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OFFICE of INTERDISCIPLINARY STUDIES

Grassroots Action Program

Climbing the Educational Ladder: Youth Mobilities in an Urban Resettled Community in Delhi

Phase 1 Findings Report

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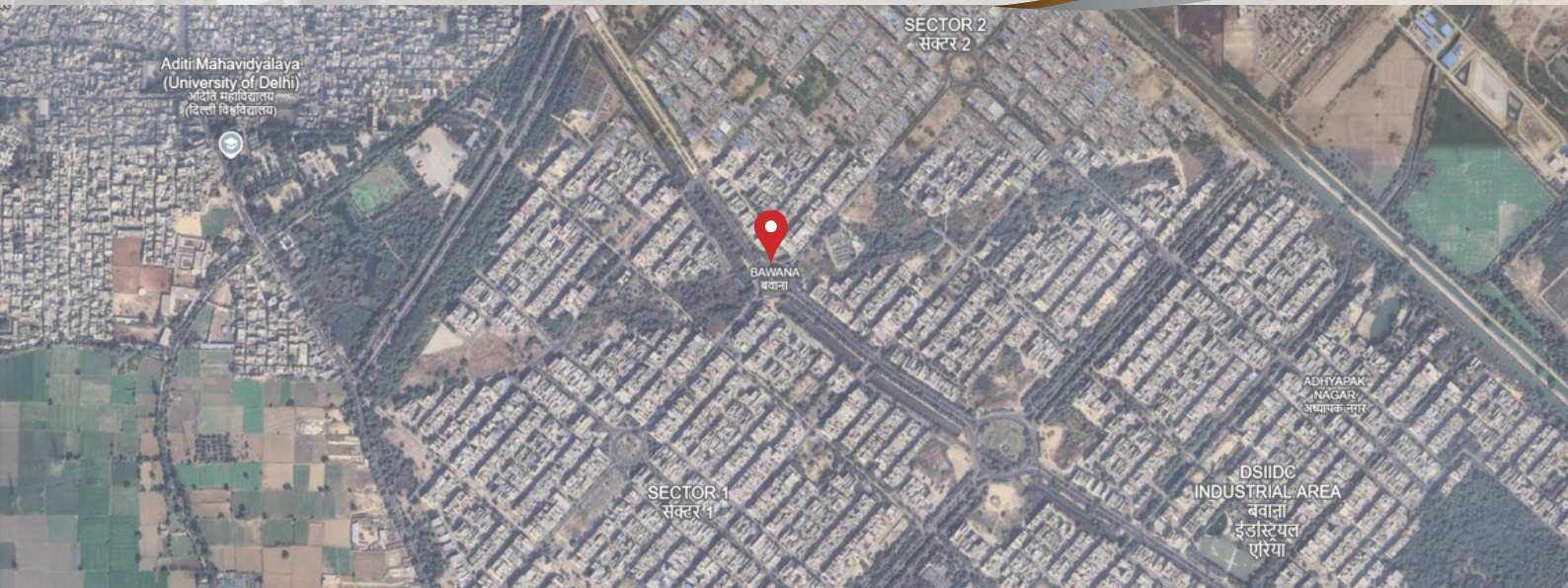

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Preface

The Grassroots Action Program (GAP) is an initiative housed at the Office of Interdisciplinary Studies (IDEAS), O.P. Jindal Global University. GAP works toward empowering marginalised communities through long-term engagement and collaborative, action-oriented research. By building on the lived experiences of civil society organisations and communities, GAP aims to generate grounded, empirical insights that can inform inclusive, evidence-based policy.

Rooted in feminist research ethics, GAP is committed not only to academic rigour and impactful outcomes, but also to reflexive and participatory processes. Equally central to our work is the goal of building capacities among community members, civil society partners, students, and faculty through every stage of the research journey.

This report presents the findings from Phase 1 of the study, Climbing the Educational Ladder, based on baseline household data collected in the resettled community of Bawana JJ Colony in Delhi. The survey aimed to understand the community's socio-economic conditions and access to public services and amenities, with a particular focus on the status of education and skill development among children and youth.

This study is a step towards understanding the lived realities of urban slum residents and contributing to evidence-based policymaking. We hope the findings will inform future interventions aimed at improving the well-being of marginalised communities in Delhi and beyond

Acknowledgments

The Grassroots Action Program exists today because of the vision, support, and encouragement of Professor Deepanshu Mohan, Dean of the Office of IDEAS. We are deeply thankful for his guidance, institutional backing, and steadfast belief in the importance of this study. His commitment to impactful, policy-relevant research has been instructive to our work.

We are especially grateful to the executive staff at the Office of IDEAS – Nirmal Lather, Kirti Sachdeva and C Krishnanath, whose careful and tireless coordination ensured the smooth execution at different stages of this study.

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We are deeply indebted to Navjyoti India Foundation, which has worked alongside the Bawana community for over two decades. We are grateful to Ms. Neetu Sharma and Mr. Sushil Arya for their constant encouragement and wisdom in carrying out the study. We would also like to thank our field team Savita, Pooja, Manoj, Anand, Hasina, Irfana, Pawan, Riya, Kumkum, Pradeep, and Rakesh, who became our field companions, sharing our concerns regarding rigorous and ethical data collection in the field. This part of the study would have been extremely difficult if not for their tireless support. A special thanks to Ayushi Pradhan, a student at Christ University, who shared our enthusiasm and joined us in the fieldwork along with the Navjyoti team.

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Executive Summary

Introduction

Grassroots Action Program engages in empirical research, taking operational learnings and insights developed over long engagement of the work done by various civil society organisations (CSOs), with us to the academic and research world of the University; and bring the expertise and commitment strengthened by our academic training to the creation of reliable primary data-driven research.

In many countries of the world, urban redevelopment is accompanied by dispossession and resettlement of urban poor to the peripheries of the city. On similar lines, the capital city of India, Delhi's preparation to host the international Commonwealth Games (2010) was preceded by multiple evictions of communities living in jhuggi-jhopdi (JJ) settlements (slums) on the Yamuna riverbank almost two decades ago.

Climbing the Educational Ladder (CEL) is a larger study in Grassroots Action Program to understand the educational trajectories of the youth living in urban low income communities. In the first phase of CEL, we intend to collect information on the socio-economic backgrounds of individuals from communities living and working in the urban margins. Based on a representative household level survey in JJ Colony Bawana- a resettled colony, this study will also present analysis of the educational trajectories of the youth of the community, whose families and households carry vestiges of earlier memories of eviction and resettlement. In addition, we analyse the long-running interventions by the equality guided civil society organisation (CSO) and their community stakeholders, to understand the impact of empowering the youth to overcome the challenges of being members of a disenfranchised community and overall, in addressing the prevailing urban inequalities

Research Design

The Phase-1 study is based on a primary survey that the baseline household level survey to explore and describe the demographic and socio-economic characteristics of the entire community and its inhabitants, with a specific focus on their education profiles.

The sample for the data collection exercise was created by using cluster proportionate sampling. Further, using the administrative blocks in the Bawana JJ colony as our primary sampling unit,

we decided to randomly select 2.5 per cent households of the population from within each cluster to form our final survey sample.

After conducting the house listing with a team of trained volunteers from Navjyoti India Foundation and students from our university, we created a final sample of households. This was followed by the creation of the survey instrument (household questionnaire), further training of the team members to conduct the digitalised survey using the Computer-Assisted Personal Interviewing (CAPI) format. A pilot survey was undertaken to both familiarise the enumerators with the questionnaire, the technological aspects of interviewing as well as to get an unambiguous understanding of the response to the survey instrument in the field. A total of 378 households and 2002 individuals constitute our final sample and information ranging from demographic, socio-economic characteristics, occupational details, educational status including enrolment, completion and absenteeism were collected.

This data was analysed collaboratively by the project team of GAP, IDEAS at O.P. Jindal Global University. The analysis presented a baseline understanding of the educational access and completion in the community, and the role of different actors in provision of schooling and higher education

Key Insights of the Study

Socio-Economic Profile of the Community

- A majority of the households in the sample of the study were those evicted and resettled from other parts of Delhi, into the JJ colony after 2004. More recently, the colony has witnessed new migration from different northern states into Delhi, with the peripheries of the city becoming a landing point for the new migrants.
- Bawana JJ Colony is a composite community with households identifying with diverse caste membership and religious identities.
- Occupational mapping alerts us to the prevalence of a working population which is engaged in insecure, irregular and low paying work available in the nearby Bawana industrial area. At least 50 percent of the households earn around or less than Rs 15000 or less per month.
- Visible gendered occupational trajectories with a greater proportion of women reporting household work as their primary occupation, cross validated even across different age groups. Younger women, who have dropped out from educational institutions report primarily occupied in unpaid household work, while young men who have dropped out of education, report taking on paid work.
- In terms of consumption patterns there is evidence of an urban life through the asset ownership/access of the households. However, the presence of indebtedness across a majority proportion of the households is indicative of debt-financed consumption.
- Evidence of low public provisioning based on data analysis of household access to civic amenities such as clean drinking water.

Are the Youth Climbing the Educational Ladder?

- Analysis of the household survey data presents preliminary evidence of truncated transition into higher education. Given, that a high proportion of youth (especially young men) move into employment early, it provides us with insights into the varied aspirations of accessing education in the community.
- Gender and religion-based disparities in education are visible especially in analysis of data on access to higher levels of education.
- Evidence of relatively economically well-off households accessing private educational institutions while the worse off households continue to access the overcrowded and under-resourced public educational institutions.
- Visible gender based differential investment in education with more girls enrolled in public education and more boys enrolled in private (more expensive) educational institutions.

Provisioning of Education in the Community and the Role of Non-State Actors

- Majority of youth in our sample rely on the public provisioning of education as the level of education increases from primary to secondary schooling to higher education.
- The educational profile of the government school (grades 6 -12)in the colony shows limitations in terms of streams, infrastructure and therefore post-education trajectories for youth.
- For the non-state actor, outreach is higher for residents who live in proximate distance.
- Child Education Program of NIF has high enrolment and attendance.

Conclusion

- Research designed to develop a baseline understanding of the socio-economic characteristics of Bawana JJ colony, an evicted and resettled community at the peripheries of the metropolitan city.
- The educational landscape of the children and youth residing in the community suggests disparities in accessing educational opportunities.
- In a low-income community, the economic constraints of household may limit the extent to which parents can support and invest in the educational attainment of their children.
- The limited public educational infrastructure implies the non- state actors can play an important role in equalizing opportunities to education for atleast households that are directly associated with its interventions.

Chapter 1:
Introduction

1.1 About the study

We, at GAP, aim to engage in grassroot level research, wherein we intend to take operational learnings and insights developed over long engagement of the work done by various civil society organisations (CSOs), with us to the academic and research world of the University; and bring the expertise and commitment strengthened by our academic training to the creation of reliable primary data-driven research. Thus, this requires us to work closely with the civil society organisations, which are actively working in different communities across several important issues.

To further this mandate, the GAP team established a collaborative working relationship with Navjyoti India Foundation, a civil society organisation working in many sites in Delhi NCR. Since Navjyoti India Foundation (NIF) already has an existing relationship with O. P. Jindal Global University, therefore, it was a natural first step for us at GAP, to start our community-based research engagement with NIF.

Among the various sites that NIF is actively working in, we chose Bawana JJ colony, a resettled colony, located at the periphery of the national capital, Delhi. The idea of periphery here highlights not only geography but also economic and political marginalisation of living in a chequered space of legal/illegal claims-making. NIF is the civil society organisation which has been working with the community since before the eviction drive, and in fact, 'resettled' with them to continue working among them, however, with a significant shift in stance towards an intensive education and skill-based intervention among the youth. The organisation works both directly in the community and in tandem with the government school departments to strengthen the provision of quality education among children and youth from the working-class communities, to foster more inclusive futures. These aims and interventions of the organisation align closely with the research interests of GAP's team.

Therefore, we define the aim of the study by Grassroots Action Program as one to understand the socio-economic trajectories of individuals from communities living and working in the urban margins. The focus of our analysis is the education mobility outcomes for the youth of the community, whose families and households carry vestiges of earlier memories of eviction and resettlement. In addition, we analyse the long-running interventions by the equality guided civil society organisation and their community stakeholders, to understand the impact of empowering the youth to overcome the challenges of being members of a disenfranchised community and overall, in addressing the prevailing urban inequalities.

This report is based on Phase 1 of the study, titled 'Climbing the Educational Ladder', which tries to address the following three specific research questions, based on a representative quantitative household level survey:

1. What does the baseline household survey of a low-income urban resettlement community tell us about the socio-economic characteristics of the community?

   Data collected through the household survey will provide a baseline understanding of the community, including demographic and economic details for all households included in the sample. At an individual level, this data will provide information on the educational and occupational status of each member of the household.

2. What is the educational status of children and youth in the low-income community?

   The data on education for children and youth will include details of enrolment, attainment, and attendance in different educational institutions. An understanding of the education outcomes of children and youth is an important first step towards developing a deeper understanding of their lifetime trajectories.

3. How are civil society organisations contributing to and shaping the education of the children and youth in the low-income community?

   This question develops an insight on the provisioning of education in a community with a history of relocation and urban resettlement. More specifically, it situates the significance of the interventions made by non-state actors within the wider arc of schooling and higher education access in the community.

The study has been sponsored and funded by the Office of Interdisciplinary Studies (IDEAS) at the O. P. Jindal Global University. Phase 1 of the study was led by its principal investigators Dr. Divya Gupta and Dr. Manika Bora and included student associates from O. P. Jindal Global University and staff members of Navjyoti India Foundation, as field enumerators and supervisors.

1.2 About the site and community

In many countries of the world, urban redevelopment is accompanied by dispossession and resettlement of urban poor to the peripheries of the city. In 1990, the government of the capital city of India, Delhi adopted the Delhi slum policy which became the grounds for multiple rounds of evictions and resettlements, continuing into late 2000s (Dupont, 2008). Due to the poor urban planning and housing scheme in Delhi the poorest sections found themselves occupying public land, where they created Jhuggi-Jhopri for themselves. The Delhi Slum Policy included 'three-pronged strategy' which included (1) in situ upgradation for clusters whose encroached land pockets are not required by the concerned landowning agencies for another 15 to 20 years for any project implementation; (2) relocation of jhuggi-jhopri clusters that are located on land required to implement projects in the "larger public interest"; (3) environmental improvement of urban slums, based on the provision of basic amenities for community use, in other clusters irrespective of the status of the encroached land (Dupont, 2008).

It has been observed that a lot of the evictions which took place were not ordered by city's development or planning authorities, rather these evictions were results of the judicial orders by the Delhi High Court and the Supreme Court issued in Public Interest Litigations (PILs) (Bhan and Shivanand, 2013). The Slum and JJ (Jhuggi-Jhopri) Department of the Municipal Corporation of Delhi was the primary executing agency for evictions. Regardless of whether the land was public or private, the Slum and JJ Department carried out the evictions (Menon-Sen and Bhan, 2008). Resettlement colonies were typically located on the metropolitan fringe, far from the original locations of the evicted bastis, and only eligible evictees (those who could prove their residence prior to 1990) were offered plots (18 square metres) (Menon-Sen and Bhan, 2008). This peripheralization was a deliberate policy choice, reflecting the city's broader urban restructuring goals.

Resettlement colonies differ from planned colonies also known as 'approved colonies'. Planned colonies are made on land which is categorised as 'development area' under the Delhi Master Plan. These colonies comply with planning norms and are provided with structured infrastructure (Heller et al, 2015). Whereas most resettlement colonies lack even the basic amenities of life and essential sanitization services. The colonies are made without adequate data on the families that would resettle thereby causing an issue of over-population and insufficient allocation of housing.

Our study is based in one such 'rehabilitated and resettled' community, who were displaced from multiple settlements in the city (Yamuna riverbank, R.K. Puram) to the Bawana JJ colony (Image 1) at the periphery of Delhi (Image 2), since 2004 onwards, making way for Delhi's preparation to host the international Commonwealth Games in 2010.

Image 1: Bawana JJ colony, Delhi

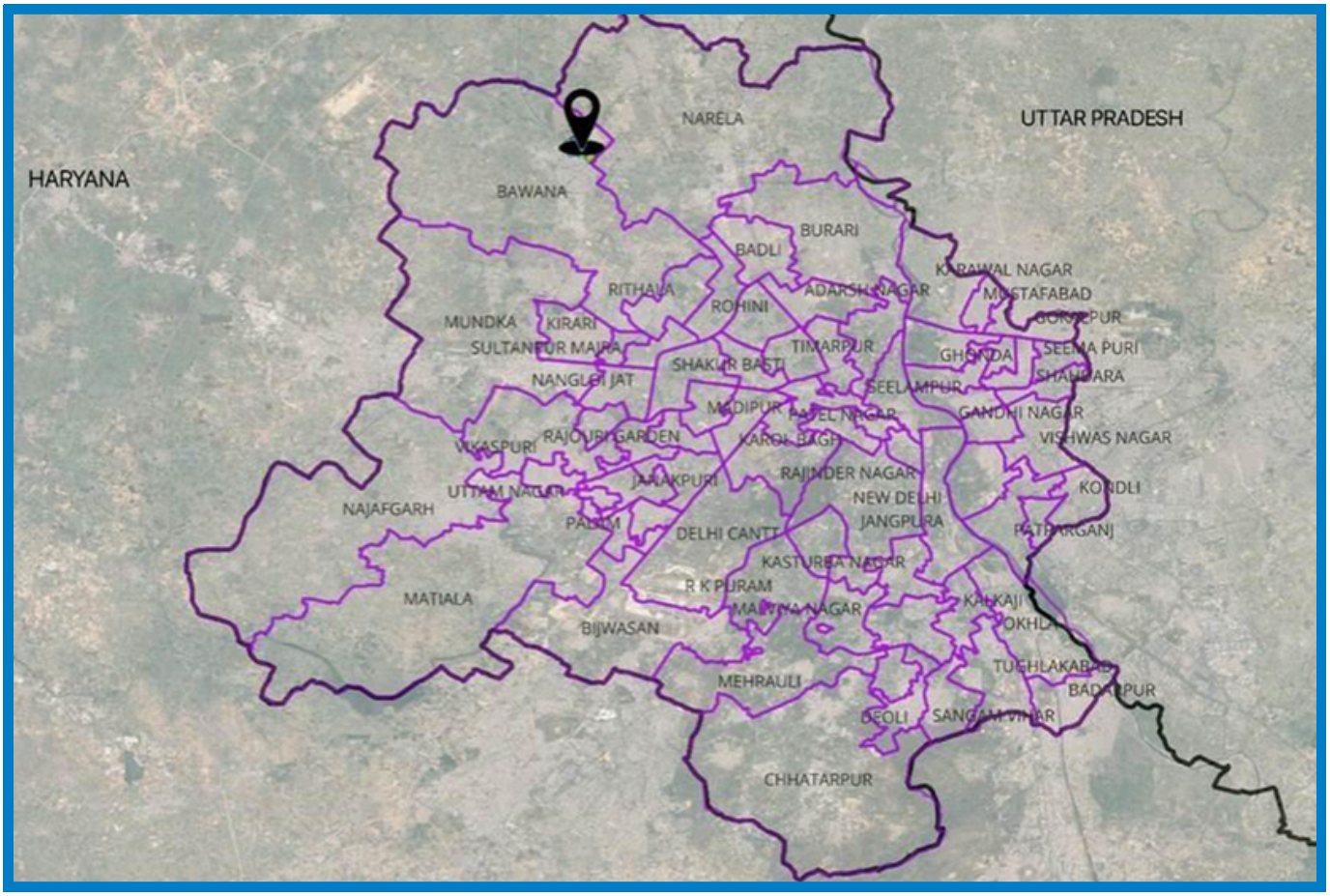

Image 2: Location of Bawana JJ colony in Bawana Census Town, within Delhi

Adoption of the Slum Policy in 1990 was not the only land restructuring that happened in the post-liberalisation Delhi. In 1996, the Supreme Court asked 168 polluting factories in Delhi to relocate or shut down, amidst growing concerns of air pollution by the residents of the city (Baviskar, 2019). By 1999, spurred by the Supreme Court again, the Delhi Pollution Control Committee sent notices to 1142 industrial units, this time regarding the discharge of effluents in the river and the non-compliance by these units to install effluent treatment plants. Further, under Delhi's Master Plan, many small 'non-confirming' industrial units received notices for closure in violation of the zoning areas which were to be segregated as residential, commercial and industrial (PUDR, 2008).

The acquisition of land by the Delhi State Industrial Development Corporation (DSIDC) in Bawana on the north-west fringe of the metropolitan city by 1996, was therefore no coincidence. The DSIIDC website declares their own objective as, "to decongest Delhi and to relocate the industries in approved industrial estates. The goal is also to reduce environmental pollution in residential areas and to provide environmentally friendly conditions in alternative localities". Bawana was one of the alternative localities and stands today as the Bawana industrial area. DDA was in possession of 739 acres of land already and notified 231 acres of additional land in Bawana village. In fact, many individuals in our surveyed sample are workers in the small industrial units that are housed in this DSIIDC developed industrial area.

Given the background of eviction and resettlement of the community, the research questions (discussed earlier) address crucial aspects about the education and occupation choices made by the children and youth.

1.3 About Navjyoti India Foundation

Navjyoti India Foundation (NIF) was established in 1988 by Dr. Kiran Bedi and a group of police officers. In its initial years of inception, the primary focus of the organisation was based on crime prevention and rehabilitation through social development. Education, however, has always been the central component of all its work. Gradually, the organisation has now moved into education and skill-enhancement of the children and youth, as its core area of work in the community.

In terms of its presence and coverage, NIF was initially working in areas such as Yamuna Pushta and Shantimani, where it worked closely with marginalized communities. However, following the demolition of these settlements, Navjyoti relocated to Bawana alongside the displaced residents, continuing its engagement with them in their new environment.

In Bawana JJ colony, the organisation operates from the community center ("Barat Ghar") in the B-block of the colony. Navjyoti runs various interventions targeted towards education and upskilling of the youth. One of the oldest programs of NIF is their Child Education Program, which encompasses two key initiatives of 'Remedial Education' and 'Bal Gurukul'. It aims to prevent school dropouts among underprivileged children and promote their holistic development. It was initiated to break the cycle linking children with street life, crime, and child labor. the 'Remedial Education' intervention, which supports children studying in government schools by providing remedial classes to students and strengthening their academic foundation and life skills. Bal Gurukul intervention aims to create a sustainable model out of the Child Education Program, through creating child leaders from within the community. The interventions trains student leaders (Bal Gurus) to teach and mentor the younger children in their communities.

The Digital Literacy Program is an initiative aimed at bridging the digital divide in through free basic and advanced computer courses, the program equips children and youth with essential digital skills ranging from typing and MS Office to internet use, graphic design, and coding basics. Similarly, another intervention called Tablet for Kids (T4K) Program initiative is designed to introduce children from the community to the digital world through an educational perspective. Targeting the age group of 9 to 14 years, the program conducts one-hour guided sessions where children engage with tablets to build their foundational literacy, numeracy, and digital awareness.

Image 3: Navjyoti India Foundation's Bawana office at Community Centre - 'Barat Ghar', in Bawana JJ colony, block B

Project Kaushal was launched to provide digital skills such as computer literacy, Tally, and digital marketing to youth, beginning at the Navjyoti campus and later expanding to satellite centres. It has since evolved into Project Tech Connect, with a broader focus on STEM education, coding, career counselling, and 21st-century skills. The initiative has also become more inclusive, engaging underprivileged women and transgender individuals. In addition, Navjyoti offers vocational training in areas like stitching and beauty and hairstylin

One of its primary objectives is to address the high dropout rates in government schools, an issue that significantly affects long-term economic and social stability. By providing academic support through after-school remedial classes and vocational training, the organization facilitates access to education as well as employment, ensuring pathways to sustainable livelihoods.

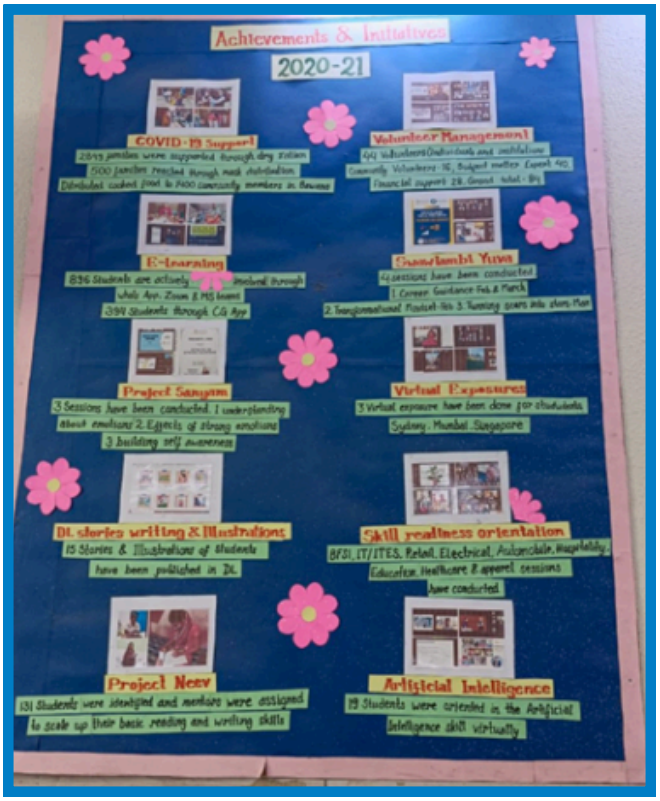

Image 4: Various projects on display at NIF's office in Bawana

The noticeable generational capacity building by NIF is visible through the accounts of many community organisers (working in their current roles as teachers, volunteers and leaders of community programs) who were at one-point young students and initiated into Navjyoti's vision through participation in their educational programs. In addition to the goodwill and positive connection with the youth therefore in the community, this contributes to the continuity of its initiatives and reinforces its role within the community.

Our understanding of the Bawana JJ colony started with collaboration with NIF, as NIF has played a very crucial role in facilitating our study by bridging the gap between us - researchers and the community. The advantages of this collaboration have been multifold. First, our working with the members of NIF has directly contributed to enhancing the quality of study design, its execution and data quality. Secondly, it has also indirectly contributed by strengthening our understanding of the community and our research impact.

The chapters of the report are organised as follows. In the next chapter, we discuss the design of the study in detail, including sections on sampling technique, creating and testing of survey instrument and discussion on the process of data collection and analysis. Chapter three introduces the community by discussing the demographic, social and economic characteristics of the community members. The baseline understanding of the community is taken forward in chapter four, wherein we focus our attention on the educational characteristics of the children and youth of the community. Next, in chapter five, we discuss the provisioning of education by looking at different kinds of institutions that are accessed by the children and youth in the community, including the educational interventions of the non-state actor. Finally, in chapter six, we conclude the Phase 1 of Climbing the Educational Ladder project.

Chapter 2
Research Design

2.1 Introduction

The first phase of the CEL project which traces educational mobilities of youth, was conceptualised as a quantitative research-based study, including data collection using household survey method. The data collected from the survey would generate a cross-sectional dataset which would be analysed using statistical techniques.

