

Determinants of Access to Social Protection Programmes in Punjab, Pakistan

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Abstract

Social protection is a key policy instrument for reducing poverty and vulnerability in developing countries; however, access to such programmes often remains uneven. This study examines the household-level determinants of access to social protection programmes in Punjab, Pakistan, using data from the Multiple Indicator Cluster Survey (MICS) Punjab 2013–14. Access is measured as participation in at least one formal social protection scheme. Using binary logistic regression, the study finds that education of the household head, female headship, family size, formal employment, and urban residence significantly increase the likelihood of access. While some factors reflect responsiveness to vulnerability, others indicate structural and administrative barriers that disadvantage less educated, informally employed, and rural households. The findings highlight persistent targeting inefficiencies and underscore the need for improved outreach and more inclusive social protection policies in Pakistan.

1. Introduction

Social protection has been a major focus of the development policy in both the developed and developing economies, especially in the environments with high poverty levels, income disparities as well as vulnerability to economic shocks. By a loose definition, social protection is a set of public measures aimed at the alleviation of poverty and vulnerability, the resilience to risk, and the inclusive growth in the form of income transfers, social insurance, and the labor market policies (Barrientos, 2010; ILO, 2021). In developing nations, with a great proportion of the population being employed in the informal sector and having limited access to formal insurance practices, social protection programmes are crucial in protecting livelihoods and provision of minimum living standards.

Poverty, vulnerability and socioeconomic inequality are some of the challenges being experienced in Pakistan. Even with times of economic improvement, a significant percentage of the population continues to struggle to afford the basic essentials and is extremely vulnerable to the shock as a result of inflation, joblessness, health crises, and disasters in climate change. Based on formal estimates, almost one-third of the Pakistani population has lived below the national poverty line in recent years, and the fact that it is vulnerable to poverty is far more extensive than the officially poor (Government of Pakistan, 2021; World Bank, 2021). In this regard, social protection programmes are a very crucial policy tool in the reduction of poverty and social inclusion.

In the last twenty years, Pakistan has been able to increase its social protection framework by implementing a set of social safety nets, social assistance as well as social security programs. Some of the major programs are Benazir Income Support Programme (BISP), Pakistan Bait-ul-Maal, Zakat, Pakistan Poverty Alleviation Fund (PPAF), subsidized food delivery by utility stores and contributory schemes like the Employees Old Age Benefits Institution (EOBI) and Workers Welfare Fund (WWF). In more recent times, the Ehsaas Programme has been unveiled as a framework to integrate and streamline interventions of social protection with the aim of creating a state that has a welfare-oriented character (Government of Pakistan, 202021).

Although the growth of social protection programmes is indicative of robust policy commitment, there is an increasing amount of evidence to indicate that access to such programmes is skewed and usually influenced by household socioeconomic factors in addition to need itself. According to a number of studies, in Pakistan, a large portion of social protection benefits go to non-poor or comparatively wealthier households, which reveals weaknesses in targeting and coverage (Waqas and Awan, 2017; Azeem, Muger, and Schilizzi, 2019). Subsequently, the knowledge of the determinants of access to social protection programmes is quite important as much as their impact on the results of poverty. Social protection does not necessarily follow but is a product of a complicated interplay between demographic, socioeconomic and institutional variables. Possible household factors include education of the household head, the gender, the size of the family, the employment rates, and the region of residence that could play a significant role in influencing the enrolment in the social protection programmes. An example is women headed households, or rural based households, which might be vulnerable to informational, administrative, or social barriers that restrict access even in cases where need may be higher. Likewise, the employment status, i.e. the participation in formal and informal sectors of employment, may influence the eligibility with regard to contributory schemes like pensions and social security (Ulriksen, 2012; Awan et al., 2011).

