Examining the Rural and Entrepreneurial Development through Microfinance

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Abstract: *This research aims to investigate the impact of microfinance on rural/socio-economic development and entrepreneurial skill development. Particularly, the present study aims to explore the impact of microfinance on social development, financial empowerment, education, healthcare, economic independence and entrepreneurial development. Data were collected through structured questionnaires from the beneficiaries of National Rural Livelihood Mission (NRLM) erstwhile Swaran Jayanti Shahri Rozgar Yojana (SJSRY) microfinance scheme in the Union Territory of Jammu and Kashmir, India. Results reveal that microfinance facilitated social development, improved financial empowerment, and promoted decision making relating to education and healthcare among beneficiaries. The findings also indicate that microfinance helps to increase entrepreneurial skill development among the beneficiaries. This study offers an insight into how microfinance not only eliminates poverty but also facilitates social development and entrepreneurial skills. Such findings have many key implications for academics, policymakers and microfinance institutions.*

Keywords: Microfinance, Financial Empowerment, Entrepreneurial Development

Introduction:

Rural development has received global attention, particularly in developing countries such as India where the most of rural population living uncertain economic- life because of less employment avenues within agriculture or service sector. The main purpose of rural development is to improve the quality of life (QOL) of rural people by eliminating poverty by means of wage employment or self-employment programmes, offering community infrastructure facilities like health, education, drinking water, road connectivity, electricity, and rural housing. In India, numerous people have no association with microfinance institutions (MFIs). Microfinance is usually regarded as an efficient means in poverty reduction/rural development, as access to microfinance helps people/beneficiaries to formulate long-standing consumption- and investment decisions-, participation in productive/decision making activities and tackle with unforeseen short-range shocks (e.g., Caskey et al., 2006; Lal, 2018). Further, the basic reason

is that owing to increasing financial services, lowest-income individuals have capability to take part in the economic marketplace and use entrepreneurial opportunities via start-up novel businesses, expanding the present business and/ or initiating novel activities (Bansal & Singh, 2019). It is thus an important link and primary step to attain comprehensive growth and development. Access to microfinance, particularly to poorer and self helpless groups (SHGs), is a precondition for poverty eradication /reduction, economic growth, social cohesion, employment generation, and entrepreneurial development, as it offers them an opportunity to invest and save, to insure their houses and facilitates them to reduce poverty. Increased access to microfinance to rural/poor people helps them to power themselves diminish poverty by investing in microenterprises and human capital, thereby diminishing aggregate poverty. To understand and investigate the relationship between microfinance, rural or socio-economic development, poverty and entrepreneurial development would assist policymakers to design or implement programmes, which may extend access to micro-financial services leads poverty elimination or income equality (Hassan & Islam, 2019; World Bank, 2001; Wun et al., 2019). The microfinance services which aimed to rural poor can play a crucial role in social-economic development and entrepreneurial development in a rural section that eventually leads to elimination of poverty (Shirazi, 2012; Wun et al., 2019). Relatedly, various microfinance works advocate that it exerts significant effect on poverty reduction- and household well-being at different levels- like health, household nutrition, asset acquisition, children education, food security, social-cohesion and women empowerment.

Various studies suggest that the impact of microfinance acts in a different way from one context to another and its impact is based or (dependent) on enterprise development, financial literacy, group-cohesion, attitudes to debt, financial service providers and so-on (Armendáriz et al., 2005; Wun et al., 2019). Regardless of the rising interest and activities in small business development in India generally and Jammu and Kashmir (J&K) particularly, researchers paid little attention to microfinance as a device for entrepreneurship and rural development in rural areas. Thus, the aforementioned gaps in extant literature call for the present study. In this research an attempt has been made to throw light on beneficiaries' perception about rural/socio-economic development and entrepreneurial development through microfinance schemes, National Rural Livelihood Mission (NRLM) in J&K, India. Particularly the study has following objectives: 1) to investigate the impact of microfinance in social development, 2) to explore the microfinance role on financial empowerment, 3) to examine the role of microfinance in developing education, healthcare and economic independence, 4) to investigate the impact of microfinance in entrepreneurial development, and 5) to provide suggestions to unravel the substantial socio-economic potential that finally leads to rural and entrepreneurial development of underprivileged society.

