Performance and Effectiveness of Social Safety Net Programmes for Household's Well-being: The Case of Zakat and BISP in Pakistan

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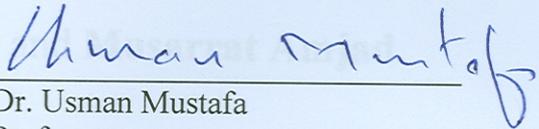
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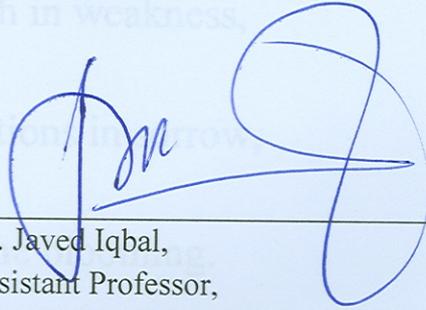# PAKISTAN INSTITUTE OF DEVELOPMENT ECONOMICS, ISLAMABAD

CERTIFICATE

This is to certify that this thesis entitled "*Performance and Effectiveness of Social Safety Net Programmes for Household's Well-being: The Case of Zakat and BISP in Pakistan*" submitted by Zoneira Suman Amjad is accepted in its present form by the Department of Development Studies, Pakistan Institute of Development Economics (PIDE) Islamabad as satisfying the requirements for partial fulfillment of the Degree of Master of Philosophy in Development Studies.

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DEDICATED TO

My Beloved Parents

Amjad Naveed Cheema and **Musarrat Amjad**

Who always pray for my success,

Who are my strength in weakness,

Who are my consolations in sorrow,

Who wish to see me blooming.

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Finally, as is customary, the errors that remain are mine alone.

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Zoneira Summan Amjad

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List of Abbreviations

AJK	Azad Jammu and Kashmir
ATT	Average Treatment on the Treated
BISP	Benazir Income Support Programme
C	Control Unit
CBN	Cost of Basic Needs
CCTs	Conditional Cash Transfers
CNIC	Computerized National Identity Card
CPI	Consumer Price Index
DD	double difference
DFID	Department for International Development
EOBI	Employees Old Age Benefit Institution
FATA	Federally Administered Tribal Areas
FEI	Food Energy Intake
HIES	Household Integrated Economic Survey
IFA	Individual Financial Assistance
KP	Khyber Pakhtunkhwa
MFIs	Micro Finance Institutions
MPI	Multidimensional Poverty Index
NADRA	National Database and Registration Authority
NCsRCL	National Centres for Rehabilitation of Child Labor
PBM	Pakistan Baitt-ul-Mall
PBS	Pakistan Bureau of Statistics
PIHS	Pakistan Integrated Household Survey
PMT	Proxy Mean Test
PPAF	Pakistan Poverty Alleviation Fund
PSC	Poverty Score Card
PSLM	Pakistan Social and Living Standards Measurement
PSM	The Propensity Score Matching
PSSS	Provincial Employees Social Security Scheme
PSUs	primary sample units
PWs	Public works programs
RM	Radius Matching
RD	Regression discontinuity
SSNs	Social Safety Nets
UCTs	Unconditional Cash Transfers
VTCs	Vocational Training Centers
WWF	Workers Welfare Fund
4Ps	Pantawid Pamilyang Pilipino Programme

Abstract

Poverty is one of the major concern in developing countries whereas Social Safety Nets (SSNs) are considered a window to improve lives of the poor. In Pakistan, various SSNs are functional, both in government and private sector. The present study made a comparison of Zakat and BISP to evaluate the effectiveness, targeting accuracy and welfare impact of both the Zakat and BISP on recipients on a wide range of indicators including consumption, headcount poverty, multidimensional poverty index, child school enrollment and women empowerment. To carry out this study, data from the latest available 2013/14 round of HIES is used which covers the sample 17,989 households.

The overall reported data of Zakat is HIES is under-reported as only 0.6 percent of the household reported as recipients of Zakat and 7 percent of the household reported that they got benefit from BISP programme. A comparison is done by comparing the socio-demographic profile of recipients of Zakat and BISP, and found that recipient households of both the Zakat and BISP are at a disadvantageous position as compared to the non-receiver households almost on all the socio-demographic and economic indicators. However, BISP beneficiaries possess more assets i.e. livestock, land and ownership of house.

Regarding the performance of the programme, Zakat has quite limited coverage as compared to BISP. Same is the case with targeting where BISP has much better targeting of 42 percent as compared to Zakat (23%). However, concentration of BISP beneficiaries is much high in bottom quintile, poverty and multidimensional poverty as compared to Zakat recipient households. Regarding the welfare impact, the study found positive welfare impact of cash assistance on per capita monthly food consumption, head count poverty and to extent impact was also observed on multidimensional poverty index, however study has not found impact on child school enrollment and partial impact was observed on women empowerment.

Chapter 1   Introduction

1.1.   Background and Introduction

Manifestation of scarcity and discrepancy in a community or society overall has suggested a response in the form of supplies and aids in addition to amendments in the development quests for improving the circumstances. These measures can be observed and worked out by different means such as reshaping institutional bodies and organizations. Currently Social Safety Nets (SSNs) are elected throughout the developing world to deal with the matter of scarcity of resources (Irfan, 2005).

SSNs are operational in the form of social improvement interference procedures that can be social welfare programmes or social assistance or wide ranging measures for reducing threats although they are incapable of confiscating poor communities from their conditions of susceptibility. According to Pritchett (2005) SSNs can be functional using various policies and can alleviate different shocks whether or not the shocks thrust households beneath the absolute threshold of scarcity (Chabala, 2009)

Social safety net programmes (SSNs) generally transfer range of resources including income, skills and assets to the poor and marginalized segments of the society. The basic rationale of SSNs is to protect marginalized and vulnerable masses by managing their livelihood risks and to hinder them from accepting such type of managing approaches that can result in destabilizing their present possessions. Empirical findings worldwide suggest that effectively administered and well targeted social protection policies can not only enhance social and economic well-being but also contribute in sustained inclusive growth by promoting human capital and employment opportunities, and preventing people from economic distresses (Jamal, 2010).

There is growing consensus in development spheres that social safety net programmes are an effective policy choice for developing world for addressing poverty and vulnerability. As a result, majority of the developing countries are opting these programmes to reduce poverty as well as for sustained inclusive growth (Barrientos and Hulme, 2008). According to Ali (2007) and ADB (2013), inclusive growth frames on three basic pillars. Firstly, SSNs are considered to be the foundation for the protection of poor communities

and preventive measures to safeguard them from temporary living distresses. Secondly, proficient sustainable growth to generate fruitful occupations and financial openings to make sure all the needs regarding employment are being addressed. And thirdly, collective addition by making sure equivalent right of entry to the financial openings through spending on health care, schooling and other societal components to enhance human aptitude. Moreover, it also emphasizes to eradicate foundational and marketplace malfunctioning.

Direct transfers, either by government or private, are the simplest and easiest ways to help the needy communities. These transfers can be categorized as unconditional and conditional and can be in the form of food, cash, water, electricity, health incentives and accommodation assistance programmes. Before deepening in detail, it is worth mentioning that although social protection and social safety nets are usually used interchangeably, but conceptually they are differing. Social protection can be termed as civilian right of every individual whereas SSNs are thought to be the mechanisms engaged to attain that rights i.e. reduction in poverty and inequality, employment promotion and improvement in social-economic well-being (Sayeed, 2004; Bari, et al., 2005).

Although there are various philosophies concerning social safety nets, however, the main principle behind establishing SSNs is to prevent the vulnerable community from further falling into depth of poverty. In this regard SSNs mainly aim on; empowering poor for better risk management, preventing poor from selling their assets, playing a vital role to release short term income related stress and depression among the poor and catering any long term disability of vulnerable household (Ginneken,1999).

 A powerful 'real world' argument against safety nets is their cost. The opponents argue that only developed countries or very small countries can implement a state-funded comprehensive social safety net system. In low-income countries having large populations and poorly developed infrastructure, it is highly logistically unfeasible to finance millions of poor. In such context, the need for safety nets is much greater than in countries that can afford them, but resource constraints necessitate targeting of welfare's interventions (Barrientos, 2009). There is a huge number of extensively practicing SSNs

in different countries of the globe, however mostly in developing countries they all have certain limitations and inadequacies that hinder their effectiveness, few of them are as under (World Bank, 2015):

1. Fail to identify the right target household.
2. The amount of cash benefit is too low that it is incapable of bringing any significant change in the lives of beneficiaries.
3. Factors like corruption and operational inefficiencies formulate the transfer of resources to beneficiaries much costly as compared to their actual cost.

1.2. Social Safety Nets in Pakistan

Among the countries undergoing the process of development, Pakistan is the only country whose national constitution demarcates that social security is an unambiguous civil right of all the citizens. Pakistan's Constitution states in its 38th Article that:

> *"The State shall provide for all persons employed in the service of Pakistan or otherwise, social security by compulsory social insurance or other means; provide basic necessities of life such as food, clothing, housing, education and medical relief, for all such citizens, irrespective of sex, creed, caste, or race, as are permanently or temporarily unable to earn their livelihood on account of infirmity, sickness or unemployment; reduce disparity in the income and earnings of individuals"*

In National Social Protection Strategy (NSPS), social protection notion is envisaged of social protection is envisaged as:

> *"a set of policies and programme interventions that address poverty and vulnerability by contributing to raising incomes of poor households, controlling the variance of income of all households, and ensuring equitable access to basic services. Social safety nets, social insurance, community programmes and labor market interventions form part of social protection."*

(GoP, 2007)

Pakistan has a long history of social protection and SSN Programmes, merged both from public and private sector. Historically public social protection schemes in Pakistan have been implemented but not remained as part of a persuasive social protection framework.

In public sector, social protection can be classified into two categories: social security schemes and social safety net assistance. The first category targets only the formal employed labor force or retirees by providing benefits on contingencies of sickness, work related injury, invalidity, maternity, old age etc. Examples in this regard are, Employees Old Age Benefits Institutions (EOBI) and Workers Welfare Fund (see details of social security schemes in Annexure Table 1). For the second category, generally the targets are extreme poor and vulnerable communities. Food Support Schemes, PBM, Zakat and BISP along with many others run both by federal and provincial governments are the part of this integral social assistance (see details of social safety net schemes in Annexure Table 2). Along with these above mentioned prescribed intrusions, there is a range of non-prescribed interventions which include support through family systems, private charity and other channels of sponsorship. All these interventions play a positive role in the working of social protection mechanism (Bari et al., 2005).

It is worth mentioning that the existing social protection programs run by the government, both social security and social safety nets in Pakistan do not target the agricultural workers and the workers involved in informal economy or temporary laid-off due to seasonal or contractual adjustments. Both the agriculture sector and informal sector are the major constituents both in terms of labor and GDP share in these sectors (Nayab and Shujaat, 2014). Two features are common in SSNs in Pakistan: first, inability to achieve financial targets, and second, public perceive that as a result of these initiatives, there can't be seen any drastic change in the livelihood of rural communities (Arif, 2006).

Though not documented well, the volume and targeting of individual social giving through philanthropy is much higher than government coverage. Poor and vulnerable masses all around the country have been benefiting from large number of social activities, usually run by individuals, charity organizations and corporate sector i.e. hospitals, schools, orphanages, public kitchens etc. Civil society has always played a critical role in disasters to protect needy masses. One can see the active role of society in assisting to needy and vulnerable people from the old 1947 migration to recent 2005 earthquake, 2008 IDPs, recent 2010 and onward floods and IDPs from FATA from 2013 to onward.

1.3.   Problem Statement and Research Gap

Pakistan has a long history of devised programmes to alleviate poverty but majority of the government programs in past relied on development programmes for addressing poverty i.e. Village Aid, Rural Works Programme, People's Works Programmes, health care, education facilities and stipulation of other societal services. The direct Social Safety Nets (SSN) in Pakistan, in past, was only limited to Zakat system and private transfers. Both Zakat and Bait-ul-mal have asymmetrical nature of disbursements. Zakat pays its beneficiaries bi-annually.

Every Muslim who meets the necessary criteria of wealth according to the Islamic laws has to pay Zakat as a foremost economic compulsion. The main purpose behind the concept of Zakat is to sustain an economic balance in the community. Officially *Zakāt* is initiated in 1980 in Pakistan under the Zakat and Ushr Ordinance. The programme does not have any specially characterizes criteria for beneficiaries rather it includes widows, disabled persons, orphans and other needy personnel (Suhaib, 2009). Official *Zakāt* collection at source (through banks) increased from PRs. 844 million in 1980/81 to PRs. 4,309 million in 1999/2000. Overtime the volume of Zakat collection remains stagnant as a total amount of PRs. 5304 million was collected for FY 2016 and distributed among the federal areas as well as provinces (GoP, 2015). However as being religious obligation, the disbursed amount by wealthy peoples might be much higher than the official disbursement private sector that has not been documented.

Alternatively, in the year 2008 Pakistan's Government instigated BISP as a major SSN programme. The main objective of this programme was to enhance the income as well as livelihood of poor and susceptible communities through its unconditional cash grants.

Despite of similar beneficiaries (poor) and unconditional cash transfers, the targeting criteria of both the *Zakat* and BISP[1] programme are entirely differ. The official disbursement of *Zakat/Usher* is directly or through respective local Zakat Committees (established by government) while private disbursement of *Zakat/sadqat* is through community itself identification of poor and needy persons. On the other hand, BISP targeting is based on 2010/11 nation-wide *door-to-door* survey where the eligibility

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[1] A smaller component of BISP has conditional cash transfer that is only 2 percent disbursement of the entire programme in FY 2016.

criteria were set by the implication of Proxy Mean Test (PMT) which on a rating scale of 0 to 100 verifies the current ranking of the household. This survey has recorded socio-economic condition of 27 million households across Pakistan. On the rating scale, 16.17 was marked as threshold level and any household that rates below this threshold level was entitled for the cash grant. There could be multiple entitled families within the entitled household. Significantly, from each entitled family an ever married or widow woman encompassing a legal (CNIC) was selected as recipient of cash grant.

The right identification of beneficiaries is quite difficult and targeting may face *Inclusion Error* (identification of those as beneficiaries who *don't fulfill* the selection criteria) and *Exclusion Error* (identification of those as non-beneficiaries who *fulfill* the selection criteria). Question arises that *how much the two sorts of welfare programmes (Zakat/Usher, and BISP) are accurate in identification of right beneficiaries, those who are poor and vulnerable?* Another question arises that *how much of all these programmes are addressing poverty in Pakistan?*

A number of studies in Pakistan has observed the relationship between *Zakat* and socio-economic development (Ali, 1963; Khan, 1974; Abdul et al., 1995; Al-Qardawi, 1999, Shirazi and Amin, 2009 and Suhaib, 2009) but none of the study has managed to observe the accuracy and right targeting of public sector and/or private sector Zakat disbursement along with split welfare impacts. Only the study of Nayab and Shujaat (2014) has observed the welfare impact of BISP on poverty, however both the inclusion and exclusion errors are not observed. The present research aims to bridge these gaps along with additional analysis to observe which of the programme is more effective in socio-economic welfare and efficient in poverty reduction.

1.4. Objectives of the Study

The present study revolves around the following 3 objectives.

1. To examine the socio-demographic and economic profile of recipients and non-recipients of Zakat and BISP;

2. To evaluate which one of the social safety net programme in Zakat and BISP have right targeting including coverage, inclusion and exclusion errors; and

3. To examine the welfare impact of these social safety net programmes on household welfare including poverty, child schooling and women empowerment.

1.5. Organization of the Study

The organization of present study is as follows:

Chapter 1 explains the background of SSNs along with social protection in Pakistan, problem statement and research gap, objectives of the study and hypothesis to be tested.

Chapter 2 presents the comprehensive review of the relevant literature from earlier widespread research papers, books and journals with an international perspective about SSNs.

Chapter 3 elaborates the potential welfare impact of social protection programmes ongoing in Pakistan with a main focus on Zakat and BISP.

Chapter 4 demonstrates the methodological framework and data description employed to carry out this study.

Chapter 5 narrates the profile of recipients: A comparison of Zakat and BISP.

Chapter 6 is an extension of chapter 5; it describes the accuracy and targeting performance of Zakat and BISP.

Chapter 7 details the welfare impact of cash assistance on household welfare.

Chapter 8 draws the conclusion from the results and suggests policy recommendations on the basis of results.

Chapter 2   Theoretical Considerations and Practices of Social Safety Nets

2.1.   Introduction

The chapter comprises of theoretical considerations of social safety net (SSN) programmes by explaining: how can we define social protection and SSN? What are the main differences in social security, social protection and social safety nets? What is the history behind SSNs? How SSNs are being experienced in different countries around the globe? How social protection is being practiced in Pakistan?

Poverty is an international concern and affliction for developing countries. Furthermore, it has been the focal point for economists, policy makers, governments and other related institutional structures. Since last 20-25 years, the issue of poverty has gained massive global attention and different multinational associations have revealed their findings regarding this issue. In addition to their findings, few have suggestion the possible mitigation measures for managing this issue. If the required consideration is not given to the matter and measures are not taken for its reduction than the consequences will be extremely influential and non-restorable.

Ever since 1980s, the rate of poverty has been declining globally (World Bank, 2006). Various empirical studies found that development and growth has remained the main causes behind this decline (Dollar and Kraay, 2002). However, concentration is being paid on the importance of income distribution for poverty reduction (Bruno et al., 1998). Collier and Dollar (1999) claimed that, aid can play a vital role in poverty alleviation, if it is supported by an established guiding principle environment. Particularly, social safety nets (SSNs) are now broadly acknowledged as an important factor in any poverty reduction strategy. These programs have become a hope for many such communities who are dealing with malnutrition, continual poverty and disease.

2.2.   Conceptual Definitions of SSNs and Social Protection

As mentioned in chapter 1, social protection can be termed as civilian right of every individual whereas SSNs are thought to be the mechanisms engaged to attain that rights

i.e. reduction in poverty and inequality, employment promotion and improvement in social-economic well-being.

2.2.1. Definitions of Social Safety Nets
Various researchers have defined social safety net as;

- Wimen et al. (2006) termed SSNs as "*the core of social risk management the pledge that stops people from falling below unaccepted minimum levels of poverty*".

- Cheta (2000) classified SSNs as "*transfer programmes designed to play both a redistribute role in poverty reduction and are regarded as a form of insurance against risk to vulnerability or from being marginalized*".

- GRZ (2005) described Social Protection as "*policies and practices that protect and promote the livelihood and welfare of people suffering from critical levels of poverty and deprivation and/or are vulnerable to risks and shocks*".

- SADC (1992) classified Social Protection as "*it is an overarching concept that includes social security as well as developmental social security*".

- ADB (2013) elaborated Social Protection as "*the set of policies and programs designed to reduce poverty and vulnerability by promoting efficient labor markets, diminishing people's exposure to risks, and enhancing their capacity to protect themselves against hazards and interruption/loss of income*".

