

# **Empowering the Ultra-Poor:** Evaluating the Impact of Pakistan's National Poverty Graduation Program

Nasir Iqbal, Saima Nawaz

# Empowering the Ultra-Poor: Evaluating the Impact of National Poverty Graduation Programme

ii

## Acknowledgment

This report delves into the effectiveness of the National Poverty Graduation Programme (NPGP) in enhancing multidimensional wellbeing within the vulnerable communities of South Punjab, Pakistan. This study was made possible through the collaborative efforts of the Pakistan Institute of Development Economics (PIDE), the Ministry of Poverty Alleviation and Social Safety, the Government of Pakistan, COMSATS University Islamabad (CUI), and various stakeholders, each contributing significantly to our research work.

We express our thanks to the Higher Education Commission (HEC) and the World Bank for their financial support through the Local Challenge Fund (LCF) grant. We extend our thanks to Dr. Nadeem ul Haque, Vice-Chancellor of PIDE, for his valuable insights and contributions in shaping the study's design.

We are thankful to the NPGP Project Management Unit (PMU) team, especially Mr. Muhammad Fazal, Ex Programme Director of NPGP, for his critical review and input, which played a vital role in refining our research tools and the final report. We are grateful to Dr. Ahsan Riaz, Programme Director, and Mr. Muhammad Yasir, Assistant Manager-MER, for their support in coordinating fieldwork activities, sharing essential project data, and finalizing research tools and draft reports. Special thanks to Ms. Shaheera Jalil Albasit for her valuable contributions during the early stages of our research. We acknowledge the cooperation and assistance extended by the management and staff of the National Rural Support Programme (NRSP) in Jhang, Layyah, and D.G. Khan.

Our thanks go to the dedicated survey team, whose tireless efforts in the field were pivotal in collecting high-quality data, essential to the success of this study. We also acknowledge the role played by the field monitors and supervisors in ensuring data accuracy and reliability. A special thanks to the communities and beneficiary families who actively participated in both the quantitative and qualitative surveys, providing invaluable insights. We appreciate Ms. Amna Riaz for her dedicated efforts in executing field activities, liaising with stakeholders, and ensuring the timely completion of the study.

We extend our thanks to the reviewers from HEC, whose guidance and support at various stages of the study significantly contributed to its improvement. Our research has been enriched by the collective efforts of these individuals and organizations. Their support and collaboration have been indispensable, shaping this study into a comprehensive exploration of poverty alleviation efforts in South Punjab.

Nasir Iqbal and Saima Nawaz

# **Executive Summary**

This report presents the findings from the quantitative research conducted on the impact evaluation of the National Poverty Graduation Programme (NPGP). The core of the evaluation is based on a household survey, conducted in three selected districts, namely Layyah, Jhang, and DG Khan from Punjab, Pakistan, targeted at NPGP beneficiary households and sub-set of non-beneficiary households that are comparable and can be used as an adequate counterfactual. Survey data involves 4,131 households, which includes both the treatment group and control group. Out of the total households, 2,277 are the NPGP beneficiaries (treatment group) and 1,854 are control group. These will provide statistically robust estimates of the impact of NPGP on its beneficiaries.

#### National Poverty Graduation Programme (NPGP)

The National Poverty Graduation Programme (NPGP) is a flagship Programme by the Government of Pakistan (GoP) and the International Fund for Agricultural Development (IFAD). The Ministry of Poverty Alleviation and Social Safety is the lead Programme agency. A Programme Management Unit (PMU) housed at the ministry is responsible for implementing NPGP. The Programme aims to assist the ultra-poor and very poor in graduating out of poverty on a sustainable basis while simultaneously improving their overall food security, nutritional status, and resilience to climate change. The development objective of the Program is to enable the rural poor especially women and youth to realize their development potential and attain a higher level of social and economic well-being through a proven, flexible, and responsive menu of assistance. As of July 2023, NPGP operates across 363 union councils in 23 districts throughout Pakistan, benefiting 308,491 households. The NPGP has transferred 123,681 assets, provided 184,810 Interest-Free Loans (IFLs), and established or revitalized 4,774 community institutions. The Programme adopts a comprehensive approach to poverty alleviation, combining social mobilization, livelihood development, and financial inclusion.

#### **Objectives of the evaluation**

The evaluation generates policy-relevant evidence regarding the impacts of the NPGP Asset Transfer Intervention. The main objectives of the evaluation are to:

- 1. Economic Empowerment: Quantify the impact of the asset transfer on economic well-being using various indicators including poverty, consumption expenditures, and income diversification.
- 2. **Long-term Resilience:** Quantify the impacts of the asset transfer on long-term resilience measures including financial development and asset accumulation.
- 3. Social Empowerment: Quantify the impact of the asset transfer on social empowerment including health, education, and women empowerment.

#### **Key Findings**

**Changes in Economic and Social Indicators of NPGP Beneficiaries**: Based on the household survey data, we find that:

- 1. Changes in Poverty Score: The asset transfer intervention led to a substantial improvement in poverty scores, as assessed by the Poverty Score Card (PSC). Approximately 86% of beneficiaries showed improvements in their PSC. Among these improvements, around 49% of NPGP beneficiaries have made progress beyond the poverty band of 23, while approximately 22% of beneficiaries experienced an increase in poverty scores from 18 to 23. Additionally, around 10% has increased in their PSC from 16.17 to 18. Around 4.7% have scored above 40 on the poverty score card indicating a successful transition out of poverty (Figure 16). These findings highlight a significant increase in PSC among Programme beneficiaries.
- 2. Changes in Income and Consumption: The intervention significantly boosted income, with targeted households experiencing a 35.6% increase in their overall average monthly income (Figure 8). Moreover, there is a substantial 41% rise in their average monthly expenditures after the intervention (Figure 9). Approximately 49.1% is the food-related consumption(Figure 10).
- 3. **Employment Diversification**: The NPGP has significantly diversified employment among the beneficiaries, with 80% now engaged in various sectors (Figure 7A). This underscores the Programme's success in creating job opportunities.
- 4. Women Empowerment: The analysis shows that around 37.68% of women assert that they have complete control over the decisions of children's marriage, and 36.96% of women claim to have full authority in the realm of children's education. In terms of small purchases for others, 37.15% of women state that they possess complete decision-making power (Figure 12) Approximately 66% of women find it relatively easy to move around, with an additional 25% stating that it's very easy. They can move very easily anywhere in their area (Figure 13). Moreover, they have shown a higher level of engagement in political activities, with approximately 99% expressing their intent to vote in the next general election (Figure 14).
- Market Relevancy and Efficacy: Based on the household survey data, we find that:
- 1. **Relevancy**: Around 92% of the beneficiaries believe that the intervention is relevant to their economic conditions. While over 90% of them find it to be relevant to their livelihood needs (Figure 18).
- 2. Sustainability: A significant 82% of beneficiaries find the intervention to be sustainable. Likewise, the retention rate of the asset is also found to be high with 9% reporting a loss of asset (Figure 20A).
- 3. Effectiveness: The perception about the effectiveness of the Programme is high with 82% of the beneficiaries reported to have found it effective.

#### Asset Quality and Nature of Benefits: We find that:

- 1. Around 92% of beneficiaries reported that the assets they received were wellmatched to their economic circumstances.
- 2. Over 90% expressed satisfaction with the suitability of the assets in addressing

their economic requirements.

3. Remarkably, 98.3% of beneficiaries received the specific asset they had initially requested, underscoring the Programme's responsiveness to individual economic preferences.

#### Impacts

#### Assessing Changes in Poverty Score

A standardized mean difference (SMD) analysis reveals significant differences between NPGP beneficiaries and the control group across various well-being indicators. Positive SMD values indicate a positive impact. The treatment group exhibited significantly higher levels of dependency, head education, and access to improved living conditions, such as lower crowding and better sanitation facilities. They also displayed higher ownership of assets like air coolers, cooking stoves, vehicles, televisions, livestock, and land. Notably, the overall poverty scorecard (PSC) score displayed a substantial difference, with the treatment group's PSC being 3.830 standard deviations higher than that of the control group.

#### Multivariate Analysis

- **Impact on** consumption: The multivariate analysis shows a significant positive impact of asset transfers on specific aspects of household consumption. Specifically, we found that asset transfers led to a substantial and statistically significant increase in per capita food consumption by 445 PKR. Moreover, our results demonstrate a notable positive impact on utilities, with per capita utility consumption increasing by 186 PKR. However, asset transfers had an insignificant impact on education, health, and clothing expenditures. While we did not find statistically significant increases in these areas in our current analysis, these effects may become more pronounced over time as beneficiaries transition from addressing immediate needs to pursuing broader, long-term goals.
- **Impact on livestock**: The analysis demonstrates a positive and statistically significant impact of asset transfers on livestock ownership, encompassing both large and small animals. Specifically, beneficiaries of asset transfers exhibit a 33-percentage point higher likelihood of owning large animals compared to nonbeneficiaries, and a 41-percentage point higher likelihood of possessing small animals when compared to the control group. However, the Programme does not appear to have any impact on the ownership of draft animals and poultry.
- Impact on asset accumulation: The empirical analysis demonstrates a positive and statistically significant impact of asset transfers on personal transport, particularly rickshaws. Beneficiaries are found to have a 12-percentage point higher likelihood of owning rickshaws compared to non-beneficiaries. Similarly, the intervention has a statistically significant impact on the ownership of household appliances, such as refrigerators and heaters. Programme beneficiaries exhibit a 14-percentage point higher probability of having refrigerators and a 6-percentage point higher probability of having heaters compared to non-beneficiaries.

• **Impact on housing amenities**: The assessment of housing amenities suggests that the intervention had a limited impact on housing quality factors such as crowding and wall materials. However, the multivariate analysis highlights a notable positive effect of the Programme on home ownership, with beneficiaries exhibiting a 21-percentage point higher likelihood of owning their homes compared to non-beneficiaries.

#### **Policy Recommendations and Way Forward**

Based on the comprehensive evaluation of the National Poverty Graduation Programme (NPGP), several policy recommendations can be derived. The recommendation part is divided into two sections including 1) Programme-level recommendations; and 2) design-level recommendations.

#### Programme level recommendations

- Sustaining and expanding asset transfers: The evaluation results demonstrate the positive impact of asset transfers on economic well-being, income diversification, and overall poverty scores of beneficiaries. Therefore, it is crucial to sustain and potentially expand this aspect of the Programme. To ensure sustainability, a thorough assessment of asset maintenance and replacement strategies should be conducted, focusing on asset quality and suitability.
- Enhancing diversification opportunities: The NPGP has been successful in diversifying employment opportunities for beneficiaries. To further enhance economic empowerment, the Programme should explore avenues for diversification beyond the current sectors. This could include support for small-scale enterprises and e-commerce to promote entrepreneurship among beneficiaries.
- Women empowerment and mobility: The Programme has had a significant impact on women's empowerment, including decision-making power and mobility. To further strengthen these gains, targeted interventions for women's economic and social empowerment should be incorporated into the Programme design.
- Asset quality and suitability: The high satisfaction rates among beneficiaries regarding asset quality and suitability are promising. Programme administrators should continue to ensure that asset allocation aligns with the economic circumstances and preferences of beneficiaries.
- Home ownership promotion: The positive impact of the Programme on home ownership is a notable finding. Encouraging home ownership can have broader socioeconomic benefits. The Programme should explore ways to facilitate access to housing and property ownership for beneficiaries.
- **Community engagement and knowledge sharing**: Building on the success of community institutions established by the Programme, knowledge-sharing platforms, and networks should be fostered to enable beneficiaries to learn from one another experiences and best practices.

