animal husbandry in particular is a vital source of selfemployment. In Bihar, women make up over 80% of the workforce in the animal husbandry industry, therefore their involvement in the primary sector is not negligible. Although they both have similar responsibilities in farming, their contributions are undervalued in labor force statistics since animal husbandry is frequently not acknowledged as their "primary" occupation. Wage rates need to change to reflect the fact that women are taking on more demanding jobs as more males leave Bihar. Farming is still quite gendered; women do activities like transplanting and weeding, while males usually do the more physically taxing labor. 'Kisan Credit Cards' should be made more widely available since they offer both long-term loans for things like buying pump sets, developing land, and setting up drip irrigation systems, as well as short-term cash credit for crops. In Bihar, putting women in self-help groups and connecting them to resources like training provided by agricultural extension has been successful; nevertheless, further scale is needed. Nowadays, casual labor accounts for one in four of the jobs held by women who work on rural farms. Women have a major role in many agricultural tasks, including as planting, transplanting, growing mulberry cocoons, and agro-processing. Through the establishment of greenhouses for vegetable gardening and the provision of subsidies through the state agricultural department, the Bihar state government has also encouraged crop diversification among women. In order to increase crop yields, women are also receiving training in climate-resilient agricultural techniques, which allows them to investigate planting patterns. Women in Bihar have a lot of chances in the agro-based sectors; by August 2016, the state's food processing facilities had grown from 399 to 407. Two thirds of the workers in the food processing sector are employed in the cereal-processing business, which dominates this sector. A 50% expansion in processing facilities might help lower the amount of perishable agricultural goods wasted, enhance farmer prices, and provide new job opportunities, according to the Bihar Economic Survey 2017-18 (GoB, 2018). Through the Integrated Development Project, the Directorate of Food Processing provides targeted support, including subsidies of 35% to individual units and 40% to clusters of food processing facilities. Women's job prospects might be improved by this program, especially in the processing and marketing of items made from maize. Mahila Producer firms have already started similar initiatives, sourcing mangoes from 130 and 28 farmers by 2017–18, and corn from 3,479 farmers. Furthermore, potatoes, spices, mangoes, and litchi have been purchased from farmers by the Samarpan Jeevika Mahila Kisan Producer Company. Mahadalit women in the Patna area have developed a profitable spice unit, demonstrating clever local marketing techniques. Evaluating these projects is essential to their growth (GoB, 2018). About one-fifth of Bihar's total rural revenue comes from the animal husbandry industry, which also offers a large number of job possibilities, especially for women and underprivileged groups. Small or marginal farmers, who only own one or two cow, make up over 70% of dairy producers in Bihar (WDC, 2018). Women make up about 80% of the workforce in this industry, although their efforts are sometimes overlooked. While males handle more apparent jobs like milking and marketing, women typically conduct less visible tasks like cleaning, gathering fodder, making cow dung cakes, and collecting cow dung (SEWA Bharat, 2014). Additional services offered to women in the animal husbandry industry include the provision of cow feed, veterinary treatment, artificial insemination, and insurance. Women get leadership development training in addition to education on the value of healthy eating, good cleanliness, child development, and their legal rights (WDC, 2018). With 538 women actively participating in the Bihar State Milk Cooperative Federation Ltd (COMFED) in 2017, there is a need to improve process efficiency. Only 17% of female dairy cooperative members are able to receive or use loans for activities linked to dairy, indicating that access to finance is still a major barrier.