- ILO (2000) characterized Social Security as "*protection that society provides for its members through a series of public measures against economic and social distress that can otherwise be caused by stoppage or substantial reduction of earnings, resulting from sickness, maternity, employment injury, unemployment, invalidity, old age, and death including the provision of subsidies for families and children*".

- ILO (2003) illustrated Social Insurance as "*a contributory based form of income protection in the event of one being incapacitated resulting in reduction or loss of income*". (Chabala, 2009).

According to World Bank report 2015, there are six types of safety nets, which are:

i. **Conditional Cash Transfers (CCTs)**

CCTs are the programs that have a conditionality factor in its procedure manual. The condition could be one or more along with the terms of weakly endorsed or

strongly endorsed. For instance, visits to the health services or minimum level of school attendance. The Philippines *Pantawid* program falls under this category.

ii. **Unconditional Cash Transfers (UCTs)**

UCTs provide cash assistance to their beneficiaries with any condition to be fulfilled and beneficiary can spend the money according to his/her wish. The Hunger Safety Net program in Kenya and BISP in Pakistan are the examples of this type.

iii. **School feeding programs**

These programs require certain conformities from the recipients, such as assured level of monthly attendance in school can make them eligible to take home food ratios for children's families. Example includes, Brazil's Programa Nacional de Alimentacao Escola.

iv. **Unconditional in-kind transfers**

Such programs permit the distribution of grant or food without any set conditions. For instance, The Programa Nacional de Reabilitacao Nutricional in Mozambique provide nutritional food to pregnant women and malnourished children.

v. **Public works programs (PWs)**

These types of programs involve their recipients in labor oriented activities such as construction of public infrastructure. Public works carried out under Productive safety net program in Ethiopia are an example of this kind.

vi. **Fee waivers**

Such programs assist their beneficiaries with free social services, for example The Capitation Grant Program in Ghana provides free primary health services to the beneficiary.

2.2.2. Definition of Social Protection

Among the focused approaches to social protection, there are two approaches which are generally used for defining social protection. One approach focuses on risk reduction and mitigation as the primary purpose of social protection. The other approach is rooted in the concept of rights and entitlements. Based on the concept that the citizenship of a state confers the right to its citizens of a certain minimum standard of living, social protection is considered an entitlement of citizenship. Internationally, social protection is being

explored in ways that are integrated with mainstream poverty frameworks and address structural inequalities leading to poverty and social exclusion. Moreover, it is being designed in many countries to elevate receivers from the depth of scarcity, instead of protecting them entirely from any unforeseen event (Jamal, 2010). Social protection is generally divided into six major categories:

(i) Social Assistance

- Safety nets for the vulnerable and those most at risk for food security and basic needs;
- Targeted subsidies provided to the poor and vulnerable;
- Provision of facilities for the poor and vulnerable such as crisis centres, *dar-ul-amans* (shelter homes for women), orphanages, etc.

(ii) Social Security

- Pensions and retirement funds.
- Adopting life cycle approach for provision of support services and facilities for health education, growth monitoring, education and skill development, health care and other necessary support for the vulnerable.
- Unemployment benefits.
- Insurance schemes for the poor.
- Leave benefits for pregnant mothers, expectant fathers and medical leave.

(iii) Labour Market Interventions

- Promote employability through provision of skills/vocational/other trainings, job placement, counselling etc.
- Productive asset transfers for the poor such as livestock, land, equipment and tool kits for enterprises.
- Graduation programmes aimed at assisting the poor from transiting out of poverty.
- Targeted access to subsidized finance.
- Public works programmes for employment generation targeted at the poor.
- Measures to protect the extremely vulnerable from harm such as bonded labour, child labourers, orphans, etc.

(iv) Natural & other disasters

- Support for mitigating the impact of events such as natural disasters such as floods, earthquake, drought, etc.

- Support provided to those who are internally displaced as a result of security and other issues.

- Assistance provided to poor households to build their resilience to climate change and mitigate environmental risks.

(v) Fundamental Facilities headed for underprivileged

- Stipulation of essential needs like health and education to the poorest who are otherwise unable to afford these services;

- Expenditure on those types of infrastructure schemes especially targeted at assisting the poorest and most vulnerable such as water, sanitation, etc.

- Low cost housing.

(vi) Alteration Instruments

- Laws, policies and other measures to uphold and protect women and girls from gender based violence, protection of children from early marriage, ensuring that right to education and health care is properly supported through a legal framework.

- Methods to defend the extremely vulnerable from harm such as bonded labour, child labour, orphans, etc.

- Legal steps to shield land rights, inheritance rights, water rights, etc., and have a supportive and enabling environment to protect the basic rights of people.

Another classification of social protection on the basis of procedures is;

i. *Protective procedures,* to provide relief from extreme deficiency.

ii. *Preventive procedures,* to straightforwardly hunt for the prevention of dispossession in a range of conducts.

iii. *Promotional procedures,* to boost actual revenues as well as potentials.

iv. *Transformative procedures,* to track down such guidelines that transmit societal discrepancies and result in continual susceptibilities.

However, the conception of social protection is incomplete to address 'structural issues, as faced by developing world. While looking the economy of developing countries, mostly they have predominant sectors of output and employment i.e. agriculture and mostly organized as informal sector with widespread absolute poverty. Thus employment associated with this informal and pre-dominated sector fall outside the coverage of social security, which usually remains limited only to formal sector. Beside this, fiscal and organizational constraints of arranging resources are the other constraints to expand coverage. Rising globalization along with structural adjustment has also resulted in further erosion for effective and efficient social security delivery to a growing populace. Developing countries implemented such organizational modification strategies that had a tendency of privatizing communal segments, reducing societal resources as well as rationalizing the governments (Dreze et al., 1991).

The scantiness of the concept of social security is furthermore negotiated due to the current guideline in upbringing of the third world countries. An extensive perception of social protection which integrates apprehensions of social safety is needed to accompany the poverty alleviation strategies and policies in the third world countries (Sayeed, 2004; Dreze et al., 1991).

2.3.   Distinguishing Social Security, Social protection and Safety Nets

Social security refers to the safeguard granted by the social order to all of its members through an assortment of community procedures to compensate a considerable decline in income from work in consequence of any natural threat or unpredicted issue like death of main bread earner, unemployment, old age and sickness etc (Shepherd et al., 2004). Social security classifications are typically for people working in the formal sector and mainly comprises of social assistance and social insurance strategies. Therefore, it is considered as a component of social protection.

Social protection is the civil right that every national should get whereas safety nets are the strategies designed to attain that rights i.e. reduction in poverty and inequality, employment promotion and improvement in social-economic well-being. Safety nets have following three basic features[8]:

    a.   Preventing the poor and vulnerable.

b. Assist poor to accept marketplace based transformations.

c. Facilitate poor for managing risks.

Hence, safety nets can be classified as communal commodities which can significantly influence growth of trade and industry in the state.

2.4. Historical Perspective and Performance of Social Safety Nets

Social concern for the poor appears to be as old as mankind itself. Many traditional societies i.e. Eskimos, sub-Saharan Africa and South Asian and Latin American countries have been facing hunger and poverty for several decades. The concern of poverty and hunger was reflected through variety of provisions and transfers from rich segments to poor by sharing resources. The transactions of resources from rich to poor may be based on some exchange relationships entailing reciprocity to sustain a given structure or control mechanism. Cultural values and religion could be the other reasons. For example, Amos much before Christ emphasized to help poor by rich. Church in Europe established houses for poor, and hospitals. Islam made it obligatory that wealthy people must pay Zakat and Ushr to poor besides charity/Sadaqa (Raimi et al., 2014).

This in fact represented the foremost effort in human history wherein Zakat/Ushr collection, establishment of Baitual Mal and elaborate procedures for distribution among poor was made by state. With the demise of Caliphate system and emergence of kingdoms in Muslim world the obligatory payment of Zakat to poor was left to the individuals themselves and state ceased to collect and distribute these levies. Before Islamic Caliphate period, the social giving remained mostly through non-state, communities and families. In later with the demise of Caliphate system the obligatory payment of Zakat was left to the individuals again and state ceased to collect and distribute these levies (Al-Qaradawi, 1999).

Social safety nets are thought to be the precautionary defensive system for vulnerable and deprived segment of overall population and cover an extensive history which can be related with the prehistoric Egypt and the Roman Empire. In sequential array, the most primitive SSN came into exposition during 1980s as a reaction to the temporary unpleasant consequences of institutional amendments (Adato, Ahmed and Lund, 2004). During the economic crisis in East Asia, inspiration of the idea of SSNs propagated

(Paitoonpong et al., 2008). As a result of globalization, economic crises turn out to be worldwide, new understandings were attained during 1990s which consequently escorted the extension of this idea from temporary to permanent intrusions usually claimed as social protection. In developed countries, social protection is considered as a domestic issue and institutional bodies come forward for the protection of general public by mitigating the risk factors and supporting the deprived masses (Norton et al., 2001). Within the outlines of third world countries, Social Protection serves as a pioneering term that had bloomed up from the idea of temporary SSNs and signifies the permanent development approaches integrating social assistance as well as social insurance (Page et al., 2005).

The concept of SSNs is not innovative for the world and many countries have formulated diversified SSNs programmes and have witnessed many optimistic outcomes of such programmes on the economic growth and poverty reduction of the nation state. In Philippines a conditional cash transfers programme commonly termed as 4Ps i.e. Pantawid Pamilyang Pilipino Programme projected to eliminate poverty by spending on education and health specifically in ages 0-14 years. In Indonesia, different SSNs are functional, which include; (Raskin) it provides subsidized rice to the poor, Bantuan Langsung Tunai (BLT) provides cash assistance given to the vulnerable community, (Jamkesams) it offers health insurance to the poor. In India, a range of SSNs are operational for wellbeing of poor and vulnerable communities such as National Old Age Pension Scheme, Disability Pension Scheme and National Family Benefit Scheme.

In Brazil (Bolsa Familia) offers cash grant to the poor by ensuring that the children of beneficiaries have attended school and are timely vaccinated. In Mexico (Oportunidades; previous program named as Progresa) grants cash assistance in exchange for regular visits to health clinics and school attendance of children.

The ultimate goal of SSNs around the globe is to help poor segments to manage risks by raising their resilience to shocks as well as making soecities more equitable by improving economic opportunities for the poor. All the reveals that SSNs have three major goals: resilience, equity, and opportunity. Various countries have different success rates, depends on development of SSNs i.e. targeting, coverage, enrollment and implementation

level; however, in both the Saharan Africa and South Asia, not only the coverage is low but also the cash transfer is too low to fulfil needs of poor households i.e. mostly SSN covers only 10 percent of the consumption of household (World Bank, 2015).

2.5.   Social Protection in Pakistan

"Social Protection" is elaborated through the *"National Policy Framework for Social Protection in Pakistan"* by,

 "a set of policies and programme interventions that address poverty and vulnerability by contributing to raising the living standard of poor households, mitigating the risks of income variance of all households, ensuring equitable access to basic services and protecting the rights of the vulnerable and the marginalized. Policies and programmes include those which provide social safety nets, social insurance (including pensions), labor market interventions and transformative measures which protect the poor and vulnerable."

There is a wide array of policies and programmes for social protection which have been gradually initiated by the Government. These include policies and programmes of social assistance, social security and labor market programmes. Figure 1 shows that social protection in Pakistan has three basic subdivisions.

Figure 1: Subdivisions of Social Protection in Pakistan

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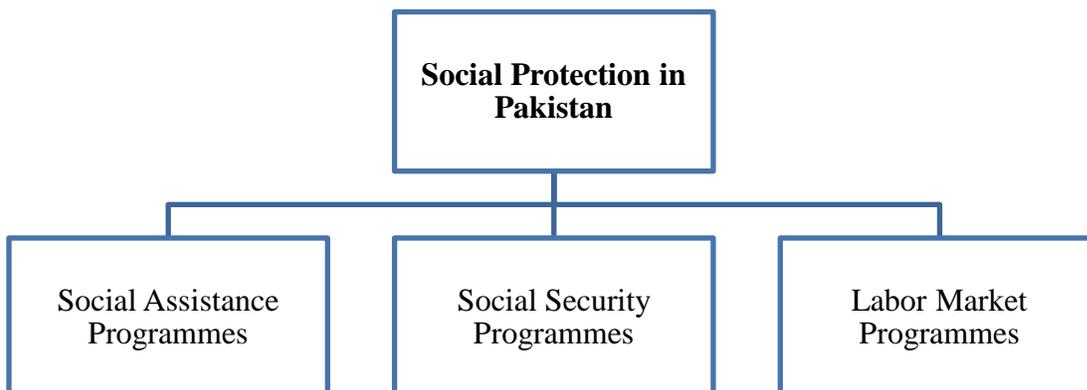
2.5.1. Zakat

In 1980, under the Ordinance of Zakat and Usher, the commencement of Zakat system took place. Zakat funds are to be collected by making an annual deduction of 2.5 percent from individual term deposits and other savings schemes accounts. Through the State Bank of Pakistan, all the collected funds are dispatched to the central Zakat fund. There is complete hierarchy of Zakat council which comprises of federal level councils, provincial level councils and local Zakat committees. Funds gathered by Zakat system are distributed among the neediest citizens such as disabled personnel, orphans, handicapped individuals, widows and extreme poor households. These funds are directly transferred through local Zakat committees or indirectly through the institution that are supported by Zakat funds such as educational, vocational, hospitals and those which provide social welfare support etc. the funds are used to provide a Guzarra or survival grants for deprived households, healthcare allowances, educational stipends and natural disasters victim rehabilitation. Local Zakat committees disburse 75 percent of the total fund while the institution disburses only 25 percent of the fund (GoP, 2015)

2.5.2. Pakistan Baitt-ul-Mall (PBM)

Under the requirements of Pakistan Baitt-ul-Mall Act 1991, PBM was created as a sovereign body with the main goal of providing support to those communities who are for some specific reasons not eligible to receive Zakat funds. Such communities incorporate minorities and certain clusters of Muslims. Federal Government of Pakistan provides fund to PBM and additional grants are provided by NGOs, provincial governments, international donor agencies and some private organizations as well. Prime Minister's National Health Insurance Programme is the new initiative under PBM. Key Schemes of PBM are as below;

Individual Financial Assistance (IFA) through which poor, indigent women and orphans as well as widows are supported for education, rehabilitation, medical treatments and general assistance. During the period of July 2015 t0 March 2016, an approximate amount of Rs. 1456.93 million has been disbursed.

PBM Thalassemia Centre under which flagship of PBM Thalassemia Centre was established in March 2015 in Islamabad and is offering treatment without charges to

number of patients every month. During the last three years, PBM had provided financial assistance to more than 1500 Thalassemia patients, with special instructions to cater patients from AJK, Northern areas and Gilgit Baltistan.

Special Friends of PBM envisaged for granting wheelchairs to every disabled person in the country. In addition to this, it has entitled some families as special families who have to support one or more special child and will be eligible to receive a cash grant of Rs. 25000 annually. During FY 2015-2016 a sum of Rs. 58.67 million is distributed by this programme.

Pakistan Sweet Homes (Orphanage) where Orphanages have been established by PBM in 34 division of Pakistan and so far 3430 children are registered in these sweet homes where they are provided with accommodation, food, free education and medical treatment. During the period of July 2015 to March 2016 this programme has consumed Rs. 261.94 million.

PBM Great Homes (Old Homes) has the vision to establish Great Homes in every province of the country. The main goals of these old homes ids to provide basic necessities of life including, accommodation, food, medication, clothing as well as recreation to unsecured and uncared senior citizens and build an atmosphere of love, hope and care around them. Two Great Homes are functional at Lahore and Karachi. During the period of July 2015 to March 2016 this programme has devoted Rs. 4.85 millions.

Child Support Programme where PBM collects finances from government and deliver them as restrictive cash grants to those recipients which send their children (age group 5 to 16 years) to school for education. In addition to this, families with single child and families with more than one child are given additional grants of Rs.3600/year and Rs. 7200/year respectively. Currently in 10 districts of Pakistan this programme is functional.

National Centres for Rehabilitation of Child Labor (NCsRCL) was launched nationwide in 1995 under the flagship of PBM and currently there are 159 such centers in different areas. The main objective of these centers is to withdraw children (age group 5 to 16 years) commencing dangerous employment, in addition, enrolling them in primary schools.

Vocational Training Centers (VTCs) main aims is to provide free training of different skills to widows, orphans and poor females. Currently there are 147 such centers established nationwide and among those 15 are upgraded with diversified fields such as Interior decoration, glass painting, computer courses, tie and dye techniques, office equipment like photocopier, fax, printers, scanners etc (GoP, 2014)

2.5.3. Benazir Income Support Programme (BISP)

The Government in 2008 launched an unconditional cash transfer programme termed as BISP; it encompasses a large number of beneficiaries. The vision of this programme is to mitigate the adverse impact of rising food and fuel prices. This flagship safety net initiative was launched through World Bank's assistance, the Department for International Development (DFID) and other donor and financing agencies. The programme identified its recipients through survey of the poorest households. The National Database and Registration Authority (NADRA) was instrumental in tagging each beneficiary through the Computerized National Identity Card (CNIC) system which is managed by the authority. The programme started with four interrelated elements known as:

  i.   Waseela-e-Haq: to support micro-finance.
  ii.   Waseela-e-Rozgar: to assist technical and vocational training.
  iii. Waseela-e-Sehat: to provide health and life insurance.
  iv.   Waseela-e-Taleem: to enforce primary education.

Currently only the Waseela-e-Taleem is functional through which children of BISP beneficiaries between the age group of 5 to 12 years are persuaded for school enrollments. Initially the cash grant was set to Rs. 1000 per month which was enhanced to Rs. 1200/- per month w.e.f 1st July, 2013 by the present government and has now been fixed at Rs. 1500/-per month w.e.f 1st July, 2014.

