



# WHEN WE RAISE OUR VOICE

## The Challenge of Eradicating Labor Exploitation

*An Evaluation of a Community Empowerment Intervention in Uttar Pradesh, India*

MARCH 2016



# ACKNOWLEDGMENTS

This report was written by Jewel Gausman, Miriam Chernoff, Angela Duger, Jacqueline Bhabha (Principal Investigator), and Hillary Chu, faculty and associates of the François Xavier Bagnoud (FXB) Center for Health and Human Rights at Harvard University. We are grateful for the support and guidance of Anne Stetson. (See Appendix for bios).

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We dedicate this study to the families and respondents who were willing to take part in this research project. We hope this report contributes to raising awareness about the plight of forced and bonded laborers in Uttar Pradesh and beyond, and to strengthening effective and sustainable strategies for eliminating labor exploitation.

The FXB Center for Health and Human Rights at Harvard University is an interdisciplinary center that conducts rigorous investigation of the most serious threats to health and wellbeing globally. We work closely with scholars, students, the international policy community, and civil society to engage in ongoing strategic efforts to promote equity and dignity for those oppressed by grave poverty and stigma around the world.

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# TABLE OF CONTENTS

- Acknowledgements ..... 2
- Author Bios ..... 3
- Executive Summary ..... 5
- Introduction ..... 7
- Background ..... 8
- Methodology ..... 12
- Demographic Characteristics ..... 18
- Labor, Employment, and Debt Conditions ..... 22
- Status of Children ..... 33
- Other Socioeconomic Improvements: Food Availability, Water and Sanitation,  
and Animal Ownership, and Medical Care ..... 40
- Civic Participation and Self-Efficacy ..... 45
- Limitations ..... 53
- Conclusions and Recommendations ..... 55
- Appendices ..... 57
  - 1 – Methods and Regression Models ..... 57
  - 2a – Baseline Survey ..... 66
  - 2b – Baseline Survey ..... 70
  - 3 – Semi-structured Questionnaire ..... 81
  - 4 – Focus Group Interview Guide ..... 95
  - 5 – Key Informant Interview Guide ..... 97
  - 6 – Regression Models ..... 99



## I. EXECUTIVE SUMMARY



Manav Sansadhan Evam Mahila Vikas Sansthan (MSEMVS) is a non-governmental organization (NGO) that has worked for decades with communities in the Indian State of Uttar Pradesh (UP) to eradicate forced and bonded labor. These communities are home to some of the most economically disenfranchised and vulnerable populations in India. Community members are employed in local agriculture, carpet and brick industries, widely recognized hubs for exploitative and abusive labor conditions. To assist the local community in combating these conditions, MSEMVS utilizes a community empowerment model that enables community groups to identify their own key priorities. MESEMS helps them take steps to achieve those changes by developing education opportunities, generating alternative labor training in new skill sets, increasing an understanding of legal rights and providing legal support, and linking these groups together to achieve changes across a wider area.

This report is an independent, evidence-based assessment of MSEMVS's work, produced by the FXB Center, Harvard's only university-wide human rights center, with funding from the Freedom Fund, a philanthropic initiative designed to bring financial resources and strategic focus to the fight against modern slavery. The Delhi-based Institute for Human Development (IHD), an organization with extensive experience conducting research and evaluation studies, provided technical input and conducted the field-level data collection.



The research project had two primary aims: 1) To determine whether forced and bonded labor had been eradicated in villages where targeted interventions by MSEMVS took place; and 2) To measure the effect that the intervention had on a wide range of social and economic factors relevant to households within those villages. The research consisted of a mixed methods study that involved collecting both quantitative and qualitative data to measure the extent of eradication of bonded labor, forced labor and human trafficking and the resulting socio-economic benefits in targeted communities and in comparable communities where no direct intervention occurred. MSEMVS implemented limited interventions within this comparison group during the latter part of the study period and these communities may also have been affected by MSEMVS's wider activities, such as rescue operations and police trainings within nearby villages and district-level advocacy efforts. Focus group discussions and key informant interviews were also conducted with Community Vigilance Committees (CVCs), state and local government officials, as well as other key players.

We found that many households in the study belong to scheduled castes, with low levels of literacy and extremely high rates of poverty. During the period of the study, labor conditions improved across all study arms (both targeted intervention and comparison), evidence of a nuanced and changing picture in relation to exploitative labor conditions, especially bonded labor, which we discuss below. MSEMVS had a demonstrable, positive impact on other critical aspects of the targeted communities' circumstances. Interviews with community members highlighted MSEMVS's contribution to reducing indebtedness and threats of violence, improving wage levels and generating a sense of collective efficacy. The intervention also had a strong effect on food security, access to medical care, civic participation and take up of government programs such as the national rural job creation scheme (NREGA<sup>1</sup>). Results relating to other critical circumstances, including the prevalence of child marriage and child labor, were inconclusive between intervention and comparison groups.

This is the first independent study to examine the impact of a multifaceted, community-based intervention on eradication of forced and bonded labor. It demonstrates the complex web of factors that contribute to a life dominated by exploitation and the multiple dimensions that need to be targeted to eliminate or reduce it. Future research, both quantitative and qualitative, could probe in more detail the social, legal and intra-personal dimensions of exploitation eradication, and strategies for impacting the enduring legacy of caste as a determinant of vulnerability. Exploration of such local change agents as community vigilance committees and the impact of community-based organizing against exploitation would also be valuable.

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<sup>1</sup> The National Rural Employment Guarantee Act 2005, or NREGA, guarantees wage employment on a wide scale. It aims to improve the economic security of rural households by "providing at least one hundred days of guaranteed wage employment in every financial year to every household whose adult members volunteer to do unskilled manual work." ("Mahatma Gandhi National Rural Employment Guarantee Act (Mahatma Gandhi NREGA)," Ministry of Rural Development, Government of India, accessed January 29, 2016, [http://rural.nic.in/sites/downloads/right-information-act/02%20\\_CIC\\_PartII\\_MG\\_NREGA\(F\).pdf](http://rural.nic.in/sites/downloads/right-information-act/02%20_CIC_PartII_MG_NREGA(F).pdf))

# INTRODUCTION

In 2014, the François Xavier Bagnoud (FXB) Center for Health and Human Rights at Harvard University received support from the Freedom Fund, a philanthropic initiative designed to bring financial resources and strategic focus to the fight against modern slavery. The support enabled FXB to evaluate the results of a three-year intervention implemented by a non-governmental organization (NGO), Manav Sansadhan Evam Mahila Vikas Sansthan (MSEMVS), in Uttar Pradesh (UP), India's most populous and one of its poorest states. MSEMVS's intervention was designed to eradicate exploitative labor conditions, including forced and bonded labor in a set of villages. MSEMVS believes that its work, beginning in 2011, has successfully eradicated forced and bonded labor in many of the communities in which the organization has been active.

MSEMVS has been engaged in the struggle against bonded and forced labor in UP for decades. The organization has worked in communities with high levels of exploitation through a community empowerment approach that enables community groups to identify their own key priorities. MSEMVS helps these groups achieve sustainable gains in their organizing capacity by developing education opportunities, generating alternative labor training in new skill sets, increasing an understanding of legal rights and available legal support, and linking these groups together to achieve broader changes.

MSEMVS's focus on the complete eradication of forced and bonded labor has targeted two administrative areas, called "Nyaya Panchayats"<sup>2</sup> in UP. In one further Nyaya Panchayat area, data were collected at the start of MSEMVS's work, but a full intervention was not undertaken. All three areas are within Sant Raividas Nagar district. These communities are home to some of the most economically disenfranchised and vulnerable populations in India. The fact that the targeted villages are the sites of agriculture as well as robust carpet and brick industries contributes to making this area a hub for exploitative and abusive labor conditions.

MSEMVS has worked in communities with high levels of exploitation through a community empowerment approach that enables community groups to identify their own key priorities.

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<sup>2</sup> A Nyaya Panchayat is a cluster of Gram Panchayats, usually averaging six Gram Panchayats in this district. The Gram Panchayat is the smallest unit of government in India, an elective village council that is the fundamental organ of village self-government. Originally an assembly ("ayat") of five ("panch") respected village elders chosen and accepted by the local community, it now consists of between five and 21 members, depending on the size of the village, with one third of seats reserved for female candidates.

**This research project has two primary aims:**

1. To determine whether forced and bonded labor have been eradicated in villages where targeted interventions by MSEMVS have taken place; and
2. To measure the effect that the intervention has had on a wide range of social and economic factors relevant to households within those villages.

This study is the first of its kind to assess the impact of an intervention on forced and bonded labor. Using rigorous qualitative and quantitative methods, the FXB Center set out to evaluate evidence of the effectiveness of MSEMVS's intervention and to contribute to the analysis of how to best design future interventions that share the same goal. With this study, the FXB Center seeks to provide a rigorous, independent and nuanced evaluation of the painstaking work that MSEMVS has undertaken in order to improve the lives of those living under poverty and the ever-present threat of exploitation.

## BACKGROUND

### MSEMVS'S WORK

Manav Sansadhan Evam Mahila Vikas Sansthan (MSEMVS) is an NGO based in the city of Varanasi (previously known as Benares), India. Established in 1990, MSEMVS's anti-trafficking work began in Uttar Pradesh in 1996. MSEMVS has also developed a strong focus on ending the practice of child labor in the communities where it has worked.

A core component of MSEMVS's work is to help residents establish Community Vigilance Committees (CVCs). This strategy is described by MSEMVS as a process through which groups of formerly bonded or forced laborers secure their freedom from oppressive employers or landlords by exercising collective power and by pressuring the local authority to enforce labor protection laws and socio-economic entitlements. MSEMVS's strategy focuses on building a movement among exploited community members to leverage the power and impact of collective action. Their work carefully targets the dalit hamlets (the most oppressed villages) that are geographically set apart from the main villages in this area, and where cases of bonded labor, child labor and trafficking tend to concentrate. Thanks to MSEMVS's organizing work, the established CVCs have been linked together in 14 district-level networks, some of which are now part of an overarching federation. The federation, highly active in Sant Ravidas Nagar district, has the collective power and skills to pressure the local government authority to address exploitative labor conditions. MSEMVS is also regularly engaged in direct intervention within the communities affected. This intervention has resulted in the rescue from situations of bondage or forced labor of approximately 65 men, women and children every month, and in the provision of follow-up reintegration support to facilitate adaptation to and security within the community.





MSEMVS believes that forced and bonded labor have been eradicated as a result of their work in most of the dalit hamlets within the Nyaya Panchayats of Bisapur and Giriyan. Additionally, according to MSEMVS, their interventions have led residents of these communities to experience significant improvements in their quality of life, notably with regard to living standards, political participation and effective agency. MSEMVS believes that over time, the CVCs in many of the target communities have matured, and have succeeded in reducing the prevalence of and vulnerability to forced and bonded labor within their communities. These improvements, according to MSEMVS, are a result of the CVCs' success in 1) increasing the target community's awareness of exploitative labor practices and human trafficking, 2) supporting residents to more effectively claim government services to which they are entitled (including birth registration, government-supported job opportunities, social security and pensions, housing assistance and access to health care), 3) promoting government delivery of fundamental economic and social rights within the affected communities (including establishing adequate schools and teachers, functional health clinics with trained staff and adequate sanitation facilities equipped with regularly available clean water) and 4) instituting infrastructural improvements including the construction and/or repair of roads and bridges.

In order to carefully target its intervention to areas and households with greatest need, and with an eye towards future evaluation, in 2011, MSEMVS carried out a baseline survey regarding labor and socioeconomic conditions within three Uttar Pradesh Nyaya Panchayat areas and they supplied these data to the FXB Center for the purposes of this evaluation.

# THE ROLE OF THE FXB CENTER AND MSEMVS

The Harvard FXB Center advances the rights and wellbeing of children, adolescents, youth and their families living in the most extreme circumstances worldwide. The Center adopts a rights-based approach to understand the constraints and obstacles faced by these marginalized populations, and to discern possibilities for release from oppressive situations and empowerment.<sup>3</sup> As the only university-wide human rights center at Harvard, the FXB Center draws on an interdisciplinary faculty that includes international law scholars, emergency physicians and biostatisticians. This expertise enables the center to execute complex action research projects that rely on sophisticated quantitative and qualitative research methodologies.

For this study, the FXB Center served as the lead organization responsible for producing an independent and rigorous assessment of MSEMVS's work on the eradication of bonded and forced labor within the targeted communities. To conduct the research, the FXB Center partnered with an Indian research organization, the Institute for Human Development (IHD), selected because of its extensive experience and excellent reputation as a sophisticated and reliable research institute. IHD provided critical technical input into the formulation and translation of the research instrument, and then proceeded to conduct all the field-level data collection and computer data entry.

Throughout the current study, MSEMVS graciously facilitated access to the targeted research villages. Because the impact of MSEMVS's work was the primary subject of the research, the FXB Center and its Indian partner IHD took great care to ensure that MSEMVS played no role in the data collection process itself and that its contribution to this project was strictly limited to facilitating IHD researchers' initial access to the research sites and populations.

## STUDY GOALS AND RATIONALE

This study examines the work conducted by MSEMVS between 2011 and 2014 in two Nyaya Panchayats in Uttar Pradesh, India: Bisapur and Giriyan. The research is intended to contribute to the scientific literature on interventions designed to eliminate exploitative labor conditions – notably forced and bonded labor. This project is significant because of the absence of studies that quantify the multifaceted nature of bonded and forced labor and document the effectiveness of eradication efforts.

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<sup>3</sup> "What We Do," FXB Center for Health and Human Rights, accessed October 9, 2015, <http://fxb.harvard.edu/what-we-do/>

The goal of this study is to provide an evidence-based assessment of the effectiveness of eradication strategies targeting exploitative labor conditions by means of large-scale yet focused interventions. In many parts of the world, including India, forced and bonded labor are viewed as intractable problems for which there are no direct solutions. Legal approaches both at the international and national level do not appear to have reduced the number of individuals subjected to such conditions.<sup>4</sup> Likewise, economic and social policies at both national and state levels in India have had little impact.<sup>5</sup> Evidence-based data on the successful strategies for eradicating entrenched labor exploitation has the potential to inform and strengthen advocacy and programming targeting these acknowledged human rights abuses.<sup>6</sup>

This study also provides an assessment of the concurrent social and economic benefits conferred upon households recently freed from labor exploitation. People freed from labor exploitation become able to enjoy fundamental human rights, such as the freedom from abuse and violence,<sup>7</sup> freedom of movement,<sup>8</sup> freedom of association,<sup>9</sup> the right to decent work,<sup>10</sup> the right to education,<sup>11</sup> the right to health<sup>12</sup> and the right to respect for human dignity.<sup>13</sup> This study collects data on several social and economic indicators to document the extent to which the surveyed households were able to enjoy these fundamental rights in addition to their new found freedom from forced and bonded labor.

We hope that this study contributes to the field of social and economic empowerment in several ways. It can be used to demonstrate, across a large number of study participants, how changes in exploitative labor practices have an impact on a broad range of other social and economic indicators. The study could also incentivize stakeholders in government, law, policy, NGOs and the philanthropic community to increase their strategic investment in the eradication of labor exploitation. Finally, we hope the study will encourage development agencies to broaden the scope of their investment to encompass elimination of forced and bonded labor as strategic social and economic development priorities.

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4 International Labour Organization, *Work in Freedom, A perspective plan to eliminate forced labour in India*, L. Mishra, WP.2 (Geneva, 2001), 10.

5 Isabelle Guérin, G Venkatasubramanian, S Kumar, "Debt Bondage and the Tricks of Capital," *Economic & Political Weekly* 50 (2015): 11, accessed October 9, 2015  
<http://www.epw.in/journal/2015/26-27/review-rural-affairs-review-issues/debt-bondage-and-tricks-capital.html>

6 *International Covenant on Civil and Political Rights (ICCPR), Article 8*

7 *ICCPR, Article 7*

8 *ICCPR, Article 12*

9 *ICCPR, Article 22*

10 *Universal Declaration of Human Rights (UDHR), Article 23*

11 *UDHR, Article 26*

12 *UDHR, Article 25*

13 *ICCPR, Article 10*

# METHODOLOGY

## STUDY DESIGN

The FXB Center adopted a mixed methods research design for this study. It collected both quantitative and qualitative data to measure the extent of the eradication of bonded labor, forced labor and human trafficking in the hamlets where a targeted intervention occurred, and to study the resulting socio-economic benefits. The study design identified three distinct cohorts based on MSEMVS's evaluation of the impact of their interventions: 1) hamlets that received the targeted intervention where the intervention was considered to be "mature" according to MSEMVS's list of benchmark achievements (the Full Intervention group; for example CVCs in these communities were capable of raising public awareness of labor issues, educating their community about civil rights and building local leaders); 2) hamlets that received the full targeted intervention, but where the intervention was not considered to be "mature" because a majority of benchmark achievements had not yet been met (the Partial Intervention group, where MSEMVS will continue its work); and 3) hamlets where limited and late MSEMVS intervention took place (the Comparison group). In the Comparison group, some interventions (advocacy, CVCs) took place in 2014, toward the end of the study period. The study sample comprised households in three Nyaya Panchayats: Bisapur, Giriyan and Mahuapur, the latter constituting the Comparison group.

The core of the research consisted of a quantitative survey of households within all three cohorts to compare those who received MSEMVS's intervention (full or partial) with those who did not (comparison). We also compared each intervention group to the Comparison group. For the baseline survey, all 1865 households in 21 villages (43 hamlets) were interviewed between July 2011 and September 2011. The MSEMVS intervention began at varying times for different hamlets within Bisapur and Giriyan, ranging from October 2011 to April 2012. Intervention start times in individual hamlets are shown in Appendix 1. The Full Intervention group (cohort 1) consisted of 1040 households in 25 hamlets (intervention started between Oct 2011 and Dec 2011); the Partial Intervention group (cohort 2) consisted of 257 households in 8 hamlets (intervention started between Nov 2011 and Apr 2012); and the Comparison group consisted of 568 households in 10 hamlets. Refer to Appendix 1 for an inventory of villages and hamlets in the baseline study.

For the endline survey, the FXB Center targeted 835 households for endline interviews. Returning to the same households as baseline, we randomly selected 645 households from cohorts 1 and 2. Randomization was achieved by using cluster-randomization by hamlet and balancing by district and hamlet size (with the exclusion of one unusually large hamlet). All households within the target hamlets were approached. For the Comparison group at endline, all 190 households in Mahuapur village (one of the five comparison group villages within Mahuapur Nyaya Panchayat, consisting of five hamlets) were targeted for re-interview. Refer to Appendix 1 for the inventory of which hamlets were targeted for endline interviews and information on random selection procedures.

The FXB Center collected both quantitative and qualitative data to measure the extent of the eradication of bonded labor, forced labor and human trafficking in the hamlets where a targeted intervention occurred, and to study the resulting socio-economic benefits.

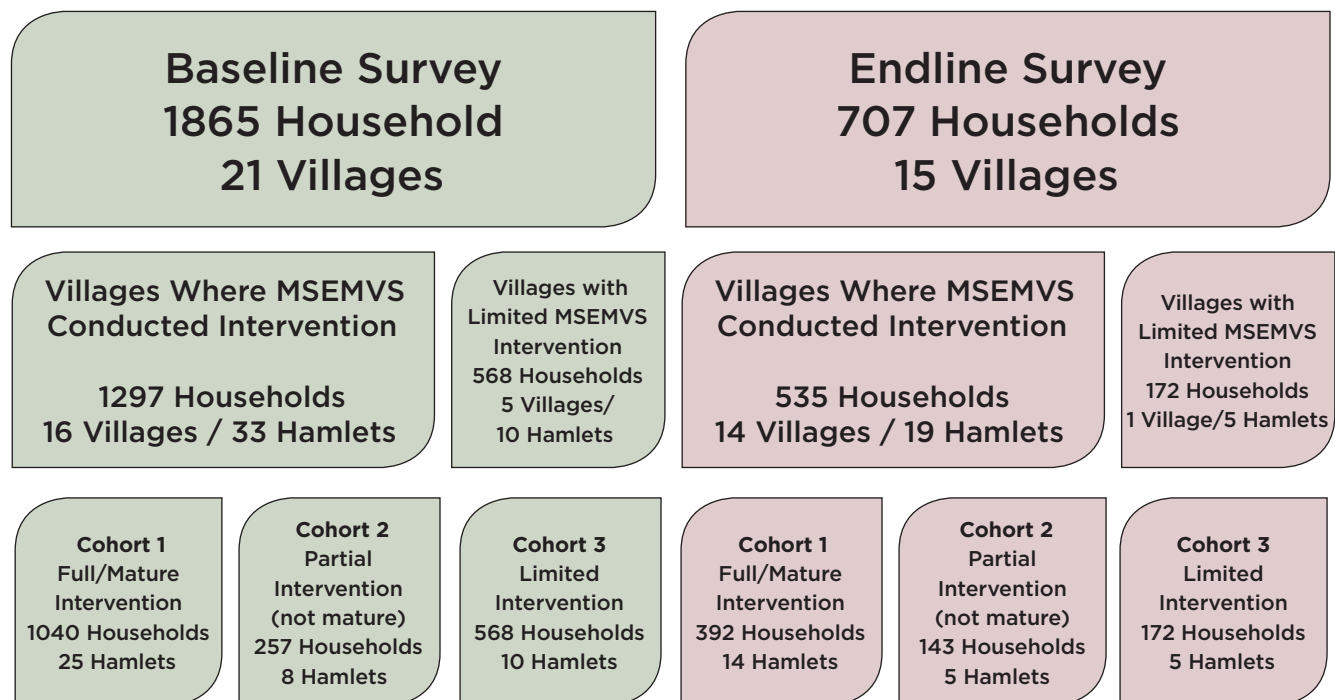
Endline structured (quantitative) interviews were translated into Hindi by IHD staff. The Harvard Institutional Review Board approved the research project. After field identification of target households, the endline interview was administered by eight trained research staff (seven men and one woman), two of whom were from the local area. The interviews took an average of 54 minutes, with time ranging from 25 minutes to one hour and 55 minutes. Generally the head of the household responded to the survey (91%); in 7% of interviews, spouses of the head of the household responded while for the remaining interviews, either children, children-in-law, or parents of the household head responded. At times spouses or other household members were present.

Endline data collection occurred between March 2015 and June 2015. Of the households targeted for the endline interviews, 707 (85%) were successfully interviewed. Of the 15% (128 households) that were not successfully re-interviewed at endline, information as to the reasons for drop out was available for 124 of the households and is described in Appendix 1. About half of these households moved away either to find work or as a result of the death of the head of household; the other half were not available when the endline survey was conducted. The percentage of households that dropped out was fairly evenly distributed across each study arm (about 10% in the Full Intervention and Comparison groups and 7% in the Partial Intervention group). No significant differences were found when comparing the households that dropped out of the study to those that were successfully re-interviewed at endline with regard to household wage, head of household age and other key demographic characteristics.

The endline survey instrument developed by the FXB Center addressed the extent of bonded labor, forced labor and human trafficking eradication in the respondents, along with several other aspects of their social and economic development. This endline instrument drew heavily on the questions used in the baseline survey conducted three years earlier, prior to MSEMVS's intervention (both instruments shown in Appendix 2). However the endline instrument modified the baseline questions by making them more specific in order to generate more detailed data on the labor environment, health and government assistance. In other cases, questions were added to probe these issues in more depth. Changes in prevalence and characteristics of labor exploitation and socio-economic indicators were assessed and a pre-post analysis was carried out to compare changes from baseline in the target outcomes. Given the brief duration of the study (i.e. 3.5 years), we did not attempt to isolate variables such as fluctuations in external factors that may have affected socio-economic conditions in the area and among the hamlets surveyed. We instead recognized them as a consistent backdrop that, if at all, would have contributed uniform socio-economic changes across the three study arms.

