

Financing and Managing Poverty Reduction in Rural Pakistan; A Case of DG Khan and Rajan Pur Districts

By

Nadeem Iqbal

A Research Thesis submitted to the Department of Management & Social
Sciences,

Mohammad Ali Jinnah University, Islamabad

in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY IN MANAGEMENT SCIENCES (FINANCE)



**DEPARTMENT OF MANAGEMENT SCIENCES
MOHAMMAD ALI JINNAH UNIVERSITY
ISLAMABAD
FEBRUARY 2014**

Financing and Managing Poverty Reduction in Rural Pakistan; A Case of DG Khan and Rajan Pur Districts

By

**Nadeem Iqbal
PM091012**

A Research Thesis submitted to the Department of Management & Social Sciences, Mohammad Ali Jinnah University Islamabad, in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY IN MANAGEMENT SCIENCES (FINANCE)



**DEPARTMENT OF MANAGEMENT SCIENCES
MOHAMMAD ALI JINNAH UNIVERSITY
ISLAMABAD
FEBRUARY 2014**

Table of Contents

CHAPTER 1

INTRODUCTION

1.1. Financing and managing poverty reduction in rural Pakistan: a background	4
1.2. Research aims and objectives	10
1.3. Research questions.....	11
1.4. Significance of the study.....	11
1.5. Research methodology.....	13
1.6. Overview of the thesis	13

CHAPTER 2

LITERATURE REVIEW

2.1. Poverty: Definition and Estimation.....	14
2.1.1. Relative Poverty.....	15
2.1.2. Subjective Poverty	16
2.1.3. Absolute Poverty.....	16
2.2. Poverty Indices.....	17
2.2.1. Headcount ratio (P^0).....	17
2.2.2. Poverty Gap (P^1)	18
2.2.3. Squared Poverty Gap (P^2)	18
2.3. Estimating Absolute Poverty Line	18
2.3.1. Selection of an Indicator of Economic Welfare	19
2.3.2. Defining a Poverty Line.....	19
2.3.3. Equivalence Scales.....	20
2.4. Construction of Absolute Poverty Line	22
2.4.1. Cost of Basic Needs (CBN) Poverty Line.....	22
2.4.2. Calorie Intake Method	23
2.5. Poverty Band and the Three Zones of Poverty	24
2.6. Financing and managing poverty reduction.....	24
2.6.1. Microfinancing and Poverty.....	25
2.6.2. Education and Poverty	31
2.6.3. Poverty and Human Capital	36
2.7. CONCLUSION.....	41

CHAPTER 3

METHODOLOGY

3.1. Introduction.....	43
3.2. Defining the geographical field of the study and the poverty related programmes covered: cases for the research.....	43
3.3. Research methodology	50
3.4. Research design	52
3.5. Research strategy	54
3.6. Research method.....	55
3.6.1. Research Method: Data Collection	55
3.6.2. Quantitative data collection method: Questionnaires	57
3.6.3. Questionnaire design.....	57
3.6.4. Administration of the questionnaires.....	58
3.6.5. Pre-Test	58
3.7. Sampling	59
3.7.1. Research population	59
3.7.2. Sample frame.....	59
3.7.3. Sampling method	60
3.7.4. Sample size.....	61
3.7.5. Data collection process	62
3.7.6. Reliability and Validity.....	62
3.8. Research Method: Data Analysis Methods.....	64
3.8.1. Questionnaire data analysis.....	64
3.9. Limitations and difficulties	67

CHAPTER 4

MEASURING THE EFICIENYC OF POVERTY REDUCTION PROGRAMMES: EMPIRICAL ANALAYSES

4.1. Introduction.....	70
4.2. Descriptive analysis	70

CHAPTER 5

INFERENTIAL STATISTICAL ANALAYSIS

5.1. Introduction.....	108
5.2. Testing the non-normality of the data.....	108
5.3. Non-parametric analysis	109
5.4. Conclusion and discussion.....	110

CHAPTER 6

LOCATING THE EFFICIENCY OF POVERTY REDUCATION PROGRAMMES IN DG KHAN AND RAJUNPUAR DISTRICTS OF PAKISTAN: LOGISTIC REGRESSION

6.1. Introduction..... 115
6.2. Modelling..... 115
6.3. Logistic overall model summary..... 117
6.4. Discussion and concluding remarks..... 124

CHAPTER 7

FINDINGS, CONCLUSION AND RECOMMENDATION

7.1. Introduction..... 128
7.2. Hypothesis testing..... 128
7.3. Responding to research questions..... 130
7.4. Recommendations..... 138
7.6. Conclusion..... 141

REFERENCES

APPENDICES

Annexure I: Estimation and Determinants of poverty in Pakistan..... 151
Annexure II: Basic Information about Household..... 153
Annexure III: IMPACT OF TRAINING ON POVERTY REDUCTION..... 157

List of Tables

Table 2.1:	Calories Required by Age and Gender (Per Capita/day).....	12
Table 3.1:	District-wise Breakup of Total Sample Size.....	43
Table 3.2:	Program Wise Breakup of the Sample Size.....	Error! Bookmark not defined.
Table 3.3:	Per Capita Daily Calorie Requirements By Age and Sex	Error! Bookmark not defined.
Table 3.4:	Weights to Convert Different Age Household Members	Error! Bookmark not defined.

Abstract

Financing and Managing Poverty Reduction in Rural Pakistan: A Case of DG Khan and Rajanpur Districts **Nadeem Iqbal**

Poverty remains an essential global issue in this new century as well, despite the number of global and domestic initiatives undertaken by governments and international agencies. Pakistan, being a developing country, has been facing the realities of poverty, where a number of programmes developed at state and civil society level to respond to poverty.

In an attempt to alleviate poverty in the Pakistan, financial resources are provided by microfinance institutions to poor and vulnerable people to engage in income generating activity on soft term and conditions. *Zakat* Institution and BISP provide free cash to needy and poor as living allowances. ZI, PBM and NGOs provide financing for human capital development through education and training to manage the poverty reduction. These institutions facilitate the poor segment directly to manage the poverty reduction on sustainable basis.

The research presented in this study, hence, aims to explore and evaluate the financial dimensions of managing poverty reduction in rural Pakistan through a micro level study to evaluate the outcome and effectiveness of poverty reduction programmes in Pakistan by focusing on the impact of such programmes in DG Khan and Rajanpur Districts.

In fulfilling the aim of this study, primary data were collected through a questionnaire survey to measure the perceptions of the households, in the form beneficiaries and non beneficiaries, on the outcome and efficiency of the poverty reduction programmes in the DG Khan and Rajanpur.

In terms of analysis, this study used non-parametric (Kruskal Wallis and Mean U Whitney tests) and parametric inferential statistics, such as logit model, to draw the result for research questions.

In terms of findings from the non-parametric test, institution, employment, marital status, working female members, working male members, assets like land, livestock, business assets, savings and loan are significant and ranked at 1 for income related questions. Training, education, gender, age, child dependency and district variables are also significant and causing for poverty but ranking at second number.

In addition, Logit model helped to draw conclusion that beneficiaries and households are statically significant and positively correlated with probability of being poor. It also concluded that education, institution, gender, age, employment, working male member, and working female member as variables are statically significant and negatively correlated with probability of being poor.

In Logit regression, as forward conditional method is applied to measure the impact of efficiency of institutions for financing and managing the poverty reduction. The model draws result from the data for ZI that it contributed in working male member and change in income. Working male members are found to be statically significant and negatively correlated with probability of being poor. It was also found that BISP did not contributed in determinant for managing the poverty reduction, while PBM contributed in working male member, which is significant and negatively correlated with probability of being poor. In addition, the findings indicate that MFI contributed in education and change in income, which are negatively correlated with probability of being poor. Furthermore, this study established that NGOs contributed in change in income for managing the poverty reduction.

It is concluded from the analysis that financial capital and human capital development is essential element for financing and managing the poverty reduction in rural Pakistan. But it should be noted that coordination of different poverty reduction program is essential of such an effective strategy. Although it is very difficult task to eliminate the poverty in society due to being multidimensional, yet it can be managed through effective planning and coordination of poverty reduction institution.

CHAPTER 1

INTRODUCTION

1.1. Financing and managing poverty reduction in rural Pakistan: a background

Poverty is generally considered as a humanitarian problem, which also remains as an international phenomenon. Frequently, it is described in terms of defined deprivations in human wellbeing. The most serious form of poverty, namely abject poverty, occurs when people lack a certain minimum level of food, clothing, shelter, health and education facilities to live a humane life. In addition, poverty arises when people lack key capabilities, and so have insufficient incomes, education, and health facilities. Social sources and consequences of poverty includes they face lack of confidence, or a sense of helplessness, and feel the absence of rights like the freedom of speech (Sen, 1987).

Theoretically, it is suggested that there exist a relationship between poverty and inequality and vulnerability. Inequality means the distribution of characteristics, such as income or consumption, among the complete population, while vulnerability may be defined as the risk of facing into poverty trap in the future. A person may fall in poverty even if the person is not necessarily poor now due to vulnerability, which is often connected with the belongings of shocks. Thus, vulnerability is a key element of welfare, which affects individual behavior and the perceptions of their own situations.

It is estimated that more than 1.4 billion people live under the global poverty line based USD 1.25 a day in rural areas of the world (IFAD 2013). There are 842 million people who have not sufficient food to live a healthy life (FAO, 2013). While majority of poor people live in developing countries of the world, from the whole poor population 0.431 billion people live in South Asia (FAO, 2005). According to another and relatively more recent estimate, half of the global population suffers from absolute poverty; and majority of the poor people live in developing countries (IFAD, 2011). Since the population of developing countries is more rural than urban, poverty is very much a rural phenomena as well: about 55% populations of developing countries live in rural areas. It is estimated that 90% population of rural people living in Asian continent are poor (IFAD, 2011).

Providing and managing access to financial resources for the poor, in particular, in the form of microfinance has been considered as an effective tool for economic development and

poverty reduction (Morduch and Haley, 2002; Khandker, 2003). This requires a well established financial management strategy, which is very important and is considered one of the most critical activities for the poverty reduction. It is a fact that the availability of finance is the basic requirement to any household for his economic development, earning activities and poverty reduction.

Financial services, hence, play a vital role for poor and other families to invest the financial resources for the productive purpose effectively, but also have access to financing for microenterprises through microfinancing type of schemes. These financial resources are used into practical investment projects such as improved agribusiness or many other farm and non-farm rural economic activities. This will enable the poor household to earn higher income and build a savings reserve, which also helps to deal with future needs and the risk of shocks and vulnerability of household. So the investment, realized through financing or other financial resources, is the vehicle of socio-economic development.

It should be noted that financial services provide facilities for investment and keep flow of fund smoothly between different parties, while financial management is only a tool to reduce the poverty through income generating activities - not an end- product. Therefore, attention must be given simultaneously to increasing and managing access to finance as well as to additional development support needs for poverty reduction, as it has been argued that lack of managing access to finance is one of the main factors behind persistent poverty (Levine, 2008). Consequently, the rural poverty may be reduced by managing the financial resources and financial services to the poor.

Rural poverty reduction requires investment in all aspects of rural development for creating the conditions and capacity needed to improve income and assets, which, therefore, requires investment in all features of rural development - agriculture and non-agriculture - to create the conditions and capacity needed to improve farm and non-farm income and assets, including managing the financial services, market development, human capital and policy development. In addition, rural poverty reduction implies increased incomes that can build assets and maintain them, even in the presence of negative household shocks. Considering the nature of rural poverty reductions, finance enables access to some of these services, which in turn allow incomes to grow and the household enterprise to be competitive. With more business activity, there is growth in complementary services and industries, also enabling and managing greater access to rural finance in the future. Managing the financing to poor is

essential tool against the poverty in any region of the world. It is also basic requirement for the development of the human capital.

As part of poverty reduction strategy, and the with the assumption that poverty is very much related to rural sections of the society, rural finance has been recognized as a vital tool for rural investment. An important concept of rural finance is that the business/farm and household are intertwined; both need financial services for community investment. Financial services for non-agricultural activities in the community are as important as agricultural financial services. They may include financial services to be used for education, emergencies, housing, irrigation systems and other productive infrastructure. Enhancing access to formal financial services especially micro-credit to the rural poor household has been identified as a means of reducing poverty in developing countries. Micro-credit is defined as the small loan on short-term basis for the purpose of establishment of enterprises and self-employment to generate the higher income (Chatterjee, 2001; Nanavaty, 2000; Leon, 1998). A great number of studies investigated positive impact of micro credit on poverty reduction, which among others include: Leon (1998), Amin *et al.* (1998), Chatterjee (2001), UN Report (1997), Cheston and Kuhn (2000), Sharma and Zeller (2000), Media Cell PPAF (2003), Kuramanalivia and Montgomery (2003), Weiss (2003) and many more.

As part of the poverty reduction strategy, micro credit is used for enhancement of human capital, productivity and income generating activities. It has been reported that microcredit has positive impact on household input and productivity . It is also empirically proved that provision of loan and its proper usage enhance the productivity in rural areas (Okorouwa, 2002) including through short-term loans.

An important part of poverty reduction strategy is the development of human capital stock through education and skill. Education and skill requires sufficient amount of managing access to finance. Numerous studies have shown that enhancing human capital through education and training increases output and income of household. According to Harbison (1964), there are many empirical evidences that combine human capital with higher performance and sustainable competitive advantage. Different studies (such as: Alladadi, 2011; Aggrey, 2010) concluded the negative relationship between productivity and poverty, while greater human capital stock is associated with productivity and higher income (Mincer, 1997). It should be noted that the major secret of growth that has taken place in South Asia

countries is connected with also development of human capital stock in line with endogenous growth theories.

With enhanced human capital, a person innovates, creates, builds and produces goods and services for the welfare of society, and also an individual can renovate basic ideas and concepts and produce innovated, wanted and useful economic products. Availability of basic human needs, resources and opportunities to the person inspires him to become more action oriented. These kinds of practical action bring him with the employment and income-generating opportunities that are associated with higher income. So the well known theory that human capital is primary element for economic development and for poverty reduction as well.

The practical experience as suggested by theoretical studies confirms that human capital is enhanced through training and skill and is linked with education: education and level of poverty has negative correlation with each other. The higher the level of education leads to higher income growth which resulted in lesser number of poor persons, as education provides knowledge and skills to the person which is helpful for generating higher income. The direct effect of education and skill on poverty reduction is through enhancing of human capital and increasing the income. The indirect effect of education on poverty is important, because as education improves the income, and raises the living standard of the person. The relationship between education and poverty can be observed in this way. Thus, managing the financial resource for education increases the skills and productivity of poor households, which leads to enhance the income level of the poor and overall standard of living as well.

Increasing productivity of individual is one thing and availability of production resources is another. The major problems of rural poor are unskilled labor, small landholdings, livestock and agro inputs. More availability of these resources can enable him to produce more income and reduce his poverty, as lacks of these resources accentuate the poverty trap. The poverty trap can, however, be broken by investing in the personality of rural poor and investment through supplying him with productive resources. Both of these requirements cannot be met without the availability of sufficient financing, which these rural poor are lacking. Additionally providing and managing access to finance is required to start small and micro enterprises to supplement income of the rural poor in a sustainable manner. It is a fact that such financial resources are provided through different institutions, which adopt different

strategies by focusing on availability of funds and others try to enhance to human capital by providing education and skill.

It is important to state that reducing poverty need to formulate a systematic approach to identify the cause of poverty and to implement the policy about the pro-poor programs adopted by different institutions. According to various studies, institution building is closely related with the exchange of resources where socio-economic and political associations interlock to create varying patterns of implementation network and intervention packages (Gustafson, 1994; Brinkerhoff and Goldsmith, 1992; Ahmed, 1992). A first step to building wide-ranging institutions is to ensure that they are effective for poverty reduction and agent of all parts of society. These institutions should be held responsible for all deprived and poor persons of the society for poverty reduction.

The significance of poverty and its consequences are not new to those who have been engaging and researching them with its various aspects, as a numerous number of studies on poverty issues has been conducted over time. Programs and projects have been designed, formulated and subsequently implemented by the academia, the civil society and NGOs, state institutions and international development institutions over the years in different regions of the world. But up to now, not a single universal model or standard could be developed to apply practically to all poverty circumstances in any region of the world. This is because poverty situations and circumstances have always been unique to specific region and multifaceted.

Poverty must be investigated and analyzed with one thing in mind that it requires the cooperation and collaboration from all the stakeholders. These stakeholders include the devoted core of experts, specialists and institutions. All these stakeholders will be tasked to draft and design a unique program that will attack poverty in all its dimensions. Although the war against poverty might not be won, yet the extent of poverty must be significantly reduced at least.

Since this study is on Pakistan, it is important to identify poverty issues in Pakistan. It should be mentioned at the outset that Pakistan in particular has a high incidence of poverty; however, in recent years, Pakistan made great progress in reducing the poverty level in country during the 1970s. Pakistan also made good progress in 1980s to reduce poverty and it has to face the reverse situation during the 1990s. This situation was reversed during the mid

of last decade but same at the end of last decade (Amjad and Kemal, 1997). Thus, cycles in poverty reduction policies have direct impact on the actual and experienced poverty in real life. According to Arif (2000), poverty in Pakistan is a rural trend, which is supported almost by all the other studies. Planning Commission of Pakistan investigated that 40% people were living below the poverty line in 2008. UNDP (2010) also conducted a survey and estimated that Pakistan has faced 54% multidimensional incidence of poverty. Most recently, a study by World Bank indicates that poverty irrationally went up from 2008 to 2010 in Pakistan (World Bank, 2010).

A peculiar feature of poverty in Pakistan is its asymmetric distribution both across provinces and within each province. As the province of Punjab is concerned, its Southern and Western areas have been relatively seriously affected. There are great differences between the indicators of welfare among the different regions of the Punjab. Rural area of the Punjab is poorer as compared to urban area. In Punjab, household of its southern and western region have faced higher poverty level and worse human development indicators. This area is facing lack of educational and public services delivery outcome (Cheema, 2008). DG Khan Division, which is located in the southern Punjab, has been identified as the poorest division of the Punjab province. To evidence this, Ali (2010) identified that 82% poor live in rural areas of DG Khan Division.

The Government of Pakistan has since long been executing various strategies that directly or indirectly target to reduce poverty. The government indirect strategies are mostly covered through its macro-economic policy framework that aims at to ensure higher employment, enhance income and sustain growth, and more specifically, such programs include the poverty related expenditures like Peoples Works Programs, Improving Governance, Rural Development, Market Access and Community Services, *etc.*

The government's direct strategies to reduce poverty include programs that emphasize allocation of increased financial resources to underprivileged population with the aim of increasing their access to physical inputs needed for higher output and enhanced human capital, as well. Details of such programs are available elsewhere, including government publications (a more recent detailed reference is on 'Social Safety Nets' of the Pakistan Economic Survey 2011-12; Government of Pakistan, 2012).

It should be noted that such programs have been in operation since long, but their impact in terms of poverty reduction in the country is still uncertain. The study of the literature, reviewed in an incoming section, will further reinforce the need of carrying out a detailed review and evaluation of all such programs that are in operation in Pakistan, with the objective of reducing poverty at the gross roots, in an efficient way.

1.2. Research aims and objectives

The prime aim of the study is to evaluate the efficiency of the poverty-reduction programs operated in Southern Punjab, Pakistan in the sense as to whether they contribute to the reduction of poverty in a sustainable and consistent manner. In other words, this research aims to evaluate the impact of poverty reduction programmes in Pakistan by focusing on the impact on the socio-economic features of individuals benefiting from such programmes.

To achieve its prime aim of evaluating the available poverty-reduction programs for an efficient contribution towards poverty reduction, and to develop a model program of poverty reduction in Pakistan, the following research objectives are developed:

- (i) to develop an advanced understanding of the theoretical issues in poverty reduction in developing countries;
- (ii) to identify the observed sources of poverty in Pakistan;
- (iii) to collect primary data through a questionnaire survey to measure the individual impact of poverty reduction programmes;
- (iv) to estimate and compare poverty status of beneficiaries and non-beneficiaries of various poverty-reduction programs in operation in a purposively selected poor area of the southern Punjab;
- (v) to identify the major poverty-reduction programs available for poverty reduction and evaluate each of such programs for its contribution towards poverty reduction;
- (vi) to identify the major strengths and weaknesses of major poverty reduction programs operated in the field in terms of targeting major specific determinants of poverty;
- (vii) to determine how the contribution of the poverty reduction programs can be made and managed more productive and efficient?;
- (viii) to develop a model program of poverty reduction based on the experiences gained in study area and elsewhere by using the findings developed by this study.

1.3. Research questions

In fulfilling the aims and objectives of this study, the following research questions are developed:

- (i) What is the level of poverty in Pakistan?
- (ii) How is poverty reduction being financed and managed in Pakistan?
- (iii) What specific poverty-reduction programs are available for poverty reduction? Which of these programs are actually targeting poverty-determinants, and which ones need to be revitalized, and how, towards better contributing to poverty reduction?
- (iv) How the poverty-reduction financing in general and that of the contribution of poverty-reduction programs in particular can be made and managed more efficient?
- (v) What is the perceived impact of poverty reduction strategies implemented in the country on the sampled population?
- (vi) What would be a model program of poverty reduction based on the experiences gained in study area?

1.4. Significance of the study

Development financing is managed to enhance the availability of physical resources and human capital. In this, physical resources are utilized for the purpose of income generating activities. Human capital, on the other hand, is associated with productivity and higher income as a result of educated and trained individuals.

In locating the sources of poverty, lower income is not the only reasons; as shortages and unavailability of health and education facilities contributes to the sustaining of poverty. In addition, having people being mostly unskilled resulting into an unproductive life style further sustains poverty. Under the condition of poverty, individuals do not physical inputs available for them to get out of their conditions, as in most cases, the states fails to provide the necessary conditions for their development.

Pakistan has high incidence of poverty having 24% population below the poverty line. In searching for the reasons of poverty, it is estimated that two third population of the country lives in rural areas (Chaudhry, 2009) implying that availability of the necessary conditions is rather limited for them to move out of their poverty. Therefore, poverty in Pakistan is largely

a rural phenomenon; as the statistics indicate that about 80 per cent of them live in rural areas of Pakistan. Indeed, a number of other factors contribute to poverty in the country including economic, political, cultural reasons.

For seeking an effective solution of poverty, different strategies are adopted by Government of Pakistan over the years. Although Government of Pakistan allocates the large funds every year to provide the physical resources and to enhance the human capital through different poverty-reduction programs, the impact of these programs are still uncertain in terms of efficiency in reducing poverty.

This study, hence, focuses on the poverty-reduction programs for provision of physical inputs and human capital development for enhancing productivity. As it is contended that higher productivity generates higher level of income, which reduces the poverty status. As part of such strategies, microfinance is considered to be an important program, which has played a positive role to reduce the poverty in different societies. Microfinance programmes provide a chance to poor for increased access to credit for the purchase of physical inputs and to start a business whereby it is expected to reduce poverty through increased household incomes. This microfinance is also provided by different poverty reduction institutions for human capital development of vulnerable and poor segment of society to manage the poverty reduction.

Financing and managing the poverty reduction institution make the indirect and direct strategies and implement them for poverty reduction. Through direct strategies, the institutions manage the finance for doing earning activity and for human capital development. This study measures the efficiency of these institutions individually special with the objective of identifying the right segment. It should, therefore, be noted that this is the first study at micro level which measures the impact of financing and managing poverty reduction institution through contributing to determinants for poverty reduction. It is also the first detailed study about the efficiency comparison between poverty reduction institutions to identify the determinants of financing and managing the poverty reduction.

This study will contribute in filling the information gap by assessing the economic impact of these programs at household level by targeting the determinant for poverty reduction. The study is likely to generate useful implications for policy formulation and decision making in respect of poverty reduction strategy by contributing to existing body of literature and form a basis for further research.

1.5. Research methodology

This research is constructed within *qualitative research methodology*, as it aims to respond to the research questions through the perceptions, understanding, and opinions of the participants. In doing so, it collected primary data in the form of quantitative method through questionnaire from South Punjab districts. The data were subjected to statistical analysis in an attempt to make meaning for drawing conclusions.

1.6. Overview of the thesis

This research has been completed in seven chapters including Introduction and Conclusion.

Chapter 1, as the Introduction chapter, aims at providing a contextualization to the observed poverty in Pakistan as well as it provides details of the aims and objectives of this research.

Chapter 2 is the literature review chapter of this research; it discusses poverty, its measurement, managing the poverty reduction through micro-financing, education and human capital as well as discussing the existing empirical studies from various countries.

Chapter 3 is the Research Methodology chapter, which also includes the geographical location of study, namely DG Khan and Rajanpur Districts of Pakistan, in terms of the available poverty reduction program engaged in the study area. The chapter provides further details on the research method and process.

Chapter 4, 5 and 6 presents the empirical findings. Descriptive, non parametric and parametric techniques are applied and discussed in the chapters to draw the meaningful result from the data.

Chapter 7, being the final chapter, include the final findings, conclusion and recommendation of the study.

CHAPTER 2

LITERATURE REVIEW

As a principle, this section should provide a review of the literature that has certain relevancy with the research questions and/or objectives of the study. Hence, literature relevant to poverty, its definition and estimation of poverty line, determinants of poverty, programs meant for poverty eradication, means and measures to evaluate poverty reduction programs, and identification of ways and means of poverty reduction need is reviewed through the existing body of knowledge to develop a framework for the later empirical chapters.

2.1. Poverty: Definition and Estimation

The concept of poverty is not easy to define and describe so it has no universally accepted or recognized definition, which is acceptable. Since it does not have a particular definition, there is no consensus over its determinants and nor on the solutions offered.

Despite not having a particular definition for poverty, it is generally defined as lack of command over resources. This approach to measuring poverty may be quoted as income approach as it measures the degree of shortage in income or consumption in the society, which, being one-dimensional approach to poverty, views poverty as income or consumption deprivation. This approach defines people as poor if their access to economic resources is insufficient to acquire enough commodities to meet basic needs (World Bank, 2000; Khan, 2000).

However, it should be noted that poverty is not just income or consumption deprivation, but, as it is recognized, it is a multidimensional concept. The poverty of opportunity index, a composite of deprivation in three vital dimensions (health, education, and income) captures more appropriately the real causes of poverty as human suffering (MHDC, 1999). Thus, poverty has many faces. Sen (2000) suggested that poverty should be considered as the

deficiency of basic capabilities rather than as lack of income. In terms of capability deprivation, poverty encompasses not only material scarcity (measured by income or consumption), but also other types of deprivation such as unemployment, sickness, lack of education, vulnerability, powerlessness and social deprivation.

Poverty can be described as hunger, lack of shelter, being sick and not having capability to visit a doctor, not have capacity to go to school and cannot read. It can be considered as not having a job or death of baby due to impure water. Furthermore it can be referred to as powerlessness, lack of representation and freedom. Thus, poverty can be illustrated in various ways, having numerous forms and vary across one situation to other situation and time (Govt. of Pakistan, 2003)

As regards to the aspects of poverty, according to authorities on poverty, poverty can be categorized as relative poverty, subjective poverty and absolute poverty (MCHD, 1999; Haq and Batti, 2001; Cheema, 2005), which are discussed in the following section.

2.1.1. Relative Poverty

Relative poverty refers to the position of an individual compared with the average income or expenditure in the specific country. It is more subjective, as social standards prevailing in a society clearly identify that judgment are involved in defining the level of poverty. The poverty line varies according to the state of the economy, as poverty line changes with the central tendency of the distribution of living standards, which is not the same across regions and over time.

It should be noted that a relative poverty line is not useful to monitor poverty over time or space. Because it does not yield consistent objectives to assess the effectiveness of government Programmes, which changes each year against the variation of real consumption

rather than being fixed in real terms. Kakwani (2001) suggested in a study that to assess the poverty level such type of approach is not suitable in developing countries.

2.1.2. Subjective Poverty

The subjective approach can be referred to as the position of a person or a family unit with respect to an income that is just sufficient to ensure the satisfaction of an individual or a household expenditure. According to this approach, to be poor is feeling that you do not have enough to get along. This refers to that level of income at which people feel that their income is just equal to the minimum income required. Accordingly, all households with income less than their reported minimum income are classified as poor; consequently, this approach leads to inconsistencies. For example, in a questionnaire survey, people with the same level of welfare may give different answers for their minimum income requirement and may be treated differently with respect to poor and non-poor. It is observed that subjective poverty is very sensitive to words used in questions, and also variation amongst the response of households are observed in such primary research.

2.1.3. Absolute Poverty

Absolute poverty means the condition and level of household in relation to the minimum cost of calorie intake bundle. According to this approach, a poor is deficient in a few essential needs.

The absolute poverty line can be conceptualized as the minimum socially acceptable level of consumption or income used to distinguish the poor from non-poor. Thus, those individuals' remains under the poverty line are classified as poor and the others are non-poor.

The absolute poverty line is considered as constant over time and across regions due to consistency. It is further segmented into: (a) Caloric intake approach, in which poverty line is

decided on the basis of least calorie requirements. In this approach cost of gaining a specific quantity of calories is calculated by analyzing the association of calories intake and expenditures; (b) Basic needs approach in which poverty line represents the cost of the least bundle of essential needs comprised of food, clothing, housing, health, education *etc.* (c) Non-food consumption share approach in which poverty line is considered as a cut-off point by utilizing specific part of non-food in the overall consumption expenses. So the households, which have lesser non-food share as compared to the specific level, are considered as poor.

2.2. Poverty Indices

It is very important to select the poverty line. After selecting the poverty line, the theoretical and policy literature indicates that there is need to determine the choice of aggregator. Through this, individuals are counted who are below the poverty line and also measure the distribution of attributes such as income amongst the poor. These are the headcount ratio (P^0), average poverty gap (P^1) and the squared poverty gap (P^2), which were first used by Foster, Greer, and Thorbeck in 1984 (MCHD, 1999; Haq and Bhatti, 2001 and Cheema, 2005). These indices are used for poverty measurement, sensitivity and analysis.

2.2.1. Headcount ratio (P^0)

The headcount ratio is calculated to determine the proportion of people below the poverty line in whole population. It is well known and easy to calculate measure. It does not account the depth of poverty and does not follow the rule of transfer as well. Although, it has many deficiencies but it is the most widely used poverty measure.

$$\text{Head - count: } P_{0i} = P_0(w_i) = \begin{cases} 1 & \text{if } w_i < z \\ 0 & \text{if } w_i \geq z \end{cases} \quad HC = \frac{1}{N} \sum_{i=1}^N P_0(w_i)$$

(2.1)

Where z is the value of the poverty line for the household, w_i is the per adult equivalent consumption expenditure of the individual i , and N is the total population. Individual values are summed up. These values are multiplied with household size. They are properly weighted for the purpose to represent the whole population.

2.2.2. Poverty Gap (P^1)

Poverty gap calculate the distance between the incomes of the poor and the poverty line. It shows and calculates the average deficit of the incomes of the poor articulated as a share of the poverty line. Poverty gap measures the depth of poverty but it ignores the distribution of income amongst the poor or severity of the poverty.

$$Poverty\ gap: P_{1i} = P_1(w_i) = \begin{cases} \left(\frac{z-w_i}{z}\right) & \text{if } w_i < z \\ 0 & \text{if } w_i \geq z \end{cases} \quad PG = \frac{1}{N} \sum_{i=1}^N P_1(w_i) \quad (2.2)$$

2.2.3. Squared Poverty Gap (P^2)

The squared poverty gap measure of poverty is to give the more importance to the poorest below the poverty line. This measure accounts and give reponse to the squared average distance of income of the poor to the poverty line. So moving from P^0 towards P^2 , more weight is given to the poorest in the population.

$$Severity\ of\ poverty: P_{2i} = P_2(w_i) = \begin{cases} \left(\frac{z-w_i}{z}\right)^2 & \text{if } w_i < z \\ 0 & \text{if } w_i \geq z \end{cases} \quad SP = \frac{1}{N} \sum_{i=1}^N P_2(w_i) \quad (2.3)$$

2.3. Estimating Absolute Poverty Line

While a number of poverty indices, as poverty measurement tools are available, it is relevant to this study to discuss the estimation of the absolute poverty line. Since the objective should be monitoring poverty over time and across regions, absolute poverty is considered the most

appropriate approach for a developing country like Pakistan. CRPRID (2002) and Cheema (2005) discussed in detail the construction and estimation of absolute poverty line, as reflected upon the following section.