### 3. LITERATURE REVIEW

Anabestani et al. (2024) conducted interviews with 14 exceptional female entrepreneurs to investigate the factors and difficulties associated with the founding and expansion of businesses and entrepreneurial endeavors. The study discovered that economic, social, personal, cultural, and environmental issues were the main drivers of women's entrepreneurship. The main challenges that women encountered while beginning and growing their own businesses were classified as bureaucratic, financial, family, psychological, infrastructural, policy-related, sociocultural, and technological. In their study, Dana et al. (2024) used bibliometric analysis and a Systematic Literature Review (SLR) to investigate the qualitative and quantitative research landscape of women's entrepreneurship in India. The research's four main clusters were identified by their findings: the marginalization that women entrepreneurs experience in India's informal sector, the microfinance's role interventions in empowering women entrepreneurs, and the contextual factors that influence women's entrepreneurship. After examining the effects of microfinance loans on female entrepreneurs in developing nations, Adebisi and Coatanzo (2023) came to the conclusion that the growth of female entrepreneurs in these areas is not significantly impacted by variables like interest rates, inflation, GDP, or population. Women's rights are supported by feminist thought in terms of gender equality and empowerment. Better decision-making is therefore essential to their success as entrepreneurs. Furthermore, a study conducted in 2021 by Shohel, Niner, and Gunawardana emphasizes the connection between improved decision-making and microfinance. Through mentoring programs, women may get knowledge from seasoned company entrepreneurs who can assist them in overcoming obstacles, growing their companies, and understanding market dynamics. Through networking with suppliers, clients, and other company owners, women may improve their chances of success in the marketplace. Non-financial services are especially important in this context. These services, which include business training, financial literacy programs, mentorship, and networking opportunities, aid women gain the skills and information needed to handle the complicated realities of company ownership (Rani, 2021). Women who participate in networking and mentoring activities inside microfinance programs, according to Das and Sahoo (2020), report feeling more confident, their businesses growing, and their social empowerment increasing. Many Indian women company owners are not well educated and do not possess effective business management abilities. Despite these obstacles, microfinance has demonstrated the capacity to alter the lives of women in Bihar by allowing them to start and develop enterprises. However, research indicates that the addition of nonfinancial services is critical to the long-term viability of these businesses (Kumari, 2020). Microfinance has considerably encouraged women's entrepreneurship in undeveloped nations like India. Gender stereotypes, poor literacy rates, and socioeconomic barriers have historically made it difficult for women in rural and semi-urban regions to get official financial services. Microfinance institutions (MFIs), which provide small loans and financial products tailored exclusively to female entrepreneurs, have been a critical instrument in closing this gap over the last several decades. Studies show that non-financial services like as networking, mentorship, training, and capacity-building initiatives are as crucial for the long-term success of women-owned businesses (Kumari & Sharma, 2020). According to research, women who get both financial and non-financial help from MFIs are more likely to succeed in business, attain financial independence, and make substantial contributions to community development (Jha & Sinha, 2019). Bihar is one of India's impoverished states, provides a revealing case study for investigating the influence of microfinance on women's entrepreneurial growth. The state has a high degree of poverty, low female literacy rates, and a highly deeply entrenched patriarchal system, all of which provide substantial hurdles for female entrepreneurs (Singh & Mishra, 2018). Microfinance institutions can assist break down these hurdles by providing women with knowledge and support, promoting both economic and social empowerment (Sharma & Singh, 2017). By providing women with vital skills like inventory control, customer interactions, supply chain management, and pricing tactics, microfinance institutions that provide business training programs contribute to the reduction of gender disparities (Sharma, 2017). According to Mayoux (2005), microfinance gives women more authority over how they handle the financial resources of their enterprises, which improves their ability to make decisions. Dietz (2003) draws attention to the fact that gender imbalance often favors males over women. The study examined a number of facets of feminist theory, concentrating on the subjectivity, identity, and political participation of women. The main areas where women have been marginalized by gender inequality are addressed by feminist philosophy.

Nonetheless, it is becoming increasingly obvious that financial resources alone may not be sufficient to empower female entrepreneurs or assure the success of their businesses.

### 4. OBJECTIVES OF THE STUDY

- To examine the role of microfinance institution services, their perceived value, and significance in promoting agrowomen's entrepreneurial development in Bihar.
- To investigate an exploratory research design aimed at observing the causal relationship between microfinance services and the development of agro-women's entrepreneurship in Bihar.