#### Design level recommendations

- Shifting from unconditional to graduation-based support for BISP Beneficiaries: The success of the asset transfer Programme highlights an opportunity for change. Currently, the Government of Pakistan allocates substantial funds annually for unconditional cash transfers to 09 million families through BISP. It is crucial to reconsider this approach and strategize a transition plan. By directing resources from unconditional cash transfers and engaging development partners, the government can adopt structured graduation Programmes like NPGP. This shift ensures sustainable poverty alleviation, moving beneficiaries beyond unconditional cash support.
- Value-chain approach for Poverty Graduation: NPGP has mainly focused on asset transfer at the household level. However, the experiences from other countries have shown that developing pro-poor value chains through having collective assets and businesses by the poor that offer opportunities for access to bigger markets has a high potential for doubling the return on investment for the poor. The individual asset transfer has so far been successful in increasing income and household consumption, but NPGP needs to modify its approach with the addition of developing collective businesses of the poor around horticulture, livestock, agriculture, and other non-farm value chains to help achieve the goal of sustainable poverty graduation.
- **Investing in Education and Health**: While the Programme has shown positive impacts on basic needs like food consumption and utilities, it should consider strategies to promote investments in education and health in the medium to long term. This could involve creating incentives for beneficiaries to allocate a portion of their increased income toward education and healthcare expenses.

These policy recommendations aim to build on the NPGP's successes and address areas that require further attention, ultimately enhancing its effectiveness in alleviating poverty and improving the well-being of beneficiaries. Regular evaluations and adaptability will be key to the Programme's continued success in the dynamic context of poverty alleviation.

#### **Direction for future evaluation**

- Monitoring and Evaluation: Continuous monitoring and evaluation of the program's impact are essential. This includes regularly assessing the relevance, sustainability, and effectiveness of the Programme. Feedback mechanisms should be established to incorporate beneficiary perspectives in Programme improvements.
- National-level impact assessment of NPGP: A comprehensive national-level evaluation of the NPGP is essential to provide a holistic understanding of its impact across diverse regions of Pakistan. By conducting a wide-ranging assessment, policymakers can gain insights into the Programme's effectiveness on a national scale, aiding in targeted interventions and Programme refinements.

- **Exploring diverse NPGP interventions**: Investigating all interventions under the NPGP umbrella, beyond just asset transfers, is vital for understanding the synergies and impacts of the complete Programme package. Future research should delve into livelihood development initiatives, financial inclusion strategies, social mobilization efforts, and capacity-building Programmes. Analyzing the interplay of these interventions will provide a nuanced perspective, enabling a more comprehensive approach to poverty alleviation and sustainable development.
- Role of NPGP in Climate Change Adaptation: Focusing on the role of the NPGP in addressing climate change challenges is crucial, considering the vulnerability of the Programme beneficiaries to climate-induced disasters. Future research should assess the specific climate resilience measures integrated within the NPGP interventions. It should explore how beneficiaries are being equipped to cope with climate shocks, adapt their agricultural practices, and protect their livelihoods. Evaluating the effectiveness of these climate adaptation strategies will shed light on the Programme's contribution to building resilience among vulnerable communities in the face of climate change.

#### **Table of Contents**

Acknowledgmentiii
Executive Summaryiv
National Poverty Graduation Programme (NPGP)iv
Objectives of the evaluationiv
Key Findingsiv
Impacts       vi         Assessing Changes in Poverty Score       vi         Multivariate Analysis       vi
Policy Recommendations and Way Forwardvii Programme level recommendations
Direction for future evaluation viii
List of Figures xii
List of Tables xiii
1. Introduction
1.1. Motivation
1.2. Objectives of the evaluation
1.3. Scope and Limitations of the evaluation
2. NPGP: An Overview
2.1. Asset Transfers
2.2. Success Indicators: Log-frame
3. Evaluation Method
3.1. Household Survey
3.2. Data Analysis
3.2.1. Empirical Specification
4. Situational Analysis
4.1. Socio-Economic Profile
4.2. Livelihood and Employability
4.3. Income and Consumption Patterns14
4.4. Assessing Poverty Levels: A CBN-Based Analysis
4.5. Women Empowerment
5. Moving up the Ladder: Graduating from Poverty
5.1. Graduation: Transition in Poverty Levels
5.2. Graduation: Transition in PSC
6. Empirical results

6.1.	Impact on consumption	
6.2.	Impact on livestock	26
6.3.	Impact on asset accumulation	26
6.4.	Impact on housing Amenities	28
7.	Beneficiary Perception	
8.	Conclusion	

# **List of Figures**

Figure 1: PERCENTAGE DISTRIBUTION OF ASSETS	5
Figure 2: PERCENTAGE DISTRIBUTION OF ASSETS WITHIN DISTRICTS	6
Figure 3: SAMPLE STRATEGY	
Figure 4: SAMPLE DISTRIBUTION	10
Figure 5: BENEFICIARY AND HOUSEHOLD HEAD LITERACY LEVEL	13
Figure 6: BENEFICIARY AND HOUSEHOLD HEAD EMPLOYMENT STATU	S13
Figure 7: EMPLOYMENT TYPE OF BENEFICIARY AND HEAD OF	
HOUSEHOLD	14
Figure 8: INCOME PATTERN: BEFORE AND AFTER INTERVENTION	
Figure 9: CONSUMPTION PATTERN: BEFORE AND AFTER INTERVENTIO	N
-	16
Figure 10: BREAKDOWN OF CONSUMPTION EXPENDITURES BY	
CATEGORIES	16
Figure 11: POVERTY RATES OF NPGP BENEFICIARIES	17
Figure 12: WOMEN DECISION MAKING IN HOUSEHOLD	18
Figure 13: WOMEN MOBILITY AROUND AREA	
Figure 14: WOMEN PARTICIPATION IN VOTING	20
Figure 15: CHANGES IN POVERTY LEVELS AMONG NPGP BENEFICIARIE	
-	22
Figure 16: TRANSITION IN POVERTY SCORECARD	23
Figure 17: TRANSITION IN PSC DISTRICT VISE	23
Figure 18: ASSET RELEVANCY	30
Figure 19: WELLBEING IMPROVEMENT	31
Figure 20: PROGRAMME SUSTAINABILITY AND SATISFACTION	32

# List of Tables

Table 1: BENEFICIARY DEMOGRAPHIC CHARACTERISTICS	12
Table 2: ASSESSING THE CHANGES IN PSC: STANDARDIZED MEAN	
DIFFERENCE (SDM)	25
Table 3: IMPACT OF ASSET TRANSFER ON HH CONSUMPTION	27
Table 4: IMPACT OF ASSET TRANSFER ON LIVESTOCK	28
Table 5: IMPACT OF ASSET TRANSFER ON DURABLE ASSETS	28
Table 6: IMPACT OF ASSET TRANSFER ON HOUSING CHARACTERIST	TICS,
FACILITIES & FUEL QUALITY	28



Introduction

## **1.Introduction**

Poverty graduation Programmes have gained increased attention and recognition in recent times as a strategy for poverty eradication, promoting multidimensional wellbeing and empowerment (Balboni et al., 2022; Bandiera et al., 2017; Banerjee et al., 2015; Cerkez et al., 2023). Graduation Programmes are designed to lift individuals out of extreme poverty through transformative livelihood interventions, such as asset transfers, often in combination with training and community mobilization to foster sustainable livelihood opportunities, increase income, and enhance multi-dimensional welfare (Banerjee et al., 2015). The logic behind these Programmes is that by providing assets, individuals can create sustainable livelihoods and break the cycle of poverty<sup>1</sup>.

In efforts to eradicate poverty, the Government of Pakistan with the support of the International Fund for Agricultural Development (IFAD) has been implementing the National Poverty Graduation Programme (NPGP) since 2017 to uplift vulnerable segments of society through a holistic poverty graduation package that includes livelihood asset transfer, interest-free loans, technical and vocational training, and capacity building<sup>2</sup>. NPGP emerges as a pivotal and comprehensive initiative to eradicate poverty and foster sustainable economic growth. The Programme embodies a multi-faceted strategy that integrates social mobilization, livelihood development, and financial inclusion. The objective revolves around elevating the most vulnerable households, endowing them with the essential tools and opportunities to overcome their economic adversities.

The aim of the Programme remains firmly rooted in assisting the ultra-poor and the very poor to graduate from poverty on a sustainable basis. Simultaneously, it seeks to improve their overall food security, nutritional status, and resilience to climate change impacts. The crux of the Programme's development objective centers on empowering the rural poor, with special emphasis on women and youth, to unlock their development potential and attain heightened levels of social and economic wellbeing. Currently, the implementation of NPGP extends across 363 union councils spanning 23 districts within the four provinces of Pakistan. As of now, the implementation of the Programme is impressive, reaching a total of 308, 491 households, facilitating the transfer of 123,681 assets, disbursing 184,810 interest-free loans, and revitalizing or establishing 4,774 community institutions<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup> Graduation model is pioneered by the Bangladesh Rural Advancement Committee (BRAC) to tackle poverty in Bangladesh. The BRAC Ultra-Poor Graduation Initiative is widely recognized as one of the most effective asset transfer Programs. Other asset transfer Programs around the world like Mexico's Progresa/Oportunidades, Ethiopia's Productive Safety Net Program, and Zambia's Social Cash Transfer Program, have also made significant contributions to reducing poverty and improving the well-being of vulnerable populations.

<sup>&</sup>lt;sup>2</sup> For further details see https://npgp.gov.pk/overview.html

<sup>&</sup>lt;sup>3</sup> These figures are taken from the NPGP website as of July 25, 2023.

# 1.1. Motivation

The graduation-based approach to poverty eradication seeks to address two major shortcomings inherent in conventional poverty reduction strategies such as cash transfers. Firstly, it recognizes that poverty is not a binary issue but rather a multifaceted one, acknowledging the complexity of the problem. Secondly, while conventional poverty reduction Programmes may provide temporary relief to the impoverished, they often fall short of creating lasting, sustainable improvements in their lives. Those living around the poverty line remain highly vulnerable to external shocks. Any major shock can easily push them back into the depths of poverty. As a result, conventional strategies fail to build resilience against these shocks.

Considering these challenges, the key question is whether the NPGP will effectively contribute to the development of resilience among its beneficiaries, ultimately facilitating their permanent escape from poverty. This evaluation is motivated by the need to assess whether the NPGP, with its multifaceted approach aimed at empowering the impoverished through productive assets and income-generating activities, can address the shortcomings of conventional poverty reduction strategies and provide a sustainable pathway out of poverty. It aims to understand the Programme's role in enhancing transformative resilience, enabling beneficiaries to withstand shocks, maintain incomes above the poverty line, and make consistent progress toward improved livelihoods.