2.3.1. Selection of an Indicator of Economic Welfare

There are different methods to measure the well-being, as it is a wider concept compared to economic welfare, which measures only a person's command over commodities. The well-known approach to measure economic welfare is to calculate the household consumption expenditure or household income. But these methods do not properly indicate the situation due to false and fake information, as the household individuals do not disclose the income level due to tax reason, neither do they report the earnings from other sources. In addition, it is also very difficult to calculate some part of income. For example, it is very difficult to observe the changes in the value of livestock. It is also believed that incomes fluctuate during the year but consumptions remain mostly constant over the time. So consumption is considered better indicator of welfare than income.

2.3.2. Defining a Poverty Line

Once a measure of household well-being is determined, then there is need to calculate the amount whether the people remain in poverty trap or not, which is calculated through poverty line.

Poverty line is a certain minimum level required by a person (household) to fulfil his or her basic needs such as food, clothing, shelter, health and education facilities to live a humane life. The poverty line which is obtained through consumption bundle consists of food needs is called a 'food (calorie intake) poverty line'. On the other hand, the consumption bundle consisted of basic food as well as non-food needs called as 'basic needs poverty line'.

A poverty line is considered as country specific and this level of income or expenditure varies from one country to another. Individual with per capita income falling below this line is considered poor.

It should be noted that the Government of Pakistan has not an official poverty line, while each researcher used its own poverty line in Pakistan. They calculated the poverty line by using the different models. Planning Commission of Pakistan has announced the poverty line in 2002 that it shall be based on calories intake requirements of 2350 per adult equivalent which is called official poverty line in Pakistan.

2.3.3. Equivalence Scales

It is a fact that household compositions are different for each poor and non-poor. A comparison of aggregate household composition may provide the false and misleading results about welfare of the individuals in a given household. There is, hence, a need of some standard scale to solve this problem. For this purpose, adult equivalent scale is used to adjust for size and composition of the household. In this scale every member of household is counted as some fraction of an adult person. The adult equivalent scales are applied for the conversion of the number of persons in a household to adult equivalents. It is observed that with increase in household size, the per capita consumption decreases. So the equivalent scales depend on the different calorie needs of individuals of different ages, sexes and activities. In reflecting on nutrition scales, Nutrition Cell of the Planning Commission of Pakistan approved a revised scale, which is as under Table 2.1.

Table 2.1: Calories Required by Age and Gender (Per Capita/day) determined by Nutrition Cell of the Planning Commission of Pakistan

Age (in Years)	Male	Female
01 – 0 4	1304	1304
05 – 0 9	1768	1768
10 – 14	2816	2464
15 – 19	3087	2322
20 – 39	2760	2080
40 – 49	2640	1976
50 – 59	2460	1872
60 +	2146	1632
National Average		2150 – 2350

Besides the adult equivalent scale given above, some researchers also used the simpler scales.

Jafri (1995; 1999), used the scale indentified in equation (2.4):

$$AE = a_1 X_1 + a_2 X_2 + a_3 X_3 + a_4 X_4 \quad (2.4)$$

where

AE stands for adult equivalent a_i for parameters $a_1=1$, $a_2= 0.85$, $a_3=0.75$ and $a_4=0.45$

X_1 for adults in the household (age > 16 years), X_2 for children between 10-16 years of age, X_3 for children between 6-10 years of age, and

X_4 for children below 6 years of age

Havinga (1989) used the scale for estimation as identified in equation (2.5)

$$AE = 1 (EA) + 0.8 (NEA) + 0.7 (C < 10) \quad (2.5)$$

where

EA stands for Earning Adult, *NEA* non-earning adults, *C*<10 for child <10 years

Ahmad (1993) and Gazder *et al.* (1994) used the scale as under equation (2.6):

$$AE = 1 (A) + 0.8 (C) \quad (2.6)$$

A for adult and C for children less than 18 years

Kruijk (1989) used the following equation (2.7) for estimation:

$$AE = 1 (HHH) + 0.5 (AM) \quad (2.7)$$

where *HHH* for head of household and *AM* for additional member

2.4. Construction of Absolute Poverty Line

Poverty line is cut-off point between the poor and non-poor household. There are various steps which are involved in construction of both calorie intake poverty lines. These are discussed as under:

2.4.1. Cost of Basic Needs (CBN) Poverty Line

Cost of basic needs poverty line is widely used in developing countries. This is calculated with considering the expenditure or income necessary to obtain a given basket of food and non-food items, which satisfy the basic need of household. In this poverty line, food consumption bundle is found out firstly and then cost is estimated about that bundle. The food expenditure leads to calculate the food poverty line. After that some estimated value of non-food expenditure is added to food poverty line to get cost of basic need poverty line.

2.4.2. Calorie Intake Method

The calorie intake method to set the poverty line is based on minimum food requirements, expressed in terms of calorie intake per day.

- (i) Poverty line is calculated for each household or on per capita (adult equivalent) basis. To estimate poverty on per adult equivalence basis, adult equivalence for each household is to be calculated;
- (ii) Food quantity consumed by household is computed than it is converted into calories-intake;
- (iii) Per capita calories intake is converted into per adult equivalent calorie needs according to some specified scale.
- (iv) After computing the expenditure bundle and cost of that bundle is calculated.
- (v) There is need of daily intake of minimum required level of food-calories norm against which poverty line is estimated.
- (vi) There is need to compute of separate areas specific poverty lines for rural and urban areas due to different nature of economic activities done in these areas.
- (vii) The recommended level of calorie intake is computed and converted into food poverty line, for which Calorie Consumption Function (CCF) is used.

Poverty line, thus, is computed and from a regression of per adult equivalent monthly consumption expenditure (food and non-food) against estimated daily per adult equivalent calorie intake. This methodology absolutely assumes that those households who are able to achieve the minimum requirement of calorie consume also necessary non-food items. If they

are not able to reach than they should increase calorie intake. The regression is run for the first three quintiles of the population, as expressed in equation 2.8:

$$Y = a + bX + u \quad (2.8)$$

where Y indicates the monthly per adult equivalent consumption expenditure (food and non-food) and X is used for daily per adult equivalent calorie intake

2.5. Poverty Band and the Three Zones of Poverty

Poverty categories are established by CRPRID (2002) on the basis of its depth and severity. It is suggested that Poverty Band (interval estimate) should be estimated instead of Poverty Line (point estimate); and accordingly, people should be categorized in different interval such as Non-poor, Transitory-vulnerable, Transitory-poor, Chronically-poor and Extremely-poor.

In such categorization, ‘transients’ are those who can move in and out of poverty band, while ‘vulnerable’ are those people who stand above the poverty band. In addition, ‘transitory poor’ are below the poverty band, while the categories chronically poor and extremely poor are below the transitory poor.

2.6. Financing and managing poverty reduction

As stated above, poverty is not a simple phenomenon, and therefore it is very difficult to adopt a specific approach to address it, as it is interlocked with complex socio-economic and demographic factors. Different strategies have been adopted over time to address the poverty in different countries. The following literature review focuses in strategies aimed at managing and alleviating poverty.

2.6.1. Microfinancing and Poverty

Microfinancing is a financing tool aiming to manage and alleviate poverty, reduce vulnerability and poverty trap in the developed and developing countries of the world. Many institutions are functioning for the purpose to provide micro credit to people for income generating activities. The credit is provided for purchase of agri inputs, livestock and to start and expand the existing business.

The existing body of knowledge indicates that a number of studies have been conducted to measure its impact. Some studies estimated the positive impacts and the other differs from this point of view. The following sub-section aims to evaluate such empirical studies focusing on the impact of microfinancing on poverty reduction.

Ayuub (2013) estimated to measure impact of microfinance on poverty reduction in Bahawalpur District in Pakistan. For this research primary data was collected from microfinance banks and some of their clients. He concluded that there was a great potential for the growth of microfinancing in Bahawalpur region. He noted that the purpose of microfinance should be to develop the standard of living of the people of the country. But in Pakistan main focus of Microfinance Institutes (MFIs) is to earn higher profit on the credit. Increase in income level and customer satisfaction level was estimated in this report. He concluded that in rural areas credit is not available to the farmer on time, and that higher interest is also charged from the farmer. However, the study found that there is no increase in income significantly. There is still high potential market for the growth of micro finance. He concluded that there is a strong relationship between microcredit and poverty reduction in the region. The results also showed that Microfinance Scheme helped people to improve their income and their living standard as well, as it provided them financial opportunity to start, expand and stable their business. Microfinance may play important role to quick revival of economy, increase in living standards and empowerment.

In an another study, Hamdani (2012) investigated the relationship between microcredit and social mobility, and explicated that how microcredit updates the social mobility from down to upward. The paper was basically aimed to evaluate the role of microcredit in social mobility. Microcredit was considered as the long lasting approach to struggle against poverty and empowering low income households. It is also considered that in society and organizational processes microfinance supported the lower income people and groups. The analysis of the study yields that there was a significant positive association between microcredit and social

mobility in the society. Furthermore, the results of the study revealed that microcredit enhanced the social mobility of people which in turn provide support to improve their living standard and offered various financial opportunities. Hamdani (2012) found that microcredit emerged as prominent strategy, that assist in rapid revitalization of economy, raise the living standard, empowerment in decision making and social mobility of people.

Shah *et al.* (2011) investigated the association of microcredit in income generating activities of women and its impact on their socio-economic empowerment. The target population of the study was those women who had availed microcredit facilities from some microcredit providing institutions or organizations in district Kasur. The study utilized survey method technique for the purpose of data collection and analysis. The major portion of population was illiterate or semi-literate, so interview technique was applied as an instrument of data collection and using two stage clusters sampling method respondents were selected as a sample. The findings of the study demonstrate that microcredit has significant positive impact on the enhancement of socio-economic empowerment of the borrowers in district Kasur.

In focusing on the gender related impact, Noreen (2011) concluded that empowerment of women is one of major and vital problem in developing countries. Although women are fundamental part of society, yet their status and participation in decision making as well as economic activities is very low. She concluded that microcredit plays a role in improving women decision making by contributing in economic activities. In this study an attempt was made to explore the socio economic determinants of women empowerment. This study used regression analysis based on primary data of Bahawalpur City to check the relationship of different socio-economic determinants on women empowerment. She measured the women empowerment by constructing simple index, which was constructed through five indicators related to child health, education, selection of spouse of children, purchase of basic goods and decision about the use of loan. The results show that women empowerment is considerably influenced by age, education of husband, father inherited assets, marital status, number of sons alive and microcredit. It is noted that among the significant variables, age, education of husband, no of live sons and father inherited assets are more statistically significant variables in this study. Further, this study decomposed data with male and female using loan which implies that females use loan effectively for income generating activities than males. It is suggested that education facilities and family protection must be provided in proper way to

all members of household. Thus, the study concludes that microfinance institutions should play important role to reinforce and increase their support to resource poor women.

In an attempt to measure the poverty alleviation impact of microfinancing, Duranni *et al.* (2011) analysed and estimated that microfinance is an effective poverty reduction strategy. He analysed the role of microfinance on poverty alleviation both in social empowerment and economic growth aspects. The social and economic factors that were considered in this study include the improvement of life style, better accommodation standard, higher income generation, life standard, purchasing power, expansion of resources for business, self-employment and adoption of better technology. Economic growth and development was also considered basic element in this study. It reveals that access and efficient provision of micro credit can enable the poor to generate higher income, smooth consumption, better manage their risks and to face the shocks, gradually build their assets, start and develop the micro enterprises, and enjoy an improved quality of life. Durrain *et al.*, (20011) argue that with little efforts and commitment, the performance of microfinance institutions could be improved gradually. These institutions can play their role for better social empowerment and economic in the society for poverty alleviation.

Ali *et al.* (2011) attempted to locate the impact of financial sector development on poverty in various countries. The rationale is drawn from the fact that financial sector provides microfinance in the society, while growth depends on financial sector development and poverty depends on growth, hence the negative relationship of poverty and financial sector development was tested. The findings show that banking sector variables proved the negative relationships of poverty and financial sector development because all the banking sector variables are negative correlation with poverty. Like the banking sector, stock market variables also indicate a negative relationship and they are highly significant also. In bond market, negative relationship between public bond market capitalization to GDP and poverty was founded. However, the study located that with the improvement of the stated variables of banking, stock and bond market poverty has decreased.

Muhammad (2010) evaluated that micro finance was a basic player to get out the poor from poverty trap. He highlighted the challenges and opportunities faced by microfinance sector in Pakistan. He also concluded that microfinance in Pakistan has completed its primary stage and is entering in mature phase to take part in the economic development of the country. However, the successful transition is subject to strategic thinking by microfinance providers

(MFP) and established institutions and as to how they behave and play their role for the achievement of their basic goal of poverty alleviation. Many microfinance programmes have increasingly targeted women in response to experience of excellent repayment rates in other countries. But in Pakistan they should keep in mind of local culture and other social customs. Because badly designed micro-finance programs may have very limited impact on poverty alleviation which is its core objective. Overall, the study concludes that microcredit programs may alleviate the poverty through positive and timely taking steps.

Khan *et al.* (2009) conducted a study to investigate the impact of Cooperative Microfinance Program on the standard of life of poor marginalized masses, who used secondary data including time series from 2002-2008 about the disbursement of funds, number of beneficiaries (gender wise), financing methods have been taken from the reports of Islamic Relief. Numbers of beneficiaries, the volume of disbursement, recovery rate from disbursement, profitability and viability have been used as a proxy of well-being of the poor masses and successful performance of IMFO respectively. Augmented Dickey Fuller (ADF) test for checking the Stationary of data set has been used. In the study, the efficiency and performance of financial programs has been evaluated by using various financial ratios such as Return on Assets (ROA), Net return Margin (NRM) and Beneficiaries to Employee Ratio (BER). The study found that on the basis of RoA, NRM and OCL the financial performance of Islamic Relief Pakistan is much better than the conventionally largest NGO namely National Rural Support Program (NRSP). BER is used to measure the efficiency of the employees in reaching the beneficiaries. In this respect the performance of both of the organizations were found to be approximately same. The study reveals that average total number of clients per year is 340, which increase with annual growth more than 250 %. Annual average disbursement through *murabah'ah* transactions) is growing more than 690% annually. Findings of the study suggest that there is a great potential and greater chance of growth for Cooperative microfinance programs over here in Pakistan. Based upon the findings, the study suggests that the government should initiate a comprehensive cooperative microfinance program to alleviate the absolute level of poverty and to improve the standard of life of extremely marginalized groups of the society.

In a specific case study, Sherazi *et al.* (2009) investigated the impact of PPAF micro credit on poverty reduction of the borrowers. The PPAF micro credit has reduced the overall poverty level by 3.07 percentage points (from 6.61% to 3.54%) and the borrowers have

shifted to higher income groups during the reported period. Sherazi *et al.* also found that the poverty status of the extremely poor borrowers has been marginally increased (by 0.63 percentage point), representing evidently no effect of micro credit on the poverty status of these households. It should be noted that the results of the study were consistent with the conceptualization that evolved from the prior literature that chronic poor households borrow basically for protection purposes. The study also found that in case of ultra-poor, the net impact of micro credit showed a reduction by 1.45 percentage points (a positive impact). Although the percentage of vulnerable group showed a reduction, both with and without micro credit, however the net impact shows an increase in their number by 1.77 points.

In another case study, Setboonsarng (2008) investigated the results of impact of microfinance on clients of Khushahali bank. The study adopted Propensity Score Matching Method for the purpose of selectivity bias and the results revealed that lending programs of the bank positively affected the income generating activities like as agricultural production and especially animal raising. Furthermore the study concluded that lending programs has minor impact on various additional MDGs like as education, health and female empowerment. The major reason for the little impact on other factors was that most of the sample went through only single loan cycle so the relationship emerged as near to insignificant and could be investigated in the future. Previous study by Montgomery investigated the impact by adapting OLS and Logit models on the similar dataset but in this study PSM Method yielded somewhat different results from prior study. The study reported consistent results with prior study when measuring impact of microfinance on poverty reduction and furthermore when selectivity bias was controlled results were more significant.

Kim *et al.* (2007) evaluated the impact of microfinance projects on rural poverty alleviation improved the socioeconomic status of women in developing member countries. The study used quantitative tools to measure the impact of microfinance on rural households. The results of the econometric estimates showed that the provision of microcredit loans had positive and mildly significant on the per capita income of the beneficiaries. However, the impact on per capita income and expenditures was found to be regressive. Study, therefore, suggested that only targeting the poor households might not be the most appropriate way to help them to escape poverty but impacts could be strengthened if the quality of client subprojects were improved to generate higher profit to increase the household incomes. The poor household needed the guidance and skill for business to develop income generating

activities. To improve the quality of impact evaluations for poverty alleviation, microfinance projects could allocate the necessary budget for baseline for post-intervene. Data should be collected to estimate and measure the impact and to guide them. Selected projects should be included for data collection of impact measurement. The institution should also give the training to staff time to time so that proper they should provide the guideline to household.

Abbas *et al*, (2005) empirically analysed the role of microcredit on income generating and poverty through regression and correlation methods. The empirical evidence showed that there is a positive impact of micro credit on income generating. It is also concluded that effectiveness of microcredit on poverty reduction largely depends on local circumstances. A road map for the supervision of agricultural credit should be adopted. The loaning process should be made easier and quicker. In the case of small landholding, the poor farmer might be guide to invest in small and medium enterprises as well as in their land by purchasing inputs to alleviate the shocks and vulnerability faced by them.

Ahmad (2004) recommended that concept of micro financing was very important to alleviate the rural and urban poverty of the country. This research was conducted to explore the role of micro finance program through Kush Hali Bank in poverty alleviation in Tehsil Rahim Yar Khan, Pakistan. It was concluded from the data that Khush Hali Bank was professionally serving the poor to reduce the poverty level and to develop their living standard. It was also suggested that loan amount should be increased, routine meeting should be conducted timely by bank and bank must adopt the easier process to provide the loan.

Ahmad (2003) estimated the input elasticity of production for poor and non-poor farms. The study used and estimated the stochastic frontier production function which resulted that the elasticity of production differ for poor and rich farms. The production elasticity of land was significantly higher on rich farms than belonging to poor farmers. This indicated that rich farmers were getting higher return on investment. The tail-end location of the plot adversely affected farm productivity and efficiency, particularly at the poor farms. The study further concluded that the least efficient group was operating at the lower portion of the production frontier. Consequently, increasing financing and managing access to the inputs would likely raise productivity and reduce poverty in rural areas. The results indicated that before the land distribution among the poor and small farmers there would be need to change the existing farm structure, rural infrastructure, and the weak farm-supporting institutions to raise farm productivity and reduce poverty. The researcher also suggested an active role to be played by

government in close partnership with the private sector to initiate income-generating activities and inputs supply chains in the rural areas to break the vicious circle of poverty, land degradation, and low agricultural productivity.

Zaidi (2001) investigated the impact of micro credit on the poverty reduction in poor recipients of micro credit. The study proposed that micro credit was not an efficient tool to reduce poverty of very poor and destitute so following suggestions are made to make it more efficient: (a) Micro credit ignored the category of extreme poor so in future it should take in to account the more broader target group; (b) Micro credit treated all the family with one standard rather than there should be more focus and priority for the families having children under 18; (c) Micro credit should provide other support like as (physical support, training, skill development) also rather than just providing the economic support.

Another study conducted by Qureshi *et al.* (2001) on rural areas suggested that poverty ratio was higher in nonfarm households as compared with farm households: the higher the number of workers in a household the lesser will be ratio of poverty in a household. The study suggested that education has a strong positive impact on the productivity and earning of individual. Furthermore, the education of individual strongly influenced the productivity and earning of all interlinked people. The study concluded that provision of employment opportunities reduced the level of poverty in rural areas.

Akhtar (2000) presented an Islamic approach to poverty alleviation on sustainable basis, and therefore, he found major problems in existing approaches that poverty alleviation was never sought as policy goal by government. Government did not take proper and accurate step to address the poverty in the country. This paper suggested that grant, small cash provision through safety nets and small loan are not solution of the poverty alleviation. The paper suggested two-pronged approach which guided to accelerate economic growth favouring poor and second was systematically extending them to provide education, health, and drinking water facilities to the poor of the country. For this approach the paper suggested starting of Islamic banking system, instituting of guarantee agency, and welfare budget in the country.

2.6.2. Education and Poverty

As stated previously, poverty is complex phenomena with its socio-economic and cultural background. In this, education is considered an important instrument to break this vicious circle of poverty. Therefore, many researchers concluded the education as a basic tool to

address the poverty issues. There is not a single study which denies the importance of education in the society to reduce the poverty level for the household.

Faux and Ntembe (2013) concluded that poverty alleviation in all its forms requires economic growth and progress, who evaluated that lack of education reduced the earning abilities of individuals in an attempt to investigate the impact of education attainment on poverty. The data was collected for the study from Cameroon household Survey which was conducted in 2007. The study employed a logistic regression model to investigate the probability of an individual being poor. The dependent variable was a dichotomous variable, which was equal to one if the person is poor and zero, otherwise. While they used the variable including gender, work experience and education levels of education as explanatory variables, they estimated that there was no impact of primary education on poverty alleviation in the country. They evaluated that as the level of education increased, the level of poverty reduced in the country. The study also found that the reduction in the probability of being poor as educational level increases impacts women more than men. The results of the regression were consistent with the claim that educational attainment played a substantial role in poverty reduction, as they concluded that education could serve as an effective tool for empowering women. Education can play in reducing the gender bias in earnings among males and females, rendering them more productive, and ultimately help to reduce poverty.

Awan *et al.* (2011) conducted a study on human capital through education and income and suggested that there exist a positive relationship between human capital and income. Results of the study revealed that education and experience of individuals are negatively associated with the poverty status of individuals. The results of the study implied that education of poor people had vital importance in breaching the fierce circle of poverty. Education of poor people was suggested as an effective tool for reduction of poverty by increasing the productivity individuals. The discrimination of gender in provision of education should be reduced to yield the social rate of return to female that is very high.

Aref (2011) concluded that education and learning were widely recognized as essential to the processes of economic development and poverty reduction in the country. He used focused group to evaluate the relationship between poverty and educational attainment. He observed that education access opportunities, equity and quality of education were identified as prerequisites to the achievement of economic growth and development goals. He also identified that there were some rural structural barriers for the achievement of quality

education. He also pointed out the negative relationship between the education and level of poverty in rural areas.

Janjua (2010) evaluated that the existing literature on education and poverty considered mostly primary data from an income point of view. He also pointed out that the benefits of education vary from a direct income effect to positive externalities, which can help reduce poverty. This paper used panel data for 40 developing countries for the period 1999 to 2007. He estimated coefficients by applying the random effect generalized least squares (GLS) technique. The study concluded that per capita income growth played a moderate role in poverty alleviation in our selected countries during the observed period. Study also evaluated that decrease in income inequality play a strong role in poverty alleviation. The study also resulted that secondary education was the main contributor to poverty alleviation, while education clearly enhances human capital and a person's earning ability.

Kiani (2010) evaluated the role of university education for economic growth and poverty alleviation in the country, who aimed at measuring the impact of different programs by Higher Education Commission through Indigenous and Foreign Scholarship for PhD's on economic growth of the country. The scheme aims to produce much PhDs which ultimately improve the standard of living of the students and attainment of well reputed jobs in different institutions of Pakistan, leads to alleviate the poverty relatively. This paper, hence, reviewed the role of education in promoting economic well-being focusing on the role of educational quality. Much evidence in the paper from developing countries suggested that education was a key player in reducing poverty. It should be noted that the main purpose of this study was to examine the effects of some of the key macroeconomic variables on Pakistan's economic growth during 1980-2007 taking four different education levels. It was concluded that the cognitive skills of the population-rather than mere school attainment-were powerfully related to individual earnings, to the distribution of income, and to economic growth as well. University education did not play a significant role in poverty alleviation.

In an another study, Awan *et al.* (2010), explored the effectiveness of education stated that the attainment of middle, matriculation, intermediate, bachelors and professional degree would minimize the likelihood of individuals to remain poor. The study suggested that all the educational factors were negatively associated with the poverty status of individuals. Furthermore the study concluded that public services (such as telephone, water supply and sewerage) were also negatively associated with the probability to become poor and poverty status of individuals.

Chaudhry *et al.* (2009; 2006) analysed and showed the positive relationship between big family size, increased dependency ratio, higher female-male ratio and poverty. There is negative relationship between education, landholding, participation ratio, age of household and poverty. The empirical evidence represents that household size, dependency ratio, the presence of a female household head, and residence in a *kacha* house were strongly and positively associated with the possibility to become poor. Moreover, it stated that two variables naming the educational attainment of households and literate household head were significantly and negatively associated with chances to become poor.

Hashmi *et al.* (2008) identified that if household size and dependency ratio raised then likelihood to remain poor also increased and the chances of remaining poor for a family in the Attock district were higher. He also evaluated that if the members of household were on average higher aged then the chance of remaining poor were less. Educational level of male or female household members had strong negative association with the poverty level of poor. Moreover the education of household head had also a strong negative association with poverty level.

Rose (2008) evaluated and acknowledged that primary education was widely supposed to play a key role in reducing poverty. In this study, it was found out that education was also positively correlated with the productivity and higher income and negatively correlated with poverty. The results indicate that education was extremely correlated for female with improvements in health and reductions in fertility, infant mortality and sickness rates, which should be considered as an important instrument to break the vicious circle of poverty. He also found that less work was done on chronic poverty and education in the literature. He also concluded that the use of education to reduce chronic poverty does not emerge from review of the literature as a focus of education policy.

Bhutto (2007) evaluated that poverty was rural phenomena in Pakistan. In rural areas of Pakistan, people were facing deprivation with regard to incomes, clothing, housing, healthcare, education, sanitary facilities and human rights. He also pointed out that agriculture sector generated major part of GDP in the country and provided employment for workforce of the country. He evaluated that the population living in rural areas is directly or indirectly dependent on agriculture for their income and livelihood. He highlighted the rising population, shrinking agricultural land, increasing demand for water resources, widespread land degradation and inadequate were major concerns of the agriculture sector in Pakistan. In

addition, Bhutto (2007) examined the population growth–agriculture growth–poverty alleviation linkage, in which he argued that agriculture would continue to be one of the most important sectors of Pakistan’s economy for years to come. He suggested for poverty alleviation that Pakistan enhance the productivity of the agriculture sector through the provision of a series of inputs. It should be noted that these inputs may provision of easy credit to the small farmer, availability of quality fertilizers and pesticides, tractor and harvester services, improvement in the effectiveness of the vast irrigation system and, finally, farmer education. In conclusion, he stated that the high rate of population growth needs to be restricted for increased agricultural productivity.

In an attempt to measure the impact of education an a basic element, Awan (2008) concluded the education played a critical role in human development. He particularly found that gender inequality in education was a problem for quality education, sustainable growth and poverty reduction as well in the country. He empirically proved that provision of education to female could make them socially empowerment and productive. He also pointed out that inequality in education was main cause of wage differential and income inequality. Labour market also compensated the education biased based also within a country. In order to estimate the impact of different factors on earning inequality, this study used earning function and occupational choice model. The estimated Mincerian earning equation showed that extra year of schooling increased the income for male and female population. It resulted that it was stronger for the latter bringing a reduction in income inequality between males and females. Education also helped the people choose better earning job and also provided the opportunity to be self-employed.

Sabir *et al.* (2006) used several approaches that were applied in determining the causes of poverty in Faisalabad and Tobe Take Singh. The major poverty causing factors were low productivity of crops, bigger family size poor resource base, illiteracy, lack of infrastructures and dependence ratio. The education of household head was a poverty reducing factor. He concluded that education was the better source to fight against poverty.

Another study by Siddiqui (2005) suggested that there should be more opportunities for the poor in the form of education, vocational training for developing skills, infrastructural development and additional resources to help them to get out from the poverty trap. The study investigated that transfer of funds from overseas Pakistanis to home country had strong negative impact on the level of poverty in the households. The study also suggested that

family units having their personal homes had strong negative impact on the poverty and increased the financial position of household. The results of the study implied that new policies should seriously consider the provision of homes to poor in order to develop strong financial position and raise the living standard. But the study rejected the pre conception about male/female ratio and poverty reduction and concluded that there is no significant association between male/female ratio and poverty reduction.

Lastly, Khalid *et al.* (2005) suggested that poverty level in rural region is higher as compare to the urban region. Results of the study revealed that age of head of household has negative association with the food poverty in the household. As their study suggested that the higher the age of a head of household will be the lesser food poverty exists in the household. Furthermore the study concluded that major reasons of the poverty are deficiency of credit, lack of human capabilities (like as education and skills), shortage of physical assets (like as land or financial) and largeness of household. The study suggested that households in which females were head or households had farms were less likely to remain poor. He suggested to provide credit facilities for poor to launch some new income generating activities in the favour of household like as shop keeping, stitching schools and small businesses for income generating activities.

2.6.3. Poverty and Human Capital

Human capital is associated is associated with higher performance and output. Higher output leads to higher income, which reduces the poverty level of households. Many studies suggested enhancing the human capital to reduce the poverty in the society. Human capital may be enhanced through education and skill to the member of household.

Awan (2011) evaluated positive relationship between human capital and higher level of income through empirical research. He found that the economic development in East Asian countries was associated with investment in education for the development of human capital. The study was designed to investigate the relationship between levels of education and experience and urban poverty. A survey-based analysis was carried out for the purpose. Results showed that education and experience are negatively related with the level of poverty. The research implied that education of poor is necessary for human capital development in breaking the vicious circle of poverty.

Santos (2011) evaluated the model of poverty trap based on an unequal initial income and human capital distribution, and inequality in education between children from the more and less advantaged social sectors. He used a poverty trap model developed by Ceroni (2001) who incorporated the quality of education in the analysis. The study estimated the correlation in an inequality in the distribution of human capital and income, the human capital accumulation dynamics lead, under certain conditions. Under certain conditions, the economy converged to a position with three stable and simultaneous equilibriums. He concluded that with low human capital individual could not enhance the quality of education and income as well. He evaluated that high level of human capital ensured the quality of education and higher income. Paper concluded that a policy of equal education would reduce inequality in income for the long run, which would lead to reduce the poverty.

Kumara and Singh (2009) evaluated and estimated different aspect of human development of poor households in North Bihar, which revealed that female was higher deprived in energy intake as compare to male in rural areas. They found that poor household had higher incidence of illiteracy and non-enrolment in schools. The study indicated that poorhouse hold had lower stake in the management of rural organizations, which also suggested that higher investment in human capital through education could reduce the level of poverty. They also suggested to improve the structure of rural areas and to launch the rural development program. The study observed that targeting of rural poor households in formulating strategies and implementing development programmes need special attention to break the vicious circle of poverty in rural areas. These factors need to be addressed immediately for increasing their capability and skill through human capital development so that they could be able to get out of poverty trap. They concluded that improvement in social and human development aspects were the per-requisite for implementation of any programme for poverty attenuation in Bihar.