The three cohort design was adopted to investigate the intervention impact overall, and to confirm or contradict MSEMVS's assessment that their work was taking longer to mature and generate results in some hamlets than others. The comparison group was selected due to availability of baseline data, the limited nature of MSEMVS's work there and because we were told it was located far enough away geographically from the two intervention groups to avoid any spillover effects. Internal validity relied on assumptions regarding the equivalence of the three cohorts both at the time the intervention started and right through to completion of the endline survey. Additionally, the statistical modeling technique used can adjust for any underlying differences between the cohorts (as discussed more extensively below in the analytic section).

In addition to the quantitative survey, 3-5 individual households were randomly selected from approximately half of the targeted hamlets to participate in semi-structured qualitative interviews, which took about one and one half hours to administer. Key informant interviews and focus group discussions were also administered, taking roughly one and one half and two hours each, respectively. Key informant interviews included state and local government officials, health and education service providers, among others. In Mahuapur, the Comparison arm, three employers were also interviewed (a violation of the study protocol that was reported to the Harvard IRB). Focus group discussions were conducted with current members of the CVCs in a random selection of hamlets where the CVCs have been established. Appendices 3 and 4 include the semi-structured questionnaires and focus group and key informant interview guides.



## DATA ANALYSIS

Interview data were entered by IHD using standard quality assurance procedures. All quantitative data were analyzed using Stata and the statistical package R. Continuous outcomes were first examined using T-tests (for 2-group comparisons) or analyses of variance (for 3-group comparisons) and dichotomous variables were analyzed using Chi-Square tests of independence to examine the overall distribution between groups. Descriptive statistics are presented as stratified by Intervention Cohort: 1) Full Intervention, 2) Partial Intervention and 3) Comparison. In the statistical modeling, observations are clustered at the village level in order to preserve the most data possible and improve comparability between baseline and endline. For example, all observations at baseline and endline are included for villages that were selected at random to be included at endline (not just the individuals/households that were selected or interviewed during the endline survey). P-values, which indicate the level of significance, are reported with no adjustment for multiple testing. A two-sided significance level of  $p < .05$ , indicating a strong level of significance, was used for hypothesis testing.

To determine the intervention effect, generalized linear regression models are used for continuous outcomes and logistic regression models are used for dichotomous outcomes. These models apply a difference in difference (DID) approach, which is a statistical technique used in econometrics to mimic an experimental research design. This method improves the validity of the estimated treatment effect and is appropriate for the data collected in a study such as this which is quasi-experimental (given that the initial cohort assignments were not randomly selected, the intervention effect could have been subject to bias).

The DID modelling technique calculates the effect of a treatment (i.e. exposure to the intervention) on an outcome (i.e. the prevalence of bonded labor) by comparing the average change over time in the outcome variable for the treatment group to the average change over time for the comparison group. By doing so, this method adjusts for underlying differences between study groups, and is intended to eliminate some of the effect of selection bias. Household level covariates (such as the educational status of the head of household, the occupation of the head of household and caste) as well as village-level fixed effects (to adjust for any remaining differences inherent across villages) are included to control for any other underlying differences that could have confounded the results. Education is measured according to 4 categories: “Not Literate,” “Minimal,” “Literate” and “Very Literate” which were measured by self-assessment. Occupation was considered to be time-invariant across the study period, and included “stone breaking,” “agricultural,” “weaving,” “construction,” “brick kiln” and “other.” Caste categories included “Harijan,” “Mushar,” “Rajbhar” and “Saroj.”

Given that the data are primarily collected at the household level, most regression models presented in this study indicate the effect at the household level. The general regression model used for binary variables in the analysis is presented in Appendix 1. In the analysis of binary variables, the odds of the given event occurring are compared pairwise across cohorts, resulting in an “odds ratio,” which indicates if there are model effects. Odds ratios (OR) that are statistically different from one indicate that a particular group had a greater ( $OR > 1.0$ ) or less chance ( $OR < 1.0$ ) of the targeted event occurring compared to not-occurring. For analyses of continuous variables, we assess model effects through the estimates of the slopes of regression equation parameters. We also compute 95% confidence intervals around the odds ratio and slope estimates as a way of assessing the magnitude of the effects and whether the values are statistically significant. The 95% confidence interval is a good way of estimating an unknown parameter as it will include the true underlying value of our effect of interest with a probability of 95%. For example, if we repeated our study 100 times and constructed an OR for a particular effect with each new set of data, 95 of the 100 confidence intervals would include the true value of the OR.

Our analysis examined a variety of perspectives from key informant interviews and focus group discussions to ensure representation across districts and regions

## QUALITATIVE DATA

Qualitative data were collected from 33 randomly selected individual households who also completed the quantitative survey and the interviews were carried out using a semi-structured survey instrument (Appendix 3). Focus groups with between 12 and 18 participants were carried out with the CVCs in eight randomly selected communities (six in the Full Intervention and two in the Partial Intervention cohorts) using a separate research guide (Appendix 4). Finally, 10 key informants were interviewed, also using a research guide (Appendix 5); three each were from the Full Intervention (a child care provider, a government official, a ration-shop provider) and the Partial Intervention cohorts (a government official, a headmaster, a local health service provider) and 4 were from the Comparison group (one government worker and three employers, in particular one farmer and two brick kiln owners). Sampling details are presented in Appendix 1. All qualitative data were analyzed according to grounded theory<sup>14</sup> and examined for emergent themes within the various domains examined in this report, including employment, labor conditions and quality of life. Grounded theory does not superimpose hypotheses on the data. Rather it enables the researcher to identify themes by reviewing the data, coding key ideas generated in the qualitative interviews and finally organizing the collection of codes into categories. Our analysis examined a variety of perspectives from key informant interviews and focus group discussions to ensure representation across districts and regions. Our findings are incorporated in narrative form.

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14 According to Glaser and Strauss, “grounded theory” refers to the sociological research method of systematically obtaining and analyzing data to generate theory. (Barney G. Glaser and Anselm L. Strauss, *The Discovery of Grounded Theory: Strategies for Qualitative Research* (Chicago: Transaction Publishers, 2009), p. 1.)



# STATISTICAL METHODS

## I. ODDS RATIOS (OR)

The odds ratio is a way of assessing effect size; it indicates the relative probability of an outcome occurring vs. not occurring for two groups, for example an intervention group and a comparison group. As such, it reflects the relative association of the intervention with the outcome. Odds ratios (OR) that are statistically different from one indicate that a particular group had a greater (OR > 1.0) or reduced chance (OR < 1.0) of the targeted outcome occurring. So, for example, if the odds ratio is 4.0, it indicates the intervention group's odds is four times that of the comparison group (thus being more likely to occur). If the odds ratio is 0.5, it indicates the intervention group's odds is one half that of the comparison group (thus being less likely to occur). The statistical significance of an odds ratio is assessed via a confidence interval or p-value.

## II. 95% CONFIDENCE INTERVAL (CI)

The 95% confidence interval is a good way of estimating an unknown parameter (for example, a regression slope estimate or an odds ratio). It will include the true underlying value of the effect of interest with a probability of 95%. For example, if we repeated our study 100 times and constructed an OR for a particular effect with each new set of data, 95 of the 100 confidence intervals would include the true value of the OR. The 95% confidence interval around an OR can be used to “test” whether the value is 1.0 or less or greater than 1.0. If the lower limit of the 95% CI is greater than 1.0, then we conclude the OR is statistically significant and greater than 1.0. If the upper limit of the 95% CI is less than 1.0, then we conclude the OR is statistically significant and less than 1.0.

## III. STATISTICAL SIGNIFICANCE AND HYPOTHESIS TESTING

When we assess the difference between intervention and comparison groups, we often refer to statistical significance. Research questions are often framed in terms of whether the intervention is associated with improved outcomes. In order to answer such questions, we do a statistical hypothesis test. There is an underlying null hypothesis (often that two groups are the same) and an alternative hypothesis (for example, that the intervention improves certain outcomes). We collect data and then perform a statistical test (such as a t-test or chi-square test), which provides evidence for or against the null hypothesis. The value of the test statistic and its associated p-value helps us judge the evidence. The p-value indicates the probability of observing a test statistic under the null hypothesis. If this probability is very small, we reject the null hypothesis and accept the alternative. In our study, if there is less than a 5% chance of observing the data we collected under the null hypothesis ( $p < 0.05$ ), we conclude that the alternative hypothesis is true. We have several kinds of statistical tests in this study. For example, we compare baseline study arm characteristics for similarity using analysis of variance and chi-square tests. We compare intervention effects using odds ratios and regression slope estimates. 95% CIs can also be used as a means of hypothesis testing (see note above).

# DEMOGRAPHIC CHARACTERISTICS

## KEY FINDINGS

- **Nearly all households included in the study are severely deprived, characterized by a population that includes a majority of scheduled castes, low levels of literacy and extremely high levels of poverty.**
- **Some variation in occupation exists across study arms. Agriculture, weaving and employment in brick kilns tend to be the most common forms of employment.**
- **All three study arms are generally similar according to the demographic characteristics measured.**

A total of 9,115 individuals from 1,865 households were sampled at baseline across the three study arms. The distribution of participants in each of the three groups was as follows: 5,106 individuals from 1,040 households in the treatment group in which forced and bonded labor had, according to MSEMVS, been eradicated (referred to from this point on as “the Full Intervention group”), 1,277 individuals from 257 households in which forced labor, according to MSEMVS, had not yet been fully eradicated (referred to from this point on as “the Partial Intervention group”) and 2,732 individuals from 568 households in the Comparison group in which limited and late targeted intervention occurred. Baseline demographic characteristics are presented in Table 1 on the next page.

Overall, the distribution of individuals by participant sex is similar across study arms at baseline (ranging between 42.6% male to 46.6% male). Similarly, education levels are generally similar across study arms, with the vast majority of participants reporting themselves to be either illiterate or minimally literate. Some important differences exist with regard to participant occupation by treatment group. In the Full Intervention group, agricultural work (including domestic work) is the most common (27.0%), whereas it is less common in the Partial Intervention group (15.3%) and the Comparison group (13.6%). Weaving constitutes a large percentage of employment in all groups, with the highest percentage of individuals reporting weaving as their primary occupation in the Full Intervention group (25.3%). Employment in brick kilns is most common in the Partial Intervention group (15.3%), compared to only 6.8% in the Full Intervention group. Individuals reporting an occupation defined as “other” represent the largest percentage of employment type across all treatment groups.<sup>15</sup> The Comparison group had the highest percentage of individuals reporting “other” (54.2%), compared to 31.6% and 34.5% in the Full and Partial Intervention groups respectively. Occupations that were included in the other category include: free collection of goods, running small shops, cycle repairing, rickshaw pulling, raising pigs or cattle and street vending. The specific percentages of individuals engaged in these activities at baseline are unavailable.

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<sup>15</sup> Note: data do not exist for the “other” response at baseline to further disaggregate



**Table 1: Baseline Demographic Characteristics**

	Individual Level Variables by Cohort			
	Full Intervention	Partial Intervention	Comparison	p-value <sup>1</sup>
Number of Individuals	5106	1277	2732	
Mean Age (sd)	23.68 (17.47)	23.47 (17.42)	24.45 (17.94)	0.124
Sex (% male)	2380 (46.6)	543 (42.6)	1195 (43.8)	0.006
<b>Education Level (%)</b>				<0.001
Not Literate	1316 (43.9)	323 (41.7)	1043 (65.4)	
Minimal	1152 (38.5)	350 (45.2)	313 (19.6)	
Literate	367 (12.3)	71 (9.2)	194 (12.2)	
Very Literate	160 (5.3)	30 (3.9)	45 (2.8)	
<b>Marital Status (%)</b>				<0.001
Unmarried	2516 (49.9)	651 (51.4)	1324 (48.7)	
Married	2450 (48.6)	600 (47.4)	1326 (48.8)	
Divorced	13 (0.3)	3 (0.2)	2 (0.1)	
Widow	63 (1.2)	12 (0.9)	68 (2.5)	
<b>Occupation (%)</b>				<0.001
Stone breaking	18 (1.3)	7 (2.4)	8 (1.0)	
Agricultural	370 (27.0)	44 (15.3)	108 (13.6)	
Weaving	346 (25.3)	68 (23.7)	102 (12.9)	
Construction	125 (9.1)	25 (8.7)	90 (11.3)	
Brick kiln	78 (5.7)	44 (15.3)	54 (6.8)	
Other	433 (31.6)	99 (34.5)	430 (54.2)	
Mean Daily Wage in Rupees (sd)	78.82 (35.62)	78.43 (43.18)	83.21 (23.93)	0.060

1. P-values for continuous variables (wage and age) compare differences across the treatment groups and are calculated using t-tests. All other variables were calculated using chi-2 tests.

Significant differences exist with regard to self-reported daily wage across each group. The average daily wage in the Comparison group is the highest (83.21 rupees per day) compared to 78.82 rupees per day in the Full Intervention group and 78.43 rupees per day in the Partial Intervention group. To put the average daily earnings observed into local context, 200 rupees per day is considered to be minimum wage; thus, nearly all households fall dramatically below that level.<sup>16</sup>

Given that the follow up study was only conducted in a selected number of households that were interviewed at baseline, a comparison was made to assess whether there was any evidence of selection bias between the entire study population at baseline and the smaller sample that was randomly selected to be interviewed during follow-up. There were no statistically significant differences on any baseline demographic characteristics found between the entire study population at baseline and the smaller sample that was selected (data not shown).

At endline, a total of 3,869 individuals residing in 707 households were sampled, consisting of 2,146 individuals from 392 households in the Full Intervention group, 799 individuals from 143 households in the Partial Intervention group and 924 individuals from 172 households in the Comparison group. Demographic characteristics at endline are presented in Table 2. Responses indicate that the study arms are fairly similar with regard to their demographic profile, although individuals in the Full Intervention group seem to have slightly higher wages overall. Ages of respondents were measured in the same manner between baseline and endline, and are roughly similar between the two study assessment periods. There are some differences with regard to response categories measuring education levels, occupation and marital status between baseline and endline, but overall, both study periods seem to yield similar results. The similarity between baseline and endline indicates that there is unlikely to be any bias between the smaller sample that was randomly selected at endline compared to the larger sample (census of participating hamlets) at baseline, and that random selection was executed properly to eliminate selection bias.

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<sup>16</sup> “Minimum Wages in Uttar Pradesh Revisited,” Labour Law Reporter, accessed October 9, 2015, <http://www.labourlawreporter.com/minimum-wages-in-uttar-pradesh-revised/>

**Table 2: Endline Demographic Characteristics**

	Individual Level Variables by Cohort <sup>2</sup>			
	Full Intervention	Partial Intervention	Comparison	p-value <sup>3</sup>
Number of Individuals	2146	799	924	
Mean Age (SD)	23.88 (18.2)	23.64 (17.8)	23.80 (18.3)	0.947
Sex (% Male)	1138 (53.03)	435 (54.44)	496 (53.68)	0.783
<b>Educational Level (%)</b>				<0.001
No education	757 (40.2)	285 (41.0)	371 (46.5)	
Up to 1st standard	238 (12.6)	76 (10.9)	48 (6.0)	
Up to 3rd standard	209 (11.1)	57 (8.2)	79 (9.9)	
Up to 5th standard	240 (12.8)	73 (10.5)	97 (12.2)	
Up to 8th standard	226 (12.0)	87 (12.5)	79 (9.9)	
Up to 10th standard	98 (5.2)	59 (8.5)	54 (6.8)	
Up to 12th Standard	66 (3.5)	30 (4.3)	42 (5.3)	
Bachelor's degree	31 (1.6)	25 (3.6)	19 (2.4)	
Masters degree	12 (0.6)	3 (0.4)	6 (0.8)	
Vocational studies	2 (0.1)	0 (0.0)	2 (0.3)	
Others	3 (0.2)	0 (0.0)	0 (0.0)	
<b>Marital Status (%)</b>				0.594
Unmarried	1150 (53.6)	423 (52.9)	487 (52.7)	
Married	942 (43.9)	365 (45.7)	415 (44.9)	
Widowed	52 (2.4)	11 (1.4)	21 (2.3)	
Divorced	1 (0.0)	0 (0.0)	0 (0.0)	
Separated	1 (0.0)	0 (0.0)	0 (0.0)	
Deserted	0 (0.0)	0 (0.0)	1 (0.1)	
<b>Occupation (%)</b>				<0.001
Agriculture	347 (32.01)	118 (29.14)	147 (32.45)	
Construction	156 (14.39)	53 (13.09)	84 (18.54)	
Brick Kiln	210 (18.54)	64 (15.80)	50 (11.04)	
Government Sector	125 (11.53)	64 (15.80)	45 (9.93)	
Domestic Work	222 (20.48)	84 (20.74)	119 (26.27)	
Other	33 (3.04)	22 (5.43)	8 (1.77)	
<b>Mean Daily Wage in Rupees (sd)</b>	<b>186.92 (390.32)</b>	<b>150.58 (88.78)</b>	<b>145.60 (93.82)</b>	<b>0.014</b>

2. Percentages are calculated after excluding missing values.

3. P-values for continuous variables (wage and age) compare differences across the treatment groups and are calculated using one-way test for independence.



## LABOR, EMPLOYMENT AND DEBT CONDITIONS

### KEY FINDINGS

- Labor conditions improved across all study arms during the course of the study.
- The intervention had a strong effect on reducing indebtedness. As a result of the intervention, the odds of a household having any amount of debt, the odds that a household would hold extreme debt (10,000 rupees or more) and the odds that a household reported taking on debt as the result of a medical expenditure decreased significantly.

As the main goal of the intervention is to eradicate forced and bonded labor, a major component of this analysis focuses on the abusive labor conditions that relate to these outcomes. Victims of forced and bonded labor have their freedom denied and are used, controlled or exploited by another person for profit or other benefit. Forced labor relates to an element of coercion in the employer-employee relationship, while debt bondage is defined as the mortgaging of labor where there is an involvement of either an advance wage or a loan against which an individual is rendering labor service to the creditor.<sup>17</sup>

<sup>17</sup> International Labour Organization, *Work in Freedom, Bonded Labour in India: Its Incidence and Pattern*, Ravi S. Srivastava, WP 43 (Geneva, 2005), 1-4.

This study examines the exploitative work conditions associated with forced and bonded labor by focusing on variables related to these conditions. These include whether individuals report being forced to work to pay off debt, being unable to change employers or to move, being unable to refuse to work, and whether they make under the minimum daily wage. Given the overall level of poverty in this area of India and the complicated structure of family, community and employee dynamics, this study examines whether these individual indicators associated with forced and bonded labor improved, rather than seeking to impose a strict definition on the conditions observed.

Overall, labor conditions appeared to improve across all study arms between baseline and endline. For example, at baseline between 16% and 17% of households in the Full and Partial Intervention groups reported that someone in the household was required to work to repay a debt. Only 1.9% of households indicated that this was the case at baseline in the Comparison Group. At endline, there are large shifts in this percentage across all groups, especially the intervention groups: there is a decrease to only 1.2% of households in the Full Intervention Group and 0.0% of households in the Partial Intervention Group, while, on the other hand, this percentage increases slightly to 5.7% in the Comparison Group. While this may provide some indication that requirements to work off debt through labor have decreased in the areas where the intervention took place, these results must be interpreted with caution given several inconsistencies between the administration of the study between baseline and endline.<sup>18</sup>

At baseline, the proportion of households in which an individual reports the possibility of being subjected to physical violence, the loss of a home, or threats for refusing to work or trying to change employers is fairly high across all study arms. For example, households in which a member stated that he or she would be subjected to physical violence for refusing to work range between 35.6% in the Full Intervention group and 44.3% in the Comparison group. The data indicate that these conditions changed dramatically over the course of the study period. At endline, very few households in any group reported any negative consequences as a result of refusing to work or changing employer. These figures are provided in Table 3.

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<sup>18</sup> At baseline, only one question was used to assess whether anyone in the household was forced to work to pay off a debt. At endline, two questions were combined to produce a more precise but similar inquiry. At endline the head of household was asked about work to pay off debt. Due to an error in the way the survey was administered, it is not clear whether the head of households' answers refer only to themselves or to other household members.

**Table 3: Work Refusal and Forced Work Before and After Intervention**

	Baseline <sup>4</sup>			Endline <sup>5</sup>			p-value <sup>6</sup>
	Full Intervention	Partial Intervention	Comparison	Full Intervention	Partial Intervention	Comparison	
Number of Households	1040	257	568	392	143	172	
Someone in household required to work as a result of borrowing money (% yes)	174 (16.7)	41 (16.0)	11 (1.9)	4 (1.2)	0 (0.0)	9 (5.7)	0.001
<b>What would happen if individual owing debt refused to work? (%)</b>							<0.001
Physical Violence	281 (35.6)	71 (35.3)	151 (44.3)	0 (0.0)	1 (0.9)	0 (0.0)	
Lose Home	169 (21.4)	38 (18.9)	101 (29.6)	0 (0.0)	0 (0.0)	0 (0.0)	
Threats	198 (25.1)	57 (28.4)	66 (19.4)	31 (10.3)	2 (1.9)	3 (2.1)	
Nothing	22 (2.8)	4 (2.0)	0 (0.0)	270 (89.4)	104 (97.2)	137 (97.9)	
Other	118 (15.0)	31 (15.4)	23 (6.7)	1 (0.3)	0 (0.0)	0 (0.0)	
<b>What would happen if individual owing debt decided to move away or work for someone else? (%)</b>							<0.001
Physical Violence	92 (25.6)	44 (28.8)	122 (36.1)	0 (0.0)	0 (0.0)	0 (0.0)	
Lose Home	91 (25.3)	28 (18.3)	128 (37.9)	0 (0.0)	0 (0.0)	0 (0.0)	
Threats	152 (42.2)	57 (37.3)	70 (20.7)	30 (9.9)	2 (1.9)	3 (2.1)	
Nothing	21 (5.8)	24 (15.7)	3 (0.9)	271 (89.7)	105 (98.1)	135 (96.4)	
Other	4 (1.1)	0 (0.0)	15 (4.4)	1 (0.3)	0 (0.0)	2 (1.4)	

4. Percentages are calculated after excluding missing values.

5. Percentages are calculated after excluding missing values.

6. P-values were calculated using chi-2 tests and compared the distribution of each variable between baseline and endline.



After adjusting for underlying differences between the treatment groups (including caste, village and the educational level and occupation of the head of the household), the intervention did not have a significant effect on the probability that someone in a household would be subjected to physical violence, the loss of their home, or threats if they refused to work ( $p < 0.99$ ) or if they decided to change employers ( $p < 0.99$ ). Because the data indicate that labor conditions improved across all three study arms, the intervention did not appear to have a significant effect.

The data indicate that the risk of exposure to labor-related threats of violence decreased dramatically across all three study arms. The fact that MSEMVS intervened in all 3 study arms, including the Comparison group, when issues of violence came to light is probably the reason for this welcome across the board change. They could also be the result of state wide labor condition improvement trends affecting the entire study area. Alternatively there could have been spillover effects from the MSEMVS intervention and other nearby interventions that facilitated the labor condition improvements in the Comparison group. Or again there might have been other reasons for these changes. For example, in an effort to secure more precise and comprehensive labor data, the endline survey questions were slightly different from those asked at baseline. Perhaps the endline survey did not elicit exactly the same responses as at baseline. Similarly, there could have been issues of trust that led respondents to feel less comfortable revealing sensitive information to the endline researchers compared to those who conducted the baseline.