# **1.2.** Objectives of the evaluation

The evaluation should generate policy-relevant evidence regarding the impacts of the NPGP Asset Transfer Intervention. The main objectives of the evaluation are to:

- 1. **Economic Empowerment**: Quantify the impact of the asset transfer on economic well-being using various indicators including poverty, consumption expenditures, and income diversification.
- 2. **Long-term Resilience**: Quantify the impacts of the asset transfer on long-term resilience measures including financial development and asset accumulation.
- 3. **Social Empowerment**: Quantify the impact of the asset transfer on social empowerment including health, education, and women empowerment.

# **1.3.** Scope and Limitations of the evaluation

**Scope**: This evaluation focuses on assessing the impact of the asset transfer component within the NPGP in three districts, namely Jhang, Layyah, and DG Khan, of Punjab only in Pakistan. It primarily evaluates the short-term effects of asset transfers, providing insights into the immediate outcomes of intervention.

#### Limitations:

A. **Geographical Limitation**: The evaluation's geographic coverage is limited to selected districts within one province of Pakistan. Therefore, the findings may

not fully represent the diverse conditions prevalent in other provinces or regions of the country.

- B. Exclusion of Programme Components: The research concentrates exclusively on the asset transfer aspect of the NPGP, excluding a comprehensive evaluation of other programme components such as Interest-Free Loans (IFL) and skill development initiatives. Consequently, the evaluation's conclusions pertain solely to the effects of asset transfers and may not capture the broader impact of the entire NPGP.
- C. **Short-Term Analysis**: The evaluation provides insights into the short-term effects of asset transfers. It may not account for the long-term sustainability and enduring impacts of the intervention, necessitating further research to explore the Programme's transformative potential over an extended period.



# **NPGP:** An Overview

# 2.NPGP: An Overview

The NPGP is a poverty reduction initiative that is supported by the IFAD and the GoP. The NPGP aims to address poverty at the grassroots level by utilizing a graduation approach that combines social mobilization, livelihood development, and financial inclusion. This approach involves identifying and targeting the most vulnerable households and providing them with a comprehensive package of support to help them overcome their economic challenges.

- **Programme design and objectives**: The Programme comprises two primary components: 1) Poverty graduation valued at USD 117.8 million, and 2) Social Mobilization (SM) and Programme Management worth USD 14.8 million. The first component emphasizes creating or transferring productive assets, providing Interest-Free Loans (IFLs), and imparting training to beneficiaries of assets and IFLs. The second component includes Social Mobilization, establishment, and training of Community Resource Persons (CRPs), enhancement of Community Institutions' (CIs) capabilities, research investigations, conferences, and policy briefs.
- **Implementation**: NPGP's implementation is carried out through a collaborative effort between various stakeholders, including government institutions, NGOs, and local communities, namely Baluchistan Rural Support Programme (BRSP), LASOONA, National Rural Support Programme (NRSP), Sindh Rural Support Organizations (SRSO), Thardeep Rural Development Programme (TRDP) and Social Action Bureau for Assistance in Welfare and Organization (SABAWON).
- **Coverage**: As of July 2023, NPGP is being implemented in 363 union councils of 23 districts across Punjab, Sindh, Baluchistan, and KPK. So far NPGP has reached a total of 308, 491 Households, has transferred 123,681 Assets, 184,810 Interest-Free Loans, and 4,774 Community institutions have been formed or revitalized.
- Interventions This support package under NPGP includes skills training, asset transfers, access to credit, and other financial services.

## 2.1. Asset Transfers

Asset creation holds a critical position within the framework of the NPGP. Under this component households whose poverty score falls between 0 and 16.17 are provided tangible assets. It is important to note that these households are eligible for unconditional cash transfers through the BISP Programme. Which serves as a means of consumption allowance for these recipients of tangible assets. On average the value of this support package amounts to PKR 50,000<sup>4</sup>. Figure 1 shows the frequency distribution of various assets transferred to the beneficiaries in the three surveyed districts. Large animals (cow/buffalo) are the most frequently provided asset, making up approximately 69% of the total. Small animals (goat/sheep) are the second most frequently provided asset, making up around 13% of the total. Loader Rickshaws

<sup>4</sup> For details <u>https://webapps.ifad.org/members/eb/121/docs/EB-2017-121-R-18-Project-design-report.pdf</u>

make up around 12% while small businesses/shops are the least frequently provided assets, making up almost 6% of the total. This distribution pattern shows that the programme has placed greater emphasis on providing large animals to address the needs of the target group. Large animals can provide a sustainable source of income and contribute to the overall economic well-being of the beneficiary households. Whereas small animals may also provide a similar source of income but on a smaller scale. On the other hand, small businesses/shops may require relatively bigger investment and basic skill sets to sustain an independent business. Given the fact that the target population lacks investment of their own and the required skills to operate a business may not have largely opted for this option.

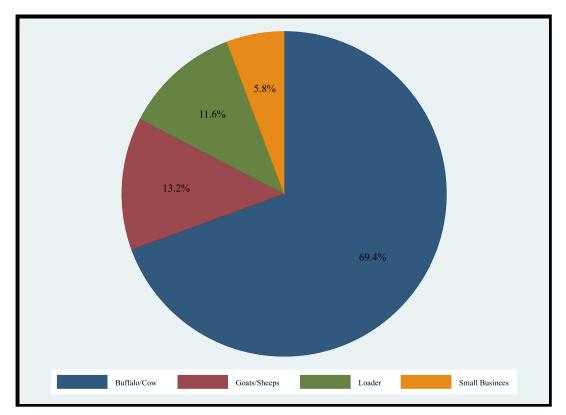


Figure 1: PERCENTAGE DISTRIBUTION OF ASSETS

Notes: Author's formulation based on Survey data

The transfer of assets within the districts largely confirms the pattern highlighted in Figure 1. In each district large animals such as cows and buffaloes are the most frequently received asset (Figure 2). While slight variations can be observed in the prevalence of other asset categories. This trend is evident in Jhang, where a substantial 77% of households have acquired large animals, and in DG Khan, the Figure stands at 68%. Comparatively, the proportion is slightly lower in Layyah, where 65% of households have received large animals (Figure 2). On the other hand, Layyah stands out for its relatively higher percentage of households that have acquired small animals (goats/sheep) at 25%, as compared to 14% in DG Khan and 3% in Jhang. In terms of other asset categories, DG Khan leads with the highest proportion of beneficiaries having received the asset of "loader," accounting for 17% of the beneficiaries. In contrast, Jhang registers the highest percentage of beneficiaries engaged in "small business," with 16% pursuing this asset category as part of the

Programme. The distribution of assets follows a relatively consistent pattern across these districts. In each of the three districts, large animals are the most provided asset. However, the second most frequently distributed asset varies across these districts. In DG Khan, the second most provided asset is the loader rickshaw, while in Layyah, it is small animals, and in Jhang, it is small businesses.

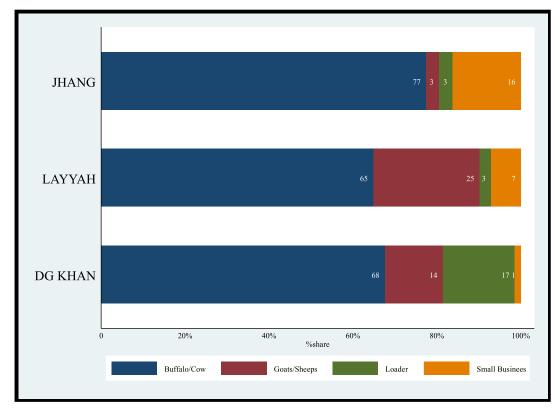


Figure 2: PERCENTAGE DISTRIBUTION OF ASSETS WITHIN DISTRICTS

# 2.2. Success Indicators: Log-frame

The key indicator for assessing the Programme's success is that 50% of eligible beneficiary households (who are part of the BISP) have successfully transitioned out of the Programme. The primary measure of success for the Programme's development objective is the percentage of the poorest households, including those headed by women, who receive asset transfers and have subsequently improved their score on the Poverty Score Card (PSC). The goal is for 60% of such households to see an increase in their PSC score, with 20% of them graduating out of poverty entirely (scoring over 23 on the PSC).

- A. **Outcome 1**: Improved livelihoods, living conditions, and income-generative capacities for poor households and the youth
  - No. of new jobs created
  - Percentage of HHs experience 30% increase in income as a result of productive use of assets and access to working capital

Notes: Author's formulation based on Survey data

- Percentage of persons/ households reporting adoption of new/improved inputs, technologies, or practices
- B. **Outcome 2**: Women from ultra-poor and poor households experience higher levels of socioeconomic empowerment
  - Percentage of Women reporting increased role in HH decision-making
- C. Outcome 3: The target population has improved access to financial service



# **Evaluation Method**

# **3. Evaluation Method**

This evaluation employs a quantitative methodology to evaluate the socioeconomic impact of the NPGP on households. The quantitative assessment involves comparing two groups: the treatment households, composed of Programme beneficiaries who received tangible assets (e.g., livestock, loader rickshaws, small businesses), and the control households, consisting of non-beneficiary households with poverty scores slightly above the Programme's eligibility threshold, as determined by the Poverty Score Card (PSC). To ensure comparability between the treatment and control groups, the selection of a suitable bandwidth is crucial. In line with existing literature (Ambler and de Brauw, 2023; Sefa et al., 2021), a fixed bandwidth of 5 is applied to define these groups as follows:

- Treatment group: Comprising NPGP beneficiaries whose PSC scores fall within the range of 11 to 16.17, denoted as  $(11.00 < PSC \le 16.17)$ .
- Control group: Comprising non-beneficiaries of the Programme, yet with PSC scores just above the eligibility threshold, defined as  $(16.17 < PSC \le 21.17)$ .

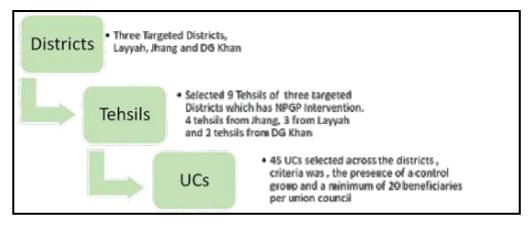
This rigorous selection process ensures that the treatment and control groups are comparable and allows for a robust evaluation of the impact of asset transfers on a variety of socioeconomic indicators.

# 3.1. Household Survey

This evaluation uses a three-stage stratified random sampling technique to collect data from NPGP and BISP beneficiary households across three districts (DG Khan, Layyah, and Jhang). We obtained relevant administrative data from the NPGP project unit to develop a sampling framework. This data covers detailed information on targeted beneficiary households along with their Proxy Mean Test (PMT) poverty scores. Based on this administrative data, we devised a three-stage stratified random sampling methodology to select respondent households for the field survey

- **Stage 1**: The primary sampling units are districts covered under NPGP. As mentioned earlier, NPGP covers 23 districts across Pakistan. We purposely select 3 districts from Punjab.
- Stage 2: We have selected 9 tehsils from targeted three districts and then purposely selected a total of 45 Union Councils (UCs), from the selected tehsils and districts. Union councils were selected based on two criteria: the presence of a control group and a minimum of 20 beneficiaries per union council.
- **Stage 3**: From selected UCs, we randomly chose NPGP and/or BISP beneficiary households for the survey in three districts. Keeping in view the potential non-response, we initially randomly picked 7,741 households in both the treatment and control groups. Out of this total, 3,240 households were in the control group, and 4,501 were in the treatment group. Among the 4,501 households in the treatment group, 3,433 were beneficiaries of assets, 57 belonged to the asset plus Interest-Free Loan (IFL) category, and 1,011 were IFL beneficiaries.