McKee (2011) evaluated the effectiveness of Mexico's Oportunidades program in terms of its impact in increasing enrolment in schooling and improving health of disadvantaged children. The study estimated and integrated experiment of the program's effects on human capital and income generating activities, which also analysed how Oportunidades would affect future earnings of program participants. The study non parametrically acted out earnings distributions, with and without the program, and predicted that Oportunidades would increase future mean earnings. The Oportunidades program focused to reduce poverty through human

capital development for disadvantaged people. The empirical findings of the paper suggested that the human capital investment in today's youth would enhance the earning level.

Vinod *et al.* (2007) evaluated that human capital which was used to explain GDP growth in Solow model with the objective of demonstrating whether human capital might be enhanced through education. They showed statistically significant coefficient for human capital variable in the models for OECD countries, for which they used time series data of 20 years and panel regressions on a group of eighteen large developing countries. They found that investment in human capital had remained a low priority compared to physical capital for policy maker to address the productivity and increased earnings.

Kaas (2007) studied and evaluated the dynamic interaction between human capital growth and economic growth in the country. Due to capital market imperfections and indivisibility in human capital investment, poor agents were banned from skills development. Modern and productive technologies required more modern training and qualification and involve higher training costs. This paper showed that one need not refer to exogenous shocks to account for a non-monotone pattern of growth and schooling activities, as they found that, in the presence of capital market imperfections, the interaction of skill acquisition and technological progress could generate endogenous growth in cycles. They estimated that individual human capital investments exercise an externality on economic growth; as for example, human capital might be enhanced by learning by doing for use of technologies. They concluded that it was the best and the easiest way to link the human capital with economic growth.

Behrman (2011) concluded to a similar conclusion in a survey of human capital policies by focusing on as to how increasing education affects earnings inequality in Chile. He observed that it was very difficult to predict which child would have low human capital capabilities and would earn lower in the labour market. He also concluded that childhood poverty was strong predictor for future low earning. He pointed out that it was very necessary to target the deprived poor and to enhance human capital for higher earning in future.

Jones *et al.* (2006) evaluated that human capital played an important role in the theory of economic growth, as it was necessary factor for poverty reduction in the country. They surveyed the psychological literature on cross-cultural IQ tests and conclude that intelligence tests provided a useful measure of human capital. Using a new database of national average IQ, they showed that IQ was statistically significant in 99.8% of the 1330 regressions, easily

passing a Bayesian model-averaging robustness test: a 1 point increase in a nation's average IQ is associated with a persistent 0.1 1% annual increase in GDP per capita. GDP growth was associated with poverty reduction in the country. So human capital was primary factor for economic growth, which might lead to poverty reduction in the country.

Chakraborty (2005) focused on high intergenerational correlation of economic status and persistent disparities in health status between the rich and the poor. He introduced health capital into a two-period overlapping generations model and found that private health investment improved the probability of surviving from the first period of life to the next and, along with education which enhanced an individual's labor productivity. He concluded that poorer parents had poor health and they were unable to invest much in reducing mortality risk and improving their human capital. As a result, they left less for their progeny, which led to poor health. He estimated that initial differences in economic and health status might perpetuate across generations. He concluded that health was necessary for human capital development.

In another empirical study, Horell (2001) evaluated and estimated to illustrate the intergenerational transmission of poverty through the effects of shocks to family income in Britain. He also estimated these shocks on children's general education and health and subsequently on their capacity to work and earn as adults. He concluded the evidence for 19th-century Britain, which showed that being fatherless, had an adverse effect on children's human capital acquisition which resulted in poverty. However, policy intervention for human capital development could block the transmission of poverty. Evidence from Britain demonstrated the effects of early deprivation on human capital acquisition and suggested that the poverty of one generation could prejudice the life chances of the next independently of individual merit. A common misfortune, the loss of a father triggered a slide into such hardship as would damage human capital, both physical and educational. There was need of a large rise in income to offset these early insults and recur as productive members of society through human capital development.

Barro (2001) in his study concluded that human development has been integrated as part of economic development theory, as his study evidenced that education was very important for human capital, which contributed to economic growth. He concluded that inequality of access to education was a serious problem, which should be solved. He noted that in a poverty alleviation programme, tackling regional inequalities in education is very important in any

region, and further suggested that quality education for all was basic solution to address the poverty in the country, as educational quality enhances human capital which increases the productivity and income as well

Oxaal (1997) evaluated the link between education, human capital and human capital and poverty. He discussed that there was great gender inequality in education in developing countries. Female were provided less opportunity to enrol in school and to get the education. He concluded that female disadvantaged in enrolment and education were the basic problem of overall development. He evaluated that opportunity cost for female education was higher and return was lower due to differential in wage of men and women. He suggested reducing the opportunity cost for female schooling and increasing the investment for their education. He, lastly, pointed out that poverty could be addressed by enhancing the human capital with quality education.

On the basis of literature reviewed above these hypothesis are developed to test for study:

H₀: Micro financing for livestock does not reduce the level of rural poverty.

H₁: Micro financing for livestock reduces the level of rural poverty.

H₀: Micro financing for agri inputs does not reduce the level of rural poverty.

H₁: Micro financing for agri inputs reduces the level of rural poverty.

H₀: BISP's cash disbursement reduces the level of rural poverty.

H₁: BISP's cash disbursement does not reduce the level of rural poverty.

H₀: Education and training does not reduce the level of poverty.

H₁: Education and training reduce the level of poverty.

H₀: Institutional microfinance does not significantly reduce poverty

H₁: Institutional microfinance significantly reduces poverty

H₀: Zakat disbursement does not reduce the rural poverty

H₁: Zakat disbursement reduces the rural poverty

H₀: VTI program financed by Zakat fund is not most significant program in rural poverty reduction.

H₁: VTI program financed by Zakat fund is most significant program in rural poverty reduction.

2.7. CONCLUSION

As the preceding discussion indicates, the debate over poverty in the literature show that poverty is multidimensional and therefore any strategy to alleviate poverty should be multidimensional as well. As mentioned above that it has complex phenomenon interlocking with socio-economic and demographic factors differing from region to region where it is addressed.

The literature, thus, has not agreed on single one strategy to pull out the poor from poverty trap. Some of researchers focused on microfinancing, as they argue that microfinancing is an important financing tool aiming to manage and alleviate poverty, reduce vulnerability and poverty trap in the developed and developing countries of the world. Therefore, recent years have witnessed the emergence of many institutions functioning for the purpose of providing micro credit to people for income generating activities. The credit is provided is mostly in the form of purchase of agri inputs, livestock and to start and expand the existing business.

Others researchers concluded that education is basic point on which all strategies should be focused for managing the poverty reduction. However, as to which level of education is compulsory for managing the poverty in any region is controversial, as some argues primary education is important, while others focused on higher level of education. Many studies suggested that inequality in education is also reason for poverty. They suggested that overcoming the inequality of education in the country is an essential tool.

In responding to poverty alleviation, one school of researcher focused on human capital as an essential tool to increase the output efficiency and income as well to manage the poverty reduction. They concluded that human capital is associated with higher performance and output. Higher output leads to higher income, which reduces the poverty level of households. Many studies suggested, therefore, that enhancing the human capital to reduce poverty in the society, as human capital may be enhanced through education and skill to the member of

household. Therefore, to enhance the human capital, some researchers argue about the formal education but the other focus on skill and development for the poor.

As the literature indicates, different studies have been conducted with separate strategies. There is a need hence, to conduct the study including all these strategies and to measure the impact of these strategies on poverty reduction at the same time. So this study is being conducted including above mentioned strategies to conclude which strategy is the best for study area to manage the poverty reduction.

This research presented in this study aims explore poverty strategies and their impact in the least developed districts of Punjab where literacy rate is very low and poverty ratio is very high. Different institutional frameworks have been working since a long time to manage and finance the poverty alleviation. For example, microfinance is provided through Khushhali Bank and other institutions to poor in this area for agro purpose. In addition, vocational and technical education is also provided by some institutions in this underprivileged area to poor members free of cost. Furthermore, scholarship is also provided to students in cash by *zakat* institution to continue the education. Some institutions have been providing the regular cash to poor females and other household members as well.

In concluding, it should be mentioned that this study is first one in its nature to investigate the impact on different type of beneficiaries at the same time to compare the effectiveness of institutions to manage the poverty reduction in rural area of Pakistan.

CHAPTER 3

METHODOLOGY

3.1. Introduction

The theme of this research in general, and the research questions and research objectives in particular necessitate to develop a methodological framework that consists of the following components:

- (i) Select a research site or area that represents the poorest of the poor, and where majority of the public and private sector poverty reduction programs and safety-nets have been in operation for a sizeable long period.
- (ii) Select a sample of the poor people, including both beneficiaries and non-beneficiaries so that the poverty status of the two can be known and compared.
- (iii) Set a methodology for measuring poverty status of the two types of respondents' beneficiaries and non-beneficiaries of various poverty reduction and safety-net programs.
- (iv) Set appropriate statistical/econometric/mathematical tools that suit for a sophisticated analysis necessary for this research.

The following sections, hence, details the research process and research administration to provide a research methodological context, which starts with geographical regions and the poverty related programmes covered in this study.

3.2. Defining the geographical field of the study and the poverty related programmes covered: cases for the research

As mentioned earlier, the occurrence of poverty in Pakistan is highly asymmetric both across the provinces and within the province. The Southern and Eastern areas of the province of Punjab are considered seriously affected. Furthermore, the rural areas of Punjab are poor and reflect the worst human development indicators relative to the urban areas of the province. The household in Southern and Western regions of the province are badly affected by providing the educational and health facilities and other public service rescue outcomes as discussed in last chapter no 1. Among these regions, the DG Khan Division has been

identified as the poorest division of Punjab. Rajanpur (RP) and DG Khan Districts are the poorest of the poor in the Southern Punjab. The profile of these districts is as under.

Dera Ghazai Khan District is situated near the Indus River. It is an important district of west southern Punjab, Pakistan. Dera Ghazi Khan is populous city of southern Punjab having the area of 11922 square kilometer with cropped area of 377,000hectars it is only city of Pakistan which is called junction of all province. In the west, its boarder is attached with Distt Barkhan of Balochistan, in north it is linked with Dera Ismail Khan of Khyber Pakhtoonkha. It is last district of last in the west. The location of Dera Ghazi Khan District (D. G. Khan) is 30°03" N and 70°38" E. The district can be further sub divided into two sub divisions: plane areas and tribal belt that is mountainous. There are two major town in the composition of district, 1) D. G. Khan and 2) Taunsa. The plane area of district can be further divided into three regions 1) Piedmont area, 2) canal irrigated area and 3) river irrigated area. The de-excluded area of district Rajanpur comprises ranges of Sluleman Mountains. DG Khan is very shaky in terms of temperature, the coldest month is January in which temperature varies from 21 to 4.5 degree and likewise the hottest month is June in which temperature ranges from 42 to 29 degrees. It rains heavily during moon soon that causes flood in the river Indus and torrents also emerge from Suleman range. Due to the barren mountains of *Koh-Suleman* (Sulaiman Mountains) and the sandy soil of the area, windstorms are very common in the summer. During summer, the temperatures are generally amongst the highest in Pakistan. Fort Munro, located on the edge of Punjab Province, has relatively cooler weather. In winter, scattered snowfall is also reported in this area.

The overall climate of the district is hot and dry with little rainfall. The winter is relatively cold and the climate is hot during the remaining part of the year, but it is very hot in summer. The temperature during summer is usually about 115 °F (46 °C), while during winter season the temperature is as low as 40 °F (4 °C). The prevailing wind direction is North-South.

According to census 1998, the sum total population of DG Khan District was 1643,000 and it was an increased 3.3% growth rate from 1981. Based on growth rate, the population on June 30, 2012 was 2285000 with 138 density person per square kilo meter. According to MICP 2011-12, there are 108 male for 100 female in the district. According to MICSP 2011-12, it was 828 Mauzas and 51 union councils in DG Khan District. Islam is the major religion of the area according to 1998 census.

Access to education and achievement of basic and primary education is basic right of human and important role of Millennium Development. It is vital tool against poverty reduction and promoting human right and democracy. Literacy is important indication for monitoring progress towards universe of education Literacy rate of district DG Khan was 30.6% in 1998 in which the male population is almost double as compared to female as the contribution from female was 18.1 % and it was 30.6 % for male. The literacy rate of in urban area is 61.8% and in rural area it is 25% only. According to MICSP 2011-12, more than half (60%) of Punjab population 10+ years was literate and in DG Khan district 42% were literate population and 33% in Rajanpur district which is the lowest in Punjab.

Punjab has infant mortality rate of 82 per thousand live births and 104 under-five child mortality rates whereas DG khan district has 96 and 124 per thousand live births. There are only 6 hospitals in district with 3 TB clinics.

Agriculture and livestock are the main source of earning in the area of this research study. Hill torrents provide the basis for irrigation supplemented by canals to cultivate the land. Different water canals and tube well system is working as source of water for cultivated area.

Wheat, cotton, rice, maize and vegetables are main agri products in the district. Agriculture and livestock integrated part of rural area of the district and people keep the camel, buffalos, sheep and goats as economic resources. There are 12 veterinary hospitals and 59 veterinary dispensaries in the district (MICS Punjab 2011-12).

Rajanpur district is located at extreme southern west part of Punjab and to the west of Indus River it was separated from D. G. Khan in 1982. In the north of Rajanpur there is D. G. Khan city while Jacobabad city is on the southern side of Ranjanpur. Similarly on east it the city of Muzafargarh and on the western side there is DeraBugti city. Like D. G. Khan the district Rajanpur is also divided into three major regions 1) Piedmont area 2) canal irrigated area and 3) river irrigated area. Piedmont are is parallel to KohSuleman where baloch tribes live. The de-excluded area of district Rajanpur comprises ranges of Sluleman Mountains. Sheep and camels are major source of earning of different baloch tribes. Rajanpur is very shaky in terms of temperature, the coldest month is January in which temperature varies from 21 to 4.5 degree and likewise the hottest month is June in which temperature ranges from 42 to 29 degrees. It rains heavily during moon soon that causes flood in the river Indus and torrents also emerge from Suleman range.

According to census 1998, the sum total population of Rajanpur tehsil was 11,04 thousand and it was an increase of 172.7 % as compared to 1981 with a growth rate of 3.3 for this period. According to MICS Punjab 2011-12, the population of district in 2012 was 1529 thousands. The area of district Rajanpur is 12,318 square Km. So with respect to area the population density is 90 person per square kilometre. Urban population is 14.5 % according to census 1998 with a growth rate of 5.8% during the period of 1981 to 1998. Rajanpur and Jampur are two major municipal committees of district while town committees include Fazilpur, KotMithan, Rojhan and Dajal. In 1998, total Mauzas were 532 among which only 47 muzas were having population more than 500 while the population of 116 muazas was between, 2000 to 5000. Similarly 94 mauzas consist population over 1000 persons. Islam is the major religion of the area that is 99.7% as it is observed in 1998 census.

According to reports of United Nations, there are more females in 119 countries of the total 191 countries however in 62 countries the female population is less than male and in 10 countries this ratio is equal. Pakistan is one of only four countries in which life expectancy at birth is less than male and there are 92 female for 100 males in Pakistan so the female rate is negative and it is lowest in Balochistan province where it is 87. In Rajanpur district, the number of female per 100 male is 90. Urban sex ratio at Rajanpur is 92.9 % and rural is 89.5% and if all the districts of Pakistan are arranged in descending order in term of sex ratio then Rajanpur stands at number 73 among 106 districts.

Sex breakup in term of age in Rajanpur indicates three channels in female life. The first decline is from birth to the age of 15 years but after this age there is a dramatic increase in their numbers and in the age of 20 to 25 years the ratio of men and women is almost equal this is also their reproductive age and suffer heavily from maternal health problems. Females of this age are largely victims of so many things like honor killings and discriminations. So by the age of 40 the number of females drop badly and it gets a little relax at the end of reproductive age but this relief is very short as the graph for number of females continues its journey of declining as females get into the age of 50 where there resources decline as compared to men. Obvious differences are observed in sex ratio for urban and rural areas. This gap is very sharp for the age bracket of 5 to 19 years as in this age bracket, the number of female for 100 males is 92.3 in urban areas whereas it is 82.3 in rural areas and in de-excluded areas of Rajanpur this ratio is 73.6 on average.

Literacy rate of district Rajanpur was 20.7 % in 1998 in which the male population is almost double as compared to female as the contribution from female was 11.3 % and it was 29 % for male. The literacy rate of female in urban area is 23.6 % and in rural area it is drastic (6.3%). This difference is not so much drastic in urban areas where literacy rate for male is 60% and for female is 39%. The district Rajanpur is at the bottom among 35 districts of Punjab province with respect to male female literacy rate. According to census 1998, only 22 children out of 100 were going school that is very poor percentage as compared to other districts of Punjab province. Obvious differences are recorded in school enrolment for urban and rural areas. In rural areas, the enrolment of female students is 10 % while in urban areas it is 44% that clearly indicates that this disparity will continue in near future as well. Similarly the census 1998 reports concluded that out of hundred literate students, only 21 are middle pass and 15 students could pass matriculation while 5 passed intermediate. Only two students were at graduate level and postgraduate students make only 1 %. It was also observed that male were more highly educated as females.

During 2002-2003 school enrolment was about 51% in Punjab and there were significant differences among different districts as it was nearly 70% in upper Punjab areas and 35% in lower side of Punjab. Rajanpur's enrolment was 33% and it is on 32 numbers among different districts Punjab. At school level out of every 100 students there were 28 females and 72 males and these ratio further decreases as the level of education increases. The situation is worst among tribal areas where only 30% villages have primary level education facilities for females.

Rajanpur has the highest infant mortality rate in Punjab as average for Punjab is 77 out of 1000 children but it is 97 in Rajanpur. The district lies in bottom in terms of all socio-economic indicators and there are only 71 government health facilities which include only 5 hospitals. There is only one bed for each 2955 people that is drastic figure. There are only 8 percent households covered by lady health workers in Rajanpur district that is lowest in Punjab as the average of Punjab is 35 %. Similarly only 7 deliveries out of 100 are handled by trained lady health workers that are also lowest as it is 33 on average in Punjab province.

The distribution of land among 58 % families who have access to land is very uneven. Only 73% among these families have ownership of lands while 10% rents the land for cultivation. Every one fifth of farming community serves farming as occupation and they do not have any farming land in their possession. The district Rajanpur's agriculture is dominated by large

and medium farmers. And majority of farmers have very little land (2.3 acres) for cultivation these are small farmers whereas medium farmers have almost 10 acres of land for cultivation. Small farmers are 47% of farming community and medium farmers are 48% of the community. This total 95% population owns only 68% land while rest of cultivated land is owned by large farmers that are only 5% but owns 42 % land. There is only one tractor available for thirty farming families. Canal's water is the main source of irrigation in district Rajanpur.

Agriculture and livestock are the main source of earning in the area of this research study. Hill torrents provide the basis for irrigation supplemented by canals to cultivate the land. More than 119 thousand acres of land in district Rajanpur is still uncultivated. Land use intensity refers to non-cultivation of settled land the average for Punjab province is 92% but this average is also low in district Rajanpur. In 2007, there were only 58% families that have access to land while 42% do not have access to land in rural areas. These families don't rely on agriculture and they serve in industrial labour, trades and livestock to earn their livings. Wheat and cotton rotation is typical cultivation in the Rajanpur. Rajanpur district is the 9th largest producer of the cotton in Punjab. Beside the wheat and cotton, sugarcane, tobacco and rice are cultivated in this district. Farmers have little interest to cultivate the vegetable and fruits in these areas.

In rural Rajanpur livestock is other big source of an economic activity as farming. In Rajanpur district, there are around 90 thousand households which are associated with farming. There are 10 thousand landless families which keep large animals. According to Livestock Census 2006, a livestock holder family here owns 7 cows and 2 buffalos, on average while 30 thousand families' rear sheep with an average herd size of 13 animals. About to one lac families keep the goat an average size of 7. The families rearing goats are more than 90,000 with an average herd size of 7. There are about twenty thousand camels in the district. This is the second highest camel population in the entire province after Bhakkar district.

Rajanpur is the least developed and the poorest district of Punjab having lowest literacy rate in the province of Punjab. It stands at the bottom among the districts of Punjab according to socio-economic indicator. In the Multiple Indicator Cluster Survey 2003-04 of Punjab, districts are ranked against eight key indicators and Rajanpur was at number 34 among the 34 districts of the province with respect to all indicators. Same results were shown in the survey

conducted by Social Policy Development Centre in 2001. Results of MICS 2003-04 also suggested that 66% population of the district having per capita income of less than Rs 750 per month while average per capita income of Punjab was Rs 1385. It was lowest per capita income in the province. Another research conducted by Haroon Jamal (2007) estimated the income poverty at the district level using information available in household surveys; PSLM and HIES 2004-05, Rajanpur was second poorest district of the Punjab. This variation may be due to the selection of different indicators for different researcher but it is fact that the district is poorest among the poor.

Different programs for poverty reduction in rural areas have been initiated and are being managed by the Government of Pakistan. These programs are also functioning in DG Khan and Rajanpur districts. Instead of going in to details of each and every program, we present here a brief account of some of the programs which adopted the direct strategies and are being implemented for poverty reduction at gross roots.

Benazir Income Support Program (BISP) has been working for the needy and poor people since 2008 as main social safety net. This program is working with the aim to make the country prosperous through reducing the poverty level and empowering the female in the country. Its primary objective is to help the poor through different strategies. This program provides the cash assistant to needy people and is planning to provide the skill and training to these people so that they can earn and increase their income. Skill and training is provided for the purpose of human capital enhancement. This program is also trying to provide the micro-financing to unemployed poor people for their self-employment.

Zakat institution is another source of free financing to the rural poor under Zakat and Usher Ordinance 1980 through the network of local Zakat Committee. Zakat funds are utilized to provide help and assist to the needy, indigent, poor, orphans, widows, handicapped and disabled. These poor segments of society are provided Zakat funds either directly through respective local Zakat Committee or indirectly through institutions i.e. educational, vocational, social institutions and hospitals, etc.

Pakistan Bait-ul-Mal (PBM) is established in 1992 to provide the help to poorest of the poor in the society without discrimination of color, creed, religions and gender. The services are provided to needy poor people. These services include cash assistance, skill through Dastkari Schools and health facilities to indoor patients. In the Dastkati schools, trainings are provided

to poor widows, orphans and needy girls so that they can earn for live a respectable life. PBM provides the cash assistance directly or training and education through institution indirectly.

Microfinance is considered the best tool in the world to pull out the poor people from the poverty trap. It also protects the vulnerable people from the vulnerability. Micro-financing provides the opportunity of self-employment. It also increases the earning capacity of the poor people and empowers them. Different government organization, NGOs and other institutions are providing this facility to the poor people. These organizations are providing the financing with the aim to increase the access of poor to physical inputs so that people can utilize them for income generating activities.

Non-Government Organizations (NGOs) have been playing a great role for poverty reduction since their establishment. In the NGOs, people join their hands to help out the poor people in the society. They help out the poor people to stay alive. These are private, non-profit institutions devoted to make sure the welfare of all citizens in the country. Several NGOs are working in Pakistan. Many of them have succeeded in reaching the poorest of the poor by adopting the modern strategies including the provision of micro-credit and educating the poor people free of cost, providing basic needs on monthly basis as well. These institutions also provide the important information to improve the health quality, legal rights, cleanliness and other valuable information to the poor. These NGOs allocate huge funds to manage the poverty reduction in Pakistan Alflah Development Organization (AFDO) has been working since 1984 in DG Khan and Rajanpur districts. This organization provides the hand pump to poor for clean water drinking facility. This organization also provides the monthly food to widow as well under Kafala scheme. Its main contribution for poverty reduction is free education to orphan children in the society.

The study focused on direct strategies adopted by these programs which mainly include the micro-financing and safety nets programs. This financing is provided directly through cash or indirectly through education and skill by different institutions in the country. The survey will be conducted for data collection from beneficiaries of these programs.

3.3. Research methodology

Research methodology includes methods and techniques which are to be used and applied to investigate the problem and to meet the aims and objectives of the study. The quality of the research and usage of proper and modern techniques is an important element for the research,

thus it will be mentioned including a discussion regarding research type, sampling procedure, analysis techniques, finishing with indicating to the research's limitations, ethical issues, and plagiarism.

Social research is done by researcher, which follows by the systematic plan. Any piece of social research needs a particular research methodology framework through which it can be operationalised. Research methodology is defined as "a model, which entails theoretical principles as well as a framework that provides guidelines about how research is done in the contest of particular paradigm" (Sarantakos, 1993). In a more functional sense, Sarantakos (1993) stated that "a methodology translates the principles of paradigm in research language and shows how the world can be explained, handled, approached or studies". More simply put, research methodology can be described as "how we will go about studying any phenomenon" (Silverman, 2013). Therefore, the methodology should be properly identified and set up in accordance with the nature of the specific research questions as it "cannot be true or false, only more or less useful" for a particular research objective (Silverman, 2013).

In social research, quantitative and qualitative are two main methodological frameworks which are used for investigation. Bryman (2008) described in detail the fundamental differences between quantitative and qualitative methodologies. Quantitative methodology is defined " a genre which uses a special language....[similar] to the ways in which scientists talk when they investigate the natural order-variables, control and measurement" (Bryman, 1988). He further explains that quantitative research emphasis evaluating, examining and explaining through "quantification in the data collection and analysis of data" which mostly involves deductive-oriented strategies. Therefore, epistemologically, quantitative methodology "views social reality as an external, objective reality" (Bryman, 2008). This is one kind of research which involves formal, objective information about the world by using mathematical quantification. This type of research is be used to estimate test relationships and to evaluate cause and effect relationships. Quantitative designs study social phenomena through quantifiable empirical evidence, and describe statistical analysis for different cases to create valid and reliable result and discussion.

Qualitative research research deals with phenomena which is difficult or impossible to quantify mathematically, e.i as beliefs, meanings, attributes, and symbols. It emphasizes to understand the social phenomena through direct observation and communication with participants. So qualitative research methodology emphasis words rather than quantifiable

data (Bryman 2008); therefore it is defined as "an approach to the study of the social world which seeks to describe and analyse the culture and behaviour of humans and their groups from the point of view of those being studied" (Bryman, 1988). Whereas Denzin describes that "qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them" (Denzin 1994). Thus, qualitative research is motivated by exploration; therefore, epistemologically, it considers social reality as a socially constructed process. It therefore, emphasises the human aspects and how people see, perceive and understand social phenomenon as they occur in situation. Being socially constructed, qualitative research is subjective by definition.

Silverman explains that there is no good or bad methodology, or valid and invalid methodology, as the choice between quantitative and qualitative depends on the research aims and objectives, and what the researcher wants to discover (Silverman, 2001). So keeping in mind the research aims, objectives and research questions of this study, this research is framed to employ a quantitative research methodology, as it aims to measure the poverty level in study area and especially to estimate the impact of different programs on poverty reduction in the country.

3.4. Research design

A research design is a systematic plan to investigate problem. The design of a study defines the study type and sub-type, research question, hypotheses, explanatory and dependent variables, and, data collection methods and a statistical analysis plan. Research design is important as it prepares proper framework and blueprint for research activities to be carried and gives proper direction and time-table to research activity. A researcher must not go ahead with his research study unless the research design is accurately and properly planned.

A research design "provides a framework for the collection and analysis of data" (Bryman, 2008), but also helps to frame the research. In essence, it is about how research questions turn into a research project, how to answer the research questions (Saunders, et al., 2011) and how data are collected and analysed. The research design should be properly formulated by adapting the most suitable technique in relation to the research objectives in order to achieve an accurate outcome.

Depending on the research methodology and strategy, there are number of research designs explained by the different researchers and authors in different way. There are some common and vital types of research design under below.

First, exploratory design is utilised when there is not much information and knowledge available on a particular subject (Sekaran and Bougie, 2010). Therefore exploratory design is useful when researcher wants "to clarify understanding of a problem" or "to ensure the precise nature of the problem" (Saunders et al. 2011). The common tools of the data collection for this design include distributing questionnaires, interviewing, or conducting focus groups (Sekaran and Bougie, 2010).

Descriptive design aims to "ascertain and be able to describe the characteristics of the variables" (Sekaran and Bougie, 2010). Therefore, the research outcome will provide an accurate understanding of the characteristics, which then will offer inspiration for further research. In this type of design, quantitative data such as frequencies, means, cross tabulation and standard deviations are used for analysis (Sekaran and Bougie, 2010).

Third, explanatory design is valuable for verifying causal relationship between variables (Saunders et al., 2011). Therefore, it mostly relates to qualitative research methodology and deductive strategy.

Fourth, case study design "involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidences" (Robson, 2002, as cited in Saunders et al, 2011). A case study aims to obtain an in-depth understanding of an object of interest which could be a certain organization, location, persons or events" (Bryman and Bell, 2007). Therefore, case study refers to a detailed and intensive study in a specific community or organization in a certain location (Bryman, 2008). It should be noted that a case study can involve a single case or more than one case, commonly labelled multiple case-study or comparative case study (Jankowicz, 2005). In a multiple case study, the researcher compares the cases he/she is exploring (Bryman and Bell, 2007). Country-based research can be considered an example of a case study.

Fifth, Survey research is used to perceive the assessment about thoughts, opinions, and feelings which consists of a predetermined set of questions that is given to a sample. Using questionnaire or structured interviews, conducted on "more than one case" or only at "a single point in time", data can be quantitative or qualitative, with more than two variables being

analysed to identify a pattern of association" (Bryman, 2008). This popular approach and is mostly used to collect quantitative data by using questionnaires for quantitative analysis based on descriptive and inferential statistics. The advantage of this strategy is that it provides analysis by generating findings (Saunders et al., 2011). It should be noted that the survey design is also constructed through interview analysis, leading to qualitative and exploratory research.

This research is framed as combination of exploratory, descriptive, survey and multiple case-study survey approaches. It is exploratory since it aims to explore the impact of different program on poverty reduction as comparative study which is first type in its nature. It is a case study as it aims to locate the research questions in a particular country, Pakistan, and in particular geographical part of Southern Punjab namely DG Khan and Rajanpur Districts. Furthermore, it is a multiple case-study, as it explores the research questions in the context of five type of institutions namely ZI, PBM, BISP, MFI and NGO which are working in the study area are for poverty reduction, which are different in nature. Moreover, this study is also a survey based design, as it explores issues affecting a large group of people, namely poor and borrower who are beneficiaries from these institutions by planned questionnaire from the study area.

3.5. Research strategy

The research strategy is concerned with how the researcher relates the theory with the field or data. Social theory identifies two particular research strategies: deductive and inductive (Bryman, 2008).

In the deductive approach, the research process starts from a particular theory and tests it through secondary data in order to obtain findings. Thus deductive research moves from the general to the specific. Since the motivation in such an approach is explanation, examination and evaluation, deductive strategy is usually related to quantitative methods.

The inductive approach works in the opposite directions in relation to deductive strategy, as it moves from the specific to the general. In other words, inductive strategy begins by observing and understanding the social reality in action in the field by collecting data through observation. The establishing of a general pattern that governs the data may lead to the theory-building, which is defined as grounded theory. Due to the nature of the process, the inductive approach is usually associated with qualitative methods.

This research initially employs an inductive strategy because there is no particular established theory with empirical evidence in regards to the impact of the safety nets and MFI on poverty reduction in the country that could be estimated, evaluated and tested by the data collected. Secondly, in this study, the research process begins by collecting primary data through field research about the poverty level of people and socio-economic and demographic factor of poor household and beneficiaries of these programs. Thus, the cycle commences with data collection with the objectives of determining the general pattern in the data set to derive some conclusions. In addition to inductive strategy, this research should be considered with in deductive research strategy framework; as the search findings helps to evaluate and test a particular theoretical framework, namely micro-financing and poverty alleviation. Thus, inductively established findings later were used to test a particular theoretical framework, resulting in the employment of both the research strategies in this research whereby the strength of research is enhanced.

