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Is Microfinance a Magic Bullet for the Well-being of Poor Households in Pakistan?

A Case Study of Southern Punjab

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Abstract

Microfinance is used one of the tools for the poverty reduction. Microfinance institutions supply small loans to poor people, farmers and small enterprises. The research provides analysis of microfinance and poverty reduction at Muzaffargarh district Punjab Pakistan. This study is based on the qualitative and quantitative methodologies in order to find out the feasible solution of this research question: to explore the role of microfinance on reduction of poverty in rural areas? The research mainly focus on the impact of NRSP on this area, borrowers have been taken as a sample from NRSP and customers selected randomly. Multi stage sampling techniques were used to get total of three hundred respondents and finally analyzed by using SPSS. Data were collected to close ended and open ended questionnaires. Data analysis was based on descriptive statistics using various statistical tools percentages, frequency distribution and empirical analysis was conducted by using Logit regression model and Paired *t*-test. The research finds that provision of microfinance is very useful in poverty reduction. The result of the research also show that microfinance borrowers increase their monthly income and expenditure on health, education and eatables. Study highlight significant impact of microfinance in eradicating poverty. There are still high potential markets that need microfinance but with the high interest

rate by these microfinance institutions makes it difficult for people to borrow. It is recommended that by reducing interest rate microfinance institutions can reach the maximum number of borrowers; this will enable poor households to get rid from the web of poverty.

Keywords: NRSP, Microfinance, Rural Areas of Southern Punjab, Poverty Reduction, Logistic Model

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INTRODUCTION

Background of the Study

One worldwide problem that has received a lot of attention is poverty. It has been the hub of policy makers for a considerable amount of time. Poverty is an issue that people worldwide are dealing with. The degree of experience lacking in a family or country might be conceptualized as poverty. Pakistan is experiencing a variety of forms of poverty. As to Nizami and Hizam (2023) [1] those who are impoverished often do not have access to secure housing, decent water, good schools, or medical treatment. According to Arshad A. (2018) [2] microfinance is essential to reducing poverty in Pakistan. When low-income family families require access to formal economic institutions, microfinance provides them with financial services (Tasos, 2020) [3]. What microfinance means is "giving access to financing implies, to an extraordinary of needy individuals, by allowing them to utilize their capacities in the support of a solid improvement". The organization that seeks to provide economic services to the underprivileged is known as microfinance; these services include financial evaluation, exchanges, protection, and investment funds. Microfinance institutions, or MFIs, provide savings, insurance, and transfer services. Microfinance institutions also integrate other social services including

education and training, organizational assistance, fitness, and capacities in line with their improvement aims.

The word poverty is extracted from the Latin word “pauper” means “poor. It can be describe as the inability to afford or have access to basic needs like clothing, shelter, adequate amount of food etc. Poverty can be defined as the condition in which one have fewer resources or less income to satisfy basic needs. Poverty has many bad aspects. It is the base of ill. It creates diseases, insecurity and stigmatization. Moral values are badly affected by poverty. It leads to drug addiction and have very negative effects on environment and most of all it trigger the terrorist activities and extremist attitudes. .therefore fighting against poverty is extremely important and urgent task for the whole world. Poverty is an ethical concept, not a statistical one. It is not to be deprived of basic necessities such as food shelter and cloth. it can be summed up as a lack of capability, to overcome ills of the society like violence, hunger, ignorance, illness, injustice.

Microfinance is a specific way of processing credit. It provides small and short term loans to micro entrepreneurs (Zaidi, 2005) [4]. The economic development of a country is linked with its level of poverty. Social reorganization of natural resources has not been considered completely (empowerment vs. alienation people, sustainable use vs. depletion of environment). Poverty reduction is the indicator through which the economies with positive growth rate of gross national product (GNP) were measured. This acknowledgement emphasizes on the achievement of wealth and technology as a path for development and assumed that improved lives for all would be natural consequence (khan, 2005) [5].

“Microfinance is the supply of loans, savings, and other basic financial services to the poor” (CGAP). It gives financial services like, saving opportunity, loan facility insurance of health and business and transfer of money to the poor which are considered unbendable. Microfinance helps their business to work smoothly and makes their own assets. Although Pakistan’s economy is in stable growth by comparison during the 1990s but poverty and discrimination is stepping up. The World Development Indicator 2015 of the World Bank indicated that over 50 percent of population of Pakistan living under below poverty line on the basis of US\$ 1.25 per day although Pakistan has responded positively to overcome the extreme poverty by setting ‘poverty alleviation program’ as its overcoming task. Keeping in view the essential role of microfinance in decreasing poverty, government of Pakistan has launched a program for the development of microfinance sector to provide poor a broad domain of financial services in a sustainable manner.