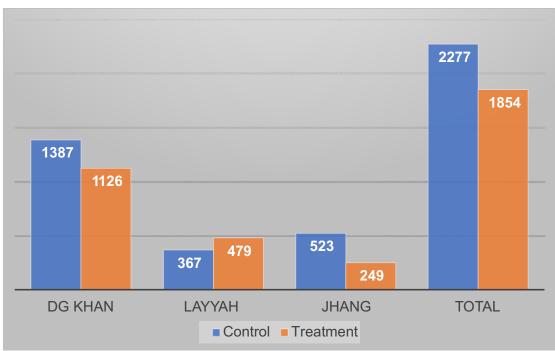
#### Figure 3: SAMPLE STRATEGY



Notes: Author's formulation

- Data Collection Primary data collection occurred through a household survey conducted in select districts of Punjab. The questionnaire's development, translation, and digitization followed a structured approach. Covering extensive details about household characteristics, assets, and knowledge, the questionnaire was translated into the local language for improved comprehensibility. Data collection utilized computer-assisted personal interviewing (CAPI) with Android tablets, facilitated through the CSpro platform. NPGP provided contacts of Partner Organizations (POs) with local offices in sampled districts, to obtain administrative data which contains complete address information to enable us to select respondent households randomly. These POs also facilitated the survey teams in locating and conducting surveys with the sampled households.
- Final Sample: Out of 7,741 households, we successfully identified and interviewed 5,079 households. Around 520 households were dropped from the final sample due to various reasons like "Death of respondent, Migrated, Refused to interview, Not a beneficiary, Beneficiary not available". Despite all efforts, around 2600 households are not found in all the districts, percentage of the control group is higher in "not found" cases. This sampling framework enabled us to survey **4559 households**.
- Data cleaning: During the data cleaning stage, we excluded certain households from our analysis which included, the households that had received IFL from NPGP, those who had never been beneficiaries of the BISP Programme, households who are not currently getting BISP payments, and some household where data was missing due to issues with the android application (CSpro). By carefully curating this subset of households, we aim to ensure the precision and reliability of our quantitative analysis results. The final data set consists of 4,131 households, covering both treatment and control groups. The corresponding Figure 4 presents the status of the surveyed households. Out of the total sample of 4131 households, 2277 are the NPGP beneficiaries (Treatment group) and 1854 households are the control group (BISP beneficiaries but with no NPGP intervention). All the NPGP beneficiaries are the Asset beneficiaries.

#### Figure 4: SAMPLE DISTRIBUTION



Notes: Author s formulation

## **3.2.** Data Analysis

This evaluation employs a multifaceted approach to evaluate the collected data. It incorporates a variety of evaluation techniques to comprehensively analyze the impacts of NPGP asset transfer intervention. Firstly, the evaluation undertakes frequency analysis to systematically uncover trends and patterns inherent in the data. This exploration sheds light on various indicators of well-being, such as consumption and income, enabling a nuanced understanding of changes over time. In addition, the evaluation calculates the PSC for the beneficiaries. This scorecard serves as a quantitative measure to assess the socio-economic status of the beneficiaries. By tracking changes in the poverty score levels as compared to the baseline, the evaluation gains insights into the effectiveness of the NPGP intervention in graduating beneficiaries from extreme poverty.

## **3.2.1.** Empirical Specification

As suggested by existing research, we utilize a parametric Regression Discontinuity Design (RDD) to assess the impact of the NPGP on diverse welfare indicators (Asher et al., 2017; Card & Krueger, 2016; Pinotti et al., 2017). This framework helps identify the causal effects of NPGP intervention on a range of socio-economic outcomes. Our specified model is as follows:

$$Y_i = \alpha + \beta_1 D_i + \beta_2 PSC_i + \beta_3 (PSC_i * D_i) + \beta_4 FE_i + X_i^T \gamma + \varepsilon_i$$

#### Where

- $Y_i$  represents the outcome variable (welfare measures) for household *i*. These outcomes encompass key dimensions such as livelihood diversification, asset enhancement, consumption expenditure, and women empowerment.
- $\alpha$  is the intercept.
- $D_i$  is a binary treatment variable equal to 1 if  $PSC_i \le 16.17$  (indicating the treatment group) and 0 if  $PSC_i > 16.17$  (indicating the control group).
- *PSC<sub>i</sub>* is the Poverty Score Card (PSC) score for household *i*.
- $FE_i$  represents the Fixed Effects at the district level, capturing district-specific characteristics. We use district-level dummies to control regional heterogeneity.
- $X_i^T$  is a vector of covariates for household ii, capturing relevant household characteristics. Various control variables are used to capture the demography of households (Card et al., 2016; Nawaz et al., 2020; Churchill et al., 2021).
- $\gamma$  represents the vector of coefficients associated with the covariates.
- $\varepsilon_i$  is the error term for household *i*.

By specifying this parametric RDD model with Fixed Effects, we aim to provide robust estimates of the causal impact of the NPGP intervention on welfare indicators, addressing potential endogeneity and selection bias issues through the use of the RDD framework.

**Interpretation**:  $\beta_1$  represents the causal effect of the NPGP intervention on the welfare indicator. A positive  $\beta_1$  indicates a positive impact of the intervention on the welfare indicator, while a negative  $\beta_1$  suggests a negative impact.



# **Situational Analysis**

#### 4. Situational Analysis

This section presents an in-depth situational analysis of beneficiary households included in the survey. It provides detailed insights into the present circumstances and environment surrounding these households.

#### 4.1. Socio-Economic Profile

**Demographic Characteristics of Beneficiaries:** Table 1 presents the demographic attributes of the beneficiaries' households. On average, households consist of 7.4 individuals, with slight variations seen across the districts. Jhang has a relatively smaller average household size of 6.9, while Layyah stands at 7.2, and DG Khan boasts the largest household size at 7.7 members. The average age of the beneficiaries across the districts converges at 46.4 years. Furthermore, the gender composition of the beneficiaries shows that a significant proportion constituting 94.1% are female.

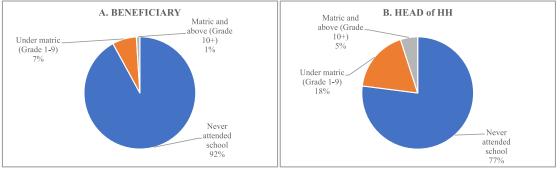
Factors		evel	All	
	Layyah	Jhang	DG Khan	
HH Size (Average)	7.2	6.9	7.7	7.4
Gender of Beneficiary (Female=1)	96%	94%	89%	91.50%
Age Of Beneficiary(Average)	47.6	46.4	46.7	46.8
Gender of head (Male=1)	99.40%	99.20%	98%	98.70%
Age Of HH Head (Average)	50.6	49	49.8	49.8
Married HH Heads	97%	98.70%	98%	98%

Table 1: BENEFICIARY DEMOGRAPHIC CHARACTERISTICS

Notes: Author's formulation based on Survey data. The table displays the demographic characteristics of the beneficiaries.

**Beneficiaries Educational Attainment:** Figure 5 presents the educational attainment of the beneficiary and head household<sup>5</sup>. Overall, a substantial 92% of beneficiaries have not attended school, indicative of a prevailing lack of formal education among them. Only 7% possess an "Under Matric" education, denoting primary or elementary schooling, while a mere 1% of the beneficiaries have attained "Matric and above," signifying secondary education or beyond. Shifting attention to household heads, 77% of the total individuals have never attended school. Concurrently, 18% possess an "Under Matric" education and 5% have accomplished "Matric and above," signifying a relatively modest prevalence of higher educational attainment among household heads. These statistics show that most of the beneficiaries have not had access to formal education (Figure 5).

<sup>&</sup>lt;sup>5</sup> Educational levels are categorized into three tiers: (a) "Never Attended School," encompassing those lacking formal education,(b) "Under Matric," accounting for individuals with education below the 10th grade, from 1st to 9th, and (c) "Matric and above," encompassing completion of the 10th grade, intermediate, and higher education. These categories capture the diversity in educational achievements of the NPGP beneficiaries and their household heads.



#### Figure 5: BENEFICIARY AND HOUSEHOLD HEAD LITERACY LEVEL

Notes: Author's formulation based on Survey data

## 4.2. Livelihood and Employability

An in-depth examination of the livelihood status of the Programme beneficiaries and their respective household heads unveils intriguing patterns that shed light on their economic situations. Notably, a significant 80% of the total beneficiaries are employed across various sectors. The employment rate among the household heads is even higher, with a substantial 90% of them being employed (Figure 6).

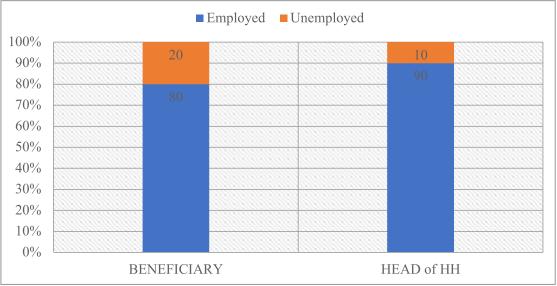


Figure 6: BENEFICIARY AND HOUSEHOLD HEAD EMPLOYMENT STATUS

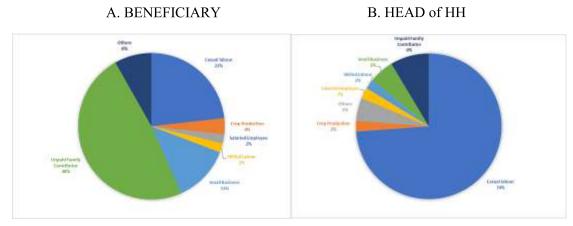
Notes: Author s formulation based on Survey data

The sectoral breakdown of employment reveals a diverse range of economic activities in which beneficiaries and their household heads are involved<sup>6</sup>. As illustrated in

<sup>&</sup>lt;sup>6</sup> This report follows the PBS <u>https://www.pbs.gov.pk/sites/default/files/labour\_force/publications/lfs2018\_19/lfs\_2018\_19\_final\_report.pdf\_classification of employment types; and considers Salaried worker, Casual labour, agriculture sector employed, own account worker,</u>

Figure 7A, the largest segment, constituting 48% of beneficiaries, consists of unpaid family contributors. Following closely behind, 23% of beneficiaries are engaged in casual labor, primarily encompassing roles related to transportation and daily wage work. Notably, 13% of beneficiaries are involved in small businesses, such as operating shops and vending goods. Furthermore, a minority, at 2%, hold salaried positions in the public and private sectors and work as skilled laborers. When examining the sectoral distribution pattern among household heads, we observed that the majority, comprising 74% of household heads, are employed in casual labor positions, followed by 9% who serve as unpaid family contributors, while only 2% of households operate small businesses. Additionally, 3% of household heads are engaged in salaried employment.