3.6. Research method

Research method is a procedure to evaluate the result through the required data for some types of experiments or incidents. Basically research method is a way of collecting inputs data and finding the result and outputs for successful research. Bryman defines as "a technique for collecting data" and analysing data (Bryman, 2008). Sarantakos (1993) states that "a method refers to the tools or instruments employed by researchers to gathers empirical evidence". In a more comprehensive manner, Jankowicz (2005) defines a research method as "a systematic and orderly approach taken towards the collection and analysis of data so that information can be obtained from those data". Thus, it is a specific tool or technique used to collect and analyse data.

Silverman explained that "similar to methodology, methods cannot be true or false, but more or less useful depending on their fit with the theories and methodologies being used and the hypothesis being tested and/or the research topic that is selected"(Silverman, 2001).

3.6.1. Research Method: Data Collection

Quantitative and qualitative are two main methods or approaches to collect data for analysis. The quantitative method mostly relates to data collection through questionnaires, which use numerical data, while the qualitative approach refers to data collection that

uses non-numerical data, such as interviewing (Saunders *et al.* 2011). The qualitative method often combines observation, actions, thought, analysis of text and documents, interviews, recording and transcribing (Silverman, 2013). Each method has its own strengths and weaknesses, which must be considered as they will affect the research findings. Distributing questionnaires personally helps to build connections with respondents, and quick results can be obtained. However, it can be expensive when respondents are distributed across a large region (Sekaran and Bougie, 2010). On the other hand, interviews can supply rich data while building close connections with respondents; if there is any doubt about the meaning of a question, it can be directly explained, thus enhancing the understanding of multifaceted issues. However, conducting face-to-face interviews with large numbers of respondents might lead to bias and would be expensive (Sekaran and Bougie, 2010).

In order to decide which data collection method to use, the researcher should mainly consider the research methodology framework that is being employed (Sarantakos, 1993) and the method's appropriateness to the research questions established at the beginning of the research (Bryman, 2008).

Nowadays, due to the complexity of social phenomena, it is common to combine both approaches, resulting in 'triangulation'. Triangulation is a mixed method using two or more data collection and analysis methods to support the research outcome (Saunders *et al.*, 2011). Similarly, Tashakkori and Teddlie (2009) define 'integration' as "research in which the investigator collects and analyzes data, integrates the findings and draws inferences using both qualitative approaches and methods in a single study". Thus, the research might be categorised as 'mixed-method' if it satisfies one or more conditions as follows: two types of research questions, two types of data collection, two types of data analysis (Tashakkori and Teddlie, 2009). Generally, the goal of using this mixed-method approach is to achieve complementarities, completeness, development, expansion, confirmation, compensation and diversity.

Triangulation offers certain advantages: it provides more validity to the conclusion when the outcome provides mutual confirmation; it usually (but not always) offers generally consistent data; it tends to provide mutually reinforcing results (Bryman, 1988). Also, the quality of data collected using this method might be more credible since the weakness inherent in using a single method might be reduced, although it requires more time and

financial effort (Sekaran and Bougie, 2010). However, it should be noted that this method is not fundamentally of better quality compared to using a mono-method approach (Bryman, 2008). Hence, Bryman (2008) suggests some important points to be considered when using this mixed-method approach: it must be competently designed and conducted; it must be appropriate to the research question; it must consider the need to spread limited research resources.

Due to the nature of the research questions in this research, quantitative approach is adopted, as they require quantitative data and knowing. In doing so, this research particularly applies quantitative approach in the sense of using a quantitative method through questionnaires through structured interviews in order to obtain the most reliable and valid information for results from the sample respondents.

3.6.2. Quantitative data collection method: Questionnaires

In a survey study, the most common data collection method is the questionnaire (Saunders, *et al.*, 2011), which is a common and often-used data collection method. To capture the main primary data required to answer the research questions and considering the advantage they offer in terms of efficiency in time, energy and cost (Sekaran and Bougie, 2010), questionnaires are considered an efficient method for data collection.

Sekaran and Bougie (2010) define a questionnaire as "a pre-formulated written set of questions to which respondents record their answers, usually within rather closely defined alternatives". It can be personally administered or self-administered; postal or online questionnaires.

For this research, the questionnaire is considered an efficient method of reaching out to non-beneficiaries and beneficiaries of safety nets and MFI, as their population size is quite large. In addition, considering the detailed nature of the questions posed, the questionnaire is considered more appropriate tools for data collection.

3.6.3. Questionnaire design

The questions in the questionnaire were designed as closed-ended questions. In addition, three types of scales were used for close-ended questions: the dichotomous scale; category scale; and ratio scale. The dichotomous scale is used for questions with Yes or No answers (Sekaran and Bougie, 2010), *e.g.* question number 19 on whether

or not the respondent has personal saving for emergency *etc.*

Category scale is applied for multiple items to obtain a single response (Sekaran and Bougie, 2010), such as question number 13 change of income, or number 5 about marital status, *etc.*

The ratio scale is used for questions that can be answered in terms of number (Sekaran and Bougie, 2010), such as question number 2 about age, number 11 and 12 about the value of assets, *etc.* Hence, the respondents' precise numerical answers are more accurate and are likely to provide more flexibility when grouping the data analysis.

3.6.4. Administration of the questionnaires

The questionnaires were personally administered to beneficiaries who include the beneficiaries from safety-nets and customers of Khushahli Bank in Jampur and DG Khan. This method of administering was employed because the characteristics of the respondents as well as the character of the questions posed are very specific and detailed, such as personal financial information of the respondents (Saunders *et al.*, 2007). Hence, this approach is considered helpful for building connections with the respondents, for providing clarification when there is difficulty in answering the questions, and to ensure that the questionnaires are completed; they can then be collected immediately (Sekaran and Bougie, 2010). It should also be noted that personally administering the questionnaire proved to be expensive due to the large numbers of respondents being located in rural area of DG Khan and Rajanpur Districts.

3.6.5. Pre-Test

Pre-tests of the questionnaire were conducted in a number of stages. The first stage was conducted through distribution of written questionnaires to some PhD students who were undertaking research into Islamic micro-finance. Based on the suggestions collected during the first pre-test, the questionnaire was developed for the second pre-test. The second stage was conducted using online questionnaires to obtain more responses from students of Vocational Training Institute funded by zakat institution and Indus International Institute DG Khan. The third pre-test was distributed to non-beneficiaries of rural region of study area. This provided an opportunity to develop the questionnaire and also gave initial validity to the process.

3.7. Sampling

Sampling is defined as "the process of selecting the right individuals, objects or events as representatives for the entire population" (Sekaran and Bougie, 2010). Due to the large size of the population in the research, it is important to select a subset of the population to be included in the research, which is known as sampling. A proper sampling procedure should be adopted in order to obtain a sample representing the population. It is true and inevitable that certain persons will be included in the sample as a result of the researcher's personal judgement, the prospective availability of respondents, and the researcher's criteria (Bryman, 2008).

3.7.1. Research population

The target population in this research can be divided into two groups. The first group include those households which are non-beneficiaries from any safety net program living in rural area of Pakistan. These household never got any benefits directly from the safety nets.

The second group, as regards the interview schedule population, is beneficiaries of safety nets and borrowers of MFI in rural Pakistan. A structured interview schedule is employed to obtain in-depth information from these respondents. The following sections provide details of the sampling issues for this study.

3.7.2. Sample frame

The sampling frame is "a physical representation of all elements in the population from which the sample is drawn" (Sekaran and Bougie, 2010). Ideally, the samples for this research should be beneficiaries including borrowers of all Govt and NGOs administered MFIs and beneficiaries of all safety net programs. However, it was impossible to reach all of them since there were limitations in terms of data, time and funding availability. Thus, the sample frame was set based on beneficiaries which got directly benefits from these institutions in the study area only. Beneficiaries from Khushahali Bank and safety nets are limited to rural area of Mouza Rakh Azmat Rajan pur and Mouza Darkhast Jamal Khan of DG Khan District with non-beneficiaries of the same area. Such individuals were also considered for this study with the objective of increasing the sample size.

3.7.3. Sampling method

Defining the most appropriate sampling method is the next important process in selecting the samples. The relevant literature indicates that there are two broad categories of sampling method: probability sampling and non-probability sampling (Sekaran and Bougie, 2010).

Probability sampling means that all members of the population have the same probability of being selected as a sample (Sekaran and Bougie, 2010). This type is used when "the representativeness of the sample is importance in the interest of wider generalizability" (Sekaran and Bougie, 2010). Non-probability sampling, on the other hand, does not give the entire population a predetermined chance of being selected as subjects, which means that the findings of the research cannot be generalised vigorously (Sekaran and Bougie, 2010). This method is suitable for researchers with limited schedules, resources and finance.

There are two categories of non-probability sampling: convenience sampling and purposive sampling (Sekaran and Bougie, 2010). Convenience sampling refers to "the collection of information from members of the population who are conveniently available to provide it" (Sekaran and Bougie, 2010). Although this is the least reliable method compared to other sampling methods, it is suitable for exploratory research (Sekaran and Bougie, 2010). Purposive sampling, on the other hand, is an approach where "the researcher purposely chooses subjects who, in their opinion, are thought to be relevant to the research topic" (Sarantakos, 1993). In this approach, subjects are a specific group of people who have the required information and common people of the same area.

In quantitative data collection, the questionnaire method, hence convenience sampling is then applied to select the beneficiaries and non-beneficiaries of the study area. Every household was approached at his home for data collection.

In relation to geographical delimitation and sampling, it should be stated that the large population size and limited resources implied that it was impossible to undertake nationwide sampling.

3.7.4. Sample size

Determining a proper sample size is necessary in order to obtain a reliable and valid sample that is representative for data analysis. A sufficient sample size should fulfil two requirements: precision and confidence (Sekaran and Bougie, 2010). Precision refers to "how close our estimate is to the true population characteristics" (Sekaran and Bougie, 2010), while confidence indicates that the certainty level of researcher's estimation "will really hold true for the population" (Sekaran and Bougie, 2010). The larger the sample size, the greater the precision and confidence. However, a large sample will increase the cost of data collection.

Bryman (2008) argues that there is no fixed size or number required for a sample, since it depends on a number of factors including time limitation, funding availability and the need for precision. He summarises that a large sample size is likely to provide more precision and fewer sampling errors. As a straightforward guidance, a comprehensive table on the sample size of a given population is prepared by Krejcie and Morgan (1970).

Micro-financing and Safety-Net programs are in operation in DG Khan and Rajanpur districts. These programs include the BISP, PBM, and Zakat Institution. The management of these programs was contacted for provision of lists of their respective programs' beneficiaries.

Since we are interested in the evaluation of the above stated programs, we would therefore need to include two types of people in the samples, the beneficiaries and non-beneficiaries of these programs. Though it is generally recommended that sample size should be 5% of the sampled population. But keeping in view the complications of field study and benefiting from modern modelling approach in quantitative techniques the proposed research will on sample size of one thousand representing 500 beneficiaries and 500 non-beneficiaries. Theoretically stratified sampling technique with core concept of area sampling is proposed to determine the district and program wise sample size and the proportional allocation method of stratified sampling is considered the most appropriate and feasible keeping in view the heterogeneity of the sampling frame. Considering the varying significance of different poverty reduction programs the study will include the concept of purposive sampling. The district and program wise breakup of the total sample size 1000 is given in the tables under below. In the first Phase the proportional allocation method suggests as to determine the sample size of each district.

Table 3.1: Program Wise Breakup of the Sample Size for District DG Khan using core concept of purposive sampling

Program	Sample Size in DG Khan Distt	Sample Size in Rajan Pur Distt	Total Sample size
Zakat Institution	120	80	200
Bait ul Mal	30	20	50
BISP	60	40	100
Khushhali Bank	60	40	100
AFDO	30	20	50
Non-beneficiaries	200	300	500
Total	200	300	1000

This study will use primary data that will be collected through structured interviews from the beneficiaries of the different programs and non-beneficiaries from rural area of DG Khan and Rajan Pur districts. The questionnaires include questions about the severity and determinants of poverty and also focus on obtaining information necessary for the measurement of poverty using income measure of poverty measure of poverty. The interviews will particularly emphasize on measurement indicators to determine the impact of financing and managing rural poverty reduction. The sample size of 500 will be selected from non-beneficiaries using same sample design.

3.7.5. Data collection process

The field research took more than six months from March to mid-September 2013. As for data collection, in the sample there are two groups of respondents: non-beneficiaries and beneficiaries of safety net programs, Khushhali Bank and Alflah development organization in Rajanpur and DG Khan districts situated in southern Punjab, Pakistan. The lists of these beneficiaries were taken from the concerned offices related to study area. For the data collection process using questionnaires, three part-time enumerators were employed to help respondents answer the questions. The respondents were selected from among the beneficiaries of year 2011-12.

3.7.6. Reliability and Validity

In social research, to ensure the quality of the research three issues are raised: reliability, replication and validity (Bryman, 2008). This implies that good research should be repeatable and consistent, meaning that when it is conducted in other areas or

on other occasions, the measurements should still be reliable and repeatable to produce good outcomes. Replication refers to the capacity of the measurements or procedures to be replicated by other researchers (Bryman, 2008).

In technical terms, reliability refers to "consistency of measures" (Bryman, 2008), which can be measured using 'Cronbach's alpha'; this measurement is also valuable for ensuring internal consistency of the data (Bryman, 2008). Moreover, the reliability of a scale indicates the extent to which it is free from random errors, for which indicators are used to test-retest reliability and internal consistency (Pallant and Tennant, 2007). First, test-retest reliability administers the survey to the same people at two different times and calculates the correlation between the two scores obtained. Accordingly, the higher the test-retest correlation, the higher the reliability. Since the survey measures household profiles which are quite stable, the test-retest will have a high correlation. The impact aspect will also be expected to be stable. Second, internal consistency is "the degree to which the items that make up the scale are all-measuring the same underlying attribute", in other words, the extent to which the items "hang together". Similar to Bryman's suggestion, the internal consistency measured by Cronbach's coefficient alpha should be above 0.7 (Pallant and Tennant, 2007). This study used the ratio scale which does not need to check the reliability test.

Validity relates to the 'integrity' of the research outcome (Bryman, 2008; Bryman and Bell, 2007). In other words, as Pallant (2007) argues, validity refers to "the degree to which it measures what it is supposed to measure". Bryman (2008) discusses four aspects of validity: measurement validity, internal validity, external validity and ecological validity. In quantitative methods, measurement validity mostly relates to reliability of measurement (Bryman and Bell, 2007).

Internal validity means that the conclusion derived has a 'causal relationship' between two or more variables (Bryman, 2008). External validity is concerned "with the question of whether the results of the study can be generalized beyond the specific research context" (Bryman and Bell, 2007). Ecological validity is about ensuring that the environment is neutral, as when respondents respond to questionnaires, the environment should enable them to react naturally without any inference.

Pallant and Tennant (2007) states that the validation of a scale involves the collection of evidence concerning its use, which technically includes: (i) content validity, which refers to "the adequacy with which a measure of scale has sampled from the intended universe or domain of content"; (ii) criterion validity, which is defined as "the relationship between scale scores and some specified measurable criterion"; (iii) construct validity, which is related to "testing a scale not against a single criterion but in terms of theoretically derived hypotheses concerning the nature of the underlying variables or construct" (Pallant and Tennat, 2007). It is measured by investigating its relationship with other constructs.

To ensure the validity of this study, the researcher relied on the empirical evidence developed in previous research and carefully chose the wording applied in the questions. It should be noted that no straightforward, simple calculation method is provided in the statistical software. Therefore, an attempt to ensure the measurement and content validity has been conducted by adopting variables and scales from previous related studies. The pre-tests were also beneficial in providing feedback on whether the wording applied in the questions was clear and not misleading; thus, based on the feedback, corrections were made. In addition, the part-time enumerators employed to distribute the questionnaires to households were trained in order to ensure that they fully understood the questions and the specific information being sought.

3.8. Research Method: Data Analysis Methods

Data analysis is the next important step after all the data have been collected. This process must be conducted carefully in order to obtain accurate outcomes. This research analyses quantitative data from questionnaires; hence, the corresponding data analysis methods should be identified.

3.8.1. Questionnaire data analysis

There is a particular process for analysing quantitative data from questionnaires. Sekaran and Bougie (2010) suggest the following steps as part of such a process: preparing data for analysis; getting a feel of the data; testing the goodness of the data; and hypothesis- testing.

First, before analysis, data must be coded and keyed into a database. In relation to this

research, SPSS v.21 software was utilised in keying and analysing the data. Then, the data must be edited to deal with any problems such as blank responses and outlier responses. This process must be done appropriately to ensure that all the data are correct.

Second, getting a feel of the data can be carried out by checking the central tendency and dispersion of the variables to obtain brief information on the survey outcome (Sekaran and Bougie, 2010). To this end, the researcher adopted a number of statistical methods such as frequency distribution, mean (average), standard deviation and cross-tabulation.

Third, testing the goodness or quality of the data refers to checking the validity and reliability, as discussed in previous section.

Finally, after conducting the above three processes, analysis can be conducted by testing the proposed hypotheses using the appropriate statistical testing. The purpose of hypotheses-testing is "to determine accurately if the null hypotheses can be rejected in favour of the alternate hypotheses...with a certain degree of confidence" (Sekaran and Bougie, 2010). It should be noted that implicit and specific written hypotheses were not set up in this research, as the research questions guide the analysis.

Before the empirical statistical test is conducted, descriptive analysis is prepared 'to explore the data with the objective of describing the characteristics of the samples (Pallant and Tennat, 2007). This analysis is the process of summarising data into forms, which are easier to be understood, as the basis for further inferential analysis (Tashakkori and Teddlie, 2009). Descriptive analysis is useful for depicting data characteristics and checking whether there is any violation of assumptions (Pallant and Tennat, 2007). Pallant and Tennant (2007) considers descriptive analysis as a preliminary analysis before further statistical tests are carried out; it provides important information including skewness of data distribution, frequency, percentage distribution, mean and median. Similarly, Saunders *et al.* (2011) emphasise that descriptive statistics focus on the central tendency of the data and how the data have been spread, which could be presented in tables, charts or graphs. Thus, in this research, all variables have been tested using descriptive analysis in order to gain a general understanding of responses from the participants. The findings of the descriptive analysis are presented in Chapter 4.

In addition to descriptive analysis, various empirical analyses could be adopted depending on the type of data, and whether it is parametric or non-parametric, as each type has assumptions that must be fulfilled (Pallant and Tennant, 2007). A parametric test is appropriate when the data have normal distribution, meaning they do not have positive or negative skewness (Pallant and Tennant, 2007). When the required assumptions are not met, a non-parametric test should be applied. In addition, non-parametric tests are often more suitable for surveys that have small samples and use ordinal scales. Therefore, it can be assumed that a non-parametric test is less stringent than a parametric test. However, this does not mean that the non-parametric tests are less powerful than parametric tests (Hardle and Mammen, 1993). This research adopts non-parametric testing due to the nature of the study, which is considered an exploration. In addition, it was established that data distribution is not normal mainly due to the fact that they were collected in a non-random sampling manner.

As part of the inference test, two types of statistical tests were applied in this research: testing or comparing the difference between groups (including Mann-Whitney-U Test, and Kruskal Wallis); and finding significance and relationships between variables.

It should be noted that all the statistical tests are conducted using SPSS version 21 and all the findings of the inferential statistical analyses are presented in Chapter 4. The following particular inferential tests are utilised in this research:

Mann Whitney U-test: This non-parametric test is utilised to test significant differences between two variables, which have two groups. When the significant difference is found, the mean rank is used to describe the direction of the difference, which group has the higher direction (Pallant and Tennant, 2007). The effect size for this test is measured by dividing z value with square root number of cases (N) (Pallant and Tennant, 2007).

Kruskal-Wallis Test: Similar to the Mann-Whitney U -Test, this non-parametric test is also applied to test relationships (significant difference) between groups. However, this test can be applied when some continuous variables have more than two groups (Pallant and Teenant, 2007).

Binary Logistic Regression: This technique is used to measure the predictor variables to predict the occurrence of socio-economic and demographic impact. In this study, the dependent variable used is dichotomous while the predictor variables are categorical and continuous variables (Lesschen *et al.* 2005). The important outcome of this test are beta coefficient, unique significant of each predictor in the model and odd ratio of $\text{Exp}(B)$ (Lesschen *et al.* 2005). To evaluate the effectiveness of institutions, stepwise forward conditional method is also used in the binary logistic regression, which shows the result of significant variables working with these poverty reduction institutions.

Binary Logistic Regression; Stepwise forward conditional method: In binominal logistic regression model, forwarded conditional method was also used to evaluate the effectiveness of the institution. In this method choice of independent variable is carried out by automatic procedure. This model is designed to find the most parsimonious set of predictors that are most effective in predicting the dependant because it excludes variables that do not contribute to explaining differences in the dependent variable. Variables are added to the logistic regression equation one at a time, using the statistical criterion of reducing the -2 Log Likelihood error for the included predictor and dependant variable. After each variable is entered, if the model is better the variable are excluded. This does not happen often. The process of adding more variables stops when all of the predictor variables have been included. The process also stops when it is not possible to make a statistically significant reduction in -2 Log Likelihood using any of the predictor variables not yet included. It is possible that none of the variables will be included as in BISP. It is also possible that all of the variables or some of them may be included. Once a variable is included, its interpretation in stepwise logistic regression is the same as it would be using other methods for including variables.

3.9. Limitations and difficulties

Like any other research, during field research the researcher faced various challenges and problems, starting with identification of samples to data collection process in the field, including population identification, sampling process and actual data collection. In the population identification process, the researcher was unable to obtain a complete, valid and recent comprehensive list of beneficiaries; thus, the non-probability sampling method is applied.

In the sampling process, the researcher faced challenges in terms of cost, time and

cooperation from the respondents. This is a self-funding field study unsupported by any institutions. This limited the number of respondents that could be captured, as reaching a large number of respondents throughout Pakistan was impractical.

In terms of time allocated for the data collection process, the researcher only had around six months to collect data from questionnaires and the interviews in DG Khan Division, Pakistan, which is the researcher's home country. This should be considered a limitation, as within this limited period it was not possible to expand the number of respondents. It should be noted that the respondents to the questionnaires are beneficiaries and non-beneficiaries of the study area. Waiting for their approval to conduct interviews and research on their premises, and to gain access to beneficiaries through them, proved to be time-consuming.

Cooperation with the target institutions was the most challenging problem faced. Some institutions delayed their response or refused to provide supporting data or provide published reports, although the data are available and should be accessible by the public. Here, issues of transparency of the institutions arose. Also, most institutions did not provide enough lists of beneficiaries' data for the questionnaire survey due to confidentiality issues.

Furthermore, in the actual data collection process, some respondents tend to be reluctant to answer the questionnaires, particularly on the questions relating to the value of assets, income and expenditures and some have no idea about the valuation such as agriculture and livestock product. Thus, before the respondents answer the questionnaires, they are provided with sufficient information about the purpose of the research and assuring confidentiality of the information, which is done through personal approach.

Despite all the burdens and challenges, the collected data which were analysed in this research should be considered relatively satisfactory in terms of supporting the analysis; for this, gratitude should be extended to the institutions for their support, particularly Zakat Institution which seemed to be more open and offered kinship.

It should be noted that the study took 1000 sample size including non-beneficiaries (Controlled Group) and beneficiaries of safety nets and micro-financing (Treatment Group) having 500 in sizes from each group. But beneficiaries are from five institutions against non-

beneficiaries household for comparison. It should be noted that calories intake method is used as official poverty line in Pakistan. It was tried to develop a questionnaire to collect the data to measure the calories intake poverty line. But information gathered for this purpose was not sufficient because people used many products for their daily usage produced by them and they do not know about the quantity, which is compulsory to calculate the poverty line. They keep the livestock and use the milk for tea, which is used in breakfast and dinner, grow the vegetables in or near to house for their own usage and cultivate the wheat and grain for them without proper measurement. They purchase the goods through barter system in the village. So it was quite difficult to calculate the calories intake poverty line for this research in appropriate way. Ultimately, financial poverty line is used for this research. Poverty line is determined by equaling to USD 1 per person per day. The dollar-a-day poverty line was determined in the International Comparison Program project, undertaken jointly by the United Nations Statistics Division, the World Bank and the University of Pennsylvania in 1985 (Economic Survey of Pakistan 2007-08, Govt of Pakistan). This was used for comparison among courtiers in absolute poverty. Due to international trade, USD value remains fluctuating in Pakistan in PKR. Data was collected during the march to September and value of USD fluctuates during this period from PKR. 98 to PKR 105. So it was decided that USD equal to PKR.100 is used for this data analysis because most of the data was collected in the early month of the data collection period.

CHAPTER 4

MEASURING THE EFFICIENCY OF POVERTY REDUCTION PROGRAMMES: EMPIRICAL ANALYSES

4.1. Introduction

Chapter 3 presents the detailed account of research methodology and method by identifying that the primary data collected for this research was analysed through non-parametric and parametric statistical analysis. Being the first empirical chapter, this chapter presents the descriptive statistics, which is based on descriptive statistics, while the next two chapters include inferential statistics to draw the conclusion of research question.

4.2. Descriptive analysis

Before analyzing data, data clearing will be done to make available right kind of data. Descriptive statistics is initial point of the empirical analysis. It will help us in finding out the frequency, mean and variations of its variables around means and tightness of the quantitative relationship between dependent and independent variables as well as relationship between the exploratory variables. Descriptive analysis will be used to describe the characteristics of the variables in terms of the frequencies and the percentage of distribution of the survey, which aided in making comparisons among the variables. Basically it is initial process before its extension into more sophisticated models of which will be applied and explained in the next section.

Table 4.1. The Distribution of Responses According to the Districts

District-wise sample distribution					
		Frequency	Percent	Valid Percent	Cumulative Percent
	D.G.Khan	600	60.0	60.0	60.0
Valid	Rajan Pur	400	40.0	40.0	100.0
	Total	1000	100.0	100.0	

Table 4.1 shows that data from 1000 households were collected for the analysis form which 600 sample belong to DG Khan District whereas 400 samples is taken from Rajanpur District in all categories. In percentage 60% sample is collected from DG Khan District and 40% is

collected from Rajanpur District. DG Khan district higher number of beneficiaries so greater number of sample is taken from the district comparatively.

Table 4.1.1. The Distribution of Responses According to the District and Beneficiaries

District * Beneficiaries Crosstabulation					
			Beneficiaries		Total
			No	Yes	
District	D.G.Khan	Count	300	300	600
		% within District	50.0%	50.0%	100.0%
		% within Beneficiaries	60.0%	60.0%	60.0%
	Rajan Pur	Count	200	200	400
		% within District	50.0%	50.0%	100.0%
		% within Beneficiaries	40.0%	40.0%	40.0%
Total	Count	500	500	1000	
	% within District	50.0%	50.0%	100.0%	
	% within Beneficiaries	100.0%	100.0%	100.0%	

The sample is divided into two categories namely beneficiaries and non-beneficiaries in both districts. Table 4.1.1 shows that out of total sample, 50% are non-beneficiaries and 50% are beneficiaries from any organized institution in the both districts.

Table 4.1.2. The Distribution of Responses According to the District and Institutions

District * Institution Crosstabulation									
			Institution						Total
			No Institution	Zakat	BISP	PBM	MFI	NGO	
District	D.G.Khan	Count	300	120	60	30	60	30	600
		% within District	50.0%	20.0%	10.0%	5.0%	10.0%	5.0%	100.0%
		% within Institution	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
	Rajan Pur	Count	200	80	40	20	40	20	400
		% within District	50.0%	20.0%	10.0%	5.0%	10.0%	5.0%	100.0%
		% within Institution	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%
Total	Count	500	200	100	50	100	50	1000	
	% within District	50.0%	20.0%	10.0%	5.0%	10.0%	5.0%	100.0%	
	% within Institution	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

It is noted from the table 4.1.2 that 60% beneficiaries belong to DG Khan district and 40% beneficiaries belong to RajanPur district.

Table 4.3 The Distribution of Responses According to the Training and Districts

District * Training Crosstabulation

			Training		Total
			No training from institution	Got training from institution	
District	D.G.Khan	Count	487	113	600
		% within District	81.2%	18.8%	100.0%
	Rajan Pur	% within Training	58.8%	65.7%	60.0%
		Count	341	59	400
Total	Total	% within District	85.3%	14.8%	100.0%
		% within Training	41.2%	34.3%	40.0%
	Total	Count	828	172	1000
		% within District	82.8%	17.2%	100.0%
		% within Training	100.0%	100.0%	100.0%

Table 4.1.3 shows the distribution of these beneficiaries, which are 20% from Zakat institution, 10% for each from Benazir Income Support Program and Khushali Bank, 5% each from Pakistan Bait ul Mal and Al Flah Development organization.

Table 4.2. The Distribution of Responses According to the Poverty Status

		Status			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	non-poor	173	17.3	17.3	17.3
	poor	827	82.7	82.7	100.0
	Total	1000	100.0	100.0	

Poverty line is cut point which separates the poor from non poor. Table 4.2 shows that 827 households are poor and only 173 households are non-poor according to determined poverty line and in percentage 82.7% are poor and 17.3% households are non poor.

Table 4.2.1. The Distribution of Responses According to the Poverty Status and Districts.

Status * District Crosstabulation					
			District		Total
			D.G.Khan	Rajan Pur	
Status	non-poor	Count	96	77	173
		% within Status	55.5%	44.5%	100.0%
		% within District	16.0%	19.3%	17.3%
	poor	Count	504	323	827
		% within Status	60.9%	39.1%	100.0%
		% within District	84.0%	80.8%	82.7%
Total	Count	600	400	1000	
	% within Status	60.0%	40.0%	100.0%	
	% within District	100.0%	100.0%	100.0%	

Table 4.2.1 shows that from 173 non-poor household 96 households belong to DG khan district and 77 households belong to Rajanpur district. In percentage distribution, 55.5% non poor belong to G Khan district and 44.5% non-poor belong to Rajanpur district from this sample. From 827 poor household 504 poor household belong to DG khan district and 323 poor household belongs to Rajanpur district.

Table 4.2.2 The Distribution of Responses According to the Poverty Status and Institutions

Status * Institution Crosstabulation									
		Institution						Total	
		No Institution	Zakat	BISP	PBM	MFI	NGO		
Status	non-poor	Count	85	45	1	12	22	8	173
		% within Status	49.1%	26.0%	0.6%	6.9%	12.7%	4.6%	100.0%
		% within Institution	17.0%	22.5%	1.0%	24.0%	22.0%	16.0%	17.3%
	poor	Count	415	155	99	38	78	42	827
		% within Status	50.2%	18.7%	12.0%	4.6%	9.4%	5.1%	100.0%
		% within Institution	83.0%	77.5%	99.0%	76.0%	78.0%	84.0%	82.7%
Total	Count	500	200	100	50	100	50	1000	
	% within Status	50.0%	20.0%	10.0%	5.0%	10.0%	5.0%	100.0%	
	% within Institution	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

In percentage from total poor households of sample 60.9% poor belong to DG Khan district and 39.1% belong to Rajanpur district according to survey sample. Table also shows that poverty ratio in both districts is at same level as 84% in DG Khan district and 81% in Rajanpur district. Table 4.2.2 shows that from 173 non-poor household 85 households are non-beneficiaries and 88 households are beneficiaries from any institution in which 45 household are beneficiaries of zakat institution which are maximum number and minimum 1 household beneficiary from BISP is now non-poor. It is noted that 12 beneficiaries from Pakistan Bait ul mal, 22 beneficiaries of MFI and 8 beneficiaries from NGO are also non-poor. Beneficiaries from BISP 99% household are poor where as 78% households beneficiaries from Khushali Banks, 84% from NGO and 76% from PBM still fall under the poverty line. Table shows that 17% non beneficiaries' households are non-poor and 83% households are poor.