Poverty is among the burning social problem of Pakistan. It is not the issue of Pakistan alone, but the issue of entire globe. Poverty creates instability in society as it intensifies the class antagonism which triggers crimes, robbery, theft, violence, lawlessness, injustice etc. To satisfy peoples' basic needs is the fundamental responsibility of a country. Basic needs include shelter, food and clothing. Inability to satisfy these needs causes socio-economic problems. Failure in solving these problems timely has lead to a catastrophic situation in society often in the form of deviant behavior like lawlessness, corruption, insecurity and illiteracy etc.

Poverty can be examined as a living standard indicator like poor health, inadequate food, hunger, hunger, education lack, alienation, social exclusion and so on. To ensure comparability of poverty estimates over the time, Financial Services provided to low income group from

“Microfinance Institutions” is defined as Microfinance. Practically, the term is associated to loans and other services. To provide very small loans to unsalaried borrowers these institutions are using new methods which are developed recently, with little or no identity. These methods included liability and group landing, pre future loans if existing ones are paid completely. Microfinance has emerged as an alternative source of financing as traditional commercial banking sector does take into poor bankable. Traditional commercial banks do not supply finances to the poor because these people do not fulfill the eligibility criteria, including collateral. Thus, in most countries poor people truly have no access to formal financial services. Microfinance has come as noble alternate for in formal credit an intended and powerful tool for reducing poverty in many countries among people who are financially fragile and vulnerable but they are active economically.

In 2006 only 0.7 million people have access to micro finance services in Pakistan which has been raised to 2.4 million in 2013. Pakistani peoples are daily on risk in trying to establish new income sources and to enhance their earning. With the goal of providing credit to poor people without indemnity and alleviating poverty by the struggle of poor microfinance program was first started in Bangladesh in 1976 by Professor Dr. Younas. In 1997, addressing to micro credit summit in Washington D.C, he compared his dream to remove poverty with the pursuit of man to fly 100 years ago. He said that he is very hopeful about the world free of poverty through microfinance program although he started this program from very small level. He ensures the success of program in future but according to him it will take enough time accomplish.

Contrary to other microfinance services, study about the impact of microcredit is very wide. There is huge dissimilarity between microcredit and microfinance. Microcredit typically means to the supply of very small loan for unsalaried borrowers with little or no indemnity. Based on automated scoring Consumer credit provides to sailed worker usually not included in the definition of the microcredit. On the other hand microfinance is the arrangement of financial services like insurance, money transfer, credit and other financial product provided by the various service providers targeted at low income and poor people. Microcredit can provide arrange of benefits like long term increase in income and consumption that poor households highly value.

Many studies endorse the consequential advantages of microcredit. However, only few succeeded to tackle the methodological challenges. In fact, most professional econometricians do not regard many studies as meaningful. New and clear picture can be produce as new wave randomized control trials are now in process. Even so, there is a great endorsement from borrowers that microcredit help to improve their lives. To ensure to continue to the access to the services in the future they repay their loans devotedly. Empirical research on the role of financial services like money transfer, savings, insurance etc, is very limited because these services has developed more recently but there are strong indications that poor people values such services. Microfinance institutions attracts the borrowers by offering good voluntary savings services.

Savings are considered to be the “forgotten half of microfinance”, because of the lack to former deposited services. Most poor people do not use the informer mechanisms to save. . They may hide the cash in whole or in form of animals or jewelry that can be sold out at any

time in the future, or stockpile other materials. Cash can be stolen, animals can get sick, and neighbors can run off so these saving methods are not secure. Often these assets are illiquid as if someone needs a small amount of money he or she cannot sell just the cow's leg. The poor want convenient and safe deposited services. Microfinance institutions that offer good services of savings usually attract borrowers.

This research is about microfinance and its role on poverty reduction and the development of the poor within Pakistan. Microfinance has great impact in changing the living conditions of poor people especially women. Many scalars and NGOs are working on microfinance program among poor people, which are still very far away from conventional system. It was consider that microfinance is not valuable for all people but most groups can take advantage from this program.