The Pakistani province of Punjab is the largest and the most populated province which offers a particularly suitable place to examine the access to social protection. The province has a large proportion of poor and vulnerable individuals in the country and rural-urban and socioeconomic inequalities are very high. Despite having a relatively high infrastructure and administrative capacity in comparison to other provinces, there is evidence that access to social protection in the province is uneven and provoking critical policy issues on inclusiveness and targeting efficiency.

The majority of available empirical research on social protection in Pakistan is aimed at determining the influence of transfers on poverty, vulnerability, or particular welfare outcomes (e.g., health and education). Relatively less research directly investigates the determinants of access to social protection programmes by the household, especially with large-scale and representative microdata. This constitutes a very important literature gap because to reduce poverty effectively, effective programmes are not enough, but also a fair access to eligible households. It is against this backdrop that this study will examine the determinants of access to social protection programmes in Punjab, Pakistan, based on data on households provided by the Multiple Indicator Cluster Survey (MICS) 2013/14. With the outcome of interest being enrolment and inclusion in social protection programmes, this paper supplements the body of research that has concentrated on the impact and offers novel understandings of the socioeconomic dimension of influencing access to public transfers and benefits.

In particular, the research questions that will be discussed in the study include the following: (i) What household-level socioeconomic and demographic factors have a significant impact on the likelihood of social protection benefits in Punjab? (ii) What is the impact of education, gender of household head, family size, employment status and region on access to social protection programmes and (iii) What are the policy implications to enhance efficiency and inclusiveness of social protection interventions?

Answering these questions, the study makes the input to the literature in three significant ways. First, it presents empirical evidence on determinants of access based on a large and representative dataset on Punjab. Second, it separates various socioeconomic avenues by which households become or do not receive access to social protection. Third, it will provide policy-relevant information that can be used to design more inclusive and effective social protection systems in Pakistan.

The rest of the paper is organized in the following way. Section 2 is a review of the available theoretical and empirical literature on access to social protection programmes. Part 3 provides a description of the data source, the construction of the variables and the econometric methodology. The empirical results are presented and discussed in section 4. The final section of the study (sec 5) presents the policy recommendations to ensure the availability of social protection in Punjab.

2. Literature Review

With the extended acknowledgment of social protection as a key element of the poverty reduction and inclusive growth strategies, the literature on the subject of social protection in developing countries has grown substantially over the last 20 years. Although abundant research has been conducted to determine the effects of social protection programmes on poverty, consumption smoothing and human capital outcomes, there is a relative lack of studies that are specifically concerned with the factors that determine access to social protection programmes. The access is fundamental to be understood because the well strategized programmes cannot deliver their results in exclusion of eligible households and when non-poor groups monopolize on the benefits.

In theoretical terms, the possibility to access social protection can be explained in the context of welfare economics and social choice. The social protection programmes are usually structured to help in addressing the vulnerable populations based on income, demographic factors or employment status. Nevertheless, there are usually targeting mistakes due to imperfect information, the lack of administrative capacity, and political economy that causes both deserving families to be excluded and ineligible beneficiaries to be included (Coady, Grosh, and Hoddinott, 2004). The household-level factors and institutional factors influence these targeting outcomes.

Empirical research in the developing nations has continually pointed to the fact that access to social protection depends on socioeconomic characteristics. Education comes out as one of the strongest predictors of programme attendance. It is also more likely that educated household heads will learn of programmes available and know the eligibility requirements, as well as, hurdle through the administrative processes, thus increasing their chances of enrolment (Ulriksen, 2012; Barrientos, 2010). Lowly educated households on the other hand have been known to be at the receiving end of informational barriers that pose a block to accessibility even when they qualify.

Demographic attributes of the households also contribute towards a great extent. A number of studies conclude that households headed by females are more prone to social assistance transfer, a policy initiative to favor women as primary caregivers and to boost the results of intra-household welfare (World Bank, 2019). There is however a mixed evidence with certain studies indicating that female headed families have more administrative and social obstacles which hamper good access to programmes, especially in conservative or rural settings (Awan et al., 2011).