Since its inception in 2008, BISP has grown rapidly; it is now the largest single social safety net program in Pakistan's history. The number of beneficiaries has increased from 1.7 million households in FY 2008-9 to approximately 4.7 million as of 31st Dec, 2014 and BISP annual disbursements have risen from Rs. 16 billion in FY 2008-9 to Rs. 65 billion in FY 2013-14. This FY, disbursements to beneficiaries is expected

to reach Rs. 90 billion. The following graphs show the yearly number of beneficiaries of BISP and cash grants disbursed to them (GoP, 2015)

Figure 2: Yearly Number of BISP beneficiaries (In Millions)
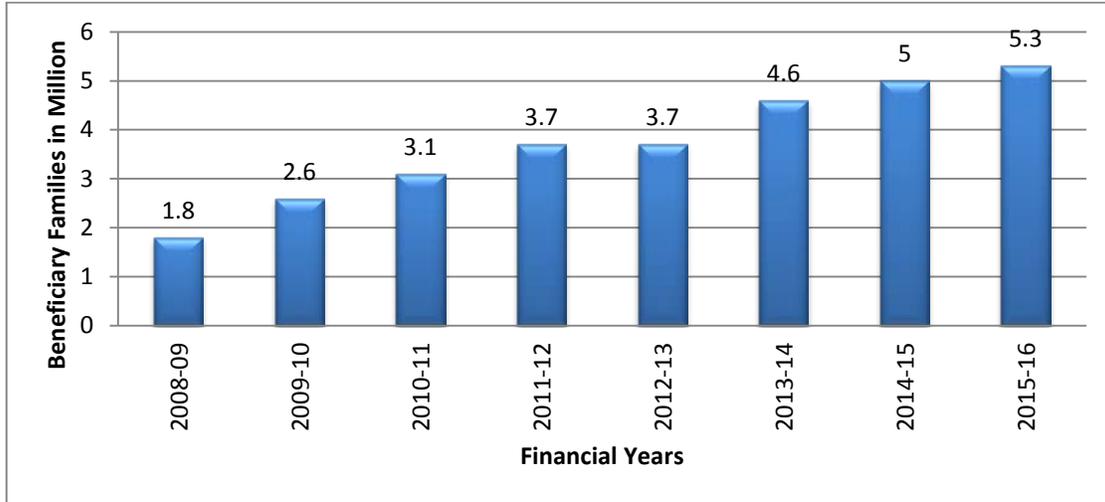
Source: BISP Annual Report 2015/16

Figure 3: Yearly Cash Grant Disbursed by BISP (in Billion Rs)
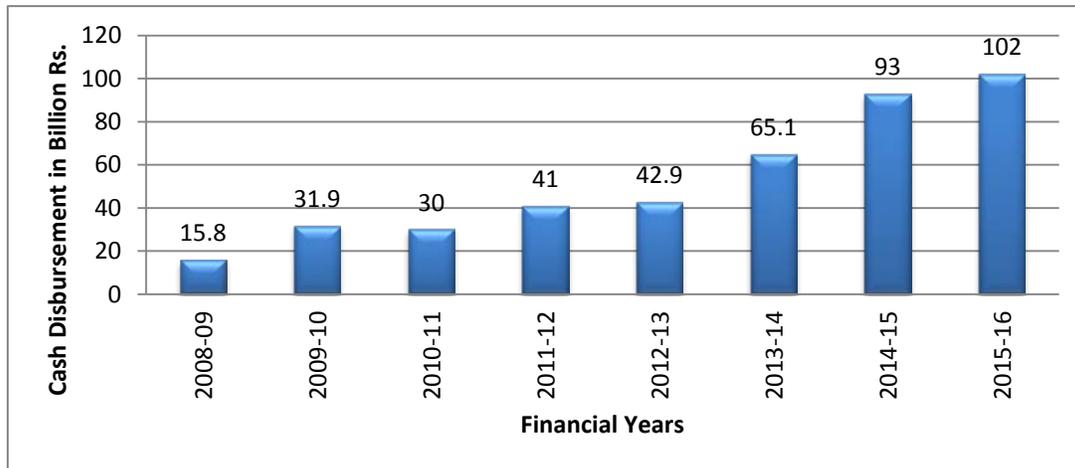
Source: BISP Annual Report 2015/16

2.5.4. Social Security Programmes

The social security benefits are paid to the employees of the Government, including both the civilian administration and military. Private sector employees are expected to be covered by contributions made by the employer with a small (1%) contribution of the

employees. There is no cover of any type of labor force which is working on contracts or those working in the informal sector that are estimated to constitute about 73 percent of the work force.

Among the various schemes of social security, the most important include the one founded in 1954 and named as Government Servants Pension Fund; it is working as a mandatory scheme for all government recruits that are retired from their service with a minimum period of twenty-five years. Pension is directly financed by government budget whereas the Provident fund is subtracted by the employer from the monthly wages of the workers.

2.5.5. Employees Old Age Benefit Institution (EOBI)

In 1976 EOBI was founded as a federal sovereign institution which is believed to work under Ministry of Labor. A board of 19 trustees administrates it, which are to be selected from government, employers and other unions. The system offers assistances of old age pensions and old age grants. At one time the federal Government also provides a matching grant of 5 percent but this was later withdrawn. Pensions are transferred monthly. The least amount of pension is Rs. 3600 per month. Old-age grants are given as per rule of insured person's average monthly salary for the number of years he served the employer. In the FY 2014/2015 only 364,000 people were registered to receive old age pensions, survivor's pensions, invalidity pension and survivor grant valued Rs. 16 billion. Collectively.

2.5.6. Provincial Employees Social Security Scheme (PSSS)

In 1967, PSSS was launched by covering textile industry on the condition of fortification for injuries, deaths, sickness and maternity. The scheme was further enhanced in 1969, with insertion of commercial and industrial workers.

2.5.7. Pakistan Poverty Alleviation Fund (PPAF)

PPAF was founded like a pinnacle Government non-revenue institute for the development of the community. PPAF acquires its assistance along with aid from Government of Pakistan, Italian Development Cooperation, commercial contributors, Development Bank of Germany and International Fund for Development. The basic

objective of this fund is to take necessary steps in improving the living standards of vulnerable as well as poor communities of the country. However, more precised goals of PPAF are:

- To attain widespread primary education.
- To eliminate extreme poverty and hunger.
- To endorse women empowerment and gender equality.
- To enhance maternal health.
- To create and reinforce harmony among community and NGO institutions.
- To lessen child mortality.

2.5.8. Workers Welfare Fund (WWF)

Under the Workers Welfare Ordinance 1971, WWF was founded in 1971. It gives coverage to the workers of only those institutions which have made them registered with the fund. It also receives aid from Workers Participation Fund which was established under the company's Profits Act 1968. Foremost targets of WWF are: To provide less price housing and welfare to the workers of industries.

- To provide free education up till secondary level.
- Scholarships from secondary onwards levels.
- Matrimony grants.
- Death grants

2.5.9. Labor Market Programmes

These include programmes as well as strategies proposed for promoting fortification of employees, proficient process of labor market and employment opportunities. At the national level, public works programme such as Tamir-e-Wattan programme and Khush-haal Pakistan Programme were launched within the last ten years and are reported to have had an impact on the standard living of ordinary people by providing employment opportunities and facilities regarding infrastructure, for instance, health care, education, sanitation, telephone, water supply, electricity, roads etc that result in immediate impact of energizing rural growth. Some also include the President's or People's Rozgar Scheme as it was variously termed as a prescribed tool for social protection for providing

admittance to finances on a very low mark up to facilitate unemployed personals for establishing their own small scale business.

Each provincial government has a range of Technical and Vocational Education Training Institutions that are scheduling for building up the capacity of its workforce through strengthening them and increasing their links among private segments ensuring their relevance to meet market demand. The Punjab Economic Opportunities Programme funded jointly by DFID focuses on poverty alleviation through provision of marketable skills and by enhancing the potential for livestock development.

2.5.10. Microfinance Initiatives

Micro-finance and micro-insurance are often also included in the category of social protection programmes. Pakistan's microfinance market is currently rated as the third best in the world. It has 3.2 million insurance policy possessors, 2.8 million loan clients, together with 5.1 million hoarders by means of a full-bodied, self-motivated organizational configuration mechanism designed for sustained development. Few of the MFIs embrace their specific viewpoint about providing loan and hence propose some exceptional economic merchandise. Among such MFIs, the most well-known is Akhowat. Its main philosophy circles around the theory of Karz-e-Hasnaa, i.e. offering help to the needy with interest free loans. It appeals various philanthropists for raising its funds so that it can finance the related operations. It organizes special events and campaigns before Ramzan for fund raising.

2.5.11. Micro insurance

Micro insurance is currently being provided by several companies in Pakistan. The current programmes were able to reach poor rural clients through linkages with micro-finance programmes. In these cases, the insurance product is not voluntary and is tied to the micro-loans which the MFIs are providing. A client is automatically insured when he takes a loan and the payment for the premium is deducted as part of his service fee for the loan. This particular insurance product generally covers life, health and hospitalization costs.

Chapter 3   Welfare Impact of Social Safety Nets (SSNs)

3.1.   Introduction

The present chapter made a reviewed analysis of potential welfare impact of SSNs including the Zakat and BISP. There are different reasons behind the poverty of different communities and there lies a diverse range of remedial measures to overcome them. As characterized by Devereux (2000), there are three root causes of poverty are:

a. **Less production:** insufficient income from industry and other production sources that give revenue.

b. **Susceptibility:** threat and effects of unpredicted down fall in revenues and expenditures.

c. **Reliance:** unable to build a self-governing living due to lack of employment opportunities.

The causes like less production and susceptibility are the factors which are not under control of the effected personnel. There are several unwaged people around the globe who are facing less income occupational problems, for instance, inconsequential trading in the unofficial zone. Less production results in unending deprivation and hence is a consequence of reduced income from property and industry.

Susceptibility results in temporary deprivation subsequently bringing a downfall in the profit silhouettes (Alamgir, 1980). The last bunch of causes is reliance that totally takes place from individual characteristics that becomes the reason behind the inability of a person to create a self-sufficient living because they cannot benefit the required capital from their employment because they are disabled mentally or physically, or else they are too young or too old to work competently (Sharp, 1997). Support from their families, neighborhoods and governmental as well as private institutions that proved charity turn out to be the reasons behind the survival of such individuals (Lipton, 1988).

Poverty which results from less production, susceptibility and Reliance can be restored all the way through intrusions to elevate the profits generated from the occupations. Less production can be paramount tackled by production enhancing interruptions whereas

susceptibility can be comprehended temporarily through SSNs, i.e. by cash grants or material goods subsidies. On the other hand, elimination of reliance cannot be made by production enhancing intrusions rather it demands direct transfers from the social welfare institutions (Herring, 1998).

Poverty Dilemma	Anti-poverty Intrusions
Less production (insufficient income from production sources)	**Profits creation** (Production enhancing intrusions
susceptibility (downfall in revenues)	**Social Safety Nets** (Cash grants or material goods subsidies)
Reliance (not capable of working)	**Social Welfare Institutions** (Direct transfers)

In social protection, two sets of public interventions can be observed which are 'livelihood promotion' and 'livelihood protection' (Sen, 1981). According to Dreze and Sen (1989), all the foundations of occupation are to be originated by 4 sorts of privileges, i.e. manufacturing based, employment based, business based and legacy or transfer based. The vision of SSNs comprises on the protection and support of the livelihood of underprivileged and susceptible communities.

3.2. Empirical Considerations of SSNs

The empirical findings reveal various safety net programmes have a positive impact on social and economic well-being (Nayab and Shujaat, 2014). However, welfare impacts are mostly obstructed by various factors like identification, coverage and accomplishment of these social safety net programmes (Bari, et al. 2005; World Bank 2007). Accessibility and type of interventions is highly linked to help people for moving out of poverty on permanent basis as well as improvement of the institutions in a broader framework. Supplementary concerns portraying SSNs are, replication, overlying, less coordination among the fragments of institution etc. which must be conquered for a better impact of such public schemes[1]. Before going in detail, it is worth mentioning that as per the mandate of this study, the below mentioned literature review has mainly been carried out in the domain of *Zakat* and BISP.

3.2.1. Welfare Impact of Zakat

Ahmed (2004) has estimated the Zakat collection and required resources to alleviate poverty in 24 IDB member countries by using a $1/day and $2/day poverty lines. To determine the required amount for poverty alleviation, the author multiplied the number of poor in each country and required resources as a percentage of GDP. The author found that Tunisia required only 0.3 percent of GDP under $1/day and 1.4 percent of GDP under $2/day to alleviate poverty. On the other hand, Nigeria required huge amount that is 107.7 percent ($1/day) and 149.6 percent ($1/day) of GDP respectively for poverty alleviation. The findings suggested that with the Zakat rate of 1.8 percent of GDP, only eight countries out of 24 countries (Algeria, Azerbaijan, Egypt, Jordan, Kazakhstan, Morocco, Tunisia and Turkey) owned the capacity to lift the poor out of poverty under $1/day criteria. With Zakat rate of 4.3 percent of GDP, half of the countries could move their hard core poor people out of poverty ($1/day). Using similar methodology, Yaumidin (2009) estimated the required resources for addressing poverty through Zakat for Malaysia and Indonesia and found that performance of Malaysia is much better than Indonesia.

Table 1: Federal and Provincial level disbursement of Zakat in FY 2015-16		
Sr. No.	**Provinces/ Other Areas**	**Disbursed Amount (Rs. Millions)**
1.	Punjab	2784.83
2.	Sindh	1190.40
3.	KPK	693.85
4.	Balochistan	256.55
5.	FATA	174.93
6.	ICT	132.79
7.	Gilgit-Baltistan	70.18
Total		5303.53

Source: Ministry of Religious Affairs

The data analysis of 2000/01 PSES carried out in Pakistan depicts that overall 4.1 percent of the households were given Zakat from both the sources, i.e. public as well as private. Among those 1.3 percent were from private and 2.2 percent were from public sources and 0.6 from both. These outcomes indicated that the coverage provided by public Zakat in much less than the actual number of households that are eligible for it. Thus, the problem under consideration is practical not theoretical. The Zakat funds are inadequate for

distributing to all underprivileged households to meet their basic needs. Furthermost, it was evaluated in this study that one fifth recipients of Zakat belonged to 3rd and 4th quintiles of income (Arif, 2006). Table 1 shows the federal and provincial level disbursement of Zakat by the Zakat system in FY 2015-2016.

Hassan and Khan (2007) found in Bangladesh that Zakat has led to increase the income and employment if it is allocated rightly. Authors suggested that Zakat funds can be used for other developmental and social expenditures. While discussing the distributive effect of Zakat, Awad (1989) estimated that in Sudan about 3 to 4 percent of GDP is collected as Zakat revenue which implies that one third of GDP can be redistributed form the rich to the poor in a decade.

Descriptive as well as existing empirical studies have showed that Zakat has played a significant role in alleviation of poverty. Raimi, et al. (2014) developed a faith-based model (FBM) by using a qualitative research method by integrating corporate social responsibility (CSR), Waqf and Zakat system in the poverty reduction model for Malaysia and found significant impact in poverty reduction. Akram and Afzal (2014) adopted ARDL approach of co-integration to evaluate the short and long run impact of Zakat disbursement on poverty and found similar findings.

Using generalized method of moments (GMM) for the period 2001- 2012 of 14 Malaysian states, Ahmed et al., (2015) examined the impact of Zakat on income inequality and poverty in Malaysia. The results indicated that while Zakat has no significant impact on income inequality, Zakat significantly reduce both poverty incidence and hardcore poverty.

3.2.2. Welfare Impact of BISP

BISP programme was initiated in 2008; therefore, limited research on BISP has been conducted including its targeting accuracy and welfare impacts. Majority of the studies have just conducted the reviewed analysis without investing the welfare impacts and accuracy in detailed manner. Only the two studies possess in-depth analysis that are Nayab and Shujaat (2014) and OPM (2013, 2014 and 2016). Using the propensity score matching (PSM) technique, Nayab and Shujaat (2014) has used the Pakistan Panel Household Survey (PPHS)-2010 and found that the as compared to the attempted and

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never attempted groups, the beneficiaries household are seen at a drawback situation. Moreover, although the attempt group has better circumstances than recipient group but still it's much more deprived than that group which never attempted for any assistance. The study found significant impact of BISP intervention on food and health expenditures but no significant impact on poverty, school enrollment and women empowerment. Oxford Policy Management (OPM)[2] conducted the impact evaluation of BISP in three consecutive years: 2013, 2014 and 2016 by using a panel dataset of BISP and observed impact on variety of indicators including poverty, women empowerment, child nutrition, child schooling, livelihood strategies and asset accumulation. The evaluation adopted quasi-experimental Regression Discontinuity (RD) design. Both the rounds found that few of the households were not delivered with all four quarterly disbursements. The findings suggest that by BISP cash grant an effect is observed on poverty reduction and increase in utility expenditure. A great number of recipients reported that they have the authority over the cash grant and this resulted as a livelihood transformation approach implemented in recipient's household from seasonal labor to self-employed activities.

Some inconsequential studies have also reviewed the programme in various dimensions. Ullah (nd) highlighted the fact that after being registered with BISP programme a significance change is observed in the social consideration of women. The study found that most of the female beneficiaries were not possessing CNIC before BISP grant. CNIC helped women to vote as they simultaneously registered with Election Commission of Pakistan along NADRA registration. CNIC helped in getting wedlock money (Mahar) from husbands, transfer lands, own property, disability fund from government, become eligible for higher education and scholarship, open bank account, pass through security check post with CNIC, become eligible for bank loans, can claim and transfer inherited land etc.

Shehzad (2011) observed the BISP beneficiaries in 4 districts: Mianwali, Sanghar, Mirpurkhas and Multan. The results of his study designate that the cash grants transferred by BISP were supportive for most beneficiaries for meeting their basic needs such as food products, offspring's education, utility bills, travelling cost etc. the collective

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[2] http://www.bisp.gov.pk/

analysis illustrates that BISP cash grants had empowered women financially to upgrade their household conditions. It was also observed that most of the recipients were investing that money on food consumption which can eventually play a part to reduce malnutrition in the country.

Ghazadar (2011) conducted the reviewed analysis of various SSNs in Pakistan and argued that BISP will empower the women as they cannot be enrolled in programme without NADRA identity cards. For being registered with BISP, initially they must register themselves with NADRA. The study describes that due to this compulsion there was a significant increase in filing NADRA applications, specifically in less developed rural locales and among extreme poor women.

Arshad (2011) monitored that cash grants from BISP had empowered women by two means. Firstly, when she receives the cash herself the wisdom of authority rises in her. Secondly, the optimistic tool of BISP programme is that by following its policy, it provides access and control of the cash grant to the women, which ensures women's admittance to income.

Gazdar and Mallah (2010) commenced a quick evaluation in five different villages of Punjab and Sindh. In their study, they argued that the given impression of BISP is different from the real picture. Their findings declare that the beneficiaries of BISP are still poor and because of lack of political relationships, many of the needy poor personnel have been excluded due to the reason that they were associated with the opponent political group.

Chapter 4   Methodological Framework and Data Description

4.1.   Introduction

As discussed in chapter 1 that the present study aims to observe the welfare impact of two social safety nets (SSN) programmes of Pakistan, named as Zakat and BISP where objectives can be viewed through four main research questions; a) how bot the Zakat and BISP is disbursed across regions and provinces? b) which type of socio-economic group has been receiving Zakat and BISP? c) which of the SSN programme have accurate targeting to the poorest of the poor? and d) what is the welfare impact of both the programmes? It is worth mentioning that welfare has been defined at household level with various indicators including food consumption, non-food consumption, headcount poverty, consumption quintiles, multidimensional poverty, child school enrollment and women empowerment.

This present chapter highlights the methodological framework and data description to accomplish the above-mentioned objectives/ research questions of the study. Section 4.2 highlights the design of data collection required to accomplish above mentioned objectives and explains the utilized dataset by the study including population universe, sample size and limitations in dataset. The last section discusses the detailed methodology against each objective of the study.