OBJECTIVES OF THE STUDY

The study's goals are listed below.

1. To analyze the well-being of poor households situation in District Muzaffargarh.
2. To examine the role of microfinance on well-being of poor households in District Muzaffargarh.
3. To suggest policy implications.

HYPOTHESES

The following hypotheses would be tested in the study.

- Whether microfinance improves the well-being of poor households.
- Whether microfinance does not improves the well-being of poor household.

LITRATURE REVIEW

There are many community oriented programs and policies which have different objectives of national development, economic development or simply development. For instance, particular rural development program in the province of Punjab, green revolution and agriculture project are known internationally. Most of these policies and programs were designed to improve the socio-economic condition of the rural population. Microfinance has been viewed as only one of its program for the reduction of poverty and this will helpful for millennium development goals. Microfinance allowed poor ones to increase income sources, the necessary element to end hunger. Diversification made people more elastic to outer shocks. To study the poverty and its eradication are not new rather.

Charles et al. (2011) [6] looked at the correlation between poverty and microfinance in Nigeria. The decrease of poverty was significantly impacted. According to the report, the nation-building effort's elimination of poverty has enabled the Microfinance Bank to operate at an operational level. The study explained there were the categories of both the people: those who used those who did not. Questionnaire was used as a tool. The terms used in the questionnaire are related to the objectives and hypothesis of the study. The data was analyzed and explained according to the descriptive statistical techniques including frequency and simple percentage. The chi-square test was used to proof the level of significance in testing related to hypotheses. The F-test, chi-square test, and t-test were employed in the study to investigate how microfinance affected poverty. At 0.5 significant levels, the three hypotheses were evaluated in the study. The statistical significance of a categorization system was examined by the first set of hypotheses. utilized was the chi-square test. The second hypothesis employed a simple regression equation to test the hypothesis that MFIs had a substantial influence on poverty

alleviation. The third hypothesis rejected that there was no impact of MFIs on poverty eradication.

Qureshi et al. (2012) [7] investigated the impact of microfinance on poverty reduction in Dera Ismail Khan (KPK) Pakistan. The study found that the microfinance reduced the poverty in the fields of income, employment, education, communication, health care, children education and housing etc. The study used the primary data of 96 borrowers in the study area of businessmen. The study used the stratified sampling technique on the basis of structured closed ended question and interview. The journal linear model used to know the impact of microfinance and poverty alleviation. The model used nine independent variables and only three variable experience, family size and occupation showed the significant impact of microfinance on poverty reduction. The other six variables showed the insignificant impact of microfinance on poverty alleviation in Dera Ismail Khan. Experience, family size and gender showed the positive significant impact on poverty reduction but the other six variables provided the positive insignificant impact on poverty reduction.

Ayuub (2013) [8] noted how microfinance helped reduce poverty in the Bahawalpur area. This study used qualitative data from questionnaires, interviews, and observations of several institutes in operation to assess the contribution of microfinance from the NRSP to poverty reduction in the district of Bahawalpur, Pakistan. Percentage analysis is a statistical approach used to examine qualitative data. The study looked into the use of microfinance policies to boost low-income families and promote economic growth. The MFB and NRSP had a major effect on Bahawalpur's rural impoverished societies. The largest industry in the whole loan portfolio, by far, is undoubtedly agriculture, according to the survey data utilised by NRSP and MFB. The

study observed 67% of the borrowers increased their income level after getting microfinance availabilities and bettered their living standard.

Selvaraj, (2014) [9] explored the impact of microfinance and self-help groups (SHGS) on poverty reduction in India. The SHGS big contributed to the poor people in India. The women purchase large goods with the help of SHGS programs. The main benefit of microcredit reduced poverty and increased empowerments of women. The microfinance reduced poverty and changed their living standard of local poor people in India. The unemployment and other society problem decreased through development entrepreneurship. The microcredit SHGs both reduced poverty in India society. The study used the secondary data from websites, research paper and generals. The study explained that SHGS movement decreased the poverty and increased improvement of poor women. The microcredit improved condition of rural poor people in India. The SHGS bettered the saving habit of the poor people. The SHGs program increased the saving of the poor people in India then unemployment decreased. The study showed that the both microcredit SHGS programs improved the saving and consumption habits of the poor people and increased the improvement of poor women in India. The study concluded SHGS programs reduced 16.9% poverty in India. The study observed that the SHGS and microcredit scheme provided the better strategies for development and under development against the poverty.