The other factor that determines access is family size. There are higher dependency ratios in larger households that might qualify them better to receive the means-tested programmes, but they might have problems with documents and verification procedures. The situation in South Asia indicates that the high household size is frequently connected to the increased likelihood of getting the social assistance, but the strength of the effect depends on the type of programme (Azeem et al., 2019). Labor market participation and employment status have a powerful impact on access to social protection especially contributory schemes like pensions and social insurance. Formally employed households have a much higher probability of accessing benefits under social security, and the informal sector workers (the majority of workers in developing countries) are largely ineligible to contributory programmes (ILO, 2021). This dualism invents structural inequalities of access and restricts the redistributive capacity of social protection systems.

The access to social protection is further formed by spatial factors such as rural-urban location and regional differences. The urban households usually have access to superior administrative infrastructure, closer distance to programme offices, and high rate of information dissemination, which boosts enrolment rates as compared to the rural households. Reduced access to social protection has always been recorded in rural regions, despite adjusting to the status of poverty (Coady et al., 2004; Waqas and Awan, 2017). The empirical study of the access to social protection in Pakistan is still limited. The current research has mainly focused on the effect of social protection transfer on poverty and vulnerability, but not on enrolment. Azeem, Mugeru and Schilizzi (2019) discover that, despite the lowering of poverty, due to social protection transfers, in Punjab, the access to the transfer is not associated with poverty, which implies inefficiencies in targeting. According to Waqas and

Awan (2017), the Pakistani public expenditure on social protection has a poor pro-poor character, with large gains going to non-poor households.

In addition, institutional and administrative barriers, such as complicated eligibility rules, lack of coordination between agencies, and inadequate use of updated poverty databases, add to the unequal access to Pakistan social protection programmes. Although the latest efforts like the Ehsaas Programme are attempting better targeting with the help of digital databases and biometric authentication, its effectiveness has not been empirically proven. All in all, the literature indicates the access to social protection to be a product of a set of household socioeconomic factors, labor market, and spatial factors. Nevertheless, it is apparent that there is a lack of comprehensive, micro-level studies that explicitly model access to social protection programmes with representative data on Pakistan. This study will fill this gap and supplement the existing impact-oriented studies by working on the determinants of access in Punjab.

3. Data and Methodology

This section describes the data source, sample design, variable construction, and econometric strategy employed to examine the determinants of access to social protection programmes in Punjab.

3.1 Data Source and Sample Design

The paper relies on household-based microdata, Multiple Indicator Cluster Survey (MICS) Punjab 2013¹⁴ that was carried out by Pakistan Bureau of Statistics and UNICEF. MICS is a representative, national and provincial survey, which aimed at gathering detailed information on household demographics, education, employment, source of income and social access to social services including social protection programmes.

The survey is stratified into two stages, which are cluster sampling design. In the former phase, probability proportional to size is used to identify enumeration areas so that both rural and urban areas are sufficiently represented in all the districts of Punjab. During the second phase, the households are randomly sampled in each enumeration area. This type of sampling will be representative on a provincial, rural-urban, and district level.

In this research, analysis sample will be limited to households living in Punjab province. The observations on which the information regarding social protection participation or significant household characteristics is missing are excluded. This leaves a large representative sample, which is useful in econometric estimation of determinants of access.

3.2 Definition of Social Protection Access

The access to social protection is also a binary outcome that determines whether a household benefits in at least one formal social protection programme. There are three broad groups of social protection namely, social safety nets, social security schemes and subsidized consumption support. A household is defined to have access to social protection (coded as 1) when it reports that it receives benefits of any of the following programmes: Benazir Income Support Programme (BISP), Zakat, Pakistan Bait-ul-Maal, Sasta Ration Scheme, Watan Card, Employees Old Age Benefits Institution (EOBI), Workers Welfare Fund (WWF) or subsidized government utility stores purchases. Those households who indicate that they have not participated in any of these programmes are registered as 0.

This index of access to social protection comprehensively describes access to social protection, and it is an indicator of the institutional reality in Pakistan, where a household can be the recipient of multiple programmes at the same time.