This study also attempted to ascertain whether any member of a household was trafficked. However, limitations in the nature of the survey questions preclude us from drawing conclusions about actual trafficking. At baseline, the question about trafficking asked respondents whether any close family member or neighbor had been taken away from home to work and prevented from returning. Because this information depended, by definition, on second hand knowledge or hearsay rather than personal experience, it cannot be construed as an objective measure of individual trafficking. 21% of the Full Intervention, 26% of the Partial Intervention and 12% of the Comparison group households gave a positive response to this question at baseline. In the quantitative interviews at endline, no one in any of the study arms indicated that a member of their household had been taken away for work and not been allowed to return. Interestingly, in individual interviews some respondents mentioned trafficking as a problem, such as this participant in the Full Intervention group while describing MSEMVS's work:

*“Some of the villagers were rescued from the rice mill who were not allowed to come home.”* Respondent from Daripur (Full Intervention group)

Others merely talked about the importance of migration as an option in securing work, without specific reference to trafficking or other forms of coercion.

*“The situation is similar to what it was earlier. There is no work for the whole year. That is why people migrate to different places outside the state in search of better work and opportunities.” Respondent from Mahuapur (Comparison group)*

The fact that the endline quantitative data reveal no evidence for trafficking may reflect the respondents’ hesitation in providing frank answers or difficulty in understanding exactly what was being asked. The conversations with respondents during the qualitative interviews may have elicited a greater sense of trust.

The qualitative data provide some insight into the labor environment in these communities. In their interviews, some respondents from the Comparison group described a dire situation. One respondent said:

*“Physical violence, misbehavior, deduction of wages when work is not up to the mark (when bricks are spoilt) are all situations and troubles that [we] have to tolerate and face.” Respondent from Mahuapur (Comparison group)*

According to another respondent from the Comparison group, awareness of individual rights was increasing, and had had an impact on reducing exploitative and abusive conditions.

*“It is not easy now to exploit or to physically harass anyone at the workplace. Earlier such incidents were most common but not now. People have become more aware of their rights and legal provisions.” Respondent from Mahuapur (Comparison group)*

From responses in the areas where MSEMVS intervened (the Full Intervention group and the Partial Intervention group), it appeared that MSEMVS had had a very positive impact on labor conditions. Community members highlighted improvements that had occurred since MSEMVS began their work, and nearly all respondents indicated that forced and bonded labor were a thing of the past in their community. Many stated that whereas in the past employers used to threaten, beat and verbally abuse them, these abuses had come to an end with MSEMVS’s involvement. The interviews suggested that MSEMVS’s work empowering villagers and creating a sense of collective efficacy had been fundamental to these improvements.

*“Incidences of threatening or frightening us used to occur, but things have changed since the time the organization started working here.” Respondent from Daripur (Full Intervention group)*

*“[We] were ill-treated at the brick kilns. We had to work for long hours for a very low wage. Houses were not provided. They hit and abused us. We were not taken to the doctor when we fell ill. It became difficult to breathe. The organization solved all these problems.” Respondent from Domanpur (Partial Intervention group)*

*“We were ill-treated at the brick kilns. We had to work for long hours for a very low wage. Houses were not provided. They hit and abused us. We were not taken to the doctor when we fell ill. It became difficult to breathe. The organization solved all these problems.”*

*“[Violence] used to happen earlier. But now no one can threaten us or do any harm as well as we all are aware of our rights. We can also raise our voices.” Respondent from Baduana (Full Intervention group)*

*“Violence used to happen earlier. But now no one can threaten us or do any harm as well as we all are aware of our rights. We can also raise our voices.”*

Improvements in wages and debt reduction emerge across all of the groups in the study (Table 4). In particular, mean daily wages increased in all three groups, with the greatest change in payments occurring in the Full Intervention cohort. At baseline, the mean wage of the highest earner in the household in the Full Intervention group was 82.9 (sd 35.2) rupees per day, compared to 85.7 (sd 44.11) rupees per day in the Partial Intervention group and 87.9 (sd 21.6) rupees per day in the Comparison group. At endline, by contrast, these groups made 209.4 (sd 110.6), 196.5 (sd 111.4) and 184.7 (sd 127.5), respectively. An in-depth examination of the highest wage earner in each household at baseline and endline reveals a statistically significant increase in daily wages by approximately 35 rupees per day ( $p < 0.001$ ; 95% CI: 15.4, 56.3) over the intervention period. An increase of 35 rupees per day represents almost a 20% increase in salary for those making minimum wage (200 rupees per day)—a very substantial increase.

Overall, the percentage of households reporting current debt decreased and the percentage of households with at least one working member reported to be making under minimum wage (defined by Indian law as making less than 200 rupees per day)<sup>19</sup> also decreased. Despite this overall decrease in numbers of households in debt, the data suggest that the level of indebtedness increased for the families who were in debt. Again, this pattern is reflected in all study groups. Between baseline and endline, the percentage of indebted households across all three study arms owing more than 10,000 rupees increased from 29.2% to 75.7%. The comparison group showed the greatest increase in the amounts owed by indebted households.

Further investigation of these trends across the study arms suggests that the intervention had a strong and significant effect on reducing the odds of a household (a) having any amount of debt, (b) holding extreme debt (10,000 rupees or more), or (c) taking on debt as the result of a medical expenditure (statistical models are provided in Appendix 1). Figure 1 summarizes the odds ratios<sup>20</sup> estimating the effect of the intervention after adjusting for the education level of the head of household, the reported occupation of the head of household and family caste. Households that were exposed to the intervention (the Full Intervention and the Partial Intervention groups combined) had 0.21 times the odds (95% CI: 0.09, 0.49;  $p < 0.001$ ) of being in debt, 0.22 times the odds (95% CI: 0.09, 0.49;  $p < 0.001$ ) of having debt greater than 10,000 rupees and 0.14 times the odds (95% CI: 0.06, 0.32;  $p < 0.001$ ) of having debt resulting from medical care as a household in the Comparison group. In other words, households receiving the intervention were less likely to have debt, less likely to have large debt (over 10,000 rupees) and were less likely to have debt resulting from medical care,

19 “Minimum Wages in Uttar Pradesh Revisited.”

20 E.g. the probability that a household will report, for example, being in debt given that they experienced the intervention, compared to what they would report had they not experienced it.

**Table 4: Wages and Debt**

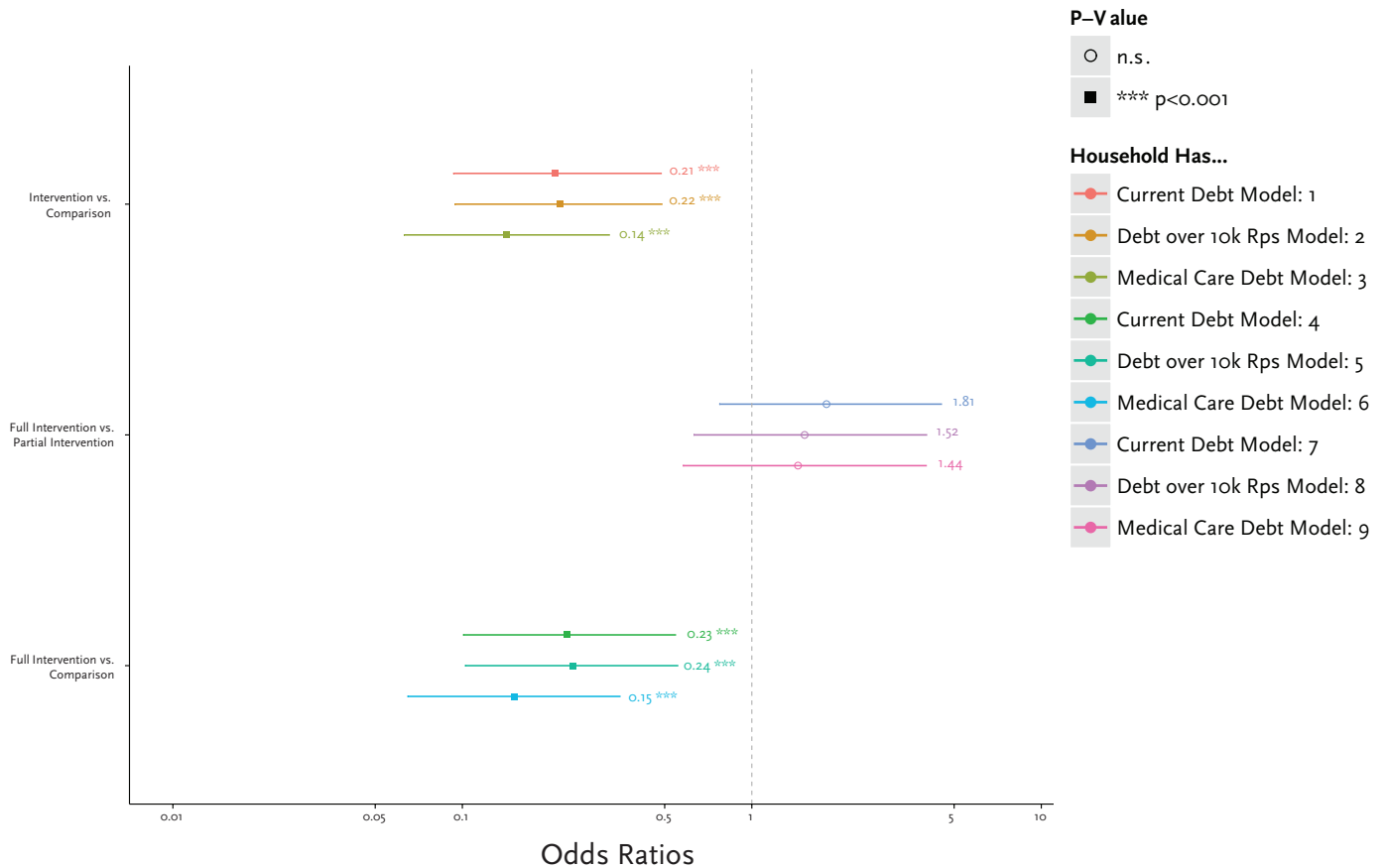
	Baseline			Endline			p-value
	Full Intervention	Partial Intervention	Comparison	Full Intervention	Partial Intervention	Comparison	
Number of Households	1040	257	568	392	143	172	
Household currently holds debt (% yes)	626 (84.8)	147 (83.1)	190 (76.5)	84 (21.4)	27 (18.9)	51 (29.7)	<0.001
<b>Total Amount of Debt, rps (%)</b>							<0.001
less than 1000	30 (4.8)	10 (6.8)	5 (2.6)	3 (4.1)	0 (0.0)	2 (5.4)	
1000-5000	188 (30.1)	37 (25.2)	52 (27.4)	12 (16.2)	1 (4.3)	5 (13.5)	
5001-10000	215 (34.4)	41 (27.9)	68 (35.8)	16 (21.6)	4 (17.4)	2 (5.4)	
10000+	192 (30.7)	59 (40.1)	65 (34.2)	43 (58.1)	18 (78.3)	28 (75.7)	
<b>Reason for Debt (%)</b>							<0.001
Medical Care	368 (59.8)	110 (74.8)	99 (52.1)	36 (42.9)	12 (44.4)	28 (54.9)	
Home Repair	38 (6.2)	2 (1.4)	20 (10.5)	3 (3.6)	0 (0.0)	1 (2.0)	
Food	29 (4.7)	3 (2.0)	14 (7.4)	6 (7.1)	1 (3.7)	1 (2.0)	
Business Materials	14 (2.3)	2 (1.4)	14 (7.4)	3 (3.6)	2 (7.4)	2 (3.9)	
Equipment/Assets	3 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	
To live on land	7 (1.1)	1 (0.7)	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	
Family Marriage	122 (19.8)	27 (18.4)	30 (15.8)	29 (34.5)	11 (40.7)	13 (25.5)	
Family Funeral	10 (1.6)	2 (1.4)	4 (2.1)	3 (3.6)	0 (0.0)	2 (3.9)	
Other	24 (3.9)	0 (0.0)	8 (4.2)	4 (4.8)	1 (3.7)	4 (7.8)	
<b>Source of Loan</b>							<0.001
Local Moneylender	26(41.6)	43 (29.8)	70 (36.8)	11 (13.10)	5 (18.5)	18 (35.2)	
Neighbors, Friends, Relatives	122 (19.5)	33 ( 22.9)	26 ( 13.7)	58 (69.1)	15 (55.6)	5 (29.4)	
Landowner or Employer	223 (35.6)	59 (40.9)	85 (44.7)	11 (13.1)	5 (18.5)	13 (25.5)	
Other (including self-help group and bank)	19 (3.0)	9 (6.3)	9 (4.7)	4 (4.8)	2 (7.41)	5 (9.8)	<0.001
<b>Is there Interest paid on the Debt (%)</b>							
yes	583 (76.5)	136 (76.8)	190 (57.8)	34 (40.5)	25 (92.6)	37 (72.5)	
no	175 (23.0)	41 (23.2)	76 (23.1)	50 (59.5)	2 (7.4)	14 (27.5)	
don't know	4 (0.5)	0 (0.0)	63 (19.1)	0 (0.0)	0 (0.0)	0 (0.0)	
Mean Wage of Highest Wage Earner in Household (rps)	82.9(35.2)	85.67 (43.11)	87.9 (21.6)	209.44 (110.6)	196.5(111.4)	184.7 (127.5)	
Individual in Household makes below Minimum Wage (200 rps per day; % yes)	599 (57.6)	149 (57.9)	380 (66.9)	143(43.5)	98 (50.0)	100 (58.8)	

7. P-values were calculated using chi-2 tests and compared the distribution of each variable between baseline and endline.

compared to the Comparison group. The same pattern of significance is preserved when comparing only the Full Intervention group with the Comparison group. There is no significant difference comparing the Full Intervention group with the Partial Intervention group. While the intervention had a strong effect on debt reduction, the intervention did not have an effect on decreasing the number of households with a member reporting less than minimum wage. Since data were collected at the household level it is possible that the number of *individuals* who made less than minimum wage decreased as a result of the intervention, but that the number of *households* in which at least one member made less than the minimum wage did not change significantly.

The qualitative interviews provide important details about wage levels that support the quantitative evidence of significant absolute wage increases. In the Comparison group, many respondents indicated that they still received a very low wage and that they were punished for demanding higher wages by being fired.

**Figure 1: Summary of Intervention Effect on Wages and Debt**



*“When [we] raise [our] voice and demand a hike in wages from the farmer-employers, they retaliate by hiring laborers from other nearby villages who are ready to work at lower wages. The helplessness and survival needs prevent workers from unification/organization.”*

Respondent from Mahuapur (Comparison group)

Respondents in the areas served by MSEMVS were aware of their right to fair wages and their power to demand wage increases through labor organizing. Nearly all respondents indicated that the wages they received were adequate. Again, MSEMVS’s focus on community organization and empowerment appears to have played a vital role in improving the respondents’ livelihoods.

*“The organization has told us how much wage we deserve. They told us to not work more than 8 hours. Nobody ill-treats us now.”* Respondent from Bisapur (Full Intervention group)

*“If we don’t get a good wage we refuse to work. We get to eat good quality food now. We have become more independent.”* Respondent from Darpur (Full Intervention group)

Medical care and marriage are the most common reasons for debt both at baseline and endline across all study arms; however, the data indicate notable fluctuation. After combining both the Full and Partial Intervention groups, a smaller proportion of families report being in debt for reasons associated with medical care at endline than did at baseline, while the percentage of families indicating medical care as the reason for their debt increased slightly in the Comparison group over the study period. Interestingly, the percentage of families that report being in debt as the result of a marriage increased between baseline and endline across all groups. The increase in debt related to marriage may be attributable to an effect of seasonality on the timing of data collection, although this is unknown. Among the households with the greatest amount of debt, medical expenses and family marriage are still the most important reasons for taking on debt. Of all the households included in the survey with high debt (over 10,000 rupees), 46% reported the debt was incurred for medical expenses and 40% reported that it was incurred as a result of a family marriage.

At baseline, local moneylenders and landowners/employers were the largest source of loans (38.2% and 38%, respectively). Neighbors, friends and relatives were the next most common source (19.8%), followed by “other” (3.9%). At endline, neighbors, friends and relatives were by far the most common source of loans (57.9%). Landowners and moneylenders both reduced in importance to 15.8% and 19.1%, respectively. Banks and self-help groups were added to the possible responses during the endline survey, among other changes in possible response categories, which may account for some of the shifts in the lender categories observed over time. While the changes in the survey in response categories for this question would render baseline to endline comparisons invalid across groups, a comparison between lenders at the time of follow up

reveals significant differences across groups. After adjusting for demographic characteristics, at endline only, the Full Intervention group had 9 times the odds of reporting having received a loan from a friend, neighbor, or relative, ( $p < 0.0001$ ; 95% CI: 5.1, 16.3) (regression not shown) and 0.2 times the odds of reporting a moneylender as the source of a loan ( $p < 0.0001$ ; 95% CI: 0.1, 0.5) when compared to the Partial Intervention group and the Comparison group. While these findings cannot be interpreted as being causally related to the intervention, it shows that the Full Intervention group at endline has improved lending sources compared to the other two groups.

The probability that a household reported having to pay interest on a loan decreased at a statistically significant level between baseline and endline in the Full Intervention group (from 76.5% to 40.5%). After adjusting for baseline differences, household education, occupation and caste, households in the Full Intervention group had 0.3 times the odds ( $p < 0.02$ ) of paying interest on a loan as a result of the intervention (regression not shown). However the probability of a household reporting having to pay interest on a loan increased in the Partial Intervention group (from 76.8% to 92.6%) and in the Comparison group (from 57.8% to 72.5%).

The qualitative data yield some interesting insights into lending practices at endline. In the Comparison group, most respondents describe difficulties in getting a loan. Many describe a situation in which they first go to a family member or friend. If that person cannot lend them the money, they mortgage items at a 5% interest rate through a moneylender or large-scale farmer. As explained by one villager in the Comparison group:

*“First [we] try to get money without any interest from [our] near ones. If [we] are not able to get from relative or friends then take loan from moneylenders or big farmers by mortgaging some of [my] assets, which they get at 5% monthly interest rate. However, for this [we] have to work hard and plead, only after that the loan is made available.”*

Respondent from Mahuapur (Comparison group)

Additionally, one respondent in the Comparison group indicated that employers were still engaged in exploitative lending practices and bonded labor.

*“Except Brick Kiln owner no other person provides loan or advance. The owner does not take interest but by working in his Brick Kiln one can pay back the loan or advance. The owner does not allow the worker to leave until the loan amount is over.”* Respondent from Mahuapur (Comparison group)

*“Some family members and other community members work in Brick Kiln. They take 5000-10000 Rs advance from employer. After taking advance they cannot refuse for work and not even leave the work in the middle otherwise employer forcefully brings them back other wise they are made to pay interest on the advance amount.”* Respondent from Mahuapur (Comparison group)

*“Except Brick Kiln owner no other person provides loan or advance. The owner does not take interest but by working in his Brick Kiln one can pay back the loan or advance. The owner does not allow the worker to leave until the loan amount is over.”*

By contrast with these Comparison group members, respondents from both intervention groups described a very different situation. The majority indicated that they were able to easily borrow money from family members or neighbors. Failing that, they could get a loan from the village Self Help Group (SHG) rather than having to rely on a moneylender, as they had done in the past.

*“Earlier we used to borrow money from moneylenders but now we borrow it from the SHG.”* Respondent from Domanpur (Partial Intervention group)

*“We save money through the SHG and in case of emergency we take loan at a low interest rate (rs.2 per hundred rupees).”* Respondent from Domanpur (Partial Intervention group)

Others indicated that even when they did need to go to a moneylender or to their employer, there was no longer any exploitation. One respondent said that the interest rate paid to the moneylender was 3% (compared to the 5% rate mentioned by the Comparison group).

*“I spin carpets. If needed, I borrow money from the employer. After finishing the work, I return the money back. There is no exploitation from the employer.”* Respondent from Baduana (Full Intervention group)

Finally, at endline, households were asked to give an estimated value for their annual household income and their monthly savings. Results are presented in Table 5. Annual earnings are fairly similar across the study arms, with the Full Intervention group reporting a slightly higher annual income than the other two study arms. The same trend is observed with regard to monthly savings. No significant differences were found between study arms after adjusting for household caste as well as the head of the household’s educational level and occupation. Additionally, no significant differences in income or savings were observed by caste, occupation or educational level.

*“Earlier we used to borrow money from moneylenders but now we borrow it from the Self Help Group.”*

*“We save money through the Self Help Group and in case of emergency we take loan at a low interest rate.”*

**Table 5: Mean Household Monthly Savings and Annual Income**

	Endline			p-value <sup>6</sup>
	Full Intervention	Partial Intervention	Comparison	
Number of Households	392	143	172	
Annual Household Income (mean (sd))	43904.44 (31377.02)	42371.82 (25833.81)	42781.40 (35927.76)	0.855
Monthly Household Savings (mean (sd))	478.80 (1583.95)	405.33 (727.52)	310.10 (366.10)	0.501

6. P-values were calculated using analysis of variance to compare differences across treatment groups



# STATUS OF CHILDREN

## KEY FINDINGS

- **Birth registration has improved significantly over time across all study groups.**
- **Child immunization rates are high across all study arms.**
- **The data collected on child marriage and child labor are inconclusive.**

Given the harmful conditions children are often subjected to in an environment where poverty and exploitative labor conditions are pervasive, MSEMVS emphasizes reducing child labor as part of their intervention. This study examined a number of variables related to child rights, including child marriage and whether children were reported to be in full-time school and/or working. The definition of child marriage used in this study is consistent with Indian law. According to this law, child marriage is prohibited when one of the contracting parties is a child, defined separately for males and females. For males, a child is a person who has not completed 21 years of age. For females, a child is a person who has not completed 18 years of age.<sup>21</sup>

The definitions used to examine children's participation in education and child labor are also based on Indian law. According to the Right of Children to Free and Compulsory Education Act, 2009, any child under the age of 15 has the right to receive free education. For this reason, this study focuses on examining child school enrollment status for children under the age of 15. The definition of child labor is complicated and depends not only on a child's age, but on the type of work he or she is engaged in. Because of the complexity of this definition, this study is unable to assess the existence of child labor. However, as children in India are entitled to education until the age of 15, this study focuses on the prevalence of children under the age of 15 who are not in school and who are reported to be working, as this population would represent the most disadvantaged and vulnerable.

Among girls, at both baseline and endline, child marriage is uncommon in any of the study groups. At baseline, the data collected indicate that the percentages of girls under 15 who are in school are 84.26% in the Full Intervention group, 86.18% in the Partial Intervention group and 76.8% in the Comparison group. Additionally, 7.2% of girls under 15 are engaged in work outside the home in the Full Intervention group, compared with 6.3% in the Partial Intervention group and 11.7% in the Comparison group (Table 6). At endline, the percentage of girls reported to be in full-time school remains similar to baseline with between 68.3% and 83.5% attending school, while the percentage of girls who are not in school and reported to be working outside the home exhibits a very small decrease during this time period for each study arm. No statistically significant impact of the intervention was found in the adjusted regression analyses comparing baseline and endline.