The first objective of the phase-1 study is to develop a baseline understanding of the demographic and socio-economic characteristics of the entire community and its inhabitants. Therefore, the survey's geographical coverage was the entire Bawana JJ colony, which is a small part of the Census Town Bawana, and has population of more than 15000 households. Clearly, conducting a census survey was not feasible or conceivable. Therefore, we decided to conduct a survey of a representative sample of the community, based on cluster proportionate sampling. This sampling design treated each block of the community as a cluster from where every 40^{th} household was selected as part of the sample, contributing to 2.5% of the population of each cluster; and consequently, of the community at large. A list of all such households were created across all blocks, which was employed by all field enumerators as a guide for house visits.

The second and third objectives of the phase-1 study are to focus on the education outcomes and challenges faced by children and youth of the community; and the role of non-state actors (that is, NIF in this case) in the same. Therefore, in our survey of the representative sample, in addition to asking questions related to baseline household characteristics, we also focus specifically on the details of enrolment into education or vocational institutes, participation in Navjyoti-run interventions, types of institutes, reasons for non-enrolment etc.

Given the mandate of the research questions, we conducted Focus Group Discussions (FGD) with two groups, to aid the creation of the survey instrument. The focus group discussions (FGD 1 and FGD 2) were conducted with the teachers of NIF-run education centres and the parents in the community, respectively, to explore questions regarding existing values and aspirations around education as well as the challenges faced by them of different levels. This would enable us to streamline the survey instrument as per the common community practices and challenges, which is vital to collect any meaningful and reliable data.

This chapter discusses each of these steps in detail, which were involved in the design of phase 1 of the research project.

2.2 Survey Design

Bawana JJ colony is administratively divided into several blocks which range alphabetically from A to M (with the exception of any block being titled 'I'). There is immense variation in the population and densities of each of these blocks. The colony contains approximately 15000 households. While there are two community centres in total in the colony, only one of those is operational, and is the epicenter from where our partner NGO operates. The blocks in the vicinity of the operational community centre, accommodates many households and therefore have a high population density. Whereas blocks which are farther away, have fewer households and relatively sparse densities.

Selecting a representative sample of the Bawana JJ colony, requires a sampling frame, that encompasses the census houselisting of the entire colony, from which we would select a random sample. However, for Bawana JJ colony, no such data was available at the administrative level, which could provide us with census figures of the population in the community at large, and more specifically across blocks. Even the Town and Village Amenities data files of Census 2011, which does provide data at village/town level, has information on population for the Bawana CT (census town) as a whole. The administrative definition and boundaries of Bawana CT is much bigger than Bawana JJ colony (see image 2).

Furthermore, the partner NGO also had neither conducted any recent census, nor had they any previous record of the list of all households living in the community, which could be used for the purpose of our sampling.

Thus, in the absence of a sampling frame for the entire sampling universe, we used cluster proportionate sampling. Cluster sampling is a sampling method in which the first step in the sampling strategy step involves selecting the basis for collections of persons or households, instead of sampling the households or persons directly. Cluster sampling is done very frequently. It allows random sampling in situations where simple or systematic random sampling of households either is not possible (in our context) or is inefficient.

Therefore, our sampling strategy involves multiple stages:

1. **Selecting the primary sampling unit (PSU)**: Cluster sampling requires the division of the population into smaller geographical units, such as city blocks, subdistricts or villages. In our sampling universe, that is, Bawana JJ colony, we consider the administrative blocks in the colony as our primary sampling unit, which are also our sampling clusters.

2. **Selecting households for survey based on PPS:** After finalising the blocks as clusters, we apply 'probability proportional to size (PPS)' to select the households from within each cluster. In facilitating the selection of households based on PPS, we once again need details on all households residing within each sampling cluster. In our case, while we still do not have the complete houselisting of all the households in each block, we do have information on an estimate of the total number of households residing in each block. This information on population figures for each block is gathered by the partner NGO, and further cross-verified by the local property dealers, who are in the business of buying, selling and renting the plots in that colony.

3. **Drawing a random sample proportionate to 2.5% of the population in each cluster**: Based on the study feasibility, we decided to randomly select 2.5% households of the population from within each cluster to form our final survey sample. For this, we follow the following simple steps.

i. Create a list of blocks/cluster and add a column to this list, which contains the cumulative population figures.
ii. Imagine that we are numbering all the households in the entire population within each block. For example, in Bawana JJ colony block A, households are numbered from 1 to 1300. Thus, the proportionate sample size for block A would be 2.5% of 1300 ~ 33 households.

Our sampling universe and sample size, thus, was designed as given below:

Table 1: Random sample with blocks as clusters

Block	A	B	C	D	E	F	G	H	J	K	L	M
Total households (estimat	1300	1500	900	1800	3700	2000	300	470	300	600	600	450
Design Sample size (~2.5 per cent)	33	38	23	45	93	50	8	12	8	15	15	12
Final sample size	40	47	24	47	78	47	12	17	11	21	20	14

iii. The next step involves selecting the household numbered as per the sampling fraction. That is, since our sampling fraction is 2.5 per cent = 1/40, we decided to select every 40th household within each cluster. For example, in block A, households numbered 1, 41, 81 will be selected for the survey and so on. Further, in block B, households numbered 2, 42, 82, will be selected and so on.

iv. Eligible households: An additional identification criterion was added before creating the final sample. Since the objective of the study was to develop a baseline understanding of the education profile of children and youth, a household will be 'eligible' to be included in the sample, if and only if, the household has at least one household member between the ages of 5 to 25 years. We identify this age-group as 'children and youth' of the community, who are of the eligible ages to be enrolled in some educational or vocational institutes. Even though we realise that formal schooling starts at the age of 6 years, it is common practice in the community to send children of slightly younger ages to either pre-schools or private schools, therefore the decision to include 5-year-olds as well. Further, in order to align with the education cycle, which includes school plus college education, we include ages until 25 years, by when we would hope an individual would have completed their education.

4. **Replacement households:** Non-response can bias the survey results because people who participate in a survey may be systematically different than those who do not. These differences may be reflected in the indicators that are being measured.During the house-listing exercise, for those eligible households where the respondent was not found in the first visit, the enumerators were instructed to note down the reason for absence as house locked or no eligible respondent at home, and a follow-up date for the survey was scheduled, after asking the neighbours or talking to the respondent themselves on the phone. If the house/plot visited was found locked permanently, or was uninhabited, or was found ineligible (that is, with no household member in ages 5-25 years), the replacement household in the sample would be the next numbered household. For example, if as per the cluster random sampling technique, household number 41 is to be included in the sample, but is permanently locked, the enumerators would go to the next household, that is, house no. 42, and so on. For some blocks in the JJ colony, however, the method of finding a replacement household as the immediate adjacent house was not entirely effective. The placement of plots in these colony blocks were either interspersed with commercially owned enterprises (and therefore no families resided in the vicinity) or entire stretches of consecutive plots were empty and unconstructed yet. The researchers and enumerators, in such an event, were provided with a list of middle ranges of house numbers to select the replacement household. For example, if in a certain block, a large stretch of house plots adjacent to house number 41 are empty, enumerators would pick any house between, say, house number 55-65, to find the replacement household.

Finally, after carefully implementing all the steps mentioned, the houselisting of 400 households was completed to be included in our sample. This would also include those households which, later on, at the time of final data collection, would report not being interested in participating in the study. Thus, our final sample for which data was collected is 378 households, which translates to 2002 individuals.

The map below shows the spread of our final surveyed households.

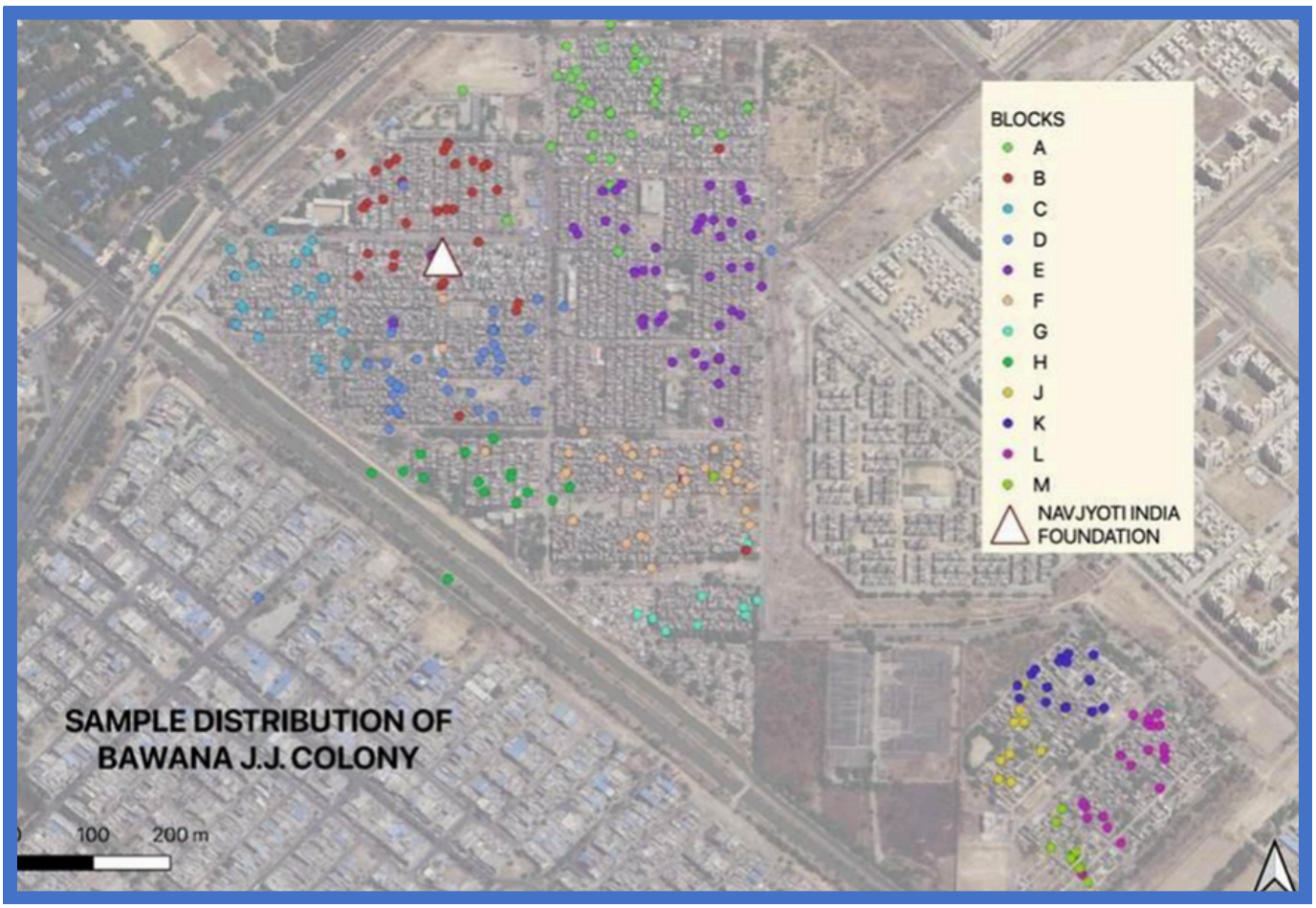

Image 5: Spread of sample in Bawana JJ Colony

2.3 Focus Group Discussions

After the formulation of the research design, in order to better align the nstrument with the research questions, we conducted two Focus Group Discussions (FGDs) before the household survey was finally conducted.

FGD 1 (N=15) was undertaken with the teachers who have been teaching in some capacity in the education centres run by Navyoti India Foundation. Some of these interventions also work in collaboration with the government schools (Project Neenv). The discussions with the teachers focused on themes of challenges they faced in working with the students from the community.

Some of the pertinent challenges, as shared by the teachers, were related to the role of parental education and household living conditions, in shaping the education aspirations and outcomes of children and youth. The role of gendered division of labour influencing girls' and boys' choice of education differently, was also highlighted. Further, different types of issues were highlighted to be affecting girls and boys differently, such as safety was cited as a reason often affecting girls.

FGD 2 (N=12) was conducted with parents from the community, including parents of students who are/were enrolled in the Navjyoti programs. The discussions with the parents were centered on themes of disruptions in educational journeys at the time of eviction and resettlement, the initial issues/conflicts with the native communities/schools, safety of their children, change in educational aspirations over time in the community and the teacher absenteeism in the government schools. The aim of the FGD was also to provide us with an understanding of the living conditions of the community members.

During the discussion, some of the most prominent challenges and issues, with respect to the education of children and youth in the community, that were echoed by the parents were related to the quality of public schooling such as high pupil-teacher ratio, teacher absenteeism etc. Further, safety was another major concern cited by most parents, specifically safety of girls.

The discussions and findings of the two FGDs helped us shape our survey instrument; and in fact, some of these findings are also validated by the quantitative survey outcomes, as discussed in the latter part of the report.

2.4 Survey Instrument

The Bawana baseline household survey was conducted based on a detailed structured questionnaire. The questionnaire had been structured into multiple modules, each capturing distinct aspects of household characteristics, demographics, and educational engagement.

The first module, that is, the Household Identification module establishes the identity of the surveyed household based on the prior sampling exercise wherein eligible households were defined to be those where at least one residing member was between the ages of 5 and 25 years, as explained previously. Interviewers record details such as the block and house number, GPS location, and the number of families residing in the household. The survey confirms the presence of a competent/eligible respondent, defined as someone over the age of 15 years, and obtains their consent before proceeding. If no eligible respondent is available, the absence is documented, and a follow-up date is scheduled based on when the respondent is expected to be present.

The Household Roster seeks to construct a socio-economic and demographic profile of the individuals residing in the household. The interviewers list all residing household members. Then, for each member, information on relationship to the household head, age, gender, marital status, is collected. This module also gathers basic information for all individuals in the household who are aged 5 years or above, on their literacy levels, formal years of education completed, education status in terms of ever enrolment in any educational or vocational or skill-based training institute. Beyond basic education characteristics, the household roster also captures socioeconomic indicators such as occupation, income, and household assets. Respondents provide details on primary and secondary occupations, the nature of employment, working hours, and frequency of wage payments. The survey also examines economic status, including ownership status of different household assets like mobile phones, vehicles, and appliances etc., access to electricity and drinking water, availability of toilets. Understanding these aspects helps establish the broader economic context but also looks at the gendered context of occupation and responsibility, in which education-related decisions are made.

The Education Roster collects more detailed information on the educational characteristics of children and youth in the household. This roster is administered only to household members aged between 5 and 25 years. Focus is placed on understanding access to education, with respondents being asked on whether children are enrolled in any school/institute or not, the type of institution attended, the mode of transport used, fee payment and whether they take up private tuitions or not. If a child is reported to be not enrolled in school or any other educational/vocational institute, the survey explores the reasons for non-enrollment, ranging from financial constraints to lack of access or social barriers.

Additionally, acknowledging the important role played by CSO-run interventions in bridging the existing gaps in education outcomes in this community; and aligning the design of the survey instrument with the third research question, the education roster of the survey also collects information on enrolment in the programs run by NIF. The survey, thus, collects information on the participation of the children and youth in any Navjyoti interventions, - skill training programs, digital literacy initiatives, or vocational courses. The questionnaire also contains questions regarding the reasons for non-enrolment, if they are not enrolled in any of these programs.

The last part of the survey focuses on children's absenteeism from educational institutions. Thus, the study goes beyond simply capturing enrollment in educational institutions and attempts to draw out the information on regularity in attendance as well. If a child has missed school on the previous day or in the past week, respondents are asked about the reasons, which may include illness, household responsibilities, financial difficulties, or quality of education concerns. Similarly, information is also collected from respondents whose households have any children enrolled in Navjyoti run educational programs.

The survey was disseminated through Computer-Assisted Personal Interviewing (CAPI) and was conducted face-to-face using smartphones to administer the questionnaire, allowing data collection without an internet connection. Internet access was only required at the time of syncing of all the completed interviews. CAPI integrates logical checks, skip patterns, and automatic validations to ensure responses follow a logical sequence and minimized errors in data collection. For example, the occupation related questions of the household roster would appear only if the respondent is aged 12 years or above, preventing irrelevant responses and reducing the need for manual data cleaning. Validation conditions were also used to prevent inconsistent responses; for instance, when a respondent would be asked about how many hours a day they worked, the respondent could not claim nor the enumerator can mistakenly enter the work done for more than twenty-four hours in a day.

Therefore, CAPI also enables real-time validation, providing immediate feedback on inconsistencies, reducing errors and ensuring data completeness. It records data such as interview start and end times, GPS locations, and enumerator details, allowing supervisors to monitor data collection and verify interview locations. This reduces the time and resources needed for data cleaning and validation. The system ensures that only relevant rosters appear based on prior responses, minimizing enumerator mistakes and improving data quality. The mode of survey also allowed for built-in instructions for enumerators, ensuring clarity in data collection. For example, while listing household members, enumerators were instructed to include children who live outside the household for studies but if the family migrated (to Bawana) without their children, then list only the parents.

The use of CAPI aligns with GAP's broader objective of capacity building through this technology-driven data collection. Enumerators underwent comprehensive training on the software and survey methodology, covering data accuracy, question intent, and effective respondent interaction. Ethical considerations, including informed consent and responsible data collection, were also emphasized to maintain research integrity. By integrating technology into data collection and providing structured training, GAP aims to strengthen the capacity of partner organizations, equipping them with the skills and methodologies necessary for effective data-driven decision-making and problem-solving in achieving their goals.

2.5 Data Collection and Analysis

After the careful curation and design of the questionnaire, the next immediate step in the study involved providing the enumerators with a day-long intensive training on the survey goals, survey methods and the survey instrument, specifically the digital version of it, that is, on the mobile application. This was vital to bring the entire survey team on the same pedestal and bring harmony in diverse goals of the study. That is, to bridge the gap between the academic thinking part of the study and the on-the-ground implementation part of the study.

Before we administer the questionnaire on field to collect final data, it is important to first pilot test the questionnaire, by undertaking a preliminary small-scale study on fewer number of households, which are not part of the final sample.

The objectives of the pilot survey were manyfold:

a) to test the validity of questionnaire and test the clarity and effectiveness of the questions;

b) to make the enumerators, many of whom were engaging in an exercise like this for the first time, accustomed to the field and questionnaire;

c) to assess the reliability and validity of responses;

d) to identify logistical or operational challenges in data collection;

e) to estimate the time required for survey administration;

f) to identify any challenges specifically with respect to the software used for data collection;

g) to identify any distinct or newer patterns or observations from the field that ought to be incorporated into the questionnaire, before the final survey; and

h) to test the validity of our definitions in the questionnaire

The pilot survey, hence, was conducted over three days, covering around 10-15 households. Each day of the pilot survey exercise would begin as well as end with a brain-storming session with the entire team of field enumerators and supervisors to exchange feedback on improvising the effectiveness of the survey instrument. This intensive feedback exercise brought about multiple revisions in the survey instrument, finally culminating into version 9 of the questionnaire, which was used to carry out the household survey.

Finally, after concluding the pilot survey and undertaking the revisions in the survey instrument, the final data was collected from 400 households. The enumerators would go in teams of two, comprising of one male and one female enumerator, to ensure that the enumerator of the respondent's gender is present at the time of interview. Further, the exercise of data validation was also being carried out alongside the final data collection and continued even after that, which entailed field monitors going back to the surveyed household to verify certain sets of information or to collect information on any missing observations.

Consequently, after completion of the field exercise with data collection and validation checks, data was further cleaned for the purpose of data analysis and visualisation. Since phase 1 of the study has been designed as a quantitative survey, the process of intended data analysis as an outcome of this survey would involve statistical analysis of the varied information collected, keeping in mind the qualitative information collected previously as part of the two FGDs, as well as field observations from the data collection exercise. The next three chapters present such statistical analyses with an aim to address the three research questions of this study.

Chapter 3
Socio-Economic Profile of the Community

3.1. Introduction

In line with the first research question, this chapter presents a detailed socio-economic profile of the households surveyed as part of the baseline study. Understanding the demographic, occupational, and asset-based characteristics of the community is essential to contextualizing other aspects of the study particularly education, access to services, and livelihood vulnerabilities.

The data in this chapter draws entirely from responses collected through the household questionnaire administered across the survey area. The objective is to identify key patterns related to caste, religion, gender composition, household structure, type of housing, asset ownership, nature of employment, and economic status as indicated by income levels, and indebtedness of the households. These indicators serve as important markers of vulnerability, capability, social positioning and opportunity within and across the community.

The sections that follow are organised thematically, beginning with basic demographic characteristics, followed by housing conditions, access to infrastructure, asset ownership, patterns of employment, and household-level income and debt.

3.2. Demographic and Social Overview

Understanding the demographic profile of the surveyed population provides the foundation for interpreting the socio-economic and educational patterns discussed in later sections of this report. Socio-demographic characteristics such as age, gender, household composition, caste, and religion not only shape the everyday experiences of residents but also influence their access to resources, opportunities, and services.

Age-distribution: Understanding the age composition of households is crucial for assessing the demographic profile and helps identify the dependency ratio, intergenerational household structures, and potential demographic transitions. Age distribution gives insights into the proportion of children, working-age adults, and the elderly, each of which has distinct implications for education, employment and health within a household. In a resettled urban context like this, age data can shed light on patterns of migration, family rebuilding, and the evolving responsibilities borne by different age groups. The following section presents the age-wise distribution of individuals in the surveyed households and offers reflections on the emerging patterns.

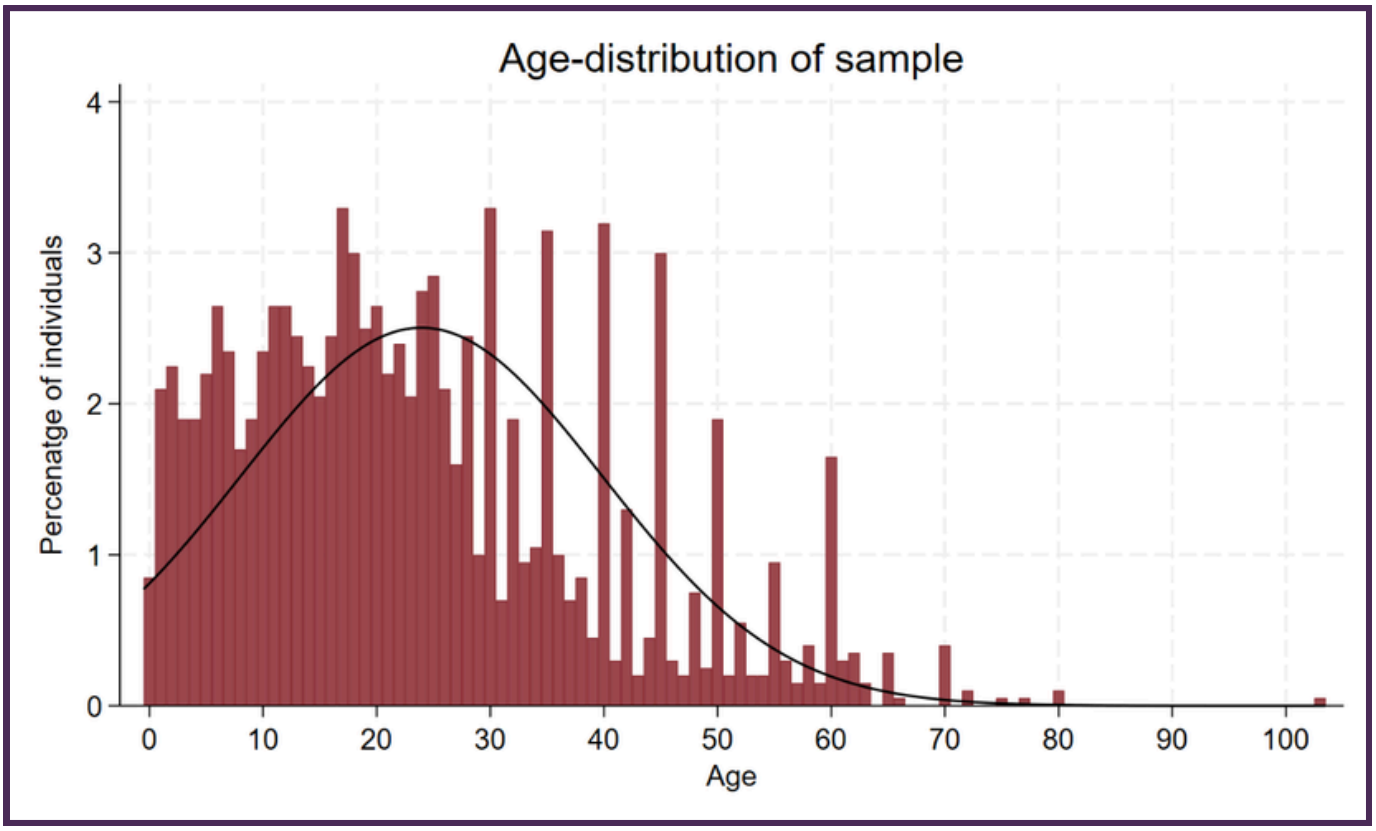

Figure 1: Age-distribution of all individuals in the sample

Out of the total sample of 2,002 individuals, 1,027 approximately 51.3 percent fall within the age group of 5 to 25 years. Children under the age of 5 comprise 180 individuals (9.0 percent), while 795 individuals (39.7 percent) are aged above 25 years. As discussed earlier, for the purposes of our study, we define this category between ages 5-25 years as 'children and youth', as these are the individuals who typically enroll in schools, colleges and other higher education institutions. Given the context of our situated study, this age group also represents the young adults transitioning into the workforce. As shown in figure 1 above, this skew towards a younger demographic indicates a youth-heavy population structure within the surveyed community. Such a profile has significant implications for public services and policy interventions particularly in relation to education, skill development, and employment.

Household Size and Structure: Understanding household size and structure provides insight into family composition, dependency ratios, caregiving responsibilities, comparison around various indicators, social change and the social organisation of domestic life. In the baseline survey, data were collected on the number of household members, their age and gender, and the type of household (nuclear, joint, or extended).

Most households in our sample are multigenerational households with almost 60.05 percent reporting more than 4 members, while merely 2.65 percent had smaller household size of 1-2 members (see table 2).

Table 2: Household Size in the sample

Number of members in the household	Percentage of households
1-2	2.65
3 - 4 (nuclear)	36.6
5 and above (multigenerational)	60.05

Gender: Our sample consisted of nearly 51 percent of men and 49 percent of women. Although our questionnaire consisted of more than the binarised classification of gender, there are no reported third gender individuals in the sample.

Caste and Religion: The household questionnaire included a set of questions to record the caste group and religion of the household head as declared by respondents. JJ Colony is a mixed neighbourhood comprising both Hindu and Muslim communities. In our sample, 52% identified as Muslim, 47% as Hindu, and the remaining as Christian. While respondents generally reported their religious identity without difficulty, the identification of caste proved more complex, particularly with reference to the official categories of Scheduled Castes (SC), Scheduled Tribes (ST), Other Backward Classes (OBC), and the General category. In many cases, respondents stated their jaati rather than aligning themselves with these standardized classifications. Accurate enumeration can be further constrained by a range of social factors: the stigma and humiliation associated with being identified as 'low caste,' the tendency to claim association with higher castes as a means of asserting social status, and the risk of violence or discrimination upon disclosure of a marginalized caste identity. Some dynamics were also echoed in community discussions, where participants described experiences of stigmatization by dominant groups such as the Jats.These challenges highlight the limitations of self-reported caste data and underscore the need for qualitative research to complement quantitative findings. Given that caste distinctions cut across religious groups and that among Muslims, too, caste-based identities are widely recognized questions on caste were included for Muslim respondents. Table 3 presents the caste groups of sampled households, as reported to the enumerators.