Review of Literature:

The widespread growth of economy is not only to produce social-justice or unprejudiced development, but it can be joined with poverty alleviation and employment generating avenues for marginalized and deprived sectors of society (e.g., Chibango, 2014; IBEF, 2020). Poverty is defined as the lack of basic human needs that generally incorporates food, water, shelter, clothing, sanitation, health care and education (Erenstein, 2011). It also refers as an aspect of unbalanced social relationships and social status, dependency, social exclusion, and reduced ability to develop or to participate in meaningful links with others in society (e.g., Davis, 2002).

Relatedly, microfinance is considered as a key tool to empower developing countries by supporting entrepreneurship (Agboola & Osunde, 2012; Bansal & Singh, 2019). Researches like Weber & Ahmad (2014) contend that microfinance is required to lift emerging nations out of poverty (Hassan & Islam, 2019). Microfinance has been extensively documented as a key factor for socio-economic well-being and poverty alleviation (Ahmad & Ahmad, 2016; Hassan & Islam, 2019; Imai et al. 2012; Imai & Azam 2012). Microfinance facilitates to smoothen the household expenditure, expand the household income and manage with economic fluctuations and shocks of poor people (Imai et al. 2012; Samer et al., 2015; Wun et al., 2019). Many studies advocate that the impact/effect of microfinance acts in a different way from one context to another. For example, Morduch and Graduate (2002) found that, Zimbabwe microfinance has a significant and positive influence on poverty reduction. Furthermore the average income of microfinance customers was higher than new-customers or non-customers. Uganda- microfinance positively affects asset accumulation and rural household's income diversification (e.g., Morris & Barnes 2005). As per the panel data finding, Bangladeshi microfinance also indicated positive impact on poverty elimination/reduction and household expenditure specially non-food and food context (Khandker, 2005).

Recently, in Sub-Saharan Africa countries, microfinance plays a crucial role in socio-economic development and poverty reduction (Van Rooyen et al., 2012). Similarly, at macro level, microfinance exercises a significant/ positive influence on poverty reduction in urban areas (e.g., Imai et al. 2012). Pakistani microfinance further showed positive effect on poverty-alleviation in household expenditure and income in health and clothing context (Ghaliba, Malki, & Imai, 2014). Al-mamun et al. (2014) identified that, Malaysian microfinance positively affects economic vulnerability amongst extreme poorer families. On the basis of 'retrospective data' collected from Ghana, India, and Guatemala MFIs, the effect of microfinance positively affects borrowers' businesses and households (Mcintosh, Villaran, & Wydick, 2011). The microfinance significantly impacts social development and entrepreneurial development as advocated by researchers like; Agboola & Osunde, 2012; Bansal & Singh, 2019). Microfinance is considered as an efficient means to empower emerging nations by encouraging entrepreneurship (Weber & Ahmad, 2014). Well developed microfinance can efficiently alleviate poverty and increase social development, promotes financial empowerment, enhances education, healthcare and economic independence and develops entrepreneurial skills development. Based on above discussed arguments, the hypotheses are:

H1: Microfinance enhances social development.

$H1_0$: Microfinance does not have any impact on social development

H1a: Microfinance significantly impacts social development.

H2: Microfinance develops financial empowerment.

$H2_0$: Microfinance does not impact financial empowerment.

H2a: Microfinance significantly impacts financial empowerment.

H3: Microfinance increases the decision-making ability relating to education, healthcare and economic independence.

$H3_0$: Microfinance does not increase decision-making ability

H3a: Microfinance increases the decision-making ability

H4: Microfinance develops entrepreneurial skills development.