4.2.   Data Description

The progression of designing and implementation of a research analysis is as important to its efficient completion as the information itself. Successful research practices mainly depend on focused problem identification and analysis of the problem. Keeping in view the above mentioned research questions, the following types of information are necessary to accomplish the objectives of this study;

- Information on both the Zakat and BISP programme along with socio-demographic and economic profile of recipients of these SSNs;
- Assets and other well-being information are required to observe the accuracy of targeting of both the programme and the welfare impact on recipients of Zakat and BISP

The latest available national dataset named as Household Integrated Economic Survey (HIES) 2013/14 covers all the desired information to fulfill above mentioned objectives of the study. Pakistan Bureau of Statistics (PBS) managed the HIES survey since 1963, it has been conducted, with some breaks, not for each year. In 1990, the questionnaire of HIES was revised to capture information on detailed food and non-food consumption and four rounds were conducted in 1990/91, 1992/93, 1993/94 and 1996/97 by using revised modules through which headcount poverty (consumption base) was measured. It was named as Pakistan Integrated Household Survey (PIHS) and two rounds in 1998/99 and 2001/02 were conducted with this name. In 2004/05 it was renamed as Pakistan Social and Living Standards Measurement (PSLM) Survey and since then HIES is the sub-set of PSLM survey. PSLM is representative at district level, while HIES is representative at national/provincial level. Since 2004/05 six rounds of HIES were carried out during 2004/05, 2005/06, 2007/08, 2010/11, 2011/12 and the latest available 2013/14.

Besides providing an extensive array of information about the economic as well as socio-demographic characteristics of households, that include, health, employment, population welfare, water supply, household facilities, sanitation, household assets etc, also gathered by PSLM at district level, HIES gives significant information about household consumption prototypes, expenditure utilization, savings, income, legal responsibilities etc. at both provincial as well as national level with rural/urban breakdown. Since 1990/91 HIES has been used to calculate official headcount poverty in Pakistan.

The present study has used the latest available 2013/14 round of HIES which covers the sample 17,989 households. The world of HIES survey constitutes of all the rural along with urban population in all 4 provinces, Gilgit-Baltistan and AJK. However, military plus FATA limited regions are not covered by the survey. Two separate questionnaires are being administered by HIES for each household where female enumerator gathers information from female respondent while male enumerator gathers information from male respondent. Both the male and female questionnaires cover separate fragments; among every fragment glances on a specific characteristic of household's information, behavior and wellbeing.

To determine the representative sample size for HIES 2013/14, PBS used 6 indicators which included literacy rate (10 and above age population), population 10 age and above that ever-attended school, net enrolment rate at primary level, children age 12-23 months immunized fully, contraceptive prevalence of women age 15-49 years and post-natal consultation for ever-married women aged 15-49 years. Keeping in view the proportion of these six indicators at various margin of error levels, a representative sample size of 19620 households was determined from 1368 primary sample units (PSUs) including (567 urban and 801 rural from the four provinces with urban-rural breakdown, however, the data was collected from 1307 PSUs by covering 17989 households. It is worth mentioning that micro data of AJK and GB was not shared, therefore analysis in present study covers only 4 provinces. The distribution plan of PSUs and SSUs by province and region is as under in Table 2:

Table 2: Profile of the sample from HIES 2013-14

Province/Area	Sample PSUs			Sample SSUs		
	Urban	**Rural**	**Total**	**Urban**	**Rural**	**Total**
Punjab	282	287	569	3150	4447	7597
Sindh	123	241	364	1374	3837	5211
KPK	115	144	259	1301	2221	3522
Baluchistan	36	79	115	409	1250	1659
Total	**556**	**751**	**1307**	**6234**	**11755**	17989
AJK	40	42	82	422	624	1046
GB	32	40	72	350	619	969
Total	**72**	**82**	**154**	**772**	**1243**	**2015**
Grand total	**628**	**833**	**1461**	**7007**	**12998**	**20004**

Source: HIES 2013-14 Data Report

4.3. Methodological Framework

The below sub-sections explain briefed details over the measurement of indicators and detailed methodology in the line of objectives of the study

4.3.1. Socio-Demographic Profile of Recipients of Zakat and BISP

The male questionnaire of 2013/14 HIES covers detailed information on transferred received (Zakat, Ushar, BISP, remittances and other sources) and paid out by the households with the reference period of one year preceding the survey. Following objective first, percentage of recipients of households is estimated who have received Zakat (public and private) and BISP or both (Zakat and/or BISP) assistance during last

one year. It is worth mentioning that HIES 2013/14 first time has covered the BISP recipient's data while the earlier HIES rounds limited only to Zakat/Ushar information as BISP was launched in 2008/09. Unlike to the study of Nayab and Shujaat (2014) that limited only to BISP beneficiaries and used Pakistan Panel Household Survey (PPHS)-2010 dataset, HIES survey covers information of only those who received assistance and lack information on those who attempted for assistance but not received.

A comparison of both the Zakat and BISP recipient and non- recipient households is made by using their various socio-demographic and economic characteristics to explain the targeting level of both the programmes i.e. *the extent to which a programme reaches its projected targeted population as it is usually argued that SSN should target poorest of the poor and marginalized groups*. The analysis is carried out at regional level. These socio-demographic and economic characteristics involved to observe targeting level includes the following broad indicators;

1. Sex of head of household
2. Education of the head of household
3. Employment status (employed vs unemployed/inactive) of head of household
4. Family size and dependency burden (ratio of dependent below 15 age and above 64 age to independent population 15-64 years)
5. Household occupancy status, crowding (persons per room) and toilet facility
6. Various durable assets including refrigerator, motorcycle and car/vehicle ownership
7. Various productive assets including land and livestock ownership, status of receiving overseas remittances and non-farm enterprise (whether household own any non-farm enterprise or not)

4.3.2. Accuracy and Performance of Zakat and BISP Targeting

Though above mentioned socio-demographic variables also precisely explains the accuracy of Zakat and BISP targeting, whether the programme is effectively reaching to the poorest and needy population or not? For a detailed analysis on accuracy and performance of both the Zakat and BISP, three household welfare indicators/poverty were taken which includes per capita consumption expenditure quintiles, headcount

poverty and multidimensional poverty index (MPI). Before explaining the detailed methodology on accuracy and performance, it is necessary to explain the construction of above mentioned three welfare indicators of poverty.

HIES dataset obtained detailed consumption expenditures including food and non-food items from sampled households, using these food and non-food consumption expenditures (excluding durables), per capita consumption expenditures were calculated and five quintiles were established where bottom quintile is considered as the destitute or deprived household.

Regarding headcount poverty, the Government of Pakistan adopted Food Energy Intake (FEI) approach in 2001 that was calories based poverty (2350 calories per adult equivalent per day[3]). The FEI measure was facing various laminations including outdated basket of good, methodology not consistent to non-food consumption variation and urban biasness of Consumer Price Index (CPI). To overcome, The Government of Pakistan has recently updated the food and non-food items basket, necessary to measure head count poverty. The poverty line was also updated and new poverty line is set of Rs. 3030 per adult equivalent per month for HIES 2013/14 instead of Rs. 2400. per adult equivalent per month if old FEI approach would be followed. The new approach is named as Cost of Basic Needs (CBN) approach and it considers additional non-food expenditures on education, clothing and shelter to be the part of poverty measurement. Using the CBN approach, this study has measured headcount poverty by using Rs. 3030 per adult equivalent per month and found 29.5 percent poverty (18.2% in urban areas and 35.6% in rural areas), the same number reported by the government.

Headcount poverty may capture limited deprivation as being estimated only through consumption expenditures, however household deprivation is a complex concept that could be in the shape of education, health and assets deprivation. To capture detailed household deprivation, the present study has followed Alkaire and Foster methodology and estimated multidimensional poverty index (MPI).[4] The study has used 3 dimensions which include education, health and living standards to estimate MPI. Overall 14 indicators were taken against these three dimensions including 4 indicators each for

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[3] An individual of age below 18 years is weighted equal to 0.8.
[4] See details at website http://www.ophi.org.uk/research/multidimensional-poverty/alkire-foster-method/

education and health and 6 indicators for standard of living. Equal weights were taken for each dimension whereas they vary for indicators within each dimension. The detailed definition of each indicator and information on weights is explain in Annexure Table 3. Like consumption quintile, the households below cut-off of 33 percent was considered as the deprived population.

The performance and targeting of both the SSNs, Zakat and BISP is measured through the following four ways while measurement formula is given in Table 3:

a. Coverage of the poor: it is defined as percentage of poor covered by the each of the SSN program (Zakat and BISP). Where coverage is measured by all the above mentioned three indicators including bottom quintile of per capita consumption expenditure, head count poor, and MPI poor (based on 33% cut-off).

b. Targeting performance: it is measured as the percentage of program beneficiaries who are poor; in other words, the share of poor in the total number of program beneficiaries. Again, the targeting performance is defined by above mentioned three indicators of poverty.

c. Exclusion error or under-coverage: percentage of the poor missed (or not covered) by the Zakat and BISP program;

d. Inclusion error or leakage: percentage of beneficiaries who are not poor but are getting benefits from Zakat and BISP program.

Table 3: Performance Measures of Zakat and BISP

	Target Group (Poor)	**Non-Target Group (Non-Poor)**	**Total**
Getting Assistance	Correctly Identified (S1)	Inclusion Error (E2)	Total Eligible (N3)
Not getting Assistance	Exclusion Error (E1)	Correctly Identified (S2)	Total Non-Eligible (N4)
Total	Total Target Group (N1)	Total Non-Target Group (N2)	Total Population (N)
Coverage = S1/N1 *Targeting* = S1/N3 Leakage (*inclusion* error) = E2/N3 Total Coverage = N3/N Under-coverage (*exclusion* error) = E1/N1			

4.3.3. Welfare Impact of Zakat and BISP: A Note on Propensity Score Matching

Regarding the last objective, the study has estimated the welfare impact of both the Zakat and BISP where 5 welfare indicators were used including; per capita monthly consumption expenditures (in Rs.), total consumption expenditures, head count poverty based on CBN approach, multi-dimensional poverty index (MPI), child school enrolment and women empowerment. The detailed definition of these indicators is given in Table 4;

Table 4: Household Welfare Impact Indicators

Household Welfare Indicators	Measurement of Variable
Per capita monthly consumption expenditures (in Rs.)	The total monthly consumption expenditures (in Rs.) made by household and adjusted by household size
Head Count Poverty	Whether the household is poor or not-poor by using Cost of Basic Need approach and poverty line of Rs. 3030 per adult equivalent per month.
Current School Enrollment	Whether the Child of age 6-14 is currently attending school or not
Multi-dimensional poverty index (MPI)	Whether a household is deprived or not by using cut-off of 33%
Women empowerment	Whether a women of age 15-49 years is involved in decision making to pursue her education and/or seeking work

Before explaining detailed methodology, it is worth mentioning that the present study has separately measure the impact of Zakat and BISP on these welfare indicators as well as the combined impact is also estimated.

To estimate the impact of Zakat and BISP cash assistance on above mentioned household's welfare indicators, this study has employed *Propensity Score Matching* (PSM) technique. The aim of the all the social safety net programmes is to improve the lives of the poor, especially the most vulnerable and marginalized. However, all of them do not necessarily get assistance due host of limitations in the design and implementation of these programmes. Some of these households get assistance from BISP and Zakat or from both while majority do not, referred as 'receiver' and 'non-receiver' households in this study, respectively.

The question arises *why we have used Propensity Score Matching (PSM) technique to measure the welfare impact of Zakat and BISP*? The issue is to manage selective biasness

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as the receiver group (getting assistance from Zakat, BISP) is the marginal group while the non-receiver may be both the poor and non-poor group, therefore comparing poor with non-poor is not ideal that can be done through various techniques i.e. logistic regression analysis, regression analysis, paired observation and double difference (DD) methods; however, all these methods widely ignore the issue of 'selection bias' as socio-demographic profile and economic characteristics of the 'receiver' and 'non-receiver' households may widely differ.[5] It is usually understood that the 'non-receiver' group may be comparatively better off than the receiver so should not get assistance from Zakat or Bait-ul-Maal or BISP. It is also likely that despite of getting assistance, the 'receiver' group though improved some welfare level but remained marginal than the 'non-receiver' households. Taking the mean outcome of both these groups as a proxy of welfare is also not advisable as the 'receiver' and 'non-receiver' households usually differ on their socio-economic background even in the absence of assistance and/or sometime during the execution of the programme (Ravallion, 2003).

The Propensity Score Matching (PSM) technique developed by Rosenbaum and Rubin (1983), is one of the possible solutions not only to deal with the issue of 'selection bias' but also to measure the welfare impact of any kind of intervention. The reasoning behind this technique is to find a comparison (control) group from 'non-receiver' households that should possess similar characteristics to the 'receiver' (targeted) group in all the aspects including socio-demographic and economic profile except one, that the control group does not have received any cash assistance i.e. Zakat, BISP etc. The technique balances the observed covariates between the 'receiver' and the 'non-receiver' households/group based on the similarity of their predicted probabilities of receiving cash assistance, called their 'propensity scores'. The difference between PSM and a pure experiment is that the latter also assures that the treatment and comparison groups are identical in terms of the allocation of disregarded characteristics (Ravallion, 2003).

Using the profile of households given in 2013/14 HIES survey, four groups were formed; only BISP recipient households, only Zakat recipient households, households getting assistance either from Zakat or BISP and the non-receiver households. In the PSM

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[5] Nssah (2006). Propensity Score Matching and Policy Impact Analysis A Demonstration In Eviews. WPS 3877. The World Bank. Washington, D.C.

analysis, the former three groups are the 'treated households' while the later are 'non-treated households'. Treated households are matched to the non-treated households on the basis of the propensity score.

$$P(Y_i) = \text{Prob} (D_i = 1 | Y_i) = E(D | Y_i) \qquad (1)$$

Where $D_i = 1$ if the household has received assistance from BISP/Zakat and 0 otherwise and Y_i is a vector of pre-treatment characteristics. as suggested by Ravallion (2003), larger the sample of non-receiver household is desired for accurate analysis. Since we have representative sample of both the receiver and non-receive households, therefore we estimate the propensity scores on the basis of the following model run through logistic regression:

$$\text{Ass}_i = \alpha_0 + \alpha_1 I_i + \alpha_2 hh_i + \alpha_3 \text{Asset}_i + \alpha_4 Rg_i + \varepsilon_i \qquad (2)$$

In equation 2 Ass_i represent whether household i has received assistance from Zakat or BISP or not. On the right-hand side, there are four sets of explanatory variables which can influence status of receiving assistance including I_i a vector of individual characteristics like gender, education and employment of household head, Hh_i represents household characteristics like dependency ratio, household size, ownership of house crowding, Asset_i is the vector of asset characteristics which include durable and productive assets. Rg_i represents provinces and region dummies.

After running the model through logistic regression approach, predicted values of the probability were calculated called as 'propensity scores' for every sampled receiver and non-receiver. Some of the non-receiver sampled households, mostly the rich households may be excluded due to their high scores as they have better socio-demographic profile. Before estimating the PSM, two conditions must be met to estimate the *Average Treatment on the Treated* (ATT) effect based on the propensity score of households (Rosenbaum and Rubin, 1983). The first condition can be called as the balancing of pre-treatment variables given the propensity score, mean that household should have similar characteristics. If the balancing hypothesis is satisfied, the pre-treatment characteristics must be the same for the target and the control groups. The second condition is that of the unconfoundedness given the propensity score. If assignment to treatment is unconfounded conditional on the variables pretreatment, then assignment to treatment is unconfounded given the propensity score.

After calculating propensity scores through logistic regression model, and then the *Average Treatment on the Treated* (ATT) effect is estimated as by four different methods of PSM: Kernel Matching, Nearest Neighbour Matching; Stratification Matching and Radius Matching (Becker and Ichino, 2002).

a) Nearest Neighbor (NN) Method

The most straightforward matching method is the NN method where, each treated household is matched with the non-treated households having the closest propensity score with replacement. After comparing the difference in each matched pair is computed, and finally the ATT is estimated by taking the average of all pairs. Let T be the set of treated units and C the set of control units; X_i^u and X_j^g are the observed outcomes of the treated and control units, respectively. If A is a set of treated units matched to the control treated unit i with an estimated PSM value of P_i then:

$$A_{(i)} = \min j \parallel P_i - P_j \parallel \tag{3}$$

b) Radius Matching (RM) Method

The Nearest Neighbor method may face the risk of bad matches if the closest neighbor is far away, it can be overcome through imposing a limit on maximum propensity score distance, called as radius. However, the limit of radius should be careful as a very small radius can shed treated observations, but the quality of the matches may improve.

$$A_{(i)} = \{P_j \mid \parallel P_i - P_j \mid < r\} \text{ by applying weights } w_{ij} \tag{4}$$

Where $w_{ij} = \frac{1}{N_i^A}$ if $j \in A_{(i)}$ and $w_{ij} = 0$ otherwise

Average Treatment Effect (ATT) for both Nearest Neighbor and Radium Matching can be estimated as

$$ATT^N = \frac{1}{N^T} \sum_{i \in T} [X_i^T \sum_{j \in A(i)} w_{ij} X_j^A] \tag{5}$$

$$ATT^N = \frac{1}{N^T} \sum_{i \in T} [X_i^T - \sum_{i \in T} \sum_{j \in A(i)} w_{ij} X_j^A]$$

$$= \frac{1}{N^T} \sum_{i \in T} X_i^T - \frac{1}{N^T} \sum_{j \in A} w_j Y_j^A] \qquad \text{where } w_j = \sum_i w_{ij}$$

Similarly, the variance can be estimated by taking fixed weights and independent outcome across units.

$$\text{Variance } ATT^N = \frac{1}{(N^T)^2} \left[\sum_{i \in T} var(X_i^T) + \sum_{j \in A} var(w_j)^2 \, var(X_j^A) \right] \tag{6}$$

$$= \frac{1}{(N^T)^2} [N^T var(X_i^T) + \sum_{j \in A}(w_j)^2 \, var(X_j^A)]$$

$$= \frac{1}{N^T} \, var(X_i^T) + \frac{1}{(N^T)^2} \sum_{j \in A}(w_j)^2 \, var(X_j^A)$$

c) Kernel Matching Method

The Kernel method matches all the treated households with the weighted average of all the non-treated households where weights are inversely proportional to the distance between the propensity scores of treated and non- treated households. The ATT is calculated as:

$$ATT^K = \frac{1}{N^T} \sum_{i \in T} \left\{ X_i^T - \frac{\sum_{j \in Q} Y_j^A \, H\left(\frac{P_j - P_i}{V_n}\right)}{\sum_{K \in A} H\left(\frac{P_k - P_i}{V_n}\right)} \right\} \tag{7}$$

$$= \frac{\sum_{j \in Q} X_j^A \, H\left(\frac{P_j - P_i}{V_n}\right)}{\sum_{K \in A} H\left(\frac{P_k - P_i}{V_n}\right)} \}$$

Where H(.) represents Kernel Function, and V_n is Bandwidth Parameter.

d) Stratification Matching Method

The stratification matching method, consists of dividing the range of variation of the propensity score in a set of intervals such that, within each interval, the treated and non-treated household have, on average, the same propensity score. This method is also known as sub- classification, blocking or interval matching. Hence, the z index defines the blocks over intervals of the propensity score; within each block,

$$ATT_z^S = \frac{\sum_{i \in I(z)} X_i^T}{N_z^T} - \frac{\sum_{j \in I(z)} X_j^Q}{N_z^Q} \tag{8}$$

$I(z)$ is a set of units in block g while N_z^T and N_z^Q are the numbers of treated and control units in block z.

$$ATT^S = \sum_{z=1}^{Q} T_z^S \, \frac{\sum_{i \in I(z)} D_i}{\sum_{\forall_i} D_i}$$

4.4. Summary of Chapter

This chapter describes the data description and methodological framework as according to the objectives of the study. To observe the recipients of Zakat trends, the study has used various rounds of micro-dataset of HIES survey; however, for in-depth analysis on targeting of Zakat and BISP, their targeting efficiency and to estimate the welfare impacts, the latest available 2013/14 round of HIES is used which covers the sample 17,989 households.