#### 5. RESEARCH METHODOLOGY

The study utilised an explanatory research design and a qualitative methodology. Initially, the explanatory design was used to explore the fundamental relation between the microfinance services and the development of agro-women's entrepreneurship in Bihar. The quantitative approach was also applied to address the core objective of the research. Data were gathered from 240 selected women clients in the Bihar service sector using a structured questionnaire based on a 5-point Likert scale. Additionally, secondary data concerning the number of women clients and other relevant information was obtained from institutional annual reports. The data collected via the questionnaire were analysed using SPSS version 21 and AMOS version 23. First of all, descriptive analysis was conducted to provide frequencies and percentages to interpret the respondent's characteristics and business profiles. Following this, a Measurement Model and Path Analysis were used to assess the validity and reliability of the instrument and to test the hypothesis regarding the impact of microfinance services on the development of agro-women's entrepreneurship. A SEM (Structural equation model) is a statistical tool which distinguishes the relationships among dependent variables, providing a framework for examining intricate interactions and testing theoretical concepts (Heir et al., 2017). SEM enables the assessment and representation of model, illustrating hypothesized connections between latent using path diagrams. It offers practical solutions to real world complex issues, that multiple linear regression cannot handle due to specific limitations and violations (Dogan, 2004).

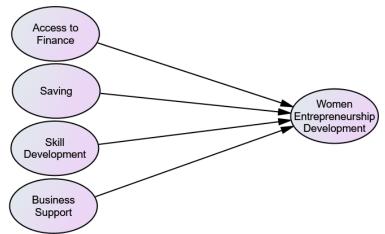


Figure 1.

#### 6. HYPOTHESIS

- H1: There are positive and significant effects of access to finance on women agro-entrepreneurs' development.
- H2: There are positive and significant effects of saving on women's agro-entrepreneurship development.
- H3: There are positive and significant effects of Skill development training on women's agro-entrepreneurship development.
- H4: There are positive and significant effects of business support service on women's agro-entrepreneurship development.

#### 7. ANALYSIS AND FINDINGS

**Table 1. Demographic Outline** 

Variable	Description	Frequency	Percent
Age	<20 years	63	26.3
	20-34	124	51.7
	35-50	40	16.7
	50<	13	5.4
Level of Education	Elementary Education	34	14.2
	Secondary/+2 School	43	17.9
	Graduation	106	44.2
	Post-Graduation	54	22.5
	Vocational School	3	1.3
Marital Status	Married	169	70.4
	Unmarried	71	29.6
<b>Enterprises Characteristic</b>			
•	Before 2000	140	58.3
Enterprise Year of	2000-2010	66	27.5
Establishment	2011-2020	23	9.6
	After 2020	11	4.6
Type of Business	Service	129	53.8
• •	Retail Business	68	28.3
	Manufacturing	11	4.6
	Construction	19	7.9
	Others	13	5.4
<b>Enterprise Status During</b>	Micro	157	65.4
Establishment	Small	83	34.6
Enterprise Current	Micro	153	63.8
-	Small	87	36.3

#### 8. RESPONDENT'S DEMOGRAPHIC PROFILE

The experience and education level of MSE owners or managers play a crucial role in shaping the growth, success, and long term profitability of these businesses. These factors directly influence decision making, operational efficiency, and the ability to adopt to market changes, all of which are essential for sustainable enterprise development. As shown in Table 1, 51.7% of respondents were aged between 20-34, while 26.3% were below 20 years old. Additionally, 16.7% were aged between 35-60, and the remaining 5.4% were above 50. This indicates that the majority 78% of the respondents were under the age of 35, suggesting that a significant proportion of the respondents are young, productive individuals focused on improving their living standards and contributing to the development of their communities. When looking at the respondents' highest level of education, the findings reveal that 14.2 % had completed primary education, 17.9% had attained secondary or high education, 66.7% held a first degree, and 1.3 % had vocational education. This suggests that most women surveyed possess basic literacy skills, which enables them to understand and benefit from the economic opportunities provided by microfinance services. Regarding marital status, 70.4& of the sampled women were married while 29.6% were unmarried. It outlines the characteristics of women-owned MSEs. The data shows that 48.5% of these businesses were recognised amid 2011 and 2020, while 43.6% linked the sector afterward 2020. An additional 6.1% were founded between 2000 and 2020, and 1.8% were established before 2000. Regarding the types of businesses women are engaged in 43.6% are elaborate retail trade, 23.6% in services, 13.9% in manufacturing, 12.7% in construction, and 6.1% in other types of businesses. The initial and current status of these enterprises reveals that 88.5% were initially established at the micro level, and 11.5% began as small-scale businesses. Currently, 83.6% are still functioning at the micro level, indicating that only eight of the 146 micro-scale enterprises have progressed to the smallscale level. This limited growth could be attributed to a lack of continuous oversight and support from local government supports, which are responsible for assessing MSE performance and promoting businesses to higher levels. These findings highlight the need for stronger governmental follow-up to help, MSEs grow from micro to small, and from small to medium, based on their capital growth and employment capacity.