$H4_0$: Microfinance does not build entrepreneurial skills

H4a: Microfinance plays a significant role in entrepreneurial skill development

Research Method:

This study is descriptive is nature and data were collected by adopting a structured questionnaire from individual beneficiaries, SHGs of Swaran Jayanti Shahri Rozgar Yojana (SJSRY) Scheme in two regions i.e. Anantnag (southern region) and Baramulla (northern region) of Jammu and Kashmir, India. Purposive sampling technique has been considered suitable for this scientific examination, as such type of probability sampling helps the researchers to select the units, which they think would be handy particularly for the purpose of acquiring precise/accurate data (Babbie 2008).

The research was conducted with the 'sample-size' of 410 that includes two groups- first group comprises of individuals called treatment group (i.e., those joined microfinance program) and another group called control group (i.e., individuals not joined microfinance program) of 205 participants each. The method of employing both groups (treatment and control) to investigate the impact of microfinance was also employed (e.g., Weber & Ahmad, 2014).

All the measurement items were adapted from existing studies including; Bansal & Singh, 2019; Garikipati et al., 2016; Weber & Ahmad, 2014). The scale items were gathered on 5-point scales (1 = *strongly disagree* to 5 = *strongly agree*; please see measurement items in Table 2). So as to assess the difference; paired sample t-test was adopted that underlined the difference between both treatment-group and control-group. As a result of this, this study identified the impact of microfinance on socio-economic development and entrepreneurial development of beneficiaries. Prior to the main study, pilot-study was conducted with a sample of 40 beneficiaries in 10-days period. The results indicated no concerns about the questionnaires' readability or item clarity. The reliability test results (please see Table 2) also indicate that all factors have satisfactory internal consistency as Cronbach (α) values are exceeding 0.70 (Hair et al., 2008). Of the respondents, 45 percent were males and 55 percent were females. With respect to age of respondents, 35 percent of the respondents were between 18-29 years of age, 40 percent were between 30-40 years and 25 percent were above 41 years of age.

Data Analysis and Discussion:

This paper adopted exploratory factor analysis (EFA) to identify the broader dimensions/factors underlying the impact of microfinance on its beneficiaries. Table 1 indicates that, Bartlett's test of sphericity is significant at 0.0001 level which reveals significant correlations among variables. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy falls in acceptable range (above 0.50) with a value of 0.8 (Hair et al., 2008) (see Table 1). These measures indicate that the variables are appropriate for factor analysis. The factor loadings vary from 0.73 to 0.93. The analysis shaped 4-factors which contributed to a satisfactory 66.3 percent of variance explained. The Eigen values ranges from 4.256-1.492. Overall description of 4-factors with 21 items/ variables emerged is shown in Table 2.

Table 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.800
Bartlett's Test of Sphericity	Approx. Chi-Square	4148.340
	Df	351
	Sig.	.000

Table 2: Factors and Measurement Items

Measurement items	Loadings	Eigen-value	Cronbach-α	Variance
Social development		4.256	0.823	41.54
New skilled acquired	0.79			
Interaction	0.80			
Motivation	0.89			
Participation in social activities	0.73			
Networking	0.76			
Access to capital	0.82			
Financial empowerment		3.125	0.859	10.18
Income spending	0.91			
Control spending	0.89			
Spending decision	0.78			
Loan decision	0.85			
Loan utilization	0.92			
Decision making relating to education, healthcare and economy		2.761	0.847	8.13
Education of children	0.90			
Healthcare	0.93			
Purchase of household goods	0.89			
Family planning	0.82			
Buy/sell of assets	0.86			
Entrepreneurial skills		1.492	0.913	7.45
Commitment	0.91			
Self-confidence	0.80			
Willingness to take risk	0.82			
Leadership	0.79			
Knowledge gained	089			

Descriptive analysis and Paired sample t-test analysis has been performed to investigate the impacts of microfinance on rural (social/ economic), empowerment or entrepreneurial development by underlying the difference between treatment-group and control-group.

The descriptive analysis which includes mean and standard deviation was carried out to identify the 'social development' of individuals of both treatment and control groups. As indicated in Table 3, the mean-difference of six factors includes '*participation in social activities*': 0.79, '*increasing skill'*: 0.35, '*interaction with people'*: 0.60, '*motivation':* 0.48, '*developing social contacts'*: 0.88, and '*access to capital'*: 0.44. Results revealed that mean-difference for '*developing social contacts'* achieved maximum (0.88). The higher mean-difference value of variable '*social contacts'* indicates that individuals who joined microfinance program increased their social networking and/or relationship developing skills.