A comparison of both the Zakat and BISP recipient and non- recipient households is made by using their various socio-demographic and economic characteristics to explain the targeting level of both the programmes. The performance and accuracy of both the programmes is observed on a wide range of welfare indicators including per capita consumption expenditure quintiles, headcount poverty and multidimensional poverty index (MPI).

The study has estimated the welfare impact of both the Zakat and BISP on 5 welfare indictors which include; per capita monthly consumption expenditures (in Rs.), total consumption expenditures, head count poverty based on CBN approach, multi-dimensional poverty index (MPI), child school enrolment and women empowerment. in this regard *Propensity Score Matching* (PSM) technique is applied to measure welfare impact.

Chapter 5   Profile of Recipients: A Comparison of Zakat and BISP

5.1.   Introduction

In the light of first objective of this dissertation, the present chapter has made a comparison of Zakat and BISP recipient households over their socio-demographic and economic profile by taking household head, demographic, household dwelling and productive assets characteristics that how much both the groups are similar and differ to each other on these characteristics. Both the groups were also compared with the non-recipient households, the households who have not received cash assistance from both these programmes.

The Chapter has been divided into 3 sections. Section 5.2 details the province and region wise profile of recipients of Zakat and BISP, followed by detailed comparison on socio-demographic and economic characteristics of recipients of both the Zakat and BISP as well as non-recipient households in Section 5.3.

5.2.   Recipients of Zakat and BISP Households

Using various rounds of HIES micro dataset (2005/06 to 2013/14 rounds), it was found that percentage of households who have received Zakat/Usher have been declining consistently over years both in rural and urban areas. By comparing the percentage of 2005/06 with 2013/14 HIES survey, the results show that percentage of Zakat recipient households turned down three times and five times within rural and urban areas respectively. Latest HIES 2013/14 survey shows that only 0.6 percent of the households in Pakistan has received Zakat/Usher with more percentage in rural areas (0.7%) than the urban areas (0.3%). Though sample size of HIES is sufficiently large (17,989 households) and questionnaire is almost consistent in the all the rounds since 2005; however, very few percentage (113 households) in 2013/14 has reported that they have received Zakat/Usher during last one year (Table 5). It may reflect household's reluctance to disclose that led to under-reporting. The under-reporting can also be viewed from the HIES 2013/14 survey where Zakat donation details are also available. The data shows that 7.9 percent of the households have reported that they donated Zakat during

last one year (11.5% in urban areas and 5.8% in rural areas), mainly to the private sector. The percentage by province and region is reported in Annexure Table 4.

Table 5: % of Households Who Received Zakat/Usher —2005 to 2013 Period

Round of HIES	% of Zakat Receiver Households		
	Urban	**Rural**	**Total**
2005-06	1.6	2.0	1.9
2007-08	0.4	1.6	1.2
2010-11	0.6	1.1	1.0
2013-14	0.3	0.7	0.6

Source: Estimated from various rounds of HIES micro datasets

Table 6 shows that out of the Zakat recipient households (0.6%), only 0.1 percent have received Zakat from the public sector (federal/provincial/district governments) while the rests 0.4 percent have received from private sources including relatives, NGOs, trust etc. contrary to Zakat, the percentage of BISP recipient households is quite high (1646 households) as 2.9 percent of the urban households and 10.2 percent of the rural households have received cash assistance from BISP, thus making an average of 7.6 percent at the national level (Table 6). Though very high percentage of population has reported as BISP recipient, however still it is estimated that total recipient households estimated by HIES are much lower (1.83 million) as compared to BISP statistics whereas the active beneficiaries of BISP for the same year (2013/14) were 3.9 million (excluding AJK, GB and FATA). It could be either due to lower coverage of BISP beneficiaries in HIES survey or overall under reporting of total population of Pakistan as projected population from 2013/14 HIES is around 162 million.

Table 6: % of Households Who Received Zakat/Usher and BISP Cash Transfer

Source of Assistance	Urban	Rural	Total
Zakat	0.3	0.7	0.6
- Public sector	0.1	0.2	0.1
- Private sector	0.3	0.5	0.4
BISP	2.6	9.7	7.1
Received from Zakat or BISP	**2.9**	**10.2**	**7.6**

Source: Estimated from HIES 2013/14 micro dataset

Table 7 shows provincial and region-wise percentage of Zakat and BISP recipients of households. The statistics reveals that the highest percentage of Zakat receiving households is in KP (2%), followed by Punjab and Balochistan with 0.4 percent and the

lowest in Sindh (0.2%). Across the regions, the results are quite interesting as except province Punjab, more percentage of the urban households have reported that they have received Zakat as compared to the rural households.

Table 7: % of Households Who Received Cash Assistance (Zakat or BISP) by Province and Region

Assistance Type	Urban	Rural	Total
Zakat Receiver (in %)			
KP	2.1	2.0	2.0
Punjab	0.2	0.5	0.4
Sindh	0.2	0.1	0.2
Balochistan	0.8	0.3	0.4
National	**0.3**	**0.7**	**0.6**
BISP Receiver (in %)			
KP	9.8	21.5	19.3
Punjab	1.7	3.5	2.9
Sindh	2.8	21.3	11.5
Balochistan	1.4	2.5	2.2
National	**2.6**	**9.7**	**7.1**
Both Zakat or BISP Receiver (in %)			
KP	11.3	22.8	20.7
Punjab	1.9	4.0	3.3
Sindh	3.0	21.3	11.7
Balochistan	2.2	2.6	2.5
National	**2.9**	**10.2**	**7.6**

Source: Estimated from HIES 2013/14 micro dataset

Province KP also stands first on BISP cash assistance receiving households as 19 percent of the total households have reported that they received BISP cash assistance during last one year. The percentage of BISP cash assistance recipient in Sindh is 11.5 while households from both the Punjab and Sindh have reported this percentage to 2.9 and 2.2, respectively. These numbers are differing to the earlier study of Nayab and Shujaat (2014) which reported Sindh at top (13.6%), followed by Balochistan (8.5%), KP (4.9%) and Punjab (3.1%). The difference could be due to two reasons; first the estimates based on Nayab and Shujaat study used Pakistan Panel Household Survey (PPHS) 2010/11 dataset that is not nationally representative survey as its sample is limited only to 16 districts and 4142 households. Second, BISP targeting criteria changed in 2010/11 where BISP shifted its targeting from subjective approach (through parliamentarians) to

scientific approach (proxy mean test formula) and beneficiaries were identified through a door-to-door household survey.

Contrary to Zakat/Usher, more percentage of the rural households have received BISP cash assistance in all the provinces of Pakistan; however rural statistics of Sindh recipients (21.3%) is quite close to KP province (22.8%). Except urban KP, the percentage of BISP cash assistance is 2 to 3 in all the other three provinces (Table 7). The high percentage of BISP receiver households in KP province could be due to worse law and order situation, especially in 2008-2013 period that make worsen vast majority of population both in rural and urban areas. Since BISP beneficiaries were identified by BISP Poverty Score Card (PSC) survey 2010/11 so high percentage of beneficiaries were enrolled in the survey. Quality of PSC survey could be another reason due to which some eligible households were not entertained in some regions/provinces. As shown in Table 8 province Balochistan, especially the rural areas have very lower percentage of BISP beneficiaries despite of high poverty and vulnerability in the province. The wide coverage difference among urban and rural regions in Province Sindh could be due to huge poverty disparity in Sindh province among rural and urban regions due to which concentration of BISP beneficiaries in rural areas is 7 times higher than the urban areas.

5.3. Household Profile of Recipients: A Comparison of Zakat and BISP

5.3.1. Household Head Profile of Recipients and Non-Recipients

This section makes the comparison of BISP and Zakat recipient households as well as with both the recipient households with non-recipient households. Table 8 reports the percentage distribution of household head characteristics by receiver and non-receiver of Zakat and BISP households. The results show that among the non-receiver households (both Zakat and BISP), 10.4 percent are headed by females; the percentage is 10 for BISP cash assistance households and 29.5 for Zakat receiver households, much higher than both the BISP and non-receiver households.

Regarding the education of head of household, the results in Table 8 reveals that both the Zakat and BISP recipient households are mostly headed by illiterate or less educated (upto primary grades) households as compared to the non-recipient households. The distribution also reveals that more BISP cash receiving households are illiterate and less

educated compared to Zakat, around 9 percent of the Zakat receiver households have their head with education more than 10 grades, the percentage is 4 for BISP receiver households. regarding the employment status of household head, BISP cash receiver head of households have the highest percentage of employment (86%) as compared to Zakat recipient heads (62%) and non-recipient households (85%). The lower employment percentage in Zakat recipient heads of households could be due to more concentration of female headship who are unemployed/inactive due to various cultural and other social norms.

Table 8: % Distribution of Household's Head Characteristics by Recipients and non-Recipients of Cash Assistance

Head Characteristics	Recipients Households			Non-Recipients Households
	Zakat	BISP	Overall	
Sex of Head of Household				
Male	70.5	90.2	88.7	89.6
Female	29.5	9.8	11.3	10.4
Education of the Head of Household (in Grades)				
0 to 5	64.8	82.4	81.4	55.0
6-10	26.1	14.0	14.6	30.1
Above 10	9.1	3.7	4.0	14.9
Employment Status of Head of Household				
Employed	61.9	86.4	85.0	84.8
Unemployed/Inactive	38.1	13.6	15.0	15.2

Source: Estimated from HIES 2013/14 micro dataset

5.3.2. Demographic Profile of Recipients and Non-Recipients Households

The distribution by household demographic characteristics is reported in Table 10 which shows that distribution by members of household size is quite close among Zakat recipient and non-recipient households; however, BISP cash assistance receiving households are facing large family size as near to half of these households (47%) have family size 8 and above persons in their homes, this percentage is 19 for Zakat recipient and 27 for non-recipient households. Similar statistics can be observed on dependency burden of households where one-third of both the Zakat recipient and non-recipient households are facing high dependency rates whereas near half of the BISP recipient households are facing high dependency rates. One-third of the Zakat recipient households fall in low dependency burden compared to one-fourth of BISP recipient households.

Overall both Table 8 and Table 9 shows that socio-demographic profile of both the Zakat and BISP recipient households vary which could be either due to different targeting mechanism of both the programmes or due to lower reported sample of Zakat recipient households in HIES survey (113 households), that might not be sufficient to draw meaningful results as compared to the BISP recipient sample (1646 households).

Table 9: % Distribution of Household's Demographic Characteristics by Recipients and non-Recipients of Cash Assistance

Demographic Characteristics	Recipients Households			Non-Recipients Households
	Zakat	**BISP**	**Overall**	
Family Size (in numbers)				
1-4	32.4	13.2	14.5	28.1
5-7	49.0	39.9	40.4	45.1
8-9	8.6	25.5	24.3	15.3
10+	10.1	21.4	20.8	11.4
Dependency Ratio*				
Low	32.2	24.2	24.9	41.9
Medium	33.4	26.5	26.7	25.0
High	34.4	49.4	48.4	33.1

* Household size was categorized into two categories dependent (below 15 age and above 64 age) and independent (15-64 years age). Dependency ratio is number of dependent divide by number of independent. Low dependency means if ratio is 0-0.5, medium mean 0.51-1 and high mean >1

Source: Estimated from HIES 2013/14 micro dataset

5.3.3. Household Dwelling Profile of Recipients and Non-Recipients

Table 10 reports the household dwelling characteristics by Zakat and BISP recipients and non-recipient households. The analysis shows that high percentage of Zakat recipient households (29%) not own house as compared to BISP beneficiaries (8%), while 17 percent of the non-recipients of both the Zakat and BISP also not own house. Despite of low ownership among Zakat recipient households, they are facing less crowding issues as compared to BISP recipient households as more than half (55%) are living in homes with 3 persons in a room, whereas only one-third of the BISP recipient households are living upto 3 persons in a room. However, both the SSN receiver households (Zakat and BISP) have overall high crowding rates as compared to the non-receiver households where 61 percent of the households are facing less crowding issues (up to 3 persons in a room).

Regarding durable assets, both the Zakat and BISP assisted households own almost equal percentage of refrigerator (12%) as compared to the non-recipient households (46%).

Similar findings can be seen for motorcycle where a slight more parentage of BISP beneficiaries own this asset as compared to Zakat receiver households, however both the groups are far less on this ownership as compared to non-receiver households. A minor percentage of BISP assisted households have reported that they own car (Table 10).

Table 10: % Distribution of Household's Dwelling Characteristics by Recipients and non-Recipients of Cash Assistance

Dwelling Characteristics	Recipients Households			Non-Recipients Households
	Zakat	**BISP**	**Overall**	
Occupancy status of House				
Own	71.5	91.9	90.4	83.1
Rent/rent free	28.5	8.1	9.6	16.9
Crowding in house				
Upto 3 persons in a room	54.8	32.3	33.6	60.5
>3 to 5 persons in a room	32.2	35.0	35.0	26.5
Above 5 persons in a room	13.0	32.7	31.4	13.0
Refrigerator/Freezer				
No	87.7	88.0	87.9	53.6
Yes	12.3	12.0	12.1	46.4
Motorcycle/Scooter				
No	86.9	86.0	86.0	64.8
Yes	13.1	14.0	14.0	35.2
Car/vehicle				
No	100.0	99.9	99.9	95.2
Yes	0.0	0.1	0.1	4.8
Toilet facility				
No/dry pit	40.2	57.4	56.2	23.0
Yes	59.8	42.6	43.8	77.0

Source: Estimated from HIES 2013/14 micro dataset

More percentage of Zakat receiver households own toilet facility as compared to BISP beneficiaries, however the facility is much higher among the non-beneficiaries of both the programmes. Overall the comparison from durable assets dwelling suggests that both the BISP and Zakat beneficiaries are marginal as compared to the non-beneficiaries as they possess less assets and other household facilities including ownership of house, toilet facility in their homes and in more they are facing high crowding rates due to less availability of room in their homes.

5.3.4. Productive Assets of Recipient and Non-Recipient Households

Regarding productive assets among SSN receivers and non-receivers, the findings are quite noteworthy in Table 11 where 92 percent of the Zakat receiver households not own any agricultural land, while 79 percent of the BISP beneficiaries not own land. The non-ownership among BISP beneficiaries is low as compared to the non-beneficiaries of both these programmes (82%). It is also quite surprising that land ownership distribution among BISP beneficiaries and non-beneficiaries is quite close as significant percentage of BISP beneficiaries owns few and more acre lands, while Zakat beneficiaries are mostly the deprived on this productive asset (Table 11). These results support the findings of Nayab and Shujaat (2014) that also found significant percentage of land owner households as BISP beneficiaries and concluded it as the violation of programme design and might not targeting the poorest of the poor as checked by some evaluation indicators.

Table 11: % Distribution of Household's Productive Assets by Recipients and non-Recipients of Cash Assistance

Productive Assets	Recipients Households			Non-Recipients Households
	Zakat	BISP	Overall	
Land ownership				
No land	92.3	78.1	78.9	82.1
≤ 2 acres	3.9	13.0	12.4	7.9
2.1 – 5 acres	1.4	5.0	4.8	5.5
5.1 - 10 acres	1.7	2.7	2.7	2.7
> 10 acres	0.8	1.2	1.2	1.8
Large animal ownership (cattle or buffalo or camel) *				
No	92.2	68.1	69.5	76.0
Yes	7.8	31.9	30.5	24.0
Small animal ownership (sheep or goat) *				
No	93.1	82.0	82.6	89.1
Yes	6.9	18.0	17.4	10.9
Non-farm activities**				
No	83.3	83.8	83.9	76.8
Yes	16.7	16.2	16.1	23.3
Overseas Remittances				
No	95.3	95.9	95.9	93.4
Yes	4.7	4.1	4.1	6.6

* Value is given in the data rather than number of animals
** Non-farm activities includes as *"During the last 12 months was any HH member proprietor of or partner in a non-agricultural, non-financial establishment, business or shop (fixed or mobile) which employed no more than 9 persons on any day during the last 12 months"*.
Source: Estimated from HIES 2013/14 micro dataset

Similar findings can be seen on livestock ownership including the small and large animals where again BISP cash assisted households possess more large animals (32%) as well as small animals (18%) as compared to both the Zakat cash assisted households and non-beneficiaries of both these programmes. The Zakat recipient households are at the marginal in both the large and small animal ownership as compared to both the other two groups, BISP recipients and non-recipients. Non-farm enterprises are usually owned by wealthier households and the same can be seen in Table 11 where non-recipient households of both the BISP and Zakat programme own more percentage of non-farm enterprises (23%), the ownership percentage is almost close among BISP and Zakat recipient households.

Overseas remittances were taken another indicator for household well-being which shows that out of total, 4-5 percent of BISP and Zakat cash assisted households received overseas remittances, the percentage is high (7%) among the non-receiver households. However, it does not necessarily imply that BISP and Zakat receiver households who received overseas remittances have their own family members abroad, these remittances could be the assistance by some other households due to socio-cultural norms in the society.

Table 12: Comparison of BISP and Zakat Targeting: Socio-Economic Characteristics of Households by Status of Assistance

Characteristics	Recipients Households		Non-Recipients Households
	Zakat	**BISP**	
Household size (number)	5.7	7.7	6.2
Education of head (average years)	4.1	2.5	5.4
Head employed (%)	62.0	86.4	84.8
Own house (%)	71.5	91.9	83.1
Persons per room (numbers)	3.4	4.7	3.3
Toilet facility (%)	59.8	42.6	77.0
Refrigerator	12.2	12.0	46.4
Own motorcycle (%)	13.1	14.0	35.2
Own large animal (%)	7.8	31.9	24.0
Own small animal (%)	6.9	18.0	10.9
Own land (acres)	0.34	0.95	1.0
Own non-farm activities (%)	16.7	16.3	23.3
Received overseas remittances (%)	4.7	4.1	6.6

Source: Estimated from HIES 2013/14 micro dataset

A summary and mean comparison of Zakat and BISP cash assisted households on household demographic, dwelling and asset including the productive assets is reported in Table 12 in which the profile of non-recipient households is also reported. Using above comparison analysis on socio-demographic and economic profile as well as the mean characteristics reported in Table 12, two broad conclusions can be drawn; first, the recipient households of both the Zakat and BISP are at a disadvantageous position as compared to the non-receiver households almost on all the socio-demographic and economic indicators, they have less education, lower employment opportunities an possess fewer asset that help them to mitigate their poverty and vulnerability. And second, BISP recipient households seems at advantageous than the Zakat recipient households while looking various productive assets i.e. land and livestock as well as employment status and ownership of home. Similar mix findings have been found by other studies done on similar or related topics in Pakistan, i.e. Arif (2006) and Nayab and Shujaat (2014).