Shakya (2016) [10] examined the state of poverty alleviation and the promotion of women's position in Nepalese society. The purpose of the study was to examine the impact of microfinance on borrowers. The results are based on surveys, and prior studies and interviews have also indicated that there has been progress in social as well as economic domains. The

findings showed that women in rural regions do not benefit from microcredit interest rates, which explains why urban women borrow more money than their rural counterparts.

Researchers like Addai (2017) [11] looked into the effects of microfinance on economic and social empowerment. The purposive non-probability sampling approach was employed, using Ghana as the research region. Ghana's Greater Accra, Ashanti, Eastern, Central, and Western regions were the sources of the 500 respondents who made up the sample. Microfinance programs, he discovered, lessen poverty in Ghana and support women's empowerment. For data analysis, he employed the estimate and probit models. According to the findings, economic and social empowerment have greatly grown with access to microfinance.

In its book chapter, (IGI Global, 2019) [12] discusses Indian self-help groups, or SHGs. Because it views SHGs as beneficial for women's economic empowerment, it promotes them. The study looks into how three aspects of women's empowerment are affected by having access to microfinance. These include having an impact on decisions made on children, expenses, and credit. The study was conducted using data from a primary survey, in which 800 women who had received microloans from different credit institutions were chosen as respondents. For data analysis, they used the multivariate probit estimation approach. The findings point to detrimental effects of increased access to microfinance on women's economic empowerment, specifically with regard to credit and spending-related problems.

(Mostafa, 2020) [13] recruited a sample of 316 women from two microfinance institutions in Bangladesh, Grameen and BRAC. Nonetheless, 285 surveys were completed and returned. The findings attest to the partial role that microfinance has had in empowering women. Women's household income, financial management, and saving were used to assess economic

empowerment. The three factors and the loan amount are shown to be related by the study. On the other hand, the research was unable to provide any evidence linking the loan to the location of the lending woman. The likelihood of a rise in household income is increased when women participate in money-generating activities relative to their long-term participation.

Conclusion

The examination of the literature demonstrates the role that microfinance plays in poverty reduction. Numerous research have been conducted in South Asia and other nations. Although Pakistan was also studied for the phenomena in the early years of the previous decade, the research team has not discovered any noteworthy studies in the last few years. The sampled bank is a government bank with a focus on microfinance; no noteworthy study has been done on it. This study was conducted to close this knowledge gap and get a better understanding of how formal government initiatives affect poverty reduction and well-being of poor households in Muzaffargarh Southern Punjab.

Research Methodology

This section includes details on the approach that was chosen and applied for the current study. Here, we provide an overview of the subject areas, methodological guidelines, and challenges the research encountered. The current study's design led to the adoption of a quantitative research approach. In order to use the proper approaches, researchers must have a clear understanding of the country's variables and indicators.

Profile of the Study Area

Settled by Muzafar Khan, the historical district named as Muzaffargarh contains four Tehsils: Kotaddu, Ali Pur, Jatoi and Muzaffargarh. Muzaffargarh City is surrounded by heavy industries where thousands of workers are employed. Based on agriculture territory Muzaffargarh is popular in producing cotton, sugarcane, mangos, vegetables and particularly wheat. 8250 square kilometers is the total area of Muzaffargarh and its population size is estimated 2.635 million according to the population census 1998, whereas its dominant language is Saraiki. There are 93 union councils in the district. Division of union councils by Tehsils:

Table highlights union council details according to every Tehsils of Muzaffargarh district. Muzaffargarh Tehsils is the largest among others which contain 35 union councils. With 28 union councils Kot Addu is the second largest Tehsil in the very district. Whereas as third is Tehsil Jatoi, consisting 16 UCs, and fourth is Ali pur having 14 UCs. This district is striped between river Indus and Chenab which pass along western and eastern borders respectively. Rahimyar Khan and Bahawalpur are the districts on the south region whereas it is bounded from north by Layyah, whereas eastern side is covered with district Khanewal and Multan across the Chenab river, while Rajanpur and Dera Ghazi Khan lie on west and Jhang district touches from the north east across Indus river. Punjab Development Statistics of 2008 estimates 3,430 thousand people on Muzaffargarh district, among these numbers 1,646 are female and 1,784 thousand males.