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Table 3: Caste groups in the sample

Caste category of the household head	Percentage of households
SC/ST	10.32
OBC	14.02
Others	35.71
Household did not want to report their caste category	13.49

Note: Almost 26.46 percent of the households were unable to tell the enumerators their caste categories and have instead reported their 'jaatis'.

Table 4: Duration and nature of residence in JJ Colony Bawana

Reasons for residence in Bawana JJ colony	Frequency	Percent
Displaced and evicted, 2004 onwards	226	59.79
Bought a house	64	16.93
On Rent	72	19.05
Other	16	4.23
Total	378	100.00

Migration History and Settlement Patterns: While the religious and caste composition tells us who lives in Bawana, a look at the history of how they came to live here sheds light on the layered experiences of eviction, resettlement, and migration that shape the community today. As table 4 shows, a significant proportion of our sample – nearly 60 percent – comprises households that were forcibly evicted from Delhi around 2004 and resettled in Bawana JJ Colony as part of the city's "slum clearance" efforts leading up to the Commonwealth Games. This marks a key moment in the shaping of the community, where state-led eviction and resettlement became central to the everyday lives and geographies of the urban poor.

Today, the colony hosts a mix of populations: the older resettled residents as well as more recent migrants who have moved to Bawana between 2010 and 2024, often drawn by the proximity to affordable housing and employment opportunities in nearby industrial zones. An analysis of the reported year of settlement reveals a distinct trend: most resettled households arrived between 2004–2009, while households that purchased or rented property in the area did so in the subsequent decade.

3.3 Housing, Infrastructure, and Asset Ownership

To understand the material realities and living conditions of the households surveyed in Bawana JJ Colony, this section brings together data on housing conditions, access to basic infrastructure, and ownership of household assets. These indicators are deeply interlinked and together shape the everyday experiences, mobility, and aspirations of urban poor communities. The data presented here allows us to examine the extent of adequacy and deprivation in physical living conditions within the colony.

Table 5: Patterns of household ownership

Characteristics	**In percentage**
Proportion of the Households self-reporting as Owners (living in their own house)	72.22
Proportion of Households self-reporting as Landlords Other	13.76

Table 5 presents the patterns of household ownership as reported by respondents during the baseline survey. A significant majority of households 72.22% identified themselves as owners, meaning they reside in a house that they claim as their own.

Interestingly, 13.76% of the households reported themselves as landlords, indicating that they rent out property to others. This is a noteworthy figure in an urban resettlement or low-income community context, as it points to small-scale rental economies developing within the area.

Table 6: Status of residential property across religious groups

Religion	Status of property rights			
	Owner of the house	Tenant	Neither owner, nor tenant, relatives' house	**Total**
Hindu	37.83	9.26	0.00	47.09
Muslim	34.13	17.46	1.06	52.65
Christian	0.26	0.00	0.00	0.26
Total	273	101	4	378

The data presented in Table 6 highlights the patterns of housing ownership and tenancy across religious groups in the surveyed community. For Hindu households, 37.83% reported living in homes they own, while 9.26% identified as tenants. In comparison, 34.13% of Muslim households reported home ownership, but a significantly higher proportion 17.86% reported living as tenants.

This distribution suggests that while the overall rates of home ownership among Hindus and Muslims in the sample are relatively close, Muslim households are more likely to be tenants than their Hindu counterparts.

Table 7: Households living in rental accommodation

	Frequency	Percent
Yes	52	13.76
No	326	86.24
Total	378	100.00

Almost 13 percent households in our sample represent migrants from outside as well as inside Delhi NCR, in search of work opportunities in the Bawana area. This underscores the significance of the industrial area in urban peripheries as an important site to study migration, as quite often newer migrants reach these areas as a first foothold in the city.

Access to Basic Infrastructure and Civic Amenities: Access to basic infrastructure such as clean drinking water, sanitation, electricity, and waste disposal is a critical determinant of everyday wellbeing and quality of life in urban resettlement colonies. These services form the foundation upon which health, livelihood, and dignity are built. For communities that have been relocated, such as those in Bawana JJ Colony, the adequacy and stability of these civic amenities become even more crucial. This section draws on the household survey to present a snapshot of the availability and accessibility of key infrastructural services in the area.

Table 8: Availability of tap water within the residence

Tap water within residence	Percent
No	67.90
Yes	32.10

Image 6: A private tanker in the community

An important indicator of basic infrastructure and quality of life is the availability of tap water within the household premises. In our sample, only 32 percent of households reported having access to tap water within their residence, while a significant 68 percent reported no such access. This implies that a majority of the households continue to rely on shared or external water sources for daily needs. The absence of in-house water access reflects the ongoing infrastructural deficits in the JJ colony and indicates the persistence of everyday struggles around basic civic amenities.

Table 9: Source of clean drinking water in sample households

Type of water source	Public		Private		
	Community tap	Handpumps	Private tankers	Tubewell	Submersible
With the source (in percent)	25.73	0.27	59.42	2.65	41.64
Without (in percent)	74.27	99.73	40.58	97.35	58.36

This implies that a majority of the households continue to rely on shared or external water sources for daily needs, majority through private sources like tankers, tubewell, and submersible The absence of in-house water access reflects the ongoing infrastructural deficits in the JJ colony and indicates the persistence of everyday struggles around basic civic amenities

Observing the data on the source of clean drinking water by households confirms the story of public neglect in an under-served community, where most households depend on out-of-pocket expenditures to provide for the most basic civic amenities such as clean drinking water (see table 9).

Asset Ownership: Asset ownership offers a useful lens to understand material well-being and levels of economic stability within the community. It not only reflects long-term household investment but also indicates access to everyday amenities that support dignified living.

Figure 2 below shows asset ownership across surveyed households, helping us understand their material conditions and perceived economic well-being. Ownership of assets such as televisions, refrigerators, mobile phones, water purifiers, two-wheelers, and other durable goods is often used as an indirect indicator of household wealth and standard of living.

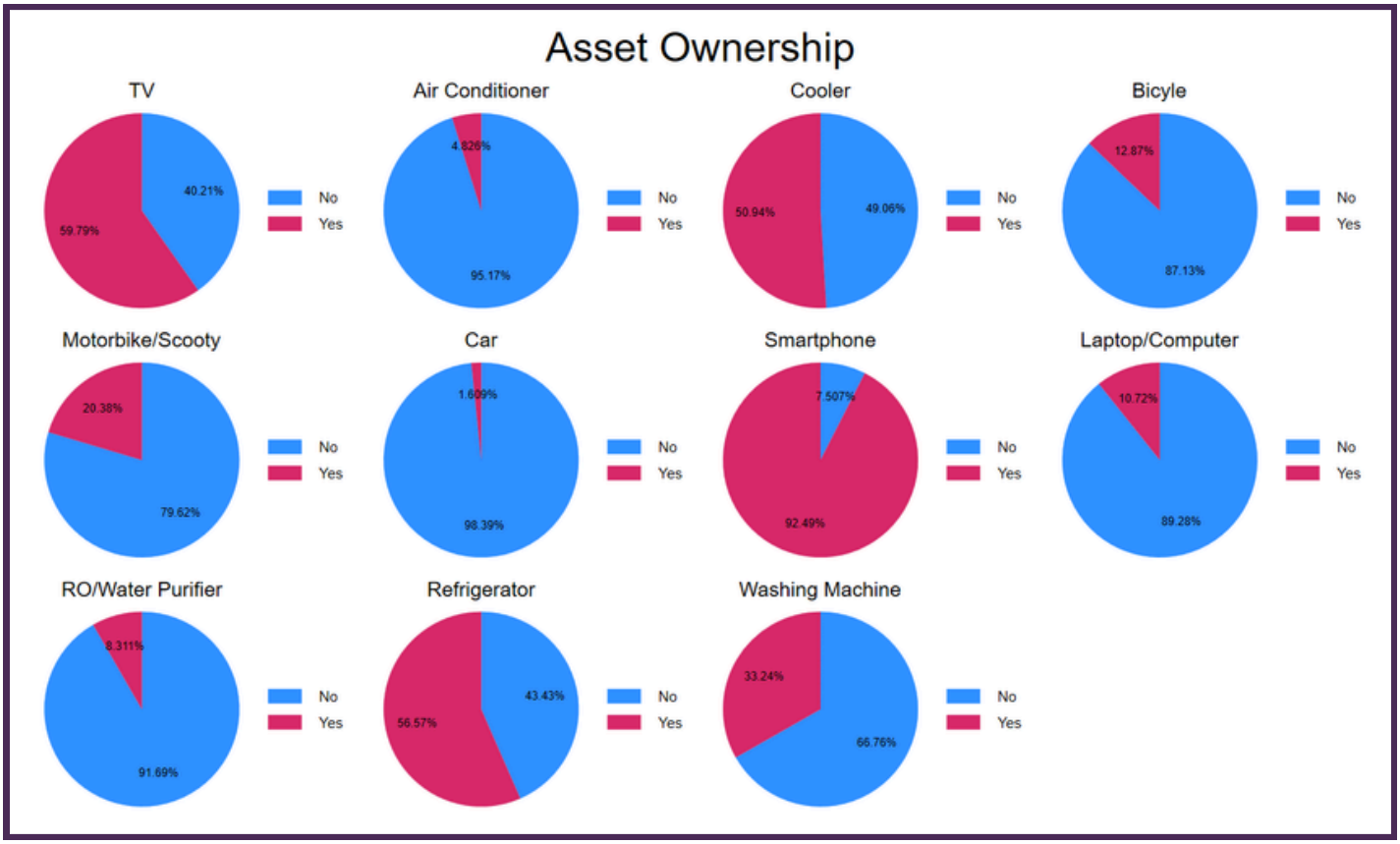

Figure 2: Ownership of assets in the households of the sample

Note: Notably, 5 households in our sample reported to have none of the above-mentioned assets, possibly indicating acute poverty conditions.

The data indicates that a significant proportion of households report owning basic consumer durables. Close to 50 percent or more households in our sample reported ownership of consumer durables such as television, refrigerator and coolers. While ownership of air conditioners, RO water purifiers and washing machines is reported by fewer households. Assets contributing to mobility such as bike and bicycle have less than 20 percent ownership while less than 2 percent of households own a car. Assets contributing to communication, on the other hand, such as smart phones are present in almost 92 percent households, with nearly 60 percent of the households reported having more than 1 smartphone.

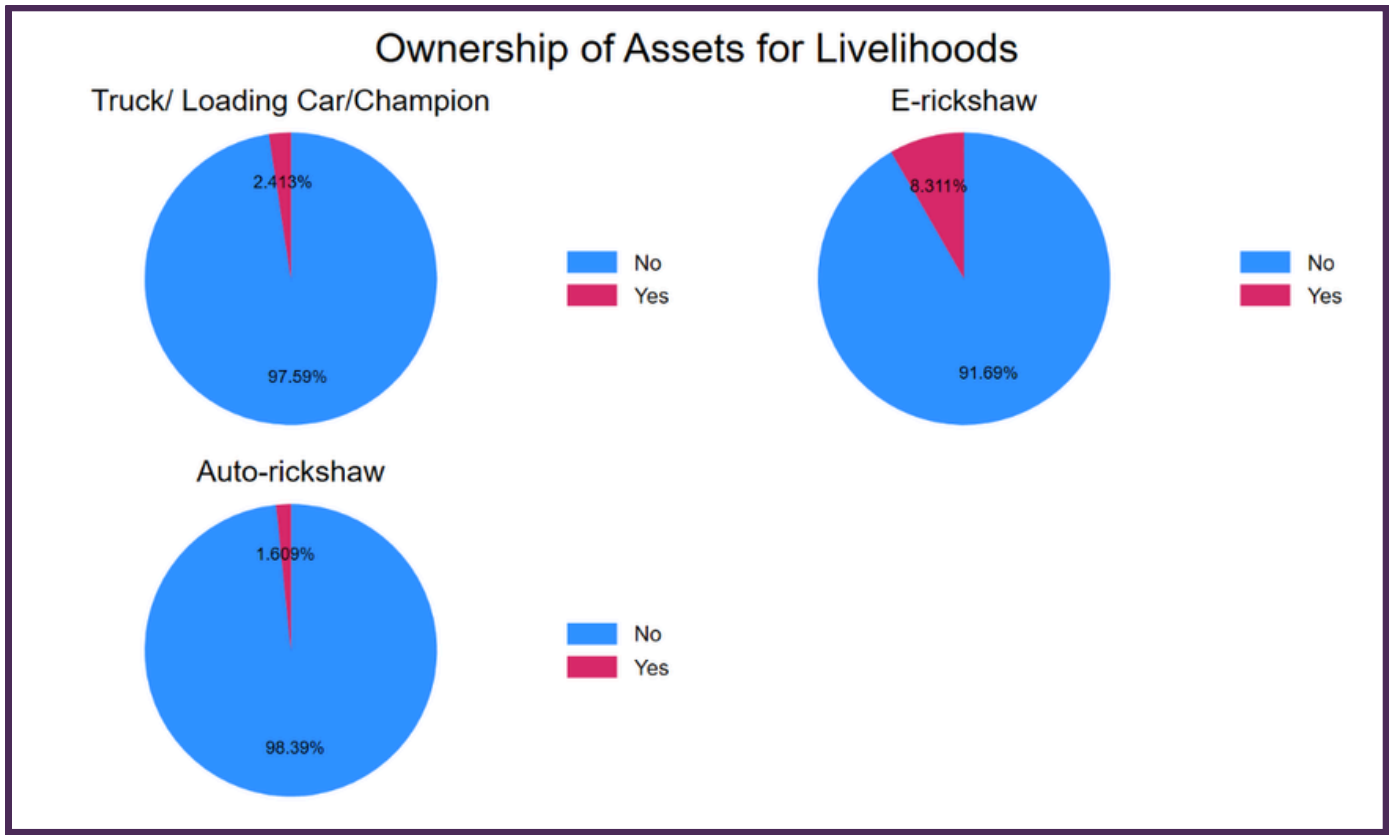

Figure 3: Ownership of assets for livelihoods

If we look at the ownership of assets which are, in some ways, likely to support the livelihoods of households, we see fewer households reporting ownership of small vehicles for loading and transport like truck and autorickshaw, while some households, nearly 8 percent own e-rickshaws (figure 3). This, combined with the occupational mapping, tells us about the forms of self-employment that individuals in an urban periphery like this are engaged in.

3.5 Employment and Livelihoods

Livelihoods in Bawana JJ Colony are characterized by informality, precarity, and low wages. The question related to employment were asked from all household members who were aged 12 years or above. The lower bound of the age for such questions was decided to be 12 years, based on consultation and feedback from the community members as well as the members of NIF, some of whom were also the field enumerators and field monitors, who informed us that participation in the labour market at an early age was common practice in the community.

This section presents data on the employment status of individuals aged 12 years and above, disaggregated by gender and age groups. It focuses on the nature of work, types of jobs, and livelihood strategies adopted by households to sustain themselves amidst economic vulnerability. We also look at youth employment patterns and the gendered distribution of occupations.

In the following section we will present a basic overview of the occupations undertaken by residents of JJ colony Bawana.

Table 10: Primary occupation for all individuals aged 12 years and above

Employment status of the individual	Percent
Home-based work	1.26
Self-employed (at shop or home)	15.23
Wage employed/workshop/office	31.98
Government Job	0.27
Unemployed	10.64
Student	18.95
Home maker (housewife)	21.68

Our sample constitutes 48.74 percent of individuals who report participation in paid work including home based, wage work, government job and being self-employed. Almost 11 percent of the individuals report being unemployed, while almost 19 percent of individuals are currently enrolled in an educational institution.

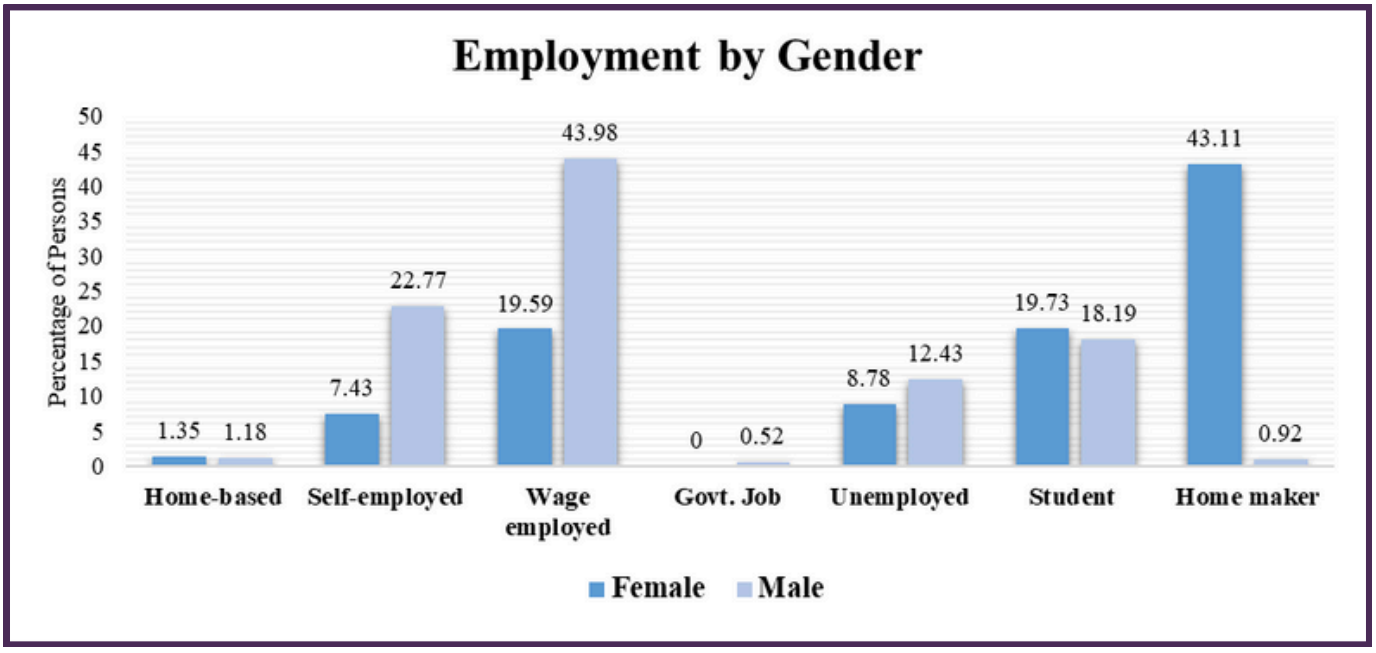

Figure 4: Gender-wise occupation of all individuals aged 12 and above

Notably, in line with the national as well as state-level trends, female paid work participation is significantly lesser than that of male. As shown in figure 4, nearly half of the women in our sample are not employed in paid work, that is, they either report to be home-makers or are unemployed. Further looking at the main employment categories of 'wage employment' and 'self-employment', we observe nearly 67 per cent of the males employed in these categories. Thus, both male and female labour force participation rates are very close to the state-wide aggregates of 69.9 per cent (males) and 18.5 per cent (females), as per Periodic Labour Force Survey report, 2024 (MOSPI).

Notably, the 43 per cent of women reporting to be 'home-maker', that is, engaged in household work as their primary work indicates the disproportionate burden of unpaid household work shared by on women, vis-à-vis men. The most recent time-use survey 2024 factsheet corroborates these findings, where females spent 289 minutes (nearly 5 hours) on an average in a day in unpaid domestic services for household members, while male members spent 88 minutes (only 1.5 hours) in a day in such activities.

Examining the primary occupational status of those between ages 12-25 years presents some expected trends. Almost 40 percent of the sample in this age group constitutes of those enrolled in educational institutions. Surprisingly, 15.89 percent of the age group reports being unemployed, which is higher than the unemployment among those above 12 years of age (see table 11).

Table 11: Employment and occupations among young children and youth, 12-25 years

Employment status	Percent
Home-based work	1.13
Self-employed (at shop or home)	7.17
Wage employed/workshop/office	20.68
Unemployed	15.89
Student	39.66
Home maker (housewife)	15.47
Total	100.00

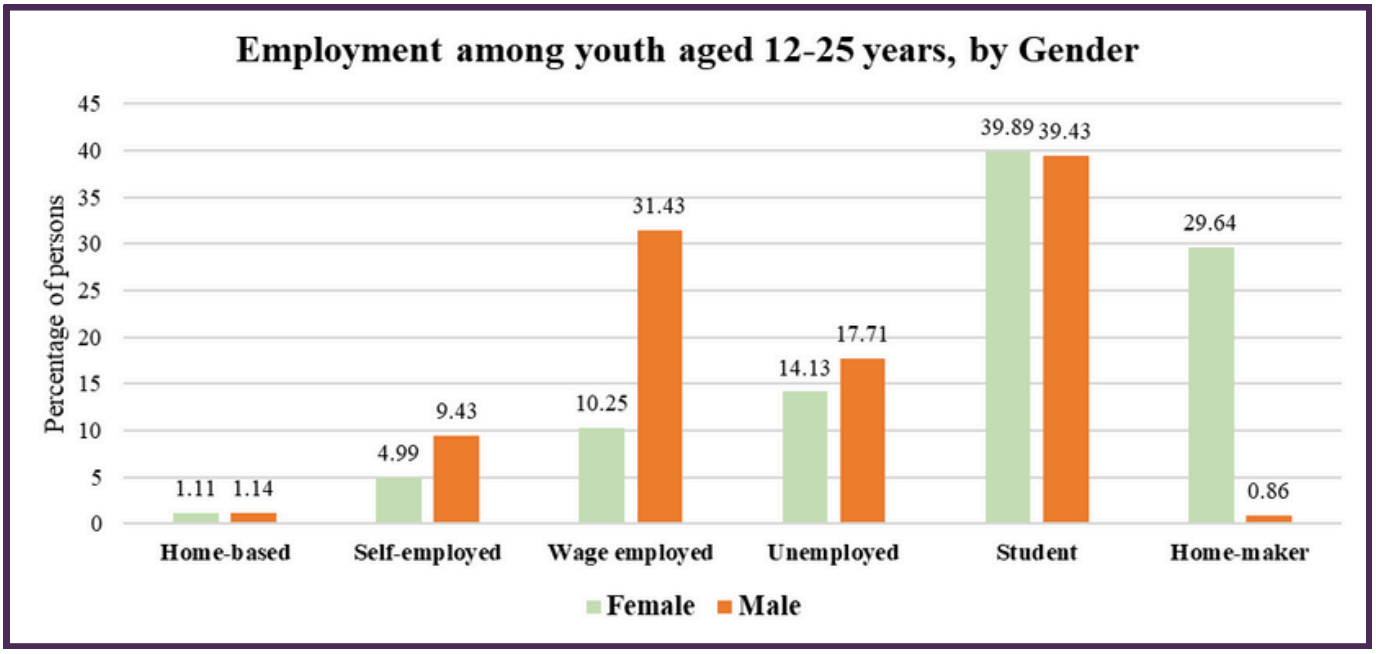

Figure 5: Employment among youth aged 12- 25 years, by Gender

A gender-wise percentage analysis of employment among the youth aged 12- 25 years presents evidence of division of labour that is starkly gendered. This is in line with the findings of nationally representative time-use surveys.

Table 12: Nature of employment based on the levels of regularity

Nature of employment	Percent
Daily-based	60.44
Permanent	11.46
Contractual	3.27
Temporary	24.83
Total	100.00

The analysis of occupational data in our sample presents a picture of precarity with almost 60 percent of the individuals working as daily workers, without secure and regular terms of employment. Only 11 percent of the working population are employed in permanent jobs.

Further, the table below (table 13) shows that both self-employed individuals and wage earners are working on a daily basis, while most home-based work is of a temporary nature. The permanent nature of employment is present largely in government jobs. Overall, close to 60 per cent of the individuals in our sample are working on a daily basis and only 11 percent have the security of a permanent employment.

Table 13: Nature of jobs by employment category

Employment status	Nature of employment			
	Daily-based	Permanent	Contractual	Temporary
Home-based workMuslim Christian	21.05	5.26	0.00	73.68
Self-employed (at shop or home)	57.89	16.67	2.63	22.81
Wage employed/workshop/office	63.62	8.52	3.74	24.12
Government Job	25.00	75.00	0.00	0.00

3.6 Income and Indebtedness

In addition to data on employment and household assets, we also collected information on income levels and indebtedness to gain a more comprehensive understanding of economic well-being. The first indicator we examine is the average monthly household income. While self-reported income data may involve some degree of underreporting or approximation, the overall distribution reveals a concerning trend: nearly 50 per cent of households report earning Rs. 15,000 or less per month.

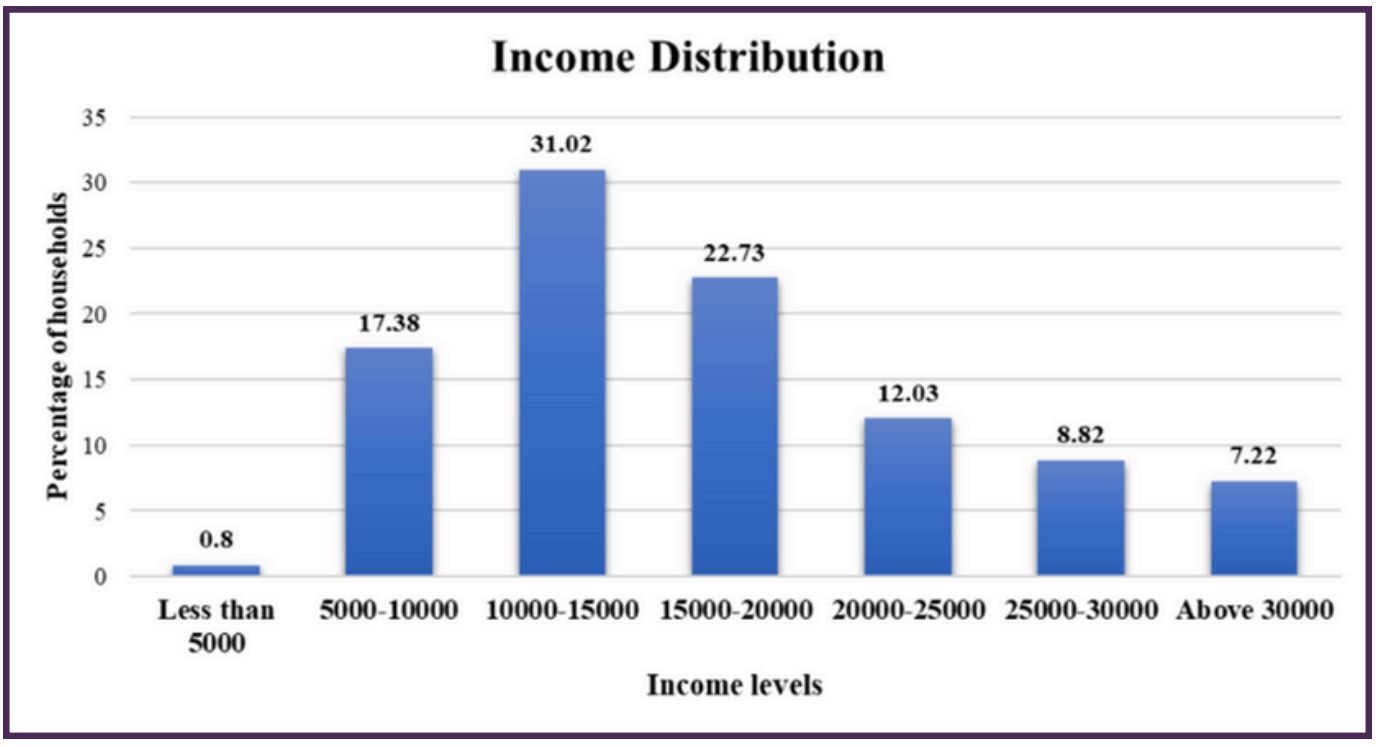

Figure 6: Distribution of income (per month) for households in the sample

Given such low levels of incomes of the households in the community, we may observe reliance on borrowings to smoothen the consumption expenditures.