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<sup>21</sup> The Prohibition of Child Marriage Act, 2006. Articles 2(a) and 2(b).

Among boys, similar trends in rates of child marriage, school enrollment status and rates of children working were reported as compared to girls (Table 7). While child marriage was slightly more common among boys at baseline ranging between 3.42% and 4.2% (defined as marriage under the age of 22 for boys rather than the age of 19 for girls), according to the data collected, child marriage is very low at endline ranging between 0.8% and 2.6%. At baseline, 81.8% in the Full Intervention group, 84.68% in the Partial Intervention group and 75.1% in the Comparison group, were reported to be attending school. At endline, this percentage remains similar, if not decreasing slightly and hovers around 66.1-88.4% across all study arms. Between 7.5% and 12.2% of school-age boys were working at baseline, while at endline, this percentage decreases for each study arm to between 1.3% and 4.2%. No statistically significant impact of the intervention was found in the adjusted regression analyses comparing baseline and endline.

In the qualitative data, it appears that in all groups, many respondents recognized the value of education and have indicated that norms around education are changing. One respondent from the Comparison group describes that local organizations have emphasized the importance of education, which may partially explain the quantitative data findings.

*“To educate children is must, due to personal awareness and government efforts a large number of children have started going to school over the years. [I] know now by educating their children their standard of living may be improved.”* Respondent from Mahuapur (Comparison group)

Responses to the type of work children were engaged in were very sparse across all groups. Results for adolescents are presented as overall percentages at baseline and endline (Table 8), and not by any other stratifying variable. Response categories differed somewhat between baseline and endline with regard to occupation. For example, weaving was not included as a response category at endline. The majority of adolescents were engaged in weaving (13%) and “other” occupations (69.4%) at baseline, while the majority of adolescents were engaged in household chores at endline.

**Table 6: Child Marriage, Labor and School Status (Girls)**

	Baseline				Endline			
	Full Intervention	Partial Intervention	Comparison	p-value	Full Intervention	Partial Intervention	Comparison	p-value <sup>9</sup>
Child marriage among girls under 19 (% Yes)	45/1,119 (4.02)	11/239 (4.6)	16/516 (3.1)	0.538	7/499 (1.4)	6/174 (3.4)	1/200 (0.5)	0.066
Child aged 5-14 years in school (% Yes)	578/686 (84.26)	131/152 (86.18)	235/306 (76.8)	0.007	223/267 (83.5)	66/80 (81.5)	69/101 (68.3)	0.005
Child Working under age 15 (% Yes)	68/946 (7.2)	13/205 (6.3)	51/435 (11.7)	0.010	11/403 (2.7)	6/128 (4.7)	11/165 (6.7)	0.083

9. P-values were calculated using chi-2 tests and compared the distribution of each variable across treatment groups

**Table 7: Child Marriage, Labor and School Status (Boys)**

	Baseline				Endline			
	Full Intervention	Partial Intervention	Comparison	p-value	Full Intervention	Partial Intervention	Comparison	p-value <sup>10</sup>
Child marriage (boys under the age of 22) (% Yes)	48/1,404 (3.42)	15/388 (3.87)	34/812 (4.2)	0.647	11/608 (1.8)	6/232 (2.6)	2/258 (0.8)	0.301
Child aged 5-14 years in school (% Yes)	658/804 (81.8)	188/222 (84.68)	304/405 (75.1)	0.004	269/316 (84.9)	91/103 (88.4)	84/127 (66.1)	<0.001
Child working under age 15 (% Yes)	90/1,068 (8.43)	22/295 (7.5)	69/566 (12.2)	0.022	10/446 (2.3)	2/160 (1.3)	8/190 (4.2)	0.039

10. P-values were calculated using chi-2 tests and compared the distribution of each variable across treatment groups.

**Table 8: Reported Work Status and Work Types for Adolescents Aged 15-18**

Work status/Type (n,%)	Baseline	Endline
Number of Adolescents	796	369
Not Working	688 (86.4)	234 <sup>a</sup> (63.4)
Working	108 (13.6)	135 (36.6)
Stone Breaking	5 (4.6)	--
Agricultural	5 <sup>b</sup> (4.6)	20 (14.8)
Weaving	14 (13.0)	--
Construction	5 (4.6)	10 (7.4)
Brick Kiln	4 (3.7)	20 (14.8)
Salary/wage earner government/private sector	--	15 (11.1)
HH Chores	--	65 (48.1)
Other	75 <sup>c</sup> (69.4)	5 (3.7)

a Includes responses of "Student", "Disabled", "Too young".

b Includes domestic work in landlord homes

c Includes free collection of goods (specially leaves for making plates), running small shops, cycle repairing, rikshaw pulling, unknown work at outside worksite (migrated), animal rearing and street vendors.

All respondents were asked why their child was not in school in an attempt to elicit responses in the event that respondents did not want to readily admit that their child was not enrolled in school. Given the awareness-raising that has been going on in these communities with regard to child marriage and child education, this concern is not unfounded. Responses to this question indicate a vastly different situation than was revealed by simply asking directly about school enrollment (Figure 2). At baseline, for both boys and girls under the age of 15, a majority of respondents who indicated that their child was not in school said that the reason was that a moneylender had forced their child to work. Concerns over discrimination and costs associated with school attendance, as well as concerns over teacher quality, also emerged as important reasons for children not being in school.

During the endline survey, however, virtually no one in any of the study groups indicated that their child was forced to work by a moneylender when answering the same question. The most common reason at endline for a child not being in school was that the child was considered to be too young; however, this analysis was restricted to include only those children aged over 5 years. Upon further analysis, 86% of the children labeled too young by their parents to attend school were between 5 and 6 years of age. Logistic regression analysis was performed to better understand the factors that influenced whether a child was forced to work by a moneylender; however, no significant results were found after fitting models that included the educational level and occupation of the head of household, as well as the household's caste.

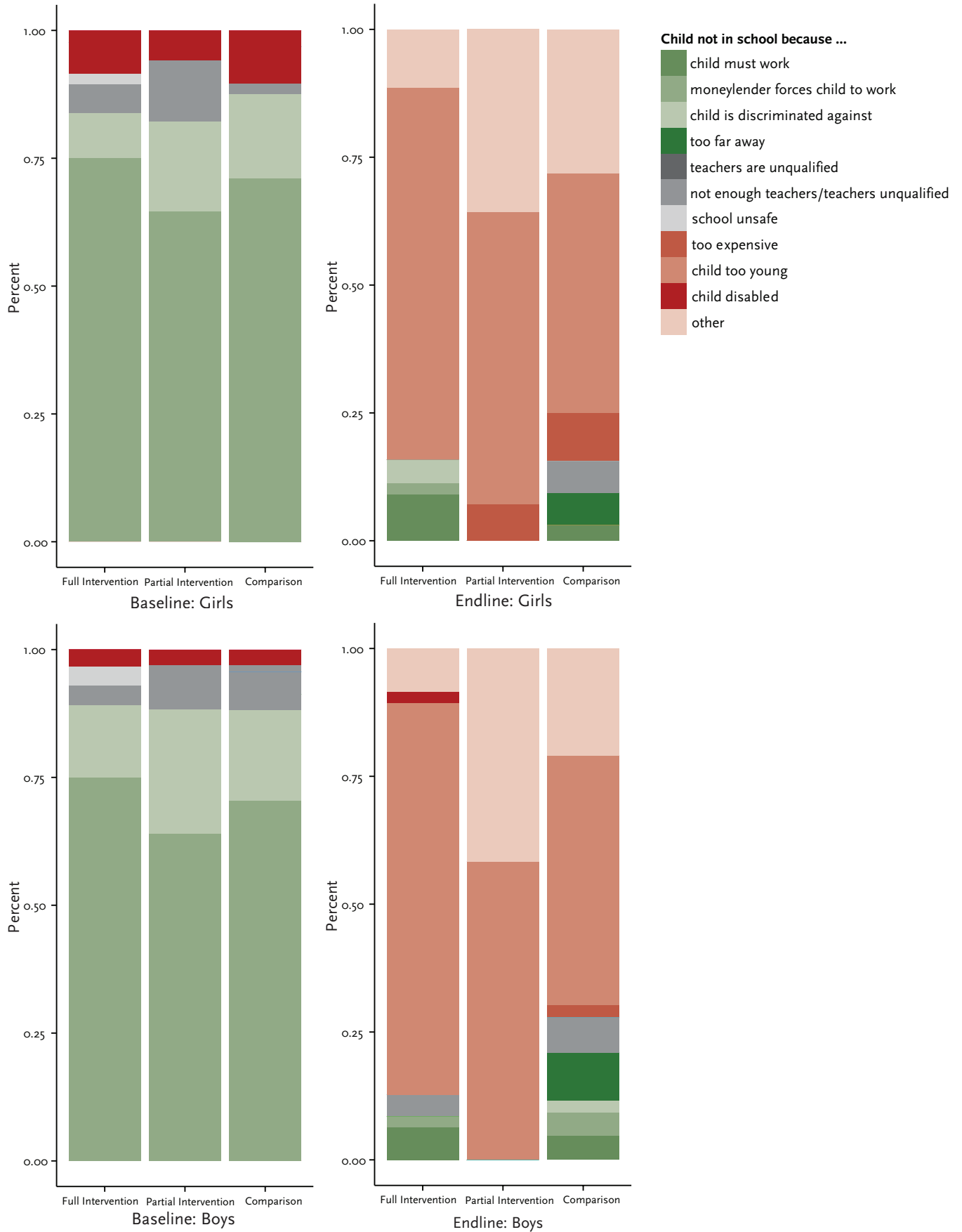
Child marriage and labor are very sensitive topics in the localities covered by the study. In recent years both MSEMVS and other local organizations working in these areas have conducted regular awareness-raising programs detailing the illegality of such practices. Given national evidence of persistent child labor in India,<sup>22,23</sup> the data collected in this study should not be taken as conclusive proof that there is no child labor or child marriage in these communities. Rather, the change captured by the data shown here may be indicative of a change in attitudes and beliefs associated with these practices making them less socially acceptable, a step in the right direction.

*“To educate children is must, due to personal awareness and government efforts a large number of children have started going to school over the years. I know now by educating their children their standard of living may be improved.”*

22 U.S. Department of Labor, Bureau of International Labor Affairs, Office of Child Labor, Forced Labor, and Human Trafficking, 2014 *Findings on the Worst Forms of Child Labor*, (Washington, DC, 2015), 415-24.

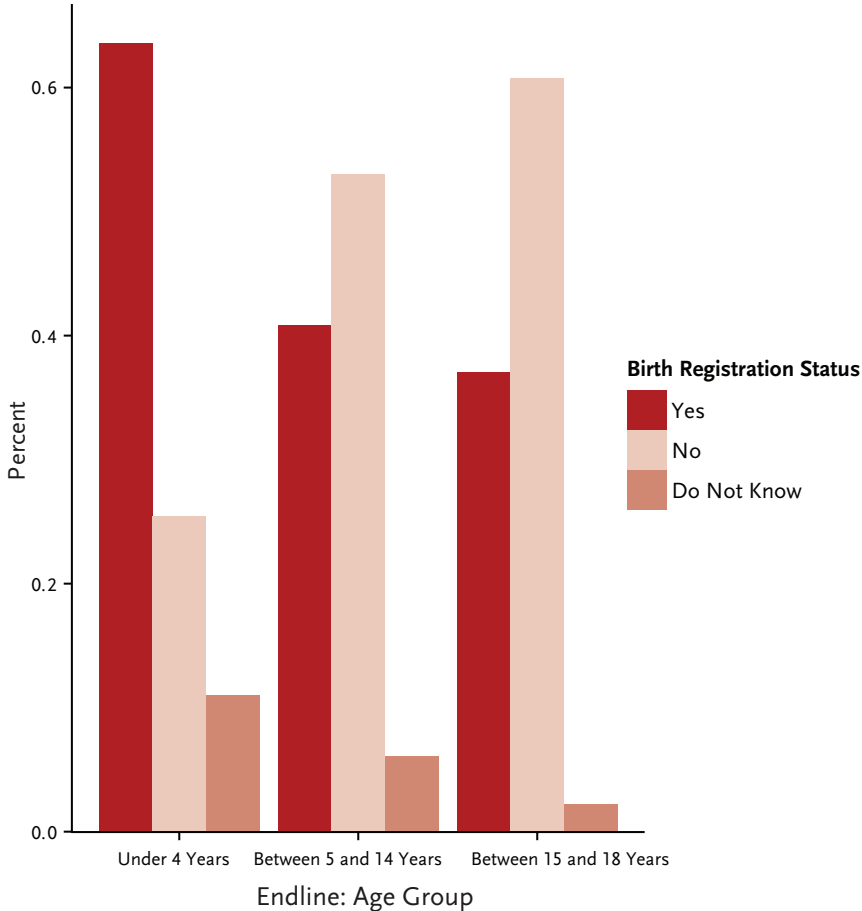
23 “About Child Labour,” Ministry of Labour & Employment, Government of India, accessed October 9, 2015, <http://labour.nic.in/content/division/child-labour.php>

**Figure 2: Reasons Why Boys and Girls (under age 15) Are Not in School**



In addition to examining child marriage and labor, data were also collected on the legal and health status of children. Table 9 shows birth registration and immunization status (only collected at endline) stratified by child sex, study group and age category. Both are important indicators of government engagement in protective measures for children born on their territory. Both boys and girls aged 4 years and under have fairly high rates of birth registration (ranging from 64.3% to 80.7%) across study arms. The percentage of boys and girls who have received 3 or more immunizations is also very similar across study arms and by child sex. The table indicates a clear trend over the last several years towards increases in birth registration, while immunization rates have tended to remain fairly high during this same period. Figure 3 illustrates the presumed trend over time in registration status by showing the percentage of children (pooled across groups and child sex) who have been registered by age cohort. As shown in the figure, birth registration becomes much less common among older cohorts of children. Many NGO and government programs have emphasized the importance of birth registration throughout the communities in the study, and the data collected here seem to indicate that these efforts are paying off. These external campaigns may also explain why changes in the Comparison group are similar to those in the two areas receiving the intervention.

**Figure 3: Birth Registration by Age Cohort**



**Table 9: Birth Registration and Immunization Status by Sex and Study Group Among Children 18 Years of Age and Under**

Age Category	Indicator	Boys				Girls			
		Full Intervention	Partial Intervention	Comparison	p-value	Full Intervention	Partial Intervention	Comparison	p-value <sup>11</sup>
4 Years of age or Under	Number of Children	342	102	101		324	103	108	
	Birth Registration (% Yes)	83 (64.3)	46 (80.7)	45 (71.4)W	0.060	98 (72.1)	35 (74.5)	46 (71.9)	0.796
	Immunization (%)				0.010				0.089
	1 immunization	15 (11.6)	7 (12.3)	10 (15.9)		16 (11.9)	5 (10.6)	8 (12.5)	
	2 immunizations	28 (21.7)	5 (8.8)	2 (3.2)		23 (17.0)	5 (10.6)	1 (1.6)	
	3+ immunizations	83 (64.3)	45 (78.9)	48 (76.2)		93 (68.9)	36 (76.6)	52 (81.2)	
	Do not know	3 (2.3)	0 (0.0)	3 (4.8)		3 (2.2)	1 (2.1)	3 (4.7)	
Between 5 and 14 Years of age	Number of Children	938	229	217		3503	1009	888	
	Birth Registration (% Yes)	122 (38.5)	47 (45.6)	55 (43.3)	0.045	211 (47.8)	83 (56.1)	95 (53.4)	0.006
	Immunization (%)				0.018				0.006
	1 immunization	8 (2.5)	3 (2.9)	1 (0.8)		26 (5.9)	5 (3.4)	8 (4.5)	
	2 immunizations	34 (10.7)	5 (4.9)	7 (5.5)		47 (10.7)	8 (5.5)	4 (2.2)	
	3+ immunizations	244 (77.0)	90 (87.4)	115 (90.6)		342 (77.6)	127 (87.6)	158 (88.8)	
	Do not know	31 (9.8)	5 (4.9)	4 (3.1)		26 (5.9)	5 (3.4)	8 (4.5)	
Between 15 and 18 Years of age	Number of Children	275	72	63		325	99	79	
	Birth Registration (% Yes)	12 (27.3)	9 (45.0)	5 (41.7)	0.521	11 (36.7)	10 (55.6)	3 (27.3)	0.469
	Immunization (%)				0.815				0.295
	1 immunization	1 (2.1)	0 (0.0)	0 (0.0)		1 (3.0)	0 (0.0)	0 (0.0)	
	2 immunizations	3 (6.2)	1 (5.0)	0 (0.0)		2 (6.1)	0 (0.0)	0 (0.0)	
	3+ immunizations	42 (87.5)	19 (95.0)	11 (91.7)		25 (75.8)	15 (100.0)	11 (100.0)	
	Do not know	2 (4.2)	0 (0.0)	1 (8.3)		5 (15.2)	0 (0.0)	0 (0.0)	

11. P-values were calculated using chi-2 tests and compared the distribution of each variable across treatment groups.

# OTHER SOCIOECONOMIC IMPROVEMENTS: FOOD AVAILABILITY, WATER AND SANITATION, ANIMAL OWNERSHIP AND MEDICAL CARE

## KEY FINDINGS

- **Food security and availability improved significantly among the Full Intervention group when compared to both the Partial Intervention group and the Comparison group.**
- **Households that received the intervention (in either treatment arm) had significantly higher odds of reporting that they received free medical care when compared to the Comparison group.**

While the intervention was focused primarily on eradicating harmful labor conditions, it may have had additional socioeconomic benefits on participating communities. Many of the variables testing this hypothesis were only collected at endline, so the inferences that can be drawn from the intervention's effect are somewhat limited. Nevertheless the data provide an important comparison between study groups and lay the foundation for further data collection in the future. Data on food availability, water source and sanitation are presented in Table 10.

Food availability calculated by the number of meals eaten per day, as reported by the head of the household, was measured at baseline and endline. The raw statistics are presented in Table 10a, and a summarized comparison between groups at endline is presented in Figure 4. Between baseline and endline, the average number of meals eaten per day increased across all study groups, but most markedly in the Full Intervention and the Partial Intervention groups. After combining both intervention groups, the increase in the number of meals reported eaten per day is statistically significant when compared to the Comparison group. On average, the intervention increased the number of meals per day by 0.21 ( $p < 0.001$ ; 95% CI: 0.09, 0.4). The percentage of households at endline eating 3 meals per day is much greater in the Full Intervention group than in the other groups. A small percentage across all groups report eating only one meal per day at endline. Generally, most households across all study arms report that no one in their household went to bed hungry and that they had not been worried about having enough food over the preceding four weeks. However, there was a substantial minority across the study arms that indicated that this occurred on occasion. In the Full Intervention group, for example, 14% of respondents indicated that sometimes, someone in their household had gone to bed hungry in the preceding four weeks compared to 17.4% in the Comparison group. Similarly, 17.3% of respondents in the Full Intervention group indicated that they had been worried about having enough food over the preceding four weeks compared to 25.5% in the Comparison group. These levels indicate a higher degree of food security in the communities that received the intervention.



**Table 10: Food Availability, Water Source and Sanitation at Endline**

	Full Intervention	Partial Intervention	Comparison	p-value <sup>12</sup>
Number of Households (n)	392	143	172	
<b>Food Availability and Security</b>				
Number of Meals per Day (mean (sd))	2.41 (0.52)	2.26 (0.57)	2.16 (0.53)	<0.001
Did any household member go to bed hungry in last 4 weeks				0.024
No (%)	337 (86.0)	112 (78.3)	141 (82.0)	
Sometimes (%)	55 (14.0)	28 (19.6)	30 (17.4)	
Often (%)	0 (0.0)	3 (2.1)	1 (0.6)	
Did respondent worry that there wouldn't be enough food to eat during last 4 weeks?				0.003
No (%)	324 (82.7)	107 (74.8)	125 (72.7)	
Sometimes (%)	68 (17.3)	32 (22.4)	44 (25.6)	
Often (%)	0 (0.0)	4 (2.8)	3 (1.7)	
<b>Water and Sanitation</b>				
Source of Drinking Water				<0.001
Piped into dwelling (%)	0 (0.0)	1 (0.7)	0 (0.0)	
Piped into yard (%)	7 (1.8)	0 (0.0)	15 (8.7)	
Public tap (%)	133 (33.9)	81 (56.6)	126 (73.3)	
Tubewell (%)	133 (33.9)	40 (28.0)	21 (12.2)	
Protected well (%)	87 (22.2)	7 (4.9)	4 (2.3)	
Unprotected well (%)	32 (8.2)	12 (8.4)	6 (3.5)	
Other (%)	0 (0.0)	2 (1.4)	0 (0.0)	
<b>Mode of Sanitation</b>				<b>0.227</b>
Flush or pour flush toilet (%)	4 (1.0)	1 (0.7)	0 (0.0)	
Pit latrine (%)	12 (3.1)	1 (0.7)	2 (1.2)	
Open space (%)	376 (95.9)	141 (98.6)	170 (98.8)	
Is the Mode of Sanitation Shared with other Households? (% No)	385 (98.2)	143 (100.0)	172 (100.0)	0.058

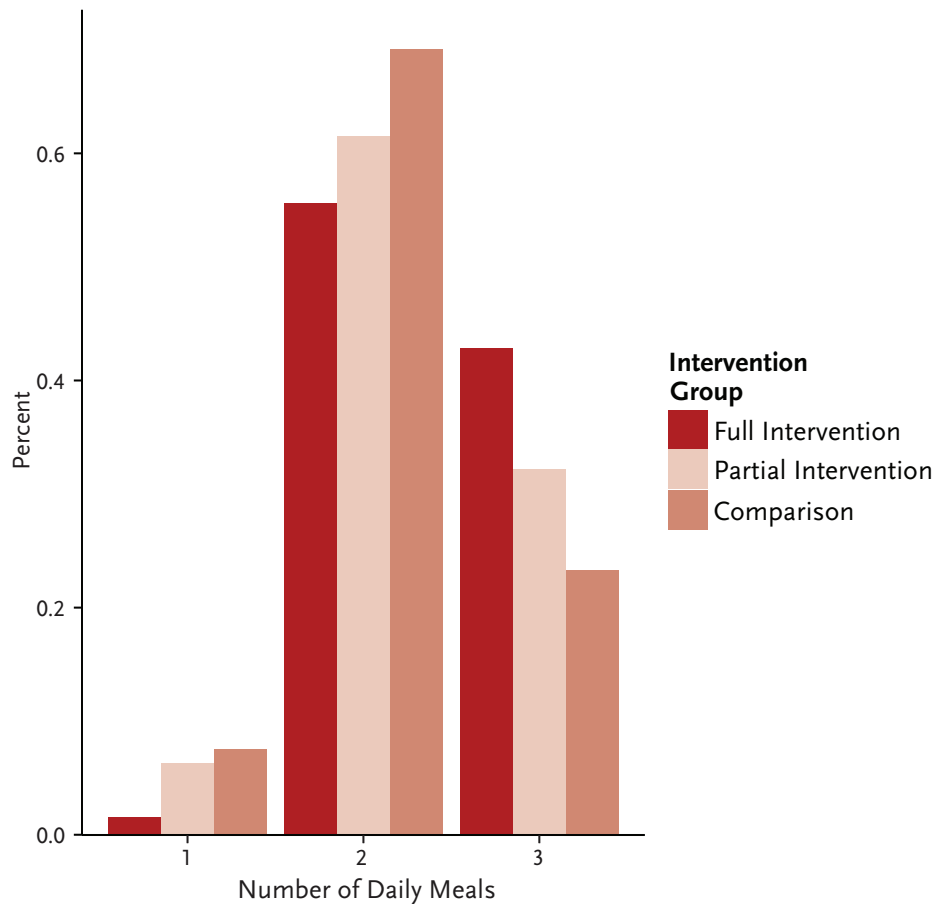
**Table 10a: Number of Meals at Baseline and Endline**

	Baseline				p-value	Endline			
	Full Intervention	Partial Intervention	Comparison	Comparison		Full Intervention	Partial Intervention	Comparison	p-value <sup>13</sup>
Number of Households	1039	257	567			392	143	172	
Number of Meals per Day (mean (sd))	1.94 (0.2)	1.84 (0.3)	2.0 (0.2)	<0.001		2.41 (0.52)	2.26 (0.57)	2.16 (0.53)	<0.001

<sup>12</sup> P-values were calculated using chi-2 to compare differences across treatment groups

<sup>13</sup> P-values were calculated using chi-2 tests and compared the distribution of each variable across treatment groups.