Table 2. Reliability					
Factors	Cronbach`s Alpha				
Development of Women Entrepreneur	0.950				
Business Support	0.963				
Access to Finance	0.953				
Saving Practice	0.948				
Skill Development	0.980				

#### 9. RELIABILITY TEST

The internal consistency of a scale is evaluated by establishing if a particular item measures the same variable as others within the scale. This is done through the use of Cronbach's Alpha and composite reliability in a reliability study. In this study each variables have their alpha value fall between 0.948 and 0.980, which shows excellent internal consistency (Heir et al. 2007). Cronbach's alpha for all five variables was 0.827 overall, which is higher than the suggested cutoff of 0.8 and is considered as very good (Heir et al., 2007).

# **CONFIRMATORY FACTOR ANALYSIS (CFA)**

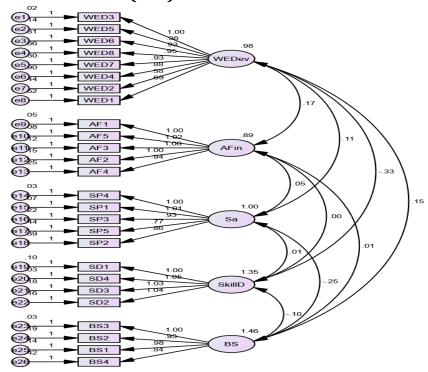


Fig 1. Measurement Model

When evaluating a scale's validity and reliability and comparing consistency across various versions and the population, a confirmatory factor analysis (CFA) is a useful tool. To validate the measurement variables and assess how well the measurement model fit the data, a CFA was used in this investigation. After calculating the composite reliability (C.R.) findings for five variables using the CFA, CMIN/DF = 4.613 was obtained. This value ranges from 0.885 to 0.942, and it is noticeably higher than the suggested value of 0.6 (Hair et al., 2013). Based on several fit statistics, the results showed a satisfactory match for both the structural models and the overall CFA assessment.  $\chi^2/df = 1.274$ , GFI = 0.825, CFI = 0.960, TLI = 0.955, PCFI = 0.845, and RMSEA = 0.067 were the CFA measurement model fit statistics.

Table 3. Mater Validity

Table 5. Mater valuity									
	CR	AVE	MSV	MaxR(H)	WED ev	AF in	Sa	Skill D	BS
WEDev	0.936	0.652	0.082	0.986	0.807				
AF in	0.972	0.874	0.033	0.979	0.183**	0.935			
Sa	0.948	0.786	0.043	0.982	0.116†	0.054	0.887		
Skill D	0.980	0.925	0.082	0.987	-0.287***	0.002	0.009	0.962	
BS	0.963	0.867	0.043	0.985	0.129†	0.011	0.208**	-0.069	0.931

VALIDITY CONCERN

No validity concerns here.

REFERENCES

**Significance of Correlations:** 

† p < 0.100

p < 0.050

\*\* p < 0.010

\*\*\* p < 0.001

#### **CONSTRUCT VALIDITY**

Construct Validity refers to the extent to which an instrument accurately measures the intended latent construct (Field, 2005). It assesses the precision of the measuring too; in producing accurate and reliable results (Pallant, 2020). In this investigation, both convergent and divergent validity were examined to evaluate the accuracy of the measurement tool.