5.4.   Summary of Chapter

This chapter has detailed the results over the socio-demographic and economic profile of Zakat and BISP recipients. The BISP recipients' details are reported only in latest available HIES survey, the various rounds of HIES suggests that percentage of recipients of Zakat in Pakistan declined overtime. It was also found that recipients' data of Zakat is HIES is under-reported as only 0.6 percent of the household reported as recipients of Zakat and 7 percent of the household reported that they got benefit from BISP programme. The data also shows that 7.9 percent of the households have reported that they donated Zakat. A comparison is done by comparing the socio-demographic and economic profile of recipients of Zakat and BISP, and found that recipient households of both the Zakat and BISP are at a disadvantageous position as compared to the non-receiver households almost on all the socio-demographic and economic indicators. However, BISP beneficiaries possess more assets i.e. livestock, land and ownership of house. BISP beneficiaries also faced more crowding in their houses, larger family size and high dependency as compared to the Zakat recipient households.

Chapter 6   Accuracy and Targeting Performance of Zakat and BISP

6.1.   Introduction

The previous chapter has discussed the socio-demographic and economic profile of both the Zakat and BISP recipient households. Following objective 2nd and 3rd the present Chapter has made analysis on the performance of both the social safety net programmes through which their coverage, targeting, inclusion and exclusion errors are measured. The realized performance is measured by looking at program outcomes ex-post, based on HIES 2013/14 survey data that captures the actual participation in the both the Zakat and BISP programme.

The Chapter is divided in 3 sections. Section 6.2 details the headcount poverty and deprivation profile of recipients of Zakat and BISP as well as non-recipient households, followed by analysis on accuracy and targeting of Zakat and BISP in Section 6.3.

6.2.   Poverty and Deprivation among Recipients and Non-Recipients

The present study has taken three household welfare indicator reflecting household poverty and deprivation which include quintiles based on per capita monthly consumption expenditures, headcount poverty and multidimensional poverty index (MPI). All the indicators were plotted with recipients including the Zakat and BIPS and non-recipient households in the present section. Figure 4 reports the percentage distribution of Zakat and BISP recipient households by quintile (per capita consumption expenditures including food and non-food). The number reveals more concentration of BISP beneficiaries in bottom 2 quintiles (70%) as compared to the Zakat beneficiaries (50%). The finding on one-fourth concentration of Zakat recipients in bottom quintile is quite contrary to the earlier study of Shirazi (1996) which found 94 percent in bottom quintile. Even in upper quintiles, more percentage of Zakat beneficiaries can be found compared to BISP beneficiaries. However high concentration of half of the Zakat beneficiaries in upper 3 quintiles could be due to social assistance to these households by community that led their high consumption.

Figure 4: % Distribution of Zakat and BISP Recipient Households by Consumption Quintile
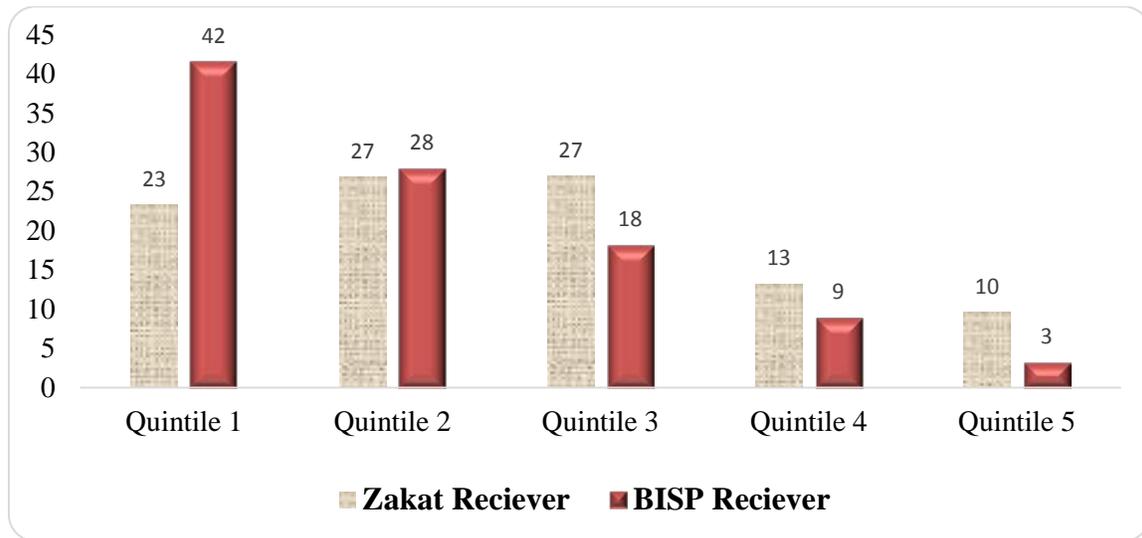
Source: Estimated from HIES 2013/14 micro dataset

Regarding the headcount poverty measured though recent updated official methodology—called the Cost of Basic Needs (CBN) approach, the results in Figure 5 shows that BISP recipient households have been facing high incidences of poverty as more than half of them are below poverty line (Rs. 3030 per adult equivalent per month). Zakat recipient households are also facing high incidences of poverty as more than one-third of them are below poverty line while the non-receiver group is least effective from poverty as 27 percent of them are below poverty line. It is worth mentioning that official poverty statistics for the same year, calculated from HIES 2013/14 is 29.5 percent overall for the country with 18.2 percent poverty in urban locales and 35.6 percent in rural locales as declared by the Government of Pakistan.

The same trends can be extracted for both the rural and urban locales for recipient and non-recipient households where the highest incidences of poverty are among the BISP cashed assisted households while the lowest incidences are among the non-receiver households. Similarly, across the regions overall poverty rates for all sorts of households are comparatively higher in rural than the urban locales (Figure 5). It is worth mentioning that overall incidences of poverty are higher in rural locales than the urban locales as reflected by all poverty statistics in Pakistan over the last few decades.

Figure 5: Headcount Poverty Rates among Recipient and Non-Recipient Households
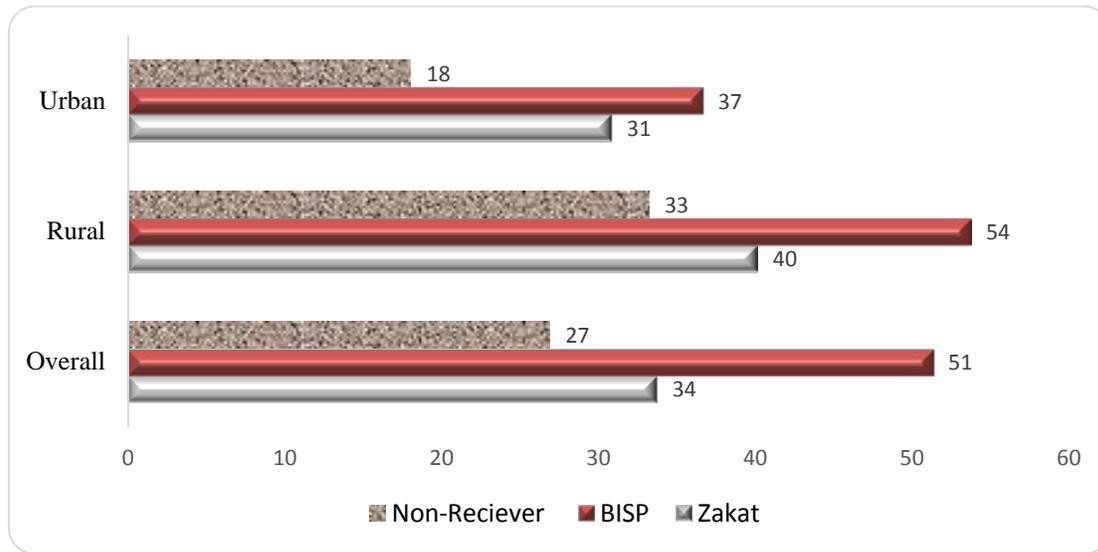
Source: Estimated from HIES 2013/14 micro dataset

Multidimensional Poverty Index (MPI) represents multiple deprivations of households, other than consumption expenditures, including education, health and living standards. The major difference between MPI and headcount poverty is that the former's estimation is based on caused indicators of wellbeing while the latter's calculation is based on outcome indicator i.e. consumption and income. Figure 6 plots the MPI rates among the recipient and non-recipient households where MPI is taken at cut-off (33%), in other words out of 14 indicators if a household is deprived in at least 33 percent of the indicators, it is considered as the deprived household after adjusting the weights. The findings suggest almost similar pattern of poverty rates that incidences of deprivation are highest among the BISP recipients (31%), followed by Zakat recipients with 18 percent incidences of deprivation and the lowest among non-recipients where incidences of deprivation are 11 percent.

Across the regions, the incidences of deprivation among Zakat beneficiaries are 21 percent in rural locales and 11 percent in urban locales—almost double in rural locales. Similarly, BISP beneficiary are facing more deprivation in both the rural and urban locales as compared to the Zakat beneficiaries with incidences of 33 percent in rural locales and 17 percent in urban locales. The non-recipients are facing less issues of

deprivation in both the rural and urban locales compared to their counter recipient households, they much better-off in urban locales (Figure 6).

Figure 6: MPI Rates (at k=0.33) among Recipient and Non-Recipient Households
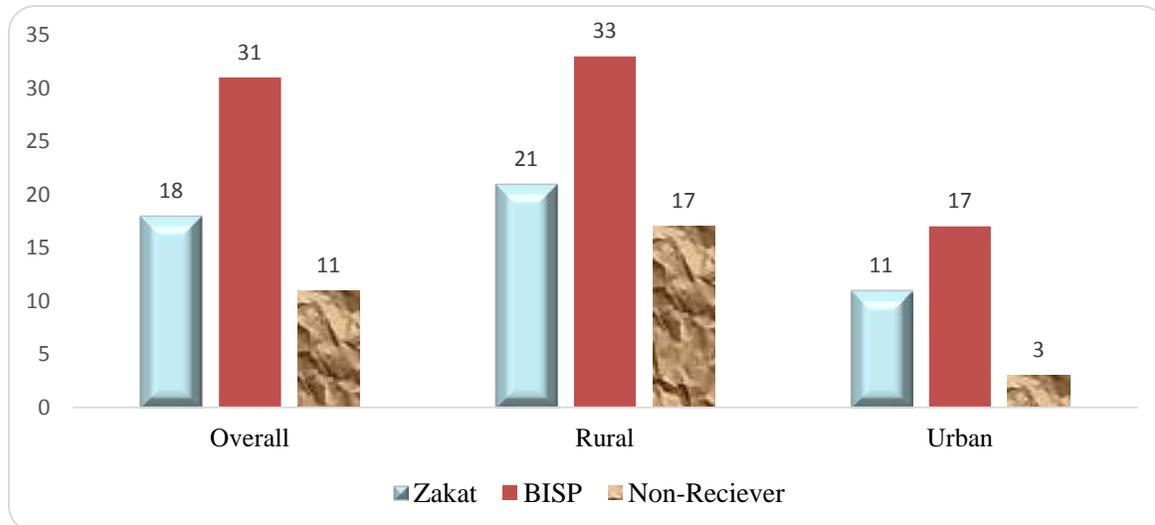
Source: Estimated from HIES 2013/14 micro dataset

Raw headcounts of Multidimensional Poverty Index (MPI) are reported in Table 13 for recipients and non-recipient households. Raw headcounts are defined as the percentage of households who are deprived on each indicator i.e. while looking the deprivation of male on education indicator in Zakat category, the results show that 43.6 percent of the households are deprived on this indicator as 'none of the male above 11 years of age has comprehended 5 years and above of school education in the house. Two broad conclusions can be drawn from Table 13; first the overall the deprivation on each indicator is higher among the BISP cash recipient households as compared to the Zakat and non-recipient households. The non-recipients are at better-off position and facing less incidences of deprivation on all the indicators. And second, all the categories of households (Zakat and BISP recipients and non-recipients) are facing deprivation on some concentrated indicators, in other words deprivation level is much higher on female education, overcrowding, sanitation, clean energy and assets possession indicators, whereas it is low on access to health facility, prenatal care and institutional delivery. Other indicators have modest level of deprivation.

Table 13: National Raw Headcount in Rural Locales by Status of Recipients

Dimension	Indicator	Raw Headcounts among Zakat Recipients	Raw Headcounts among BISP Recipients	Raw Headcounts among Non-Recipients
Education	Male Education	43.6	46.7	28.7
	Female Education	66.1	76.7	45.0
	Child School Attendance	17.0	40.8	13.9
	Educational quality	14.4	23.1	9.6
Health	Access to health care facility	3.5	7.4	5.6
	Immunization	13.2	24.5	12.1
	Prenatal care	9.8	17.0	11.0
	Institutional delivery	4.8	10.2	3.6
Standard of Living	Overcrowding	45.2	67.7	39.5
	Water	19.0	22.0	9.6
	Sanitation	31.9	50.4	21.1
	Clean Energy	78.0	87.4	58.0
	Electricity	15.3	14.7	8.0
	Assets	76.5	76.9	41.9

Source: Estimated from HIES 2013/14 micro dataset

6.3. Performance of Targeting: A Comparison of Zakat and BISP

An effective social safety net programme (SSN) can perform well by targeting the poorest of the poor (Pasha, et al, 2005; World Bank 2007) on following indicators;

i.   *Targeting*: the level to which a SSN programme reaches its targeted population (poorest of the poor) rather than those who not deserve.

ii.   *Coverage*: the percentage of total eligible households that should be benefited from programme.

iii. *Administration cost*: the percentage of administrative cost against total programme cost and used on the benefits.

iv.   *Accessibility*: the level of ease though which eligible households (individuals) could be registered and benefited from programme.

v.   *Adequacy*: programme should not only be sustained overtime but it should also improve the lives and wellbeing of targeted population in the larger context.

vi.   *Sound financing source*: programme should well-defined, self-reliant and with sustained financial resources rather than depend on ad hoc, temporary and only donor funding.

As detailed in methodological framework, that present study aims to measure the performance and targeting of both the Zakat and BISP though four indicators which are coverage, targeting, exclusion and inclusion errors.

- Coverage is the percentage of actual poor covered by Zakat and BISP programme where actual poverty is defined by 3 indicators; bottom quintile of population based on per capita consumption expenditure, head count poor using official poverty measure, and MPI poor (based on 33% cut-off). Highest the coverage implies that SSN programme is rightly targeting the desirable population.

- Targeting performance is the share of poor in the total number of program beneficiaries. Again the targeting performance is defined by above mentioned three indicators of poverty. More the targeting reflects that maximum of the deserving population is registered in programme

- Social Safety Net Programmes also face the issues of *inclusion error* (identification of those as beneficiaries who *don't fulfill* the selection criteria) and e*xclusion error* (identification of those as non-beneficiaries who *fulfill* the selection criteria). Internationally there is a maximum 10 percent tolerance for joint effect of both errors; however, the tolerance for exclusion error is less than that of inclusion.

Table 14 reports the performance of both the Zakat and BISP by taking three indicators of poverty i.e. bottom quintile (33% households) based on per capita consumption expenditure, headcount poverty and multidimensional poverty index (MPI) at cut-off 30 percent. The households who fall under bottom quintile or head count poor or MPI poor, can be called as *destitute* or *marginalized* or *deserving* households, the households who need support from SSN programme. First takes the coverage, the percentage of poor covered by SSN programmes, the findings show that Zakat have very lower level of coverage of only 0.8 percent of the deserving households as identified by all the three measures of poverty. BISP programme has quite fair coverage of 15 to 17 percent of the deserving households but still too low to cover all destitute. The overall coverage of both the BISP and Zakat range from 16 to 18 percent in Pakistan as reported by HIES survey.

Regarding the targeting, the share of poor in the total number of program beneficiaries of Zakat or BISP, Zakat targeting ranges from 23 to 41 percent by three measures of deprivation, much lower as compared to BISP targeting that ranges from 42 to 63 percent. It is worth mentioning that targeting measured by bottom quintile and headcount poverty is much close and low as compared to the targeting measured through MPI. Exclusion error (identification of those as non-beneficiaries who *fulfill* the selection criteria) is quite high in Zakat with above 99 percent; it is also high among the BISP beneficiaries with rates range from 83-84 percent under different poverty indicators. Inclusion error (identification of those as beneficiaries who *don't fulfill* the selection criteria) is also quite high both in Zakat and BISP, it is 58 percent in case of Zakat and 77 percent in case of BISP while taking the poorest 20 percent of the population (Table 14).

Table 14: Simulated Zakat and BISP Targeting Performance, 2013/14

Target group	Performance Indicator	Zakat	BISP	Overall
Poorest 20% of population based on per capita consumption expenditure	Coverage	0.8	16.1	16.9
	Targeting	23.3	41.6	40.7
	Exclusion	99.2	83.9	83.1
	Inclusion	76.7	58.4	59.3
Head count poor based on Cost of Basic Needs (CBN) approach	Coverage	0.7	15.1	15.8
	Targeting	27.9	47.1	46.0
	Exclusion	99.3	84.9	84.2
	Inclusion	72.1	52.9	54.0
Multi-dimensionally poor based on 33% cut-off rate	Coverage	0.8	17.0	17.8
	Targeting	40.5	63.4	62.0
	Exclusion	99.2	83.0	82.2
	Inclusion	59.5	36.6	38.0

Source: Estimated from HIES 2013/14 micro dataset

In Table 15, the coverage and targeting is viewed by taking bottom 40 percent of the population (bottom 2 quintiles). The findings reveal that now targeting improved significantly as 50 percent of the Zakat programme beneficiaries are found to be fall in bottom two quintiles, while 70 percent of the BISP beneficiaries are in bottom 40 percent of the population in terms of their per capita monthly consumption expenditures. Across the provinces, huge variation can be found on both the coverage and targeting. Within Zakat, KP province has shown better coverage while targeting is quite well in

Balochistan province as compared to the other provinces. Regarding BISP, again the trends are similar, with better coverage and targeting (Table 15).