**Figure 4: Number of Daily Meals by Treatment Group at Endline**



Statistical models support the conclusion that food security improved at endline among the intervention arms. Families who received the intervention (combining the Full and Partial Intervention groups) reported eating a greater number of meals per day when compared to the Comparison group in both adjusted and unadjusted statistical models (Appendix 6). In the adjusted models (those controlling for the household level characteristics), households in the combined treatment group ate 0.18 more meals per day than those in the Comparison group (95% CI: 0.06, 0.30;  $p < 0.001$ ). This change appeared to be driven by the households in the Full Intervention group, as the fully adjusted model estimated that those households ate an average of 0.19 meals more than those in the Partial Intervention group (95% CI: 0.07, 0.32;  $p < 0.001$ ). Interestingly, neither caste nor occupation influenced food availability. No significant differences were found in the number of meals eaten per day according to either of these variables.

In terms of water and sanitation variables, the vast majority of households at endline obtained their water from a protected source. 8% in each of the groups that received the intervention obtained water from an unprotected well, but only 3.5% in the Comparison group; however, these percentages are so small that they do not make a meaningful difference. Of note, it appears that water sources and sanitation facilities are independent from each other. While the overall magnitude was again very small, the Full Intervention group fared slightly better than the other two groups with regard to mode of sanitation. Approximately 4% of households in the Full Intervention group reported having either a pit latrine or flush toilet, compared to between 1-2% in the Partial Intervention and Comparison groups. Still, more than 95% of households in all groups reported that they used an open space for sanitation, meaning that these communities were far from having safe sanitary facilities and household waste disposal.

Animal ownership increased across all intervention groups between baseline and endline, as illustrated in Table 11. The largest increase in the percentage of households owning animals was observed in the Partial Intervention group (with a 29.9 percentage point increase in the number of households reporting ownership of at least one animal). Statistical models support what is presented in the raw data, and no significant change was found in animal ownership attributable to the intervention (Appendix 6). Interestingly, however, caste appears to have a strong effect on animal ownership. In adjusted models, all of the castes included in the model were significantly more likely to own at least one animal than Harijan households. In fact, Rajbhar households have 4.73 times the odds (95% CI: 3.00, 7.56;  $p < 0.01$ ) of owning an animal when compared to Harijan households, holding all other variables equal. Additionally, the increases observed in animal ownership across all groups over time are highly significant (as indicated by the *post* variable in the table), indicating that all households are investing a larger amount of resources in animal ownership over time.

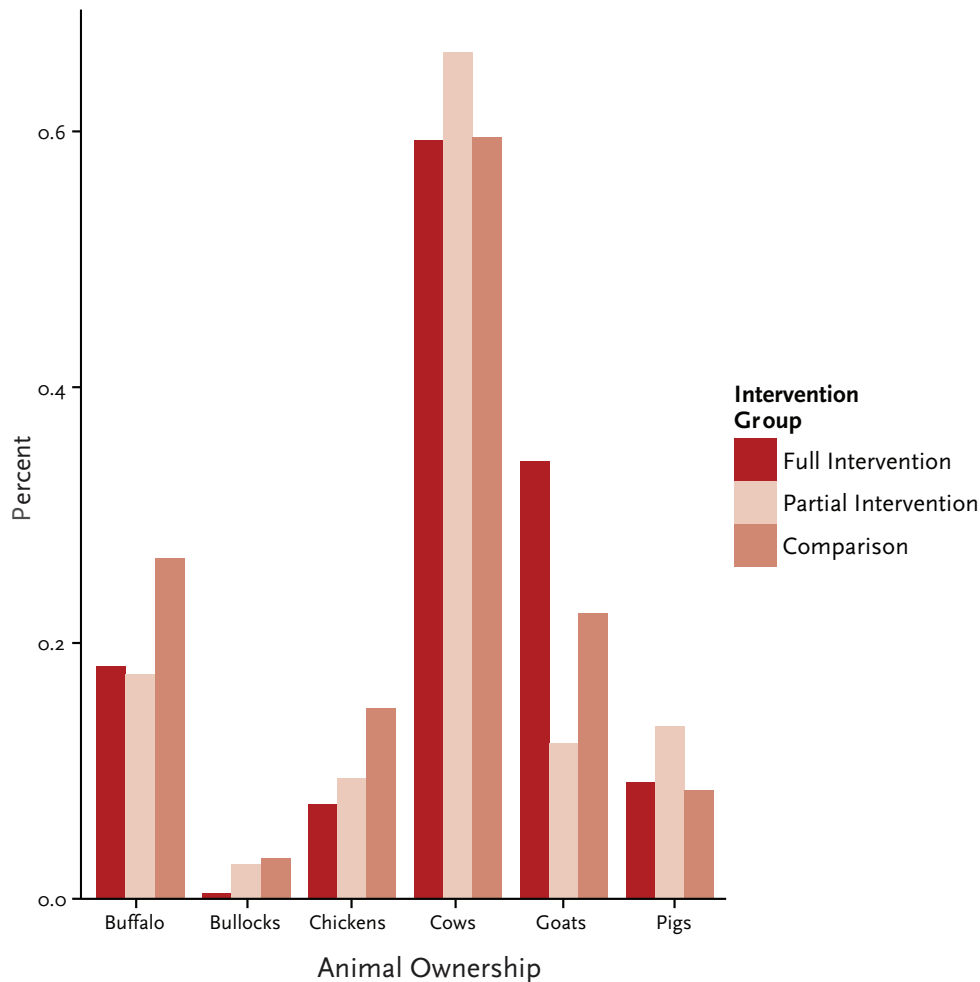
**Table 11: Animal Ownership: Whether Household Owns at Least One Animal**

	Baseline			Endline			p-value <sup>14</sup>
	Full Intervention	Partial Intervention	Comparison	Full Intervention	Partial Intervention	Comparison	
Number of Households	1,033	257	568	392	143	172	
% of Households that Own at Least 1 Animal	410 (43.5)	63 (24.8)	207 (36.5)	231 (58.9)	74 (51.7)	94 (54.7)	<0.001

14. P-values were calculated using chi-2 tests to compare the distribution by treatment group between baseline and endline

An examination of the type of animal owned at endline also reveals some differences across groups (Figure 5). Most households in the Comparison group own buffalos and chickens, while many more households in the Full Intervention group report owning goats.

**Figure 5: Percentage of Households at Endline who Own an Animal by Type**



Access to medical care was measured by where household members went to obtain medical treatment and whether their medical treatment was free. These variables were only available at endline and are presented in Table 12. The vast majority of respondents indicated that they went to either a government hospital or private doctor for medical care. This pattern also appears to be constant across caste. In terms of costs associated with obtaining medical care, a much higher percentage of households in both intervention arms than in the Comparison group report that the medical care they receive is free (50.6% in the Full Intervention group, 70.6% in the Partial Intervention group and 37.0% in the Comparison group). After adjusting for relevant covariates, the difference between the treatment and Comparison groups is significant. Individuals in the combined treatment group had 3.1 times the odds (95% CI: 1.40, 8.15;  $p < 0.05$ ) of reporting that their medical treatment was free compared to the Comparison group. By caste, Rajbhar households were significantly less likely to report receiving free medical treatment. When compared to Harijan households in the adjusted model, Rajbhar households had 0.23 times the odds (95% CI: 0.05, 0.89;  $p < 0.05$ ) of reporting free medical treatment.

**Table 12: Source of Medical Treatment and Treatment Costs at Endline by Treatment Group and Caste**

	Treatment Group				Caste				p-value <sup>15</sup>
	Full Intervention	Partial Intervention	Comparison	p-value	Harijan	Mushar	Rajbhar	Saroj	
Number of Households	392	143	172		454	117	28	108	
Source of Medical Care (%)				0.053					0.410
Govn't Hospital	73 (48.0)	23 (67.6)	23 (42.6)		79 (49.7)	17 (50.0)	4 (26.7)	19 (59.4)	
Govn't Dispensary	2 (1.3)	1 (2.9)	0 (0.0)		2 (1.3)	1 (2.9)	0 (0.0)	0 (0.0)	
Local Health Center	5 (3.3)	0 (0.0)	0 (0.0)		3 (1.9)	2 (5.9)	0 (0.0)	0 (0.0)	
Private Doctor	66 (43.4)	8 (23.5)	28 (51.9)		68 (42.8)	12 (35.3)	9 (60.0)	13 (40.6)	
Sub-Center	4 (2.6)	0 (0.0)	1 (1.9)		3 (1.9)	1 (2.9)	1 (6.7)	0 (0.0)	
Homeopath	0 (0.0)	2 (5.9)	2 (3.7)		3 (1.9)	1 (2.9)	0 (0.0)	0 (0.0)	
Other	2 (1.3)	0 (0.0)	0 (0.0)		1 (0.6)	0 (0.0)	1 (6.7)	0 (0.0)	
Is medical treatment free? (% Yes)	78 (50.6)	24 (70.6)	20 (37.0)	0.009	83 (51.6)	19 (55.9)	4 (26.7)	16 (50.0)	0.275

15. P-values were calculated using chi-2 tests and compared the distribution of each variable across treatment groups.

## CIVIC PARTICIPATION AND SELF-EFFICACY

### KEY FINDINGS:

- **MSEMVS's work dramatically increased the odds that a household would report receiving a job through NREGA and that a household would report having a job card.**
- **Households in the Full Intervention group were more likely to use government services compared to both the Partial Intervention and Comparison groups.**
- **Voter participation improved in all study arms, including in the Comparison group.**

Given MSEMVS's focus on community empowerment as a core component of their work, it was anticipated that the ensuing improvements in labor conditions would also generate positive change with regard to civic participation and community engagement. Civic participation was measured along a variety of dimensions centered on receipt of government assistance, voting and participation in community governance.

# PARTICIPATION IN GOVERNMENT SCHEMES

Over the course of the study period, dramatic increases were observed in the percentage of households receiving government assistance across all study groups. At baseline, 62.5% of households in the Full Intervention group reported receiving some form of government assistance compared to 70.2% in the Partial Intervention group and 82.2% in the Comparison group. By endline, nearly 100% of respondents in all groups reported receiving some form of government assistance, which seems to indicate a secular trend across all study groups. These values are presented in Table 13.

**Table 13: Receipt of Government Assistance**

	Baseline			Endline			p-value
	Full Intervention	Partial Intervention	Comparison	Full Intervention	Partial Intervention	Comparison	
Number of Households	1,033	257	190	392	143	172	
Household Receives Government Assistance (% Yes)	489 (62.5)	165 (70.2)	378 (82.2)	381 (97.2)	143 (100.0)	170 (98.8)	<0.001
Average Number of Government Schemes in which Household Participates	--	--	--	5.19 (2.18)	4.99 (2.31)	3.66 (1.33)	<0.001

16. P-values were calculated using chi-2 tests and compared the distribution of each variable between baseline and endline (receives government assistance) and across cohorts (number of government schemes)

Further examination of the degree to which households participated in government schemes across the three study arms shows that households in the Full Intervention group were much more likely to report participation in a greater number of government schemes when compared to the other groups. In particular, the average household in the Full Intervention group reports participating in 5.19 government schemes compared to 3.66 in the Comparison group (Table 13). Figure 6 shows the distribution of households in terms of the number of government schemes in which they participate according to study arm.

After adjusting for relevant variables, households in each intervention group participated in an average of 1.2 additional schemes when compared to the Comparison group (95% CI: 0.74, 1.66;  $p < 0.01$ ). Additionally, households in the Full Intervention group participated in an average of 0.6 more schemes than those in the Partial Intervention group (95% CI: 0.097, 1.28;  $p < 0.05$ ). This provides support for MSEMVS’s hypothesis that mature CVCs are better able to inform participants of their rights to government assistance than the more rudimentary CVCs in the Partial Intervention group. The regression models are presented in Appendix 6.

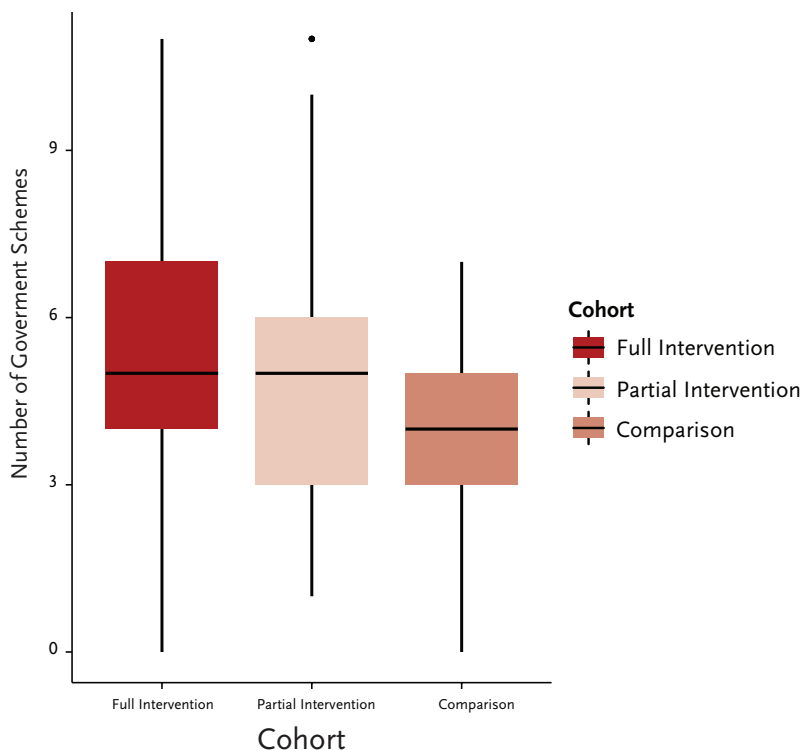
The percentage of intervention households participating in any of the government schemes on which data were collected was much higher than the corresponding percentage in the Comparison group (Figure 7). Notably, participation in *Indira Awaas Yojana (IAY)*, a social welfare program that provides housing for the rural poor, and *Janani Suraksha Yojana (JSY)*, a safe motherhood intervention, was far greater in both of the intervention groups than in the Comparison group.

The qualitative data also emphasize MSEMVS’s contribution to helping villagers take advantage of government services. Nearly all respondents in the Full and Partial Intervention groups applauded MSEMVS for their help in enabling them to secure government assistance, and said that being able to get this support had been vital to their development.

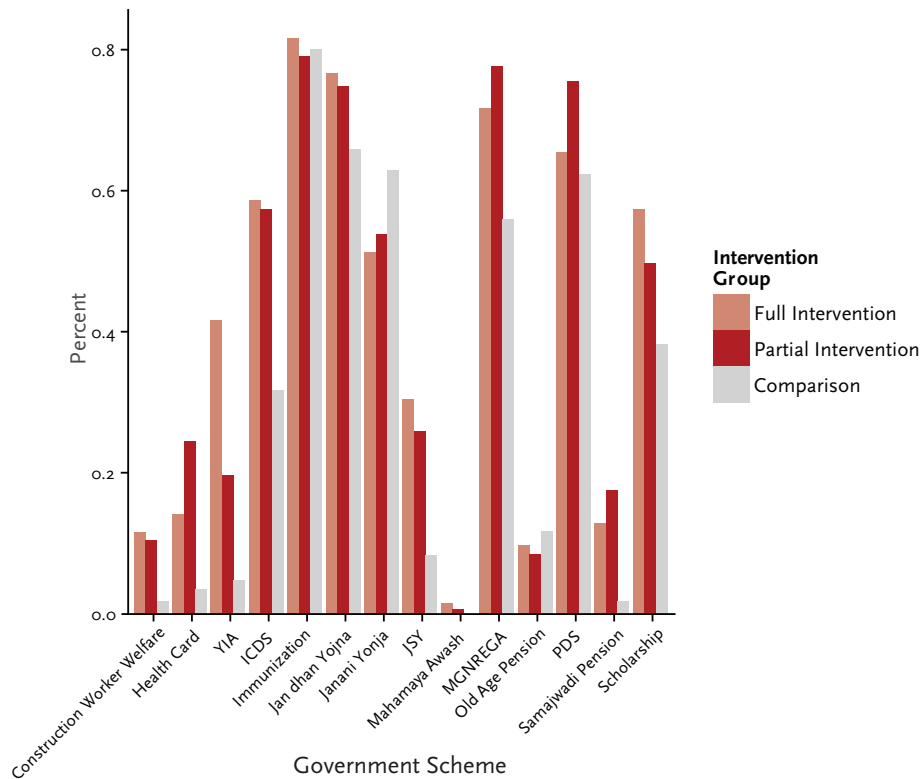
*“Yes, they informed us about various government schemes, especially health and education-related schemes. They encouraged us to avail the benefits under these schemes. They also spread awareness (especially among young girls) about human trafficking and bonded labor through audio visual tools like video films and cassettes. They made us fill ‘San-Nirman Yojana’ and ‘Samajwadi Pension’ Forms and questionnaires; and told us about our legal rights.”* Respondent from Baduana (Full Intervention group)

*“They tell us about the government schemes without which it would not have been possible for us to avail such benefits at all.”* Respondent from Nidur (Full Intervention group)

**Figure 6: Boxplot of Number of Government Schemes in which Households Participate at Endline**



**Figure 7: Household Participation by Government Scheme**



### VOTER PARTICIPATION, JOB ASSISTANCE AND CIVIC ENGAGEMENT

Of the variables related to voter participation, job assistance and civic engagement, the intervention had the strongest effect on job assistance. As evidenced in Table 14, dramatic increases were observed in the percentage of households with a job card in both the Full Intervention group (from 52.4% at baseline to 72.4% at endline) and the Partial Intervention group (43.4% at baseline to 80.4% at endline), in sharp contrast to the Comparison group (a decrease from 76.3% to 59.3% between baseline and endline). The intervention increased the odds that a household in either treatment group reported having a job card by a factor of 3.80 (95% CI: 2.05, 7.55;  $p < 0.01$ ), when compared to the Comparison group. Similarly, the percentage of households with adult members who had secured jobs under the NREGA scheme increased from 37.3% to 68.8% during the study period in the Full Intervention group, but decreased from 78.3% to 47.1% in the Comparison group. In fact, the intervention had the most dramatic effect on enrollment in the NREGA scheme compared to participation in other government schemes, increasing the odds that a household in either treatment group would report having a job under NREGA by a factor of 8.82 (95% CI: 5.96, 22.26;  $p < 0.01$ ). These results are highly significant, and indicate that MSEMVS's model is extremely effective in connecting villagers with government job assistance, thus reducing their vulnerability to forced and bonded labor. The full regression models are presented in Appendix 6.



By contrast with the impact on job assistance, the intervention did not have a distinctive effect on respondents' voting in the most recent election or on the percentage of households with voter identification cards. Rather all study arms showed large increases in all three variables between baseline and endline, making it difficult to isolate the actual effect of the intervention. A state wide trend not related to the intervention seems to have improved voter participation across the entire study area. This could be the result of either spillover effects or other interventions targeting voter participation in these areas.

The overall effect of the intervention on variables related to voter participation and job assistance obtained from the adjusted models (adjusting for education of the head of household, caste and employment type) is summarized in Figure 8. The full models are provided in Appendix 6. While the overall trends in the voter participation variables indicate that the intervention may have improved these behaviors, the confidence intervals are too wide to state that the intervention did indeed have an effect.