Table 4.3. The Distribution of Responses According to Gender

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
	Female	240	24.0	24.0	24.0
Valid	Male	760	76.0	76.0	100.0
	Total	1000	100.0	100.0	

Table 4.3 shows that 24% respondents are female and remaining 76% respondents are male. Majority respondents are male because female are not allowed to go outside the house and they are also not allowed to talk and give the answer in rural area of these district due to their culture.

Table 4.3.1 The Distribution of Responses According to Gender and Poverty Status

Gender * Status Crosstabulation						
		Status		Total		
		non-poor	poor			
Gender	Female	Count	26	214	240	
		% within Gender	10.8%	89.2%	100.0%	
		% within Status	15.0%	25.9%	24.0%	
	Male	Count	147	613	760	
			% within Gender	19.3%	80.7%	100.0%
			% within Status	85.0%	74.1%	76.0%
Total	Count	173	827	1000		
		% within Gender	17.3%	82.7%	100.0%	
		% within Status	100.0%	100.0%	100.0%	

Table 4.3.1 shows that 173 households are non-poor and 627 households are under the poverty line. Table 4.3.2 shows that from female respondents, 26 households are non poor whereas 214 household are poor. From 760 male respondents 613 households are poor and 147 households are non poor.

Table 4.3.2 The Distribution of Responses According to Gender and Districts

Gender * District Crosstabulation						
		District		Total		
		D.G.Khan	Rajan Pur			
Gender	Female	Count	143	97	240	
		% within Gender	59.6%	40.4%	100.0%	
		% within District	23.8%	24.3%	24.0%	
	Male	Count	457	303	760	
			% within Gender	60.1%	39.9%	100.0%
			% within District	76.2%	75.8%	76.0%
Total	Count	600	400	1000		
		% within Gender	60.0%	40.0%	100.0%	
		% within District	100.0%	100.0%	100.0%	

Table 4.3.2 shows that from total 760 male respondents 457 belong to DG Khan district and 303 belongs to Rajan pur district. From female respondents 147 belong to DG Khan district and 143 belong to Rajanpur district.

Table 4.3.3 The Distribution of Responses According to Gender and Institutions

		Gender * Institution Crosstabulation						Total	
		Institution							
		No Institution	Zakat	BISP	PBM	MFI	NGO		
Gender	Female	Count	10	55	100	50	8	17	240
		% within Gender	4.2%	22.9%	41.7%	20.8%	3.3%	7.1%	100.0%
		% within Institution	2.0%	27.5%	100.0%	100.0%	8.0%	34.0%	24.0%
		Count	490	145	0	0	92	33	760
		% within Gender	64.5%	19.1%	0.0%	0.0%	12.1%	4.3%	100.0%
		% within Institution	98.0%	72.5%	0.0%	0.0%	92.0%	66.0%	76.0%
Total		Count	500	200	100	50	100	50	1000
		% within Gender	50.0%	20.0%	10.0%	5.0%	10.0%	5.0%	100.0%
		% within Institution	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4.3.3 shows that 230 female are beneficiaries and 10 females are non-beneficiaries. From the male respondents 64.5% male are non beneficiaries and 35.5% male beneficiaries from the institution.

Table 4.4 The Distribution of Responses According to Employment Status

		EmploymentStatus			
		Frequency	Percent	Valid Percent	Cumulative Percent
	Unemployment	625	62.5	62.5	62.5
Valid	Employment	375	37.5	37.5	100.0
	Total	1000	100.0	100.0	

Table 4.1.4 shows that 62.5% respondents are unemployed and only 37.5% respondents are employed. In Pakistan, joint family system is observed so earning of one person is utilized for the basic need of whole family. Agriculture is main sector for employment in rural Pakistan.

Table 4.4.1 The Distribution of Responses According to Employment Status and Poverty Status

EmploymentStatus * Status Crosstabulation					
			Status		Total
			non-poor	poor	
EmploymentStatus	Unemployment	Count	61	564	625
		% within EmploymentStatus	9.8%	90.2%	100.0%
		% within Status	35.3%	68.2%	62.5%
	Employment	Count	112	263	375
		% within EmploymentStatus	29.9%	70.1%	100.0%
		% within Status	64.7%	31.8%	37.5%
Total	Count	173	827	1000	
	% within EmploymentStatus	17.3%	82.7%	100.0%	
	% within Status	100.0%	100.0%	100.0%	

Table 4.4.1 shows that 35.3% households are non poor and 68.2% are poor from the total unemployed persons whereas 29.9% households are non-poor and 70.1% household are poor from total employed respondents

Table 4.4.2 The Distribution of Responses According to Employment Status and Districts

EmploymentStatus * District Crosstabulation					
			District		Total
			D.G.Khan	Rajan Pur	
EmploymentStatus	Unemployment	Count	381	244	625
		% within EmploymentStatus	61.0%	39.0%	100.0%
		% within District	63.5%	61.0%	62.5%
	Employment	Count	219	156	375
		% within EmploymentStatus	58.4%	41.6%	100.0%
		% within District	36.5%	39.0%	37.5%
Total	Count	600	400	1000	
	% within EmploymentStatus	60.0%	40.0%	100.0%	
	% within District	100.0%	100.0%	100.0%	

Table 4.4.2 shows that from total 625 unemployed respondents 381 household belong to DG Khan district and 244 are from Rajanpur district. It is noted that from total 375 employed respondents 61% are from DG Khan district and 39% are from Rajanpur.

Table 4.4.3 The Distribution of Responses According to Employment Status and Institutions

		EmploymentStatus * Institution Crosstabulation						Total
		Institution						
		No Institution	Zakat	BISP	PBM	MFI	NGO	
EmploymentStatus	Count	426	54	79	15	3	48	625
	Unemployment % within EmploymentStatus	68.2%	8.6%	12.6%	2.4%	0.5%	7.7%	100.0%
	% within Institution	85.2%	27.0%	79.0%	30.0%	3.0%	96.0%	62.5%
	Count	74	146	21	35	97	2	375
	Employment % within EmploymentStatus	19.7%	38.9%	5.6%	9.3%	25.9%	0.5%	100.0%
	% within Institution	14.8%	73.0%	21.0%	70.0%	97.0%	4.0%	37.5%
Total	Count	500	200	100	50	100	50	1000
	% within EmploymentStatus	50.0%	20.0%	10.0%	5.0%	10.0%	5.0%	100.0%
	% within Institution	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4.4.3 also shows that from 375 employed persons 146 are from beneficiaries from zakat institutions which are maximum among groups of beneficiaries and minimum only 2 beneficiaries from NGO are employed. It is also noted that beneficiaries from zakat institution 73% respondent are employed, 97% beneficiaries from MFI, 21% from BISP, 70% from PBM and 4% from NGO are employed comparing within institution.

Table 4.5 The Distribution of Responses According to Education

		Education			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Illiterate	486	48.6	48.6	48.6
	Till Middle	189	18.9	18.9	67.5
	SSC	166	16.6	16.6	84.1
	HSSC	135	13.5	13.5	97.6
	Above HSSC	24	2.4	2.4	100.0
	Total	1000	100.0	100.0	

Table 4.5 shows that 48.6% respondents are illiterate in the sample of study area. Table also shows that 18.9% respondents are educated till middle, 16.6% passed their matriculation, 13.5% passed HSSC and only 2.4% respondents are graduate or professional degree holder. Education is considered basic tool for human capital development and poverty reduction also.

Table 4.5.1 The Distribution of Responses According to Education and Poverty Status.

Education * Status Crosstabulation					
			Status		Total
			non-poor	poor	
Education	Illiterate	Count	34	452	486
		% within Education	7.0%	93.0%	100.0%
		% within Status	19.7%	54.7%	48.6%
	Till Middle	Count	26	163	189
		% within Education	13.8%	86.2%	100.0%
		% within Status	15.0%	19.7%	18.9%
	SSC	Count	53	113	166
		% within Education	31.9%	68.1%	100.0%
		% within Status	30.6%	13.7%	16.6%
	HSSC	Count	45	90	135
		% within Education	33.3%	66.7%	100.0%
		% within Status	26.0%	10.9%	13.5%
	Above HSSC	Count	15	9	24
		% within Education	62.5%	37.5%	100.0%
	% within Status	8.7%	1.1%	2.4%	
Total	Count	173	827	1000	
	% within Education	17.3%	82.7%	100.0%	
	% within Status	100.0%	100.0%	100.0%	

Table 4.5.1 shows that from total 486 illiterate household, 452 households are poor and 34 households are non-poor. From 189 respondents educated till middle, 163 households are poor and 26 households are non-poor. It is noted that 67.7% households are poor and 33.3% of Higher Secondary School Certificate pass are non-poor. It is noted that 15 out of 24 graduate and professional degree holders are non-poor. In percentage 37.5% are poor and 62% graduate pass are non-poor household.

Table 4.5.2 The Distribution of Responses According to Education and Districts

Education * District Crosstabulation					
			District		Total
			D.G.Khan	Rajan Pur	
		Count	308	178	486
Illiterate	% within Education		63.4%	36.6%	100.0%
	% within District		51.3%	44.5%	48.6%
		Count	139	50	189
Till Middle	% within Education		73.5%	26.5%	100.0%
	% within District		23.2%	12.5%	18.9%
		Count	114	52	166
SSC	% within Education		68.7%	31.3%	100.0%
	% within District		19.0%	13.0%	16.6%
		Count	37	98	135
HSSC	% within Education		27.4%	72.6%	100.0%
	% within District		6.2%	24.5%	13.5%
		Count	2	22	24
Above HSSC	% within Education		8.3%	91.7%	100.0%
	% within District		0.3%	5.5%	2.4%
		Count	600	400	1000
Total	% within Education		60.0%	40.0%	100.0%
	% within District		100.0%	100.0%	100.0%

Table 4.5.2 shows that from 486 illiterate respondents 308 households belong to DG Khan district and 178 household belongs to Rajanpur districts. From the graduate respondents 2 households belong to DG Khan and 22 households belong to Distt Rajanpur. From matriculation pass respondents 114 belong to DG Khan district and 52 belong to Rajanpur district. From HSSC pass respondents 37 household belong to DG Khan and 98 household belong to Rajanpur district.

Table 4.1.5.3 The Distribution of Responses According to Education and Institutions

			Education * Institution Crosstabulation					Total	
			Institution						
			No Institution	Zakat	BISP	PBM	MFI	NGO	
Education	Illiterate	Count	264	40	95	30	42	15	486
		% within Education	54.3%	8.2%	19.5%	6.2%	8.6%	3.1%	100.0%
	Till Middle	% within Institution	52.8%	20.0%	95.0%	60.0%	42.0%	30.0%	48.6%
		Count	112	22	4	8	43	0	189
	SSC	% within Education	59.3%	11.6%	2.1%	4.2%	22.8%	0.0%	100.0%
		% within Institution	22.4%	11.0%	4.0%	16.0%	43.0%	0.0%	18.9%
	HSSC	Count	23	82	1	11	14	35	166
		% within Education	13.9%	49.4%	0.6%	6.6%	8.4%	21.1%	100.0%
	Above HSSC	% within Institution	4.6%	41.0%	1.0%	22.0%	14.0%	70.0%	16.6%
		Count	77	56	0	1	1	0	135
	Total	% within Education	57.0%	41.5%	0.0%	0.7%	0.7%	0.0%	100.0%
		% within Institution	15.4%	28.0%	0.0%	2.0%	1.0%	0.0%	13.5%
	Total	Count	24	0	0	0	0	0	24
		% within Education	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	Total	% within Institution	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%
		Count	500	200	100	50	100	50	1000
	Total	% within Education	50.0%	20.0%	10.0%	5.0%	10.0%	5.0%	100.0%
		% within Institution	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4.5.3 shows that there is no graduate respondent in the beneficiaries. It is noted here that level of education is negative correlated with poverty as level of education increase, level of poverty decrease. From 486 illiterate respondents, 222 households are beneficiaries from organized institutions. It is noted that from matriculation pass respondents 86% are beneficiaries from the institution. From matriculation pass respondents, 49.4% are beneficiaries from zakat institution, 0.6% from BISP, 6.6% from PBM, 8.4% from MFI and 21.1% from NGO.

Table 4.6 The Distribution of Responses According to Marital Status

		Maritalstatus			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	220	22.0	22.0	22.0
	Married	777	77.7	77.7	99.7
	Other	3	.3	.3	100.0
	Total	1000	100.0	100.0	

Table 4.6 shows that 22% respondents are single one, 77.7% respondents are married and only 0.3% is others. Other includes divorced, widow etc.

Table 4.6.1 The Distribution of Responses According to Marital Status and Poverty Status

			Maritalstatus * Status Crosstabulation		Total
			non-poor	Poor	
Maritalstatus	Single	Count	76	144	220
		% within Status	43.9%	17.4%	22.0%
	Married	Count	97	680	777
		% within Status	56.1%	82.2%	77.7%
	Other	Count	0	3	3
		% within Status	0.0%	0.4%	0.3%
	Total	Count	173	827	1000
		% within Status	100.0%	100.0%	100.0%

Table 4.6.1 shows that between single households 76 households are non-poor and 144 households are poor. Table also shows that out of total married respondents, 97 households are non poor and 680 households are poor. All other respondents are poor.

Table 4.6.2 The Distribution of Responses According to Marital Status and Districts

			Maritalstatus * District Crosstabulation		Total
			D.G.Khan	Rajan Pur	
Maritalstatus	Single	Count	139	81	220
		% within District	23.2%	20.3%	22.0%
	Married	Count	461	316	777
		% within District	76.8%	79.0%	77.7%
	Other	Count	0	3	3
		% within District	0.0%	0.8%	0.3%
	Total	Count	600	400	1000
		% within District	100.0%	100.0%	100.0%

Table 4.6.2 shows that out of 220 single respondents 139 belongs to DG Khan district and 81 respondents belong to Rajanpur district. Table also shows that out of 777 households of

married respondents 461 belong to DG Khan district and 316 household belong to Rajanpur district.

Table 4.1.6.3 The Distribution of Responses According to Marital Status and Institutions

Maritalstatus * Institution Crosstabulation

			Institution					Total	
			No Institution	Zakat	BISP	PBM	MFI		NGO
Maritalstatus	Single	Count	26	141	1	19	2	31	220
		% within Institution	5.2%	70.5%	1.0%	38.0%	2.0%	62.0%	22.0%
	Married	Count	472	58	99	31	98	19	777
		% within Institution	94.4%	29.0%	99.0%	62.0%	98.0%	38.0%	77.7%
	Other	Count	2	1	0	0	0	0	3
		% within Institution	0.4%	0.5%	0.0%	0.0%	0.0%	0.0%	0.3%
	Total	Count	500	200	100	50	100	50	1000
		% within Institution	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4.6.3 shows that majority single belongs to beneficiaries of *Zakat* institution and Pakistan Bait ul Mal because these institution focus on education and training for the younger. From the married respondents, 99 households are beneficiaries from BISP.

Table 4.7 The Distribution of Responses According to facility of water source for Agriculture Purpose

Water

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rain/rainy torrents	474	47.4	47.4	47.4
	only tubewell	188	18.8	18.8	66.2
	Canal+Tubewell	97	9.7	9.7	75.9
	Canal only	241	24.1	24.1	100.0
	Total	1000	100.0	100.0	

D. G. Khan and Rajanpur districts are divided into three major regions including Piedmont

area, canal irrigated area and river irrigated area as mentioned in chapter three. So different sources of water are used to cultivate the lands in this region. In the piedmont are, people depends only rain and rainy torrents. In the deserts and river irrigated area, they cultivated their lands with tube well. In the plain and canal irrigated area, people depends on canal system for cultivating their crops. Table 4.7 shows that 47.4% household depends on rain and rainy torrents for water facility to cultivate their lands, 18.8% households depend on tube-well source and 24% households depend on canal water facilities for cultivation purpose.

Table 4.8 The Distribution of Responses According to the change in income

ChangeInIncome					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stable	570	57.0	57.0	57.0
	Decrease	215	21.5	21.5	78.5
	Increase	215	21.5	21.5	100.0
	Total	1000	100.0	100.0	

Table 4.8 show that 57% respondents reported stability in their income since last one year. 21.5% reported for each increases and decrease in their income since last one year. Respondents were asked to report the change in income since last year.

Table 4.8.1 The Distribution of Responses According to the Change in income and poverty Status.

ChangeInIncome * Status Crosstabulation					
			Status		Total
			non-poor	poor	
ChangeInIncome	Stable	Count	57	513	570
		% within ChangeInIncome	10.0%	90.0%	100.0%
		% within Status	32.9%	62.0%	57.0%
	Decrease	Count	29	186	215
		% within ChangeInIncome	13.5%	86.5%	100.0%
		% within Status	16.8%	22.5%	21.5%
	Increase	Count	87	128	215
		% within ChangeInIncome	40.5%	59.5%	100.0%
		% within Status	50.3%	15.5%	21.5%
Total	Count	173	827	1000	
	% within ChangeInIncome	17.3%	82.7%	100.0%	
	% within Status	100.0%	100.0%	100.0%	

Table 4.8.1 shows that 57 non poor household and 513 poor households reported for no change. Table also shows that 29 from non-poor household and 186 poor household reported for decrease in income and 87 non-poor households and 128 households reported increase in their income.

Table 4.8.2 The Distribution of Responses According to the Change in income and Districts.

ChangeInIncome * District Crosstabulation					
			District		Total
			D.G.Khan	Rajan Pur	
ChangeInIncome	Stable	Count	329	241	570
		% within ChangeInIncome	57.7%	42.3%	100.0%
		% within District	54.8%	60.3%	57.0%
	Decrease	Count	162	53	215
		% within ChangeInIncome	75.3%	24.7%	100.0%
		% within District	27.0%	13.3%	21.5%
	Increase	Count	109	106	215
		% within ChangeInIncome	50.7%	49.3%	100.0%
		% within District	18.2%	26.5%	21.5%
Total	Count	600	400	1000	
	% within ChangeInIncome	60.0%	40.0%	100.0%	
	% within District	100.0%	100.0%	100.0%	

Table 4.8.2 shows that out of 570 households 329 from DG Khan district and 241 from Rajanpur district reported no change in their income. Table also shows that out of 215 households, 162 from DGK and 53 from Rajanpur district reported that income was decreased since last six months. Out of total 215 households, 109 from DG K and 106 from Rajanpur reported increase in their income since last six months.

Table 4.1.8.3 The Distribution of Responses According to the Change in income and Institutions.

ChangeInIncome * Institution Crosstabulation

		Institution						Total	
		No Institution	Zakat	BISP	PBM	MFI	NGO		
ChangeInIncome	Stable	Count	293	130	100	13	6	28	570
	% within ChangeInIncome		51.4%	22.8%	17.5%	2.3%	1.1%	4.9%	100.0%
	% within Institution		58.6%	65.0%	100.0%	26.0%	6.0%	56.0%	57.0%
	Decrease	Count	107	18	0	35	33	22	215
	% within ChangeInIncome		49.8%	8.4%	0.0%	16.3%	15.3%	10.2%	100.0%
	% within Institution		21.4%	9.0%	0.0%	70.0%	33.0%	44.0%	21.5%
	Increase	Count	100	52	0	2	61	0	215
	% within ChangeInIncome		46.5%	24.2%	0.0%	0.9%	28.4%	0.0%	100.0%
	% within Institution		20.0%	26.0%	0.0%	4.0%	61.0%	0.0%	21.5%
Total	Count	500	200	100	50	100	50	1000	
% within ChangeInIncome		50.0%	20.0%	10.0%	5.0%	10.0%	5.0%	100.0%	
% within Institution		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Table 4.8.3 shows from beneficiaries, 277 reported no change, 108 reported decrease and 115 reported increase in their income since last year. From 115 beneficiaries 61 are from Khushali Banks, and 52 are from *Zakat* institution who reported for increase in their income.

Table 4.9 The Distribution of Responses According to the Source of Change

SourceOfChange

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NO	579	57.9	57.9	57.9
	Agriculture	145	14.5	14.5	72.4
	Animal	165	16.5	16.5	88.9
	Trade/Business	38	3.8	3.8	92.7
	Service	40	4.0	4.0	96.7
	Job	29	2.9	2.9	99.6
	Other	4	.4	.4	100.0
	Total	1000	100.0	100.0	

Table 4.9 shows that 14.5% households reported the change in their income due to

agricultural factor, 16.5% households reported from animal, 3.8% reported from trade and business, 2.9% reported from getting job and 4% reported from service provision for change in income. Table shows that 57.9% households reported no source for their change.

Table 4.10 The Distribution of Responses According to the Change in amount

changeAmount				
	Frequency	Percent	Valid Percent	Cumulative Percent
no change	570	57.0	57.0	57.0
0-1500 increase	70	7.0	7.0	64.0
1500-3000 increase	84	8.4	8.4	72.4
3000-4500 increase	32	3.2	3.2	75.6
increase above 4500	30	3.0	3.0	78.6
0-1500 decrease	95	9.5	9.5	88.1
1500-3000 decrease	92	9.2	9.2	97.3
3000-4500 decrease	15	1.5	1.5	98.8
decrease above 4500	12	1.2	1.2	100.0
Total	1000	100.0	100.0	

Table 4.10 shows that 7% respondents reported the increase in their income from 0-1500, 8.4% reported to increase 1500-3000, 3.2% reported to increase 3000-4500 and 3% reported to increase more then 4500. On the other side 9.5% reported for decrease Rs.0-1500, 9.2% reported to decrease Rs.1500-3000, 1.5%reported to decrease Rs. 3000-4500 and 1.2% reported to decrease above Rs. 4500.

Table also shows that 57 non poor and 513 poor household reported for no change in their income since last year. Table 4.1.10.1 shows that 21 non poor and 49 poor households reported for their increase in income between 0-1500 per month.

Table 4.11 The Distribution of Responses According to the Saving for Emergency.

SavingForEmergency				
	Frequency	Percent	Valid Percent	Cumulative Percent
No	985	98.5	98.5	98.5
Valid Yes	15	1.5	1.5	100.0
Total	1000	100.0	100.0	

Table 4.11 show that only 15 respondents reported of money saving for emergency purposes which were only 1.5% of total sample.

Table 4.11.1 The Distribution of Responses According to the Saving for Emergency and Poverty Status.

SavingForEmergency * Status Crosstabulation

		Status		Total
		non-poor	poor	
SavingForEmergency	No	168	817	985
	Yes	5	10	15
	Total	173	827	1000

Table 4.11.1 shows that out of total respondents who saved the money for emergency, 5 respondents are non-poor and 10 are poor households.

Table 4.11.2 The Distribution of Responses According to the Saving for emergency and Districts.

SavingForEmergency * District Crosstabulation

		District		Total
		D.G.Khan	Rajan Pur	
SavingForEmergency	No	594	391	985
	Yes	6	9	15
	Total	600	400	1000

Table 4.11.2 shows that from total households having the saving for emergency, 6 households belong to DG khan district and 9 household belong to Rajanpur district.

Table 4.1.11.3 The Distribution of Responses According to the Saving and Institutions

SavingForEmergency * Institution Crosstabulation

		Institution					Total	
		No Institution	Zakat	BISP	PBM	MFI		NGO
SavingForEmergency	No	485	200	100	50	100	50	985
	Yes	15	0	0	0	0	0	15
	Total	500	200	100	50	100	50	1000

Table 4.11.3 shows that all these respondents are non-beneficiaries who saved money. No beneficiaries reported for saving for emergencies.

Table 4.12 The Distribution of Responses According to the Training

		Training			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No training from institution	828	82.8	82.8	82.8
	Got training from institution	172	17.2	17.2	100.0
	Total	1000	100.0	100.0	

Table 4.12 show that 82.8% respondents did not receive any professional training and skill from any organized institution and 17.2% respondents got training from institutions.

Table 4.12.1 The Distribution of Responses According to the training and Poverty Status

		Training * Status Crosstabulation			
		Status		Total	
		non-poor	poor		
Training	Count	116	712	828	
	No training from institution	% within Training	14.0%	86.0%	100.0%
		% within Status	67.1%	86.1%	82.8%
	Count	57	115	172	
	Got training from institution	% within Training	33.1%	66.9%	100.0%
		% within Status	32.9%	13.9%	17.2%
Total	Count	173	827	1000	
		% within Training	17.3%	82.7%	100.0%
		% within Status	100.0%	100.0%	100.0%

Table 4.12.1 shows from 172 trained individual, 57 households are non-poor and 115 households are still under the poverty line. From untrained respondents, 712 households are poor and 116 households are non poor.

Table 4.12.2 The Distribution of Responses According to the Training and district

		District		Total
		D.G.Khan	Rajan Pur	
Training	Count	487	341	828
	No training from institution	58.8%	41.2%	100.0%
	% within Training	81.2%	85.3%	82.8%
	% within District			
	Count	113	59	172
	Got training from institution	65.7%	34.3%	100.0%
Total	% within Training	18.8%	14.8%	17.2%
	% within District			
	Count	600	400	1000
	% within Training	60.0%	40.0%	100.0%
	% within District	100.0%	100.0%	100.0%

Table 4.12.2 shows that out of 172 trained respondents, 113 respondents belong to DG khan district and 59 respondents belong to Rajanpur district. *Zakat* and Pakistan bait ul mal provide the facility in the organized institutions to get training and skill which is related to industries and technology. BISP has planned to provide such a technical and vocational training to the poor.

Table 4.13 The Distribution of Responses According to the Age

		Age			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-20	172	17.2	17.2	17.2
	21-40	539	53.9	53.9	71.1
	41-60	248	24.8	24.8	95.9
	61-80	41	4.1	4.1	100.0
	Total	1000	100.0	100.0	

Table 4.13 shows that majority respondents are between 21 to 40 years which are 53.9% of total respondents and only 4.1% are more than 60 years of old. Table shows that 53.9% households belong to age group 21-40 years and 24.8% belong to age group 41-60 years. Table shows that 17.2% respondents are less than 20 years of age and 24.8% are between the age group of 41-60 years.

Table 4.13.1 The Distribution of Responses According to the age and Poverty status

			Status		Total
			non-poor	poor	
Age	0-20	Count	51	121	172
		% within Age	29.7%	70.3%	100.0%
		% within Status	29.5%	14.6%	17.2%
	21-40	Count	80	459	539
		% within Age	14.8%	85.2%	100.0%
		% within Status	46.2%	55.5%	53.9%
	41-60	Count	38	210	248
		% within Age	15.3%	84.7%	100.0%
		% within Status	22.0%	25.4%	24.8%
	61-80	Count	4	37	41
		% within Age	9.8%	90.2%	100.0%
		% within Status	2.3%	4.5%	4.1%
	Total	Count	173	827	1000
		% within Age	17.3%	82.7%	100.0%
		% within Status	100.0%	100.0%	100.0%

Table 4.13.1 shows that out of 100% poor 14.6% are under the age of 20 years, 55.5% belong to 21-40 years age group, 25.4% poor belong to 41-60 years and 4.5% poor are more than sixty years of age.

Table 4.14 The Distribution of Responses According to the total member of household

Total members of House Hold				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-2	63	6.3	6.3
	3-4	338	33.8	40.1
	5-6	373	37.3	77.4
	7-8	157	15.7	93.1
	9-10	69	6.9	100.0
Total	1000	100.0	100.0	

Table 4.14 shows that 6.3% households consist of 1-2 members, 33.8% consist of 3-4 members, 37.3% consist of 5-6 members, 15.7 consist of 7-8 members and 6.9% consist of 9-10 members in one household.

Table4.14.1 The Distribution of Responses According to the total member of household and Poverty Status.

Total members of House Hold * Status Crosstabulation					
			Status		Total
			non-poor	poor	
Total members of House Hold	1-2	Count	26	37	63
		% within Total members of House Hold	41.3%	58.7%	100.0%
	3-4	% within Status	15.0%	4.5%	6.3%
		Count	80	258	338
	5-6	% within Total members of House Hold	23.7%	76.3%	100.0%
		% within Status	46.2%	31.2%	33.8%
	7-8	Count	45	328	373
		% within Total members of House Hold	12.1%	87.9%	100.0%
	9-10	% within Status	26.0%	39.7%	37.3%
		Count	18	139	157
	Total	% within Total members of House Hold	11.5%	88.5%	100.0%
		% within Status	10.4%	16.8%	15.7%
	Total	Count	4	65	69
		% within Total members of House Hold	5.8%	94.2%	100.0%
	Total	% within Status	2.3%	7.9%	6.9%
		Count	173	827	1000
	Total	% within Total members of House Hold	17.3%	82.7%	100.0%
		% within Status	100.0%	100.0%	100.0%

Table 4.14.1 shows that out of 100% poor 4.5% household consisted of 1-2 members, 31.2% households are consisted of 3-4 members, 39.3% households consisted of 5-6 members, 16.8% households consisted of 7-8 members, and 7.9% households consisted of 9-10 members.

Table 4.15 The Distribution of Responses According to the Child dependency

ChildDep				
	Frequency	Percent	Valid Percent	Cumulative Percent
0	311	31.1	31.1	31.1
1-2	344	34.4	34.4	65.5
3-4	268	26.8	26.8	92.3
5-6	69	6.9	6.9	99.2
7-8	8	.8	.8	100.0
Total	1000	100.0	100.0	

Table 4.15 show that 31.1% households have no children, 34.4% households have 1-2 children, 26.8% households have 3-4 children, 6.9% households have 5-6 children and 0.8% households have 7-8 children in their dependency.

Table 4.15.1 The Distribution of Responses According to the child dependency and poverty status

ChildDep * Status Crosstabulation

		Status		Total
		non-poor	poor	
ChildDep	Count	96	215	311
	0 % within ChildDep	30.9%	69.1%	100.0%
	% within Status	55.5%	26.0%	31.1%
	Count	55	289	344
	1-2 % within ChildDep	16.0%	84.0%	100.0%
	% within Status	31.8%	34.9%	34.4%
	Count	20	248	268
	3-4 % within ChildDep	7.5%	92.5%	100.0%
	% within Status	11.6%	30.0%	26.8%
	Count	2	67	69
	5-6 % within ChildDep	2.9%	97.1%	100.0%
	% within Status	1.2%	8.1%	6.9%
	Count	0	8	8
	7-8 % within ChildDep	0.0%	100.0%	100.0%
	% within Status	0.0%	1.0%	0.8%
	Count	173	827	1000
	Total % within ChildDep	17.3%	82.7%	100.0%
	% within Status	100.0%	100.0%	100.0%

Table 4.15.1 shows that out of 100% poor, 26% household consisted of no child dependency, 34.9% households are consisted of 1-2 children under the age of 12 years, 34.9% households are consisted of 3-4 children, 8.1% households consisted of 5-6 dependent children, and 1% households are consisted of 9-10 dependent children.

Table 4.16 The Distribution of Responses According to the old dependency

OldDep				
	Frequency	Percent	Valid Percent	Cumulative Percent
0	926	92.6	92.6	92.6
Valid 1-2	42	4.2	4.2	96.8
3-4	32	3.2	3.2	100.0
Total	1000	100.0	100.0	

Table 4.16 show that 92.6% households have no old dependency. Table also shows that 4.2% households have 1-2 old member and 3.2% have 3-4 person for the dependency.