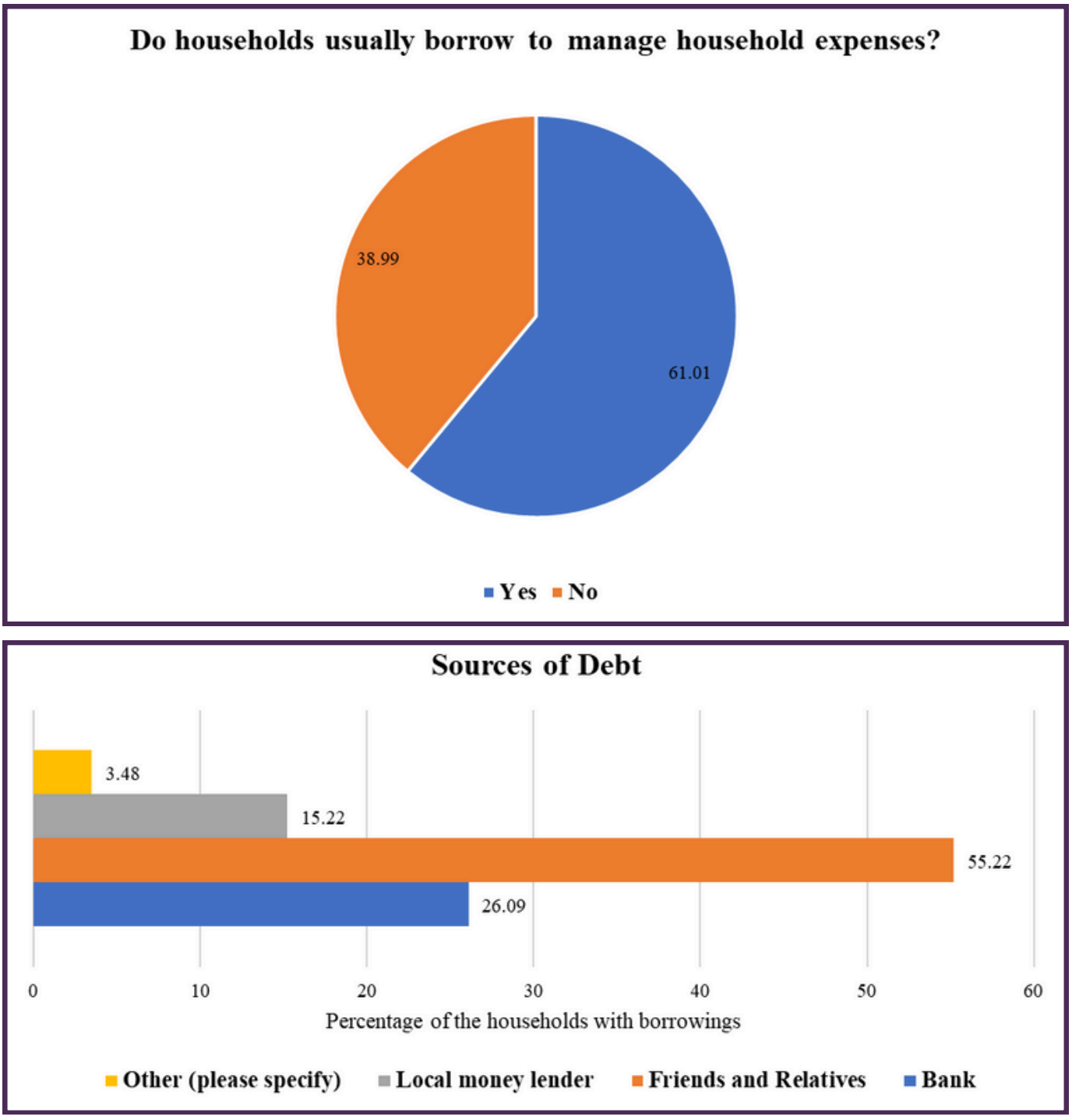

Figure 7 & 8: Indebtedness of the households in the sample and the credit sources

Indeed, 61 percent of the households report relying on external borrowing. Interestingly, out of those 61 per cent households who report to be taking some form of debt, only around one-fourth (26 per cent) take it from the formal banking system, whereas majority of them take it from informal channels like friends and relatives and local money lenders. This alerts us to the role of social capital in urban slum communities in substituting and complimenting formal credit channels. The combination of low income and high indebtedness may be related to the distribution of asset ownership.

3.7 Summary of Key Findings

This chapter provided a detailed socio-economic overview of the surveyed households, highlighting the intersecting dimensions of caste, religion, gender, income, employment, education, and households' assets. The data offers important insights into the structural conditions within which residents of the community live.

The social composition of the surveyed households is marked by both religious and caste-based diversity. A slight majority 52 per cent of the sample identifies as Muslim, followed by 47 per cent Hindus and a small proportion of Christian households. Within this, caste identities further complicate the social landscape: 10.32 per cent of households identified as Scheduled Castes or Scheduled Tribes (SC/ST), 14.02 per cent as Other Backward Classes (OBC), and 35.71 per cent as belonging to 'Others', likely representing dominant/upper caste groups. Notably, 13.49 per cent of respondents chose not to disclose their caste, reflecting possible discomfort, ambiguity, or other reasons shaped by displacement, urban resettlement and migration.

There is some evidence of residential mobility in the community, where despite owning a house sometimes families are residing as tenants elsewhere. Almost 13.76 per cent of those who own property themselves choose to live as tenants elsewhere. This practice could be indicative of either dependance on rental earnings (varying with the size and location of the property) or simply the proximity to the industrial area which offers abundant work opportunities. It can be studied further to understand the possible economic implications.

In terms of employment and occupation, our sample constitutes 48.74 per cent of individuals who report participation in paid work including home based, wage work, government job and being self-employed. Almost 11 per cent of the individuals report being unemployed, while almost 19 percent of individuals are currently enrolled in an educational institution.

Female participation in paid work in the sample is considerably lower than that of males, in line with both national and state-level trends. Nearly half of the women reported being outside paid employment, identifying themselves as homemakers or unemployed. In comparison, around two-thirds (67 per cent) of males were engaged in wage employment or self-employment. The overall labour force participation rates observed in the sample are consistent with state aggregates, recorded at 69.9 per cent for males and 18.5 per cent for females. These findings indicate a clear gender gap in labour force participation, with women's involvement in paid work remaining limited.

Further, the analysis of occupational data in our sample presents a picture of precarity with almost 60 percent of the individuals working as daily workers, without secure and regular terms of employment. Only 11 percent of the working population are employed in permanent jobs.

While households own certain assets such as televisions or two-wheelers, the quality and origin of these assets (often second-hand or bought on loan) reveal precarious consumption patterns. Employment is largely informal, with low pay, no job security, and gendered differences in work participation. Approximately half the households report incomes below Rs. 15,000/month, leading many to rely on debt to meet basic needs often through informal borrowing arrangements.

This socio-economic profile establishes the structural backdrop against which educational trajectories. The interlinkages between poverty, caste/religion, gender roles, and livelihood insecurities set the context for understanding variations in education access, and outcomes issues that are taken up in depth in Chapter 4.

Chapter 4
Are the Youth Climbing the Educational Ladder?

4.1 Introduction

Education, for some, is an important source of aspiration; while for others, it is an end to it. Thus, education has the potential to significantly transform the lives of all individuals, specifically of those who live at the periphery of an urban metropolitan city, with the sparkle of a city life alive in their eyes. For the marginalised, education can act as a powerful tool to shatter varied layers of socio-economic hierarchies and rigidities and help them move up the ladder to become a part of the mainstream in the metropolitan. In fact, education often offers different life trajectories based on the socio-economic location of the individual, including gendered trajectories between women and men. Education can offer an intrinsic value, as a critical resource to assert autonomy, voice and articulation of concerns for women, it can also serve instrumental goals in bettering life circumstances. For men, specifically young boys, education may offer an important pathway to upward mobility, in the form of improved occupational choices and outcomes.

Therefore, in this chapter, we first analyse the completed levels of education attained by all individuals in the community to develop a baseline understanding of existing levels of education. Further, to answer the second research question to understand the education trajectories of young children and youth, we focus our attention on the individuals in the age-group of 5-25 years, henceforth called 'children and youth'. Within this age-group, we identify those aged between 16-25 years as 'youth'. For the entire group of children and youth, we analyse the decision of education per se – that is, whether they are currently enrolled or not; the choice of education levels; choice of institution types among those currently enrolled; and finally, we also investigate the reasons for non-enrolment, among those who may have dropped out or have never been enrolled.

4.2 Education Attainment

In the household roster of our survey, we collect information on the completed years of schooling/education from all the individuals who are aged 5 years and above. Even though the minimum age for starting formal schooling is 6 years, this age is not very strictly followed in private institutions/schools, where children as young as 4 or 5 years of age are admitted into pre-school classes.

Similarly, even among the public institutions, many children at the age of 5 years often report to be attending primary school along with their elder siblings; or they simply go to the anganwadi centres[1]. Therefore, in order to avoid missing out on these very young children of 5 years of age, who could possibly be enrolled in or attending some institutions, we ask the question of completed years of education as well as type of institution attended, from all the individuals aged 5 years and above.

We observe that, among all these individuals aged 5 years and above, nearly 23.5 per cent report to have completed 0 years of schooling, therefore implying that either they have never been enrolled in any educational institution, or they dropped out early on without completing any formal years of schooling. It is to be noted that among those who report 0 years of schooling, only around 12 per cent belong to the young ages of 5 and 6 years, while the rest are above 6 years of age. Zero years of schooling may indicate never having attended the school or having dropped out early without completing any formal education. Therefore, in addition to recording years of formal schooling, we also ask the household members a question of whether they have attended any educational or vocational or religious/non-secular institution at all. Even for this, we observe that nearly 21 per cent of those aged 5 years and above have never attended any educational or vocational institution ever.

When we compare the status of education attainment across males and females, we observe that the gender-divide is stark. Among males aged 5 years and above, the proportion of those having never been enrolled in any institute is 17.41 per cent; whereas among females, the corresponding proportion is significantly higher at around 25 per cent. Further, analysing the different levels of education attained by males and females (see figure 9), we observe that significantly higher proportion of males than females have completed more years of education, whereas more females than males have completed lower years of education.

[1] Anganwadi Centres are the early childhood care centres run by the government, under the Integrated Child Development Scheme (ICDS). These centres focus on early childhood nutrition for children aged 0-3 years and early childhood education for those aged 4-6 years.

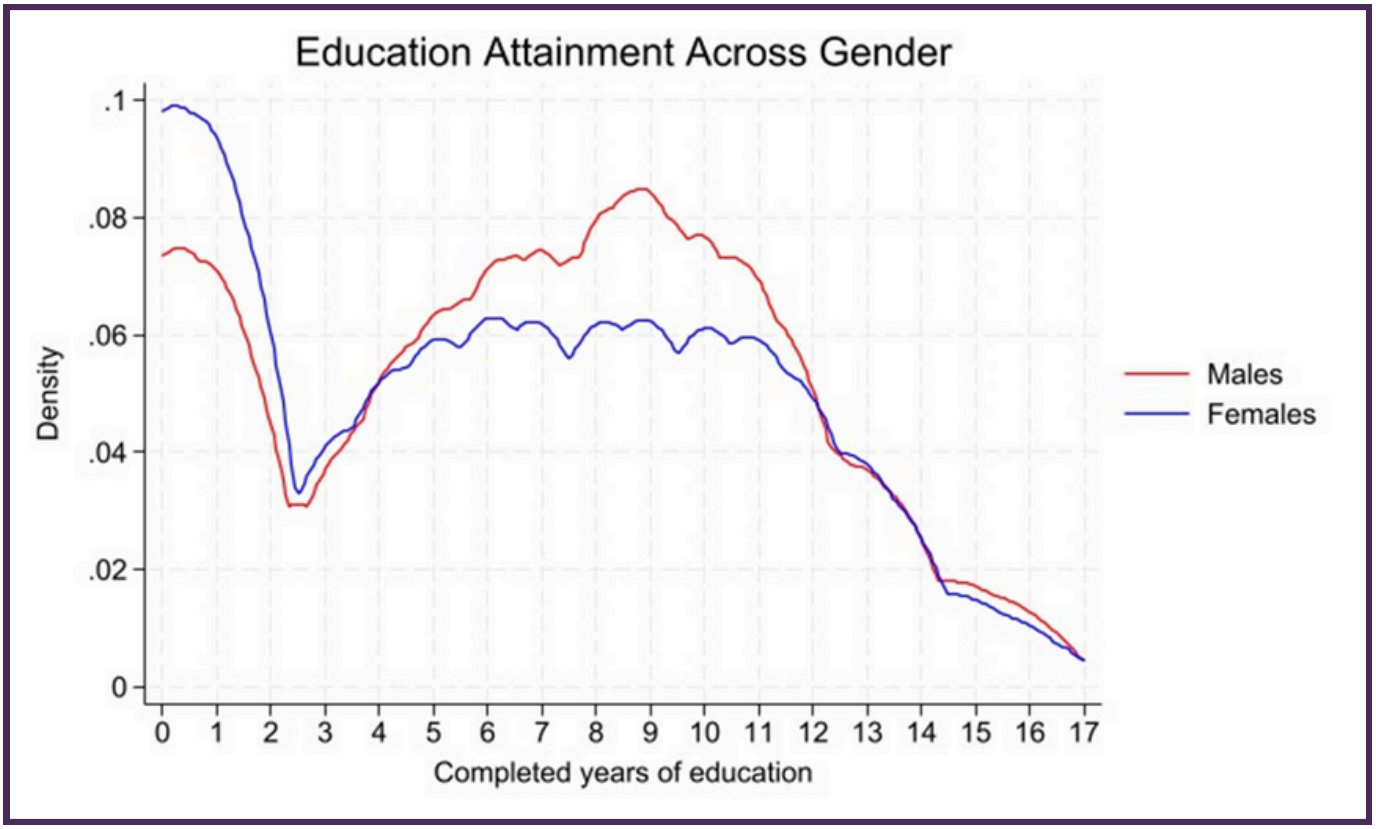

Figure 9: Years of education attained, across gender

We also observe differences in the education attainment across the two major religious groups in the community. As discussed previously, the community of Bawana JJ colony is a mixed neighbourhood comprising both Hindu and Muslim communities in equivalent proportions. We find that the proportion of individuals among Muslims who report to have been never enrolled is higher at around 22 per cent, compared to that of Hindus, at around 18 per cent. In fact, the average year of completed education is statistically significantly higher among Hindus at 6.6, compared to 5.6 among Muslims. Further, as figure 10 shows, in terms of different levels of education attained or completed, we observe that while at lower levels of education attainment, that is, until 5 years of schooling (primary level), the representation of Muslims is higher than that of Hindus, however, as we move up the levels of education, the representation of Hindus continues to be higher than that of Muslims.

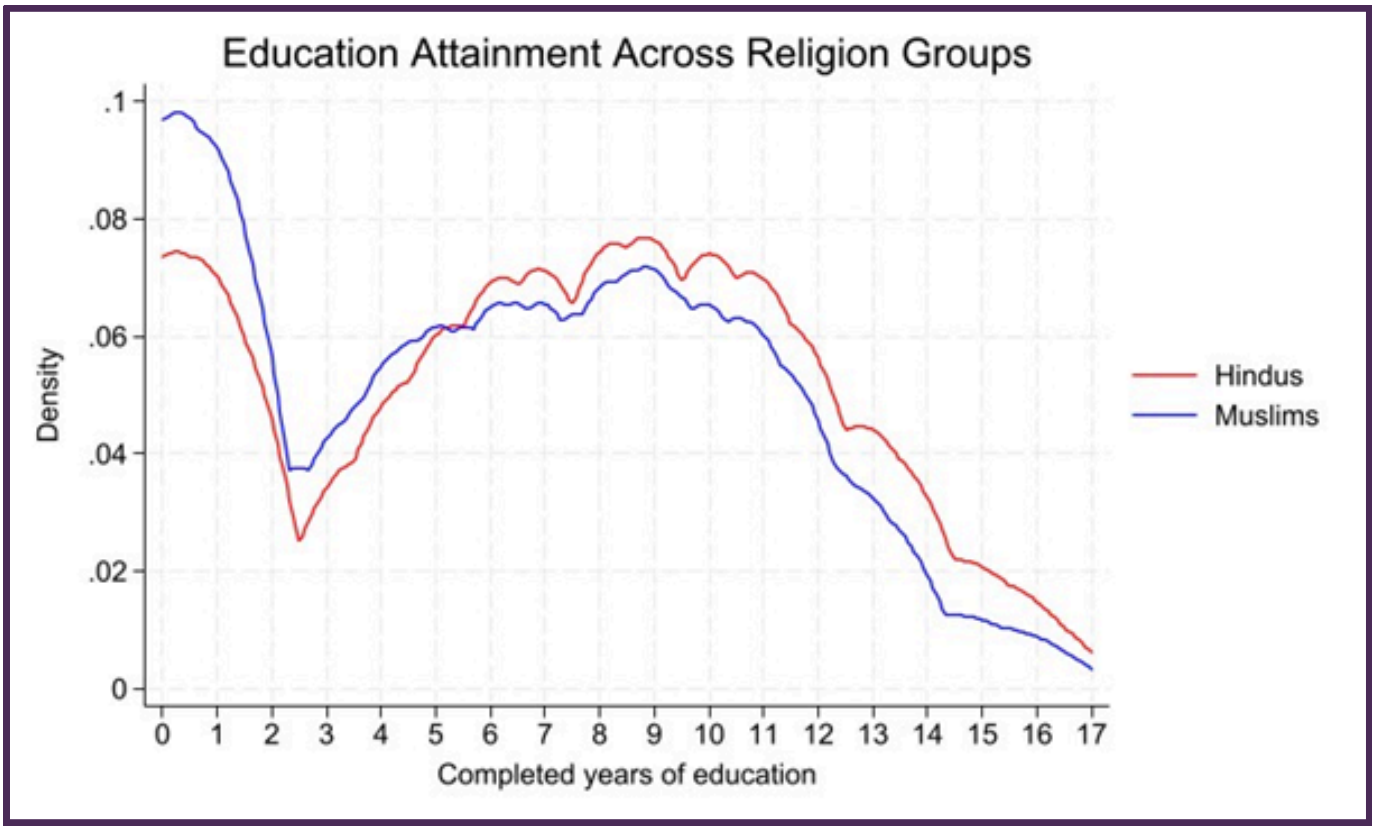

Figure 10: Years of education attained, across gender

Our analysis indicates the different patterns of completed years of schooling across gender and religious groups. Clearly, the completion of specific years of education would be determined by the age of the individual, that is, an 18-year-old who has completed their schooling, would naturally have more years of schooling than a 10-year-old, who may still have attained education till grade 4. However, educational progress is a complex matrix of increased infrastructure, resources on the one hand, and the increased value of schooling in a society over time, on the other. Often, this progress may manifest in substantial acceleration of educational attainment among younger generations who may have benefitted with better educational infrastructure, government campaigns and even institutionalization of compulsory education as in the case of the Right to Education Act, 2008 in India. Therefore, it is entirely possible, and more likely that the completed years of education for a 40-year-old today, is in fact, lower than that of an 18-year-old. To comprehend this educational development and mobility sweeps across generations we present a cohort-based analysis of education attainment, in the next section.

4.3 Education Progression based on Cohort Analysis

In order to analyze the educational progress for individuals in our sample over time, we undertake a useful device of a 'cohort analysis' to categorise the sample in terms of the decade in which the individuals were born. For instance, as explained in the table below, those who were born between the years 1989-1998 were individuals who were between 6-15 years of age at the time of the 2004 eviction from different areas in Yamuna Pushta, R.K. Puram etc. to Bawana resettlement cluster.

Table 14: Different cohorts of individuals in the sample

Cohorts	Born in the decade	Description of events as markers	Cohort Age at the time of the survey (2024) in our sample
Cohort 1	1969 -1978	Individuals who were between 26-35 years at the time of the 2004 eviction (also the individuals who resettled with their children and families in Bawana JJ colony)	46-55 years
Cohort 2	1979 -1988	Individuals who were between 16-25 years at the time of the 2004 eviction (also the individuals who would have witnessed formation of Navjyoti India Foundation in	36 –45 years
Cohort 3	1989-1998	Individuals who were between 6-15 years old at the time of 2004 eviction	26-35 years
Cohort 4	1999-2008	Individuals who were either between 0-5 years old at the time of 2004 eviction or born after that in Bawana	16-25 years

The cohort analysis for the entire sample shows a decline over time of the individuals reporting no education, from about 50 per cent among those who were born in the decade 1969-1978 to as low as 7.27 percent among those who were born in the decade 1999-2000. The proportion of individuals who were reaching higher education has increased over time with only 3.64 percent of those born in 1969-1978, compared with almost 15 percent for individuals born in the decade 1999-2000. An analysis of other intermediary levels of education also shows a rise in the proportion of individuals born more recently, that is, between 1999-2000 reporting attainment at the secondary and senior secondary levels of education.

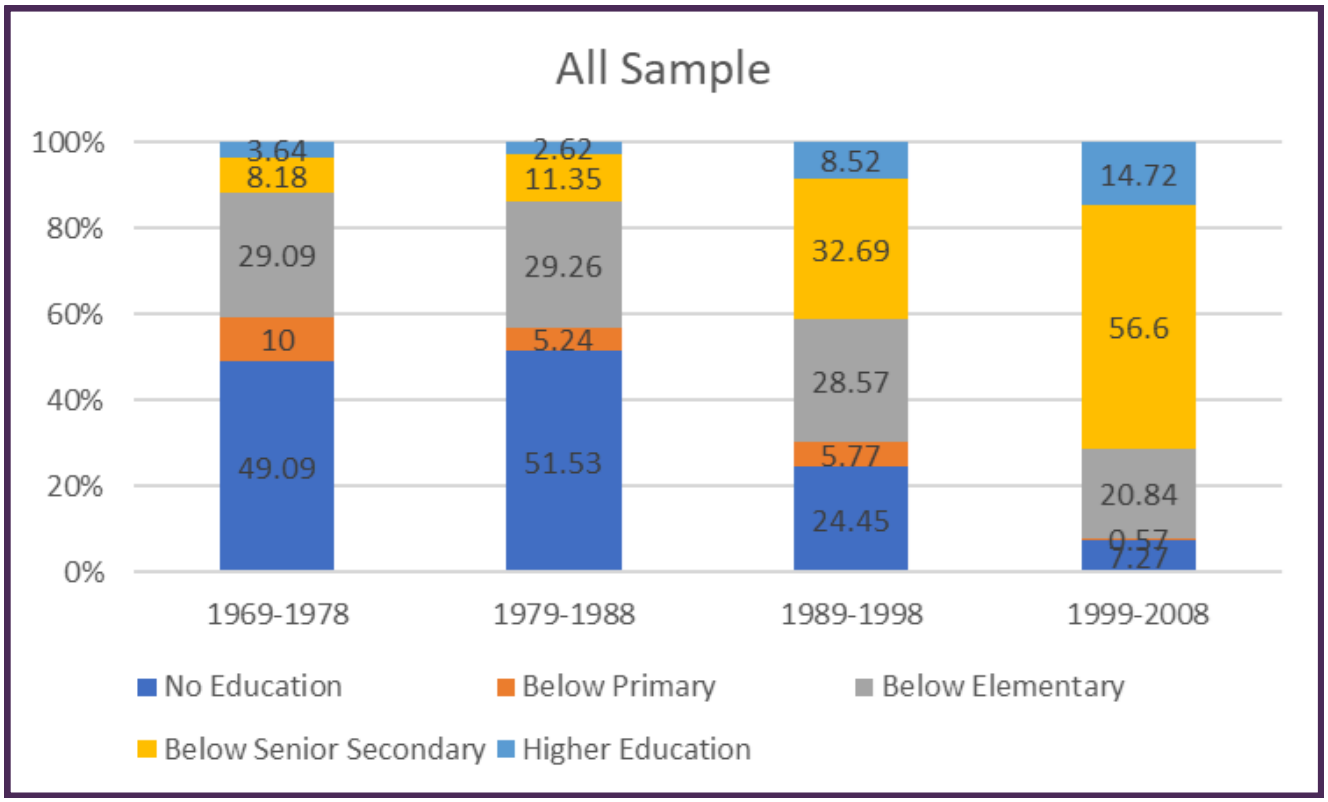

Figure 11: Attainment across educational levels of education for all sample cohorts

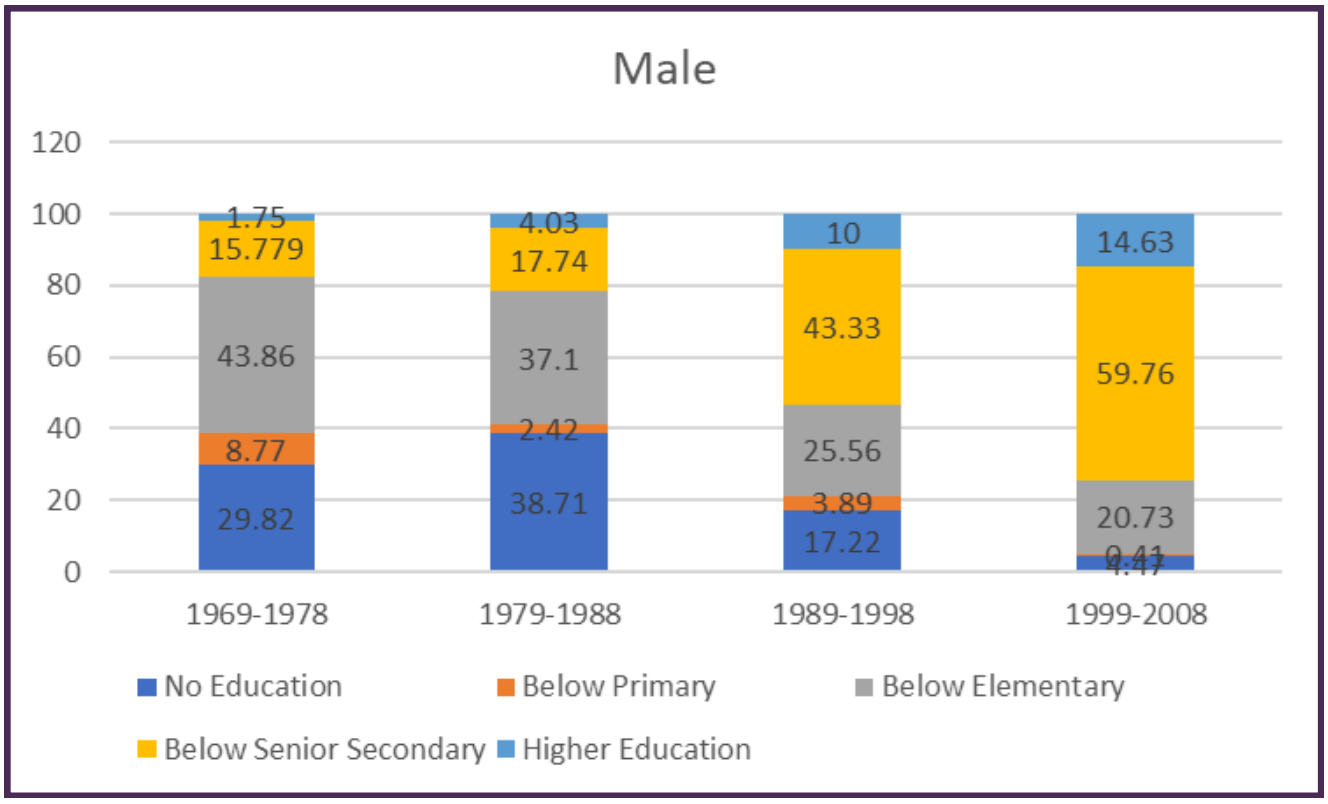

Figure 12: Attainment across educational levels for cohorts of males in the sample

In figure 11, the cohort analysis shows that the proportion of individuals reaching higher education levels (after 12 years of schooling) has increased over time with as low as 1.75 percent of the individuals born between 1969-1978 reporting attainment of higher education. This proportion increases to almost 15 percent for individuals born in recent decade of 1999-2008. Even, observing other levels of education, the analysis shows that greater proportion of individuals born in recent decades are reporting higher attainment (that is above secondary and senior secondary levels) compared with the older cohorts.