The study also adopted Paired sample t-test in investigating the individual's difference between the mean values of both treatment and control groups. Significant p-value has been attained (Â 0.05), thus supports the alternate hypothesis (HIa), which is "microfinance significantly impacts social development". It shows that individuals benefited via microfinance are most developed socially while joining the microfinance program. The results are in line with researchers who suggested that network of individuals and skill development relating to social capital leads to empowerment (e.g., Ul-Hameed et al., 2018). Similarly, our results are parallel with Bansal and Singh (2019) study which advocated that after joining microfinance and SHGs, people can obtain more skills, additional self-confidence and social development.

Table 3: Paired samples t-test relating to Social Development

Measurement items	M	MD	SD	t-value	Sig
1-Pair					
Participation in social activities					
Treatment Group	3.63	0.79	0.78	6.52	0.000
Control Group	2.84		0.71		
2-Pair					
Skills acquired					
Treatment Group	3.47	0.35	0.77	5.67	0.000
Control Group	3.12		0.68		
3-Pair					
Interaction					
Treatment Group	3.43	0.60	0.82	4.91	0.000
Control Group	2.83		0.77		
4-Pair					
Motivation to work					
Treatment Group	3.45	0.48	0.74	4.02	0.000
Control Group	2.97		0.70		
5-Pair					
Social contacts					
Treatment Group	3.71	0.88	0.79	7.53	0.000
Control Group	2.83		0.72		
6-Pair					
Access to capital					
Treatment Group	2.69	0.44	0.69	3.85	0.000
Control Group	2.25		0.65		

Note:M = Mean; MD = Mean difference; SD = Standard Deviation; Sig = Significance (two-tail)

Relatedly, mean (M) and standard deviation (SD) as shown in Table 4 of given factors has been examined. The mean difference for all five-factors in both treatment and control groups is as follows: '*Income spending'*: 0.29, '*control spending'*: 0.45, '*spending decision'*: 0.36, '*loan decision'*: 0.35, and '*loan utilization'*: 0.31. Findings emphasized that microfinance programs have better support for people by its spending income and control spending as per their own choice, spending decision, and matters relating to loan decision and loan utilization. It demonstrates that individuals are interested in income spending, control spending, loan decision and loan utilization matters.

As indicated in Table 4, significant p-value was attained (Â 0.05) as per the Paired sample t-test results for factors of financial empowerment, thus

accepts the alternate hypothesis (H2a), which is 'microfinance has significant impact on financial empowerment. This illustrates that because of microfinance people increased their financial position and achieved economic independence. These results are similar to the studies of Weber and Ahmad (2014) argue that microfinance empowers weak sections of the society to confront poverty and advance inclusive development by raising the economic opportunities for the low-skilled rural and poor households which lead to economic development, socio-economic empowerment and poverty alleviation. The results are similar to various other works revealing a relationship between microfinance and empowerment (Godinho, Eccles, & Thomas, 2018; Montgomery & Weiss, 2011).

Table 4: Paired samples t-test for Financial Empowerment

Measurement items	M	MD	SD	t-value	Sig
1-Pair					
Income spending					
Treatment Group	3.20	0.29	0.81	5.78	0.000
Control Group	2.91		0.78		
2-Pair					
Control spending					
Treatment Group	3.31	0.45	0.83	7.14	0.000
Control Group	2.86		0.79		
3-Pair					
Spending decision					
Treatment Group	3.24	0.36	0.80	5.96	0.000
Control Group	2.88		0.76		
4-Pair					
Loan decision					
Treatment Group	3.15	0.35	0.83	4.02	0.000
Control Group	2.80		0.81		
5-Pair					
Loan utilization					
Treatment Group	3.27	0.31	0.76	6.83	0.000
Control Group	2.96		0.72		

Note:M = Mean; MD = Mean difference; SD = Standard Deviation; Sig = Significance (two-tail)

Mean analysis has been used to investigate the participation level of individuals in household decisions for treatment as well as control groups. As shown in Table 5, the mean-difference of five-factors includes '*matters about education of children*': 0.31, '*purchase of household goods'*; 0.43, '*purchase of property/asset'*; 0.39, and '*matters about family healthcare';* 0.62. It uncovers that microfinance programs have improved the individuals' participation in decision making relating to healthcare, education and household matters. It also represents the enhanced issues for health among people.