Table 4.16.1 The Distribution of Responses According to the old dependency and poverty status

OldDep * Status Crosstabulation					
			Status		Total
			non-poor	poor	
OldDep	0	Count	162	764	926
		% within OldDep	17.5%	82.5%	100.0%
		% within Status	93.6%	92.4%	92.6%
	1-2	Count	2	40	42
		% within OldDep	4.8%	95.2%	100.0%
		% within Status	1.2%	4.8%	4.2%
	3-4	Count	9	23	32
		% within OldDep	28.1%	71.9%	100.0%
		% within Status	5.2%	2.8%	3.2%
Total	Count	173	827	1000	
	% within OldDep	17.3%	82.7%	100.0%	
	% within Status	100.0%	100.0%	100.0%	

Table 4.16.1 shows that out of 100% poor 92.4% household consisted of having no old dependency, 4.8% households are consisted of 1-2 members over the age of 60 years and 2.8% households are consisted of 3-4 old dependent members.

Table 4.17 The Distribution of Responses According to the working female member of household

WorkingMembersFemales				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	960	96.0	96.0
	1.00	35	3.5	99.5
	2.00	5	.5	100.0
	Total	1000	100.0	100.0

Table 4.17 show that 96% households have no female worker, 3.5% households have 1 worker and 0.5% households have 2 workers only. Due to regional culture, females are not allowed to work out for their living.

Table 4.17.1 The Distribution of Responses According to the working female member and Poverty Status.

WorkingMembersFemales * Status Crosstabulation					
		Status		Total	
		non-poor	poor		
WorkingMembersFemales	.00	Count	153	807	960
		% within WorkingMembersFemales	15.9%	84.1%	100.0%
	1.00	% within Status	88.4%	97.6%	96.0%
		Count	17	18	35
	2.00	% within WorkingMembersFemales	48.6%	51.4%	100.0%
		% within Status	9.8%	2.2%	3.5%
Total	Count	3	2	5	
	% within WorkingMembersFemales	60.0%	40.0%	100.0%	
Total	% within Status	1.7%	0.2%	0.5%	
	Count	173	827	1000	
Total	% within WorkingMembersFemales	17.3%	82.7%	100.0%	
	% within Status	100.0%	100.0%	100.0%	

Table 4.17.1 shows that out of 100% poor households 79.6% households no female working members in house, 2.2% households have 1 working female member and 0.2% households have 2 working females' members in the house.

Table 4.18 The Distribution of Responses According to the working male member of household.

	Frequency	Percent	Valid Percent	Cumulative Percent
.00	763	76.3	76.3	76.3
1.00	171	17.1	17.1	93.4
2.00	39	3.9	3.9	97.3
3.00	22	2.2	2.2	99.5
4.00	5	.5	.5	100.0
Total	1000	100.0	100.0	

Table 4.18 show that 76.3% households have no working members on regular basis, 17.1% have 1 person, 3.9% have 2 persons, 2.2% have 3 persons and 0.5% households have 4 persons having the regular job for their male members.

Table 4.18.1 The Distribution of Responses According to the working male member and Poverty status

			Status		Total
			non-poor	poor	
.00	Count		94	669	763
	% within WorkingMembersMales		12.3%	87.7%	100.0%
1.00	Count		45	126	171
	% within WorkingMembersMales		26.3%	73.7%	100.0%
2.00	Count		19	20	39
	% within WorkingMembersMales		48.7%	51.3%	100.0%
3.00	Count		13	9	22
	% within WorkingMembersMales		59.1%	40.9%	100.0%
4.00	Count		2	3	5
	% within WorkingMembersMales		40.0%	60.0%	100.0%
Total	Count		173	827	1000
	% within WorkingMembersMales		17.3%	82.7%	100.0%
			100.0%	100.0%	100.0%

Table 4.18.1 shows that out of 100% poor households 80.9% households have no male working members in house, 15.2%% households have 1 working male member, 2.4% households have 2 working members, 1.1% households have 3 working members and 0.4% households have 4 working males' members in the house.

Table 4.19 The Distribution of Responses According to the value of animal

ValueOfAnimals				
	Frequency	Percent	Valid Percent	Cumulative Percent
0	239	23.9	23.9	23.9
1-10000	95	9.5	9.5	33.4
10001-20000	140	14.0	14.0	47.4
Valid 20001-30000	52	5.2	5.2	52.6
30001-40000	52	5.2	5.2	57.8
other	422	42.2	42.2	100.0
Total	1000	100.0	100.0	

It is observed that people depends on livestock for their emergencies in rural areas of Pakistan. As table 4.19 shows that majority people have livestock with them to meet the food consumption through meat and milk and to meet the emergencies arises. Table also shows that only 23.9% people have no live stock, 9.5% have up to value of Rs, 10,000, 14% have Rs.20000, 5.2% have Rs.30000 and Rs. 40000 each and 42.5% have more than Rs. 40000 of livestock at their ownership.

Table 4.19.1 The Distribution of Responses According to the value of animal and poverty status

			Status		Total
			non-poor	poor	
ValueOfAnimals		Count	76	163	239
	0	% within ValueOfAnimals	31.8%	68.2%	100.0%
		% within Status	43.9%	19.7%	23.9%
		Count	3	92	95
	1-10000	% within ValueOfAnimals	3.2%	96.8%	100.0%
		% within Status	1.7%	11.1%	9.5%
		Count	10	130	140
	10001-20000	% within ValueOfAnimals	7.1%	92.9%	100.0%
		% within Status	5.8%	15.7%	14.0%
		Count	4	48	52
	20001-30000	% within ValueOfAnimals	7.7%	92.3%	100.0%
		% within Status	2.3%	5.8%	5.2%
		Count	1	51	52
	30001-40000	% within ValueOfAnimals	1.9%	98.1%	100.0%
		% within Status	0.6%	6.2%	5.2%
		Count	79	343	422
	other	% within ValueOfAnimals	18.7%	81.3%	100.0%
		% within Status	45.7%	41.5%	42.2%
	Count	173	827	1000	
Total	% within ValueOfAnimals	17.3%	82.7%	100.0%	
	% within Status	100.0%	100.0%	100.0%	

Table 4.19.1 shows that from poor household 19.7% household have no live stick, 11.1% households have live stock for value of Rs.0-10000, 15.7% households have vale of Rs.10001-20000, 5.8% have vale of Rs.20001-30000, 6.2% households have live stock for value of Rs.30001-40000 and 41.5% households have live stock for value of more than Rs. 40000.

Table 4.20 The Distribution of Responses According to the own land

OwnLand				
	Frequency	Percent	Valid Percent	Cumulative Percent
0	450	45.0	45.0	45.0
1-5	429	42.9	42.9	87.9
6-10	57	5.7	5.7	93.6
Valid 11-15	11	1.1	1.1	94.7
16-20	5	.5	.5	95.2
other	48	4.8	4.8	100.0
Total	1000	100.0	100.0	

Table 4.20 show that majority people are landless or having very nominal land with their ownership. Table also shows that 45% households are landless, 42.9% households have between 1-5 acres of land, 5.7 % households have 6-10 acres, 1.1% households have 11-15 acres, 0.5% households have 16-20 acres and 4.8% households have more than 20 acres with their ownership in study area.

Table 4.20.1 The Distribution of Responses According to the own land poverty status

OwnLand * Status Crosstabulation					
			Status		Total
			non-poor	poor	
OwnLand		Count	79	371	450
	0	% within OwnLand	17.6%	82.4%	100.0%
		% within Status	45.7%	44.9%	45.0%
		Count	62	367	429
	1-5	% within OwnLand	14.5%	85.5%	100.0%
		% within Status	35.8%	44.4%	42.9%
		Count	18	39	57
	6-10	% within OwnLand	31.6%	68.4%	100.0%
		% within Status	10.4%	4.7%	5.7%
		Count	6	5	11
	11-15	% within OwnLand	54.5%	45.5%	100.0%
		% within Status	3.5%	0.6%	1.1%
		Count	2	3	5
	16-20	% within OwnLand	40.0%	60.0%	100.0%
		% within Status	1.2%	0.4%	0.5%
		Count	6	42	48
	other	% within OwnLand	12.5%	87.5%	100.0%
		% within Status	3.5%	5.1%	4.8%
	Count	173	827	1000	
Total	% within OwnLand	17.3%	82.7%	100.0%	
	% within Status	100.0%	100.0%	100.0%	

Table 4.20.1 show that from the poor 44.9% households are landless, 44.4% households own 1-5 acres, 4.7% households own 6-10 acres, 0.6% households own 11-15 acres, 0.4% households own 16-20 acres and 5.1% households own more than 20 acres.

Table 4.21 The Distribution of Responses According to the cultivated land

CultivatedLand1				
	Frequency	Percent	Valid Percent	Cumulative Percent
	0	463	46.3	46.3
	1-5	437	43.7	90.0
	6-10	37	3.7	93.7
Valid	11-15	9	.9	94.6
	16-20	5	.5	95.1
	other	49	4.9	100.0
Total	1000	100.0	100.0	

Table 4.21 show that 46.3% have no cultivated land, 43.7% cultivate 1-5 acres, 3.7% cultivate 6-10 acres, less than 1% cultivate less than 20 acres and 4.9% cultivate more than 20 acres of land.

Table 4.21.1 The Distribution of Responses According to the cultivated land poverty status

CultivatedLand1 * Status Crosstabulation					
			Status		Total
			non-poor	poor	
CultivatedLand1	0	Count	84	379	463
		% within CultivatedLand1	18.1%	81.9%	100.0%
		% within Status	48.6%	45.8%	46.3%
	1-5	Count	63	374	437
		% within CultivatedLand1	14.4%	85.6%	100.0%
		% within Status	36.4%	45.2%	43.7%
	6-10	Count	14	23	37
		% within CultivatedLand1	37.8%	62.2%	100.0%
		% within Status	8.1%	2.8%	3.7%
	11-15	Count	5	4	9
		% within CultivatedLand1	55.6%	44.4%	100.0%
		% within Status	2.9%	0.5%	0.9%
	16-20	Count	2	3	5
		% within CultivatedLand1	40.0%	60.0%	100.0%
		% within Status	1.2%	0.4%	0.5%
	other	Count	5	44	49
		% within CultivatedLand1	10.2%	89.8%	100.0%
		% within Status	2.9%	5.3%	4.9%
Total	Count	173	827	1000	
	% within CultivatedLand1	17.3%	82.7%	100.0%	
	% within Status	100.0%	100.0%	100.0%	

Table 4.21.1 shows that from the poor 45.8% households are landless, 45.2% households

cultivate 1-5 acres, 2.8% households cultivate 6-10 acres, 0.5% households cultivate 11-15 acres, 0.4% households own 16-20 acres and 5.3% households own more than 20 acres.

Table 4.22 The Distribution of Responses According to the business assets

BusinessAssets				
	Frequency	Percent	Valid Percent	Cumulative Percent
0	940	94.0	94.0	94.0
1-10000	4	.4	.4	94.4
10001-20000	1	.1	.1	94.5
20001-30000	1	.1	.1	94.6
other	54	5.4	5.4	100.0
Total	1000	100.0	100.0	

Table 4.22 show that only 6% households are involved in business. Only two respondents reported that business own the assets up to Rs.30000. Table shows that 5.4% respondent reported business assets having assets more than Rs. 30000.

Table 4.22.1 The Distribution of Responses According to the business assets and poverty status.

BusinessAssets * Status Crosstabulation					
			Status		Total
			non-poor	poor	
BusinessAssets	0	Count	156	784	940
		% within BusinessAssets	16.6%	83.4%	100.0%
		% within Status	90.2%	94.8%	94.0%
	1-10000	Count	3	1	4
		% within BusinessAssets	75.0%	25.0%	100.0%
		% within Status	1.7%	0.1%	0.4%
	10001-20000	Count	1	0	1
		% within BusinessAssets	100.0%	0.0%	100.0%
		% within Status	0.6%	0.0%	0.1%
	20001-30000	Count	0	1	1
		% within BusinessAssets	0.0%	100.0%	100.0%
		% within Status	0.0%	0.1%	0.1%
	other	Count	13	41	54
		% within BusinessAssets	24.1%	75.9%	100.0%
		% within Status	7.5%	5.0%	5.4%
	Total	Count	173	827	1000
		% within BusinessAssets	17.3%	82.7%	100.0%
		% within Status	100.0%	100.0%	100.0%

Table 4.22.1 shows that from poor 94.8% household do not have no business assets as they are not involved in business activities, 0.1% have business assets of Rs. 0-10000, and 5% have business assets of more than Rs.30000.

Table 4.23 The Distribution of Responses According to the loan received

Loan				
	Frequency	Percent	Valid Percent	Cumulative Percent
No from institution	900	90.0	90.0	90.0
1-10000	2	.2	.2	90.2
10001-20000	52	5.2	5.2	95.4
Valid 20001-30000	42	4.2	4.2	99.6
30001-40000	2	.2	.2	99.8
other	2	.2	.2	100.0
Total	1000	100.0	100.0	

Table 4.23 show 0.2% household got loan up to Rs.10000, 5.2% got up to Rs.20000, 4.2% got up to Rs.30000, 0.2% got up to Rs.30000 and 0.2% got more than Rs.30000 from Khushahli Bank.

Table 4.23.1 The Distribution of Responses According to the loan received and poverty status

			Status		Total
			non-poor	poor	
Loan		Count	151	749	900
	No from institution	% within Loan	16.8%	83.2%	100.0%
		% within Status	87.3%	90.6%	90.0%
	1-10000	Count	0	2	2
		% within Loan	0.0%	100.0%	100.0%
		% within Status	0.0%	0.2%	0.2%
	10001-20000	Count	10	42	52
		% within Loan	19.2%	80.8%	100.0%
		% within Status	5.8%	5.1%	5.2%
	20001-30000	Count	8	34	42
		% within Loan	19.0%	81.0%	100.0%
		% within Status	4.6%	4.1%	4.2%
	30001-40000	Count	2	0	2
		% within Loan	100.0%	0.0%	100.0%
		% within Status	1.2%	0.0%	0.2%
	other	Count	2	0	2
		% within Loan	100.0%	0.0%	100.0%
% within Status		1.2%	0.0%	0.2%	
Total	Count	173	827	1000	
	% within Loan	17.3%	82.7%	100.0%	
	% within Status	100.0%	100.0%	100.0%	

Table 4.23.1 shows that from poor, 90.6% got never institutional loan, 0.2% households got loan of Rs.0-10000, 5.1% households got loan of Rs.10001-20000, 4.1% households got loan of Rs.20001-30000.

Table 4.24 The Descriptive statistics result

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Per Capital Income	1000	200.00	114285.71	2142.8341	4691.46405
Total Income of Household	1000	1000.00	800000.00	9806.1600	26694.01292
Valid N (listwise)	1000				

Information from individuals was obtained by floating questionnaires through personal interaction mode. A total of 1000 forms were received and were useful for analysis making it. This sample of 1000 individuals comprised of 214 females and 786 males (21%, 79% respectively). It is noted from the table that minimum per capita is Rs 200 and maximum is Rs. 114285.71 with mean value of 2142.83 and standard deviation of 4691.46. Total income of household is important factor for poverty status in this study. Minimum total income of household is Rs. 1000 and maximum is Rs. 80000 with mean value of 9806.16 and standard deviation of 26694.01.

4.3. CONCLUSION

It is concluded from the preceding descriptive analysis that majority of population living in rural Pakistan is below the poverty line. Financing and managing the poverty reduction programs target the poor efficiently. It is also observed as the level of education and employment increase, poverty level of the household decrease. Furthermore, the findings also show that the household size and child dependency increases, level of poverty also increases in the same direction. Moreover, the descriptive analysis indicates that human capital is also important for financing and managing poverty reduction as trained person are above the poverty line in comparison to non trained persons. The findings further, indicate that small amount of loan is not beneficial for managing the poverty reduction and sufficient amount of loan is necessary to manage the poverty reduction in rural Pakistan. The study in descriptive findings established that physical capital is also important for managing the poverty reduction.

The overall results show that the household holding the livestock of value of Rs. 30000 or more and owning and cultivating the land of 11-15 acre or more have less chance to be a poor. It is, therefore, concluded from the data that human capital and financial resources are

basic determinants, which should be financed and managed for poverty reduction. Human capital may be developed by education and training to manage the poverty reduction and financial resource may be provided on soft term and condition through micro finance institution to manage the poverty reduction Pakistan.

CHAPTER 5

INFERENCEAL STATISTICAL ANALAYSIS

5.1. Introduction

This chapter aims to draw the conclusion from data presented in the last chapter. This chapter includes the normality test which leads for inferential analysis. Non parametric test and parametric test are applied to data and results are presented and discussed in the following chapters. This chapter includes the normality test, non parametric test evaluation and its conclusion.

5.2. Testing the non-normality of the data

This section aims to provide the results from an inferential statistical analysis. However, before conducting any statistical analysis, it is important to check the normality of the data as this will determine whether qualitative or quantitative statistical methods can be used in the analysis of the data.

In checking the normality test, SPSS functions were used to produce the Kolmogorov Smirnova and Shapiro-Wilk test results, which can be seen in Table 5.2.1.

Table 5.2.1: Normality Test Results

Tests of Normality

	Kolmogorov Smirnov ^a			Shapiro-Wilk		
	Statisti	df	Sig.	Statisti	df	Sig.
OldDep	.531	1000	.000	.283	1000	.000
WorkingMembersFemales	.537	1000	.000	.191	1000	.000
WorkingMembersMales	.446	1000	.000	.536	1000	.000
ValueOfAnimals	.384	1000	.000	.208	1000	.000
OwnLand	.308	1000	.000	.511	1000	.000
CultivatedLand1	.316	1000	.000	.482	1000	.000

BusinessAssets	.472	1000	.000	.051	1000	.000
Water	.289	1000	.000	.759	1000	.000
ChangeInIncome	.356	1000	.000	.712	1000	.000
SourceOfChange	.331	1000	.000	.715	1000	.000
changeAmount	.333	1000	.000	.722	1000	.000
SavingForEmergency	.534	1000	.000	.097	1000	.000
Loan	.525	1000	.000	.354	1000	.000
Status	.503	1000	.000	.458	1000	.000
Per Capital Income	.342	1000	.000	.253	1000	.000
Total Income of Household	.372	1000	.000	.146	1000	.000

a. Lilliefors Significance Correction

In exploring the normality test, the following hypotheses were established:

Ho: Distribution is normal

H1: Distribution is not-normal (non-parametric)

As can be seen from Table 5.2.1, all the variables in the case of Kolmogorov Smirnova and Shapiro-Wilk tests produced p -values suggesting to reject the Ho that the distribution is normal; it is therefore concluded that all the variables are non-normal. This implies that non-parametric tests must be used to produce efficient analysis and results.

5.3. Non-parametric analysis

In addition to descriptive analysis, various empirical analyses could be adopted depending on the type of data, and whether it is parametric or non-parametric, as each type has assumptions that must be fulfilled (Pallant and Tennant, 2007). A parametric test is appropriate when the data have normal distribution, meaning they do not have positive or negative skewness (Pallant and Tennant, 2007). When the required assumptions are not met, a non-parametric test should be applied. In addition, non-parametric tests are often more suitable for surveys that have small samples and use ordinal scales. Therefore, it can be assumed that a non-parametric

test is less stringent than a parametric test. However, this does not mean that the non-parametric tests are less powerful than parametric tests (Field, 2005). This research adopts non-parametric testing due to the nature of the study, which is considered an exploration. In addition, as explained above, data distribution is not normal mainly due to the fact that they were collected in a non-random sampling manner; for this Appendix provides histogram for visual view of non-normality.

As part of the inference test, two types of statistical tests in non parametric techniques were applied in this research. Mann- Whitney-U Test, and Kruskal Wallis Rank Test are applied to test and compare the difference between groups in relation to given statements. These tests aim to test the impact of the control variables on the responses given by the participants on the statement related to income activities.

5.4. Conclusion and discussion

To summarize the results presented in non-parametric technique, Table provides further detailed descriptions of the sub-variables in each of the control variable categories. It thus aims to identify the most significant sub-variable in each control variable by referring to the frequency of the highest mean each time the sub-variable scored for the given statement related to income. This helps to establish a trend in terms of the control variables in the sense of which control variables have the highest determining role for managing the poverty reduction in study area and in rural Pakistan as well.

5.4.1 table for Rank of sub group of control variable

Group Variables) (Control	Group Categories	Frequency	Rank
District	DG khan	1	2
	Rajanpur	2	1
Training	No	0	0
	Yes	5	1
Institution	No	0	0
	ZI	0	0
	BISP	0	0
	PBM	0	0
	MFI	4	1
	NGO	1	2
Employment Status	No	0	0
	Yes	5	1

Marital Status	Single	5	1
	Married	0	0
	Other	0	0
Gender	Female	0	0
	Male	4	1
Education	Illiterate	0	0
	Up to Middle	0	0
	SSC	1	2
	HSSC	1	2
	Above HSSC	2	1

As can be seen in Table 5.4.1, it is apparent that living in Rajanpur district is more significance for statement related to income factors in the questionnaire. Training is basic tool for human capital and trained person are more significant having the rank 1 for the statement. Single person is more important as compared to married person for training, employment and earnings. In rural Pakistan, due to cultural and religious tradition, females are not allowed to do work and job out-side the boundary wall so they are not important for the statement relating to income. Education is important factor for poverty reduction. Degree and above HSSC is ranked at top for efficiency for income and HSSC and SSC are also important. It is clear from the table only literate person is not eligible for managing the poverty reduction. SSC is significant and important for managing the poverty reduction. It is also noted that institution is also significant and micro finance institution is ranked at top with achieving 4 frequencies.

5.4.2 table for Rank of sub group of control variable

Group Variables)	(Control	Group Categories	Frequency	Rank
Age	>=20		2	1
	21-40		0	0
	41-60		0	0
	60-80		0	0
Total household members	1-2 members		1	1
	3-4 members		0	0
	5-6 members		0	0
	7-8 members		0	0
	9-10 members		1	1
Child dependency	No children		2	1
	1-2 children		0	0
	3-4 children		0	0
	5-6 children		1	2
	7-8 children		0	0
Old dependency	No member		0	0
	1-2 members		1	1
	3-4 members		0	0

Working female member	0 member	0	0
	1 member	3	1
	2 members	2	2
Working Male member	0 member	0	0
	1 member	0	0
	2 members	0	0
	3 members	0	0
	4 members	4	1

For the case of the age control variable and as is illustrated by Table 5.4.2, it proved to be significant, the < 20 age group scored the highest mean value, thus implying that this is the most important determinant sub-variable for income related statement which decide about the poverty level. Working female and working male member control variables are significant, one female working member and four working male member scored the highest mean value, thus implying them most important determinant of poverty level.

5.4.3 table for Rank of sub group of control variable

Group Variables)	(Control	Group Categories	Frequency	Rank
Value of Animal		No animal	2	2
		Up to Rs.10000	0	0
		Up to Rs.20000	0	0
		Up to Rs.30000	0	0
		Up to Rs.40000	0	0
		> Rs.40000	3	1
Own land		No land	0	0
		1-5 acres	0	0
		6-10 acres	0	0
		11-15 acres	2	2
		16-20 acres	3	1
		> 20 acres	0	0
Cultivated land		No land	0	0
		1-5 acres	0	0
		6-10 acres	0	0
		11-15 acres	2	2
		16-20 acres	3	1
		> 20 acres	0	0
Business Assets		No assets	0	0
		Up to Rs.10000	1	2
		Up to Rs.20000	3	1
		Up to Rs.30000	3	1
		Up to Rs.40000	0	0
		> Rs.40000	0	0
Water		Rain/Torrent	0	0
		Tube-well only	2	2

	Tube-well/Canal	3	1
	Canal only	0	0
Savings	No	0	0
	Yes	5	1
Loan	No loan	0	0
	Up to Rs.10000	0	0
	Up to Rs.20000	0	0
	Up to Rs.30000	1	2
	Up to Rs.40000	4	1
	> Rs.40000	1	2

In contrast to the variable household size, old and child dependency, household assets proved to be the more efficient variable, being significant at rank 1 which includes land, livestock and business assets as indicated by table 5.4.3. Although the results in Table demonstrate that the value of animal control variable is significant and scored the highest mean ranking with sub-group for up to Rs.40000 of animals between groups. Business assets have the highest mean value for sub-group up to Rs.30000. own land and cultivated land is significant and scored highest mean value for group having 16-20 acres of land. Source of water for cultivation is also significant and scored the highest mean value for sub group tube well/canal source. Saving and loan are also significant control variable and loan scored the highest mean score for sub-group loan up to Rs.40000.

Ultimately, the results indicate that a number of control variables play an important role for poverty status and in determining the responses given to each of the statements in questionnaire related to income activities. In addition, a number of sub-variables proved to be more important than others in determining the results for the respective control variables.

The table describes and shows the significant variable with their ranking to statements relating to income which ultimately separate the poor from non-poor. These control variables are significant and show the frequency which they achieved.

5.4.4 table for Rank of control variable

Group Variable	Frequency of Significance	Ranking

District	3	3
Beneficiaries	13	5
Institution	56	1
Training	43	2
Gender	48	2
Employment	53	1
Education	4	2
Marital Status	51	1
Age	3	3
Total Member HH	23	4
Child dependency	3	3
Old dependency	23	4
Working Female	5	1
Working Male	5	1
Value of animal	5	1
Own Land	5	1
Cultivated Land	5	1
Business Assets	56	1
Water	5	1
Savings	5	1
Loan	5	1

Table 5.4.4 reveals a summary of the analysis of non-parametric techniques in terms of illustrating the frequency of the significance of the control variables on poverty status which is calculated with financial poverty line. Poverty is multidimensional problem having different determinants. There are some factors which are proved most efficient for causing the poverty whereas some others have also impact but having lower ranking comparatively. Institution, employment, marital status, working female members, working male members, assets like land, livestock, business assets, savings and loan are significant and efficient factors for income generating and poverty level as well. Training, education, gender, age, child dependency and district variables are also significant and causing for poverty but ranking at second number. According to above table old dependency and household size have also impact but are not so important for poverty status in study area. High ranked factors are main determinants causing the poverty and must be analyzed before planning and implanting the strategies to managing and financing the poverty reduction in the country.

CHAPTER 6

LOCATING THE EFFICIENCY OF POVERTY REDUCATION PROGRAMMES IN DG KHAN AND RAJUNPUAR DISTRICTS OF PAKISTAN: LOGISTIC REGRESSION

6.1. Introduction

It is concluded from literature that Logistic Regression is applied for poverty status. Poverty status regressions are usually applied by using a Logit model. In logistic regression, which is called logit model, poverty status is used as dichotomous variable which represents whether a household is poor or non-poor. This variable is regressed on set of explanatory variables like education, training, household members, working person, loan business assets etc. Specially such variables are included which determine the poverty status so that poverty may be managed and financed by the poverty reduction institutions, policy makers and Government for allocating the budgets for safety nets to fight against poverty in the country. Result of this research may be used by policy maker to focus on those variables which are associated with the poverty. So before making the policies and making the implementation of these policies, it is very important to be careful in interpreting the results of regression model for variables explaining the poverty status.

6.2. Modelling

In this study to find out the impact of institutions to managing poverty reduction program and determinants of rural poverty in Pakistan, Logit model was used (as discussed in earlier chapter above). Therefore it was important to discuss Logit model in detail. A Logistic model is a univariate binary model. For dependent variable Y_i , there are only two values 1 for poor and 0 for non poor which is constructed through per capita income, and a explanatory variable X_i , that

$$=1) = F(xb)$$

Here b is a parameter which needs to be estimated and F is used for logistic distribution. The basic formula application of Logit model is:

$$(P_i/1-P_i)$$

The ratio is called the log odd or Logit, which acts as the dependent variable.

Odd ratio is calculated in the model which gives us numerical calculation of variables contributing in poverty status. It is explained by Hoffmann (2004) “A number greater than one of log odds indicates a positive association between independent and dependent variable, while a number between zero and one indicates negative association among both”.

6.3. Logistic overall model summary

It was necessary before expand the analysis further, binary logistic regression was applied to explore the best predictor of poverty status, as independent variables. Table explains the findings of the regression analysis by presenting overall goodness fit of the model, in which all models have high level of significance at $p=.000$. The whole model explains between 33.20% (Cox and Snell R^2) and 55.20% (Nagelkerke R^2) of the total variations. Table also shows that the models correctly classify between 89% of the cases.

Table 6.1 Overall model goodness of fit

-2 log likelihood	517.512
(Sig)	.000
Cox and Snell	.332
Negerkerke	.552
Overall percentage predicted	89.0

The findings of unique significance level of each independent variable in the model, beta coefficient and odd ratio are also presented in Table 6.2, which shows that the statistical significance of independent variable are varied for impact on poverty level and some variables are significant of 5% level which include beneficiaries, institution, gender,

employment status, education, age, total member of household, female working member, male working members, and change of income where as marital status, old dependency and business assets are statically significant at 10% level.

Table 6.2 Overall logit model

Variables in the Equation						
	B	S.E.	Wald	df	Sig.	Exp(B)
District	-.229	.286	.639	1	.424	.795
Beneficiaries	4.635	1.402	10.926	1	.001	103.056
Institution	-.769	.312	6.100	1	.014	.463
Training	-1.553	1.160	1.792	1	.181	.212
Gender	-1.515	.575	6.951	1	.008	.220
EmploymentStatus	-1.571	.332	22.370	1	.000	.208
Education	-.630	.114	30.323	1	.000	.533
Maritalstatus	.956	.492	3.781	1	.052	2.601
Age	-.509	.208	5.965	1	.015	.601
TotalHHMembers	1.334	.181	54.377	1	.000	3.795
ChildDep	.005	.211	.000	1	.982	1.005
OldDep	.477	.280	2.909	1	.088	1.611
Step 1 ^a WorkingMembersFemales	-1.709	.525	10.587	1	.001	.181
WorkingMembersMales	-1.343	.221	36.932	1	.000	.261
ValueOfAnimals	.041	.064	.409	1	.522	1.042
OwnLand	-.470	.437	1.158	1	.282	.625
CultivatedLand1	.125	.449	.077	1	.781	1.133
BusinessAssets	.184	.098	3.536	1	.060	1.202
Water	.235	.157	2.229	1	.135	1.265
ChangeInIncome	-.598	.207	8.316	1	.004	.550
SourceOfChange	-.243	.128	3.573	1	.059	.785
changeAmount	.075	.071	1.095	1	.295	1.078
SavingForEmergency	-.039	.836	.002	1	.963	.962
Loan	-.075	.237	.099	1	.753	.928
Constant	1.815	.941	3.720	1	.054	6.142

a. Variable(s) entered on step 1: District, Beneficiaries, Institution, Training, Gender, EmploymentStatus, Education, Maritalstatus, Age, TotalHHMembers, ChildDep, OldDep, WorkingMembersFemales, WorkingMembersMales, ValueOfAnimals, OwnLand, CultivatedLand1, BusinessAssets, Water, ChangeInIncome, SourceOfChange, changeAmount, SavingForEmergency, Loan.

The beta coefficients Table show the contribution of each independent variable in the model in terms of the strength of the determining factors, therefore the largest beta coefficient of beneficiaries shows the strongest contribution or impact on poverty. Table also shows that beneficiaries, marital status, total house members, old dependency, business assets have

positive correlation on poverty where as institution, gender, employment status, education, age, female working member, male working member, change of income and source of income have negative correlation on poverty.

Beneficiaries are positive correlated with poverty with p value of .001 which shows that poverty reduction programs are rightly targeting the poor. These institutions are not only targeting the poor but also contributing and managing poverty reduction in rural Pakistan. Different intuitions are coded as dummy variable in the model which shows that these institutions are negatively correlated with being of probability of poor significantly with p value of .014 which shows that they are playing their role to targeting the poor and reducing the poverty as well.