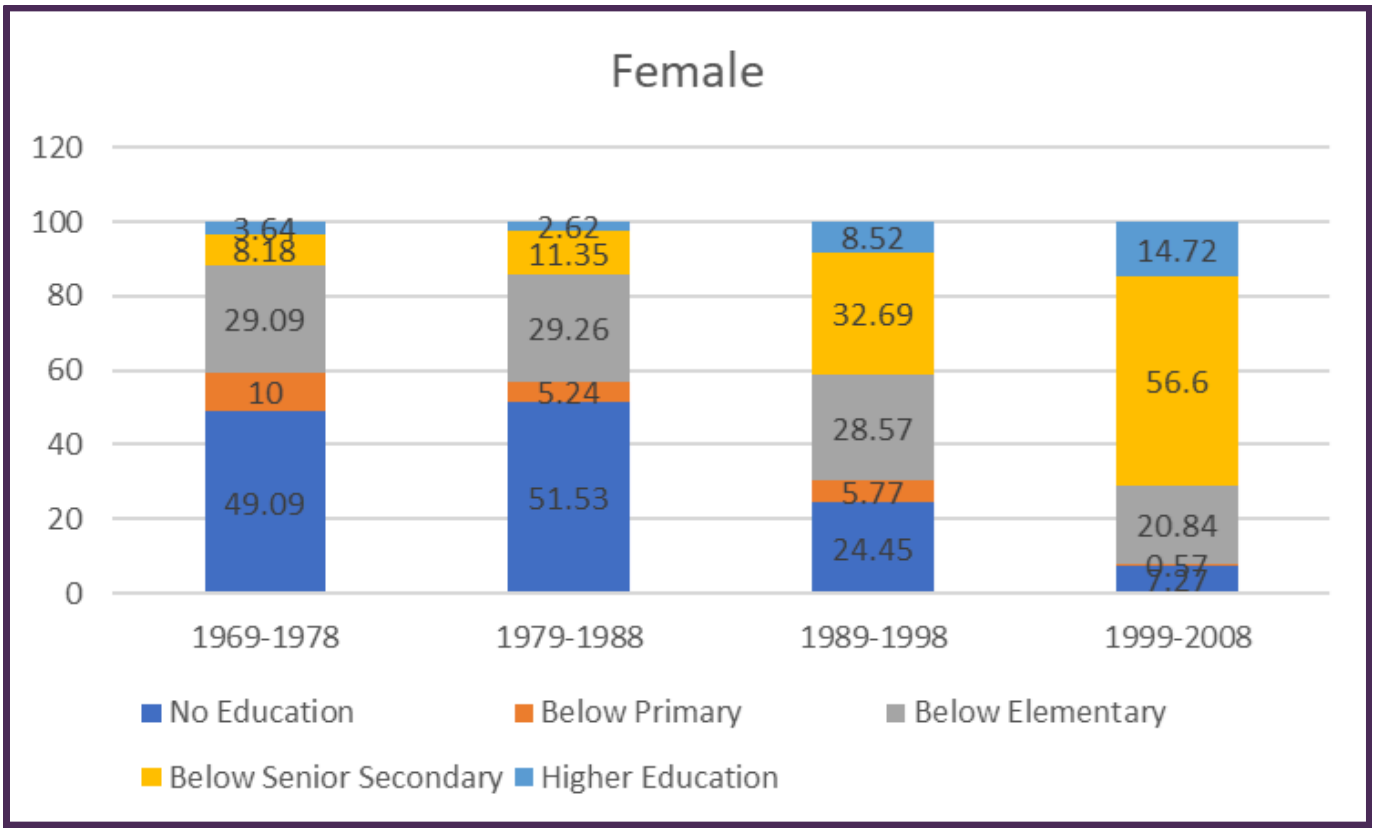

Figure 13: Attainment across educational levels for cohorts of females in the sample

The cohort analysis for women born between the decades of 1969-1978 and 1999-2008 also shows a similar story with a greater proportion of women reporting higher attainment levels over time, and a decline in the proportion of women who report no formal education status or lower education status (see figure 13).

The comparison between the cohorts of men and women in the sample tells us that despite the stark divergence that existed in the educational progression of men and women in the sample, there has been convergence over time if we were to look at the proportion of men and women who reach higher levels of education.

Therefore, overall, the cohort analysis shows a somewhat promising picture about the education progression in the community. In order to deepen our understanding of the education mobilities, specifically among children and youth in the community, we now move to an analysis of their current enrolment status.

4.4 Current Enrollments in Schools and Colleges

Since one of the research aims of the study is to analyse the educational pathways of the children and youth in the community, we now focus on the current enrolment patterns among household members aged between 5 and 25 years. The trends and patterns of current enrolment at different levels of education, specifically at higher education levels, reflect the decisions of children and youth to continue their education.

Firstly, we observe that among children and youth in the age group of 5-25 years, only about 52 per cent are reported to be currently enrolled in some educational or vocational institution. Further, among those who report to be currently enrolled in any institution, more than 84 per cent are enrolled in schools at different levels, whereas very few, less than 10 per cent, are enrolled in higher education or vocational levels (see table 15 below). This is, of course, determined by the age of the individual, which becomes clear when we look at the age distribution of those who report to be currently enrolled in any institution. We observe that nearly 78 per cent of those who are currently enrolled are of school-going age, that is 15 years or below, whereas the remaining, only 22 per cent, are of ages 16-25 years.

Table 15: Current enrolment in any educational or vocational institution

Level of Education	Number of individuals	Percentage
Class 1-5 (primary)	204	37.78
Class 6-8 (elementary)	134	24.81
Class 9-10 (secondary)	65	12.04
Class 11-12 (Senior Secondary)	54	10
Bachelor's	40	7.41
Master's	4	0.74
Madarsa	7	1.3
Vocational/skill course	3	0.56
Any other	29	5.37
Total	540	100

When we further investigate the age-wise current enrolment patterns, as shown in figure 11 below, we observe that the proportion of children who are currently enrolled in any education institute remains much higher at the early ages than at the later ages. Cumulatively, among the youth aged 16-25 years, only 23 per cent are currently enrolled in any educational or vocational institute. Further, the proportion of those currently enrolled starts dropping significantly from the age of 17 years and above.

This is in sharp contrast to the overall status of enrolment into higher education institutes for Delhi as a whole. Delhi has the third highest Gross Enrolment Ratio (GER) into higher education institutes, among youth aged 18-23 years, which stands at 49 (AISHE, 2021-22). For the corresponding age-group of 18-23 years, we observe in our sample that only around 20 per cent report to be currently enrolled in any education or vocational institute.

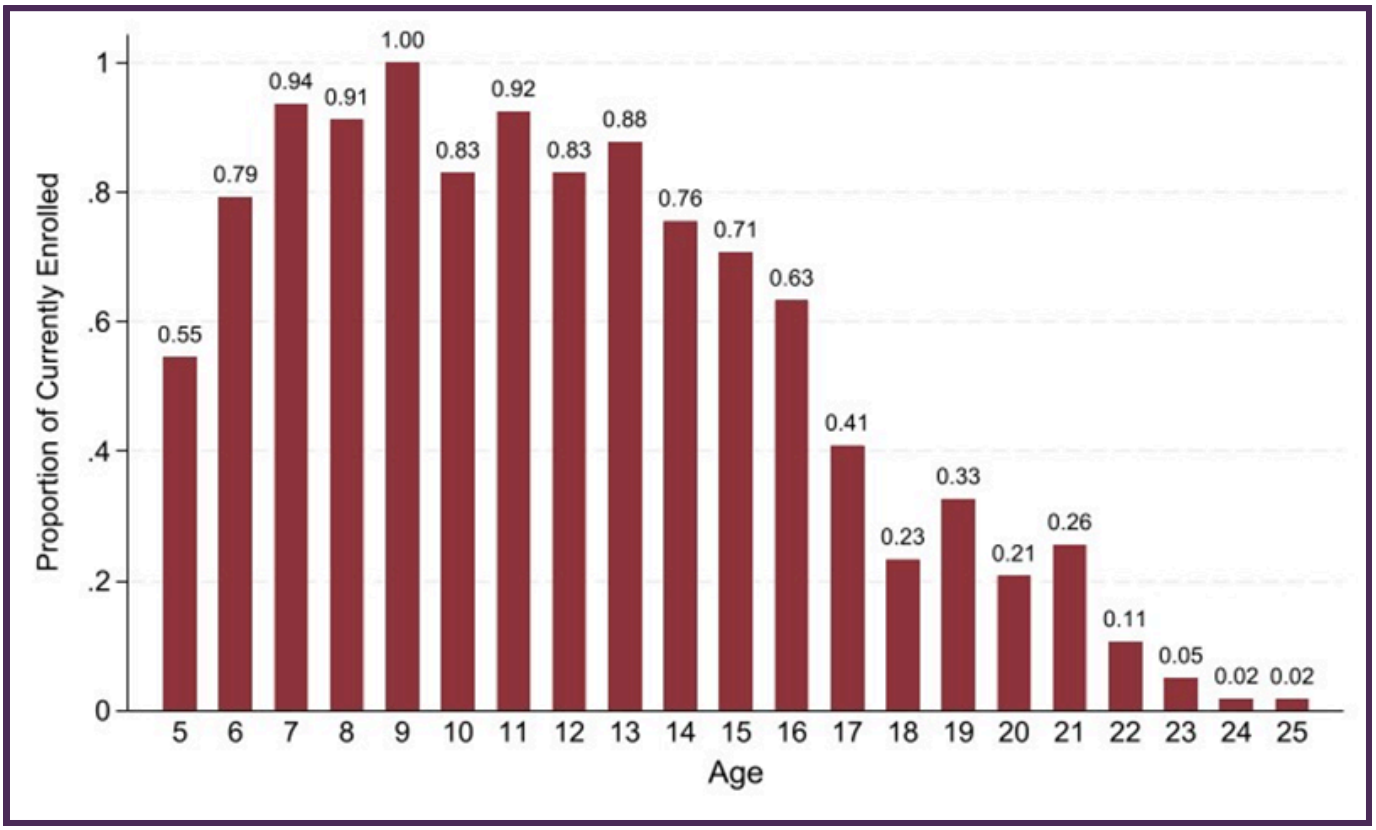

Figure 14: Age-wise proportions of currently enrolled children and youth

Therefore, despite residing in the city, the community – particularly its youth – remains subject to structural marginalisation, which is reflected in the constrained progression of their educational trajectories.

Identity-based patterns in current enrolments

While we observe significantly differential patterns of current enrolment across different age-groups, it is also vital to analyse the enrolment patterns through the lens of gender and religion. In terms of gender, no significant divide is observed from the data of overall current enrolments. That is, among all females in the ages 5-25 years, nearly 53 per cent are currently enrolled in any educational institute, while the corresponding percentage among males is nearly 52 per cent.

Within the youth age group of 16-25 years, the gender differences become somewhat visible with nearly 24 per cent females and 21 per cent males reporting to be currently enrolled in any educational or vocational institute. The gender divide, however, becomes substantially in favour of females when we look at the age category of 18-23 years, wherein, 23 per cent females report to be enrolled at any higher educational or vocational institute, as compared to only around 17 per cent males. Even for Delhi as a whole, the GER in age-group 18-23 years is higher for females at 49.7 than for males at 48.3 (AISHE, 2021-22), however, the gender difference is more significant for Bawana, than for the Delhi state.

To further understand the gender differences, we also examine the type of institution in which girls and boys are currently enrolled in. The analysis yields a significantly higher percentage of boys enrolled in private institutions, compared to girls, see figure 15. To be able to interpret this finding, it is important to examine patriarchal norms that are associated with the practice of women staying away from their natal families and staying in the marital household. The practice of patrilocality, therefore, combined with the decision to invest in the education of daughters in the families, often implies that parents do not reap the returns to investment on girls' education. This is a vital factor associated with differential investment by households in girls' education vis-a-vis that of boys (Alderman and King, 1998). The observation of higher proportion of girls enrolled in government schools than that of boys; and higher proportion of boys enrolled in private schools than that of girls, communicates the differential investment by parents in the education of their children along binarised gendered trajectories and outcomes (Tiwari and Paltasingh, 2025). It is important to note here that the above stated findings are based on a cross-sectional analysis across girls and boys in the entire sample. The argument and evidence for differential parental investment into the education of girls versus boys can be further strengthened if one analyses such differences within the same household.

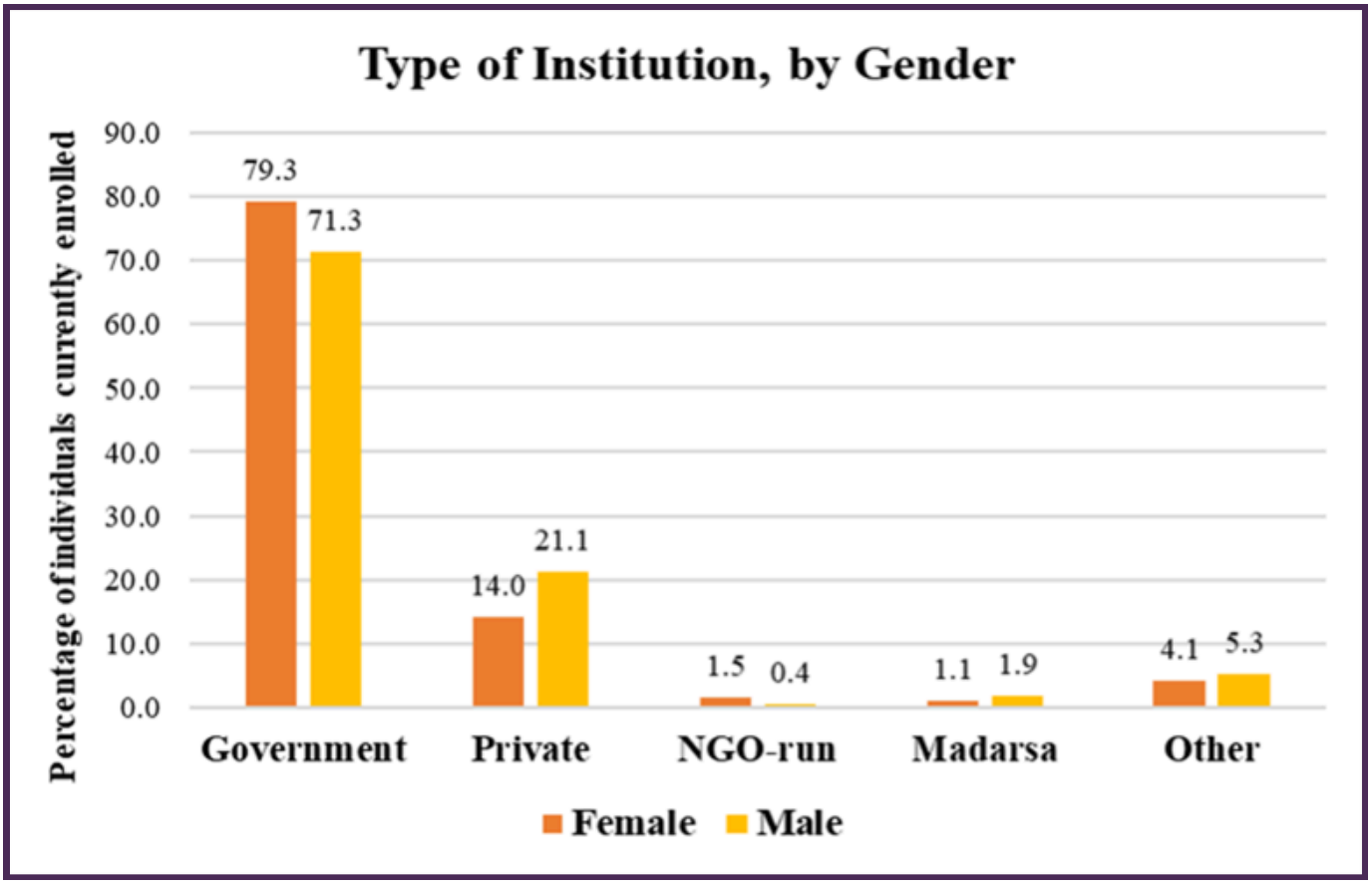

Figure 15: Percentage of household members aged 5-25 years currently enrolled in different types of institutions, by gender

We also analyse the current enrolment patterns among children and youth across the two major religious groups in the community. We observe that among Hindus, a significantly higher percentage of children and youth are currently enrolled at any educational institute, compared to children and youth among Muslims. This finding could suggest a differential rate of return on

education for individuals from different religious communities, or differential investment capacities of households positioned in different economic classes, given our previous discussion of economic differences between the two religious groups.

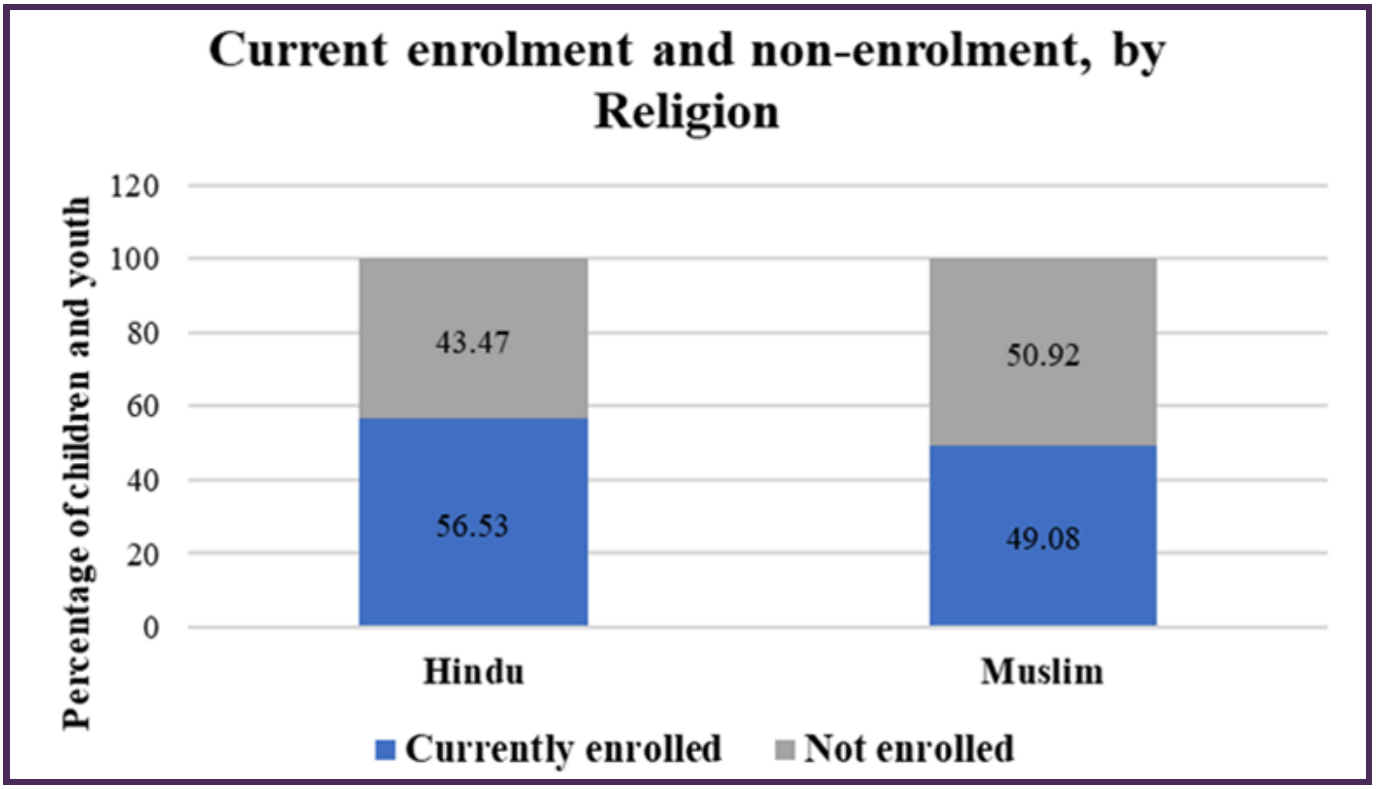

Figure 16: Percentage of household members aged 5-25 years currently enrolled or not enrolled, by religion

Further, a higher percentage of Hindus are enrolled in private institutions, compared to that of Muslims. Since private institutions require a higher amount of monetary fee to be paid, this finding is in consonance with the differential economic status of the households belonging to these two religious groups, as has been discussed previously.

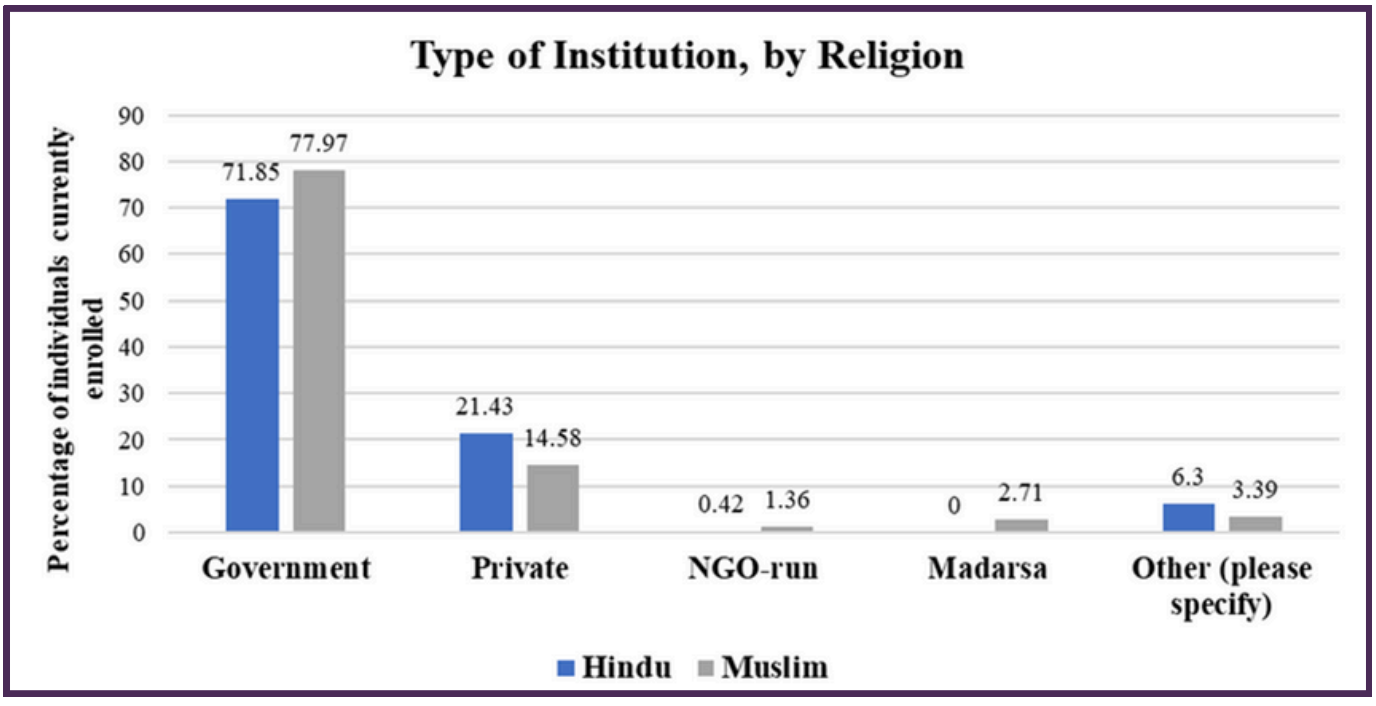

Figure 17: Percentage of household members aged 5-25 years currently enrolled in different types of institutions, by religion

4.5 Computer literacy

In addition to the overall education attainment and current enrolment patterns, the household roster of the survey questionnaire also included a basic question for each household member as to whether they knew how to operate the laptop or a computer or not. The definition of being able to operate a laptop or a computer was not based on the knowledge of any sophisticated software or computer programming, but a basic knowledge of how to turn on/off the computer or laptop and use web/internet and email on the device.

Thus, for the purpose of our analysis, we define an individual to be computer literate if they possess the basic operational knowledge of a laptop or a computer. This is in line with the definition of 'computer literacy' used by the Multiple Indicator Survey on Education & ICT Skills, 2020–21, National Sample Survey (NSS, 78th round).

Based on this definition, we find that nearly 23 per cent of all individuals aged 5 years and above know how to operate a laptop or a computer. Among females, nearly 20 per cent are computer literate, whereas among males, 26 per cent know how to operate a computer or a laptop.

Computer literacy is strongly correlated with age, with younger individuals generally being more digitally literate. Thus, youth are clearly more likely to be inclined towards attaining computer literacy. We observe that among those household members who report to have basic knowledge of how to operate a computer or laptop, nearly half of them belong to the ages 15-25 years, and only about 5 per cent belong to the ages 35 years and above (see figure 18).