Table 15: Performance of Zakat and BISP among Bottom Two Quintile

Coverage and Targeting	Overall	KPK	Punjab	Sindh	Balochistan
Zakat Recipient Households					
Coverage	0.75	2.5	0.7	0.1	0.6
Targeting	50.1	43.4	56.7	38.2	74.1
BISP Recipient Households					
Coverage	13.3	32.4	6.5	20.6	3.3
Targeting	69.6	57.9	77.0	74.3	83.2
Zakat or BISP Recipient Households					
Coverage	16.7	34.0	7.1	20.8	3.6
Targeting	68.4	56.8	74.8	73.8	80.8

Note: using per capita consumption expenditures, bottom 40% is used to check performance
Source: Estimated from HIES 2013/14 micro dataset

Overall it can be concluded that HIES 2013/14 has seriously underestimated both the BISP and Zakat coverage. As reported earlier that according to the 2013/14 HIES survey data, BISP beneficiaries are about 1.8 million households (approximatively 2.2 million families) in all the four provinces (Balochistan, KPK, Sindh, and Punjab - including the Capital region and excluding AJK, GB and FATA), while according to BISP payments data from BISP administrative sources, the benefits were given to 4 million beneficiaries in the same four provinces for FY 2013/2014.

There are several possible reasons for the HIES survey's underestimation of coverage:

1. *Sampling*: in most countries, it is common for surveys to underestimate the coverage of poverty targeted programs, since the master sample frames may miss some of the poorest and marginalized; in addition, it is common for surveys to miss households at the extreme tails of the welfare distribution. As detailed in Chapter 4, PBS used 6 indicators to determine sample size (literacy rate of 10 and above age population, population 10 age and above that ever-attended school, net enrolment rate at primary level, children age 12-23 months immunized fully, birth-control pervasiveness of females age 15-49 years and post-natal session for

ever married females aged 15-49 years) whereas poverty, vulnerability were not taken the part of sample.

2. *Measurement*: questionnaire of HIES may also be tricky to capture true reflection of BISP and Zakat. HIES does not ask about participation in the program (e.g., "are you a BISP beneficiary", or "are you enrolled in BISP") but for the annual income from BISP – thus, some beneficiaries who did not receive payments for various reasons in the previous year are not captured (according to BISP administrative data the number of payments was much lower in 2012/ 2013 and payments were also not done with regularity, which leads to underreporting because households have difficulties to recall).

3. *Lack of awareness, and misreporting*: some beneficiaries may not be aware of the official name of the program, or do not want to declare that they are BISP beneficiaries. In case of Zakat, households may be reluctant to disclose their vulnerability.

As mentioned earlier that, HIES 2013/14 data set demonstrates that approximately 42 percent of BISP recipients belong from the poorest quintile in contrast to 55 percent by design and 70 percent belong to bottom 40 percent in contrast with 82 percent by design. The targeting performance of BISP compares good with alike programmes, including Mexico Prospera (earlier Oportunidades), Philippines 4Ps and Brazil Bolsa Familia (Figure 7).

Figure 7:   Targeting Performance of BISP with Other SSN Programmes
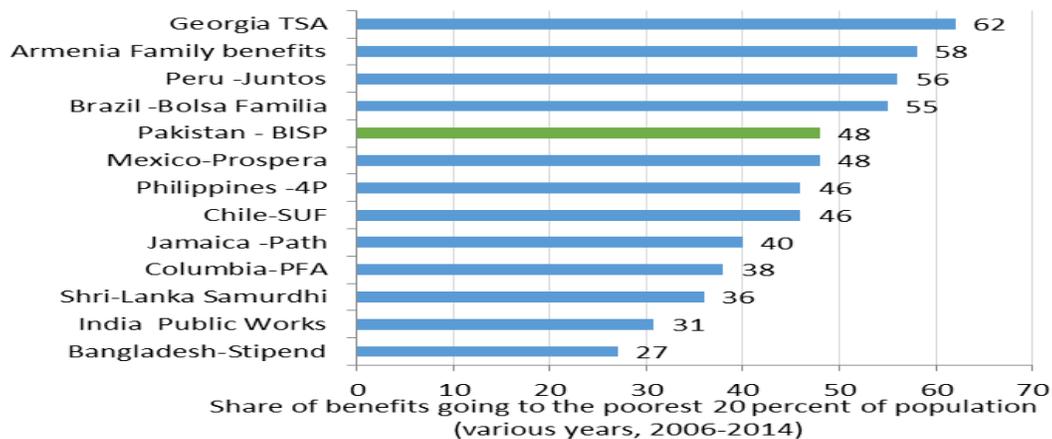
Source: ECA SP Performance Indicators, State of Social Safety Nets 2015, World Bank

6.4. Summary of the Chapter

This chapter has made analysis on the performance of both the Zakat and BISP through which their coverage, targeting, inclusion and exclusion errors are measured. The realized performance is measured by looking at program outcomes ex-post, based on HIES 2013/14 survey data that captures the actual participation in the both the Zakat and BISP programme. The results suggest more concentration of BIS recipients in bottom two quintiles compared to Zakat recipients and similarly headcount poverty rates and deprivation as measured through Multidimensional Poverty Index are also higher among BISP beneficiaries. However, both the Zakat and BISP recipients are at disadvantageous on all the indicators as compared to the non-recipients.

The coverage of Zakat is too low (only 0.8%) as compared to BISP which have coverage of 15 to 17 percent. Regarding the targeting, Zakat targeting ranges from 23 to 41 percent by three measures of deprivation, much lower as compared to BISP targeting that ranges from 42 to 63 percent. Across the provinces, huge variation was found on both the coverage and targeting; KP province has shown better coverage while targeting is quite well in Balochistan province.

Chapter 7   Welfare Impact of Zakat and BISP Programme

7.1.   Introduction

The previous chapters have discussed the socio-demographic and economic profile of both the Zakat and BISP recipient households as well as performance of both the social safety net programmes through which their coverage, targeting, inclusion and exclusion errors were measured. The present Chapter looks at the welfare impacts of both the Zakat and BISP on a range of household welfare indicators; per capita monthly household consumption expenditures (in Rs.), head count poverty based on CBN approach, multi-dimensional poverty index (MPI), child school enrolment and women empowerment. The Chapter is divided in 3 section. Section 7.2 deals with the determinants of getting social assistance either from Zakat or BISP, while Section 7.3 details the impact of cash assistance on various household welfare indicators though Propensity Score Matching Technique.

7.2.   The Determinants of Receiving Cash Assistance

Following last objective of the study, to estimate welfare impact of Zakat and BISP, we have employed propensity score matching (PSM) technique. The welfare impact is estimated on five household indicators: per capita monthly consumption expenditures (in Rs.), head count poverty based on Cost of Basic Need approach, multi-dimensional poverty index (MPI), child school enrolment of age 6-14 and women empowerment. As briefed in the methodology section, following the PSM technique, it requires a sample of treated and non-treated households, here in our case we have the data of those who received cash assistance from Zakat or BISP—called as receiver households, whereas the others who have not received cash assistance can be called as non-receiver households. Being limited observation of Zakat recipient households, separate impact of Zakat and BISP is not carried out and both the groups were clubbed.

Following step 1 of PSM to estimate Average *Treatment on the Treated* (ATT), one has to estimate the propensity scores through logistic regression. We have the dependent variable with two outcomes: whether a household received social assistance from Zakat/BISP or not. It is worth mentioning that sample of Zakat recipient households is

quite limited (only 113 observations) and not statistically enough to calculate a separate welfare impact of Zakat and BISP on above mentioned range of 5 welfare indicators. To overcome it, we have clubbed the sample of both the Zakat and BISP, thus sufficient observations are available on receiver (1,733) and non-receiver households (16,256). According to Ravillion (2003), larger the sample of eligible non-participant households, better results will be due to good matching, this condition sufficiently match in present study case as a large number of deserving households are excluded from cash assistance.

Being only two outcomes of dependent variable, the logistic regression model has been applied to find out the determinants of cash assistance in which various socio-demographic and economic variables have been used as the covariates to observe their potential impacts on the recipient status of cash assistance which includes individual characteristics of head of household, household characteristics, asset profile and regional characteristics including provincial and regional dummies. The results of Logistic Regression model are reported in Table 16.

Table 16: The Determinants of the Getting Cash Assistance: Logistic Regression

Covariates	Coefficients	Standard Error
Sex of head of Household (male=1)	-0.474***	0.124
Head employment of Household (yes=1)	0.079	0.089
Education of Head of Household (in years)	-0.084***	0.007
Household Size (in numbers)	0.065***	0.010
Dependency Ratio	0.136***	0.036
Own house (yes=1)	0.246***	0.095
Persons per room (in numbers)	0.136***	0.014
Motorcycle (yes=1)	-0.496***	0.083
Large animals (yes=)	0.019	0.066
Overseas remittances (yes=1)	-0.789***	0.152
Non form activities (yes=1)	-0.187**	0.080
Land (in acres)	-0.005	0.006
Sindh/Punjab	1.433***	0.082
KP/Punjab	1.784***	0.088
Balochistan/Punjab	-0.570***	0.169
Region (rural =1)	0.699***	0.081
Constant	-4.400***	0.183
LR chi2	1378.08	
Log likelihood	-4514.983	
Pseudo R^2	0.18	
N	17385	

Note: *** denote significant at 1%, ** denote significant at 5%
Source: Estimated from HIES 2013/14 micro dataset

The dependent variable is binary in nature, that is whether the household has received assistance (either from BISP or Zakat) or not. Although the Pseudo R^2 in logistic regression does not equate to R^2 of the OLS, the model shows a comparatively high value of Pseudo R^2. As shown in table 16, majority of the explanatory variables except employment status of head of household, ownership of large animals and land, are highly significant at mostly 1 percent level. All the variables have the signs that were expected except ownership of house which shows that ownership positively affect the likelihood that house will get cash assistance from BISP or Zakat.

First taking the head characteristics, the results in Table 16 shows that sex of household head coefficient is significant and shows negative association of getting cash assistance, in other words male headed households are less likely to be assisted from Zakat or BISP. Employment of head of household is not statistically significant. Education of head has a negative impact on getting assistance suggesting that with the increase in the education grades of head, household chances will decrease of getting cash assistance.

The two demographic variables, household size and dependency ratio has a positive association with the probability of getting cash assistance. Crowding, number of persons living in a room has also a positive impact of getting cash assistance. Durable asset i.e. motorcycle has a positive impact on cash assistance. Unexpectedly the two productive assets, large animals and land ownership do not turn out to be statistically significant as one expects that households who own productive assets should not be the part of social safety net (SSN) programme. The issue was also reported in Chapter 5 through bi-variate analysis that significant percentage of BISP beneficiaries hold livestock and land, the number was quite low for Zakat beneficiaries.

The multivariate analysis in Table 16 shows that households who own some non-farm enterprises or received overseas remittances are less likely to be the part of SSN programme in Pakistan. Regarding the third set of the independent variables which includes provincial and regional dummies, the coefficient of region shows that rural areas are more likely to be the part of SSN programmes as compared to their urban counterparts. While taking province Punjab as reference category, a significant variation in the cash transfer prevails across the provinces, with households in province KP and

Sindh are more likely to receive cash assistance as compared to the province of Punjab, whereas households of Balochsitan are less likely to receive cash assistance as compared to province Punjab.

It is worth mentioning the objective of estimating Logistic Regression model is to predict the probability of participants and non-participants, called as 'propensity scores'. Some of the non-participants, called non-receiver of cash assistance, were excluded from the analysis (mostly the rich households) because their propensity score was outside the range (typically not comparable) found for the treatment sample. The range of propensity scores estimated for the receiver group should correspond closely to that for the retained sub-sample of non-receiver households (Ravallion, 2003).

While estimating the Logistic Regression model, both the conditions required to estimates of ATT were checked which are balancing property and of unconfoundedness property. Using the '*psmatch2, pscrore, attnd, attk, attr and atts*' commands in STATA, comparison has been made between the treated and non-treated units and the welfare impact has been calculated.

7.3.   Impact of Remittances on Household Welfare

As mentioned in methodology, four matching techniques are available to measure welfare impact, however the choice of technique crucially depend on available sample and situation at hand. The performance of these four matching estimators may vary case-by-case and depends largely on data structure. If there are only few observations of both the treated and control groups, it makes no rationale to match the both without replacement method that Nearest Neighbor method offers. On the other hand, if there are a lot of comparable observations in both the targeted and control groups, it might be worth using more than one estimator for more precision in estimates. Here in our case we have sufficient observations on both the treated and control units, thus expect that all the four measures will perform similar results. Now this brings us to the final stage of PSM analysis. This brings us to the final stage of the PSM analysis to measure the welfare impact. The below sub-sections detail separate impact of cash assistance on each of the welfare indicator.

7.3.1. Welfare Impact on Per Capita Monthly Consumption

As mentioned earlier that all the components of consumption including food and non-food (non-durables) are part of monthly consumption expenditures and adjusted by household size to establish per capita monthly consumption expenditures. Table 17 shows the welfare impact of cash assistance including the Zakat and BISP on per capita monthly consumption expenditures. The findings show that social safety net prorgrammes in Pakistan has a positive impact on per capita monthly consumption expenditures as captured through HIES 2013/14 dataset. The impact varies from PSM matching measure, the lowest impact is measured by Nearest Neighbor method with Rs. 162 per capita monthly consumption expenditures and the highest though Radius method with Rs. 284 per capita. The estimated impact though Stratification method is Rs. 189 and Rs. 246 per capita monthly consumption expenditures through Kernel method. In other words, this amount is value of transfer to households due to cash assistance, while comparing these households with those who have not obtained cash assistance but have similar socio-demographic and economic profile.

Table 17: ATT Effect of Cash Assistance on Per Capita Monthly Consumption (in Rs.)

ATT Estimation	NN method	Kernel method	Radius method	Stratification method
ATT	**162.3*****	**246.1*****	**283.6*****	**189.4*****
N. treated	1672	1672	1482	1672
N. control	2594	15015	8357	15015
St. error	58.00	41.14	63.78	35.073
St. error bootstrap	62.64	41.143	76.91	35.897
t-stat	2.341	5.391	3.72	5.24

Note: *** denote significant at 1%, ** denote significant at 5%
Source: Estimated from HIES 2013/14 micro dataset

As within cash assistance, share of Zakat is quite negligible and mainly the beneficiaries are from BISP, therefore the welfare impact can also be attributed mainly to BISP programme. The findings of present study are consistent to earlier studies of Nayab and Shujaat (2014) and OPM (2013) report on BISP impact evaluation that BISP has a positive impact on consumption of households. It is worth to mention that OPM (2013) has conducted the impact evaluation of BISP where the evaluation is based on a comparison between a set of BISP beneficiaries against a set of control households who

are not BISP beneficiaries. The impact is determined by the quasi-experimental Regression Discontinuity (RD) design which requires the comparison of treatment (beneficiary households) and control households (non-beneficiary households) who have BISP poverty scores in the very close neighborhood of the BISP eligibility threshold. OPM found that average per adult equivalent monthly value of impact was Rs. 164 by design, if household receive amount as per commitment whereas the actual impact was Rs. 92. For Regression Discontinuity (RD) design sample, the impact was Rs. 318 per adult equivalent monthly consumption expenditure.

7.3.2. Welfare Impact on Headcount Poverty

Table 18 reports the welfare impact of cash assistance on headcount poverty. The findings show that the impact of cash assistance on headcount poverty is negative as estimated by all the measures of ATT. The welfare effect on poverty ranges between 4 percent to 7 percent, the lowest impact is measured by Nearest Neighbor method and the highest by Stratification method. Unlike to the study of Nayab and Shujaat (2014), the impact is significant on poverty and consistent to OPM (2013) findings which found that BISP unconditional cash transfers causes a 22 percentage point reduction in headcount poverty for the RD treatment group while comparing them with non-treated groups who hold almost similar socio-demographic profile. The impact found by OPM and this study seems quite high. OPM has also conducted impact on depth of poverty, however present study has not covered this impact. It is key to note that present study differs to OPM not only in utilizing different dataset but also differ on technique as OPM used Regression Discontinuity (RD) design whereas present study used propensity score matching technique.

Table 18: ATT Effect of Cash Assistance on Poverty (Head-Count)

ATT Estimation	NN method	Kernel method	Radius method	Stratification method
ATT	**- 0.04*****	**-0.05*****	**-0.06*****	**-0.07 *****
N. treated	1672	1672	1482	1672
N. control	2594	15015	8357	15015
St. error	0.018	0.013	0.015	0.013
St. error bootstrap	0.017	0.009	0.018	0.012
t-stat	-2.431	-5.243	-3.559	-5.481

Note: *** denote significant at 1%, ** denote significant at 5%
Source: Estimated from HIES 2013/14 micro dataset

7.3.3. Welfare Impact on Multidimensional Poverty Index

The present dissertation has used headcount of Multidimensional Poverty Index (MPI) at cut-off of 33 percent to capture welfare impact of cash assistance. The results are reported in Table 19 which shows that cash assistance has a significant negative impact on multiple deprivations as the households who received cash assistance are less deprived by 4.3 percent while comparing these households with those who have not received cash assistance but have similar socio-demographic and economic profile. However, the impact is significant only by Kernel method while the other methods show insignificant impact on multidimensional poverty index. The findings are partially consistent to OPM (2015) findings on BISP programme, the second impact evaluation report on BISP which shows that BISP has had a positive and statistically significant impact on the certain household indicators relevant to the quality of living standards.

Table 19: ATT Effect of Cash Assistance on Multidimensional Poverty Index (at K=0.33)

ATT Estimation	NN method	Kernel method	Radius method	Stratification method
ATT	-0.035	**-0.043****	-0.045	-0.066
N. treated	1672	1672	1482	1672
N. control	2594	15015	8357	15015
St. error	0.027	0.021	0.025	0.042
St. error bootstrap	0.027	0.021	0.028	0.043
t-stat	1.29	-2.04	-1.60	-1.53

Note: *** denote significant at 1%, ** denote significant at 5%
Source: Estimated from HIES 2013/14 micro dataset

7.3.4. Welfare Impact on Child School Enrollment

The fourth welfare indicator for present study is child school enrollment in which the indicator is taken whether a Child of age 6-14 years is currently attending school or not. Before estimating the welfare impact of cash assistance on child school enrollment, Table 20 displays the status of child school enrollment among Zakat and BISP recipient households. The results show that enrolment rates among recipient households of both the Zakat and BISP are lower as compared to the non-recipients. It is also interesting that children among BISP recipient households have less enrollment rates (54%) as compared to the children of Zakat recipient households (68%), highlighting the enrollment rates in Zakat recipient households are much close to the non-recipient of cash households.

Table 20: Distribution of Child School Enrollment Status by Type of Cash Assistance

Status of Child Enrollment	Status of Receiving Zakat		Status of Receiving BISP	
	No	Yes	No	Yes
Not enrolled	28.3	32.4	26.0	45.9
Enrolled	71.7	67.6	74.0	54.1
Total	100	100	100	100

Source: Estimated from HIES 2013/14 micro dataset

The welfare impact on child current enrollment in the school is given in Table 21 which shows that the impact of cash assistance on the current enrollment is ambiguous and not significant under all the four measures of ATT. It reveals that SSN programmes in Pakistan might have positive impact on consumption smoothening but they might not be sufficient to build human capabilities of these marginalized households.