## GOVERNMENT SCHEMES

- Construction Worker Welfare
- Health Card – increases access to health care facilities and reduces health-related expenditures for families below the poverty line. Falls under Rashtriya Swasthya Bima Yojna (RSBY), the Indian government's comprehensive health scheme.
- IAY – Indira Awaas Yojna; rural housing scheme that provides financial assistance for housing construction.
- ICDS – Integrated Child Development Services.
- Immunization
- PMJDY – Pradhan Mantri Jan-Dhan Yojana; access to financial services.
- JSY – Janani Suraksha Yojana; safe motherhood intervention.
- SJSY – Swarna Jayanti Swarozgar Yojana; self-employment scheme that helps the rural poor organize into Self-Help Groups. Uses a mix of bank credit and government subsidies to build capacity and provide income-generating assets.
- Mahamaya Awas Yojna – rural housing scheme that provided permanent housing to households without shelter, but ended in 2012.
- MGNREGA – Mahatma Gandhi National Rural Employment Guarantee Scheme of Andhra Pradesh.
- Old Age Pension – provided to all individuals above age 60 who live below the poverty line.
- PDS – Public Distribution System; provides subsidized staple products such as wheat, rice, sugar and kerosene through a network of fair price shops.
- Samajwadi Pension – targets poor families who have no regular income, particularly those who work in unorganized sectors; families who meet certain education- and health-related criteria are eligible. Introduced in Uttar Pradesh in 2014.
- Scholarship

For more information about government schemes, please visit <http://india.gov.in/my-government/schemes>

**Table 14: Voting Participation, Job Assistance and Civic Engagement**

	Baseline			Endline			p-value <sup>17</sup>
	Full Intervention	Partial Intervention	Comparison	Full Intervention	Partial Intervention	Comparison	
Number of Households	1,033	257	568	392	143	172	
Voter Participation							
All adults in Family have Voter ID (% Yes)	826 (80.0)	113 (44.0)	485 (85.4)	389 (99.2)	141 (98.6)	168 (97.7)	<0.001
Male Household Member Voted in last Election (% Yes)	889 (86.1)	132 (51.3)	514 (92.2)	374 (95.4)	138 (96.5)	163 (94.8)	
Female Household Member Voted in last Election (% Yes)	880 (84.9)	133 (51.6)	516 (84.7)	373 (95.2)	136 (95.1)	162 (94.2)	<0.001
Job Assistance							
Family has a job card (% Yes)	544 (52.4)	111 (43.4)	410 (72.2)	284 (72.4)	115 (80.4)	102 (59.3)	<0.001
Adult Household Members get jobs under NREGA (% Yes)	387 (37.3)	76 (30.0)	394 (69.6)	265 (68.8)	99 (71.7)	80 (47.1)	<0.001

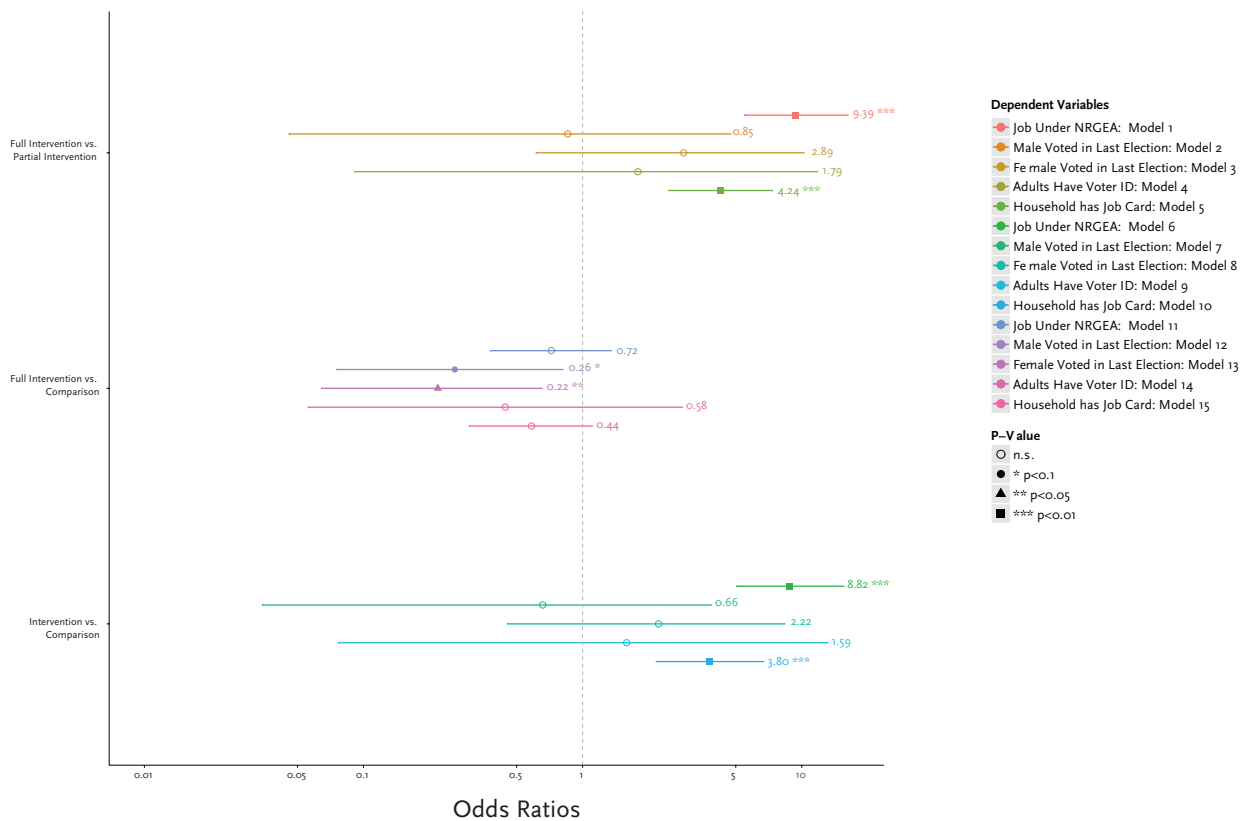
17. P-values were calculated using chi-2 tests and compared the distribution of each variable between baseline and endline

**PERCEIVED IMPROVEMENT**

Figure 9 shows respondents’ opinions about whether their life improved at endline along a range of dimensions. Participants were asked to respond to three different questions focused on whether their income improved over the last three years, whether they had had improved access to government schemes, and whether their children had had better access to education over the last three years with responses ranging from “no,” “probably no,” “probably yes” and “yes.” Responses to these questions are only available at endline. One male respondent was asked per household as well as one female respondent, as indicated in the figure.

According to the figure, participants from all study arms seem to have had fairly positive perceptions about how their life changed over the last 3 years (represented by the vast majority of responses being “yes” or “probably yes” in red and pink falling to the right hand side of the center line). Even though very few respondents indicated that they thought their life had gotten worse or probably worse (represented by the blue and light blue to the left of the center line), the Comparison group’s perceptions were slightly more negative. No significant differences emerged as a function of the respondent’s sex. For example, the difference between the two groups that received the intervention and the Comparison group is particularly prominent with regard to access to government schemes among both men and women, as there is a much higher percentage of respondents who responded negatively to the question in the Comparison group. The qualitative interviews from the intervention group areas included some

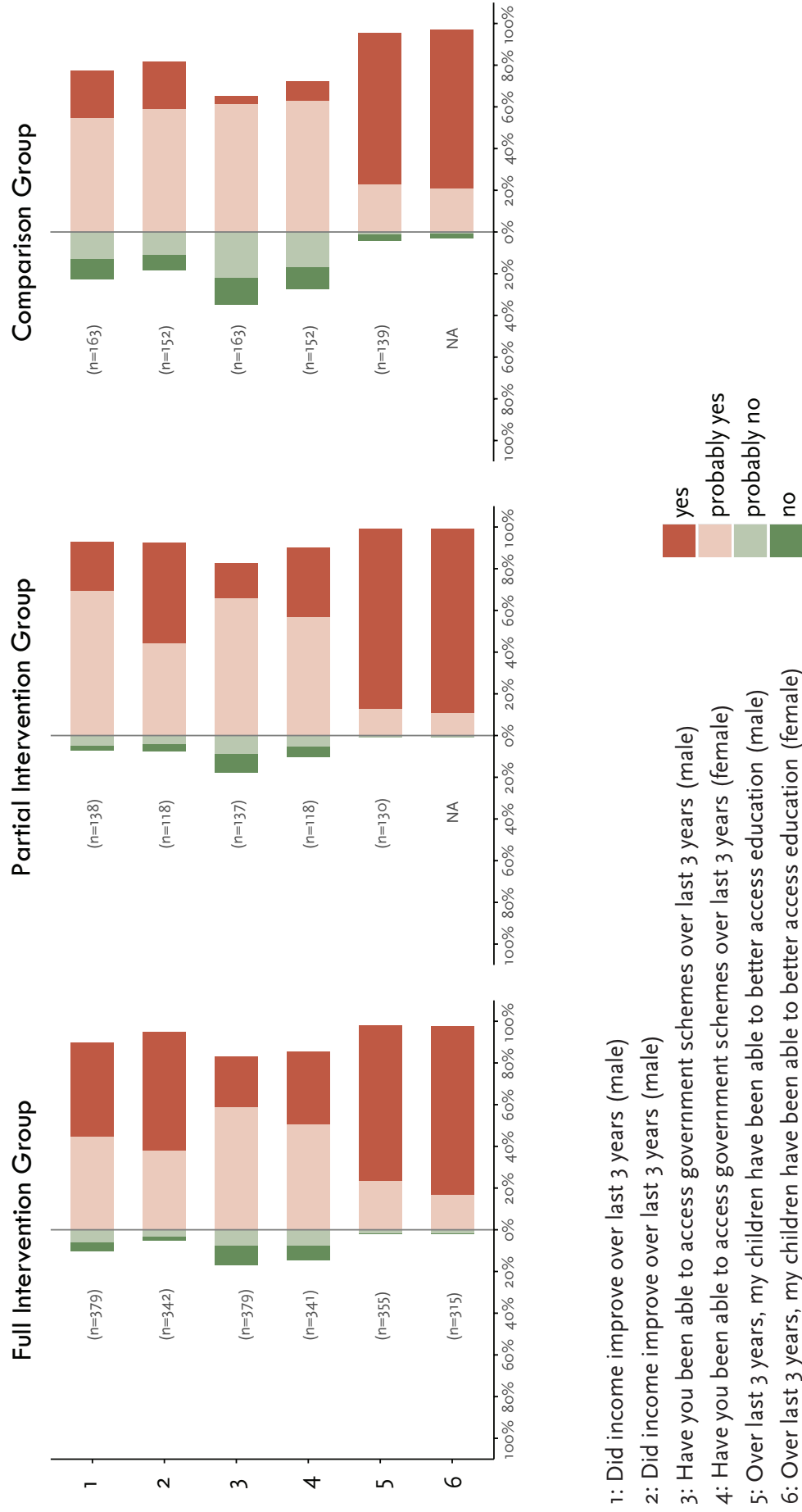
**Figure 8: Overall Effect of the Intervention on Voter Participation and Job Assistance**



closed form questions, which indicate that the vast majority of respondents in both the Full Intervention and Partial Intervention groups (27 in total) reported having experienced positive change over the past 3 years. In particular, most respondents noted a positive change with regard to community empowerment, infrastructure, access to education, access to healthcare and access to government schemes. Respondents revealed mixed reactions to their employment status. While roughly half the respondents noted improvements in their employment status, nearly 40% said they had experienced no change and about 15% said their employment status had deteriorated. By contrast, most respondents had a positive view of the sustainability of the changes brought about by MSEMVS’s work. Nearly 70% indicated that they thought the changes were sustainable, and that the community would be able to maintain the changes in the future without MSEMVS’s ongoing support.

The positive impact of MSEMVS on life in the community emerged as a dominant theme in interviews conducted with both the Full and Partial Intervention groups. The intervention’s success in catalyzing a culture of collective efficacy emerged as a critical driver of positive change. In their responses, many participants mentioned the importance of facing problems together and jointly lobbying for change. Some cited increased access to resources as a result of their ability to organize collectively.

**Figure 9: Perceived Self Efficacy by Study Group at Endline**



- 1: Did income improve over last 3 years (male)
- 2: Did income improve over last 3 years (female)
- 3: Have you been able to access government schemes over last 3 years (male)
- 4: Have you been able to access government schemes over last 3 years (female)
- 5: Over last 3 years, my children have been able to better access education (male)
- 6: Over last 3 years, my children have been able to better access education (female)

*“There has been an overall empowerment of the community due to MSEMVS.”*  
Respondent from Khetalpur (Full Intervention group)

*“Together we went and demanded for job card, Samajhwadi pension, etc. from the District Magistrate. For encroachment of government land, we complained to the Sub-Divisional Magistrate.”* Respondent from Nirdu (Full Intervention group)

*“There is a pond which was given to us 40 years back but now there are some villagers from another community trying to capture it. We have protested and are now fighting a legal case.”* Respondent from Harijan Basti (Full Intervention group)

*“Our standard of living has improved. Whenever we face any problem we solve it together.”* Respondent from Tarapur (Full Intervention group)

Many participants mentioned the importance of facing problems together and jointly lobbying for change.

*“Whenever we face any problem we solve it together.”*

## LIMITATIONS

While the FXB Center and IHD conducted this study in as rigorous a manner as possible, we would like to note a number of limitations that may have affected its results.

Some challenges resulted from the project’s overall design: the FXB Center was engaged as an independent evaluator of the intervention long after the baseline survey had been conducted. At endline, the FXB Center and IHD attempted, as noted earlier, to improve the survey collection instrument’s accuracy and scope. We note above the benefits of this approach in relation to securing data on a range of psychological and social variables. However, this strategy may have inadvertently led to shifts in the meaning of the underlying questions for the respondents, or to a change in the selection of response categories. To address this possibility, we discarded responses to questions that were not comparable, and as a result some potentially valuable data were lost.

Additionally, some errors and inconsistencies occurred during the data collection process. While FXB and IHD did their best to ensure that the study instruments were executed exactly to protocol, occasional errors occurred: in some cases questions were skipped and interviewers were not consistent in covering all members of the respondent households. Both FXB and IHD spent significant time training the interviewers hired to conduct the data collection for the study. We stressed ethical issues about consent and freedom to refuse participation, but we also emphasized the importance of consistency and thoroughness, in order to limit errors. Nonetheless some errors did occur. To address these technical problems and ensure consistency, we paid very careful attention to all the responses collected: where we had doubts about whether questions had been administered according to protocol, we discarded the answers. This strategy reduced the range of data available for our analysis but leaves us confident in the data relied upon and the claims made.

While the FXB Center used statistical methods to control for underlying differences between cohorts, these differences may nonetheless mask the full effect of the intervention. For example, Mahuapur, the site of the Comparison group, is 15 minutes' drive from the district center. As a result, households in Mahuapur are likely to receive greater attention from government programs and NGOs than those in more remote locations.

The utility of Mahuapur as a comparison group was limited by differences between that community and the intervention Nyaya Panchayats, which we only became aware of after study implementation. At baseline, MSEMVS chose not to prioritize Mahuapur Nyaya Panchayat for the study intervention, partly because they judged family and individual vulnerability there to be lower than for the other two Nyaya Panchayats. In particular, MSEMVS noted that in Mahuapur the number of working children was lower, that it was part of a special NREGA government project, and that it was nearer to the government hospital and Block headquarters. In addition, although we were told there had been no MSEMVS intervention in Mahuapur, in fact, during data analysis, we were informed that advocacy efforts had been implemented and CVCs were formed there in 2014.

Despite vigorous improvements resulting from MSEMVS's work in the intervention areas, these changes may appear less momentous against the backdrop of a comparison group where, partly for reasons irrelevant to the intervention areas, conditions were also improving.

As already noted, this study addressed extremely sensitive topics which complicated the interview interactions. While FXB and IHD took pains to ensure participant anonymity and safety, respondents may still have tailored their answers because of fears of reprisal by their employer or other community members. There may have also been some cultural or dialect differences at endline between the respondents and the IHD staff members since the latter were not from the local communities.

Finally, this study, by design, only included long term and settled community members. There may be individuals who are vulnerable to labor exploitation because they are marginal to the village community structure, who we were unable to include due to the design of the study.

# CONCLUSIONS AND RECOMMENDATIONS

This evaluation set out to determine whether forced and bonded labor were eradicated as a result of MSEMVS's work in the UP villages studied. Predictably, rather than a black and white before and after dichotomy in circumstances, we uncovered a nuanced and changing picture in relation to the exploitative labor conditions and challenging socioeconomic circumstances in which the studied communities live. At the same time, we were able to clearly establish that MSEMVS has had a dramatic impact on improving the lives of individuals and households in these communities, for example in reducing indebtedness, improving participation in government job programs and increasing community empowerment. While this study did not confirm all the expected changes in forced and bonded labor, it demonstrated that the communities in which MSEMVS has intervened are far less vulnerable to labor exploitation, and are empowered to create positive change for their families and communities.

## KEY FINDINGS DEMONSTRATING INTERVENTION EFFECT

- Indebtedness was reduced. As a result of the intervention, the odds of a household having any amount of debt, the odds that a household would hold extreme debt (10000 rupees or more) and the odds that a household reported taking on debt as the result of a medical expenditure decreased significantly.
- Food security and availability improved significantly among the Full Intervention group when compared to both the Partial Intervention group and the Comparison group.
- The odds that a household would report having a job card increased as did the odds of a household reporting receiving a job through NREGA .
- Households in the Full Intervention group were more likely to use government services compared to both the Partial Intervention and Comparison groups.
- Respondents noted a positive change with regard to community empowerment, infrastructure, access to education, access to healthcare and access to government schemes.

## KEY FINDINGS INDICATIVE OF IMPROVEMENT ACROSS ALL STUDY ARMS

- Labor conditions improved across all study arms during the course of the study, evidence of a nuanced and changing picture in relation to exploitative labor conditions.
- The status of children was good across all study groups. Endline birth registration rates were especially high among young children compared to older children, indicating it has improved significantly over time. Endline child immunization rates were high and there was a small but consistent decrease from baseline to endline in the percentage of children reported to be working.
- Voter participation improved across all study arms.

This study highlighted the difficulties that arise in trying to conduct rigorous research within physically demanding, socially precarious and politically complex settings. Applying contentious and abstract concepts such as forced labor, bonded labor and trafficking to the multi-faceted and challenging circumstances of a marginalized and vulnerable population is a research venture fraught with difficulty. Terms need de-coding and explaining in terms that are comprehensible and concrete. The precariousness of the target population, the courage and dedication of the studied NGO and the perseverance and patience of the researchers all require acknowledgement. Simplistic expectations of clear-cut “Monitoring & Evaluation” outcomes have little place in such a project; interventions are not “trials” susceptible to precise repetition or calibration. The challenge of instrumentalizing and parsing legal definitions in ways that yield measurable indicators is real. It requires creative legal interpretation and subtle ethnographic observation, sympathetic investigation and rigorous documentation and analysis. We hope this study has succeeded both in applying these techniques and candidly documenting some of the intervening obstacles.

This study is the first to examine the impact of a multifaceted, community-based intervention to eradicate forced and bonded labor. While our results are robust and encouraging, it is clear that many methodological and substantive questions remain as challenges for future investigators. Refinement of techniques for establishing nuanced baseline studies, for identifying ethical and comparable (or comparable enough) “waiting list” control groups and for introducing digital research techniques into remote locations are pressing issues. Substantive research, both quantitative and qualitative, probing in more detail the social and intra-personal dimensions of exploitation, their susceptibility to sustainable change, and the role of different change agents is essential. In the Indian context, the enduring legacy of caste as a determinant of vulnerability, social standing and susceptibility to empowerment emerged as a key but under explored issue in this study. From differential access to sources of sustenance such as household animals, to persistent stigmatization in relation to participation in community events, the role of caste must feature centrally in future studies of exploitation eradication.

More in depth research on community change agents would also be beneficial. Data on the functioning of CVCs, on the differential rates of their “maturation” and the factors responsible for this, are critical to test the hypothesis of a dose-response relationship between CVC maturity and exploitation eradication. Future research could also explore whether there is a direct link between the eradication of forced and bonded labor and a broad range of socioeconomic conditions—something that this study was unable to do with the data available. As labor mobility in the subcontinent increases, fuelled by climate change, political tensions and better information technology and communication, the importance of targeting the factors that contribute to community-based change in future exploitation eradication research is apparent.

This study is the first to examine the impact of a multifaceted, community based intervention to eradicate forced and bonded labor. While our results are robust and encouraging, it is clear that many methodological and substantive questions remain as challenges for future investigators.



# APPENDICES

## APPENDIX 1 – METHODS AND REGRESSION MODELS

### Introduction

The purpose of this appendix is to specify the methods for selecting hamlets to be re-interviewed at the study endline, to report endline interview non-response, to detail qualitative interview sampling characteristics and to specify the statistical models used in the linear and logistic regression analyses.

### Randomization

Based on preliminary power computations and funding resources, the goal of the randomization procedures was to select approximately half of the baseline study population for re-interview. Cohorts were identified by whether the communities received the complete intervention, and if so, whether MSEMVS judged that this intervention had matured at follow up, according to a set of benchmark achievements. Randomization was by hamlet, with hamlets grouped into the three study cohorts. Because Bhala village/ Bhala Bind Basti hamlet was so much larger than the other hamlets (231 households), we excluded it from the sampling plan. Cohort 1 (“Full Intervention group”) consisted of households in 25 hamlets which had received the full targeted intervention, which had matured by the time of follow-up; Cohort 2 (“Partial intervention group”) consisted of eight hamlets which had received the full targeted intervention, which had not yet matured. In addition, there were five hamlets in the comparison group (Mahuapur village; one of five villages in the Mahuapur Panchayat); these hamlets had received limited and late interventions.

First for Cohort 1, after excluding Bhala Bind Basti, we ranked the remaining 32 hamlets within Panchayat (Giriya, Bisapur) and hamlet size category (small: 1-19 households; medium: 20-49 households; large: 50 or more households) in descending order by number of households. Our aim was to balance the number of small, medium and large hamlets in the sample, maintaining roughly a 50% selection. We went down this ranked list and randomly selected one of each sequential pair within Panchayat-hamlet size category. For hamlets without an associated pair (e.g., the last in each segment of the ranked list), we randomly determined if that hamlet were to be included. We randomized within districts to create a better balance of hamlet sizes and characteristics, assuming there may be similarities among hamlets within a district.

Results: Tables 1 through 3 enumerate the hamlets with households interviewed at baseline and indicate which of these were selected for re-interview. Tables 4 and 5 show the ranked lists with random number assignments. Cohort 1 (Table 1): We selected eight hamlets from Giriya and six from Bisapur for a total of 488 households. These numbers are slightly less than the ~500 we estimated we would interview. Cohort 2 (Table 2): We selected n=157 households from two hamlets in Bisapur and three from Giriya. Cohort 3 (Table 3): All households from the five hamlets are to be re-interviewed in Mahuapur village.

**Table 1. List of villages and hamlets in Cohort 1 (Full Intervention)**

Nayaya Panchyat	Village	Number of Households in the village	Hamlet	Number of Households in Hamlet	Intervention Began	Selected for follow-up interview
Giriyan	Daripur	89	Daripur Mushar Basti	38	Oct-11	Yes
			Daripur Harijan Basti	30	Oct-11	No
			Daripur Sharma Basti	21	Oct-11	No
	Palhaiya/ Basantpur	70	Basantpur Harijan Basti	53	Dec-11	No
			Basantpur Muslim Basti	17	Dec-11	Yes
	Jogipur	59	Jogipur Saroj Basti	59	Dec-11	Yes
	Nidur	98	Nidur Harijan Basti	78	Nov-11	Yes
			Nidur Saroj Basti	20	Nov-11	Yes
	Tarapur	126	Tarapur Mushar Basti	13	Nov-11	Yes
			Tarapur Harijan Basti	72	Nov-11	No
			Tarapur Chauhan Basti	20	Nov-11	Yes
			Tarapur Pasi Basti	21	Nov-11	No
	Bhagwati- daspur	42	Bhagwatidapur Harijan Basti	28	Oct-11	Yes
			Bhagwatidaspur Pashi Basti	14	Oct-11	No
Bisapur	Bisapur	44	Bisapur Mushar Basti	17	Dec-11	No
			Bisapur Pal Basti	15	Dec-11	Yes
			Bisapur Patel Basti	12	Dec-11	No
	Bhala	301	Bhala Bind Basti	231	Oct-11	Excluded
			Bhala Rajbhar Basti	35	Oct-11	Yes
			Bhala Chauhan Basti	35	Oct-11	No
	Liladharpur	49	Liladharpur Harijanpur Basti	16	Oct-11	Yes
			Liladharpur Saroj Basti	33	Oct-11	Yes
	Badi Babhanauti	46	Badi Babhanauti Harijan Basti	46	Oct-11	No
	Khetalpur	79	Khetalpur Harijan Basti	79	Nov-11	Yes
	Badhauna	37	Badhauna Harijan Basti	37	Nov-11	Yes

**Table 2. List of villages and hamlets in Cohort 2 (Partial Intervention)**

Nayaya Panchyat	Village	Number of Households in the village	Hamlet	Number of Households in Hamlet	Intervention Began	Selected for follow-up interview
Giriyani	Domanpur	64	Domanpur Mushar Basti	22	Apr-12	No
			Domanpur Harijan Basti	20	Apr-12	Yes
			Domanpur Saroj Basti	12	Apr-12	Yes
			Domanpur Pal Basti	10	Apr-12	Yes
	Awasanpur	18	Awasanpur Pal Basti	18	Feb-12	No
Bisapur	Ismaila	83	Ismaila Mushar Basti	25*	Apr-12	Yes
			Ismaila Harijan Basti	58*	Apr-12	No
	Ucchaitha	92	Uchetha Harijan Basti	92	Nov-11	Yes

\* Initial summary data provided by MSEMVS suggested Ismaila Mushar Basti had 23 households and Ismaila Harijan Basti had 60. Values indicated are those found in the baseline dataset.