3.3 Explanatory Variables

The theoretical and empirical literature on the social protection access informs the choice of the explanatory variables. The socioeconomic and demographic factors related to households are supposed to affect the level of awareness regarding programmes, eligibility, and administrative maneuverability.

Important explanatory variables are education of the household head, the level of education in terms of categorical levels of schooling; gender of the household head; family size; employment status/ occupation of the household head; and region of residence (urban or rural). The education is likely to augment access through improvement of information and administrative capacity whereas employment status is especially pertinent in regards to access to contributory social security schemes. The family size has captured the dependency burden and entitlement to means test programmes, whilst the geographical location of the family area has captured the difference in geographical areas of administrative outreach and service provision.

3.4 Econometric Specification

The research uses a binary logistic regression to determine the determinants of access to social protection programmes. The logistic regression is suitable because the dependent variable is dichotomous and makes it possible to estimate the likelihood of a household obtaining social protection benefits according to its attributes

The model is specified as:

$$\text{Access}_i = f(\text{EduHH}_i, \text{GenHH}_i, \text{FS}_i, \text{EmpHH}_i, \text{Reg}_i) + \varepsilon_i$$

where Access_i denotes access to social protection for household i ; EduHH represents education of the household head; GenHH denotes gender of the household head; FS is family size; EmpHH captures employment or occupational status; Reg indicates rural-urban residence; and ε_i is the stochastic error term.

The parameters are estimated using maximum likelihood techniques. Estimated coefficients are transformed into odds ratios to facilitate interpretation. An odds ratio greater than one indicates a higher likelihood of accessing social protection, while a value less than one indicates lower access probability.

3.5 Estimation Strategy and Limitations

The models are all estimated with the robust standard errors to consider a possible heteroskedasticity. Correlation matrices and variance inflation factors are used to determine the presence of multicollinearity between the explanatory variables, and no significant problem of multicollinearity is found.

It is a cross-sectional analysis which fails to create causal relationships. Rather, it determines statistically significant relationships between the characteristics of households and access to the social protection programmes. Regardless of this shortcoming, such access to a large and representative dataset and a clearly constructed econometric frame gives some useful information about access dynamics and targeting performance of social protection systems in Punjab.

4. Results and Discussion

The results of the binary logistic regression model estimating the determinants of access to social protection programmes in Punjab will be presented in the section below and discussed. The goal is to give an analytical narrative that goes on to explain the patterns of access observed and connect them to existing literature and policy context.

4.1 Education of Household Head

Household head education now comes out as a powerful and statistically significant determinant of access to social protection programmes. The findings of the regression model point out that households whose heads possess greater education levels have a much better probability to receive social protection benefits than do households whose heads possess no formal education. This relationship is monotonic and the probability of access rises with each new level of schooling.

This observation indicates the importance of education in raising awareness of programmes available, eligibility and application processes. With higher education levels, household heads tend to have the information and administrative skills necessary to traverse the complicated stages of enrolment, fill out documents, and communicate with institutions of government. This finding correlates with the previous empirical data in developing countries that put education as a major prerequisite of accessibility to public welfare programmes (Barrientos, 2010; Ulriksen, 2012).

Informational asymmetries may be high in the context of Punjab where several social protection programs are running concurrently. The findings indicate that families having poor education levels can be excluded in the social protection not because they do not require them, but because they cannot interact with administrative systems.

4.2 Gender of Household Head

The gender of the head coefficient shows that female headship has a statistically significant relationship with access to social protection programmes. Women headed households are more likely to get social protection benefits as compared to male headed homes. This finding comes in line with the design objectives of a number of social assistance programmes in Pakistan especially cash transfer programmes that specifically aim to include women as the main beneficiaries.