This study performed the paired sample t-test to examine the difference between mean values of both treatment as well as control groups. Significant p-value has been attained (Â 0.05), thereby supports the alternate hypothesis (H3a), which is 'microfinance increases the decision-making ability of people relating to education, healthcare and purchase of household/assets. The results are corresponding to Isangula (2012) and Rehman et al. (2015) studies, which advocated that due to microfinance the individual's income can be enhanced and likely spend the more on education, health, and nutrition purposes.

Table 5: Paired samples t-test for Decision Making relating to Education, Healthcare and Economy

Measurement items	M	MD	SD	t-value	Sig
1-Pair					
Education of children					
Treatment Group	3.15	0.31	0.81	5.73	0.000
Control Group	2.84		0.78		
2-Pair					
Purchase of household goods					
Treatment Group	3.41	0.43	0.83	6.12	0.000
Control Group	2.98		0.80		
3-Pair					
Purchase/sell of assets					
Treatment Group	3.15	0.39	0.76	4.85	0.000
Control Group	2.76		0.74		
4-Pair					
Healthcare-related decisions					
Treatment Group	3.47	0.62	0.84	6.85	0.000
Control Group	2.85		0.80		
5-Pair					
Family planning					
Treatment Group	2.81	0.06	0.71	1.53	0.163
Control Group	2.75		0.68		

Note:M = Mean; MD = Mean difference; SD = Standard Deviation; Sig = Significance (two-tail)

Mean and standard deviation (Table 6) of several entrepreneurial skill development parameters were measured. The mean-difference was evaluated for both groups who benefited microfinance and the ones who didn't adopt it. The mean differences of various factors of entrepreneurial skill development includes '*commitment to work*': 0.28, '*self-confidence*': 0.31, '*willingness to take risk*': 0.08, '*leadership qualities*': 0.23, and '*knowledge gained*': 0.38. Our results revealed that individual's self-confidence of the treatment group has been more and working outside for livelihood. People were most committed to work as the credit needed to continue their every day works that made them self-reliant. People increased the leadership skills and abilities to take charge of their works and the decisions about it. Thus, due to credit availability people were somewhat most willing to steal the calculated risk relating to their businesses. As a result of microfinance, the people can also gain enhanced knowledge.

Table 6 also calculated the p-value for entrepreneurial skill development. Proposed H4a advocated that "microfinance improves entrepreneurial skills between people" was supported as significant value was obtained for all factors (Â 0.05). It explains that when people obtain microfinance for their business activities, they feel empowered- and develop self confidence by managing the entrepreneurship (business) activities daily. Accordingly, people are capable to capture the leadership role and are largely committed to their job. While starting their business, individuals understand somewhat new each day and thus obtain more information. Our findings are consistent with Agboola and Osunde (2012) and Bansal and Singh (2019), which claimed that microfinance played an important role in entrepreneurial development.

Table 6: Paired samples t-test relating to Entrepreneurial Skill Development

Measurement items	M	MD	SD	t-value	Sig
1-Pair					
Commitment to work (ES1)	3.26	0.28	0.84	5.86	0.000
Commitment to work before Microfinance (ES1B)	2.98		0.79		
2-Pair					
Self-confidence and fearless (ES2)	3.20	0.31	0.85	4.20	0.000
Self-confidence before Microfinance (ES2B)	2.89		0.79		
3-Pair					
Willingness to take calculated risk (ES3)	3.05	0.08	0.79	3.82	0.002
Willingness to take calculated risk before Microfinance (ES3B)	2.97		0.73		
4-Pair					
Leadership and Control (ES4)	2.92	0.23	0.79	4.83	0.000
Leadership and control before Microfinance (ES4B)	2.69		0.77		
5-Pair					
Knowledge gained (ES5)	3.25	0.38	0.76	6.64	0.000
Knowledge possessed before Microfinance (ES5B)	2.87		0.65		