#### **CONVERGENT VALIDITY**

Convergent validity refers to the extent to which different methods of measuring a latent variable produce consistent results (Cooper & Schindler, 2008). It involves assessing whether multiple items intended to extent the identical concept agree. When all item factor loadings are more than 0.6, the Average Variance Extracted (AVE) is more than 0.5, and the Composite Reliability values are more than 0.7, convergent validity is considered adequate (Hair et al., 2010). The degree to which different items consistently measure the same ideas is evaluated in terms of validity. There are no problems with convergent validity in this study because all factor loadings were above 0.6, the AVE values were higher than 0.5, and the Composite Reliability values surpassed 0.7 (Hair et al., 2010). The composite dependability values were 0.936, 0.972, 0.948, 0.980, and 0.963 for women's agro-entrepreneurship development, access to financing, savings, skill development, and business assistance, respectively. All of these values fall below the suggested criterion of 0.7. Moreover, all of the variables' Average Variance Extracted (AVE) values—0.652, 0.874, 0.786, 0.925, and 0.867—exceed the recommended threshold of 0.5. These results confirm that there are no issues with convergent validity.

#### DISCRIMINANT VALIDITY

The extent to which items differentiate between different theories or measure specific concepts is evaluated by discriminant validity. Cheung and Lee (2010) assessed this by looking at the square root of the average variance recovered for each construct and the correlations between the constructs (Fornell & Larcker, 1981). We used the standards set by Hair et al. (2010) and Chauhan (2016) to evaluate the measuring scales' discriminant validity. In particular, when the Average Variance Extracted (AVE) is less than the Composite Reliability (C.R.) and the Maximum Shared Variance (MSV) is below the AVE, discriminant validity is confirmed.

#### THE STRUCTURAL MODEL FITNESS

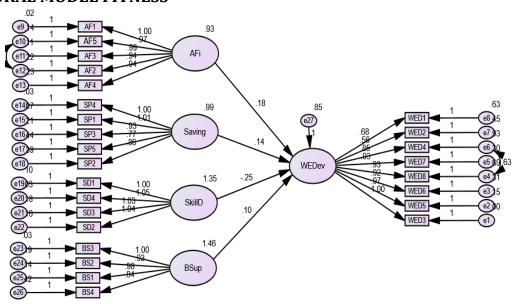


Fig. 2. Standardized Path Analysis

#### THE STRUCTURAL MODEL FITNESS

The main goal of the structural equation model is to ascertain how well a suggested model "fits," or, in other words, how well it accounts for the observed data. For structural model 1, which considers MFI Service as a conceptual model with four aspects (Credit, saving, skill development training, and business support), the women's agro-entrepreneurship development model fit statistics ( $x^2$  /df = 2.054, GFI =.802; CFI =.937; TLI =.929; PCFI = 0.832; RMSEA =.079). Take a look at Figure 2. Consequently, the measurement and structural equation model appropriate the data, and the model fit statistics values were found to be much higher than the recommended thresholds.

Hence, the structural equation evaluates how well a proposed model for credit, savings, skill development training, and business support are the four characteristics that the structural model takes into account while classifying MFI Service as a first-order component.  $\chi^2/df = 2.831$ , NFI = 0.907, GFI = 0.798, AGFI = 0.758, CFI = 0.937, TLI = 0.931, RMR = 0.107, and RMSEA = 0.088 were the fit statistics for the women's agro-entrepreneurship development model. The data is in good agreement with the measurement and structural equation model, as seen by these model fit statistics, which are much above the suggested standards.