The positive relationship indicates the policy attempts to increase the economic security of women and to improve the intra-household welfare outcomes by targeting the transfers to the female household members. Other previous studies on social protection in Pakistan and other developing nations have recorded similar trends (World Bank, 2019; Awan et al., 2011). Nevertheless, it should be remembered that female headed households are also more likely to be poor and vulnerable, and this may indicate that more access is a sign of targeting as well as more need.

4.3 Family Size

It is found that family size is positively and significantly related to access to social protection programmes. The bigger households receive social protection benefits more than the smaller ones. This is in line with most of the means-tested programmes where the eligibility criteria consider the household size and dependency ratios to determine need.

Policy wise, this result implies that social protection programmes in Punjab are to some extent responsive to household demographic structure. Nevertheless, the higher the household size, the more probable it is that it correlates with administrative visibility or more chances to reach the poverty thresholds, thus, becoming more likely to get access. Other researchers have also found similar evidence in their studies of the enrolment in social assistance in South Asia (Azeem et al., 2019).

4.4 Employment Status and Occupation

Employment status of household head is also very influential in determining access to social protection especially when contributory schemes are considered. The regression outcomes indicate that families led by persons working in the formal sector have a high probability of

gaining access to social protection benefits as opposed to those working in the informal sector or the unemployed.

This trend represents the institutional form of the Pakistani system of social protection in which the formal participation in the labor force is a critical determinant of access to social security programs like pensions and employment-related benefits. The informal workers in the sector that form a significant proportion of the Punjab labor force continue to be left mostly out of contributory programmes, indicating a structural injustice in terms of access. This observation aligns with the global evidence on the dualist character of the social protection systems of the developing economies (ILO, 2021).

4.5 Rural–Urban Differences

The geographical location also comes out as a statistically significant factor in access to social protection programmes. The households in urban areas have a higher chance of accessing the benefits of social protection than rural houses. This finding highlights the importance of spatial factors in determining the outcome of access.

Urban areas usually enjoy superior administrative infrastructure, closer access to programme offices as well as increased distributions of information, which contribute towards enrolment. Rural households, conversely, can be affected by geographic barriers, limited institutional access, and worse administrative capacity, with less successful access in cases where the need may be greater. The literature has extensively reported this rural urban disparity in access (Coady et al., 2004; Waqas and Awan, 2017).

4.6 Discussion: Targeting and Inclusion Dynamics

Collectively, the findings indicate that the household socioeconomic factors, labor market condition, and space location have a significant effect on access to social protection programmes in Punjab. On the one hand, some of the determinants in the form of family size and female headship imply responsiveness to vulnerability; on the other, some of the determinants, especially the education and formal employment, show that there are access barriers that can be disadvantageous to less educated and informally employed households.

The results indicate the possibility of inclusion and exclusion flaws in the social protection system. The more educated and formally employed households are the ones that are more likely to avail benefits even in instances where their levels of poverty might be relatively elevated. On the other hand, households that are not well educated, in the rural areas, and the informally employed might not be accommodated even when they are highly vulnerable. These trends make it evident that better targeting mechanisms and increased outreach to marginalized groups should be improved.

5. Conclusion and Policy Implications

The paper has investigated the household access to social protection programmes determinants in Punjab, Pakistan, based on household level data collected in the Multiple Indicator Cluster Survey (MICS) 201314. By paying attention to access and not to impact, the paper augments the current studies on the effectiveness of social protection and offers new information about the socioeconomic and spatial determinants of the enrolment and participation in the public welfare programmes.

The empirical study demonstrates that the access to social protection in Punjab is not haphazard, but it is correlated with household characteristics in a systematic way. The education of the household head is revealed to be one of the most important determinants and more educated households are much more likely to obtain social protection benefits. This observation highlights the importance of information, awareness, and administrative capacity in influencing the access outcome. In the same manner, female headed households show

higher access probabilities which is an indication of the policy decision to target women as key beneficiaries especially in social assistance programmes.