Figure 7: EMPLOYMENT TYPE OF BENEFICIARY AND HEAD OF HOUSEHOLD



Notes: Author's formulation based on Survey data

#### **4.3.** Income and Consumption Patterns

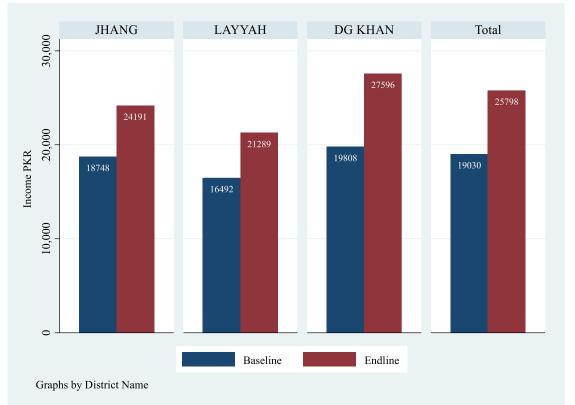
Figure 8 presents the average monthly income among beneficiary households. Among beneficiaries' households, the average current income amounts to Rs. 25,798 per month. Notably, the highest average monthly current income is recorded in DG Khan at Rs. 27,596, while Layyah reports the lowest average monthly income at Rs. 21,289 among beneficiaries' households. Figure 8 also shows the comparison between before and after intervention average monthly income of the household, both at the district level and across all districts. Following the intervention, a substantial increase of 35.6% is observed in the average monthly income across all districts. Notably, DG Khan stands out with the highest increase, marking a significant rise of 39.3% in average monthly income post-intervention. Similarly, Layyah and Jhang witnessed an approximate 29% increment in average monthly income after the intervention.

The analysis of pre- and post-intervention expenditure patterns among the

unpaid family contributors are employed. We have merged the categories; Employed in public sector and Employed in private sector into "Salaried worker", Daily wage worker and Transporter as "Casual Labour", shopkeeper, vendor as "small business", Plumber/electrician/auto mechanic etc, tailor/barber/beautician etc as "skilled Labour", Agriculture sector employed as "crop production".

beneficiaries reveals significant shifts. The average monthly expenditures of beneficiaries collectively exhibit a marked increase of 41% during the post-intervention period.

This augmentation is particularly pronounced in DG Khan, where beneficiaries report a substantial 50.6% surge in their monthly expenditure subsequent to the intervention. In Layyah, the observed change registers at 22.1%, reflecting a notable yet comparatively more moderate alteration in spending behaviors. Intriguingly, Jhang displays a more conservative shift, with post-intervention expenditure experiencing a modest increment of 30.7%.

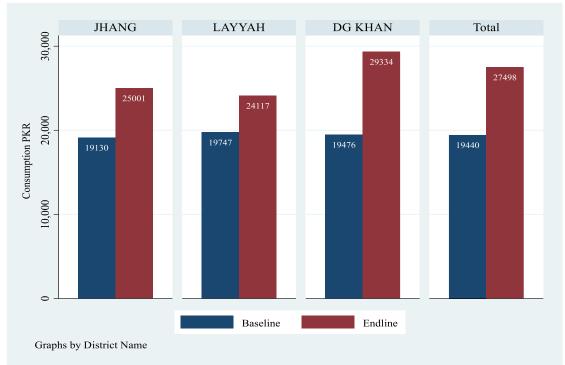


#### Figure 8: INCOME PATTERN: BEFORE AND AFTER INTERVENTION

Note: Author's formulation based on Survey data. Self-reported nominal values are presented in PKR. It includes monthly income from all sources

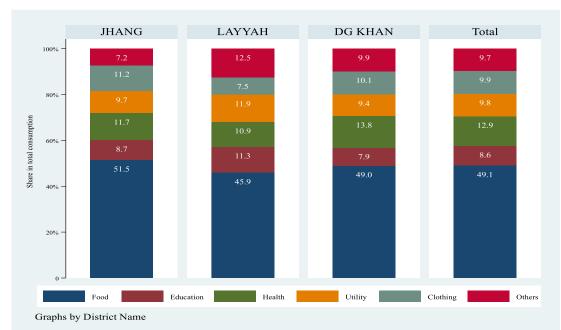
Figure 10 presents the spending priorities of the recipients. It is noted that a significant 49.1% of the total consumption is allocated to food expenses, followed by health expenditure, accounting for 12.9%. On average, educational expenses constitute 8.6% of total monthly consumption. The remaining portion of consumption expenditures is almost evenly distributed among utilities, clothing, and other expenditures. This trend remains consistent across all districts, with food expenses occupying the largest portion of consumption in each district.

Figure 9: CONSUMPTION PATTERN: BEFORE AND AFTER INTERVENTION



Note: Author's formulation based on Survey data. Self-reported nominal values are presented in PKR



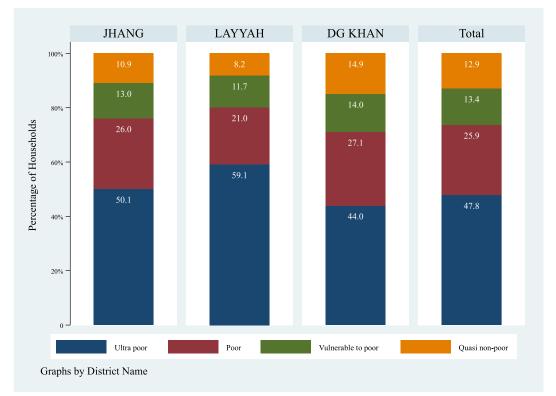


Note: Author's formulation based on Survey data. Share is calculated based on self-reported consumption across different heads

## 4.4. Assessing Poverty Levels: A CBN-Based

#### Analysis

The situational analysis presented in Figure 11 underscores the critical need for targeted poverty graduation Programmes like NPGP. Figure 11 provides a nuanced picture of poverty observed amongst beneficiary households, providing a decomposition of beneficiary households by various poverty categories as defined by the Pakistan Poverty Reduction Strategy Paper (PRSP). With 47.8% of beneficiary households categorized as ultra-poor, and an additional 25.9% classified as poor, the depth of poverty within the Programme's target population is evident. Furthermore, 13.4% of households are identified as vulnerable to poverty, indicating the precarious economic situations they face.





Note: Author's formulation based on Survey data. The poverty ladder is based on the Cost of Basic Need (CBN) method. The Government of Pakistan updated the official poverty line (expressed in monthly per adult equivalent consumption expenditure) in 2016. The updated methodology delivered a poverty line of PKR 3,244. The CBN-based poverty line after adjusting for inflation now stands at Rs 5119. Ultra-poor: those less than 75% of the poverty line. Poor: those between 75% and 100% of the poverty line. Vulnerable: those between 100% and 125% of the poverty line. Quasi non-poor: those between 125% and 200% of the poverty line. Non-poor: those at more than 200% of the poverty line.

This analysis emphasizes the necessity for continued and enhanced support Programmes, focusing on the ultra-poor and poor households, to address their specific needs comprehensively. The detailed analysis presented in Figure 11 reinforces the precision of the NPGP in targeting the right households. With 47.8% of beneficiary households classified as ultra- poor, the Programme effectively aligns with its core objective of assisting the most impoverished segments of society.

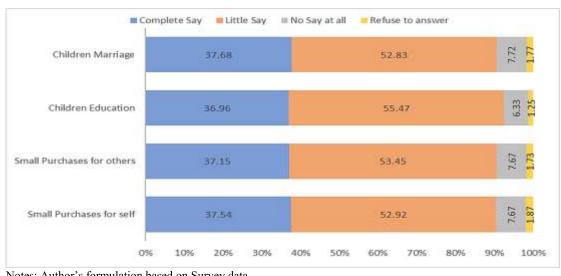
## 4.5. Women Empowerment

The evaluation delves into the issue of women's empowerment among the target group.

#### A. Women decision making

Key findings that emerge from decision-making analysis are (Figure 12):

- Most of the respondents endorsed the idea that men should be the primary heads of households, with 89% of the surveyed beneficiaries expressing this viewpoint.
- When it comes to decisions regarding children's marriages, a significant 37.68% of women assert that they have complete control over these matters, while 52.82% indicate having some degree of input.
- Similarly, in the realm of children's education, 36.96% of women claim to have full authority, with 55.47% reporting at least some level of say in the matter.
- In terms of small purchases for others, 37.15% of women state that they possess complete decision-making power, while 51.45% acknowledge having a degree of influence.
- Additionally, when it comes to small purchases for themselves, 37.54% of women assert that they exercise complete control, with 52.92% indicating some involvement. While only a modest around 7.65% of women respondents across these areas report having no say whatsoever.



#### Figure 12: WOMEN DECISION MAKING IN HOUSEHOLD

Notes: Author's formulation based on Survey data.

From these responses, it is apparent that women play a significant role in household-related decisions. While not all women claim complete autonomy in these matters, a substantial proportion exercise varying degrees of influence, highlighting their active participation in shaping key aspects of family life.

#### **B.** Mobility of Women

Around 66% of women indicate that their mobility is relatively easy, while an additional 25% report finding it very easy to move around (Figure 13). Only a modest 11% of respondents suggest that they do not find mobility easy at all, reflecting a minority of women facing notable challenges.

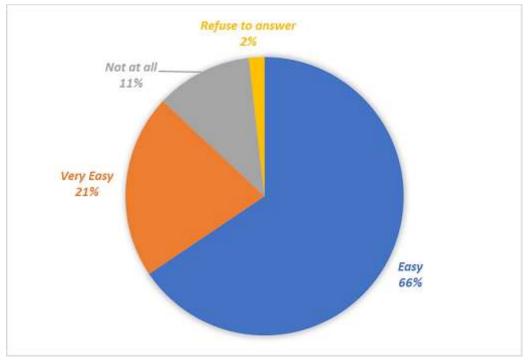


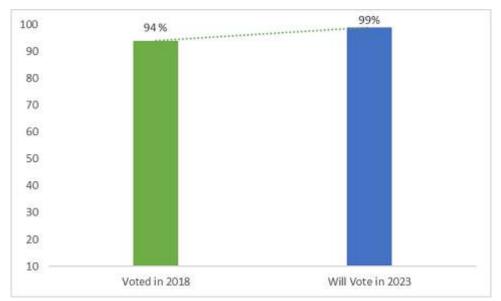
Figure 13: WOMEN MOBILITY AROUND AREA

Notes: Author's formulation based on Survey data.

#### C. Participation in Voting

Figure 14 shows that around 94% of respondent beneficiaries voted in the 2018 general elections, while over 99% of women have expressed their intention to vote in the 2023 elections. These findings signify a substantial increase in political awareness and active participation among NPGP beneficiaries.





Notes: Author's formulation based on Survey data.