**Table 3. List of villages and hamlets in Cohort 3 (Comparison)**

<b>Nayaya Panchyat</b>	<b>Village</b>	<b>Number of Households in the village</b>	<b>Hamlet</b>	<b>Number of Households in Hamlet</b>	<b>Selected for follow-up interview</b>
Mahuapur	Mahuapur	190	Malepur Mushar Basti	60	Yes
			Mahuapur Main Mushar	39	Yes
			Mahuapur Mushar train track	26	Yes
			Mahuapur Pasi Basti	30	Yes
			Mahuapur [Malepur] Bind Basti	35	Yes
	Bhikharirampur	135	Bhikharirampur Harijan Basti	135	No
	Chakchandapur	65	Chakchandapur Harijan Basti	65	No
	Dangahara	89	Dangahara Harijan Basti	89	No
	Vishnupur	89	Visnupur Harijan Basti	62	No
			Visnupur Mushar Basti	27	No

**Table 4. List of hamlets for Cohort 1 by district and hamlet size with random selection outcome.**

<b>Nyaya Panchayat</b>	<b>Name of the Hamlet</b>	<b>Number of Households in the Hamlet</b>	<b>Group</b>	<b>Key random number*</b>	<b>Select</b>
Giriyani	Nidur Harijan Basti	78	50-99	46	Yes
	Tarapur Harijan Basti	72	50-99		No
	Jogipur saroj Basti	59	50-99	5	Yes
	Basantpur Harijan Basti	53	50-99		No
	Daripur Mushar Basti	38	20-49	26	Yes
	Daripur Harijan Basti	30	20-49		No
	Bhagwatidapur Harijan Basti	28	20-49	22	Yes
	Daripur Sharma Basti	21	20-49		No
	Tarapur Pasi Basti	21	20-49	98	No
	Nidur Saroj Basti	20	20-49		Yes
	Tarapur Chauhan Basti	20	20-49	27	Yes
	Basantpur Muslim Basti	17	1-19	10	Yes
	Bhagwatidaspur Pashi Basti	14	1-19		No
	Tarapur Mushar Basti	13	1-19	16	Yes
Bisapur	Bhala Bind Basti	231	exclude	98	Skip
	Khetalpur Harijan Basti	79	50-99	42	Yes
	Badi Babhanauti Harijan Basti	46	20-49	79	No
	Badhauna Harijan Basti	37	20-49		Yes
	Bhala Rajbhar Basti	35	20-49	23	Yes
	Bhala Chauhan Basti	35	20-49		No
	Liladharpur Saroj Basti	33	20-49	42	Yes
	Bisapur Mushar Basti	17	1-19	57	No
	Liladharpur Harijanpur Basti	16	1-19		Yes
	Bisapur Pal Basti	15	1-19	0	Yes
	Bisapur Patel Basti	12	1-19		No

\* Random selection – sorted by size within district, with random number assignments and indicating hamlets which were selected for follow-up interviews. With blocks of two, if random number was 0-49, hamlet was selected; then next in pair was not selected.

**Table 5. List of hamlets in Cohort 2 by district and size with random selection outcome.**

<b>Nyaya Panchyat</b>	<b>Name of the Hamlet</b>	<b>Number of Household in Hamlet</b>	<b>Group</b>	<b>Key random number*</b>	<b>Select</b>
Bisapur	Uchetha Harijan Basti	92	50-99	24	Yes
	Ismaila Harijan Basti	60 **	50-99		No
	Ismaila Mushar Basti	23 **	20-49	11	Yes
Giriyari	Domanpur Mushar Basti	22	20-49	97	No
	Domanpur Harijan Basti	20	20-49		Yes
	Awasanpur Pal Basti	18	1-19	88	No
	Domanpur Saroj Basti	12	1-19		Yes
	Domanpur Pal Basti	10	1-19	47	Yes

**\* Random selection – sorted by size within district, with random number assignments and indicating hamlets which were selected for follow-up interviews. With blocks of two, if random number was 0-49, hamlet was selected; then next in pair was not selected.**

\*\* Initial summary data provided by MSEMVS

## **Endline Interview Non-Response**

Endline data collection occurred between March 2015 and June 2015. Of the 835 households targeted for the endline interviews, 707 (85%) were successfully interviewed. Of the 15% (128 households) that were not successfully re-interviewed at endline, information as to the reasons for drop out was available for 124 of the households. Of those, 10% (13 households) had experienced a death of the head of the household and as a result the remaining family members moved away or the household dissolved, 40% (50 households) had moved away (many of whom moved away in search of other work), and 50% (61 households) were not available when the endline survey was conducted. Analysis was conducted to detect any patterning among the households that dropped out of the study. The percentage of households that dropped out was fairly evenly distributed across each study arm (about 10% in the Full Intervention and Comparison groups and 7% in the Partial Intervention group). No significant differences were found when comparing the households that dropped out of the study to those that were successfully re-interviewed at endline with regard to household wage, head of household age and other key demographic characteristics.

## **Qualitative Interview Sampling**

We administered the qualitative household interview to between 3-5 randomly selected households from about half (randomly selected) of the endline target hamlets, for a total of 33 households, 24 in the Full Intervention cohort, 3 in the Partial Intervention Cohort and 6 in the Comparison group. Twelve interviews were from Bisapur, 15 from Giriya and 6 from Mahuapur. Four focus groups with between 12 and 18 members were carried out in each of Bisapur and Giriya; six were in the Full Intervention cohort and 2 were in the Partial Intervention cohort. Ten key informants were interviewed, three in each of the two intervention cohorts and four in the Comparison group; all six intervention group key informant interviews took place in Giriya. Details on these interviews are found in Table 6.

**Table 6. Qualitative Interview Sampling Schema**

<b>Cohort</b>	<b>Nyaya Panchayat</b>	<b>Village</b>	<b># qualitative interviews</b>	<b>Key informant</b>	<b># participants in Focus Group</b>
Full Intervention	Giryan	Bhagwatidaspur	0	0	12
		Daribpur	3	2	N/A
		Jogipur	5	0	N/A
		Nidur	2	0	13
		Palhaiya	0	0	13
		Tarapur	2	1	N/A
	Bisapur	Badhauna	3	0	14
		Bhala	3	0	N/A
		Bisapur	0	0	13
		Khetalpur	5	0	13
Liladharpur		1	0	N/A	
Partial Intervention	Giryan	Domanpur	3	3	18
	Bisapur	Ismaila	0	0	14
Comparison	Mahuapur		6	4	N/A



## Regression Models

To determine the intervention effect, generalized linear regression models are used for continuous outcomes and logistic regression models are used for dichotomous outcomes. These models are fit using a difference in difference (DID) approach, which is a statistical technique used in econometrics which attempts to mimic an experimental research design. This method improves the validity of the estimated treatment effect and is appropriate for the data collected in a study such as this which is quasi-experimental (given that the initial cohort assignments were not randomly selected, the intervention effect could have been subject to bias).

The DID modeling technique calculates the effect of a treatment (i.e. exposure to the intervention) on an outcome (i.e. the prevalence of bonded labor) by comparing the average change over time in the outcome variable for the treatment group to the average change over time for the comparison group. By doing so, this method adjusts for underlying differences between study groups, and is intended to eliminate some of the effect of selection bias. Household level covariates (such as the educational status of the head of household, the occupation of the head of household and caste) as well as village-level fixed effects (to adjust for any remaining differences inherent across villages) are included to control for any other underlying differences that could have confounded the results. Given that the data are primarily collected at the household level, most regression models presented in this study indicate the effect at the household level. In the following models,  $B_3$  is the intervention effect.

$$\text{logit}(p) = \log\left(\frac{p}{1-p}\right) = Y_{ij}$$

$$Y_{ij} = B_0 + B_1 * Cohort_{ij} + B_2 * Post_{ij} + B_3 * Post_{ij} * Cohort_{ij} + \varepsilon_{ij}$$

Where the intervention arms are defined by:

$$Cohort = \begin{cases} 0 = Comparison \\ 1 = Intervention \end{cases}$$

Survey wave is defined by

$$Post = \begin{cases} 0 = baseline \\ 1 = follow up \end{cases}$$

Fixed effects are included at the household level and village level to adjust for any underlying differences by cluster

j= village

i= household

APPENDIX 2A – BASELINE SURVEY

**MSEMVS-GG: Nyay Panchayat Slavery Eradication Programme**  
**Household Survey Form 2011**

Introduce yourself and show your MSEMVS/DDWS ID. *MSEMVS/DDWS is asking everyone who lives here about their education, health & livelihood conditions so that we can understand what has changed and what needs to change. If everyone joins in providing information, then the whole community will have a clear idea of what is happening here. Although we are collecting information from everyone, we will not pass on your personal information to anyone else. We take your name away from the information you provide to us.* Participants must be at least 18 years old. If you are not sure the person is 18 – check with them.

- 1. Village and hamlet: \_\_\_\_\_
- 2. Nyay Panchayat: \_\_\_\_\_
- 3. Interviewer Name: \_\_\_\_\_
- 4. Date of interview: \_\_\_\_\_
- 5. Family’s detail:

Serial No.	Name	Age (Year)	Gender	Marital Status	Is this a child (5-14) in school?	If no, why	Adult: Educational level	Main type of work?	Pay/ Other Pay

6. How many meals does your family eat each day? 1    2    3    4    *Less than one*

7. Comments of interviewer on quality & sufficient on food which was consumed by the family in previous day.      1. Sufficient      2. Less Sufficient      3. Insufficient

## Medical Care

8. Does your family have access to health care (health center, health worker or hospital)?

1 / 2 / DK

9. Is your family able to get free treatment? 1 / 2 / DK

10. Are the children get immunized? 1 / 2 / DK

11. Where do your family go for medical treatment?

## Household Characteristics and Income

12. What is the house's roof made of?

13. How long has your household lived in this area?

14. Does your family own land? 1 / 2

15. If yes, what is the land used for?

16. How much land does the family own? \_\_\_\_\_ (Please specify in meters<sup>2</sup>)

17. Does the family own any animals? 1 / 2 If yes, what and how much

18. Do you receive money from family members living outside of the village? 1 / 2 / DK

19. If yes, how much each month? Rs. \_\_\_\_\_ per month / DK

20. Does your household receive government assistance?..... ..

21. Has anyone in your close family/ neighbour taken work away from your home area and then not been allowed to come home? 1 / 2

22. If yes, please provide information:

Family member's name	Age when he/she left	Type of work you think he/she is doing	Sex	When did he/she leave (month and year)

23. From whom did your household borrow the money?

24. Does the household currently have a debt to anyone? 1 / 2

25. How much is the debt? \_\_\_\_\_ in rupees (or other, specify)
26. For what purpose was the original loan taken?
27. Does your household pay interest on the debt/loan? 1 / 2 / DK
28. If yes, at what annual rate of interest? \_\_\_\_\_%
29. How long ago was the loan taken?
30. From whom did your household borrow the money? .....
31. Does the person from whom your household borrowed the money require any family members to work for them as part of paying back the loan? 1 / 2
32. What would happen if they refused to work when expected to do so?
33. What would happen if the worker decided to move away or work for someone else?
34. Are you aware of any households in the village who are currently forced to work through violence or threats? 1 / 2 .....
35. Currently, is anyone in your own household forced to work (over weeks, months or years) through violence or threats? 1 / 2 .....

### Political Process

36. Does all the adults in your family have voter ID?
37. Does your family have job card?
38. Do the adult member get job under NREGA?
39. Did any male family members vote in the last local or national elections? 1 / 2
40. Did any female members vote in the last local or national elections? 1 / 2

### Perceived Self-Efficacy

**Ask one male adult respondent from the household (if available):**

41. Do you feel you have the ability to improve your life?  
1. Yes 2. Probably Yes 3. Probably No 4. No
42. Do you feel you have the ability to improve the lives of those around you?  
1. Yes 2. Probably Yes 3. Probably No 4. No
43. Are you part of any kind of village group that is trying to improve things? 1 / 2

**Ask one female adult respondent from the household (if available):**

44. Do you feel you have the ability to better your life?  
1. Yes 2. Probably Yes 3. Probably No 4. No

45. Do you feel you have the ability to better the lives of those around you?

1. Yes 2. Probably Yes 3. Probably No 4. No

46. If you want to, can you get help to limit the number of children and babies you have?

1 / 2

47. Are you part of any kind of village group that is trying to improve things?

1 / 2

48. When you think about the future, do you think things will be better, worse or no different for your household in five years time? 1 (Better) / 2 (Worse) / 3 (No Difference)

*Thank you for taking part in providing this information.*

Please sign to show that you provided the information and you chose to join in.

\_\_\_\_\_

Date Name of participant Signature/thumbprint of participant Signature of investigator

## Post-Interview Observation Form

*(To be completed **by interviewer** immediately after leaving the interview)*

49. Household religion (if known to interviewer): \_\_\_\_\_

50. Household caste (if known to interviewer): \_\_\_\_\_

51. Given the information you have gathered about this household, is it your view that this household is currently living in debt bondage? Y / N / DK

52. Was the interviewee able to speak freely to answer the questions?

Y / N / DK

53. Length of time taken for interview (circle as appropriate):

0-30 minutes

30-60 minutes

1-1.5 hrs

1.5+ hrs

## APPENDIX 2B – BASELINE SURVEY

Household number: \_\_\_\_\_



Harvard University  
**FXB CENTER**  
for Health & Human Rights

### **Bonded Labor Research Project FXB Center, Harvard University and Institute for Human Development Household Survey 2014**

Date of interview: \_\_\_\_\_ Interviewer name: \_\_\_\_\_

#### **Operational definitions**

**Household:** A group of persons living together and taking food from a common kitchen. Including temporary stay-aways (those whose total period of absence from the household is expected to be less than 6 months) but excluding temporary visitors and guests (expected total period of stay less than 6 months).

**Household member:** A person who has lived in the house for at least 6 months and resides there at least half of the time during those six months. Exceptions include newborn children and someone how who has joined the household through marriage in the last six months. Household members do not have to be blood relations.

**Head of household:** Self-identified person

**Child:** Any person under the age of 14 years.

#### *Interviewer*

Please record the interview start time: \_\_\_\_\_

*Read out loud:* Thank you for your participation in the study. I am now going to ask you some questions about your household. I would like to ask you information about each member of the household, from oldest to youngest. I will ask you about the age, sex, marital status, work status and education status of each member of the household. We will start with you.

#### **A. Household details**

A.1. Village: \_\_\_\_\_

A.2. Hamlet: \_\_\_\_\_

A.3. Nyay Panchayat: \_\_\_\_\_

A.4. Caste: \_\_\_\_\_

A.5. Religion: \_\_\_\_\_

Household number: \_\_\_\_\_

A.6. S. No.	A.7. Relationship with head of household	A.8. Sex	A.9. Age	A.10. Marital Status	A.11. Highest level of education	A.12. Does child (5yrs -14yrs) go to school?	A.13. If child does not go to school, then why not?	A.14. Where was child born?	A.15. Birth Registration	A.16. Is child immunized?	A.17. Current type of work (Main)	A.18. What is the term of work? (Main)	A.19. Pay/ Other Pay (Main)	A.20. Current type of work (Subsidiary)

Household number: \_\_\_\_\_

If other, please mention question number and add comments.

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**CODES:**

A. 7. [Code: Self (Head of the household):1; Husband/wife of head: 2; Son/daughter: 3; Son/daughter in law: 4; Grandson/daughter: 5; Father/Mother: 6; Brother/Sister: 7; Father/mother in law: 8; Brother in law/Sister in law: 9; Nephew/Niece: 10; Servant/maid: 11; Other relative: 12; Others (specify): 88.

A.8. [Code: Male:1; Female:2]

A.10. [Code:Unmarried:1, Married:2, Widowed:3, Divorced:4, Separated:5, Deserted:6 ]

A. 11. [Code: No education:1;Up to 1<sup>st</sup> standard:2;Up to 3<sup>rd</sup> standard:3; Up to 5<sup>th</sup> standard; Up to 8<sup>th</sup> standard:5; Up to 10<sup>th</sup> standard:6; Up to 12<sup>th</sup> Standard:7; Bachelor's degree:8; Masters' degree:9; Vocational studies:10; Others(specify):88 ]

A. 12.[Code: Yes:1, No:2, Not Applicable: 9]

A.13. [Code: Child must work instead:1; Moneylender forces child to work:2; Child is discriminated against in school:3; School is too far away:4; Teachers are unqualified:5; Number of teachers are not enough:6; School is unsafe:7; School is too expensive:8; Child is too young:9; Child is disabled:10; Other(Specify):88]

A.14.. [Code: Home (delivered by self, friends, family):1, Home (health personnel, TBA, midwife, doctor):2, Health Clinic:3, Hospital:4 , Others (Specify):88]

A.16. [Code: Yes, 1 immunization:1; Yes, 2 immunizations: 2; Yes, 3+ immunizations: 3; , Do not know:99]

A.17 and A.20 [Code: Self-employed in agriculture/fishery/orchard/animalhusbandary-1;Unpaid family workers in agriculture/ fishery/ orchard/ animal husbandry-2;Self-employed in non-agriculture-3;Unpaid family worker in non-agriculture-4;Regular salaried/wage employee in government/private sector-5; Casual wage labour in public works (construction)-6; Casual labour in agriculture-7; Casual labour in non-agriculture other than public works (brick kiln)-8; Domestic work (only in HH chores)- 9; Domestic work but also engaged in free collection of goods (vegetables, roots, firewood, cattle-feed etc.) sewing/weaving etc. for household use-10; Traditional service

occupation (Cobbler, Dhobi, Barber)-11; Students-12; Too Young-13; Too Old/Handicaps-14; Other (specify):88]

A.18 [ Code: Based on daily wage:1; Based on weekly wage:2; Based on monthly wage:3; Working for advanced wage:4; Working for advanced loan:5; Self-employed, no wage: 6; Other (specify): \_\_\_\_\_ 88]

A.19 [ Write in the amount of rupees. If pay is in kind (eg. grain), please estimate the financial amount of the in kind payment and record it in rupees. If the individual does not receive pay because they are working in bonded labor to pay off an advanced wage or advanced loan, use the code 00.]



Household number: \_\_\_\_\_

A.21. Has any family member taken work away from your home area and then not been allowed to come home?

[Code: Yes:1 (Go to A. 21.1),

No: 2(Skip to next section, B)

Don't know: 99 (Skip to next section, B)]

A.21.1. Family Member #	A.21.2. Sex	A. 21.3. Relationship to Head of Household	A. 21.4. When did that person leave? (month/year)	A. 21.5. Age when that person left?	A. 21.6. What type of work do you think the family member is doing?
1					
2					
3					
4					
5					
6					
7					
8					

**CODES:**

A 21.2. [Code: Male:1; Female:2].

A.21.3 .Code: Self (Head of the household):1; Husband/wife of head: 2; Son/daughter: 3; Son/daughter in law: 4; Grandson/daughter: 5; Father/Mother: 6; Brother/Sister: 7; Father/mother in law: 8; Brother in law/Sister in law: 9; Nephew/Niece: 10; Servant/maid: 11; Other relative: 12; Others (specify): 88.

A.21.6. [Code: Self-employed in agriculture/fishery/orchard/animal husbandary-1;Unpaid family workers in agriculture/fishery/orchard/animal husbandry-2; Self-employed in non-agriculture-3; Unpaid family worker in non-agriculture-4; Regular salaried/wage employee in government/private sector-5; Casual wage labour in public works (construction)-6; Casual labour in agriculture-7; Casual labour in non-agriculture other than public works (brick kiln) -8; Domestic work (only in HH chores)- 9, Domestic work but also engaged in free collection of goods (vegetables, roots, firewood, cattle-feed etc.) sewing/weaving etc. for householduse-10; Traditional service occupation (Cobbler, Dhobi, Barber)-11, Students-12, Too Young-13, Too Old/Handicaps-14, Other (specify):88

Household number: \_\_\_\_\_

*Interviewer Read loud:* I will now be asking you questions about your household's health, nutrition and hygiene habits.

**B. Health and hygiene**

B.1. Over the last week, approximately how many meals per day did your family eat?

[Code: Less than one:1,  
One:2,  
Two:3,  
Three:4,  
More than three times:5]

B.2. In the past 4 weeks, did you worry that your household would not have enough food?

[Code:No:1,  
Sometimes:2,  
Often:3]

B.3. In the past 4 weeks, did your any household member go to sleep at night hungry because there was not enough food?

[Code: No:1,  
Sometimes:2,  
Often:3]

B.4. How does your household get its drinking water?

[Code: Piped into dwelling:1,  
Piped into yard/plot:2,  
Public taps/ standpipe:3,  
Tubewell or borehole:4,  
Protected dug well :5,  
Unprotected dug well:6,  
Rainwater:8,  
Surface water (river, dam, lake, pond, canal):9  
Others (specify):88 \_\_\_\_\_]

B.5. What does your household do for sanitation?

[Code: Flush or pour flush toilet:1,  
Pit latrine:2  
No facility, open space:3]

B.6. Is this a shared sanitation latrine/toilet/open space?(Sharing defined as sharing with people outside the household)

[Code:Yes:1,  
No:2]

B.7. Does your family have access to health care? ( health center, health worker, hospital)

[Code:Yes:1  
No: 2 (Skip to B.9)  
Don't know:99]

B.8. Is the treatment free?

[Code:Yes:1,  
No:2,  
Don't know:99]

B.9. Where do you and your family go for medical treatment? (check all that apply)

[Code: Govt. Municipal hospital:1,  
Govt. Dispensary:2,

Household number: \_\_\_\_\_

Local health center:3,  
Private doctor:4,  
Sub-center:5,  
Homeopath/Vaidya/Hakim:6,  
Mobile clinic:7,  
NGO:8,  
Traditional healer:9,  
Others (Specify) :88 \_\_\_\_\_]

B.10. Over the last 6 months, did anyone in your household require any medical attention?

[Code: Yes:1,  
No:2,  
Don't know:99]

B.11. Did the person get any treatment? (record the most recent event that required medical attention)

[Code: Yes:1 (skip to C.1),  
No:2,  
Don't know:3, skip to C.1]

B.11. Why did the person not receive any treatment?

[Code: Health care too far:1,  
Health care (doctor visit/medical attention) too expensive:2,  
Cannot afford medication:3,  
Treatment denied:4  
Others (Specify): 88 \_\_\_\_\_]

*Interviewer Read loud:* I will now be asking you questions about your household's finances and living conditions.

### **C. Dwelling and Land Ownership**

C.1. How long has your household lived in the area? (Number in years)

C.2. Do you own your homestead land?

[Code: Yes, own their homestead land: 1,  
No, renting their homestead land: 2  
No: provided their homestead land by employer: 3  
Other (specify): 88 \_\_\_\_\_]

C.3. What is your house's roof made up of?

[Code: Polythene (plastic sheet): 1,  
Dry grass or paddy straw tied with rope: 2,  
Cement sheets on bamboo sticks or terracotta tiles:3,  
Tin Sheets:4,  
Others (Specify): 88 \_\_\_\_\_]

C.4. Is the kitchen separate from the sleeping area?

[Code: Yes:1,  
No:2]

C.5. Do you own any land, excluding homestead land?

[Code: Yes:1,  
No:2 (Skip to C.8.)]

C.6. Excluding household land how much land does the family own? (In acres)

Household number: \_\_\_\_\_

C.7. What is that land used for? (Choose all that apply)

[Code: Idle/ Unused:1,  
Agriculture:2,  
Animal Grazing:3,  
Others (specify): 4 \_\_\_\_\_ ]

C.8. Does the household own any animals?

[Code: Yes:1,  
No:2 (Skip to next section)]

C.8.1. How many of each?

Sl. No		[Code: Yes: 1, No:2]	How Many (Record Number)
1.	Cows		
2.	Buffaloes		
3.	Bullocks		
4.	Goats		
5.	Chickens		
6.	Pigs		
7.	Other 1		
8.	Other 2		

Interviewer Read loud: I will now proceed to ask you questions about your household's income and savings

#### D. Income and savings

D.1. Does your household receive any government assistance?