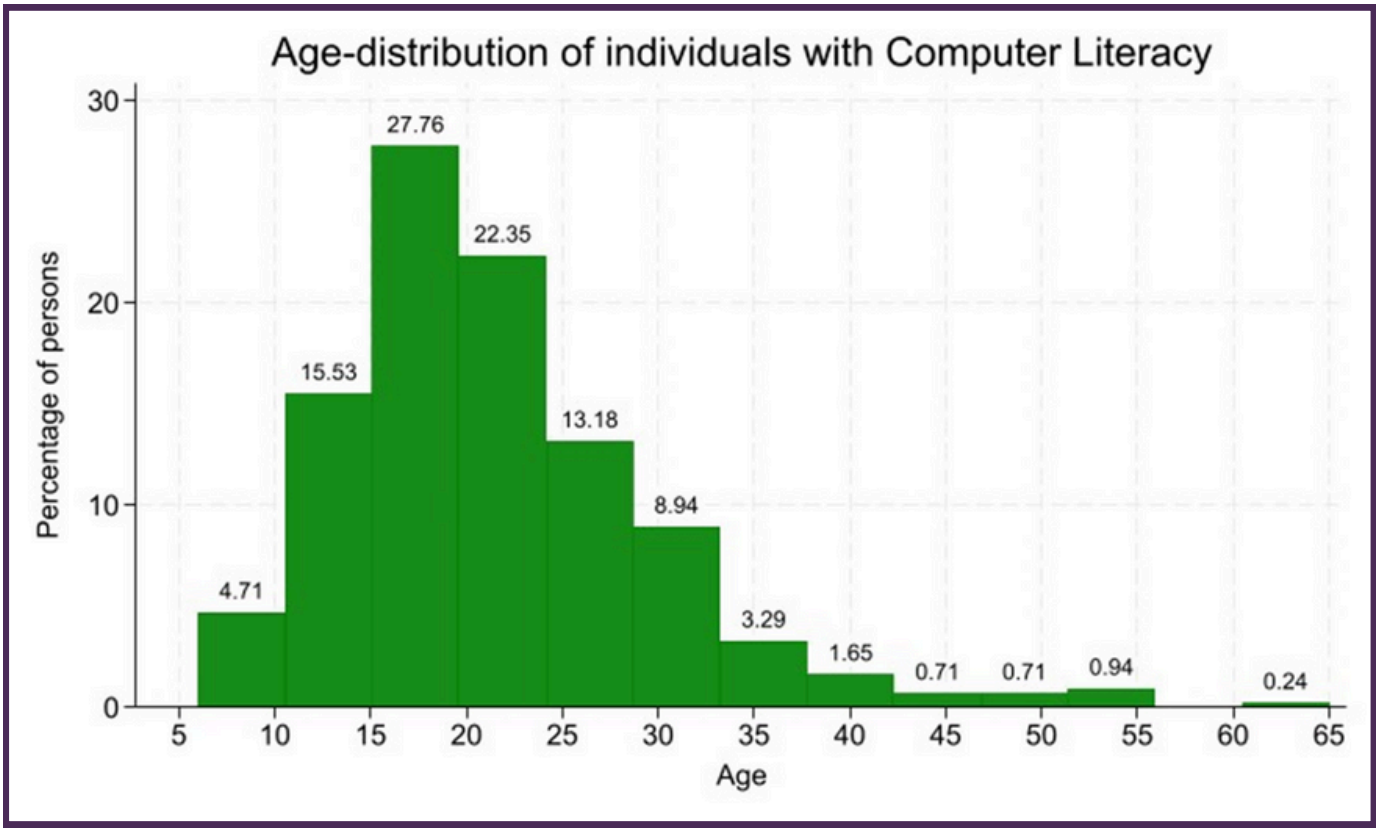

Figure 18: Age-distribution of household members reporting to have computer literacy

Putting these findings in the context of the national figures of digital literacy, we observe that the community is at par with the national status. The computer literacy among individuals aged 15 years and above is 24.7 per cent in India in 2020-21 (National Statistical Office, 2023), and the computer literacy for the corresponding ages for our sample stands at 26 per cent. The age-wise computer literacy proportions (see figure 19 below) further elaborate these patterns.

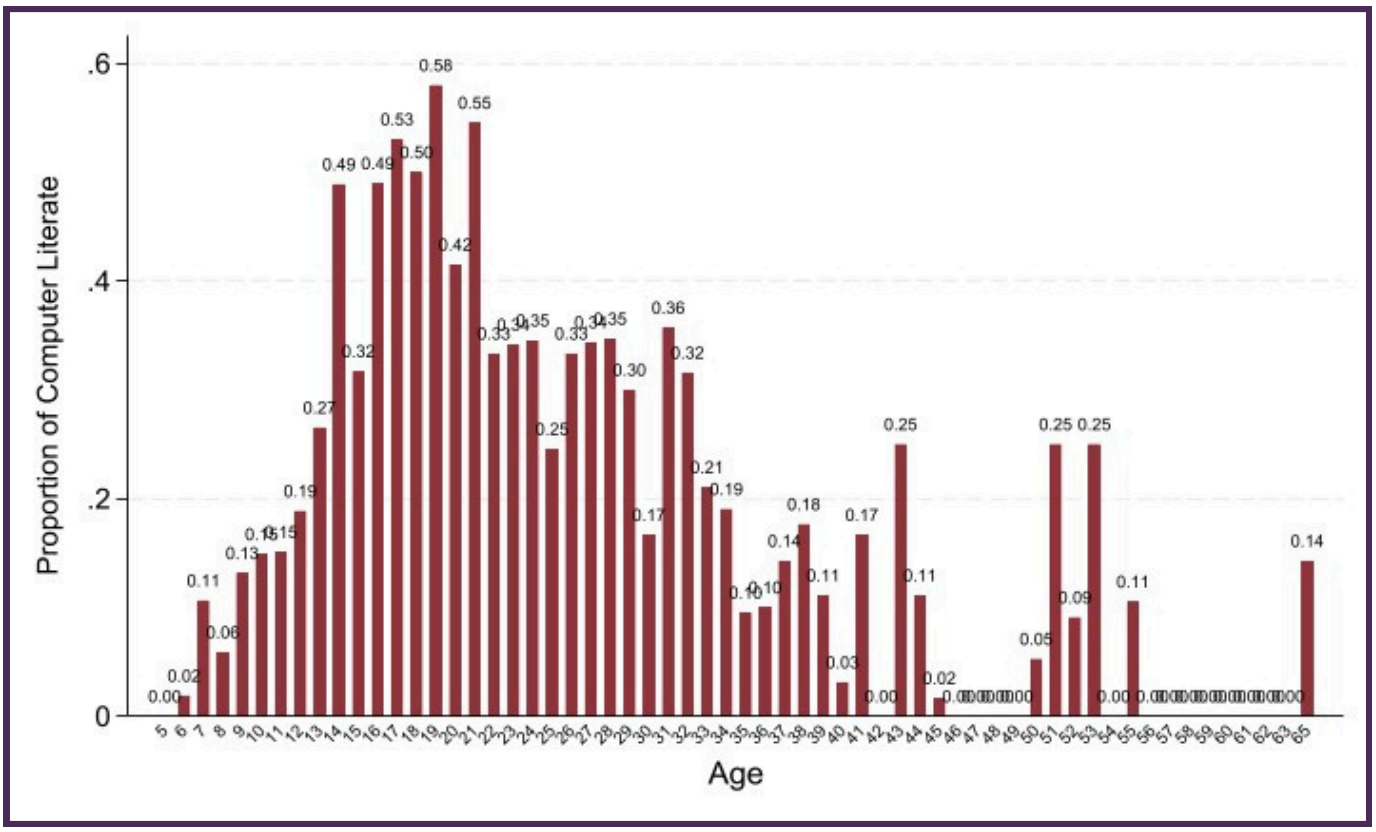

Figure 19: Age-wise proportions of individuals with computer literacy

For each age within the age-group of 15-20 years, we observe that nearly half or more than half of the children and youth know how to operate a computer or laptop. Therefore, digital or computer literacy emerges as a defining attribute of the children and youth in this community, enabling them to keep pace with their metropolitan counterparts.

4.6 Non-enrolment and Drop-outs and their Reasons

In our survey, there were no direct questions asked from the respondents on whether they have dropped out from school or formal education. However, we do have information on the completed years of schooling/education for each household member aged 5 years and above.

Therefore, for the purpose of our analysis, we infer and subsequently define the 'drop-outs' as those who are aged 18 years and above and have achieved less than 12 years of formal education, that is, they have not completed their schooling and have dropped out. This is based on the assumption that by the age of 18 years, under average circumstances, an individual is likely to have at least completed their schooling.

The table 16 shows the completed levels of education, based on completed years of education, for this restricted age group of 18 years and above. We observe that overall, only about one-fourth of the adults aged 18 years or above reported having completed schooling or higher education levels. Among all individuals aged 18 years and above, nearly 30 per cent report either no formal schooling at all, indicating the out of school children. However, in addition to the out-of-school-children, there are also drop outs across different education levels, referring to children who discontinue education without completion of the schooling level in which they may have enrolled. We infer that around 15 per cent of the adults aged 18 years and above seem to have discontinued education before or after completing primary schooling. Similarly, around 15 per cent seem to have discontinued education during or after completing elementary level of education, respectively; and so on.

.

Table 16: Completed years of education for household members aged 18 years and above

Completed years of education	Percentage of individuals
No education (0 years)	29.48
Primary (1-5 years)	14.65
Elementary (6-8)	14.91
Secondary (9-10)	16.74
Higher secondary (11-12)	14.65
Higher education	9.587
Total	100

Next, we compare the corresponding proportions of drop-outs, based on completed years of schooling and formal education, among adults aged 18 years and above, across gender and religion.

Firstly, we observe significant gender differences in the drop outs at different levels of education. A significantly higher percentage of women in the ages of 18 years and above report having no schooling at all, at around 37 per cent, compared 22 per cent of men. Further, more women, that is 15.52 per cent of them seem to have dropped out during or after completing only primary levels of education (1-5 years), compared to 13.8 per cent of men. Moving on, we observe that significantly higher proportion of men have dropped out after completing upto elementary, secondary and higher secondary levels of education, than women. This, however, needs to be analysed in line with the observation that more women were never enrolled only, or dropped out early on. Lastly, we observe no significant gender differences among those reaching or completing higher education levels.

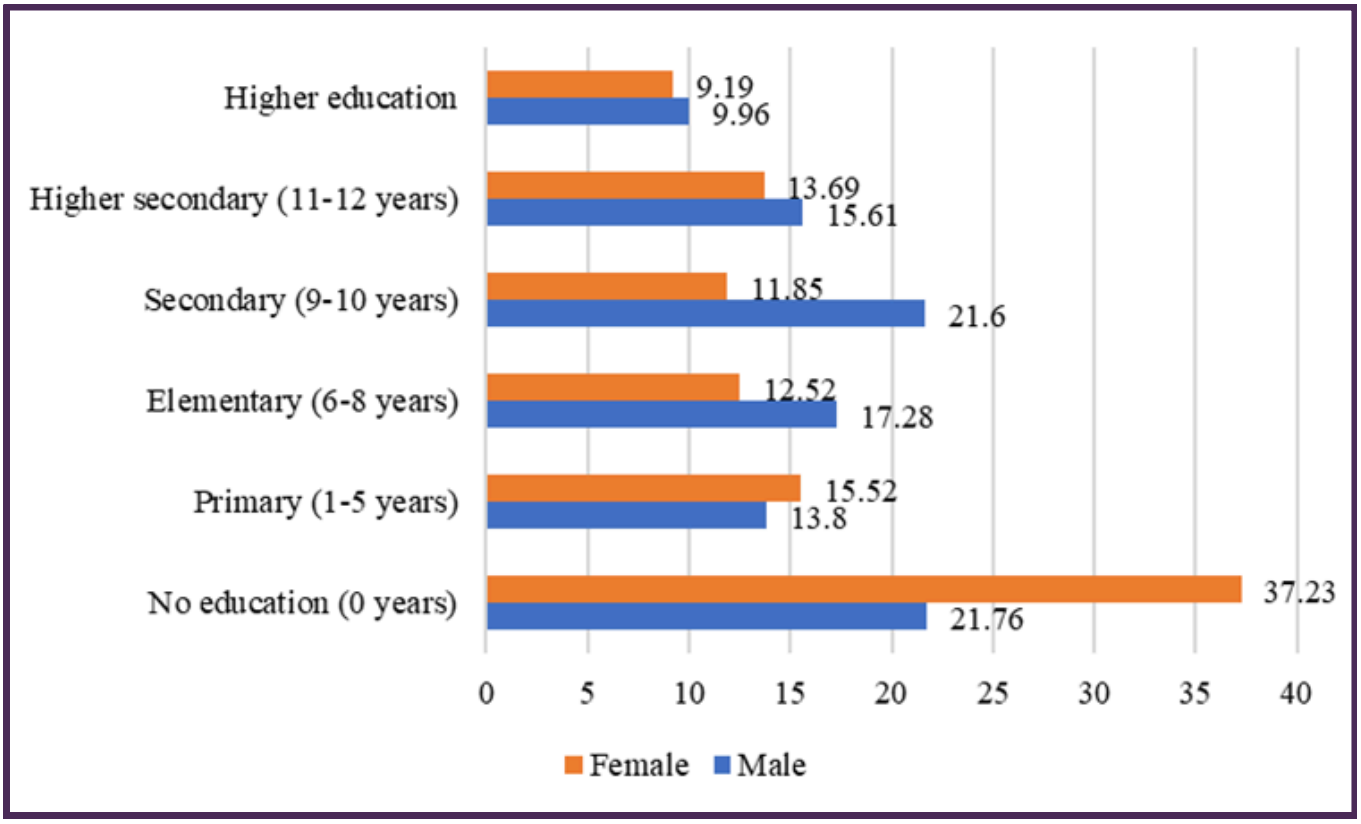

Figure 20: Percentage of household members aged 18 years and above with different completed levels of education, by gender

Similar patterns of differential dropout probabilities emerge when we examine completed years of education for individuals aged 18 years and above, across different religious groups.

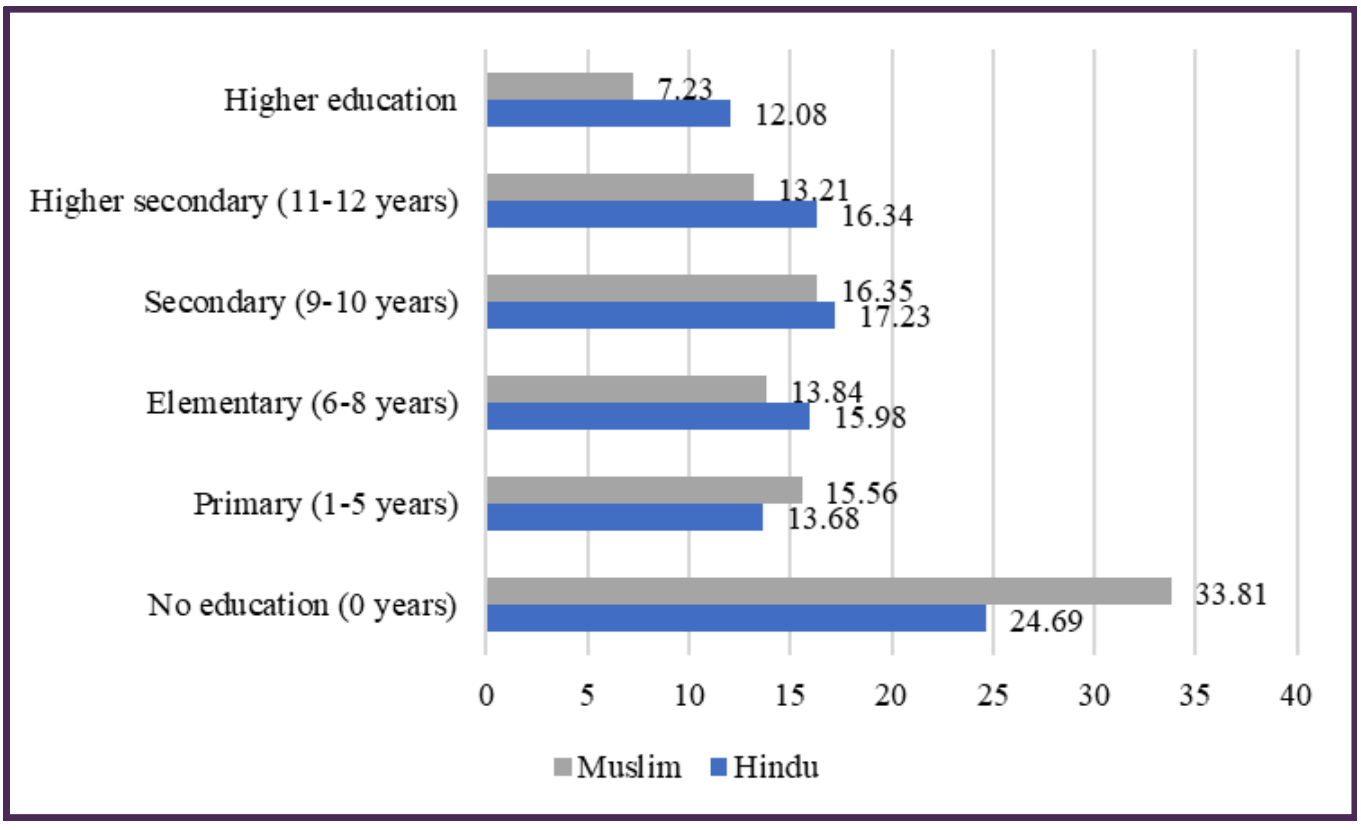

Figure 21: Percentage of household members aged 18 years and above with different completed levels of education, by religion

As figure 21 shows, we first observe a significantly higher proportion of Muslims, 34 per cent, reporting to have no formal schooling at all, compared to around 25 per cent of Hindus. Furthermore, the percentage of Muslims with only primary level of education is higher than that of Hindus, thus, indicating that more Muslim adults, than Hindu adults, seem to have dropped out during or after completing primary levels of education. Conversely, the percentage of Hindus continue to be higher than that of Muslims who report to have upto elementary, secondary and higher secondary levels of education. The disparity remains significant even at the level of higher education. Such differences may reflect not just unequal economic constraints among different religious groups, but also differential social constraints.

Reasons for non-enrollment or drop-outs

In order to develop a comprehensive understanding of the education decisions of the children and youth living in a marginalised community, it is important to analyse not just their levels of attainment of education, but also dig deeper by investigating the reasons, if any, for not continuing or completing their education. Investigating the reasons for non-enrolment or drop-out can, thus, throw light on the variety of demand and supply-side factors affecting household decisions on the education of their children. Some of these factors such as the socio-economic status of the household, educational characteristics of the parents etc. have already been discussed in this report previously, that offer some insights into the differential educational outcomes across children and youth of different age groups, genders, social groups etc.

Thus, to deepen our understanding of the education mobility or immobility among children and youth in the community, we also asked direct questions in our survey, on the reasons for not being currently enrolled in any educational or vocational institute or having dropped out, for children and youth of ages 5-25 years. This question was posed for each individual in this age-group, who was reported to be currently not enrolled in any educational or vocational institute. The respondent could offer multiple reasons for the same, hence, the questionnaire allowed for recording of multiple responses for the same individual. Further, the response on reason for non-enrolment or drop-out, was not necessarily being provided by the child or the youth themselves, but by the respondent of the survey, who in most case scenarios was an adult related to the child or youth.

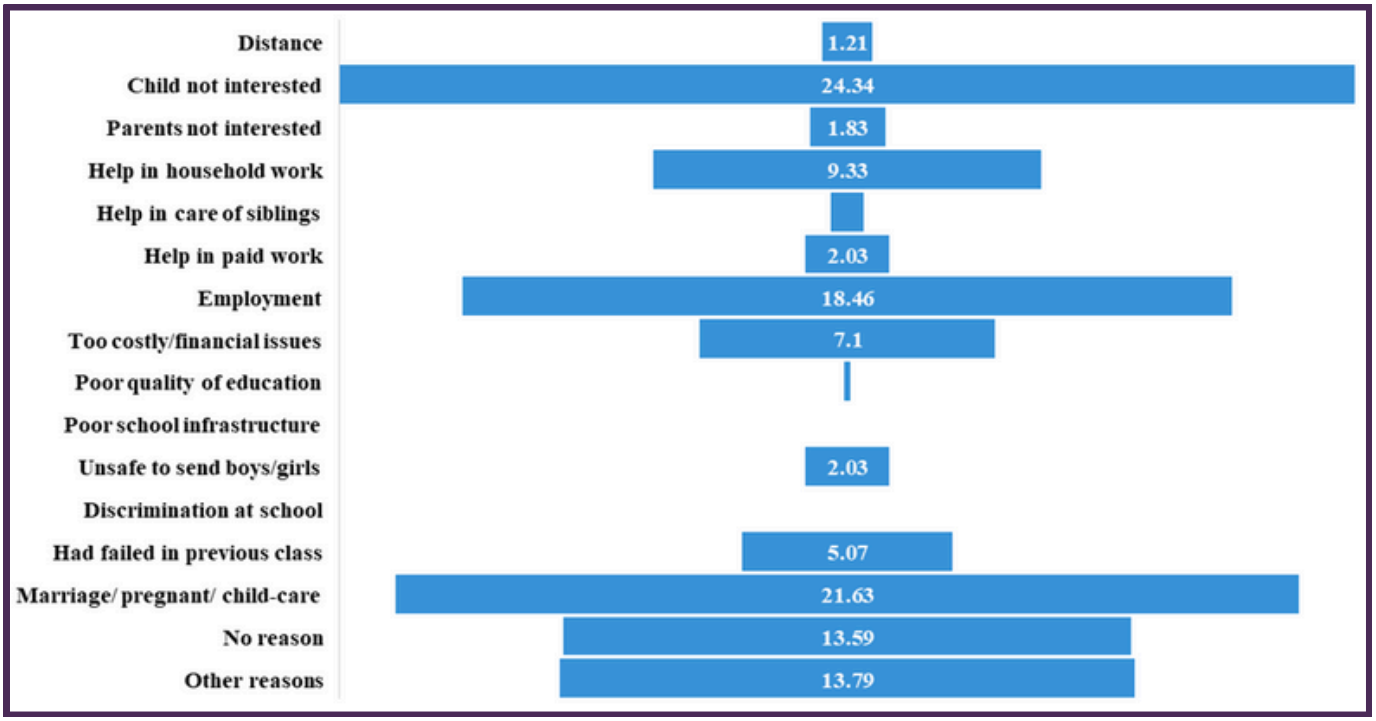

Figure 22: Reasons for non-enrolment or drop-out from any educational/vocational institute, among household members aged 5-25 years who are currently not enrolled

The figure above shows the percentage of respondents providing each of the cited reasons. Since multiple responses could have been provided by the same respondent, the total of these proportions may sum up to more than 100. First, we see that among all the reasons, the most cited reason for not being currently enrolled anywhere or dropping out is 'child not interested'. This reason cannot be interpreted as a no-response from the respondent, as we also have an option of 'No reason' in the list of reasons. Further, the enumerators had also been trained to distinguish between the responses of 'child not interested' and 'no reason'. Lastly, it is to be noted here that this finding may contain some noise, as the child or the youth themselves are not always the one responding to this question. Hence, the response of 'child not interested' may actually reflect the preferences and understandings of the respondents rather than the children or youth themselves. Nevertheless, if the respondent cites the reason as 'child not interested' in education, this poses a broader question regarding the provisioning of education, and the challenges faced by a low-income community in accessing education. This is also corroborated by the narratives of the community members (FGD 2), which highlights general parental concerns about bad influences and possible engagement in unscrupulous activities among youth.

Apart from 'child not interested', the other two most prominent reasons cited are those of 'employment' and 'marriage/pregnant/child-care'. These two specific reasons may indicate very different life trajectories for the specific individual, possibly across gender lines, hence, calls for further investigation through the gender lens.

Investigating into the host of reasons cited by girls and boys has deepened our understanding of the complexity of the decision of attending an educational institution or not.

Using gender as an analytic device in examining the reasons cited for non-enrolment and drop-outs, we observe strong evidence of gender scripts that reinforce sexual division of labour in household and community spaces. Further, our findings strengthen the argument that sexual division of labour begins early (pubescent stages of life).

As seen in the figure below, among the females who report to be currently not enrolled in any educational or vocational institute, hence, have either been never enrolled or have dropped out; more than one-thirds of them report the reason to be their marriage or pregnancy or child-care. After this, the next most important reason cited by females is that of having to help in household work, along with child not interested in further studies.

In contrast, among males who report to have been either never enrolled or dropped out from an educational or vocational institute, the most prominent reason is that of 'child not interested', reported by or for nearly 35 per cent of boys. Further, nearly one-fourth of the males currently not enrolled in any institute are due to their participation in the paid labour market.

Apart from 'child not interested', the other two most prominent reasons cited are those of 'employment' and 'marriage/pregnant/child-care'. These two specific reasons may indicate very different life trajectories for the specific individual, possibly across gender lines, hence, calls for further investigation through the gender lens.

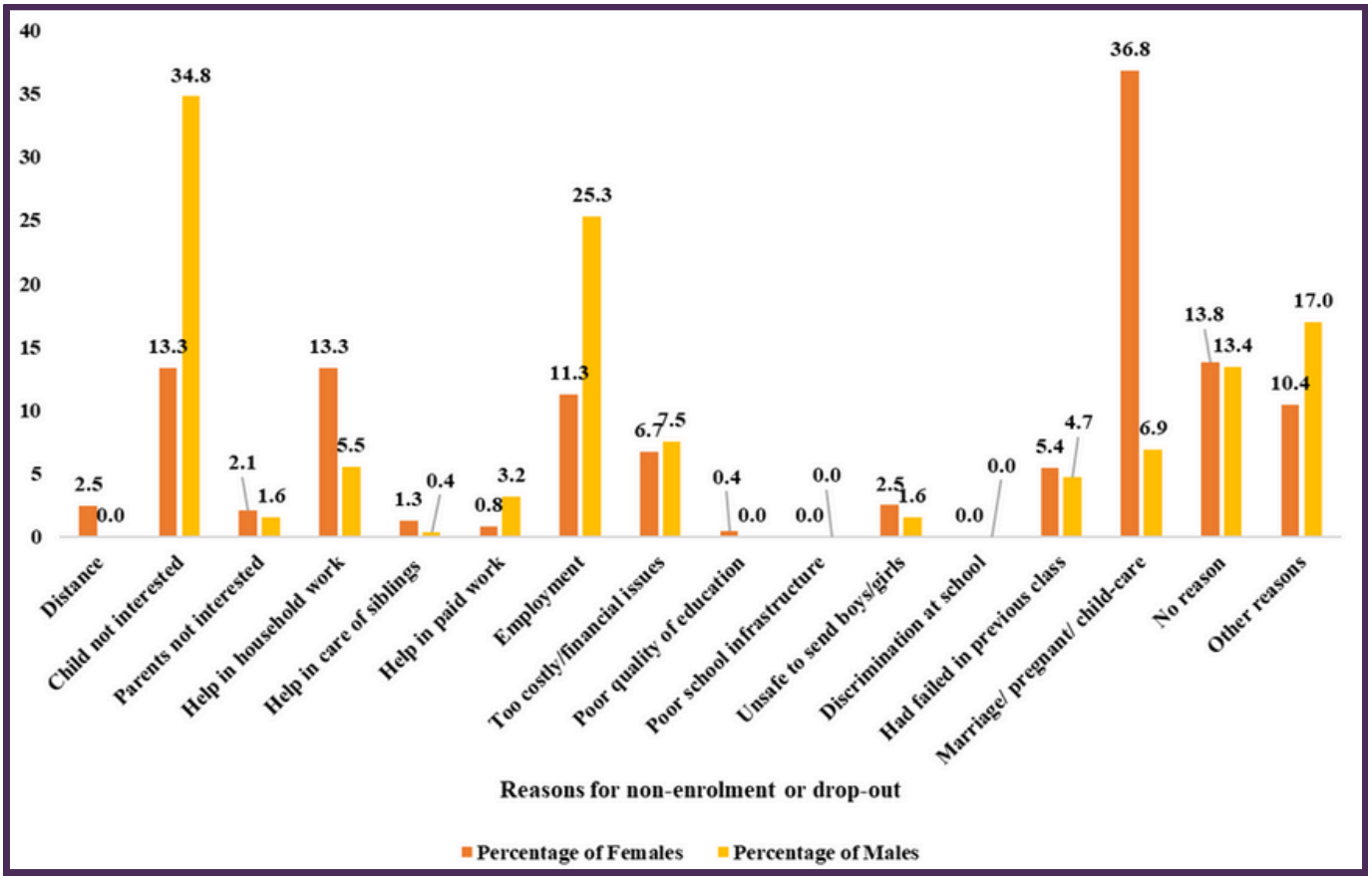

Figure 23: Gender divide within different reasons cited for non-enrolment or drop-out from any educational/vocational institute, among household members aged 5-25 years who are currently not enrolled

Interestingly, a significantly higher percentage of male responses are the reasons of 'child not interested', than the female responses. Even though this finding is somewhat noisy, as discussed earlier, nevertheless, it might still be a reflection of the difference in autonomy with respect to decisions on own education among boys vis-a-vis girls.