The demographic makeup of the household is also an issue. The bigger the family the better it is that they can receive social protection, implying that the eligibility criteria of the programme explain dependency burden partly. The employment status also further distinguishes patterns of access: households with formal employment in the sector have a much higher probability of access to social protection benefits, particularly by contributory social security programs, whereas informal sector households continue to have little or no access to social protection benefits. Moreover, there are still obvious rural-urban inequalities, with urban families having more access to it compared to rural ones, probably because of the administrative outreach and institutional capacity differences.

Collectively, these results indicate a contradictory picture of targeting performance. On one hand, social protection programmes in Punjab seem to be receptive to some of the most susceptible aspects of the vulnerability, e.g. female headship and household size. Vice versa, the robust position of education, formal employment, and city living indicates the existence of access barriers that could be systematic disadvantage of less educated, informally employed, and country households. These trends suggest possible errors of exclusion that restrict the fairness and performance of social protection interventions.

Politically, the findings suggest that more outreach and administrative processes should be enhanced to enhance accessibility in the marginalized groups. Access barriers can be minimized by simplifying the enrolment processes, increasing the spread of information in the rural setting, and decreasing the documentation requirements among less educated households. There might also be an improved coverage and less structural inequities when greater proportion of informal sector workers are integrated into social protection systems; whether non-contributory or hybrid schemes. Meanwhile, to make better progress in the accuracy of targeting, coordination between social protection programmes and the utilisation of poverty databases to match eligibility with need must be made more effective. New projects to digitize the process of beneficiary identification and simplify the delivery of the programme have potential opportunities, yet the effectiveness of the program implementation requires long-term institutional strength and openness.

Academically, the study will add to the body of literature on access determinants by offering micro-level data on access determinants based on a large, representative dataset of Punjab. The paper highlights the significance of studying the enrolment processes as a condition to a successful reduction of poverty by separating the dynamics of access and impact evaluation. Further studies may expand this study by looking at patterns of access with time, more provinces or looking at how social norms and local governance influence access to social protection.

All in all, it is necessary to enhance access to social protection programmes in order to increase their poverty-reducing capabilities. An intermediate strategy, which will involve adequate programme planning and accommodative administrative procedures, can address the concern of ensuring the social protection systems in Pakistan reach the needy people and lead to sustainable and equal development.

References

Awan, M. S., Malik, N., Sarwar, H., & Waqas, M. (2011). Impact of education on poverty reduction. *International Journal of Economics and Financial Issues*, 1(2), 1–12.

- Azeem, M. M., Mugeru, A. W., & Schilizzi, S. (2019). Do social protection transfers reduce poverty and vulnerability to poverty in Pakistan? *Journal of Development Studies*, 55(8), 1757–1783. <https://doi.org/10.1080/00220388.2018.1502877>
- Barrientos, A. (2010). Protecting capability, eradicating extreme poverty: Chile Solidario and the future of social protection. *Journal of Human Development and Capabilities*, 11(4), 579–597. <https://doi.org/10.1080/19452829.2010.520828>
- Coady, D., Grosh, M., & Hoddinott, J. (2004). *Targeting of transfers in developing countries: Review of lessons and experience*. World Bank.
- Government of Pakistan. (2021). *Economic Survey of Pakistan 2020–21*. Ministry of Finance.
- International Labour Organization. (2021). *World social protection report 2020–22: Social protection at the crossroads*. ILO.
- Pakistan Bureau of Statistics. (2014). *Multiple Indicator Cluster Survey (MICS) Punjab 2013–14*. Government of Pakistan.
- Ulriksen, M. S. (2012). Questioning the pro-poor agenda: Examining the links between social protection and poverty. *Development Policy Review*, 30(3), 261–281. <https://doi.org/10.1111/j.1467-7679.2012.00590.x>
- Waqas, M., & Awan, M. S. (2017). Social protection, gender, and poverty in Pakistan. *Pakistan Development Review*, 56(4), 583–606.
- World Bank. (2019). *The state of social safety nets 2018*. World Bank Publications.
- World Bank. (2021). *Pakistan@100: Shaping the future*. World Bank.