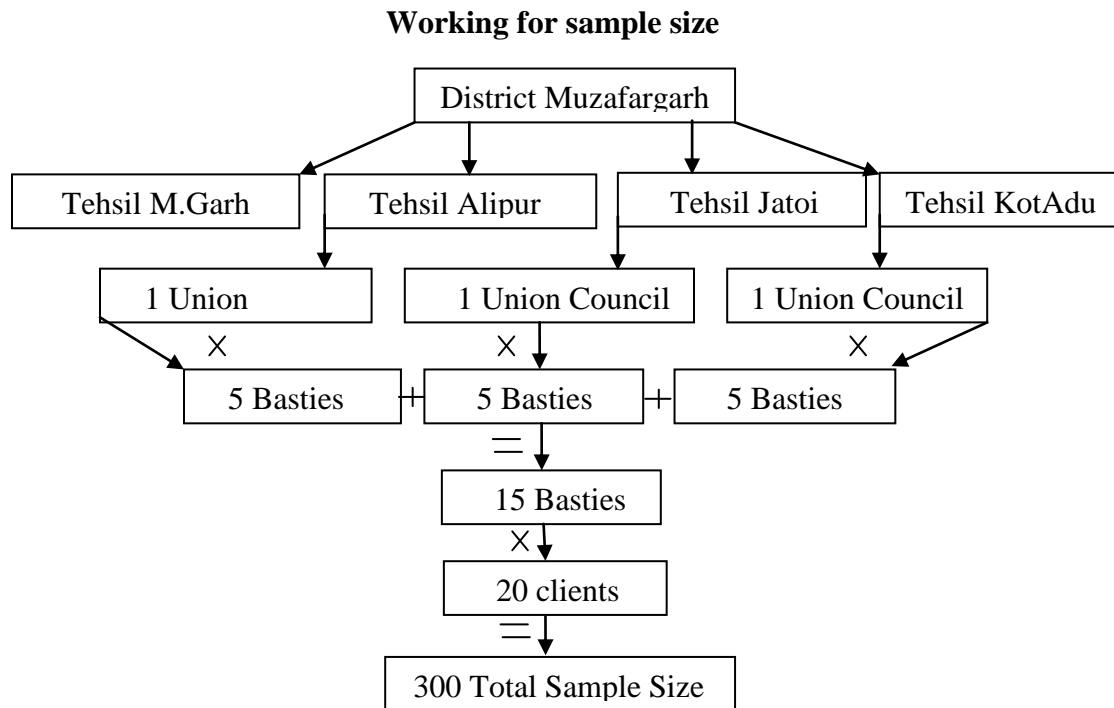
Table 1: Union Councils Tehsil Wise

Tehsils	Number of union councils
Muzaffargarh	35
KotAddu	28
Ali Pur	14
Jatoi	16
Total	93

Source: Department of Statics, Government of Pakistan

Sample design

There are several NGOs, banks and other institutions providing the microfinance facility in the every district. In Muzaffargarh district Khushali Bank (KB), National Rural Sports Program (NRSP), FINCA bank, Tameer bank and ASA foundation are the major institution of microfinance. These institutions have different process and interest rate for the Microcredit. Because of this reason we selecting the NRSP for the data collection is that the NRSP is the main provider of Microfinance loans in district Muzaffargarh. Out of the four tehsils of district Muzaffargarh, tehsil Ali pur, tehsil Kot Adu and tehsil jatoi were selected to collect the data. As there was no branch of NRSP in tehsil Muzaffargarh, so it was not selected. From each tehsil, one union council was selected. As each union council had at least five Basties (wards), the list of the respondents was available from NRSP; researcher than developed sampling frame, adding the entire available list. So 5 Basties from each union council were selected; from each Basti 20 borrowers were randomly selected that made a total sample size of 300 households.



Microfinance and Household Survey

The sample is based on the borrowers of NRSP from the rural area. Two-stage sampling technique is used. Firstly, one union council from each Tehsil was selected through simple random sampling technique and, then five Bastis from each union council was taken through same technique. Secondly, to approach the respondents using convenient sampling technique; questionnaire was constructed as a tool for data collection, containing questions regarding income, consumption, expenditure on education and health before and after borrowing from microfinance institutions. Increase in borrowers' income and expenses on health and education than this is considered as positive impact of microfinance on the eradication of poverty.