## Moving up the Ladder: Graduating from Poverty

## **5.** Moving up the Ladder: Graduating from Poverty

The notion of graduation generally denotes the progression of individuals from a state of severe destitution to a comparatively improved standard of living (Risner and Gadhavi, 2015). The criteria for determining graduation status within these Programmes display variations due to the context-specific nature of poverty (Hashemi and De Montesquiou, 2011). This evaluation uses the **poverty ladder** concept to examine the impact of the Programme on "graduation"<sup>7</sup>. In the context of poverty graduation Programmes like the NPGP, the poverty ladder concept signifies the process of moving households and individuals from lower levels of poverty to higher economic and social statuses, ultimately enabling them to 'graduate' out of poverty. In this evaluation, two different measures are employed to examine the movement on the poverty ladder:

- Unidimensional Measure Consumption-Based Poverty Band
- Multidimensional Measure Poverty Score Card (PSC)

## 5.1. Graduation: Transition in Poverty Levels

The evaluation data, as depicted in Figure 15, highlights a notable improvement in the poverty status of NPGP beneficiaries, indicating successful transitions along the poverty ladder. Specifically, the figure demonstrates the following key findings:

- **Reduction in Ultra-Poor Category**: The most significant and positive change observed is the substantial reduction in the ultra-poor category among NPGP beneficiaries. At the baseline assessment, 65.2% of beneficiaries were classified as ultra-poor. However, by the endline evaluation, this figure decreased significantly to 46.4%.
- Increase in Vulnerable to Poor and Quasi-Poor Categories: Simultaneously, the evaluation shows an increase in the proportions of beneficiaries categorized as 'vulnerable to poor' and 'quasi-poor' at the endline compared to the baseline assessment. This shift signifies positive progress, as individuals and households previously classified as ultra-poor have moved to these higher categories.

### **5.2.** Graduation: Transition in PSC

Figure 16 shows the progress made by beneficiaries on their poverty score<sup>8</sup>. As mentioned above the baseline scores ranged from 11 to 16.17. Figure 16 presents the endline scores of the beneficiaries, highlighting their advancements. An overwhelming majority, constituting 85.9% of the beneficiaries, have demonstrated notable improvements in their scores. This indicates substantial positive changes in their economic conditions.

<sup>&</sup>lt;sup>7</sup> The poverty ladder is a conceptual framework used in poverty analysis and evaluation Programmes aimed at poverty reduction. It represents different stages or levels of poverty, indicating the progression from extreme poverty to higher economic well-being.

<sup>&</sup>lt;sup>8</sup> We use the same weight (Scores) to calculate the PSC used by NPGP.

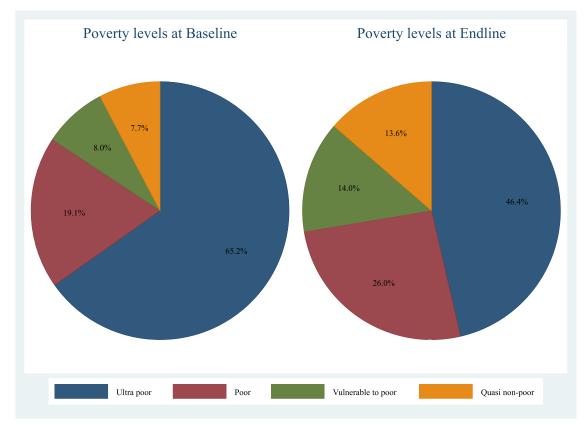
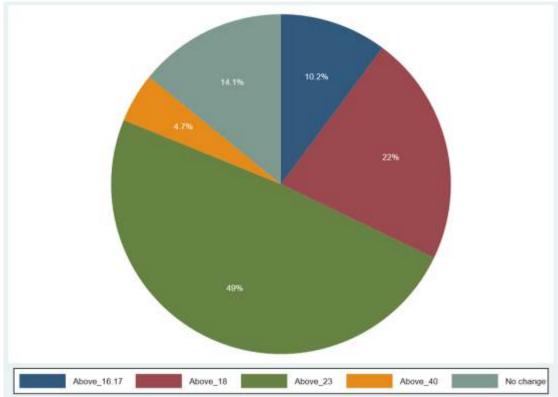


Figure 15: CHANGES IN POVERTY LEVELS AMONG NPGP BENEFICIARIES

Notes: Author's formulation based on Survey data. See Figure 11 for details on poverty levels

The poverty score of a considerable proportion of beneficiaries comprising 49%, has improved poverty score beyond 23. Following closely, 22% have attained endline scores surpassing the poverty band 18 indicating substantial advancement. Additionally, 10% of the beneficiaries moved out of the 16.17 poverty band, signifying noticeable improvement. In a noteworthy achievement, 4% have scored above 40 on the poverty scorecard, underscoring exceptional progress in their poverty alleviation journey. Around 14.1% of beneficiaries have not experienced any change in their poverty score at the endline assessment.

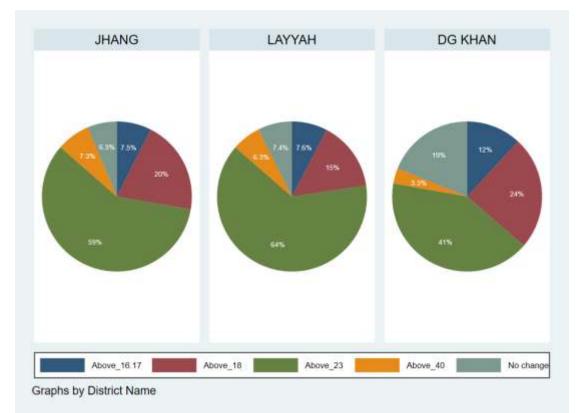
The progression pattern largely remains consistent within the districts. As illustrated in Figure 17, within each district, the majority of beneficiaries have made positive strides in their poverty scorecards. Specifically, in Jhang, there is a cumulative positive change of 93.8%, and in Layyah, it stands at 92.9%. DG Khan, while still showing improvement, slightly deviates from this trend, with 80.3% of beneficiaries enhancing their poverty scorecards. Conversely, DG Khan also records the highest percentage 19% of beneficiaries who have exhibited no change in their poverty score cards.



Notes: Author's formulation based on Survey data. "No change" if Endline PSC is less than 16.17, "Above 16.17" if (EL PSC>=16 and EL PSC<=18), "Above 18" if (EL PSC>18 and EL PSC<=23), "Above 23" if (EL PSC>23 and EL PSC<=40), "Above 40" if (EL PSC>40)

#### Figure 17: TRANSITION IN PSC DISTRICT VISE

Figure 16: TRANSITION IN POVERTY SCORECARD



Notes: Author's formulation based on Survey data. See Figure 16 for further details on the calculations.

Assessing the changes in PSC: Table 2 presents the Standardized Mean Differences (SMD) for various indicators used to assess the impact of the NPGP on beneficiaries compared to the control group. The SMD measures the difference in means between the treatment and control groups, standardized by the standard error. A positive SMD indicates that the first group has a higher mean than the second group, while a negative SMD implies the opposite. Larger SMD values signify a more significant difference between the groups, indicating a larger effect or impact<sup>9</sup>. Based on SMD, we find that:

- 1. **Dependency**: The treatment group (NPGP beneficiaries) exhibits a significantly higher level of dependency (SMD = 0.557) compared to the control group, indicating a substantial positive impact on this measure.
- 2. Head Education: There is a statistically significant difference in head education (SMD = 0.134) between the treatment and control groups, with the treatment group showing higher levels.
- 3. Crowding: The treatment group demonstrates significantly lower crowding (SMD = 0.897) compared to the control group, indicating an improvement in living conditions.
- 4. Safe Sanitation: The treatment group exhibits better access to safe sanitation facilities (SMD = 0.174) compared to the control group, indicating a positive impact on this aspect of well-being.
- 5. Air Cooler: The presence of air coolers in households is significantly higher in the treatment group (SMD = 0.483) than in the control group, suggesting improved living standards.
- 6. Cooking Stove: The treatment group has a significantly higher presence of cooking stoves (SMD = 0.263), reflecting better household infrastructure. Vehicles: While the control group has a negative SMD for vehicles, indicating fewer vehicles, the treatment group shows a significantly higher presence of vehicles (SMD = 0.258).
- 7. TV: The treatment group has a significantly higher presence of television

<sup>&</sup>lt;sup>9</sup> The Standardized Mean Difference (SDM), also known - Cohen's *d*, is a statistical measure used to compare the means of two groups while accounting for the variability within each group. This measure is particularly valuable for assessing the impact of interventions or treatments on different groups. Formula to Calculate SDM:  $SDM = \frac{\bar{X}_1 - \bar{X}_2}{s}$ . Where  $\bar{X}_1$  represents the mean of the treatment group,  $\bar{X}_2$  represents the mean of the control group. *S* is the pooled standard deviation, calculated as: S =

 $<sup>\</sup>sqrt{\frac{(n_1-1)S_1^2+(n_2-1)S_2^2}{(n_1+n_2)-2}}$ . In this formula:  $n_1$  is the sample size of the treatment group,  $n_2$  is the sample size

of the control group,  $S_1$  is the standard deviation of the treatment group,  $S_2$  is the standard deviation of the control group. Effect sizes can be categorized into small, medium, and large to provide a clearer interpretation. In the context of Cohen's d, a commonly used effect size measure, the classification is as follows: i) Small Effect: When Cohen's dd is approximately 0.2 or close to it. ii) Medium Effect: When Cohen's dd is approximately 0.5 or close to it. iii) Large Effect: When Cohen's dd is approximately 0.8 or close to it. These classifications are widely used in various fields to help researchers and readers gauge the practical significance of research findings.

(SMD = 0.215) compared to the control group, signifying improved access to entertainment and information.

- 8. Livestock: The presence of livestock is significantly higher in the treatment group (SMD = 1.451) compared to the control group, suggesting an increase in productive assets.
- **9.** Land: The treatment group shows a significantly higher presence of land (SMD = 0.377) compared to the control group, indicating improved access to agricultural resources.
- 10. Overall PSC: The overall PSC (Poverty Scorecard) score shows a substantial difference (SMD = 3.830) between the treatment and control groups, indicating a positive impact on multidimensional well-being. On average, the PSC of the treatment group (NPGP beneficiaries) is 3.830 standard deviations higher than the PSC of the control group.

These findings demonstrate that the NPGP has a significant and positive impact on various dimensions of well-being and living conditions, as evidenced by the differences in standardized mean values between the treatment and control groups. The positive SMD values across multiple indicators reflect the Programme's effectiveness in improving the well-being of beneficiaries.

Variables	Treatment	Control	Diff.	(Treatment-Control)	SE
Dependency	0.802	0.245		0.557***	(0.036)
Head Education	0.462	0.328		0.134**	(0.053)
Crowding	2.035	1.138		0.897***	(0.099)
Safe Sanitation	0.901	0.727		0.174***	(0.035)
Air Cooler	0.593	0.110		0.483***	(0.110)
Cooking Stove	0.817	0.554		0.263***	(0.082)
Vehicles	-0.094	-0.352		0.258***	(0.032)
TV	0.582	0.367		0.215***	(0.048)
Livestock	2.138	0.687		1.451***	(0.057)
Land	0.799	0.422		0.377***	(0.049)
Overall PSC	6.947	3.116		3.830***	(0.169)

Table 2: ASSESSING THE CHANGES IN PSC: STANDARDIZED MEANDIFFERENCE (SDM)

Note: Author's formulation based on Survey data. The table displays the Standardized Mean Differences (SMD) indicating the impact of NPGP on various well-being indicators. Positive SMD values suggest a positive impact, while negative values suggest the opposite.\*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.



# **Empirical results**

## **6.** Empirical results

#### 6.1. Impact on consumption

Table 3 presents empirical results related to the effects of asset transfers on per capita household consumption. We employ diverse specifications to enhance the reliability and robustness of findings. We use household-specific controls (such as household size, head of household's age, employment status, etc.) and district-level fixed effects to control heterogeneity. The multivariate analysis shows a significant positive impact of asset transfers on specific aspects of household consumption. Specifically, we found that asset transfers led to a substantial and statistically significant increase in per capita food consumption by 445 PKR. Moreover, our results demonstrate a notable positive impact on utilities, with per capita utility consumption increasing by 186 PKR. However, asset transfers had an insignificant impact on education, health, and clothing expenditures. While we did not find statistically significant increases in these areas in our current analysis, these effects may become more pronounced over time as beneficiaries transition from addressing immediate needs to pursuing broader, long-term goals.