Further, 'marriage/pregnancy/child-care' and 'help in household work' as reasons are cited mostly by women, while 'employment' as a reason is cited by a significantly higher proportion of men than women. Interestingly, the reasons of 'safety' have also been cited mostly by girls, compared to boys. This finding is coherent with some of the points raised by the parents in the community (FGD 2).

The 'other reasons' for non-enrollment include a variety of reasons such as administrative issues with admission processes due to no access to Aadhar card, exogenous family shocks like death of a parent, drop-outs due to migration, health issues of the child themselves etc.

Other responsibilities, in addition to attending the school or institute

While our previous findings suggest presence of strong gender norms affecting girls' and boys' enrolment and dropout decisions differentially, we also investigate the presence of these norms among children and youth who are currently enrolled in some educational institute.

Our survey questionnaire sought information regarding children's contribution to household work. This was asked of all youth including those who were currently pursuing education in schools, colleges and other educational institutions. Even though half of the children and youth in our sample report to have no additional responsibilities, among the other half, most report household chores such as cleaning the house, washing clothes, utensils etc. as additional tasks to be performed. This is followed by the responsibility to cook food at home and then, help parents at work.

When we segregate the responsibilities data by gender, we notice similar patterns observed previously. Significantly higher proportion of boys and men report contributing to the household by helping parents at work, compared to girls and women. Similarly, nearly half the girls and women are reporting to be responsible for helping at performing household chores like cleaning, washing etc., compared to less than 10 per cent of boys and men. Likewise, more than one-third of them are also responsible for helping at cooking, compared to negligibly small proportion of boys and men. Lastly, an interesting observation is that nearly 62 per cent males report to have no responsibility at all, compared to 39 per cent of females.

These statistics once again reaffirm the strength of gender norms and how they start impacting the lives of children and youth early on. Further, what remains to be seen is their impact on children's time allocation towards education, after they come back from school/institute; and hence how this translates into the learning outcomes they achieve.

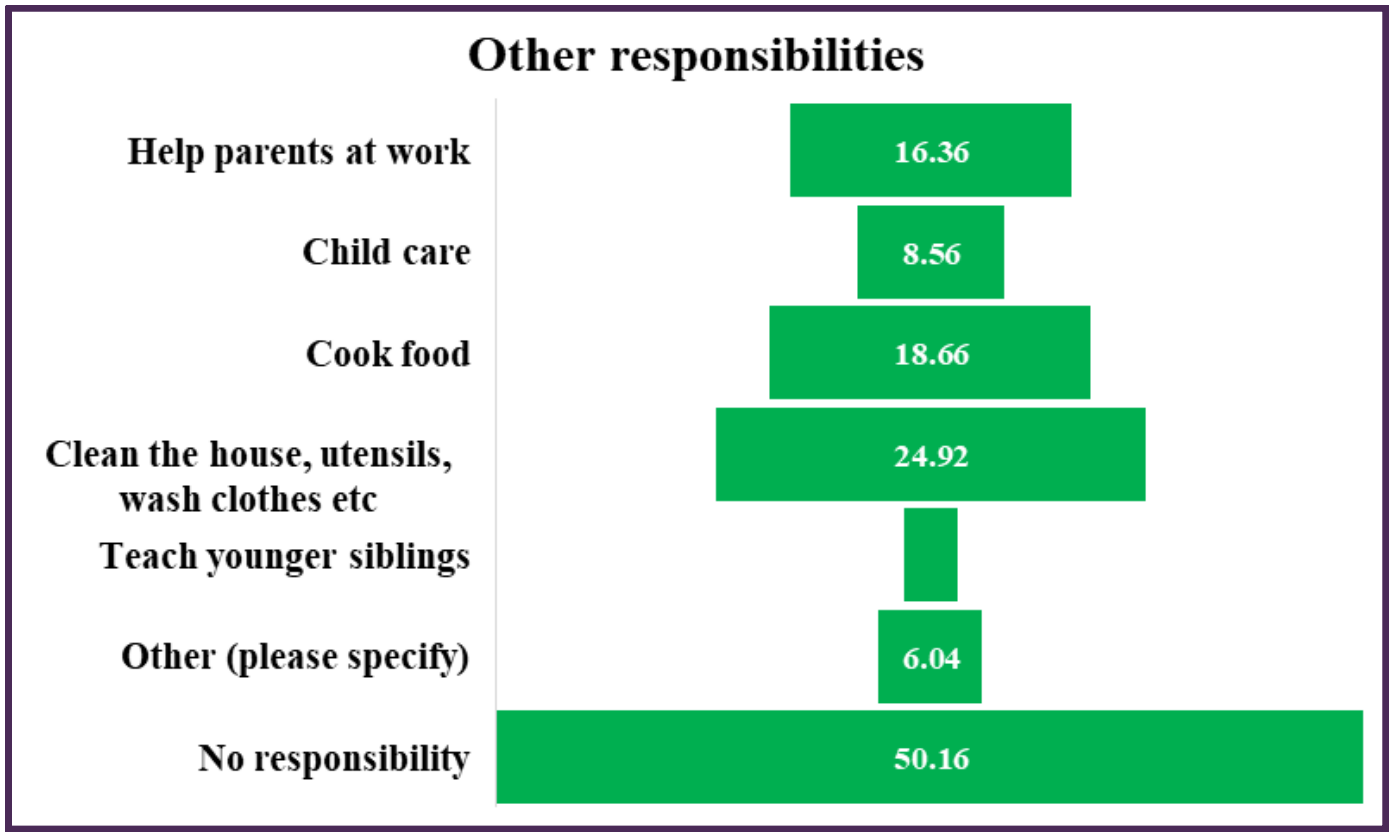

Figure 24: Other responsibilities, in addition to attending the educational/vocational institute, among household members aged 5-25 years who are currently enrolled

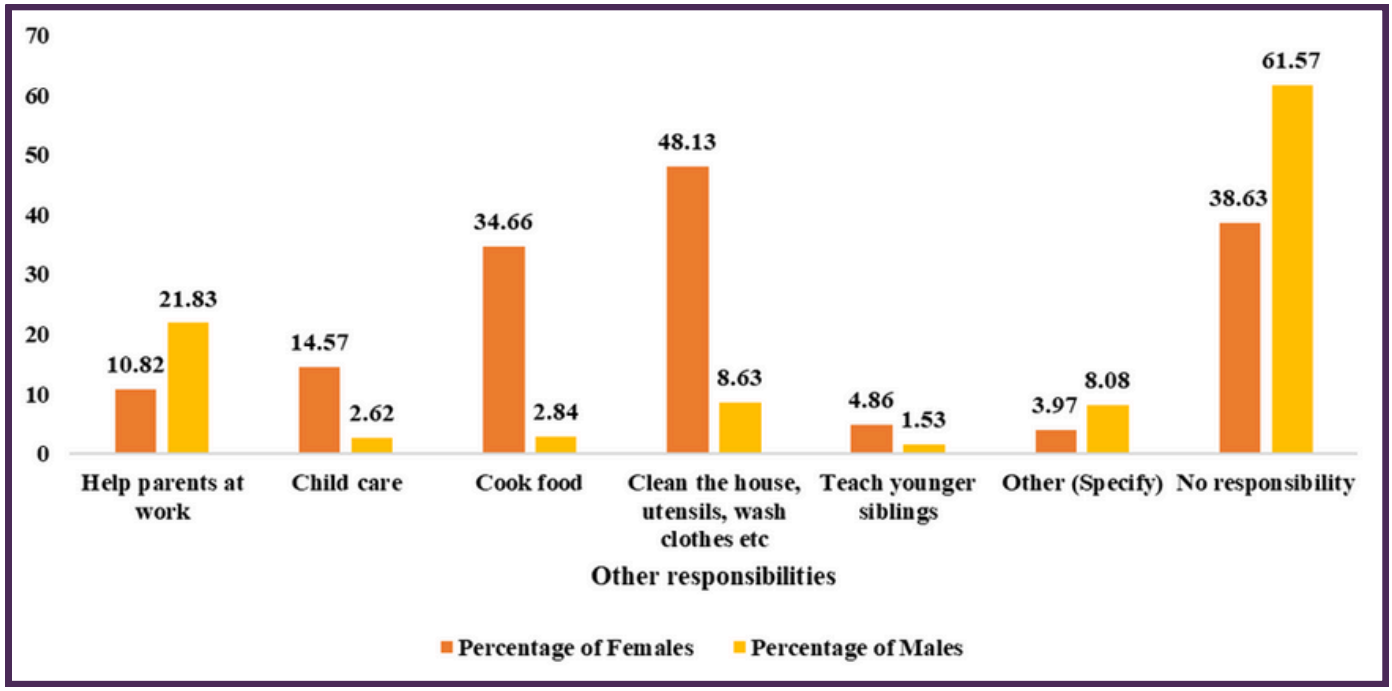

Figure 25: Gender divide within each responsibility, in addition to attending the educational/vocational institute, among household members aged 5-25 years who are currently enrolled

4.7 Summary of Key Findings

This chapter analyses the education outcomes of the community members from varied perspectives, such as their completed years of education, and current enrolment status specifically among children and youth.

First of all, we observe a significantly high proportion of individuals aged 5 years and above reporting to have never been enrolled in any educational institution, which is even higher among the adults in the community, who are aged 18 years and above. This observation is in line with the analysis of education progression across cohorts, indicating how older generations or older cohorts in the community have had lower levels of education, compared to younger cohorts for whom we see some convergence through rapid increases in levels of education.

In terms of comparison of education outcomes of females vis-a-vis males, we observe significant gender-divide when we look at the overall education attainment, that is, completed years of education for the entire sample. However, no such significant gender differences are observed in the patterns of current enrolment for children and youth aged 5-25 years. This seemingly contradictory observation can be explained through the cohort analysis of males and females, where it was observed that the gender differences in the education progression have converged considerably over time and over cohorts, specifically based on the proportion of men and women reaching higher levels of education. Having said that, even though there is convergence in the levels of education across males and females, we do observe gender-based differences in parental investments on education, as more males are enrolled in fee-based private institutions, while more females are enrolled in government institutions. This finding may indicate a differential perceived return to education of boys vis-a-vis that of girls (Alderman and King, 1998).

In addition to gender-based differences, we also observe significant differences in the education outcomes of individuals across the two major religious groups, where our finding is that of Hindus outperforming the Muslims.

Analysing the enrolment patterns across age groups, we find significantly lower enrolment of youth into higher education or vocational education institutes. This finding is coherent with the previous observation, as noted in chapter 3, of high rates of employment among the youth in this community. This indicates that there is a preference among the youth to participate in paid labour, rather than continuing their education beyond a certain level. There are multiple plausible explanations that could be put forth to interpret this decision of the youth to participate in the labour market, such as lower perceived returns to higher education, higher opportunity cost of pursuing higher education, the immediate necessity to start earning to support family income, lack of skill-based focus in the currently prevalent higher education options etc. However, the phase 1 study is limited in its scope to comment with any certainty on the exact reasons to explain this phenomenon. We intend to investigate this further by undertaking a qualitative analysis as part of the next phase of our study.

Further, our specific finding of reasonably high levels of computer literacy, specifically among the youth, highlights the importance of the significant role played by CSO-run interventions in this community. As discussed in chapter two, many of these interventions target the digital literacy aspect of youth skilling and education.

Lastly, the investigation of the reasons for non-enrolment and drop-outs throws light on some very stark gender roles, where we see more females dropping out or not enrolling due to the reasons of household and child-care responsibilities, while more males doing so citing reasons of participating in paid labour. Although, no significant gender differences were observed in terms of the current enrolment patterns, the analysis of the reasons cited by the children and youth for non-enrolment provide us with limited evidence of differential life trajectories and aspirations among young girls and boys. We intend on developing this arc of analysis further through the qualitative study to be undertaken as part of phase 2 of the research project.

Given this backdrop of the current status of education among children and youth, we now move to chapter 5, with an analysis of the state of public provisioning of education, and the role played by non-state actors, in a disenfranchised community like this.

Chapter 5
Provisioning of Education in the Community and the Role of Non-State Actors

5.1 Introduction

This chapter develops insights into the educational infrastructure that is accessed by the youth and their families to attain educational and skilling opportunities in the community. This includes a gamut of actors such as government schools, private schools, public higher education institutions, public and private skill-based learning institutions, madrasas and non-state actors. The data collected through the household survey, secondary data sources and the FGDs have been analysed to present the patchwork of education institutions that constitute the educational provisioning in the community.

The first section presents analysis of the different kinds of institutions that are accessed by the households in our sample. The second section consists of detailed information on the status of public provisioning of schooling in Bawana JJ colony, using secondary sources. The third section of the chapter elaborates on the functioning of the non-state actor (NIF) which has undertaken interventions in the community focused on education for the last two decades since resettlement.

5.2 Provisioning of School level Education

Given, the history of eviction in 2004, for families with young children, continuing schooling was a big concern and even a year after the demolitions in Yamuna Pushta, ie. 2005 there were no schools inside the colony (Menon-Sen and Bhan, 2008). Infact, in a focus group discussion (FGD 2) undertaken by the GAP team, many parents spoke of their earliest memories of trying to seek admission in the Bawana colony school, and being met with resistance and discrimination by the existing residents of the private Bawana colony and Bawana village (separate from the resettled Bawana JJ colony), who were less than welcoming of the new families evicted from inner city of Delhi. The rates of drop-outs increased for the children from the resettled families, with girls especially facing the brunt of this disruption. Many families in the aftermath of the evictions from Pushta and resettlement in Bawana arranged for hurried marriages then (Menon –Sen, 2006). Based on a qualitative study in the resettlement colony, Nambissan (2019) argues that given the paucity of public schools in the colony, economic distress from losing livelihoods meant parents were forced to send their elder male children to work and their elder female children to helping with household chores. The analysis of occupational mappings for those between the ages of 12-25 years, in our study, confirms a continuance of this male-breadwinner and female-homemaker model of household

Table 17: Type of institution across levels of education

Type of Institution	Primary	Above Primary, till Secondary	Senior Secondary	Higher Education	All Levels
Government	70.97	87.63	83.61	91.67	79.10
Private	25.81	10.82	11.48	8.33	18.28
NGO-run	0.92	0.52	3.28	-	0.93
Madarsa	2.30	1.03	-	-	1.49
Other	-	-	1.64	-	0.19

Notes: The column on Higher Education includes institutions such as colleges/universities that provide regular bachelor degrees, distance learning colleges and skilling centres accessed post completion of schooling.

The above table 17 presents analysis of the types of institutions in combination with different levels of education. This table clearly shows that as the level of education increases from primary to secondary to higher education levels, the presence of private institutions as chosen by the youth in our sample declines. In other words, public institutions become even more significant as providers of education in the community at higher levels of education.

5.3 Government schooling in Bawana JJ colony

Even in 2025, there is only a single MCD school that provides primary education to students in the JJ colony. Parents complained of over-crowding, insufficient attention by teachers and the lack of facilities (in reference to private schools) in FGD 2. Also, narrating the difficulties they face because of economic constraints that do not allow for access to expensive private schools, despite declining quality of education in the government schools.

We take a brief look at the concrete provisioning of schools beyond primary school in the table below:

Table 18: Government schools in proximity of Bawana JJ Colony

Name of the school:	Bawana-GBSSS	Bawana-SKV	Bawana J.J Colony No.1 GGSSS	Bawana J.J Colony No.2 GBSSS	Bawana J.J Colony GGSS
Gender	Boys	Girls	Girls	Boys	Girls
Provisional Level of	VI to XII	Nursery to XII	VI to XII	VI to XII	VI to X
Class XII Stream Details:					
Science	✅	✅	❌	❌	-
Commerce	✅	✅	❌	✅	-
Arts	✅	✅	✅	✅	-
Vocational	✅	❌	❌	❌	-
School resource and infrastructure (Period: Academic Year 2023-24)					
Student Teacher	37:1	33:1	23:1	29:1	31:1
Classrooms (SP- Semi	41 (SP)	42 (P) 18(SP)	36 (SP)	55 (SP)	55 (SP)
Internet	No	No	Yes	No	No
Lab Facility	Yes	Yes	Yes	Yes	No

Note: Water, electricity, playgrounds and toilet infrastructure were available for all schools. Source: NCT Delhi Education Department website.

Although, the Bawana colony has a few government schools, only 3 schools operate in proximate distance to the residents of the JJ colony. The first two schools – Bawana GBSSS and Bawana SKV are located outside the Bawana JJ Colony, and the rest of the schools (mentioned in columns 4,5 and 6) are located within the colony. In the above table, Bawana JJ Colony No. 1 GGSSS and No. 2 GBSSS refer to the same school premises, operating as a two-shift school for girls (morning shift) and boys (evening shift). The student teacher ratio as per Right to Education Act, 2009 is 30:1 (Primary) to 35:1 (Elementary), and most schools report acceptable ratios. It is noteworthy that the schools that are proximate and accessible to older students in the JJ colony do not offer Science streams. Moreover, vocational streams are also unavailable as part of the public schooling system in the JJ colony schools.

5.4 Case Study of a Non-State Actor (Navjyoti India Foundation)

As discussed previously, there is a strong and effective presence of a non-state actor in the Bawana JJ colony, specifically in terms of interventions targeting education. Navjyoti India foundation has been actively working with the community members of Bawana JJ colony ever since they were relocated here, with the specific goals of improving the education and employment outcomes of the children and youth. The education and skill-based focus of the organisation is visible from the type of its interventions introduced by them. In addition to the two education-based interventions, Child Education Program and the Bal Gurukul program, the organisation is also implementing a host of skill-upliftment interventions such as digital literacy program, tablet for kids program, stitching, beauty and hairstyling centre etc. In this section, we analyse the outreach of the organisation's interventions in terms of uptake by children and youth of the community.

Given that the organisation's presence in Bawana JJ colony is as old as the community itself (after it was resettled), we sought information from all household members above 4 years, if they have ever been a beneficiary of any of the programs run by Navjyoti. Nearly 16 per cent of the individuals in our sample reported to have been a participant in atleast one intervention program carried out by the organisation.

Table 19: Enrolment and uptake of Navjyoti intervention programs in education

Ever enrolled in Navjyoti	Frequency	Percentage
Yes, enrolled in atleast one Navjyoti program	306	16.45
Aware of Navjyoti programs but have not enrolled	1,441	77.47
No awareness about Navjyoti programs	113	6.08
Total	1860	100

The organisation's outreach is the strongest in the nearby blocks of the colony, such as block B (in which the office itself of the CSO is located), block D and blocks E and A.

Table 20: Outreach of NIF in the community, by Block

Block	Percentage of Navjyoti beneficiaries
A	13.4
B	21.24
C	4.9
D	23.53
E	16.67
F	12.75
G	0.33
H	3.92
J	0.33
K	0.98
L	0.98
M	0.98

In terms of the types of interventions, among those individuals who report to have been enrolled in a Navjyoti intervention, a huge majority report to be a part of the organisation's flagship program – Child Education Program. The next popular programme is the Digital Literacy Program.

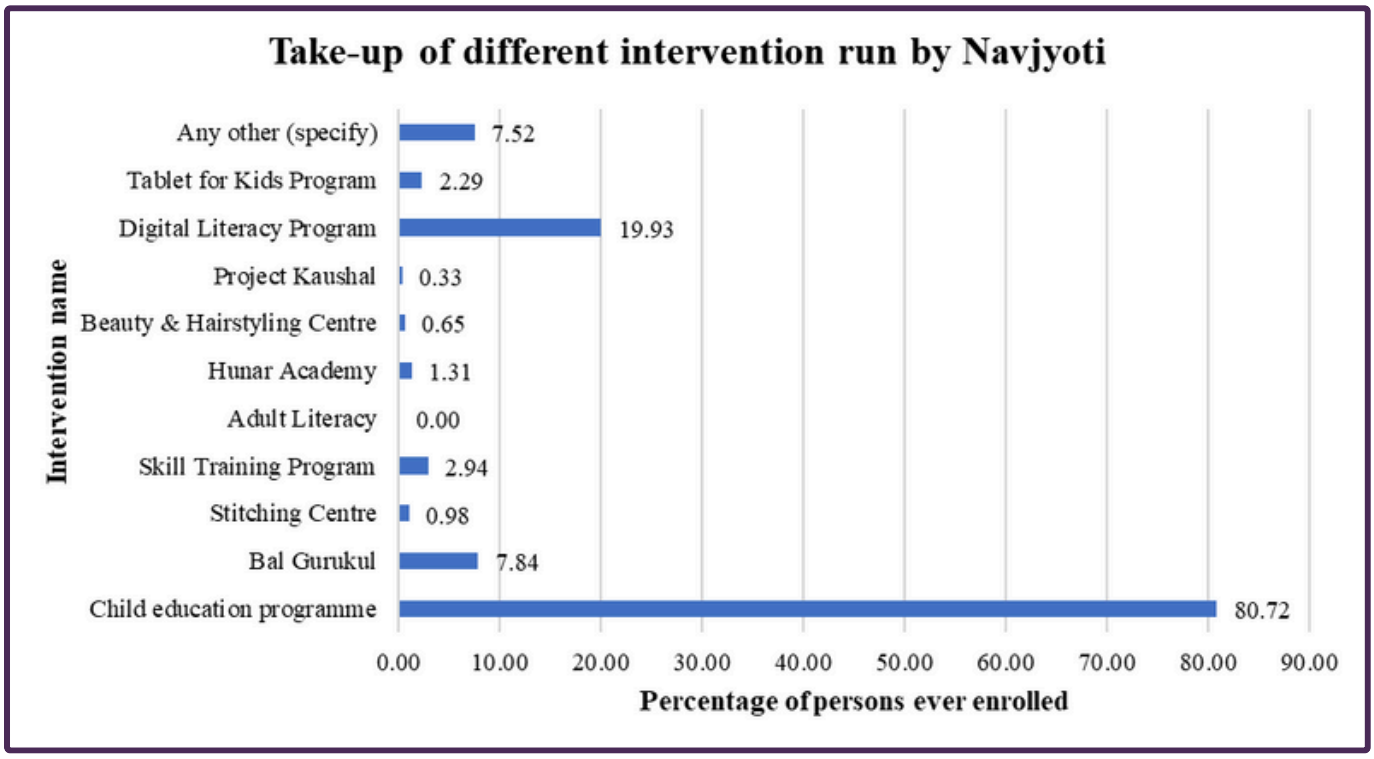

Figure 26: Percentage of beneficiaries across different intervention programs of Navjyoti

Although nearly 70 per cent of the individuals who have participated in a Navjyoti program are either currently not attending or the programme has gotten over. Thus, 31 per cent of these individuals are currently enrolled in these programmes.

Currently enrolled

In terms of current enrolment though, we see that among the children and youth aged 5-25 years, around 7 per cent are currently enrolled in any Navjyoti-run intervention. Clearly, the most popular is the Child Education Program, with more than 80 per cent of the currently enrolled children enrolled into this program.

Reasons for non-enrolment

To understand the low uptake of the organisation's interventions, we enquire the reasons for non-enrolment into any of Navjyoti's programs.

While some similar patterns re-emerge, like in case of reasons for non-enrolment in formal educational institutions, such as reasons of 'employment' and 'marriage' as some of the most prominent reasons cited, however, some interesting new reasons appear which are of note for researchers studying the role of non-state actors in urban low income communities.

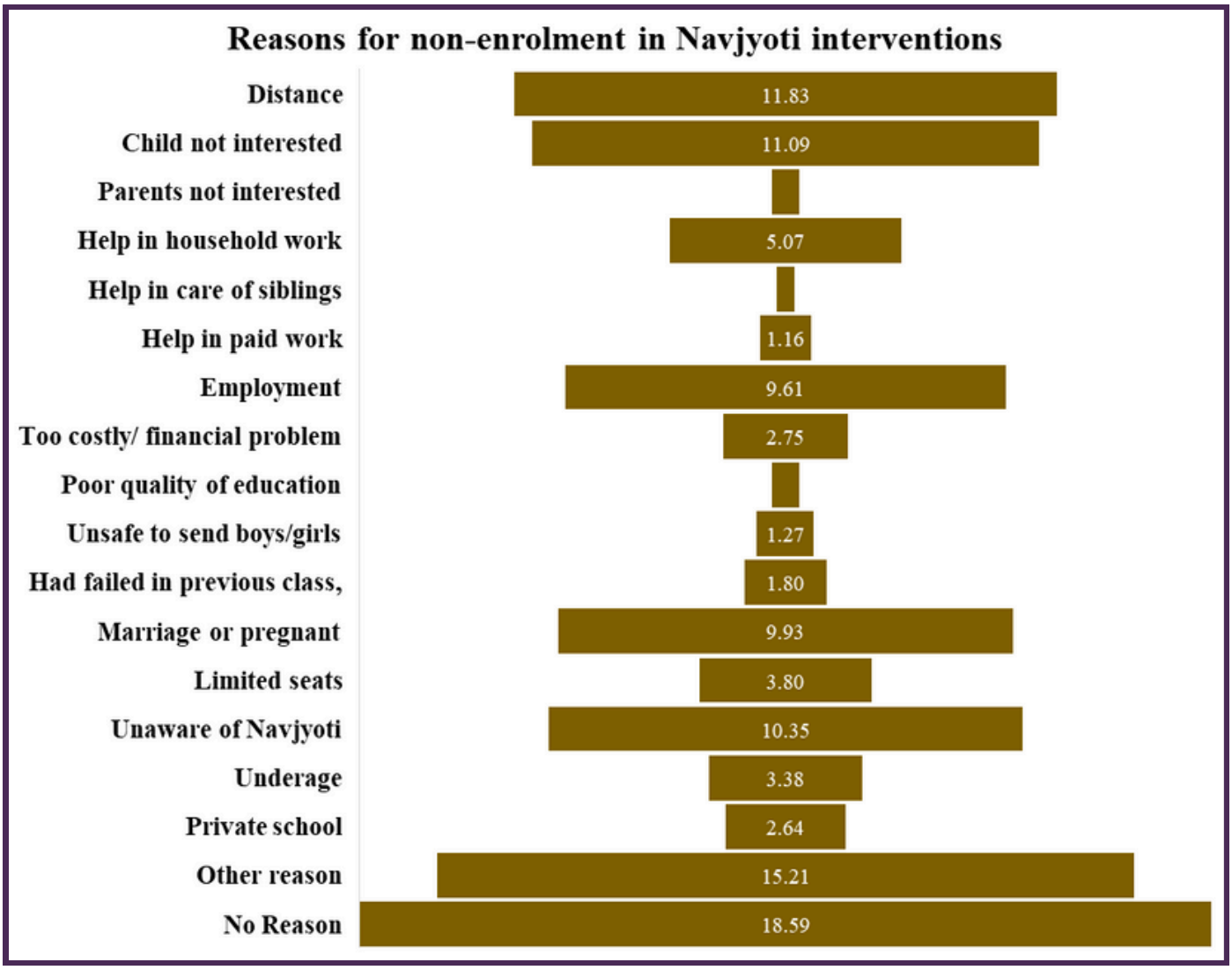

Figure 27: Reasons for non-enrolment in any program of Navjyoti, among household members aged 5-25 years

Apart from 'no reason' being the most prominent, we see significant proportions of children and youth reporting distance (11.8 per cent) and lack of awareness about the organisation or its interventions (nearly 10 per cent) as reasons for non-enrolment into the programs.