A more insightful way to examine the given data is to use the econometric approach to the data. The function of variables that are qualitative in character in the regression model was investigated using econometrics analysis. Qualitative as well as quantitative variables might have an impact on the dependent variable. The dependent variable in the model is called dichotomous regression, and a small number of the explanatory factors are qualitative in character. Of these, the logit model is one. In a basic logit model, the dependent variable is a binary or dichotomous dummy variable that has the values "0" for a household that is not impoverished and "1" for a home that is. The model is computed as a logit when the disturbance term is assumed to have a logistic distribution. Therefore, just two qualities are taken into account for determining a home's dummy or binary poverty status: (1) for a house that is poor and (0) for a household that is not poor. The following is a list of every variable used in the logistic model:

Table No 2: Microfinance model of variables

Variables	Variables Description
Dependent Variable	
POV	=1 if the household is poor =0 if non-poor
Independent Variables	
EXEU	Household expenditure on education
EXFD	Household expenditure on food
HHTF	= 1 if house access to toilet facility =0 otherwise
HVHC	=1 if household member visit health center =0 otherwise
HHPV	=1 if household personal vehicle =0 otherwise
HADW	=1 if household access to drinking water = 0 otherwise.
HHL	=1 if household head is literate =0 otherwise

We define Z as the linear function of Xs, the independent variable in the model, together with

their parameters as follows to create the logistic model from the logistic function:

$$Z = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 \tag{i}$$

Where the Xs are the determinants of dependent variables as;

$$X_1 = \text{EXEU}, X_2 = \text{EXFD}, X_3 = \text{HHFT}, X_4 = \text{HVHC}, X_5 = \text{HHPV}, X_6 = \text{HADW}, X_7 = \text{HHL}$$

and $Z = \text{POV}$ (ii)

The calculated constants of parameters here are α and β_i .

Given that the logistic function is expressed as

$$f(z) = \frac{1}{1 + e^{-z}} = \frac{1}{1 + e^{-(\alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \dots)}} \tag{iii}$$

Furthermore, the conditional probability of the dependent variable $\text{POV} = 1$ at a given value of the independent variables is the definition of the logistic model.

$$f(z) = \text{Pi}(\text{POV} = 1 | Xs) = \frac{1}{1 + e^{-z}} = \frac{e^z}{1 + e^z} \tag{iv}$$

Similarly

$$\text{Pi}(\text{POV} = 0 | Xs) = 1 - f(z) = 1 - \frac{e^z}{1 + e^z} = \frac{1}{1 + e^z}$$

For odds ratio by definition

$$\text{Odds ratio} = \frac{P(\text{POV} = 1 | Xs)}{P(\text{POV} = 0 | Xs)} = \frac{\frac{e^z}{1 + e^z}}{\frac{1}{1 + e^z}} = e^z \tag{v}$$

$$e^z = e^{(\alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7)}$$

Or

$$e^Z = e^{(\alpha + \beta_1 EXEU + \beta_2 EXFD + \beta_3 HHFT + \beta_4 HVHC + \beta_5 HHPV + \beta_6 HADW + \beta_7 HHL)} \quad (\text{vi})$$

The Logit Model is produced by applying a linear log transformation to the odds ratio mentioned above in order to make this equation.

$$Li = \ln(e^Z) = \alpha + \beta_1 EXEU + \beta_2 EXFD + \beta_3 HHFT + \beta_4 HVHC + \beta_5 HHPV + \beta_6 HADW + \beta_7 HHL \quad (\text{vii})$$

Here, it is considered that the response variables that are shown above, which reflect the real economic state of the family, impact the likelihood of being poor and falling into a certain poverty group. The primary goal of the research is to evaluate how microfinance affects these response factors directly and indirectly, as well as how this affects efforts to reduce poverty.

Data limitation:

Collecting reliable data is an art. Primary data has, like other data sets, disadvantages and advantages too. Most of the people avoid providing real information to the unknown person. In this scenario it is difficult task to collect the data. Although, to overcome this problem, research used some tactics to get rid from this limitation but still there is a chance that usually people do not give true information which may effects the results of the present study.