## 6.2. Impact on livestock

Table 4 presents the impacts of asset transfers on livestock accumulation within households, encompassing large animals, small animals, draft animals, and poultry. The analysis dissects both ownership (Own) and numerical count (Num) aspects of the livestock categories. The analysis demonstrates a positive and statistically significant impact of asset transfers on livestock ownership, encompassing both large and small animals. Specifically, beneficiaries of asset transfers exhibit a 33-percentage point higher likelihood of owning large animals compared to non-beneficiaries, and a 41-percentage point higher likelihood of possessing small animals when compared to the control group. However, the Programme does not appear to have any impact on the ownership of draft animals and poultry. These findings provide valuable insights into the targeted impacts of such interventions on livestock accumulation in households.

### 6.3. Impact on asset accumulation

Table 5 examines how asset transfers impact the ownership of durable assets within households, encompassing categories like personal transport, housing assets, and information and communication technology. The empirical analysis demonstrates a positive and statistically significant impact of asset transfers on personal transport, particularly rickshaws. Beneficiaries are found to have a 12-percentage point higher likelihood of owning rickshaws compared to non-beneficiaries. Similarly, the intervention has a statistically significant impact on the ownership of household appliances, such as refrigerators and heaters. Programme beneficiaries exhibit a 14-percentage point higher probability of having refrigerators and a 6-percentage point higher probability of having heaters compared to non-beneficiaries.

(SMD = 0.215) compared to the control group, signifying improved access to entertainment and information.

- 8. Livestock: The presence of livestock is significantly higher in the treatment group (SMD = 1.451) compared to the control group, suggesting an increase in productive assets.
- **9.** Land: The treatment group shows a significantly higher presence of land (SMD = 0.377) compared to the control group, indicating improved access to agricultural resources.
- 10. Overall PSC: The overall PSC (Poverty Scorecard) score shows a substantial difference (SMD = 3.830) between the treatment and control groups, indicating a positive impact on multidimensional well-being. On average, the PSC of the treatment group (NPGP beneficiaries) is 3.830 standard deviations higher than the PSC of the control group.

These findings demonstrate that the NPGP has a significant and positive impact on various dimensions of well-being and living conditions, as evidenced by the differences in standardized mean values between the treatment and control groups. The positive SMD values across multiple indicators reflect the Programme's effectiveness in improving the well-being of beneficiaries.

Variables	Treatment	Control	Diff.	(Treatment-Control)	SE
Dependency	0.802	0.245		0.557***	(0.036)
Head Education	0.462	0.328		0.134**	(0.053)
Crowding	2.035	1.138		0.897***	(0.099)
Safe Sanitation	0.901	0.727		0.174***	(0.035)
Air Cooler	0.593	0.110		0.483***	(0.110)
Cooking Stove	0.817	0.554		0.263***	(0.082)
Vehicles	-0.094	-0.352		0.258***	(0.032)
TV	0.582	0.367		0.215***	(0.048)
Livestock	2.138	0.687		1.451***	(0.057)
Land	0.799	0.422		0.377***	(0.049)
Overall PSC	6.947	3.116		3.830***	(0.169)

Table 2: ASSESSING THE CHANGES IN PSC: STANDARDIZED MEANDIFFERENCE (SDM)

Note: Author's formulation based on Survey data. The table displays the Standardized Mean Differences (SMD) indicating the impact of NPGP on various well-being indicators. Positive SMD values suggest a positive impact, while negative values suggest the opposite.\*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

## **6.** Empirical results

#### 6.1. Impact on consumption

Table 3 presents empirical results related to the effects of asset transfers on per capita household consumption. We employ diverse specifications to enhance the reliability and robustness of findings. We use household-specific controls (such as household size, head of household's age, employment status, etc.) and district-level fixed effects to control heterogeneity. The multivariate analysis shows a significant positive impact of asset transfers on specific aspects of household consumption. Specifically, we found that asset transfers led to a substantial and statistically significant increase in per capita food consumption by 445 PKR. Moreover, our results demonstrate a notable positive impact on utilities, with per capita utility consumption increasing by 186 PKR. However, asset transfers had an insignificant impact on education, health, and clothing expenditures. While we did not find statistically significant increases in these areas in our current analysis, these effects may become more pronounced over time as beneficiaries transition from addressing immediate needs to pursuing broader, long-term goals.

## 6.2. Impact on livestock

Table 4 presents the impacts of asset transfers on livestock accumulation within households, encompassing large animals, small animals, draft animals, and poultry. The analysis dissects both ownership (Own) and numerical count (Num) aspects of the livestock categories. The analysis demonstrates a positive and statistically significant impact of asset transfers on livestock ownership, encompassing both large and small animals. Specifically, beneficiaries of asset transfers exhibit a 33-percentage point higher likelihood of owning large animals compared to non-beneficiaries, and a 41-percentage point higher likelihood of possessing small animals when compared to the control group. However, the Programme does not appear to have any impact on the ownership of draft animals and poultry. These findings provide valuable insights into the targeted impacts of such interventions on livestock accumulation in households.

### 6.3. Impact on asset accumulation

Table 5 examines how asset transfers impact the ownership of durable assets within households, encompassing categories like personal transport, housing assets, and information and communication technology. The empirical analysis demonstrates a positive and statistically significant impact of asset transfers on personal transport, particularly rickshaws. Beneficiaries are found to have a 12-percentage point higher likelihood of owning rickshaws compared to non-beneficiaries. Similarly, the intervention has a statistically significant impact on the ownership of household appliances, such as refrigerators and heaters. Programme beneficiaries exhibit a 14-percentage point higher probability of having refrigerators and a 6-percentage point higher probability of having heaters compared to non-beneficiaries.

	Per capita Consumption (PKR)							
	(1)	(2)	(3)	(4)				
Total								
Treatment	704.881 (607.841)	670.756 (713.595)	$\begin{array}{c} 741.391 \\ (588.753) \end{array}$	671.755 (686.037)				
Control Dep. Var. Mean	4,118	4,118	4,118	4,118				
Observations	4,131	4,131	4,131	4,131				
Food								
Treatment	445.773* (250.659)	427.690** (205.805)	$445.810^{*}$ (236.330)	419.373** (196.586)				
Control Dep. Var. Mean	1,384	1,384	1,384	1,384				
Observations	4,131	4,131	4,131	4,131				
Education								
Treatment	-34.762 (85.328)	-49.463 (80.243)	-44.766 (86.452)	-42.777 (83.214)				
Control Dep. Var. Mean	212	212	212	212				
Observations	4,131	4,131	4,131	4,131				
Health								
Treatment	53.600 (137.092)	40.477 (146.102)	$59.395 \ (137.868)$	$41.309 \\ (145.782)$				
Control Dep. Var. Mean	363	363	363	363				
Observations	4,131	4,131	4,131	4,131				
Clothing								
Treatment	118.573 (109.874)	139.209 (102.747)	$\frac{115.416}{(103.584)}$	133.173 (100.203)				
Control Dep. Var. Mean	252	252	252	252				
Observations	4,131	4,131	$^{4,131}$	4,131				
Utilities								
Treatment	186.243** (91.209)	$155.329 \\ (97.965)$	176.684** (87.164)	161.882* (95.526)				
Control Dep. Var. Mean	259	259	259	259				
Observations	4,131	4,131	4,131	4,131				
Household Controls Distt FE	No No	Yes No	No Yes	Yes Yes				

Table 3: IMPACT OF ASSET TRANSFER ON HH CONSUMPTION

Note: Parametric regression discontinuity estimates are reported. Per capita consumption is measured in PKR. The standard errors clustered at the UC level (PSU). \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Large Animal		Small Animal		Draft Animal		Poultry	
	Own	Num	Own	Num	Own	Num	Own	Num
Treatment	$\begin{array}{c} 0.297 \\ (0.191) \end{array}$	0.156 (0.405)	$0.366^{***}$ (0.124)	$0.924^{**}$ (0.371)	-0.015 (0.042)	$\begin{array}{c} 0.020 \\ (0.063) \end{array}$	0.079 (0.138)	$\begin{array}{c} 0.012 \\ (0.548) \end{array}$
Control Dep. Var. Mean	0.38	0.64	0.28	0.59	0.03	0.03	0.21	0.61
Observations	4,131	4,131	4,131	4,131	4,131	4,131	4,131	4,131
Household Composition Distt FE	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes

#### Table4: IMPACT OF ASSET TRANSFER ON LIVESTOCK

Note: Parametric regression discontinuity estimates are reported. Livestock ownership is a dummy variable and the number is a continuous count. Large animal includes cows and buffalo, small animals are goats and sheep, draft animals are camel, donkey, etc and poultry consists of chicken, etc. The standard errors clustered at the UC level (PSU).. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

#### Table 5: IMPACT OF ASSET TRANSFER ON DURABLE ASSETS

	Pers	onal Transpor	t	Hous			nusing Assets			ICT		
	Car/Tractor	Motoccycle	Ricksha	Heater	Washing Machine	Fan	Cooking Stove	Refrigerator	$\simeq v$	Mobile	Computer	
Treatment	(0.008) (0.024)	-0.015 (0.109)	$\frac{0.125^{\pm 0}}{(0.060)}$	$0.063^{\circ}$ (0.031)	0.008 (0.135)	0.120 (0.086)	-0.053 (0.079)	$0.151^{*}$ (0.083)	$\frac{0.195^{\circ}}{(0.113)}$	0.087 (0.099)	$-0.049^{\circ}$ (0.027)	
Control Dep. Var. Mean	0.01	0.68	0.02	0.01	0.15	0.85	0.08	0.13	0.22	0.93	0.01	
Observations	4,131	4,131	4,131	4,131	4,131	4,131	4,131	4,131	4,131	4,131	4,131	
Household Composition Distt FE	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	

Note: Parametric regression discontinuity estimates are reported. Assets ownership is a dummy variable. The standard errors clustered at the UC level (PSU). \*, \*\*,\*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

## 6.4. Impact on housing Amenities

Table 6 displays the effects of an intervention on various aspects of housing amenities. The assessment of housing amenities suggests that the intervention had a limited impact on housing quality factors such as crowding and wall materials. However, the multivariate analysis highlights a notable positive effect of the Programme on home ownership, with beneficiaries exhibiting a 21-percentage point higher likelihood of owning their homes compared to non-beneficiaries. On the other hand, asset transfer has an insignificant impact on access to clean water, the type of fuel used (wood, gas, kerosene), safe sanitation facilities, or access to electricity.