It is also observed from the above table being a male gender has a less chance to be poor in rural Pakistan. Employment status is also negatively correlated with poverty with p value of .000. A person having permanent job has less chance to be poor as compare to unemployed person. It is also found significant that male working member ($p=.000$) and female working member ($p=.001$) on permanent basis has less chance to be poor.

The education factor also show the significant negative relation with poverty status in the study area with p value of .000. Education is basic factor which influence to be poor or non poor which enhance the human capital and earnings ability as well. It is noted that education is compulsory for both male and female for human capital development so as to get the employment opportunity on permanent basis to earn money to exit from the poverty trap.

The result revealed significantly ($p=.000$) by the table that likelihood event of being poor is more if household have more members in the house and it also increases the dependency ratio which is also positive correlated with probability of being poor with p value of .088.

Table also showed that training, livestock, landholding, and loan are insignificant for poverty status through the data in this study.

Logit Regression: Stepwise Forward Conditional for Zakat Institution

Table 6.3 Overall model goodness of fit

-2 log likelihood	84.633
(Sig)	.000
Cox and Snell	.474
Negerkerke	.723
Overall percentage predicted	84.8

Table shows binary logistic regression which applied to explore the best predictor of ZI impact on poverty reduction, as independent variables. Table depicts the result of the regression analysis by presenting overall goodness fit of the model, in which all models have high level of significance at $p=.000$. The whole model explains between 47.40% (Cox and Snell R^2) and 72.30% (Nagelkerke R^2) of the total variations. It should be noted from above table that the models correctly classify between 84.8% of the cases.

Table

6.4

Variables in the Equation						
	B	S.E.	Wald	df	Sig.	Exp(B)
District	20.454	3770.996	.000	1	.996	763722026.185
Training	-18.280	4875.802	.000	1	.997	.000
TotalHHMembers	1.936	.427	20.610	1	.000	6.934
WorkingMembersMales	-1.623	.401	16.378	1	.000	.197
ChangeInIncome	-.737	.318	5.366	1	.021	.478
Constant	15.613	4875.802	.000	1	.997	6035434.172

a. Variable(s) entered on step 5: ChangeInIncome.

District and training are statically significant at 10% and total member of household working male members and change in income are statically significant at 5% level for the Zakat institution.

Training, working male member and change in incomes are negatively correlated with poverty. Training provides the opportunity to enhance the human capital to increase the income to overcome the poverty. Training provides the chance for employment for member of household which also reduce the poverty level as well. It is also revealed from the table that as the member of household increased, probability of being poor also increased.

Table 6.5 Overall model goodness of fit for BISP

-2 log likelihood	11.200
(Sig)	.000
Cox and Snell	.000
Negerkerke	.000
Overall percentage predicted	80.90

This table shows the result of binary logistic regression which was applied to explore the best predictor of BISP impact on poverty reduction, as independent variables. Table revealed that -2 log likelihood is smaller from overall model which indicate that this model is better as compare to overall model. Table shows the result of the regression analysis by presenting overall goodness fit of the model, in which all models have high level of significance at $p=.000$. Table also shows that the models correctly classify between 80.90% of the cases.

Logit Regression: Stepwise Forward Conditional for BISP

Table 6.6 Variables in the Equation

	B	S.E.	Wald	Df	Sig.	Exp(B)
Step 0 Constant	1.153	.331	12.117	1	.000	3.167

No more variable can be deleted from or added to in the model. This institute is providing only Rs. 1000 per month which does not contribute in any variable significantly for poverty alleviation.

Logit Regression: Stepwise Forward Conditional for PBM

Table 6.7 Overall model goodness of fit

-2 log likelihood	21.170
(Sig)	.000
Cox and Snell	.493
Negerkerke	.738
Overall percentage predicted	74.1

To expand the analysis further, binary logistic regression was applied to explore the best predictor of PBM impact on poverty reduction, as independent variables. It is noted from the table about the regression analysis by presenting overall goodness fit of the model, in which all models have high level of significance at $p=.000$. The whole model explains between 49.30% (Cox and Snell R^2) and 73.80% (Nagelkerke R^2) of the total variations. The table shows that the models correctly classify between 74.1% of the cases.

Table 6.8

Variables in the Equation						
	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a						
WorkingMembersMales	-21.668	6866.743	.000	1	.997	.000
Constant	21.157	6866.743	.000	1	.998	1542818305.485

a. Variable(s) entered on step 1: WorkingMembersMales.

Table shows working male members are statically insignificant for Pakistan Bait ul Maal institution for poverty which also shows the negative correlation with poverty. PBM provides the dastkari and other training to poor member of household.

Logit Regression: Stepwise Forward Conditional for MFI

Table 6.9 Overall model goodness of fit

-2 log likelihood	28.172
(Sig)	.000
Cox and Snell	.538
Negerkerke	.826
Overall percentage predicted	76.7

It is evaluated from the table; binary logistic regression was the best predictor of MFI impact on poverty reduction, as independent variables. Table shows the result of the model by presenting overall goodness fit of the model, in which all models have high level of significance at $p=.000$. The whole model explains between 53.80% (Cox and Snell R^2) and 82.60% (Nagelkerke R^2) of the total variations. Tale also shows that the models correctly classify between 76.70% of the cases.

Table 6.10

Variables in the Equation						
	B	S.E.	Wald	df	Sig.	Exp(B)
District	-34.268	3283.760	.000	1	.992	.000
Education	-1.641	.997	2.710	1	.100	.194
TotalHHMembers	5.210	2.173	5.748	1	.017	183.027
Step 5 ^a OldDep	23.078	7258.379	.000	1	.997	10538340144.330
changeAmount	-2.255	1.199	3.536	1	.060	.105
Constant	26.363	3283.757	.000	1	.994	281269058739.41
						3

a. Variable(s) entered on step 5: Education.

The model reveals that district, old dependency, education and change in amount is statically significant at 10% level and total household member variable is significant at 5% of level. District, education and change in income is negatively correlated with poverty, while total household members and old dependency are positively correlated with poverty in rural Pakistan.

Logit Regression: Stepwise Forward Conditional for NGO

Table 6.11 Overall model goodness of fit

-2 log likelihood	19.321
(Sig)	.000
Cox and Snell	.389
Negerkerke	.665
Overall percentage predicted	82.8

Above table shows that, binary logistic regression was applied to explore the best predictor as impact of NGO on poverty reduction, as independent variables is best model. Table shows the result of the regression analysis by presenting overall goodness fit of the model, in which all models have high level of significance at $p=.000$. The whole model explains between 38.90% (Cox and Snell R^2) and 66.50% (Nagelkerke R^2) of the total variations and models correctly classify between 82.80% of the cases.

Table 6.12 Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
Maritalstatus	19.922	8696.968	.000	1	.998	448920600.833
Step 2 ^a SourceOfChange	-1.122	.353	10.083	1	.001	.326
Constant	2.896	.932	9.652	1	.002	18.093

a. Variable(s) entered on step 2: Maritalstatus.

Table shows that marital status is statically significant at 10% level and source of income is statically significant at 5% level. In addition, marital status is positive correlated with poverty whereas source of income in negative correlated with poverty in the study area.

6.4. Discussion and concluding remarks

The research in this chapter attempted to analyze the causes and determinants of poverty and effectiveness of institutions for managing the poverty reduction in rural Pakistan. Different

statistical and econometric techniques were used to analyze the data. Descriptive statistics and non parametric techniques were used to analyze the data and to evaluate the effectiveness of different institutions for managing and financing the poverty reduction programs in study area. Binominal logistic technique was used to evaluate the socio-economic and demographic determinants of poverty status. Stepwise forward conditional method of binominal logit model is also used for effectiveness of institutions for poverty reducing determinants.

It is very important to state that the determinant of poverty for managing the financing the poverty reduction in study area. Logistic model explain the determinants contributing the poverty in research area in table 6.2. The empirically result of logit model based on cluster sample identified that beneficiaries, marital status, total member of household, old dependency, business assets, are the determinants those are significantly and positively correlated with probability of being poor in the sample area. It is also empirically evaluated from sample data that institution, gender, employment status, education, age, working male member, working female member, change and source of income are statically significant and negatively correlated with probability of being poor as shown in table 6.2. While variables including district, training, child dependency, livestock, own land, cultivated land, water facility, change amount, saving and loan have the correct sign but are statically insignificant which may be observed from table 6.2.

It is very clear from the empirical result that human capital is basic instrument to reduce the poverty level in rural Pakistan. Education is basic factor for human capital development which is significant and negatively correlated with probability of being poor as shown in table 6.2. Thus, education is very important and vital factor for managing the poverty reduction in rural Pakistan. In addition, education also provide more chances for regular employment to male and female which also increase the income level of household and reduces the poverty level as well. It is empirically proved that education; employment, working female member and working male member of household are statically significant and negatively correlated with probability of being poor as Table 6.2 revealed. Education of male and female provides them more opportunity to be employed and to earn higher income and to reduce the poverty level. Training has also negative sign with poverty. Trained person has more chance to be employed and productive and to earn higher income. So education enhances the human capital which leads to have higher chance of employment which negatively correlated with probability of being poor. Due to importance of human capital,

many institutions are working for free education and training to fight against poverty in Pakistan.

It is very interesting that micro financing is not statically significant in this model as shown in table 6.2. It may be that the usage of that loan may be unproductive so monitoring and feedback is essential to achieve the desired result of micro financing. As the loaned funds could be used for consumption purpose under the pre-text of micro financing. So there is need of further research to know the causes about micro financing why is not contributing in poverty reduction in study area. This result is alarming because most of studies concluded that micro financing is basic element to get the poor out of the poverty trap as mentioned and discussed in earlier chapter. Many institutions under government arrangement and NGOs are working for managing the poverty reduction through micro financing. Thus, it is very important to research and carefully evaluate the reason about the failure to contribute in poverty reduction.

To evaluate the effectiveness of the institution providing poverty alleviation programmes, binary logit regression in the form of forward conditional method was used for Zakat Institution, training, total household and working male member of household were significant and negatively associated with probability of being poor as table 6.4 revealed. Zakat institutions provide free training through organized institution vocational training institute to poor who are getting competence to be productive and have more opportunity to be employed and increasing their income. It is also observed from the table 6.4 that total numbers of household are positively associated with probability of being poor. It also indicated that zakat institution is targeting the large household to train them so that they must get rid of poverty trap. Thus, it can be argued that this institution is performing well through training for human capital development and poverty reduction as well. BISP, being another institution, provides cash of Rs.1000 to household, which is targeting the poor well as indicated in table 5.4.2 but not contributing in poverty reduction as shown in table 6.6. In addition, PBM is working for health, primary education, food stamp program *etc.* Working male members has correct sign and negatively associated with poverty status but is insignificant variable with PBM as shown in table 6.8. For MFI education has negative sign with poverty insignificantly as indicated in table 6.10. It should be noted that total member of household is significant and positively correlated with probability of being poor. Furthermore, old dependency has positive sign insignificantly. Change of amount is also significantly and negatively correlated with poverty

of beneficiaries of MFI. Source of change is significantly and negatively correlated with poverty of NGO model as shown in table 6.12.

When the logit regression's forwarded conditional method is used for effectiveness of institution, it is empirically proved that Zakat Institution is contributing in poverty reduction effectively. This institution provides training to poor households who help them to explore the permanent and regular job which is negatively associated with poverty. Other institutions allocate huge amount of budget for managing and financing the poverty reduction but they are not performing well to reduce the poverty on sustainable basis. It is resulted that human capital is more effective tool as compared to financial tool for managing the poverty reduction.

MFIs provide financial loan to poor and Zakat institution is working for enhancement of human capital through free training to poor. Loan is insignificant for poverty status, while employment status, working female and working male member of household are significantly and negatively correlated with probability of being poor. As evidenced from the preceding findings, it can be concluded that Zakat institutions do perform better as compared to other institution in Pakistan for financing and managing the poverty reduction in the country.

CHAPTER 7

FINDINGS, CONCLUSION AND RECOMMENDATION

7.1. Introduction

The empirical analyses of the data were discussed separately in the last two chapters. All previous findings are integrated in this chapter to produce an in-depth and critical discussion of the analysis in accordance with the aims and the objectives of the study as described in Chapter 1 through contextualizing the findings with an interpretative discursive approach. This provides an opportunity to give further meaning to the data. In a more structured manner, the following sections aim to substantiate whether this study's findings would be able to reject or accept the hypotheses developed in preceding chapters, providing reasons for such acceptance and rejection. This section also provide the answers of research questions and integrating the researcher's inferences into it by contextualizing the findings developed in the empirical chapters but also by benefiting from the foundational or literature review chapters.

7.2. Hypothesis testing

The working hypothesis of the study is to identify the level of rural poverty in Pakistan and to evaluate the impact of financing and managing poverty reduction. On the basis of above literature review the hypothesis can be developed as under:

H₀: Enhancement of human capital does not reduce the level of rural poverty.

H₁: Enhancement of human capital reduces the level of rural poverty.

Education is considered as basic tool for human capital development (Awan, 2011; 2008, Vinode *et al.*, 2007; Chaudry, 2006; Oxaal 1997) as disused in Chapter 2. Table 6.2 in Chapter 6 shows that education is negatively and significantly correlated with probability of being poor. Consequently, *H₀* is rejected and *H₁* is accepted as education remains an important factor in contributing poverty reduction.

H₀: Micro financing for livestock does not reduce the level of rural poverty.

H₁: Micro financing for livestock reduces the level of rural poverty.

The results in Chapter 6 shows that loan and livestock both are insignificant in logit model, while both of these variables are ranked no 1 in non-parametric test. The difference in the conclusion can be explained by the fact that non-parametric tests relates to individual variables, whereas logit model measure the significance of each independent variable in the equation in an interacting manner. In using non-parametric reasoning, H_0 is rejected and H_1 is accepted. However, considering that poverty is a multi-dimensional reality, and therefore interacting nature of logit results should be considered as more efficient and we should consider accepting H_0 .

H₀: Micro financing for agri inputs does not reduce the level of rural poverty.

H₁: Micro financing for agri inputs reduces the level of rural poverty.

The results in Chapter 6 shows that loan and cultivated land both are insignificant in the logit model in terms of reducing poverty. However, as before, both of these variables are ranked no 1 in non-parametric test. The same explanation as above can be submitted in this case as well depending on the perception of the analysis; and hence, there is a favourable statistical support in the case of both results.

H₀: BISP's cash disbursement reduces the level of rural poverty.

H₁: BISP's cash disbursement does not reduce the level of rural poverty.

BISP provides cash to poor married female. When logit forward conditional model is applied to beneficiaries of the program, no variable is found significant with this program. It does not contribute in poverty reduction as indicated by table 6.6 in logit model. Non parametric test also show the lowest mean value of the program in table 5.3.14. So H_0 is rejected and H_1 is accepted.

H₀: Education and training does not reduce the level of poverty.

H₁: Education and training reduce the level of poverty.

Education is considered as basic tool for human capital development as discussed earlier and training also provide the opportunity to beneficiaries to be productive. Table 6.2 shows that education and training are negatively and significantly correlated with probability of being

poor. Non parametric test also show the education and training at rank 2 in table 5.4.4. Consequently, H_0 is rejected and H_1 is accepted as education and training are contributing much in poverty reduction.

H_0 : Institutional microfinance does not significantly reduce poverty

H_1 : Institutional microfinance significantly reduces poverty

Table 6.2 reveals that micro finance is insignificant in the model applied to data. But in non-parametric test it is ranked at No 1. Thus, referring to the earlier comment, evidence can be generated for the acceptance (and rejection) of both the hypotheses.

H_0 : Zakat disbursement does not reduce the rural poverty

H_1 : Zakat disbursement reduces the rural poverty

Zakat is provided for training and education in Pakistan. It is proved empirically table 6.2 that education and training are negatively correlated with probability of being poor. Non-parametric test also support this argument in table 5.4.4. Thus, H_0 is rejected and H_1 is accepted.

H_0 : VTI program financed by Zakat fund is not most significant program in rural poverty reduction.

H_1 : VTI program financed by Zakat fund is most significant program in rural poverty reduction.

Zakat is provided for training and education in Pakistan. It is proved from empirical result shown in table 6.2 that education and training are negatively correlated with probability of being poor. As a result, H_0 is rejected and H_1 is accepted.

7.3. Responding to research questions

Research Question No. 1 What is the level of poverty in Pakistan?

DG Khan and Rajanpur districts are poorer of poor in the country. Poverty ratio is very high in the study area. Poverty in DG Khan District (84%) is high compare to Rajan pur District (80.8%) as shown in table 4.1.2.1 whereas overall poverty level in the study area is 82.7% (Table 4.1.2). Table 4.1.2.3 shows that within poor, 50.2% household are non beneficiaries

and 49.8% are beneficiaries of intuitions. It is concluded that institutions are financing and managing poverty reduction but these are not doing in equally to contribution for poverty reduction. As noted in table 4.1.2.2 that 99% of beneficiaries of BISP are poor household which indicated that program is targeting well to poor but not contributing to push out the poor from poverty as shown in table 6.6. Table 4.1.2.2 also shows that 76% PMB beneficiaries are under the poverty line, 77.5% ZI beneficiaries, 78% of MFI, 84% of NGO and 83% non beneficiaries household are under the poverty line in study area.

Research Question No.2: How is poverty reduction being financed and managed in Pakistan?

Government of Pakistan has adopted different strategies for managing and financing the poverty reduction in the country since a long which may be classified into two strategies including Indirect Strategies and Direct strategies. Indirect strategies are adopted to formulate a macro-economic policy framework to ensure sustainable growth, higher employment, higher per capita income, and resultantly poverty reduction is managed. For this strategy, different program are launched by Government of Pakistan which are related to pro poor expenditures. These pro poor public expenditures are important and essential for improving human capabilities, reducing income inequalities, writ implementation of governance and justice and ensuring greater participation of poor in the process of economic development. Government of Pakistan (2013) reported that these expenditures through indirect strategies are divided in to five broad categories which are related to macro-economic policies. These strategies facilitate economic growth and lead to redistribute the opportunity and income for the poor. These strategies also include the macro policies which lead to economic growth. Expenditure related to human development and rural developments are good example of the strategy (Economic Survey of Pakistan 2012-13, 203-04).

Direct Strategies are adopted to target the underprivileged and poor population in society and provide them necessary assistance to ensure the basic necessities and need of life, credit access, improve health conditions, increase literacy rate to finance and manage the poverty reduction in the country. Through this strategy, most vulnerable segment of society is protected and poverty reduction is financed and managed in the country. Through these strategy poor and vulnerable segments is provided financial assistance to unproductive member of society and to enhance the human capital of productive poor of the society as well. BISP and ZI provide financial assistance on monthly

basis whereas ZI and PBM facilitate the vulnerable and poor segment to enhance the human capital through training and skill in society. Some of programs provide subsidies on different products to manage the poverty reduction. These programs include public funded institution like ZI, BISP, PBM, MFI, Pension Fund, Old Age Benevolent Fund etc. (Pakistan Economic Survey 2011-12; Government of Pakistan, 2012).

(iii) (a) What specific poverty-reduction programs are available for poverty reduction?

According to indirect strategies these programs are adopted for pro poor expenditure by Government of Pakistan. These are divided into seventeen programs under five categories. (Economic Survey of Pakistan, 2012-13, GOP 2013).

- (I) Market Access and Community Service
 - (i) Roads, Highways & Bridges
 - (ii) Water Supply & Sanitation/Environment
- (II) Human Development
 - (iii) Education
 - (iv) Health
 - (v) Population Planning
- (III) Rural Development
 - (vi) Agriculture
 - (vii) Land Reclamation
 - (viii) Rural Development
 - (ix) People's Work Program
- (IV) Safety Nets
 - (x) Subsidies
 - (xi) Social Security & Welfare
 - (xii) Food Support Program
 - (xiii) People's Works Program-I
 - (xiv) Natural Climate and Disaster
 - (xv) Low Cost Housing
- (V) Governance.
 - (xvi) Law & Order
 - (xvii) Justice Administration

Under the direct strategies different institution are working to manage and finance the poverty reduction in the country. These programs aim to manage the poverty through financial assistance and to enhance the human capital of vulnerable and poor segment of society. These programs are financed and managed by Government of Pakistan for poverty reduction in country for productive and unproductive member of the society as under.

Sr. No	Program	Financing	Type of Benefit	Target Groups	Geographical Coverage	Managed By
1	Benazir Income Support Program (BISP)	Public Funds	Cash as Income Support	Married females belonging to ultra poor households	Nationwide	Federal Government
2.	Microfinance	Donor Funded	Cash as loan for establishing business	Provide financial services, credit to the poor for self employment and move them out of poverty	Nationwide	RSPs/MFIs
3.	Pakistan Bait-ul-Mal	Public Funds	Cash as income support grant for daughters' weddings, food supplement in education	Disabled persons, invalids, widows, orphans and household living below the poverty line	Nationwide	Federal Government
4.	People's Works Program	Public Funds	Cash for Work	Provision of electricity, gas, farm to market roads, good, water supply and other facilities to the rural poor	Nationwide	Federal Government
5	People's Rozgar Scheme	Commercial Bank Financed	Financing for Selected businesses*	Unemployed educated persons	Nationwide	National Bank of Pakistan
6	Subsidy on Wheat, Sugar & Fertilizer	Public Funds	In kind as social welfare	Poor people of the country	Nationwide	Federal Government
7	Utility Stores	Public Funds	In kind as social welfare	Poor people of the country	Nationwide	Federal Government
8	Zakat & Ushr	Special levy on bank balances & agricultural output	Cash	"Deserving/ Needy" among Muslims	Nationwide	Government & Zakat & Ushr Committees
9.	Child Labour and Children in Bondage	Public Funds	Protection survival development and rehabilitation services	Working children facing abuse and exploitation	Nationwide	Federal & Provincial Government, FATA, GB
10	Employees Old-Age Benefit Scheme	Contributory (Employers)	Cash	Formal Sector Employees	Nationwide	Federal Government
11	Social Health Insurance	Contributory (individuals)	Cash	General Population	Nationwide	Federal Government
12	Workers Welfare	Contributory	Housing, schools,	Formal Sector	Nationwide	Federal

Fund	(Employers)	health facilities	employees		Government
*: Community Transport, Community Utility Stores, Community Mobile Utility Stores and PCO/Tele-Centers with a maximum of Rs 200,000/- three new products including Commercial Vehicle, Shopkeepers and Primary Healthcare Equipments to Medical Graduates, Science Graduates and B-Pharmacy qualified individuals. The maximum limit ranges from Rs 500,000/- to Rs 700,000/-					

Source: Economic Survey of Pakistan 2011-12 Government of Pakistan 2012-226

(b) Which of these programs are actually targeting poverty-determinants, and which ones need to be revitalized, and how, towards better contributing to poverty reduction?

Poverty is complex phenomena with different socio-economic and demographic determinants and varies region to region. So it is difficult to adopt a generalized strategy and to focus the specific determinants. It is empirically evaluated in last chapter to focus on combination of determinants at the same time to manage and finance the poverty reduction in study area. It is noted that although these program are working well to target the poverty reduction as indicated in table 4.1.2.2 but it is necessary to make these institution efficient so that they may contribute in poverty reduction effectively. As discussed above, In Pakistan two types of strategies including direct and indirect strategies are adapted to finance and manage the poverty reduction. In direct strategy different institutions including ZI, BISP, PBM, MFI and NGO finance for poverty reduction through free cash to poor household, education, loan on soft term and conditions and training to member of poor household. As ZI is providing the cash, education and training to poor members so logit model shows that training and working male members are generatively associated with poverty as shown in table 6.2 and 6.4. Training provides the opportunity to explore the job and business activity which leads to change in income as is empirically proved in table and reduce the poverty level of household. BISP is providing only Rs.1000 to household which is not contributing on sustainable basis for poverty reduction and it does not change in any determinant of poverty as shown in table 6.6 that no variable is statically significant for beneficiaries of this program and non parametric test also indicated the same result in table 5.4.1. PBM is also proving primary education to children of labor and training to member of poor families. Through the empirically investigation, it is proved that working male member are significant variable for the beneficiaries of this program which is negatively correlated with poverty as shown in table 6.8. For the performance of MFI it is observed that old dependency, education and change in amount are statically significant variables for poverty reduction. Loan is

insignificant as shown in the table 6.2. of logit model. It is significant in non-parametric test with statement related to income as shown in table 5.4.4. It is also observed that sufficient amount should be provided for productive purpose to manage the poverty reduction. As table 5.4.3 shows that loan up to Rs, 40000 is ranked at top level so small amount is insignificant and not effective tool for managing the poverty reduction in rural Pakistan. It is also observed in logit model that for beneficiaries of NGO, statically significant variables are marital status and source of income. NGO is also ranked 2 in non parametric test as shown in table 5.4.4. This NGO provide education to orphan children free of cost for human capital development.

It is concluded from last chapter discussion that ZI is performing well as compare to other institutions for managing poverty reduction in the society through human capital development. BISP is only targeting the poor segment well but not playing any role for managing poverty reduction. PBM is also contributing for poverty reduction but small part of budget is allocated for training program. MFI is not playing well for poverty reduction purpose as shown in logit model but loan up to Rs. 40000 is statically significant of income related statements. Education is also important determinant of poverty having the negative correlation with poverty level of household and AFDO (NGO) targets the education for orphan children of society. These children are unluckily having no father and AFDO provides them free education with residence and health facilities in the institution free of cost.

So it is concluded that these institutions work for managing and financing the poverty reduction to target the poverty determinant. ZI manages the financing for education and training which are negatively correlated with probability of being poor. There is needed to make the strategies in such way that these may contribute effectively for managing the poverty reduction. ZI and BISP should provide the financial assistance to unproductive member of household only. Training is basic instrument of employment so ZI, BISP and PBM should manage and finance the organized institution to provide the skill and training to productive member of society. MFI should provide sufficient loan so that beneficiary may properly use that amount for productive purpose. NGOs should be motivated to facilitate the poor according their need on productive and unproductive basis for vulnerable and poor member of society.

(iv) How the poverty-reduction financing in general and that of the contribution of poverty-reduction programs in particular can be made and managed more efficient?

Financial management for poverty reduction is basic instrument to manage the poverty reduction in rural Pakistan as discussed in the last chapters. It is observed from parametric and non- parametric test that some variables are statically significant with income and change in income of the household as discussed in empirical results. Human capital is basic determinant to in managing the poverty reduction. Education and training are basic component for development of human capital. Educated and trained person have more chance to get employment to increase the income and to escape from poverty traps. These variables are statically significant and negatively correlated with probability of being poor as shown in non parametric test table 5.4.4 and logit model table 6.2. Employment status, working male member and working female members of households also contribute in managing the poverty reduction as shown in table 5.4.4 and table 6.2. From the empirical evaluation it is resulted that there should be coordination and combination of different strategies to make the more efficient and effective financing for managing poverty reduction in the country. Equality in quality education should be provided in the rural areas of the country for managing the poverty reduction on sustainable basis. Productive adult male and female of household should be provided skill and training which will lead to employment and income generation ultimately poverty reduction will be managed effectively. Trained people should be provided with sufficient finance (table 5.4.3) so that they may make productive use of loan and start their own business for earnings. It is suggested that before provision of financing and micro finance, training facilities should be managed for poor and vulnerable segment so that they should utilize the resources effectively. It is also suggested to manage the finance for trained vulnerable and poor member so that they may utilize their competencies to earn the money and defeat the poverty. It is evaluated that human capital and financial capital both are compulsory and should be coordinated with each other to get the effective result for managing the poverty reduction.

(v) What is the perceived impact of poverty reduction strategies implemented in the country on the sampled population?

It is evaluated from the empirical result as shown in last chapter that that the programs provide Rs.1000 per month, do not contribute to manage the poverty reduction on sustainable basis. It is also observed that institutions are not effectively managing and financing the poverty reduction on sustainable basis. These programs should coordinate to achieve the goal for managing the poverty reduction in the country. Only ZI is playing well its role for

financing and managing poverty reduction as shown in table 6.4 through human capital development. This institute manages the finance to provide education and training of different nature to poor productive members for fighting against the poverty in society. It enables the poor to develop skill to search a job or to start a business by enhancing human capital through organized institutions in country. So table 6.2 shows that male working member is statically significant and negatively correlated with probability of being poor. In non-parametric test, it is observed that MFI is playing well for managing the poverty reduction as shown in table 5.4.4 but is should be noted from the same table that sufficient amount up to Rs.40000 of loan is critical for effective income generating activities.

(vi) What would be a model program of poverty reduction based on the experiences gained in study area?

As discussed earlier that poverty is a complicated and multidimensional with no specific definition which has different socio-economic and demographic determinants varies region to region. So it is very difficult to adopt the strategy which will be model for the whole. It is suggested that effective planning and coordination between institutions may manage the poverty reduction. This task can achieved with proper planning, effective implementation and feedback. Although it is difficult task yet not impossible. From the empirical evaluation, the model may be developed which can help to manage the poverty reduction in rural area of the country. Two factors are very important for managing the poverty reduction in the country which includes human and financial capital. Education and training are important determinants with negative correlated with poverty (table 6.2), which are important element of human capital development. Loan for financial capital by micro financing institutions is significant with rank 1 (table 5.4.4) for income related statements. So these determinants are good target to finance and manage the poverty reduction.

All poor may not be good target for all these strategies. So it is very clear to identify the productive and unproductive target for each strategy. Productive unit may be classifying for doing business and provision of labor to businessman. As shown in table 6.2, education, employment for male and female are negatively correlated with probability of being poor. Educated and trained person have higher opportunity to find employment on regular basis. Table 5.4.4 also shows that MFI and loan are also significant variables for income related statement. It is resulted that human capital development and financial capital both are important factor to manage the poverty reduction. An effective model needs the coordination

and combination of both of the variables. So it is suggested on the basis of result and discussion that productive poor must be given the training and education and they should be provided sufficient loan to become a productive member of society to manage the poverty reduction in the country. Unproductive member should be provided soft free cash for their livings. So it is resulted that finance should be provided for education and demand driven skill and training for human capital development to manage poverty reduction effectively.

7.4. Recommendations

It is evaluated from the empirical results discussed in last chapters that different determinants are critical to handle for managing the poverty reduction in the country. Thus, age, household size, gender, physical, financial and human capitals are important determinants of poverty. Some of these determinants are financed and managed by different institutions for poverty reduction through direct strategies.

It should be noted that one institution may not be able to pull out the poor from poverty trap. Different institutions approaching the problem through different angle may be managed and financed the different strategies to enhance the human capital and to motivate the poor through different activities by institutions. These activities must be sustained and form necessary backward and forward linkages for the poor that will increase speed the extent of productive activities of beneficiaries which will increase the total income of household.

It is very difficult task for the institution to provide initiatives and interventions to target beneficiaries for managing the poverty reduction on sustainable basis. It is, hence, necessary that (i) poor must be provided certain forms of assistance and support packages to enhance their welfare; (ii) they must be screened and organized so that the delivery of assistance packages may be focused on achieving efficiency; and (iii) the assistance requires various institutions involved in poverty reduction programs to coordinate and collaborate with each other so that intended goals and objectives are properly planned and achieved. For this purpose their role must be clearly specified so that overlapping responsibilities should be avoided. Every institute has its own aims and objectives for its existence.