Empirical Analysis

Pair t test

The empirical analysis of all the variables was made with the help of SPSS, applying pair *t* test.

The results of the test are given below:

Table 3: Table of Pair t-test model of Poverty Reduction

Paired Samples Statistics				
	Mean	N	Std. Deviation	Std. Error Mean
Before	358141.14	299	125126.251	7236.238
After	397741.81	299	98903.293	5719.725

Source: Researcher’s estimates based on household survey

Paired *t* test was conducted to evaluate whether the membership in microfinance program produces sustainable increase in the mean value of income of the poor before and after borrowing MPI. Testing assumptions indicates that there was no gross violation of assumption. The results of the paired *t* test were significant, indicating that there is a significant increase in the income level of the poor from the before (M= 358141.14, SD= 125126.51, N= 299) to the after (M= 397741.81, SD= 98903.29, N= 299) borrowing the microcredit. The large effect size conforms to the Cohen’s conventions (1988). The mean increase was -39600.66, with the confidence interval for the difference between the means of -48718.09 to -30483.23. The researcher accepted the null hypothesis.

Variables in the above mentioned table of, logit regression model, provides most important findings. The table highlights independent variables with their level of significance. It shows that dummy of education status and literacy status are significant but; the farmer dummy has greater impact, as compare to the later, on poverty.

Logistic Regression Model

Table 4: Determinants of poverty: Results of Logit Regression Model before Borrowing Microfinance

Variables	B	S.E.	Wald	Df	P-Value	Odds Ratio	95.0% C.I.for EXP(B)	
							Lower	Upper
EXEU	.531	.261	4.150	1	.042	1.701	1.020	2.835
EXFD	-.040	.055	.539	1	.463	.960	.862	1.070

HHTF	.000	.000	1.189	1	.276	1.000	1.000	1.000
HVHC	-.299	.279	1.149	1	.284	.741	.429	1.282
HHPV	.157	.272	.334	1	.563	1.170	.686	1.996
HADW	.209	.280	.557	1	.456	1.232	.712	2.132
HHL	-.243	.248	.962	1	.327	.784	.482	1.275

Source: Researcher's estimates based on household survey

Table 4 shows that before receiving microfinance, all the poverty variables are insignificant. It means that the individuals were in vulnerable position when microfinance was not provided to them. They were not in a position to spend on education and food. Majority of the households did not have toilet facility and their condition regarding health, personal vehicles and drinking water facility as also not good. Most of the household heads were illiterate.

Table 5 Determinants of poverty: Results of Logit Regression Model after Borrowing Microfinance

Variables	B	S.E.	Wald	Df	P-Value	Odds Ratio	95.0% C.I.for EXP(B)	
							Lower	Upper
EXEU	.531	.261	4.150	1	.042	.701	1.020	2.835
EXFD	-.040	.055	.539	1	.003	.960	.862	1.070
HHTF	.024	.093	1.189	1	.004	.832	1.000	1.000
HVHC	-.299	.279	1.149	1	.014	.741	.429	1.282
HHPV	.157	.272	.334	1	.015	.170	.686	1.996
HADW	.209	.280	.557	1	.008	.232	.712	2.132
HHL	-.243	.248	.962	1	.021	.784	.482	1.275

Source: Researcher's estimates based on household survey

Table 5 shows that all poverty indicators have improved after microfinance. Variables like EXEU, EXFD, HHTF, HVHC, HHPV, HADW were strongly significant; however, there found a little improvement in HHL. It means that microfinance could help the clients to expend more on education and food. With microfinance, clients could have toilet facility and their visit to health

centers also improved. There seemed a remarkable positive change in possession of personal vehicles and access to drinking water. These findings clearly showed that poverty is reduced after participation in microfinance.

Findings

The current study is to examine how microfinance contributes to the decrease of poverty. The separate analysis was taken into account for before and after borrowing the microfinance. Omnibus test is insignificant in the test, so the included variables are not found significant. The model, however, predicted odd ratio being non poor is increased for data collected after borrowing microfinance. The findings strengthen and support the research objectives that the microcredit plays an important role to reduce poverty.