Table 21: ATT Effect of Cash Assistance on Child School Enrollment (at K=0.33)

ATT Estimation	NN method	Kernel method	Radius method	Stratification method
ATT	-0.024	0.012	0.024	-0.011
N. treated	4301	4301	4134	4301
N. control	4489	29449	8963	29449
St. error	0.023	0.09	0.037	0.008
St. error bootstrap	0.024	0.007	0.038	0.009
t-stat	-0.099	0.13	0.63	-1.20

Note: *** denote significant at 1%, ** denote significant at 5%
Source: Estimated from HIES 2013/14 micro dataset

7.3.5. Welfare Impact on Women Empowerment

Though not in Zakat, however a key design choice for the BISP to give cash assistance to ever married women reflects a clear commitment of the institution to promote women empowerment. The 2013/14 HIES survey has a detailed module on women involvement in decision making where questions were asked to all women of age 15-49 years on their involvement in decision making related to their education, seeking for work, family planning and purchase of consumption items. The last two indicators were asked only from married women. Using these information, women empowerment is defined as a woman is empowered if she is involved in decision making to pursue her education and/or seeking work. Table 22 shows that women who are receiving Zakat are involved more in decision making as compared to the non-receiver of Zakat, however in case of BISP, the results are quite contradictory and women are less involved in decision making

than those who are not getting BISP assistance. However, it still not be concluded that BISP programme is yielding less women empowerment as benefit recipients are marginal so cannot be compared directly with non-recipient in case if non-recipient group is better-off. High women empowerment in Zakat case could be due to high percentage of female head of households in these homes that led more women empowerment.

Table 22: Distribution of Women Decision Making by Type of Cash Assistance

Status of Decision Making	Status of Receiving Zakat		Status of Receiving BISP	
	No	Yes	No	Yes
Not involved	69.1	64.1	68.1	81.1
Involved	30.9	35.1	31.9	18.9
Total	100	100	100	100

Source: Estimated from HIES 2013/14 micro dataset

The welfare impact on women empowerment is again showing mix findings where according to the Nearest Neighbor method, the welfare impact is significant as the women whom houses are getting assistance, they are 2.7 percent more empowered compared to those who are not getting assistance but their household hold similar socio-demographic profile (Table 23). The other measures show no significant impact on women empowerment.

Table 23: ATT Effect of Cash Assistance on Women Empowerment (at K=0.33)

ATT Estimation	NN method	Kernel method	Radius method	Stratification method
ATT	**0.027****	-0.011	0.013	-0.005
N. treated	2796	2796	2796	2796
N. control	3137	24490	3137	24490
St. error	0.013	0.010	0.014	0.007
St. error bootstrap	0.014	0.010	0.014	0.008
t-stat	2.12	-1.173	0.98	-0.91

Note: *** denote significant at 1%, ** denote significant at 5%
Source: Estimated from HIES 2013/14 micro dataset

7.4.   Summary of Chapter

This chapter looks at the welfare impacts of both the Zakat and BISP on a range of household welfare indicators; per capita monthly household consumption expenditures (in Rs.), head count poverty based on CBN approach, multi-dimensional poverty index

(MPI), child school enrolment and women empowerment. The welfare impact is measured through propensity score matching (PSM) technique. Being limited observation of Zakat recipients, separate impact of Zakat and BISP is not carried out and hence both the groups were clubbed.

The findings show that social safety net prorgrammes in Pakistan has a positive impact on per capita monthly consumption expenditures and reduction in poverty, while no impact was found on child school enrollment and women empowerment.

Chapter 8   Conclusion and Policy Recommendations

8.1.   Conclusion

Social Safety Nets (SSNs) are one of the elements of broader system termed as social Protection. They are designed with a vision to provide a regular as well as predictable assistance to the poor and underprivileged community to elevate their livelihoods and to support them for coping up their intricacy. The assistance provided by SSNs is basically of two types, i.e. conditional and unconditional, whereas the mode of distribution can vary in many ways, for instance, direct cash grant or grant in the form of material goods.

This study comprises of 3 objectives; (a) To examine the socio-demographic profile of recipients and non-recipients of Zakat and BISP; (b) To evaluate which one of the social safety net programme in Zakat and BISP have right targeting including coverage, inclusion and exclusion errors; and (c) To examine the welfare impact of these social safety net programmes on household welfare including poverty and women empowerment.

The major aim of this study is to observe the welfare impact of two SSNs programmes currently functional in Pakistan; Zakat and BISP. The research questions to be answered through this study are; a) how both the Zakat and BISP is disbursed across regions and provinces? b) which type of socio-economic group has been receiving Zakat and BISP? c) which of the SSN programme have accurate targeting to the poorest of the poor? and d) what is the welfare impact of both the programmes?

Data sources and Summary of the Findings

The latest available national dataset named as Household Integrated Economic Survey (HIES) 2013/14 and has all the desired information to accomplish the above mentioned objectives of the study. Pakistan Bureau of Statistics (PBS) managed the HIES survey since 1963, it has been conducted, with some breaks, not for each year. The latest available 2013/14 round of HIES which covers the sample 17,989 households. HIES include all the rural and urban population from all four provinces of Pakistan in addition to AJK and Gilgit-Baltistan, whereas FATA and military regions are not covered in this

survey. Two separate questionnaires are being administered by HIES for each household for male and female respondents respectively.

Regarding the first objective of the study, a comparison of Zakat and BISP is carried out on the basis of profile of recipients. For the recipients of Zakat and BISP households, findings reveal that percentage of households who have received Zakat/Usher have been declining consistently over years both in rural and urban areas and very high percentage of population has reported as BISP recipient. For Household Head Profile of Recipients and Non-Recipients findings disclose that for the education of head of household both the Zakat and BISP recipient households are mostly headed by illiterate or less educated (upto primary grades) households as compared to the non-recipient households. The findings of Demographic Profile of Recipients and Non-Recipients Households show that distribution by members of household size is quite close among Zakat recipient and non-recipient households; however, BISP cash assistance receiving households are facing large family size.

On dependency burden of households where one-third of both the Zakat recipient and non-recipient households are facing high dependency rates whereas near half of the BISP recipient households are facing high dependency rates. Socio-demographic profile of both the Zakat and BISP recipient households vary which could be either due to different targeting mechanism of both the programmes or due to lower reported sample of Zakat recipient households in HIES survey (113 households), that might not be sufficient to draw meaningful results as compared to the BISP recipient sample (1646 households). For Household Dwelling Profile of Recipients and Non-Recipients high percentage of Zakat recipient households (29%) not own house as compared to BISP beneficiaries (8%), while 17 percent of the non-recipients of both the Zakat and BISP also not own house. Despite of low ownership among Zakat recipient households, they are facing less crowding issues as compared to BISP recipient households who are not facing the crowding issues.

Regarding durable assets, both the Zakat and BISP assisted households own almost equal percentage of refrigerator (12%) as compared to the non-recipient households (46%).For motorcycle where a slight more parentage of BISP beneficiaries own this asset as

compared to Zakat receiver households, however both the groups are far less on this ownership as compared to non-receiver households. A minor percentage of BISP assisted households have reported that they own car. More percentage of Zakat receiver households own toilet facility as compared to BISP beneficiaries, however the facility is much higher among the non-beneficiaries of both the programmes. For Productive Assets of Recipient and Non-Recipient Households significant percentage of land owner households as BISP beneficiaries are found and similar findings can be seen on livestock ownership including the small and large animals where again BISP cash assisted households possess more large and small animals. For non-farm enterprises non-recipient households of both the BISP and Zakat programme own more percentage of non-farm enterprises (23%), the ownership percentage is almost close among BISP and Zakat recipient households.

In support of 2nd and 3rd objectives, findings for Poverty and Deprivation among Recipients and Non-Recipients indicate that for headcount poverty, both Zakat and BISP recipient households have been facing high incidences of poverty while the non-receiver group is least effective from poverty. For Multidimensional Poverty Index (MPI) findings suggest almost similar pattern of poverty rates that incidences of deprivation are highest among the BISP recipients (31%), followed by Zakat recipients with 18 percent incidences of deprivation and the lowest among non-recipients where incidences of deprivation are 11 percent. For Targeting Performance findings show that Zakat have very lower level of coverage of only 0.8 percent of the deserving households as identified by all the three measures of poverty. BISP programme has quite fair coverage of 15 to 17 percent of the deserving households but still too low to cover all destitute. Exclusion error and Inclusion error are quite high both in Zakat and BISP, it is 58 percent in case of Zakat and 77 percent in case of BISP while taking the poorest 20 percent of the population. Overall it can be concluded that HIES 2013/14 has seriously underestimated both the BISP and Zakat coverage. The targeting performance of BISP compares good with similar programmes in the world.

Regarding the welfare impact of Zakat and BISP Programme for the Determinants of Receiving Cash Assistance ownership of house which shows that ownership positively

affect the likelihood that house will get cash assistance from BISP or Zakat. Education of head has a negative impact on getting assistance suggesting that with the increase in the education grades of head, household chances will decrease of getting cash assistance. BISP beneficiaries hold livestock and land, the number was quite low for Zakat beneficiaries. The two demographic variables, household size and dependency ratio has a positive association with the probability of getting cash assistance. Crowding, number of persons living in a room has also a positive impact of getting cash assistance. Durable asset i.e. motorcycle has a positive impact on cash assistance. High women empowerment in Zakat case could be due to high percentage of female head of households in these homes that led more women empowerment.

While taking province Punjab as reference category, a significant variation in the cash transfer prevails across the provinces, with households in province KP and Sindh are more likely to receive cash assistance as compared to the province of Punjab, whereas households of Balochsitan are less likely to receive cash assistance as compared to province Punjab.

As within cash assistance, share of Zakat is quite negligible and mainly the beneficiaries are from BISP, therefore the welfare impact can also be attributed mainly to BISP programme. BISP has had a positive impact on the certain household indicators relevant to the quality of living standards. The results show that enrolment rates among recipient households of both the Zakat and BISP are lower as compared to the non-recipients. SSN programmes in Pakistan might have positive impact on consumption smoothening but they might not be sufficient to build human capabilities of these marginalized households.

8.2. Policy Implications

As mentioned by Nayab and Shujaat (2014), that social safety net programmes are not the 'magic bullet' to alleviate poverty to alleviate poverty and vulnerability in Pakistan, currently they might be helpful in consumption smoothing of marginalized peoples as impact was found positive on consumption expenditures which ultimately translated into headcount poverty. The findings of present dissertation suggest following recommendations;

- Though comprehensive module of HIES covers information on received and paid cash assistance, however question related to Zakat and BISP require improvement as data of both these cash assistance was found to be under-reported, especially the questionnaire related to Zakst require improvement that could provide accurate information without and avoid under-reporting.

- Though targeting of both the Zakat and BISP was found to be quite fair despite of difference on targeting mechanism of both the programmes; however, lot of vulnerable households were excluded from the programme. It's quite difficult to institutionalize the Zakat programme as usually funded by individuals, however BISP, as being an official entity should cover every marginal segment of society as currently programme is even not reaching to half of the bottom quintile. The lower coverage especially in Balochsitan require considerable attention.

- Possession of assets and land ownership in BISP case reflects inclusion error, some non-deserving are getting assistance while some deserving skipped. BISP has not adopted validation criteria to judge accuracy of information, the progamme should adopt the criteria like Zakat (official) so that only needy and deserving could be approached.

- The cash assistance proved to improve household welfare on some of the indicators, however to make any social safety net programme as an effective tool to eradicate poverty, it should have comprehensive graduation strategy (as like Bolsa Familia in Brazil) so poor could be promoted with a permanent exit from poverty. It will ultimate improve the assets, child school enrollment, health and education and asset creation. The original BISP design, with its unconditional cash transfer (UCT), does not demand from the household to make an effort to

invest in its human or physical capital which may help in its transition out of poverty. The conditional cash transfer programmes also remained limited i.e. *Waseela-e-Haq, Waseela-e-Taleem, Waseela-e-Sehat* and *Waseela-e-Rozgar,* that could improve lives of poorest of the poor, the programme design should be improved.

- Though not directly covered by the study, after 18th Amendment, now social security and safety nets are provincial subjects, currently both the federal and provincial governments are separately managing various SSNs i.e. at federal level one can see Zakat/Usher, BISP, EOBI, Prime Minster Health Insurance Scheme and many others. It led duplication as well as emission as some of the targeted population are getting assistance from multiple programme while many others are excluded from these. A comprehensive social protection authority is required to streamline all these programmes under one umbrella with a well-managed data of all the poor population so duplication and emission could be avoided. The centralised data should be available to both the public and private social protection entities and data should be dynamic with ease access for every poor to be enrolled in programme.

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Annexure

Annexure Table 1: Social Security Initiatives in Pakistan

Programme	Benefits	Beneficiaries	Financed by
Government Servants Pension Fund (1954)	Provident Fund Old Age Pension	Government Employees after retirement	Employee Contribution Budgetary Expenditure
Sector Benevolent Funds and Group Insurance (1969)	Benevolent Fund Group Insurance	Public sector employees	Employee Contribution
Employees Social Security Institutions (1967)	Health Services Cash Support	Private formal sector employees	Employee Contribution
Employees Old-Age Benefits Institutions (1976)	Old age pension Invalidity Pension Survivor's pension Old age cash grant	Workers of registered establishments	Employer Contribution Budgetary Expenditure
Workers Welfare Funds (1971)	Cash support In-kind support Housing facilities	Workers of registered establishments Employee Contribution	Employer Contribution
Workers Childrens' Education Ordinance (1972)	Free education of children	Workers of registered establishments	Employer Contribution

Source: Ministry of Finance 2012:226, Sayeed (2004); Jamal (2010)
Note: Abbreviations used: RSPs-Rural Support Programmes; MFIs-Microfinance institutions

Annexure Table 2: Current Social Safety Net Initiatives in Pakistan

Programme	Benefits	Beneficiaries	Financed by
Zakat (1980)	Cash support	Needy and destitute Muslims	Zakat Levy Private Contribution
Pakistan Bait-ul-Mal	Cash support In-kind support	Needy and destitute	Federal Budget Private Contribution
People's Work Programme	Cash for work	Provision of electricity, gas, farm to market roads, water supply and such facilities to rural poor	Federal and provincial governments
People's Rozgar Scheme	Financing for selected businesses	Unemployed educated people	National Bank of Pakistan
Prime Minister Youth Loan Scheme	Financing for selected businesses	Youth	Federal Government
Prime Minister Health Insurance Scheme	Health financing	Poor people	Federal Government
Subsidy on wheat, sugar and fertilizer	In kind	Poor segments	Federal and provincial governments
Labour Market Programmes	Wage Subsidized credit	Unemployed	Federal Budget Other
Micro-finance	Cash as loan for setting up business	To poor for self-employment and move them out of poverty	Various RSPIs, MFIs and NGOs
Benazir Income Support Programme	Cash as income support	Married females belonging to very poor households	Federal Government
Benazir Income Support Programme	Public funds	Cash as income support	Married females belonging to very poor households
Microfinance	Donor funds	Cash as loan for setting up business	To poor for self-employment and move them out of poverty
Pakistan Bait-ul-Maal	Public funds	Cash support for daughters' wedding, food and education	Disabled persons, widows, orphans and households living below poverty line
People's Work Programme	Public funds	Cash for work	Provision of electricity, gas, farm to market roads, water supply and such facilities to rural poor
People's Rozgar Scheme	Commercial banks	Financing for selected businesses	Unemployed educated people
Subsidy on wheat, sugar and fertilizer	Public funds	In kind	Poor segments
Utility Stores	Public funds	Subsidy in prices	Poor segments
Zakat and Ushr	Levy on bank deposits and agri. yield	Cash	Deserving/needy among Muslims

Child Labour and children in bondage	Public funds	Protection and rehabilitation services	Working children facing abuse and exploitation
Employees Old-Age Benefit Scheme	Employers' contribution	Cash	Formal sector employees
Social Health Insurance	Individuals' contribution	Cash	General population
Workers Welfare Fund	Employers' contribution	Housing, schools and health facilities	Formal sector employees

Source: Ministry of Finance 2012:226, Sayeed (2004); Jamal (2010)

Note: Abbreviations used: RSPs-Rural Support Programmes; MFIs-Microfinance institutions

Annexure Table 3: Dimensions, Indicators, Weight and Definitions

Dimension	Indicator	Weight	Definition
Education	Male Education	1/12	No male over 11 years of age has completed 5 years and above of schooling
	Female Education	1/12	No female over 11 years of age has completed 5 years and above of schooling
	Child School Attendance	1/8	Any school-aged child (6-11) is not attending school
	Educational quality	1/24	If any person of age 6-16 does not attend school because of poor quality of education (too expensive, too far away, poor teaching behavior, no female staff, no male staff) *
Health	Access to health care facility	1/12	If any child in household of age under 5 year got diarrhea but not consulted or consulted to private due to poor government hospital facilities i.e. No Govt. facility, doctors never available, doctors not available, cannot treat complications, staff not helpful, too far away, no female staff, timing not suitable, medicines ineffective, not enough medicines OR If any child in household of age under 5 year got Malaria but not consulted or consulted to private due to poor government hospital facilities i.e. No Govt. facility, doctors never available, doctors not available, cannot treat complications, staff not helpful, too far away, no female staff, timing not suitable, medicines ineffective, not enough medicines **
	Immunization	1/12	If any child in household of age 12-59 months is not fully immunized
	Prenatal care	1/12	If any women 15-49 who gave birth in last three years did not have antenatal care (include doctor, nurse, lady health visitor, TBA, hospital)
	Institutional delivery	1/12	If any women 15-49 who gave birth in last three years did not have a safe delivery (born at home or is not facilitated by some skilled health person i.e. doctor, nurse, LHV and TBA)
Standard of Living	Overcrowding	1/18	If more than 3 people per room are residing
	Water	1/18	If water source does not meet MDG standards (unprotected well, surface water, tanker truck, other)
	Sanitation	1/18	If toilet facility does not meet MDG standards (digged ditch, no facility)
	Clean Energy	1/18	If household does not have gas connection Note: 2010 PSLM reported detailed source of cooking fuel i.e. wood, coal/charcoal, agricultural dung, crop residue, other, LPG, Gas etc.
	Electricity	1/18	If there is no access to electricity
	Assets	1/18	If HH doesn't have large asset motorcycle or refrigerator or car/vehicle

* The 2010 PSLM survey also reported issues of those who were attending school i.e. shortage of teachers, shortage of books, sub-standard education, school far away, education is costly, latrine/water not available.

** The 2010 PSLM survey reported dissatisfaction of health facility for all the members who got sickness i.e. If does not use health care facility because is costly doesn't suit, lacks tools, not enough facilities, or uses and is not satisfied

Annexure Table 4: % of Households Who Donated Zakat Province and Region

Province	Urban	Rural	Total
KP	9.6	12.8	12.2
Punjab	6.0	4.5	5.0
Sindh	19.5	3.5	11.9
Balochistan	12.4	8.9	9.5
National	**11.5**	**5.8**	**7.9**