Table 4. Hypothesis testing								
Hypothesis	Path analysis	Estimation	S.E	C.R.	P-Value	Decision		
H1	WEDev < AFi	.181	.062	2.900	.004	Accepted		
Н2	WEDev < SavingP	.137	.060	2.272	.023	Accepted		
Н3	WEDev < SkillD	248	.052	-4.782	***	Negatively accepted		
H4	WEDev < BSup	.103	.050	2.064	.039	Accepted		

Table 4 Hymothecic tecting

10. RESULTS AND DISCUSSIONS OF FINDINGS

There are significant objectives this study seeks to accomplish. The first is to look at how women's entrepreneurship is developing in relation to microfinance services, both non-financial (skills training and business support) and financial (loan and savings). Using maximum likelihood estimation, a structural equation model (SEM) was used to assess the desire hypotheses. Thus, in keeping with the goal of the study, this part will include the results and debates relevant to the hypothesis testing.

H1: THERE ARE POSITIVE AND SIGNIFICANT EFFECTS OF ACCESS TO FINANCE ON WOMEN AGRO-ENTREPRENEURS' DEVELOPMENT.

With a C.R. value of 2.900 (beyond the threshold of 1.96), a p-value of 0.004 (below the 5% significance level), and an estimated parameter for the influence of access to finance (credit services) on women's agro-entrepreneurial development, the data analysis findings show that the impact is substantial. The growth of women's entrepreneurship is positively impacted by the availability of financing through microfinance credit services, as indicated by the positive 0.18 standardized regression weight or path coefficient. This effect is statistically significant. As a result, the first hypothesis, which shapes that women agro-entrepreneurs' progress is favourably and considerably influenced by their access to finance, is certified. The result shows that women's agro-entrepreneurship in Bihar is strongly and directly influenced by their access to financing. Similarly, Mathur et al. (2021) found a strong correlation between the growth of agroentrepreneurship and microfinance services, including savings accounts, microcredit, skill development, and business assistance.

# H2: THERE ARE POSITIVE AND SIGNIFICANT EFFECTS OF SAVING ON WOMEN'S AGRO-ENTREPRENEURSHIP DEVELOPMENT.

With a p-value of 0.023 (less than the 5% significance level) and a C.R. value of 2.272 (above the 1.96 threshold), the results show that the estimated parameter for the influence of savings habits on women's agro-entrepreneurial growth is significant. The growth of women's entrepreneurship is strongly, positively, and directly impacted by the savings services offered by microfinance institutions, as evidenced by the positive 0.14 standardized regression weight. Savings have a favorable and considerable impact on the growth of women agro-entrepreneurs, which leads to the acceptance of the second hypothesis. These results imply that, among the Bihar women examined, the savings services offered by microfinance banks had the most beneficial influence on the growth of agro-entrepreneurship. According to Akula and Singh (2022) women's ownership and savings has the positive impact in India.

These results have the greatest beneficial influence on the growth of agro-entrepreneurship, among the Bihar women microfinance institutions' savings services appear. Akula and Singh (2022) found that women's attached their name to real estate and their authority to family finances which encourage them to pursue agro-entrepreneurship in India. As a result, this study also emphasizes how important it is for microfinance institutions to support women agroentrepreneurs by giving them access to cash and investment possibilities.

# H3: THERE ARE POSITIVE AND SIGNIFICANT EFFECTS OF SKILL DEVELOPMENT TRAINING ON WOMEN'S AGRO-ENTREPRENEURSHIP DEVELOPMENT.

Skill development training is a non-financial service offered by microfinance organizations. The examination of the direct parameter effect for this service indicates a negative but considerable influence on women's agro-entrepreneurial development. According to outcome, the p-value is 0.000, which is less than the 5% significance level, and the C.R. value is -4.782, which is more than 1.96 in absolute terms as well as the path coefficient, or normalized regression weight, is notably negative at -0.29, suggesting that skill development training has a detrimental but noteworthy impact on the growth of women entrepreneurs (Abebe and Kegne, 2023). As a result, the third hypothesis—which holds that training in skill development has a detrimental and substantial impact on the growth of women agro-entrepreneurs, is negatively accepted the hypothesis, means has need to improve in skill development. In the same way, Beriso (2021) discovered a negative correlation between women agro-entrepreneurs' income and agro-entrepreneurship training. Effective business training remains essential, even though the skill development training service provided by MFIs has a negligible beneficial impact in some situations. By providing women with the information, abilities, and resources needed to start, run, and develop a profitable company, it eventually promotes the expansion of agro-women's entrepreneurship.