Findings of the numerical data shows that after participation in microfinance all the variables including EXEU, EXFD, HHTF, HVHC, HHPV, HADW, HHL are found significant with less than 1 odds-ratio which indicates negative relationship with the probability of being poor. Whereas as all the variables are found insignificant before participation in microfinance. These findings clearly showed that poverty is reduced after participation in microfinance. Variables in the above mentioned table of, logit regression model, provides most important findings. Findings highlights independent variables with their level of significance. It shows that dummy of education expenditure and literacy status are significant but; the farmer dummy has greater impact, as compare to the later, on poverty. Moreover income level and expenses on eatables are also found significant.

The analysis has been made separately for the data collected before and after micro finance program and analysis is made. The all variables that we have included in our analysis are significant.

This support and strengthen our objective the micro financing play vital role in reduction of household level poverty. Major finding of the study is the significant variables of income level, education expense and literacy status after borrowing the microfinance. This vividly indicates that microfinance has significant impact on the reduction of poverty. This finding proves the hypothesis that there is correlation between the microfinance program and poverty reduction, and membership in microfinance program produces sustainable increase in the income of the poor. This can be concluded that to eradicate poverty, microfinance is the valid tool: increases income, education expense and literacy status of the poor household members. Hypothesis of the research are found significant which shows the positive impact of microfinance on poverty eradication.

Conclusion

The study's premise was to determine whether participation in a microfinance program and poverty reduction are related, and whether these programs result in a long-term rise in the impoverished's income. The study's conclusions demonstrated the critical role that microcredit plays in eliminating or drastically lowering poverty among low-income households and the robust correlation that exists between microfinance programs and the reduction of poverty. For instance, before and after using the microcredit facility, the mean monthly family income level increased from PKR 13,365 to 16,678. A rise in income level is a direct indicator of a decline in poverty.

According to the Logit model regression, microfinance significantly contributes to the decrease of poverty. The model's key finding is that it unequivocally shows microfinance has increased odds of not being poor and decreased chances of being poor. We may draw the conclusion that frequent microcredit programs that target difficult-to-reach locations will

contribute to the eradication of poverty. Since the government cannot end poverty on its own, the private sector's contribution to microcredit financing is a crucial weapon in this struggle. We may conclude from the research's findings that microcredit helps low-income households spend more on food, savings, health care, education, and other household necessities each month. These measures demonstrate how microcredit has helped lower poverty at the level of impoverished households. Once the microcredit facility was used, all of these measures of family poverty dramatically rose. Ultimately, microfinance programs have a direct influence on poverty reduction and can help lower it. Pakistan is a developing nation with several issues, one of which is the terrorism that emerges from impoverished homes. The underprivileged groups within society require the policymakers' particular focus. To combat corruption, thievery, terrorism, and target killing, we must improve the socioeconomic circumstances of the impoverished. We may do this by utilizing microcredit finance organizations, which assist individuals in escaping the shackles of poverty that compel them to commit acts of terrorism or target killing. Regarding microcredit borrowers, the state of household level poverty in the district of Muzafargarh is reported to be in extremely good shape. However, situations could vary from location to location and culture to culture, thus this might not be a generalization. Nonetheless, we might draw the conclusion that microfinance organizations are crucial to the massive transformation of poverty.

Policy Recommendations

The limited sample size used to acquire the data came from Punjab's Muzaffargarh district's villages. We are therefore unable to extrapolate the results to other districts. It is stated that in order to get the broad evidence that microfinance lowers poverty, a large-scale study is needed in

this area. The challenges faced by MFI borrowers in repaying their loans are another area that needs more research. This is the study's gap, which is recommended to other researchers working on the same subject. The data to close the gap in the literature on this study issue will come from more in-depth investigation in this area. What stage MFIs actually reach out to impoverished households with their services might be the subject of a different research?

It is suggested that more simple aims of MFIs is required to overcome their strategy, this will be attractive for the investors and donors. MFIs should provide in both financial and outreach smooth scope if they are willing to have positive social impact. Technological solutions to deliver financial service are highly required to enhance the efficacy of the MFIs. Proper staff training, cost/benefit analysis and effective monitoring will help to enhance the 3 dimensional expansions of the microfinance services. To be sustainable institutions, it is necessary for MFIs to reduce interest rate. This attracts the poor borrowers as this will be seen by them to decrease in the repayment of loans. This will result in positive impact of social and economic of poor households as well as to the MFIs; moreover relocating the branches to somewhere near to their targeted population, particularly in the rural areas.

Conflict of interests

The writers affirm that their interests are not in conflict.

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