## Table 6: IMPACT OF ASSET TRANSFER ON HOUSING CHARACTERISTICS,FACILITIES & FUEL QUALITY

	House Quality			Housin	g facilities	Fuel Quality	
	Owned Occupancy	Crowding	Quality Material	Clean Water	Safe Sanitation	Intermediate	Electricity
Treatment	$0.224^{**}$ (0.102)	-0.036 (0.048)	$0.204 \\ (0.126)$	-0.103 (0.103)	$\begin{array}{c} 0.153 \ (0.160) \end{array}$	0.110 (0.161)	0.044 (0.096)
Control Dep. Var. Mean	0.87	0.28	0.44	0.93	0.67	0.68	0.84
Observations	4,131	4,131	4,131	4,131	4,131	4,131	4,131
Household Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dist. FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Parametric regression discontinuity estimates are reported. Columns 1 through 3 report housing quality indicators. we created a dummy variable where 1 indicates owner-occupied households and 0 indicates other housing situations such as renting, subsidized rent, or rent-free arrangements. If a household possesses a quality wall, then it is considered a quality housing material. To calculate crowding, we divided the number of rooms in a household, including bedrooms and living rooms, by the number of people living there. Columns 4 and 5 present housing facilities measures. We defined clean water as the main source of drinking water falling under Piped water and Hand pumps. For safe sanitation, households must have access to a Flush connected to public sewerage, connected to a pit, or connected to an open drain. Column 6 presents fuel quality measures. Intermediate fuel includes wood, gas, and kerosene. The last column presents access to electricity. The standard errors clustered at the UC level (PSU). \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.



## **Beneficiary Perception**

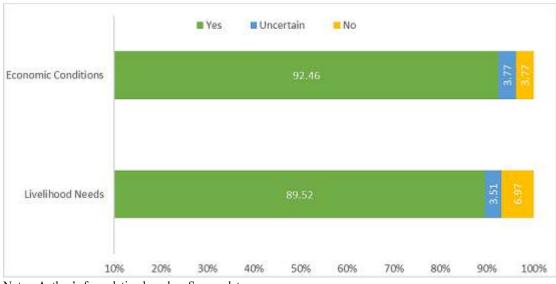
## **7. Beneficiary Perception**

This section delves into how beneficiaries perceive impacts, particularly in terms of asset quality, utility, and overall life changes.

#### A. Asset Relevancy

The graduation-based approach to poverty reduction distinguishes itself by providing tailored interventions that address the specific needs of targeted beneficiaries. This evaluation explores the perceptions of NPGP beneficiaries regarding the relevance of the assets they received. The NPGP places significant emphasis on aligning asset provision with the economic needs of beneficiaries. Figure 18 shows that:

- Around 92% of beneficiaries reported that the assets they received were wellmatched to their economic circumstances.
- Over 90% expressed satisfaction with the suitability of the assets in addressing their economic requirements.
- Remarkably, 98.3% of beneficiaries received the specific asset they had initially requested, underscoring the Programme's responsiveness to individual economic preferences.



#### Figure 18: ASSET RELEVANCY

Notes: Author's formulation based on Survey data.

#### **B.** Perception regarding welfare gains

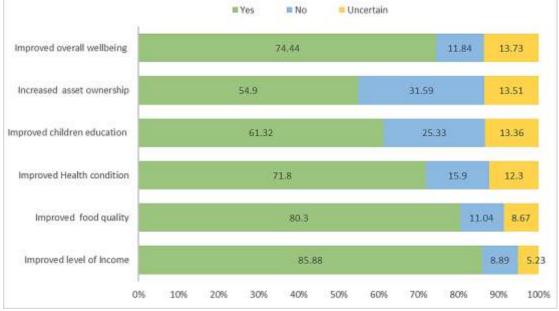
The NPGP beneficiaries demonstrate substantial social and economic returns. These quality-related responses align with the quantitative analysis presented earlier. Beneficiaries' perceptions regarding the Programme's impact on various aspects of their household welfare are overwhelmingly positive and encouraging.

• Economic Empowerment: Economic well-being is a central aspect of poverty alleviation. The majority, comprising 74% of beneficiaries, report experiencing tangible improvements in their household's well-being. A remarkable 55% of beneficiaries reported increased asset ownership. An outstanding 86% of beneficiaries reported increased income, illustrating the Programme's economic empowerment impact. This reflects their growing

economic empowerment and enhanced resilience to financial shocks.

- Educational Empowerment: Education is a powerful tool for breaking the cycle of poverty. Impressively, 61% of beneficiaries reported improved access to quality education for their children. This signifies the Programme's role in educational empowerment.
- **Health Empowerment**: Health is fundamental to well-being. An impressive 72% of beneficiaries reported improved health conditions, indicating the Programme's contribution to health empowerment.
- Nutritional Empowerment: Adequate nutrition is crucial for an improved quality of life. An overwhelming 80% of beneficiaries reported better food quality, demonstrating the NPGP Programme's role in nutritional empowerment.

These self-reported welfare gains emphasize the holistic impact of the NPGP Programme, encompassing economic, educational, health, and nutritional dimensions.



#### Figure 19: WELLBEING IMPROVEMENT

Notes: Author's formulation based on Survey data.

#### C. Program Sustainability and Satisfaction:

The prevailing sentiment among Program beneficiaries is one of optimism regarding the sustainability of the assistance they have received. This confidence is substantiated by the data illustrated in Figure 20A, which reveals that a striking 82% of beneficiaries believe that the intervention can last over an extended period. This high level of confidence in the Programme's sustainability is not only reassuring but also indicative of their expectation to continue reaping benefits from the provided assets for the foreseeable future. Moreover, beneficiaries have overwhelmingly expressed their satisfaction with the Programme. An impressive 82% of them have reported a high level of contentment with the Programme's offerings and impacts. This noteworthy level of satisfaction underscores the effectiveness of the Programme in meeting the needs and expectations of the beneficiaries. It signifies that the Programme has not only been successful in providing tangible benefits but has also managed to foster a positive and contented sentiment among those it aims to assist.

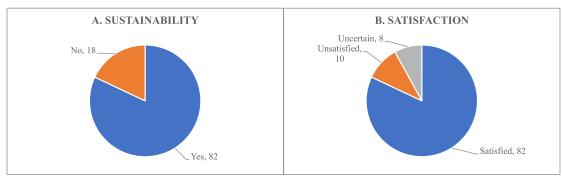


Figure 20: PROGRAMME SUSTAINABILITY AND SATISFACTION

Notes: Author's formulation based on Survey data



# Conclusion

## 8. Conclusion

The evaluation of the National Poverty Graduation Programme (NPGP) offers valuable insights into the multifaceted impacts of the intervention on beneficiary households. Through a rigorous quantitative analysis, this study delved deep into various dimensions of poverty, economic well-being, and social empowerment among the target population.

The findings underscore the Programme's effectiveness in poverty reduction, as evidenced by the significant improvement in poverty scores among beneficiaries. The asset transfers have not only enhanced income and consumption levels but have also diversified employment opportunities. Moreover, the NPGP has empowered women, granting them agency in decision-making processes and enabling their active participation in social and political spheres.

In conclusion, the NPGP has made substantial strides in uplifting ultra-poor households, improving their economic well-being, and empowering marginalized communities, particularly women. However, the study highlights the need for continued support, sustainable livelihoods, and further social empowerment.

As we move forward, it is imperative to acknowledge the achievements while addressing the challenges head-on. By nurturing the resilience of vulnerable populations, enhancing access to resources, and fostering community-driven solutions, we can create a more inclusive and sustainable future for all. The findings of this evaluation serve as a roadmap, guiding policy and Programmatic decisions toward a more equitable society, where every individual has the opportunity to thrive.

#### References

Asher, S. and Novosad, P. (2017). Politics and local economic growth: Evidence from india.

American Economic Journal: Applied Economics, 9(1):229–273.

Balboni, C., Bandiera, O., Burgess, R., Ghatak, M., and Heil, A. (2022). Why do people stay poor? The Quarterly Journal of Economics, 137(2):785–844.

Bandiera, O., Burgess, R., Das, N., Gulesci, S., Rasul, I., and Sulaiman, M. (2017). La- bor markets and poverty in village economies. The Quarterly Journal of Economics, 132(2):811–870.

Banerjee, A., Duflo, E., Goldberg, N., Karlan, D., Osei, R., Parienté, W., Shapiro, J., Thuysbaert, B., and Udry, C. (2015). A multifaceted Programme causes lasting progress for the very poor: Evidence from six countries. Science, 348(6236):1260799.

Card, D. and Giuliano, L. (2016). Can tracking raise the test scores of highability minority students? American Economic Review, 106(10):2783–2816.

Cerkez, N., Khan, A. Q., Rasul, I., and Shoaib, A. (2023). Big push pro-poor policies and economic preferences: Evidence from a partial population experiment. Working Paper, University College London, UK. Accessed: 2023-09-11.

Churchill, S. A., Iqbal, N., Nawaz, S., and Yew, S. L. (2021). Unconditional cash trans- fers, child labour and education: theory and evidence. Journal of Economic Behavior & Organization, 186:437–457.

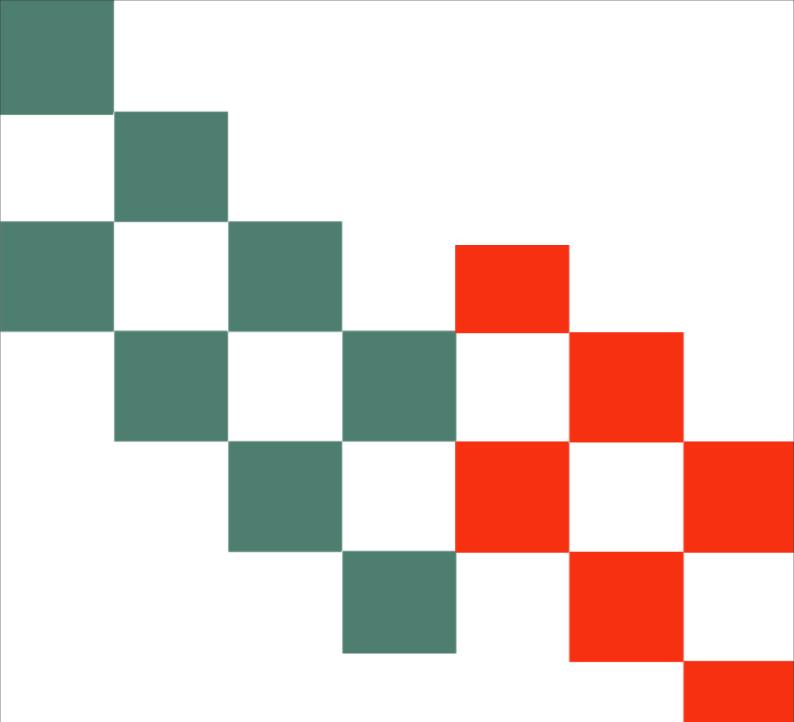
Hashemi, S. M. and De Montesquiou, A. (2011). Reaching the poorest: Lessons from the graduation model. Focus Note, 69(1):1–15.

Nawaz, S. and Iqbal, N. (2020). The impact of unconditional cash transfer on fuel choices among ultra-poor in pakistan: quasi-experimental evidence from the benazir income sup- port Programme. Energy Policy, 142:111535.

Pinotti, P. (2017). Clicking on heaven's door: The effect of immigrant legalization on crime.

American Economic Review, 107(1):138–168.

Risner, C. and Gadhavi, V. (2015). Using real-time monitoring to enhance graduation from extreme poverty in bangladesh. IDS Bulletin, 46(2):115–123.





Quaid-i-Azam University Campus, Islamabad, 44000 www.pide.org.pk 051-9248051