Note:M = Mean; MD = Mean difference; SD = Standard Deviation; Sig = Significance (two-tail)

Conclusion and Implications:

This study aims to investigate the rural (socio-economic) and entrepreneurial development through microfinance. The study results revealed that microfinance facilitated social development, advanced financial empowerment and promoted decision making relating to education and healthcare among beneficiaries. The findings further uncover that microfinance helps to increase entrepreneurial skill development among the beneficiaries. For the theoretical perspective, our research contributed novel support on the *impact of microfinance* on socio-economic (rural) and entrepreneurial development of poor (low-income) households particularly those who cannot access microfinance or financial services because of their poverty (Imai et al. 2012; Wun et al., 2019). It facilitates them to expand their household income, improve their poverty and entrepreneurial skill development.

The study findings have many key implications for policymakers and microfinance institutions. This study offers an insight regarding the microfinance role on rural development and entrepreneurial skill empowerment in an emerging country perspective i.e. Jammu and Kashmir, India. Correspondingly, the present research advocates that microfinance has the capability to add substantially to accomplishment of Indian *new economic models* and *new economic policy* 2020. It does so, because of increasing the socio-economic wellbeing of low income/poor people and rural development. It also plays a vital role in employment generation particularly for those with no way of earning or with lower-education. Thus, microfinance unlocks a chance for beneficiaries/customers/ borrowers to play important part in socio-economic/rural development.

Further, microfinance also helps to save for urgent/future situations to cope up with shocks. People likely invest a fine amount of their income from microfinance loans on children's education and/or healthcare purposes. Microfinance can be effective in its purpose of poverty reduction once users (beneficiaries) are capable to increase their

quality of life (QOL) via the income produced due to microfinance loan (Ukanwa et al., 2017; Wun et al., 2019). Due to microfinance, people are economically and socially empowered that lay the foundations for social-development and financial empowerment (Bansal & Singh, 2019). This result is corresponding to Montgomery and Weiss (2011) representing an association between microfinance and empowerment.

Our research also shows that microfinance facilitates individuals to build entrepreneurial skill development and run and progress their own micro-enterprises. Microfinance promotes self-worth, self-confidence, personal development, and increases the individual's social capital and development. Due to microfinance, people would attain more awareness and acquire enhanced knowledge. This research makes a contribution towards microfinance literature linking to rural development, poverty alleviation, and entrepreneurial skill development fulfills the research gap to some-extent by investigating the impact of microfinance on social development, financial empowerment, education, healthcare, economic independence and entrepreneurial skill development through National Rural Livelihood Mission. Our study can assist the policymakers, microfinance institutions and various stakeholders in developing social development, education, healthcare, and entrepreneurial development among the beneficiaries of poor rural households.

Limitations and Scope for Research

This study also has some limitations that offer the opportunities for future research. Firstly, this study was conducted in Jammu and Kashmir, India, thus findings have limited generalizability. Therefore, further studies can explore different cultures and different cities. Second, the present empirical study has been relied on cross-sectional data. Thus, in future perspective, longitudinal research study would be adopted to explore the impact of microfinance on socio-economic development over a longer time span. Third, future research can also add a moderating effect of gender, age, education, income in context of research. Fourth, future study can investigate the development/empowerment of women only; hence the better picture of women can be explored in the society. Fifth, our research only takes into account the beneficiaries of Swaran Jayanti Shahri Rozgar Yojana (NRLM) microfinance scheme; future research will examine the other schemes including Swarnjayanti Gram Swarozgar Yojana (SGSY) for further investigation. Finally, our study has investigated the impact of microfinance on rural/socio-economic, financial empowerment, entrepreneurial development. Therefore, future research will explore the effect of microfinance on many other parameters or factors including purchasing power and sustainability of microfinance customers.

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