An efficient poverty reduction strategy requires essential state institutions as a necessary precondition to fight against poverty in a sustainable way in the society. Institutions fighting against poverty must address its socio-economic, institutional, and political factors at the same time. On the institutional front, the key issue is to ensure that state owned institutions

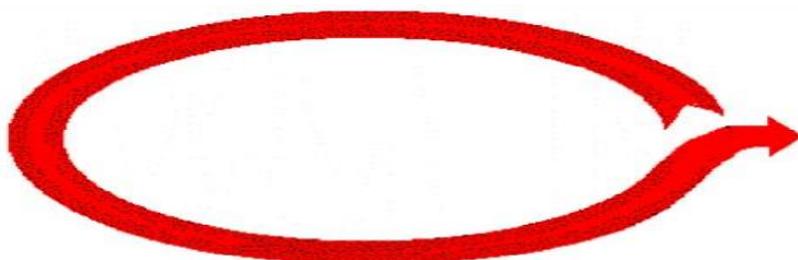
should not show favoritism against the poor in the society in terms of clientelism and patronage. These institutions should be effective, accountable, and representative. The key is to address the core problems of institutional competence and incentives within the state, civil society, and the private sector. As economic growth is very important for to poverty reduction, it cannot modify the basic causes of determined poverty unless these institutional factors are also addressed. Making institutions and policies more comprehensive for the poor is complex and completed, because they have little political power and less earning capabilities.

The success or failure of poverty reduction programs depends on the ability of concerned institutions to honestly cooperate and collaborate with each other in planning and implementing the strategies effectively. Efforts must be specified and concerted by these institutions. Participation must be serious and dedicated for achieving the goals and objectives of managing and financing the poverty reduction.

These institutions should play their role in different ways by adopting different strategies according to need of poor and vulnerable society. So it is important that institutions must realize their responsibilities and duties to sustain the objectives of poverty reduction programs in long run and must ensure that they will meet the target of the program and they must be able to perform for which purpose they are managed and financed. It is also the duty of institutions to monitor the beneficiaries so that they may get full benefits for which purpose they were supposed to be treated by the program. If planning is made carefully, strategies are made according to need and are implemented properly by institutions; it is possible to win the war against poverty in the country. The institutions should focus on these steps to manage the poverty reduction. Their strategy should be developed according to the following strategies:

Service Delivery

Identification and Screening



a. Identification and Screening of poor

Identification and screening is very important step for strategy. It is very clear that all poor have not same abilities and competencies and they are not treated same way for managing and financing the poverty reduction on sustainable basis. Old, sick, handicapped *etc.* may be unproductive and may be good candidate for direct financial support and other subsidies. To use the full potential of productive member, it is important to target and screen for education and training to enhance the human capital. So keeping in mind the targets and objective of the different programmes poor may be screened for the targeted programs. If the step is taken carefully then right candidate for right program may be identified and screened then good result of program for managing and financing the poverty reduction may be achieved with scarce resources rapidly.

b. Service Delivery for Selected Candidate

Different types of services are delivered through different programs by financing and managing the poverty reduction programs. These services include provision of free education, health facilities; industry oriented training, subsidies, financial assistance and soft term loans. These services depend on budget, time schedule and rate of change of level of poverty for beneficiaries in society. So after screening the good candidate for specific program, delivery of service must be planned and implemented effectively for achieving the meaningful results.

c. Monitoring and Feedback of Program

This step is avoided by policy implementation authorities, which are the main hurdle for achieving the specified result for managing the poverty reduction. It is very important to monitor the implementation phase of program; either it is providing the specific and targeted result or not. The goals and objectives for delivery of services must be monitored carefully and feedback must be measure for the program.

d. Graduation of Beneficiaries

The ultimate purpose and objective of managing and financing all poverty reducing programs and projects are to make beneficiaries self-sufficient and reliant on sustainable

basis. So beneficiaries must be monitored and provided interim support until they are out of poverty trap and take care of their own and family interests and welfare in the society. Provision of training and education does not mean that poor are able to be productive and they will get job. Ensuring job and employment depends on their socio and cultural attitude toward work. The beneficiaries must be prepared to take responsibility for earnings, open up to new and progressive ideas, and learn to new production techniques. They must be monitored and motivated for the getting job and increasing their income to managing the poverty reduction for the household.

If institutions coordinate their activities with each other and plan well to manage and finance the poverty reduction in the country, they may play very effective role to contribute for poverty reduction. In this way, although fight may not be won, but it is quite possible to reduce the intensity of poverty and resource may be utilized effectively.

Although the fight against poverty is very difficult to win but the extent of poverty may be reduced through coordination of institutions, effective planning and proper implementation of planned strategies.

To manage the poverty reduction, it is compulsory that poor must be provided the basic needs so that a base can be established. Financing and managing the poverty reduction programs must allow the poor to adopt their social and cultural environment and to develop the awareness that affect them to learn new life-sustaining skills to improve and increase their productivity and income as well for managing the poverty reduction.

7.6. Conclusion

It is concluded from the study that Government of Pakistan adopts the strategies at macro level which include the indirect strategies that aim to ensure the rural development, market access and service, improving governance and redistribution of income for economic growth in the country. It also adopts the micro level strategies which targets the vulnerable and poor segment directly and provide them financial capital and human capital development facilities. Through direct strategies, financial resources are provided directly to poor on soft term and condition or freely and also provided them for enhancement of human capital, which are necessary for managing the poverty reduction the country.

The empirical part of this study concluded that direct strategies are effectively targeting the

poor but are not working towards contributing in managing the poverty reduction efficiently. Zakat institutions work efficiently as compared to other institutions targeting to enhance the human capital through education and training. MFI is also contributing in managing the poverty reduction but it is suggested that amount up to Rs. 40000 should be provided to poor to engage the sufficient amount for productive purpose to escape from poverty as empirical result show in the last chapter.

This study also found that gender, marital status, household size, education, training, employment status and age are important determinant for managing and financing the poverty reduction. Institution works for financial capital and human capital development through different programs which leads to employment and resultantly poverty level is reduced.

It is recommended by this study that institution should coordinate with each other to achieve the specific objective of poverty reduction through their program and activities in the country. The institutions should coordinate to identify the productive and unproductive candidate in the society and should facilitate them according them after screening the poor to utilize their potential for managing and financing the poverty reduction in the country.

REFERENCES

- Abbas, F., Sarwar, M. N., & Hussain, S. (2005). Microfinance Route to Income Generation and Poverty Reduction: Evidence from District Faisalabad, Pakistan. *Journal of Agriculture & Social Science*, 1(2), 144-147.
- Aggrey, N., Eliab, L., & Joseph, S. (2010). Human capital and labor productivity in East African manufacturing firms. *Current Research Journal of Economic Theory*, 2(2), 48-54
- Ahmad, M. (2003). Agricultural productivity, efficiency, and rural poverty in irrigated Pakistan: A stochastic production frontier analysis. *The Pakistan Development Review*, 219-248.
- Ahmad, S., Naveed, S.M., & Ghafoor, A. (2004). Role of Microfinance in Alleviating Rural poverty: a case study of Khushhali Bank Program in Rahim Yar Khan Pakistan. *International Journal of Agriculture and Biology*, 7: 426428
- Ahmed, M. (1993). "Choice of a Norm of Poverty Threshold and Extent of Poverty in Pakistan", the *Journal of Development Studies*, Vol. XII-XII, Peshawar.
- Akhtar, Muhammad R. (1998). Role of financing micro projects through zakat funds in developing Islamic countries.
- Ali Khan, H. G., Khan, A. Z., Ahmad, A., & Siraj, A. E. (2011). Financial Sector Development And Poverty Reduction. *Global Journal of Business & Management Research*, 11(5).
- Ali, A., & Alam, M. A. (2010). *Role and Performance of Microcredit in Pakistan* (Doctoral dissertation, University West).?????????
- Ali, Ikram, Abdul Saboor, Sarfraz Ahmad & Mustafa (2010). A Profile of Regional Contribution of Rural Poverty in Punjab: Some Hidden Dynamics, *Pakistan journal of life and social Sciences*, 8(1), 35-4
- Allahdadi, Fatemeh & Abrisham A. (2011), Human Resource Development for Poverty Reduction in Iran, *Life Science Journal*, 8(3).
- Amin S., Rai A.S. and Ropa G. (2003) Does microcredit reach the poor and vulnerable? Evidence from Northern Bangladesh. *Journal of Development Economics*, 70, 59-82.
- Amjad, R. and A.R. Kamal.(1997). "Macroeconomic Policies and Their Impact on Poverty Alleviation in Pakistan", *Pakistan Development Review*, 36(1): 39-68.
- Aref, A. (2011). Perceived impact of education on poverty reduction in rural areas of Iran. *Life Science Journal*, 8(2), 498-505.
- Arif, G. M., Nazli, H., Haq, R., & Qureshi, S. K. (2000). Rural Non-agriculture Employment and Poverty in Pakistan [with Comments]. *The Pakistan Development Review*, 1089-1110.

- Awan, M. S., Iqbal, N., & Waqas, M. (2011). The impact of human capital on urban poverty: The case of Sargodha city. *Journal of Sustainable Development*, 4(1), p143.
- Awan, M. S., Malik, N., Sarwar, H., & Waqas, M. (2011). Impact of education on poverty reduction. *International journal of academic research*, 3(1).
- Awan, S.A, Farooq S. U, Bilal. R (2008) Educational Attainment, Occupational Choice and Poverty: A Gender Perspective from Pakistan *Journal of Managerial Sciences* Volume II, Number 1 96 2008
- Ayub, Muhammad Siddiqui (2009). Determinants of Poverty in Pakistan: Findings from Survey
- Ayuub, S. (2013). Impact of microfinance on poverty alleviation. A case study of NRSP in Bahawalpur of Pakistan. *International Journal of Academic Research in Accounting, Finance & Management Sciences*, 3(1).
- Barro, R. J. (2001). Human capital and growth. *The American Economic Review*, 91(2), 12-17.
- Behrman, J. R. (2011). How much might human capital policies affect earnings inequalities and poverty?. *Estudios de Economía*, 38(1), 9-41.
- Bell, E., & Bryman, A. (2007). The ethics of management research: an exploratory content analysis. *British Journal of Management*, 18(1), 63-77.
- Bhutto, A. W., & Bazmi, A. A. (2007, November). Sustainable agriculture and eradication of rural poverty in Pakistan. In *Natural Resources Forum* (Vol. 31, No. 4, pp. 253-262). Blackwell Publishing Ltd.
- Brinkerhoff, D. W., & Goldsmith, A. A. (1992). Promoting the sustainability of development institutions: A framework for strategy. *World Development*, 20(3), 369-383.
- Bryman, A. (1998). Quantitative and qualitative research strategies in knowing the social world. *Knowing the social world*, 138-156.
- Bryman, A. (2008). Why do researchers integrate/combine/mesh/blend/mix/merge/fuse quantitative and qualitative research. *Advances in mixed methods research*, 87-100.
- Central Bank of Nigeria. 1999. Poverty Alleviation in Nigeria. Bulletin. 23(4): October /December.
- Chakraborty, S., & Das, M. (2005). Mortality, human capital and persistent inequality. *Journal of Economic Growth*, 10(2), 159-192.
- Chatterjee, M. (2001). Micro finance: A Miracle Cure? *World Economic Forum, Switzerland*.
- Chaudhry, I. S., Malik, S., & Ashraf, M. (2006). Rural poverty in Pakistan: some related concepts, issues and empirical analysis. *Pakistan Economic and Social Review*, 259-276.

Cheema, I.A.(2005). “A Profile of Poverty in Pakistan”. Centre For Research On Poverty Reduction And Income Distribution Islamabad www.crprid.org.

Cheema, I.A.(2005). “Revisiting The Poverty Line 2000-2001”. Centre For Research On Poverty Reduction And Income Distribution Islamabad www.crprid.org.

Cheema, I.A.(2005). A Profile of Poverty in Pakistan. *Centre For Research On Poverty Reduction And Income Distribution Islamabad*.

Cheema, I.A.(2005). Revisiting The Poverty Line 2000-2001. *Centre For Research On Poverty Reduction And Income Distribution Islamabad*.

Cheston, S. & Khun, L. (2000). Empowering Women through Micro Finance Institutions. *Sinapi Aba Trust, Ghana*.

CRPRID (2002). “ Pakistan Human Condition Report”. Centre for Research on Poverty Reduction and Income Distribution, Pak Secretariat, Islamabad, p.79.

Denzin, N. K. (1994). The art and politics of interpretation.

Durrani, M. K. K., Usman, A., Malik, M. I., & Ahmad, S. (2011). Role of Micro Finance in Reducing Poverty: A Look at Social and Economic Factors. *International Journal of Business and Social Science*, 2(21), 138-144.

FAO (2005) The State of Food and Agriculture: Agricultural Trade and Poverty. FAO Agriculture Series No.36. Food and Agriculture Organization of the United Nations, Rome.

FAO, F. (2012). Statistical Yearbook 2013: World Food and Agriculture. *FAO (Food and Agriculture Organization of the United Nations), Rome*.

FAO, I. (2013). WFP, 2013. *The State of Food Insecurity in the World*.

FAO, I. (2013). WFP, The State of Food Insecurity in the World 2013. The multiple dimensions of food security. *FAO, Rome*

FAO, I., IMF, O., & UNCTAD, W. (2011). the World Bank, the WTO, IFPRI and the UN HLTF (2011). *Price volatility in food and agricultural markets: Policy responses*.

Faridi, M. Z., Chaudhry, I. S., & Anwar, M. (2009). The socio-economic and demographic determinants of women work participation in Pakistan: evidence from Bahawalpur District.

Faux, E., & Ntembe, A. (2013). Does Education Reduce Poverty? Response from Cameroon. *World*, 3(2).

Gazdar, H., S. Howes and S. Zaidi (1993). “Poverty in Pakistan: Measurement Trends and Patterns”, STICRD, LSE, London.

GoP (2002). Pakistan Economic Survey 2001-02. Government of Pakistan. Economic Advisor's Wing, Finance Division, Islamabad.

- GoP (2003). Pakistan Economic Survey 2002-03. Government of Pakistan. Economic Advisor's Wing. Finance Division, Islamabad.
- GoP (2012). Pakistan Economic Survey 2011-11. Government of Pakistan. Economic Advisor's Wing. Finance Division, Islamabad.
- GoP (2013). Pakistan Economic Survey 2012-13. Government of Pakistan. Economic Advisor's Wing. Finance Division, Islamabad.
- Hamdani, Syed Muhammad Qasim. (2012). The Impact of Microfinance on Social Mobility, An Empirical Evidence From Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, (3)9.
- Haq, Rashida (2001). “ Occupational Profile of Poverty in Pakistan”. The Pakistan Development Review, 40:4 Part II, PIDE Islamabad.
- Harbison, F., & Charles, M. (1964). *Education, Manpower, and Economic Growth; strategy of human resource development*: McGraw Hill Book Company, USA.
- Hardle, W., & Mammen, E. (1993). Comparing nonparametric versus parametric regression fits. *The Annals of Statistics*, 21(4), 1926-1947.
- Hashmi, A. A., Sial, M. H., Hashmi, M. H., & Anwar, T. (2008). Trends and Determinants of Rural Poverty: A Logistic Regression Analysis of Selected Districts of Punjab [with Comments]. *The Pakistan Development Review*, 909-923.
- Havinga I.C. Haanappel, F.W. Louter, A.S. and Andel W.A. van den. (1989). “Poverty in Pakistan (1984/85)”. The Pakistan Development Review Vol.28, Islamabad.
- Hoffman, J. P. (2004). *Generalised Linear Models: An Applied Approach*. Boston/New York/San Francisco.
- Horrell, S., Humphries, J., & Voth, H. J. (2001). Destined for deprivation: Human capital formation and intergenerational poverty in nineteenth-century England. *Explorations in Economic History*, 38(3), 339-365.
- IFAD, Poverty Report (2011). *New Realities, New Challenges: New Opportunities for Tomorrow's Generation*.
- Jafri S.M.Y. and Khattak A. (1995). “Income Inequality and Poverty in Pakistan”, Pakistan Economic and Social Review, Vol. XXXIII, Lahore.
- Jamal, H., & Khan, A. J. (2007). *Trends in regional human development indices*. Social Policy and Development Centre.
- Janjua, P. Z., & Kamal, U. A. (2010). The Role of Education and Income in Poverty Alleviation: A Cross-Country Analysis. *Lahore Journal of Economics*, 16(1), 143-172.
- Jankowicz, A. D. (2005). *Business research projects*. Cengage Learning EMEA.

- Jefferis, K.R. and T.F. Kelly (1999). "Botswana: Poverty amid Plenty", Oxford Development Studies. 27(2): 211-231.
- Jones, G., & Schneider, W. J. (2006). Intelligence, human capital, and economic growth: A Bayesian averaging of classical estimates (BACE) approach. *Journal of economic growth*, 11(1), 71-93.
- Jones, P. W. (2004). Taking the credit: Financing and policy linkages in the education portfolio of the World Bank. *The global politics of educational borrowing and lending*, 188-200.
- Kaas, L., & Zink, S. (2007). Human capital and growth cycles. *Economic Theory*, 31(1), 19-33.
- Kakwani, N., (2001), " Issues in Setting Absolute Poverty Lines", Poverty and Social Development Paper No. 4, ADB, Manila.
- Khalid, U., Shahnaz, L., & Bibi, H. (2005). Determinants of Poverty in Pakistan: A Multinomial Logit Approach. *Lahore Journal of Economics*, 10(1), 65-81.
- Khan, Mahmood Hasan, 2000, "Rural Poverty in Developing Countries: Issues and Policies," International Monetary Fund Working Paper WP/00178 Washington DC.
- Khan, Z., Khan, A., & Ullah, A. (2009). Cooperative microfinance: A new option for government & development organizations. *Journal of Managerial Sciences*, 3(2), 180-191.
- Khandker, S. R. (2003). *Micro-finance and poverty: evidence using panel data from Bangladesh* (Vol. 2945). World Bank Publications.
- Kiani, A. (2010). Role of University Education in Poverty Alleviation in Pakistan. *Interdisciplinary Journal of Research in Business*, 1.
- Kim, J. C., Watts, C. H., Hargreaves, J. R., Ndhlovu, L. X., Phetla, G., Morison, L. A., ... & Pronyk, P. (2007). Understanding the impact of a microfinance-based intervention on women's empowerment and the reduction of intimate partner violence in South Africa. *American Journal of Public Health*, 97(10), 1794.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.
- Kruijk H. de and Myrna van Leeuwen (1985). "Changes in Poverty and Income Inequality in Pakistan during the 1970's", *The Pakistan Development Review*, Vol. XXIV No.3&4.
- Kumaria, V., & Singh, R. K. P. (2009) Fragile Human Capital Causes Poverty in North Bihar: Some Empirical Evidences. *Agricultural Economics Research Review* Vol. 22 January-June 2009 pp 99-108
- Kuramalieva, E., Montgomery, H. & Weiss, J. (2003). Microfinance and poverty reduction in Asia: what is the evidence? *ADB Institute*.

- Kuramanalieva, E., Montgomery, H. & Weiss, J. (2003). Microfinance and poverty reduction in Asia: what is the evidence? *ADB Institute*.
- Leon, R. (1998). Women and Micro credit: A Reality and a Challenge. *Secretary for Program Development, World YWCA*.
- Lesschen, J. P., Verburg, P. H., & Staal, S. J. (2005). *Statistical methods for analysing the spatial dimension of changes in land use and farming systems*. International Livestock Research Institute.
- McKee, D., & Soldo, B. (2009). Do Good Kids Finish First? Testing Bequest Motive Theories in Mexico¹.
- McKee, D., & Todd, P. E. (2011). The longer-term effects of human capital enrichment programs on poverty and inequality: Oportunidades in Mexico. *Estudios de economia*, 38(1), 68.
- MHDC, (1999). "A Profile of Poverty in Pakistan", Mahbubul Haq Center For Human Development, Islamabad.
- Mincer, J. (1997). The production of human capital and the life cycle of earnings: Variations on a theme. *Journal of Labor Economics*, 15(1), 26-47.
- Morduch, J., & Haley, B. (2002). *Analysis of the effects of microfinance on poverty reduction* (Vol. 1014). NYU Wagner Working Paper.
- Muhammad, S. D. (2010). Microfinance Challenges and Opportunities in Pakistan. *European Journal of Social Sciences*, 14(1), 88.
- Nanavaty, R. (2000). Does Empowerment matter for Economic Development? *Poverty Reduction and Economic Management (PREM) Laurence, World Bank*.
- Noreen, S. (2011). Role of Microfinance in empowerment of female population of Bahawalpur District. In *International Conference on Economics and Finance Research* (Vol. 4, pp. 318-324).
- Okoruwa V O and O.A Oni. 2002. Agricultural Inputs and farmers' Welfare in Nigeria. F Okunmadewa (Eds).In: *Poverty Reduction and the Nigeria Agricultural Sector*. Elshaddai Global Ventures Ltd, Ibadan, Nigeria.
- Oxaal, Z. (1997). *Education and poverty: A gender analysis*. Institute of Development Studies at the University of Sussex.
- Pallant, J. F., & Tennant, A. (2007). An introduction to the Rasch measurement model: an example using the Hospital Anxiety and Depression Scale (HADS). *British Journal of Clinical Psychology*, 46(1), 1-18.

- Qureshi, S. K., & Arif, G. M. (2001). *Profile of poverty in Pakistan, 1998-99*. Pakistan institute of development economics (PIDE). *MIMAP Technical Paper Series*, 5.
- Rose, P., & Dyer, C. (2008). Chronic poverty and education: a review of literature. *Chronic Poverty Research Centre Working Paper*, (131).
- Sabir, H. M., Hussain, Z. A. K. I. R., & Saboor, A. B. D. U. L. (2006). Determinants of small farmers poverty in the central Punjab (Pakistan). *Journal of Agriculture and Social Sciences*, 2(1), 10-12.
- Santos, M. E. (2011). Human Capital and the Quality of Education in a Poverty Trap Model. *Oxford Development Studies*, 39(01), 25-47.
- Sarantakos, S. (1993). *Social research*. South Melbourne: Macmillan.
- Saunders, M. N., Saunders, M., Lewis, P., & Thornhill, A. (2011). *Research methods for business students, 5/e*. Pearson Education India.
- Sekaran, U. Bougie, roger (2010).“. *Research Methods for Business: A Skill Building Approach*.
- Sen, A. K. (2000). *Social exclusion: Concept, application, and scrutiny* (No. 1). Manila: Office of Environment and Social Development, Asian Development Bank.
- Sen, A. K. (2000). *Social exclusion: Concept, application, and scrutiny* (No. 1). Manila: Office of Environment and Social Development, Asian Development Bank.
- Sen, G., & Grown, C. (1987). *Development, Crises And Alternative Visions: Third World Women's Perspectives* (New Feminist Library) Author: Gita Sen, Car.
- Setboonsarng, S., & Parpiev, Z. (2008). *Microfinance and the Millennium Development Goals in Pakistan: Impact assessment using propensity score matching* (No. 104). ADB Institute Discussion Papers.
- Shah, T. H., & Butt, H. (2011). Income generating activities through microcredit and womens socio-economic empowerment: a study of district Kasur, Pakistan. *Academic Research*, 1.
- Sharma, M., Zeller, M., Henry, C., Lapenu, C., & Helms, B. (2000). Assessing the relative poverty level of MFI clients. *Synthesis report based on four case studies*. International Food Policy Research Institute (IFPRI) and Consultative Group to Assist the Poorest (CGAP), Washington, DC.
- Shirazi, N. S., & KHAN, A. U. (2009). ROLE OF PAKISTAN POVERTY ALLEVIATION FUND'S MICRO CREDIT IN POVERTY ALLEVIATION: A Case of Pakistan. *Pakistan Economic and Social Review*, 215-228.
- Siddiqui, T. (Ed.). (2005). *Migration and development: Pro-poor policy choices*. University Press.

Silverman, D. (2013). *Doing qualitative research: A practical handbook*. SAGE Publications Limited.

Teddlie, C., & Tashakkori, A. (Eds.). (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Sage Publications Inc.

UN Report of Secretary General (1997). Role of Micro Credit in Eradication of Poverty.
Valdés, A., Foster, W., Anríquez, G., Azzarri, C., Covarrubias, K., Davis, B., ... & Zezza, A. (2012). A profile of the rural poor. Background paper for the IFAD (International Fund for Agricultural Development) Rural poverty report 2011.

Vinod, H. D., & Kaushik, S. K. (2007). Human capital and economic growth: evidence from developing countries. *The American Economist*, 29-39.

Weiss, J & Montgomery, H (2005). Great Expectation Microfinance and Poverty reduction in Asia and Latin America. *Oxford development studies* 33(3&4): 391-416

World Bank (2000), *World Development Report, 2000-2001, "Attacking Poverty"* Washington: World Bank.

Zaidi, S. A. (2001). *The Economy, Poverty and Bonded Labour in Pakistan*.

Zeller, M. and Sharma, M. (1998). Rural finance and Poverty Alleviation. *International Food Policy Research Institute*, Food Policy Report.

Zeller, M., Sharma, M., Lapenu, C. & Henry, C. (2000). Do MFI's reach the Poorest? Rural Financial Policies for Food Security of the poor. *International Food Policy Research Institute*, Policy Brief (11).

APPENDICES

Annexure I: Estimation and Determinants of poverty in Pakistan

Step 1: Estimation of poverty Level

1. Income perspective

Income

Monthly income(Rs) -----(main source/earner)

Gender of heads -----

Expenditure Per Month

Food -----

Education -----

Health issue -----

Utilities -----

Others -----

2. Consumption perspective (

Consumption of major food items per household (LAST WEEK; data on food items consumed per household per week will be collected, and then converted equivalent to per day per equivalent-adult person)

Commodity	Quantity/last week	Price Per Unit
Flour/chapatti	_____	_____
Meat:		
Beef	_____	_____
Mutton	_____	_____
Poultry	_____	_____
Fish	_____	_____

Vegetables (Name each Veg..here:

1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

Rice:

Basmati	_____	_____
Irri	_____	_____
Others	_____	_____

Pulses:

Grams	_____	_____
-------	-------	-------

Other pulses Name here

1.	_____	_____
2.	_____	_____
3.	_____	_____

Cooking oil/

Ghee Banaspati	_____	_____
----------------	-------	-------

Desi Ghee.	_____	_____
------------	-------	-------

Milk:

Raw/fluid	_____	_____
-----------	-------	-------

Milk packs	_____	_____
------------	-------	-------

Powder	_____	_____
--------	-------	-------

Sugar	_____	_____
-------	-------	-------

Gur	_____	_____
-----	-------	-------

Tea

Black	_____	_____
-------	-------	-------

Green	_____	_____
-------	-------	-------

Fruits

1.	_____	_____
----	-------	-------

2.	_____	_____
----	-------	-------

3.	_____	_____
----	-------	-------

4.	_____	_____
----	-------	-------

5.	_____	_____
----	-------	-------

Other items of daily foods Name here:

1.	_____	_____
----	-------	-------

2.	_____	_____
----	-------	-------

3.	_____	_____
----	-------	-------

4.	_____	_____
----	-------	-------

Annexure II: Basic Information about Household

1. Name of respondent----- (Male/ Female)
2. What is your age-----
3. What is your occupation.....
4. How much education you have got-----
5. What is your marital status.....
6. How many acres of land you own.....
7. How many acres of land are cultivated.....
8. What is source of water for cultivation
 A) Cannal B) Tube well C) Dug Well D) Rain E) Other
9. What is total worth of business assets.....
10. What is your monthly income Rs.....
11. General information about household members

Relation to household head	Gender/sex (M/F)	Age	Education	Marital status (M/U)	Profession / School going	Nature of employment	Average Income per month
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

12. Values of Animals

Title	Number	Value in Rs.....
Cows/Buffalos		
Sheep/Goat		
Poultry		
Camel/Horse/Donkey		
Others.....		

13. Has your income increased during last year Increase/ Decrease/Stable

14. If increase, what was the source of that income-----

Agriculture	Animal	Trade/business	Service	Job	Other

15. How much amount is increased Rs-----

0-1000	1000-3000	3000-5000	Above 5000

16. Increased amount is utilized for the purpose of.....consumption/investment

17. Have you personal saving for emergencies since last year.....Yes/No

Loan Information

18. Have you got loan, yes.....No if yes then

19. How many times you have gotten loan for what purpose

Purpose	Amount (Rs)	Duration in months	Source

20. After getting loan from MFI, the loan was used for

Business	Agri purpose	Marrriage	Basic needs	Education	Health	Other
----------	-----------------	-----------	-------------	-----------	--------	-------

21. The loan was used for specified purpose.....

0-----25%	25-----50%	50-----75%	75-----100%
-----------	------------	------------	-------------

22. After getting loan your income increased during last year Increase/ Decrease/Stable

23. If increased, what was the source of that income-----

Expended business	New Business	Sold in new market	Other
-------------------	--------------	--------------------	-------

24. No. of people involved:

Before loan: (a) Family members____ (b) Non family members_____

After loan: (a) Family members____ (b) Non family members_____

25. Was loanee involved in any productive activity before loan?

Yes_____No._____

26. If yes, was loanee's involvement : Full time____ Part Time_____

27. Loanee's current involvement in enterprise:

Full time____ Part Time_____

28. How much amount is increased Rs-----

0-----1000	1000-----3000	3000-----5000	Above 5000
------------	---------------	---------------	------------

29. Increased amount is utilized for the purpose of.....consumption/investment

30. Have you personal saving for emergencies since last year.....Yes/ No

31. What is Impact of Zakat/BISP Disbursement

Have you got money from ZI/BISP	Received after every month(1-2-3-4)	Amount (Rs.)	Expenditure on (Edu, Hlth, Basic Needs, Business)	Received on merit/nepotism
Yes.....No				

32. After getting Zakat/BISP your income increased during last year: Increase/ Decrease/Stable

33. If increased, what was the source of that income-----

Expended business	New Business	Sold in new market	Other

34. How much amount is increased-----

0-----1000	1000-----3000	3000-----5000	Above 5000

35. Increased amount is utilized for the purpose of.....consumption/investment

36. Have you personal saving for emergencies since last year.....Yes/ No

Annexure III: IMPACT OF TRAINING ON POVERTY REDUCTION

1. What was a selection criterion of training which you got?

Orphan Based	Disability	Reference Based	Education Based	Skill Based	Rural/Urban	Other
--------------	------------	-----------------	-----------------	-------------	-------------	-------

2. Information about Training Types and Duration:

Type of training	Computer	Electric al	Agri Asst t	Medical lab	Embroider y	Tailoring	Beaut ician	Mechani c
Duration								

3. What is Impact of Training (Through Job):

Getting job after training	Is Current job related?	Training Job	What is change in Income
Yes.....No	Yes.....No	New.....existing	Stable/Increase/Decrease

4. What is Impact of Training (Through Business/Skill):

Are you doing business after training?	Is Current Business relates with Training?	What is nature of business?	What do you think about change of Income
Yes.....No	Yes.....No	New.....old	Stable/Increase/Decrease 1.....2.....3

5. If increased, what was the source of that income -----

Expended business	New Business	Training related job	Other
-------------------	--------------	----------------------	-------

6. No. of people involved:

Before Training: (a) Family members _____ (b) Non family members _____

After Training: (a) Family members _____ (b) Non family members _____

7. How much amount is increased Rs-----

0-----1000	1000-----3000	3000-----5000	Above 5000
------------	---------------	---------------	------------

8. Increased amount is utilized for the purpose of.....consumption/investment

9. Have you personal saving for emergencies since last year.....Yes/ No

10. After getting the training what do you feel? (Subjective Wellbeing)

	SD	D	N	A	SA
Is confidence increased?					
Will you get job in future on base of this training?					
After getting the training, have you will power strong?					
Do you feel yourself mentally strong?					
Is your level of satisfaction is increased?					
Is your opportunity for job has increased?					

11. Why do you not get the training?

Not eligible for criteria	Lack of willingness	Lack of information	Lack of Govt. Institute support	Nepotism	Other
---------------------------	---------------------	---------------------	---------------------------------	----------	-------

12. Facilities available in village?

School	Basic Health Unit	Metallic Road	Market	Electricity	Other, if any