# H4: THERE ARE POSITIVE AND SIGNIFICANT EFFECTS OF BUSINESS SUPPORT SERVICES ON AGRO-WOMEN'S ENTREPRENEURSHIP DEVELOPMENT.

A p-value of 0.039 (less than the 5% significance threshold) and a C.R. value of 2.064 (higher than 1.96) indicate that the estimated parameter for the impact of business assistance programs on women's agro-entrepreneurship development is essential. The expansion of women's agro-entrepreneurship is positively impacted by business support from microfinance institutions, as indicated by the positive 0.12 standardized regression weight. This effect is statistically significant. Thus, it is believed that business assistance programs have a good and significant impact on the growth of women agro-entrepreneurs. These results are consistent with those of Adera and Abdisa (2023), who emphasize the favorable and substantial effects of financial inclusion on women's economic empowerment. This highlights how crucial company assistance initiatives are in encouraging agro-entrepreneurship among women.

#### 11. CONCLUSIONS

Generally, women require easier access to modest loans (commonly for working capital), more alternatives for flexible collateral, repayment plans that fit their cash flows as a business, streamlined application procedures, and easier access to sayings accounts. The study did discover, however, that non-financial services, such skill development, had no impact on the expansion of female businesses. This shows that encouraging and supporting women's entrepreneurship by improving their access to financial resources is a more successful strategy. Even when other factors could also play a role in women's success as agro-entrepreneurs, the substantial beneficial impact of financial access underscores its significance in encouraging women to start their own businesses. Jalil (2021) discovered in a similar manner that the financial services offered by microfinance institutions significantly impact the growth of micro-enterprises in rural areas. Additionally, the results of the study show a substantial positive association between the growth of women's entrepreneurship and the savings services provided by microfinance organizations. This emphasizes how crucial microfinance organizations are in supporting women's business development by giving them access to financing and investment possibilities. Therefore, governments and policymakers have to actively support and promote these institutions in providing savings services to female entrepreneurs, as this may boost their economic empowerment and advance wider economic growth. The growth and long-term viability of women-owned micro and small businesses depend equally on the provision of effective non-financial services. In order to ensure stability and success over time, this entails providing training and assistance relevant to business, along with initiatives that facilitate market linkages. Women's agro-entrepreneurship is greatly encouraged by business training, which provides them with the information, abilities, and resources they need to start, run, and grow their enterprises.

Moreover, by giving women agro-entrepreneurs access to networking and mentoring opportunities—both essential for boosting their resilience and business acumen—business support services may have a big impact on how they grow. Supporting women both materially and non-materially is as essential as it enhances women's agro-empowerment, boosts income-generating activities, and enhances overall business success. By analysing the services offered by microfinance institutions (MFIs), such as credit, savings, and insurance, this study made a substantial contribution. It is regarded as one of the seminal studies that has significantly advanced knowledge of microfinance theory and women's entrepreneurship (WE) in the Indian setting (Akula and Singh, 2022).

There is opportunity to increase women's involvement in agricultural processing. As a result Bihar has a great biodiversity, farmers there plant a wide variety of crops beyond simply food grains. These encompasses tea, oilseeds, fibers, fruits, and vegetables. Additionally, Bihar produces an enormous quantity of milk. As such, the state offers agricultural enterprises an extensive range of potential customers.

### PRACTICAL IMPLICATIONS

The study discovered that because fewer Indian women engage in agro-entrepreneurship, they make a smaller contribution to the country's economic growth. The study offered a useful addition by looking at microfinance institutions (MFIs) as a potential remedy, demonstrating that MFIs might be crucial in helping Indian women with this problem. According to the findings, practitioners ought to support MFIs' involvement in encouraging women to start their own businesses. The Indian government and gender-focused groups should also endeavour to empower women to make decisions and to move outside the house, as they are essential for improving income-generating activities. Thus, the results of this study showed that the assistance of MFI services may greatly enhance women's business in India.

#### **CONFLICT OF INTERESTS**

None.

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