Some of the 'other reasons' cited by children and youth are related to the model of the organisation's intervention design, such as reasons of the child being under-age or the fact that they are enrolled in private schools; while some other reasons highlight the infrastructural and resource constraints faced by the organisation, such as limited seats or simply that science stream education is not being offered. Another reason cited that relates to the design of the organisation's intervention, specifically that of Child Education Program, is the reason of 'do not have time'. Navjyoti's remedial classes, as part of their program, are held after or before the school hours, as the case may be. In a community where children and youth are share the burden of their household's paid as well as unpaid work, there are only a few who would be able to take the time outside of school for these 'extra/remedial' classes.

Thus, an effective education-focused intervention could attempt to attain greater compatibility in time/space with the existing school and household routines of children and youth. The organisation has already taken steps in this direction, through one of its newer projects called project 'Neenv', where they collaborate with the government schools and provide activity-based bridge classes to students who require more individualised attention and the learning apparatus which under-resourced public schooling systems may not be able to offer.

Lastly, upon asking about whether the individual did go to the school or Navjyoti the day before the date of survey, we see that slightly higher percentage of children and youth report to have attended Navjyoti's classes, compared to those who reported to have attended formal school/institute.

Table 21: Comparative attendance status among students between formal schooling and NIF programs

Attendance	Formal school/institute	Navjyoti program
Attended the institution yesterday	76.5	80
Did not attend the institution yesterday	23.5	20

There is a possibility that the data on previous day's attendance might be biased on account of specific events in schools/institute or the organisation or in the community at large. Therefore, we also sought information on the number of days' leaves taken in the last one week.

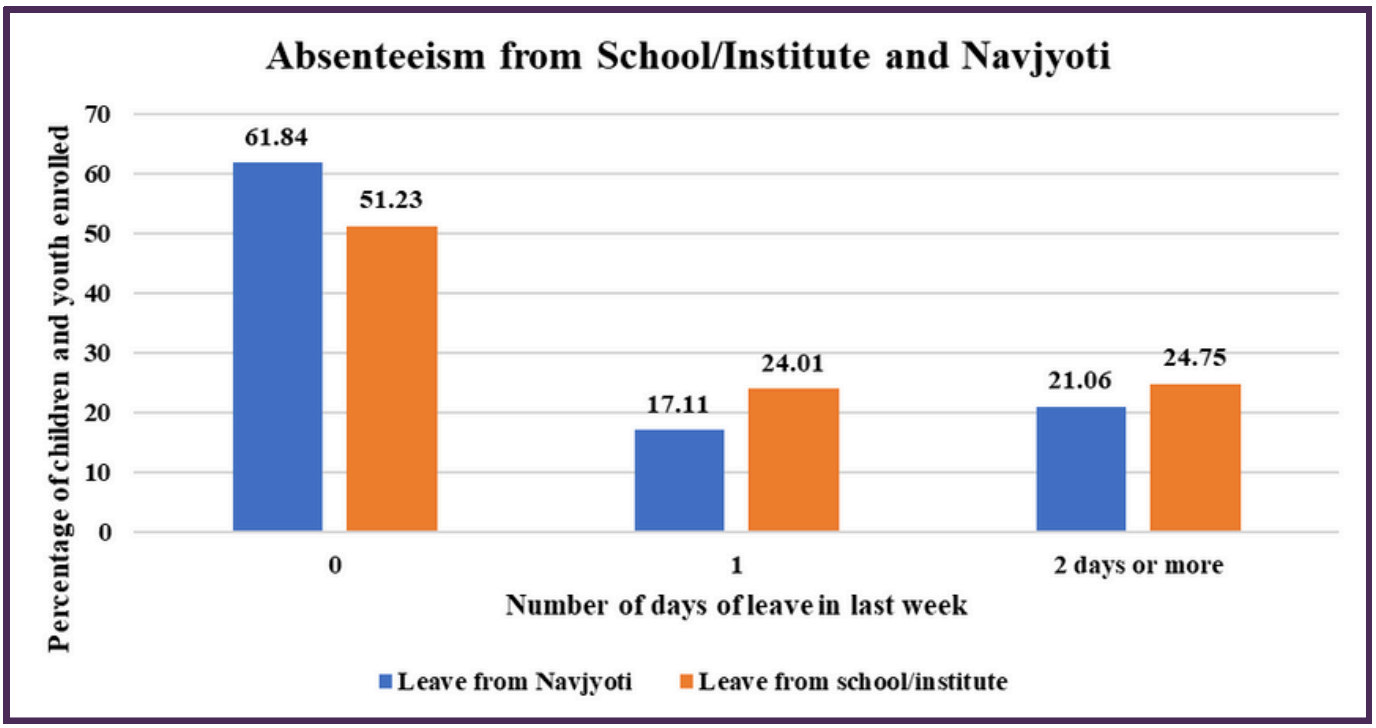

Figure 28: Number of days absent in the last week, among students between formal schooling and NIF programs

For this information, we observe that children and youth are more likely to attend the classes under the CSO's intervention program, compared to attending formal schools or institutes. Further, children and youth enrolled in formal schools or institutes are not only more likely to miss their schools/institutes once a week, compared to Navjyoti; but they are also more likely to miss their schools/institutes for more than 2 days a week. This could be an indicator, albeit weak, of the differential attention provided to students in Navjyoti's classrooms, vis-a-vis schools. Thus, a broader range of methods of inquiries are needed to assess the impact of non-state interventions in strengthening the efforts of the public education systems.

5.5 Summary of Key Findings

This chapter presents analysis that briefly describes the multiple actors engaged in provisioning of education, specifically schooling in the community. Our study shows that most students rely on the public education system as they reach higher levels of education, compared to private schooling. Given, the significant presence of Muslim households in the community, there is some presence of religious/ non-secular education among younger students, which is not visible as we observe the older students. The educational profile of the government school (grades 6 -12) that caters to a large student population in the community from elementary to senior secondary schooling has limited infrastructure. Especially at the senior secondary levels where students are required to choose between different streams such as Science, Commerce, Humanities and Vocational, the school offers only Humanities stream. This has implications for the post-secondary educational pathways and employment opportunities that are available to these students.

The analysis of the non-state actor in educational provisioning presents evidence of higher outreach in the residential blocks in proximate distance to the organisation's office, and lower among residents of blocks that are further away. Nevertheless, the effectiveness of current programs of Navjyoti can also be inferred from the information on absenteeism across schools and Navjyoti programs. Wherein more students show regular attendance in the programs at Navjyoti compared with the attendance levels at school.

Chapter 6
Conclusion

The first stage of our research project had set out to study the socio-economic characteristics of an urban resettled community living at the metropolitan fringe. The households in our sample represent youth residing in spatial, amongst other forms of urban peripheries. Conversations of eviction and re-settlement emerged in our field observations and Focus Group Discussions as much as the analysis undertaken in this study. It features in the absence of public provisioning of resources and related opportunities, for instance, access to clean drinking water and public schooling, in stark contrast to its presence in other 'well-fed' areas of the metropolitan city.

The low income earning, but aspirational existence translates into an acquired consumption-based urbanity which relies on a thriving debt economy. The income and access disparity between groups along caste and religion is visible in aspects of home ownership, tenant status and educational outcomes. The information on occupations of members of the community confirms a workforce labouring in irregular, low paying jobs in the informal industrial sector in proximate distance to the JJ colony.

Our study focussed on analysis of the educational trajectories undertaken by the youth in a low income community. The analysis indicates an unevenness, across economic class (class formation conjoined with caste and religious identity) and gendered identities when it comes to accessing educational opportunities. The gendered division of labour is visible among not only the adults living in conjugal households but also in the manifest labour contributions of the younger members of the household, both when they are enrolled in schooling systems and when they drop-out. Therefore, the parity between men and women which is visible in some aspects of education such as completion of certain schooling levels etc. should not be confounded with what is otherwise a compelling telling of the model of female as a homemaker and male as a breadwinner.

The role of non-state actors in a community 'uprooted' from their earlier residences is significant not only in rebuilding of the community but also in supporting educational aspirations of students (often from low income households and enrolled in under-funded public education system) who seek pathways into the urban economy. Our field visits during data collection allowed us to witness the exuberance and dynamism of the trailblazers in the community, many of whom attribute their triumphs to the multiple educational interventions of the non-state actor. The interventions, well planned, funded and executed, however, by design can only reach limited students and households in the community. The role of universal public education of good quality, remains a concern in such a diverse community, with working class families who may not have sufficient resources of their own to secure investment on education for the younger generation. Hence, the future steps of our Phase two study involve following up on some of the findings from phase 1 of the study, with a qualitative analysis that can feed into phase 2 of the study on this community

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Appendix

A.1: Survey Questionnaire

Bawana Baseline Phase 1 Study
Survey Questionnaire
Grassroots Action Program, IDEAS, Office of Interdisciplinary Studies, O.P. Jindal Global University

[0] Respondent and household identification	
0.1	block
0.2	cluster
0.3	locality
0.4	house number
0.5	household ID
0.6	interview date
0.7	name of interviewer 1
0.8	name of interviewer 2
0.9	whether respondent is present at home to participate in the survey?
	if 0.9 'yes'
0.10	respondent's name
0.11	respondent's contact number
0.12	which floor of the house building does the respondent's family live on? [codes:]
0.13	total number of families living on this plot of the house/building (including the respondent's family)?
0.14	whether respondent consents to participate in the study?
	if 0.14 'no'
0.15	was the house locked, or did you not find any adult to respond to the survey questionnaire? [codes:]
0.16	specify the date of next visit when the respondent will be available for interview?

[1] Household Roster: Demographics and Occupational Details	
How many household members live in this house? List all the household members and their characteristics below:	
1.1	member ID / line numbe
1.2	NAME (usual residents)
1.3	relationship with the head
1.4	gender [codes: male- 1, female- 2, other- 3
1.5	age (in years)
1.6	marital status
1.7	mother's ID
1.8	father's ID
1.9	whether (NAME) is studying currently or was ever enrolled in any educational or vocational skill institution? (see categories)
1.10	whether (NAME) has ever been a beneficiary of any intervention by Navjyoti? [codes: yes- 1, no- 2, don't know about Navjyoti- 3]
	if 0.9 'yes'
1.11	which intervention or programme was or is (NAME) a part of?
1.12	whether (NAME) is currently attending this programme of Navjyoti
1.13	completed years of formal education of (NAME).
1.14	whether (NAME) can read and write [codes: yes- 1, no- 2]
1.15	whether (NAME) knows how to operate a computer/laptop? [codes: yes- 1, no- 2]

Occupation details of Household members aged ≥ 10 Years	
List the household members and their member ids, who are aged 10 years and above	
1.1	member ID / line numbe
1.2	NAME (usual residents)
1.15	employment status of (NAME) (see categories)
1.16	what is the type of this occupation? (see categories and codes)
1.17	nature of this job [codes: daily-based- 1, permanent- 2, contractual- 3,temporary- 4]
1.18	how many hours does (NAME) spend on this occupation in a day?
1.19	frequency of payment for this job [codes: daily- 1, weekly- 2, fortnightly- 3, monthly- 4]
1.20	whether (NAME) is also engaged in any occupation other than the reported primary occupation [codes: yes- 1, no- 2]
1.21	what is/are the other occupation(s) in which (NAME) is engaged in? (see categories)
1.22	type of this secondary occupation?
1.23	nature of this secondary occupation [codes: daily-based- 1, permanent- 2, contractual- 3, temporary- 4]
1.24	hours (NAME) spends on this secondary occupation in a day
1.25	frequency of payment for this secondary job [codes: daily- 1, weekly- 2, fortnightly- 3, monthly- 4]

Other Household Socio-economic Characteristics	
1.26	caste [SC, ST, OBC, General, Others, don't know or does not want to tell]
1.27	religion [Hindu, Muslim, Christian, Sikhism, Buddhism, Others]
1.28	whether the household possesses a ration card [codes: yes- 1, no- 2]
1.29	ownership status of house accommodation
1.3	whether this house or floor is owned by the head or any member of the household
1.31	whether respondent or anyone in family own a house or any floor of a house that has been rented out [codes:yes- 1, no- 2]
1.32	source of lighting in the house [codes: meter electricity connection- 1, unmetered temporary arrangement- 2, others (specify)- 3]
1.33	source of drinking water [codes: tap water within residence- 1, community tap connections- 2, handpumps- 3, private tankers- 4, tubewell- 5, submersible- 6, others (specify)- 7]
1.34	whether respondents have their own private toilet in the house premises? [codes: yes- 1, no- 2]
1.35	how does the respondent access the toilet [codes: own private toilet at home- 1, paid community toilets- 2, open spaces- 3]
1.36	household assets owned [TV, AC, Cooler, Bicycle, Motorbike/scooty, Car, Truck/loading car/champion, E-rickshaw, Autorickshaw, Smartphone, Laptop/Computer, RO (water purifier), Refrigerator, Washing machine]
1.37	number of smartphones owned by the family
1.38	year of shifting to Bawana JJ Colony
1.39	reason for shifting [codes: displaced/ evicted in 2004- 1, bought our house- 2, came on rent- 3, other (specify)- 4]
1.4	estimate of monthly total family income
1.41	out of the total income, how much is saved every month?
1.42	whether family often has to borrow money to run expenses [codes: yes- 1, no- 2]
1.43	if yes, what is the most usual source of debt? [bank- 1, friends and relatives- 2, local money lender- 3, other (specify)- 4]

[2] Education Roster	
List all the children and youth in the household in the age group 5-25 The questions below can be answered by either of the parents or the children/youth themselves	
2.1	child ID
2.2	name of the child
2.3	line number from Household Roster
2.4	whether currently enrolled in /attending any educational/ vocational training institution [codes: yes- 1, no- 2]
	if 2.4 'yes'
2.5	level of education currently enrolled in [class 1-5 (primary) - 1, class 6-8 (elementary) -2 , class 9-10 (secondary) – 3, class 11-12 (sr. secondary) - 4, Bachelor's - 5, Master's - 6, Ph.d - 7, Madarsa - 8, Vocational/skill course - 9, other (specify) - 10]
2.6	type of educational institution enrolled in [Government - 1, Private - 2, NGO-run - 3, Madarsa - 4, other (specify) - 5]
2.7	distance of institution from residence [Less than 1 km - 1, 1-3 km - 2, 3-5 km - 3, 5-10 km - 4, Greater than 10 km - 5]
2.8	mode of commute to institution [own vehicle, by foot, public transport (bus, metro etc.), private paid vehicle (van etc.)]
2.9	frequency of fee payment to institution [monthly, quarterly (every 3 months), semesterly, yearly, only once in lumpsum]
2.10	amount of fees paid for the reported frequency
	if 2.4 'no'
2.11	reasons for not being enrolled or not going/ or dropping out?
2.12	whether respondent attends private tuition classes [codes: yes- 1, no- 2]
2.13	whether (NAME) is currently enrolled with Navjyoti, in any of their programmes [codes: yes- 1, no- 2]
2.14	if 'yes', which programme is (NAME) currently enrolled in? [Child education centres, Bal gurukul, Stitching Centre, Skill Training Program, Adult Literacy, Beauty & Hairstyling Centre, Project Kaushal, Digital Literacy Program, Tablet for Kids Program, other (specify) (can choose more than one)]
	if 2.13 'no'
2.15	reasons for non-enrolment/ or dropping out of Navjyoti's programme (can choose more than one)

Codes for 2.11/ 2.15: Reasons for dropout or non-enrolment in any educational institution or non-enrolment in Navjyoti (can choose multiple reasons)

a. School too far away/ Transport not available/ No one available to pick and drop from school

b. Child/ Boy/ Girl not interested in further education

c. Parents do not consider further education necessary

d. Required for household work

e. Required for care of younger siblings

f. Required for helping family at paid work

g. Found a job myself

h. Too costly

i. Poor quality of education

j. No proper infrastructure available at school/institution

k. Unsafe to send boys/girls

l. Discrimination at the school/institution

m. Had failed in previous class, hence dropped out

n. Got married

o. No Reason

p. Other reason (specify)

[3] Records of Absenteeism from Educational Institutions	
3.1	child ID
3.2	name of the child
3.3	whether (NAME) went to school/ college/institute yesterday [codes: yes- 1, no- 2]
	if 3.3 'no'
3.4	list the reasons for missing school/ college/institute (see categories below)
3.5	how many days (NAME) took leave/missed in the last week? [0, 1,2, 3, 4, 5, 6]
	if 3.5 greater than 0
3.6	reasons for missing the school/institute last week (codes below)
3.7	whether (NAME) usually take leave from the school/ institute every week or two [codes: yes- 1, no- 2]
3.8	whether (NAME) went to the Navjyoti centre yesterday [codes:yes- 1, no- 2]
	if 3.8 'no'
3.9	reasons for not attending the Navjyoti centre yesterday (codes below)
3.10	how many days did (NAME) take a leave/miss from Navjyoti in the last week? [0, 1,2, 3, 4, 5, 6]
	if 3.10 greater than 0
3.11	reasons for missing (codes below)
3.12	what other responsibilities does (NAME) have other than just attending school?

INTERVIEW END

Record the date and time of end of interview.

CODES AND CATEGORIES

MODULE 1: HOUSEHOLD ROSTER AND EMPLOYMENT/OCCUPATION STATUS

1.3: relationship with the head of the family: Self, Wife/Husband, Son/Daughter, Daughter-in-law/ Son-in-law, Granddaughter/Grandson, Neice/Nephew, Sibling, Other (please specify)

1.6: marital status: married, separated, divorced, widow/widower, unmarried

1.9: ever enrolled in any educational/vocational institute: School, College, ITI, Polytechnique, Never attended any school/institution/ programme, Madarsa, Any other (specify)

1.1: which intervention of Navjyoti: Child education programme, Bal Gurukul, Stitching Centre, Skill Training Program, Adult Literacy ,Hunar Academy, Beauty & Hairstyling Centre, Project Kaushal, Digital Literacy Program, Tablet for Kids Program, Any other (specify)

1.15/ 1.21: primary/secondary employment status: Home-based work, Self-employed (at shop or home), Wage employed/workshop/office, Government Job, Unemployed, Student, Home maker (housewife)

1.16: type of primary occupation: Categories: 1:Auto Driver, 2:E-Rickshaw Driver, 3:Taxi Driver, 4:Rickshaw Puller, 5:Shopkeeper, 6:Grocery Store Owner, 7:Fruit Vendor, 8:Vegetable Seller, 9:Street Hawker, 10:Newspaper Seller, 11:Tea Stall Owner, 12:Ice Cream Vendor, 13:Paan Seller, 14:Food Vendor, 15:Plumber, 16:Electrician, 17:Tailor, 18:Shoemaker, 19:Cobbler, 20:Locksmith, 21:Jewelry Maker, 22:Furniture Maker, 23:Tattoo Artist, 24:Cook, 25:Butcher, 26:Street Food Vendor, 27:Scrap Dealer, 28:Street Performer, 29:Photographer, 30:Waste Picker, 31:Cleaner, 32:Garbage Collector, 33:Shoeshiner, 34:Milkman, 35:Barber, 36:Delivery Man, 37:Food Delivery Driver, 38:Vehicle Mechanic, 39:Bag Maker, 40:Carpenter, 41:Blacksmith, 42:Welder, 43:Mechanic, 44:Electric Appliance Repairer, 45:Mason, 46:Carpenter's Assistant, 47:Handicraft, 48:Catering Worker, 1:Driver, 2:Bus Driver, 3:Truck Driver, 4:Conductor, 5:Factory Worker, 6:Printing Press Worker, 7:Shop Assistant, 8:Cashier, 9:Labourer, 10:Daily Wage Labourer, 11:Construction Worker, 12:Construction Supervisor, 13:Road Worker, 14:Gardener, 15:Construction Foreman, 16:Home Cleaner, 17:Sweeper, 18:Restaurant Worker, 19:Dishwasher, 20:Private Job, 21:Security Guard, 22:Factory Supervisor, 23:Office Assistant, 24:Office Clerk, 25:Receptionist, 26:Bus Conductor, 27:Watchman, 28:Teacher, 29:Delivery Man, 30:Food Delivery Driver, 31:Vehicle Mechanic, 32:Bag Maker, 33:Carpenter, 34:Plumber, 35:Blacksmith, 36:Welder, 37:Mechanic, 38:Electric Appliance Repairer, 39:Mason, 40:Carpenter's Assistant, 41:Catering Worker, 1:Govt. job, 1:Handicraft

1.22 type of secondary occupation: Categories: 1:Auto Driver, 2:E-Rickshaw Driver, 3:Taxi Driver, 4:Rickshaw Puller, 5:Shopkeeper, 6:Grocery Store Owner, 7:Fruit Vendor, 8:Vegetable Seller, 9:Street Hawker, 10:Newspaper Seller, 11:Tea Stall Owner, 12:Ice Cream Vendor, 13:Paan Seller, 14:Food Vendor, 15:Plumber, 16:Electrician, 17:Tailor, 18:Shoemaker, 19:Cobbler, 20:Locksmith, 21:Jewelry Maker, 22:Furniture Maker, 23:Tattoo Artist, 24:Cook, 25:Butcher, 26:Street Food Vendor, 27:Scrap Dealer, 28:Street Performer, 29:Photographer, 30:Waste Picker, 31:Cleaner, 32:Garbage Collector, 33:Shoeshiner, 34:Milkman, 35:Barber, 36:Delivery Man, 37:Food Delivery Driver, 38:Vehicle Mechanic, 39:Bag Maker, 40:Carpenter, 41:Blacksmith, 42:Welder, 43:Mechanic, 44:Electric Appliance Repairer, 45:Mason, 46:Carpenter's Assistant, 47:Handicraft, 48:Catering Worker, 1:Driver, 2:Bus Driver, 3:Truck Driver, 4:Conductor, 5:Factory Worker, 6:Printing Press Worker, 7:Shop Assistant, 8:Cashier, 9:Labourer, 10:DailyWage Labourer, 11:Construction Worker, 12:Construction Supervisor, 13:Road Worker, 14:Gardener, 15:Construction Foreman, 16:Home Cleaner, 17:Sweeper, 18:Restaurant Worker, 19:Dishwasher, 20:Private Job, 21:Security Guard, 22:Factory Supervisor, 23:Office Assistant, 24:Office Clerk, 25:Receptionist, 26:Bus Conductor, 27:Watchman, 28:Teacher, 29:Delivery Man, 30:Food Delivery Driver, 31:Vehicle Mechanic, 32:Bag Maker, 33:Carpenter, 34:Plumber, 35:Blacksmith, 36:Welder, 37:Mechanic, 38:Electric Appliance Repairer, 39:Mason, 40:Carpenter's Assistant, 41:Catering Worker, 1:Govt. job, 1:Handicraft

MODULE 2: EDUCATION

2.11: reasons for dropout or non-enrolment in any educational institution (can choose multiple reasons): School too far away/ Transport not available/ No one available to pick and drop from school, Child/ Boy/ Girl not interested in further education, Parents do not consider further education necessary, Required for household work, Required for care of younger siblings, Required for helping family at paid work, Found a job myself, Too costly, Poor quality of education, No proper infrastructure available at school/institution, Unsafe to send boys/girls, Discrimination at the school/institution, Had failed in previous class, hence dropped out, Got married, No Reason, Other reason

2.15: reasons for dropout or non-enrolment in Navjyoti (can choose multiple reasons): School too far away/ Transport not available/ No one available to pick and drop from school, Child/ Boy/ Girl not interested in further education, Parents do not consider further education necessary, Required for household work, Required for care of younger siblings, Required for helping family at paid work, Found a job myself, Too costly, Poor quality of education, No proper infrastructure available at school/institution, Unsafe to send boys/girls, Discrimination at the school/institution, Had failed in previous class, hence dropped out, Got married, No Reason, Other reason

MODULE 3: ABSENTEEISM

3.4/ 3.6/3.8: reasons for missing the school or Navjyoti centre yesterday/ last week: Illness, Household/ domestic responsibilities, Responsibilities at work, Didn't feel like going, School fee not paid, Menstruation, Punishment/Harassment by teacher, No mode of transportation, Illness/ death of family member, Bad weather, Family function, Bullying by other students, School was not in session, Teacher never comes to class or doesn't teach (poor quality of education), Went to the other NGO's programme, Other (specify)

3.12: Other responsibilities other than attending school/ institute/ Navjyoti: Help parents at work, Child care, Cook food, Clean the house, utensils, wash clothes etc., Teach younger siblings, Other (Specify), No responsibility

A.2: Consent form

Greetings. My name is _____. I am a member of a survey team from Navjyoti India Foundation, located in Bawana, and O. P. Jindal Global University, located in Sonipat. Currently, we are conducting a survey within the JJ colony of Bawana to collect data on education and economic conditions. We are gathering this information from selected households across different blocks of the JJ cluster.

(Show the questionnaire to the respondent.)

Your household is one of the randomly selected households. The selection of your area and family has been completely random and based on probability; we have chosen one household for every 40-50 houses, and your home was selected accordingly. This interview will take approximately 20 to 30 minutes, and your participation in this interview is entirely voluntary. Additionally, we would also like to speak with all members of your family who are between the ages of 5 and 25.

Will participating in this study be beneficial?

This study will enhance the knowledge of researchers, the Navjyoti India Foundation, policymakers, and the general public. We are not affiliated with any government or governmental institution. The data collected from your family will be analysed later. However, we are not in a position to offer any monetary compensation or valuable items for the time you spend in this interview. Therefore, participating in this study does not provide any direct or immediate benefits to you.

Risks/Inconveniences

Your family will need to set aside about 30 minutes for this interview, which may cause some delays in your daily activities and responsibilities at home. Additionally, you will be required to share some personal details, including information about your work and income. We will strive to ensure that you experience minimal inconvenience during the interview. However, if at any point you feel uncomfortable or encounter any adverse reaction due to your participation in this study, please contact us at the provided number so that we can take appropriate action.

How will the confidentiality of the shared information be maintained?

Your responses will remain private and confidential. We will not discuss this interview with any member of the community or even with other members of your family. Only the principal investigator and the research team will have access to this information, and it will be used solely for research purposes. Any personally identifiable information will be deleted after the completion of the survey. If the findings of this study are published in a newspaper, research paper, or presented at a conference, no real names will be included in the discussion of the results.

What are my rights as a participant in this study?

Your participation in this study is entirely voluntary. It is your decision whether to participate or not. If you agree to participate, you retain the right to withdraw at any time. You may also choose not to answer any specific question during the interview. Whatever your decision may be, you will neither receive any rewards nor face any penalties.

If you have read this consent form or if it has been read and explained to you, then:

- Do you have any questions regarding the information provided?
- Would you like any aspect of this form to be clarified again?

Once the respondent provides consent, you may proceed with the survey.

Respondent's Name: **Block and Plot Number:**

Date:

_____ _____

Surveyor 1's Signature **Surveyor 2's Signature**