[Code: Yes:1  
No: 2, (Skip to D.3) .]

D 2. What kind of assistance do you receive?

Sl. No.	Scheme	Yes -1, No-2	Sl. No.	Scheme	Yes -1, No-2
1	MGNREGA		8	Samajwadi Pension	
2	IAY		9	Health Card/Insurance Scheme/Smart card	
3	ICDS		10	Jan dhan Yojna	
4	PDS		11	Scholarship/cycle Scheme	
5	JSY		12.	Construction worker welfare scheme	
6	Immunization		13	Janani Yojna	
7	Old age Pension		14.	Other (specify)	

(skip to D.4. after completing this question)

D.3. Why does your household not receive any government assistance?

[Code: Not eligible for government assistance:1;  
Not aware of any government assistance:2;  
Not able to access assistance because of geographic or time constraints: 3,  
Not able to access assistance because I am unable to read or write: 4,

Household number: \_\_\_\_\_

We were denied government assistance: 5,  
Other (Specify): 88 \_\_\_\_\_

D.4. What is the average annual income for the household? (In rupees)

D. 5. How much money does your household save each month? (In rupees)

Household number: \_\_\_\_\_

*Interviewer Read loud:* I will now ask you questions about your household's loans and debt.

**E. Labour mortgage, Loans and debt**

*Interviewer:* Please fill out the table for all household members who are currently working for a wage (both financial or in kind wages).

E.1. S.N.	E.2. Are you currently working for an advance wage payment, or to pay off a loan with the employer? <i>(if no, skip to E.5.)</i>	E.3. How long have you been working to pay off your advanced wage payment/ loan? [in months]	E.4. Do you feel like you can pay off the loan?	E.5. Did you have an advance wage payment or loan with an employer that was terminated or completed in the last 3 years?	E.6. Is your wage delayed from what you agreed upon with your employer?	E.7. Is any part of the wage or any number of days' wage withheld on the day of payment?	E.8. Is payment withholding common practice for all employees at your place of work?	E.9. What would happen if you refused to work when expected to do so? <i>(check all that apply)</i>	E.10. What would happen if you decided to move away or work for someone else? <i>(check all that apply)</i>	E.11. If you choose to, are you able to change employer?	E.12. Let's think about a situation where you found another job you like better than the one you have. It has good pay and is close to your home. Would you feel free to quit your current job and take the new job?

Household number: \_\_\_\_\_

**Codes:**  
 E.1.: Link S.N. number with A.5.  
 E.2.: [Code: Yes, working to pay off advanced wage payment: 1; Yes, working to pay off advanced loan: 2; No: 3 (skip to E.5)]  
 E.4.: [Code: Yes: 1; No: 2]  
 E.5.: [Code: Yes: 1; No: 2]  
 E.6.: [Code: Paid on time: 1; Delayed sometimes: 2; Often delayed: 3; Regularly delayed as a 'rule': 4]  
 E.7.: [Code: No: 1; Partly: 2; Current day's wage: 3; Current week's wage: 4; Other (specify): 88]  
 E.8.: [Code: Yes: 1; No: 2]  
 E.9.: [Code: Physical violence: 1; Lose home: 2; Threats: 3; Nothing: 4; Other (specify): 88]  
 E.10.: [Code: Physical violence: 1; Lose home: 2; Threats: 3; Nothing: 4; Other (specify): 88]  
 E.11.: [Code: Yes: 1; No, there is no alternative form of employment where I live: 2; No, this is the only way that I can make a wage: 3; No, I do not feel like I could leave my current employment: 4; Other (specify): 88]  
 E.12.: [Code: yes: 1; probably yes: 2; probably no: 3; no: 4; no response: 99]

E.12. Are you or your household currently in debt to anyone?  
 [Code: Yes: 1,  
 No: 2 (skip to F.1.) ]

E.13	E.14	E.15	E.16 .	E.17.	E.18.
<b>Amount of Debt in Indian Rupees</b>	<b>When was the loan taken? (month/year)</b> [Code: Yes: 1, No: 2 (skip to F.1.) ]	<b>Why was the loan taken?</b> [Code: Medical Care: 1, Home Repair: 2, Food: 3, Business Material: 4, Equipment/Assets: 5, To buy land: 6, Family wedding: 7; Family funeral: 8, Others (Specify): 88	<b>Lender</b> [Code: Local money/lender: 1, Neighbor: 2, Friends / relatives: 3, Employer: 4, Self-help group: 5, Bank: 6, Others (specify): 88	<b>Is there an interest on the loan?</b> [Code: Yes: 1, No: 2, (Skip to next section, F ), Don't know: 99 (Skip to next section, F)]	<b>Annual Rate of interest.</b>

Household number: \_\_\_\_\_

*Interviewer Read loud:* I will now ask you questions about your household's public involvement.

**F. Politics and rights**

F.1. Do all the adults in your family have voter ID?

[Code:Yes:1,  
No:2,  
Don't know:99]

F.2. Does your family have a job card?

[Code:Yes:1,  
No:2,  
Don't know:99]

F.3. Do the adult members get jobs under NREGA?

[Code:Yes:1,  
No:2,  
Don't know:99]

F.4. Did any male family members vote in the last local or national elections?

[Code:Yes:1,  
No:2,  
Don't know:99]

F.5. Did any female members vote in the last local or national elections?

[Code:Yes:1,  
No:2,  
Don't know:99]

F.6. Are any male members of your household a part of a Community Vigilance Committee (CVC)?

[Code:Yes:1,  
No:2,  
Don't know:99]

F.7. Are any female members of your household a part of a Community Vigilance Committee (CVC)?

[Code:Yes:1,  
No:2,  
Don't know:99]

F.8. Are any male members of your household a part of village level committee (panchayat)?

[Code:Yes:1,  
No:2,  
Don't know:99]

F.9. Are any female members of your household a part of village level committee (panchayat)?

[Code:Yes:1,  
No:2,  
Don't know:99]

*Read loud:* I will now proceed to ask you about your perception about your life. I will ask these questions to one male and one female member of the household. Can you [head of household], please select one male and one female to answer these questions.

Household number: \_\_\_\_\_

**G. Perceived self-efficacy, well-being and children’s prospects –**

	Male Respondent	Female Respondent
G.1. Overall, in the past 3 years, do you think that things have gotten better for your household. [ Code: Yes :1, Probably yes :2, Probably no:3, No:4; No response: 99]		
G.2. Overall, in the past 3 years, do you think that your children have better access to education. [ Code: Yes :1, Probably yes :2, Probably no:3, No:4; No response: 99]		
G.3. Do you think that your income has improved in the last 3 years. [Code: Yes :1, Probably yes :2, Probably no:3, No:4; No response: 99]		
G.4. When you think about the future, do you think things will be better, worse or no different for your household in five years time? [Code: Better: 1, Worse: 2, No Different: 3; No response: 99]		
G.1. Do you feel that you have the ability to improve your life. [Code: Yes :1, Probably yes :2, Probably no:3, No:4; No response: 99]		
G.2. Do you feel that you have the ability to improve the lives of those around you. [Code: Yes :1, Probably yes :2, Probably no:3, No:4; No response: 99]		

**End of interview**

**Interviewer read out loud: You have reached the end of the interview. Thank you for your time and participation.**

**Post-Interview Observation Form**

*(To be completed by interviewer immediately after leaving the interview)*

H.1. Given the information you have gathered about this household, is it your view that this household is currently living in debt bondage?

[Code: Yes:1,  
No:2,  
Don't know:99]

H.2. Was the interviewee able to speak freely to answer the questions?

[Code: Yes:1,  
No:2,  
Don't know:99]

H.3. Please record the interview end time: \_\_\_\_\_



# APPENDIX 3 – SEMI-STRUCTURED QUESTIONNAIRE

Household ID: \_\_\_\_\_



## Bonded Labor Research Project FXB Center, Harvard University and Institute for Human Development Qualitative Household Survey

Date of interview: \_\_\_\_\_ Interviewer name: \_\_\_\_\_

### NOTES:

Consent: Prior to conducting the interviews, participants will be presented with the consent form and the field researcher will seek and record the participant's consent.

### Operational definitions

Household: A group of persons living together and taking food from a common kitchen. Including temporary stay-aways (those whose total period of absence from the household is expected to be less than 6 months) but excluding temporary visitors and guests (expected total period of stay less than 6 months).

Household member: A person who has lived in the house for at least 6 months and resides there at least half of the time during those six months. Exceptions include newborn children and someone who has joined the household through marriage in the last six months. Household members do not have to be blood relations.

*Interviewer Read out loud:* Thank you for your participation in the study. I am now going to ask you some questions about your household.

### **A. Household details**

A.1. Village: \_\_\_\_\_

A.2. Hamlet: \_\_\_\_\_

A.3. Nyay Panchayat: \_\_\_\_\_

A.4. Caste: \_\_\_\_\_

A.5. Religion: \_\_\_\_\_

A.6. How long has your household lived in the area? (Number in years)

A.7. What is your house's roof made up of?   
[Code: No roof:1,  
Polythene (plastic sheet):2,  
Dry grass or paddy straw tied with rope:3,  
Cement sheets on bamboo sticks or terracotta tiles:4,  
Tin Sheets: 5,  
Others (Specify): 88 \_\_\_\_\_ ]

A.8. Over the last week, approximately how many meals per day did your family eat?

Household ID: \_\_\_\_\_

[Code: Less than one:1,  
One:2,  
Two:3,  
Three:4,  
More than three times:5]

A.9. In the past 4 weeks, did you worry that your household would not have enough food?   
[Code:No:1,  
Sometimes:2,  
Often:3]

A.10. Does your family have access to health care? ( health center, health worker, hospital)   
[Code:Yes:1  
No: 2 (Skip to B.1)  
Don't know:99(Skip to B.1)]

A.11. Is the treatment free?   
[Code:Yes:1,  
No:2,  
Don't know:99]

### **B. Questions About MSEMVS**

*Interviewer Read out loud:* We will now ask questions about the work that Manav Sansadhan Evam Mahila Vikash Sansthan ("MSEMVS") does in your community.

B.1. Does MSEMVS work in your community?   
[Code:Yes:1(Skip to B.4)  
No: 2 (Skip to B.2)  
Don't know:99 (Skip to C.1)]

B.2. Has anyone in your community received help from MSEMVS in the past?   
[Code:Yes:1  
No: 2  
Don't know:99]

If yes, can you please describe how and when this happened?

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B.3. Would you like MSEMVS to work in your community?   
[Code:Yes:1(Skip to C.1)  
No: 2 (Skip to C.1)  
Don't know:99 (Skip to C.1)]

Why or why not?  
\_\_\_\_\_

Household ID: \_\_\_\_\_

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B.4. Do you think that MSEMVS' work has had a positive change, negative change or no change for your community?

[Code: Positive change:1,  
Negative change: 2,  
No change: 3,  
Don't know:99]

Please describe how MSEMVS helps people in your community. (Other prompts: What kind of work do they do? What is the role that MSEMVS has in your community)

Please check all boxes that the participant mentions:

<input type="checkbox"/> 1. Community building / empowerment	<input type="checkbox"/> 4. Supports access to financial services	<input type="checkbox"/> 7. Awareness training / training of rights
<input type="checkbox"/> 2. Supports access to government services	<input type="checkbox"/> 5. Supports access to medical services	<input type="checkbox"/> 8. Supports access to education
<input type="checkbox"/> 3. Provides job trainings	<input type="checkbox"/> 6. Provides legal support	<input type="checkbox"/> 9. Political involvement

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B.5. Do you think that MSEMVS' work has helped everyone the same amount? Or do you think that some people have been helped more than other people?

[Code: Everyone was helped the same: 1,  
Some were helped more than others: 2,  
Don't know:99]

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Household ID: \_\_\_\_\_

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B.6.A. Have you noticed any difference in your community within the past 3 years?

[Code: Yes: 1  
No: 2  
Don't know: 99]

Please describe:

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B.6.B. What specific changes have you noticed and have these changes been positive or negative:

1. Community empowerment / community mobilization	
2. Political involvement	
3. Infrastructure (access to water, roads, access to utilities)	
4. Freedom of movement	
5. Access to education	
6. Access to health care	
7. Employment status	
8. Access to government schemes	
9. Other:	
10. Other:	

[Code: Positive change: 1, Negative change: 2, No change: 3, Don't know: 99]

B.7.A. Do you think the changes in your community will last a long time?

[Code: Yes: 1  
No: 2  
Don't know: 99]

B.7.B. Do you think that your community will be able to continue carrying out these changes without MSE support and/or presence?

Household ID: \_\_\_\_\_

[Code: Yes: 1  
No: 2  
Don't know: 99]

B.8. How satisfied are you with MSEMVS' work?

[Code: Very satisfied: 1,  
Satisfied: 2,  
Not satisfied: 3,  
Don't know: 99]

Please explain:

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B.9. With exclusion of their usual activities, in your opinion what other activities and assistance should the MSEMVS be involved in within your community?

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### C. Other Interventions

C.1. Do you know of any group, other than MSEMVS, that has been working within your community to help the community?

[Code: Yes: 1  
No: 2  
Don't know: 99]

If yes, please tell us about them, how long they have been in your community, and what they do:

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Household ID: \_\_\_\_\_

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**D. Civil and Political Empowerment**

D.1.A. Do you know of a group that is trying to make change within the community?

[Code: Yes:1  
No: 2 (Skip to D.2)  
Don't know:99]

D.1.B. Are you a member of these groups?

[Code: Yes:1(Skip to D.1.D)  
No: 2  
Don't know:99]

D.1.C. Would you be able to join the group if you wanted to?

[Code: Yes:1  
No: 2,  
Don't know:99]

D.1.D. Can you describe the activities the group is involved in?

Please check all boxes that the participant mentions:

<input type="checkbox"/> 1. Community building / empowerment	<input type="checkbox"/> 4. Supports access to financial services	<input type="checkbox"/> 7. Awareness training / training on rights
<input type="checkbox"/> 2. Supports access to government services	<input type="checkbox"/> 5. Supports access to medical services	<input type="checkbox"/> 8. Supports access to education
<input type="checkbox"/> 3. Provides job trainings	<input type="checkbox"/> 6. Provides legal support	<input type="checkbox"/> 9. Political involvement

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D.2. Can you describe a situation where you were able to gain access to government support schemes on your own?

[Code: Yes:1  
No: 2 (Skip to D.3)  
Don't know:99]

Please describe:

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Household ID: \_\_\_\_\_

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D.3. Do you know of anyone who has been denied government benefits and schemes?

[Code: Yes: 1  
No: 2 (Skip to D.4)  
Don't know: 99]

If yes, please describe why you think they were denied. Can you also tell us whether they are pursuing any legal action to remedy their situation:

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D.4. Have you, along with other members of your community, ever acted together to change something in the community?

[Code: Yes: 1  
No: 2 (Skip to E.1)  
Don't know: 99]

If yes, please describe:

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***E. Community Vigilance Committee***

E.1. Do you have a CVC in your community?

[Code: Yes: 1

Household ID: \_\_\_\_\_

No: 2 (Skip to F.1)  
Don't know: 99]

E.2. How does the CVC help the community?

Please check all boxes that the participant mentions:

<input type="checkbox"/> 1. Trafficking and bonded labor public awareness	<input type="checkbox"/> 5. Awareness training / training on rights	<input type="checkbox"/> 9. Leadership development
<input type="checkbox"/> 2. Reintegration of survivors	<input type="checkbox"/> 6. Supports access to medical services	<input type="checkbox"/> 10. Supports access to education
<input type="checkbox"/> 3. Provides job trainings	<input type="checkbox"/> 7. Supports access to government services	<input type="checkbox"/> 11. Political involvement
<input type="checkbox"/> 4. Community building / empowerment	<input type="checkbox"/> 8. Supports access to financial services	<input type="checkbox"/> 12. Other

Please describe:

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E.3. How active is the CVC in your community?

[Code: Very active: 1,  
Somewhat active: 2,  
Barely active: 3,  
Not active: 4,  
Don't know: 99]

E.4. How satisfied are you with the work of the CVC?

[Code: Very satisfied: 1,  
Satisfied: 2,  
Not satisfied: 3,  
Don't know: 99]

## F. Employment

Interviewer Read out loud: We will now ask questions about the work conditions for you and other people in your community.

F.1. How satisfied are you with the following:

[Code: Very satisfied: 1, satisfied: 2, not satisfied: 3, Don't know: 99]

1. Employment generally	
2. Working hours	
3. Wages	



Household ID: \_\_\_\_\_

4. Working conditions	
5. Freedom of movement	
6. Freedom to voice opinions	
6. Work contract	
7. Feeling of empowerment	
8. Other	
9. Other	

*Please check all boxes that the participant mentions:*

<input type="checkbox"/> 1. Low wages	<input type="checkbox"/> 2. Long working hours	<input type="checkbox"/> 3. Is bonded to work to pay loans
<input type="checkbox"/> 4. No pay	<input type="checkbox"/> 5. Employer restricts movement	<input type="checkbox"/> 6. Worried about risk of injury
<input type="checkbox"/> 7. Person not allowed to come home	<input type="checkbox"/> 8. Verbally abused at work	<input type="checkbox"/> 9. Physically abused at work
<input type="checkbox"/> 10. Sexually harassed at work	<input type="checkbox"/> 11. Other:	<input type="checkbox"/> 12. Other:

Please describe:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

F.2. Do you know of anyone who is having trouble at their workplace?

[Code: Yes: 1  
 No: 2 (Skip to F.3)  
 Don't know: 99]

*Please check all boxes that the participant mentions:*

<input type="checkbox"/> 1. Low wages	<input type="checkbox"/> 2. Long working hours	<input type="checkbox"/> 3. Is bonded to work to pay loans
<input type="checkbox"/> 4. No pay	<input type="checkbox"/> 5. Employer restricts movement	<input type="checkbox"/> 6. Worried about risk of injury
<input type="checkbox"/> 7. Person not allowed to come home	<input type="checkbox"/> 8. Verbally abused at work	<input type="checkbox"/> 9. Physically abused at work
<input type="checkbox"/> 10. Sexually harassed at work	<input type="checkbox"/> 11. Other:	<input type="checkbox"/> 12. Other:

Household ID: \_\_\_\_\_

If yes, could you tell us more about it?

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F.3. Do you know of anyone within the community who still needs to work to pay off their loans?

[Code: Yes: 1

No: 2 (Skip to F.4.A.)

Don't know: 99]

If yes, could you tell us more about it?

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F.4.A. What is the normal thing to do when someone in the community is threatened or harmed at their work place?

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F.4.B. Would the person have access to any services when someone is harmed at their workplace?

[Code: Yes: 1

No: 2 (Skip to F.5)

Don't know: 99]

Please describe what services would be available and how you would access them:

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Household ID: \_\_\_\_\_

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**G. Economic and Social Empowerment**

*Interviewer Read out loud:* We will now ask questions about the living conditions for you and other people in your community.

G.1. Do you think your family has experienced any changes in terms of financial security in the past two years?

[Code: Yes: 1  
No: 2  
Don't know: 99]

Why or why not?

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G.2.A. If you need to borrow money, where do you go?

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G.2.B. If you need to save money, where do you go?

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Household ID: \_\_\_\_\_

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G.3. Could you tell me, how important is it for your child to go to school?

*[Code: Very important: 1,  
Somewhat important: 2,  
Not important: 3,  
I don't care: 4,  
Don't know: 99]*

Please explain:

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G.4. Has going to school helped you or your children?

*[Code: Yes: 1  
No: 2  
Don't know: 99]*

Why or why not?

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G.5. Have you ever gone to an adult school or job training program?

*[Code: Yes: 1  
No: 2  
Don't know: 99]*

If yes, did you find it helpful? Why or why not?

Household ID: \_\_\_\_\_

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*Please check all boxes that the participant mentions:*

<input type="checkbox"/> 1. Emergency care	<input type="checkbox"/> 2. Vaccinations	<input type="checkbox"/> 3. Child check-ups
<input type="checkbox"/> 4. Pre- & Post-Natal	<input type="checkbox"/> 5. Child delivery	<input type="checkbox"/> 6. Health clinic
<input type="checkbox"/> 7. Family doctor	<input type="checkbox"/> 8. Other:	<input type="checkbox"/> 9. Other:

G.6.A. What kind of health services do you have access to?

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G.7.B. How satisfied are you with the health services you access?

*[Code: Very satisfied: 1,  
Satisfied: 2,  
Not satisfied: 3,  
Don't know: 99]*

G.8. Do you know anyone who is having emotional problems in general?

*[Code: Yes: 1  
No: 2 (  
Don't know: 99]*

If yes, can you describe the reasons for it?

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Household ID: \_\_\_\_\_

_____
<b>H. Conclusion</b>
<i>Interviewer Read out loud:</i> We have come to the end of all questions. Thank you for participating in this discussion. Is there anything you would like to add or say to us before we leave?
_____ _____
<i>Interviewer Read out loud:</i> Thank you for your participation in this discussion.

## APPENDIX 4 – FOCUS GROUP INTERVIEW GUIDE

CVC Number: \_\_\_\_\_  
CVC – Intervention / Eradication



**Bonded Labor Research Project  
FXB Center, Harvard University and Institute for Human Development  
Focus Group Discussion Guide 2014  
Community Vigilance Committee  
Intervention / Eradication**

Date of interview: \_\_\_\_\_ Interviewer name: \_\_\_\_\_

**NOTES:**

Consent: Prior to the gathering of the discussion group, focus group participants will be presented with the consent form and the field researcher will seek and record the participant's consent.

Welcome

Welcome to the focus group discussion for the FXB and IHD research project. Thank you kindly for volunteering your time to participate in this group discussion. We will be discussing the work of the Community Vigilance Committee in your community.

Anonymity

All of the information that is shared today will remain anonymous. Your names will not be recorded or written down and none of the information shared will be associated with any of you. When discussing particular cases or stories, you should not mention the name of the person about whom you are speaking. We request that you do not share any information that you hear from other participants in this discussion with anyone else in the community.

Basic Rules

There are some basic rules I would like to establish for this discussion:

- Only one person can speak at a time.
- Everything that is shared during this discussion should not be shared with others outside of this discussion.
- There are no right or wrong answers. It is important that everyone is able to participate and share their thoughts and opinions. We must respect the person that is sharing and listen to what they are saying.
- We want to hear both the good and bad stories about your communities. You should not be afraid to share bad stories if you feel comfortable sharing them.

CVC Number: \_\_\_\_\_  
CVC – Intervention / Eradication

### Introduction

Let's start by having everyone in the group introduce themselves. My name is \_\_\_\_\_ and I am a field researcher with the Institute for Human Development. [Everyone introduces themselves].

### Guiding Questions

1. Can you tell me, how is the CVC helping the community? Is the CVC helping the political, social or economic life of the community?
2. What are some of the successes you've had as a group?
3. What are some of the failures you've had as a group?
4. Could you describe some of the challenges your group has faced?
5. Could you describe the support you get from the community?
6. Are you satisfied with the work CVC has been doing? Why or why not?
7. What are your top goals for the coming year?

### Concluding Questions

1. Is there anything else about the CVC that I should know?
2. Is there anything else you would like to add to this discussion?

### Conclusion & Thank You

Thank you for your participation in this discussion. Your answers and comments will help us to understand the work the Community Vigilance Committee does for the community. Remember; please do not share information that you have heard in this discussion with other people not involved in this discussion. Please feel free to contact the research team if you have any questions about this discussion or other aspects of this research project. Thank you for your participation.



APPENDIX 5 – KEY INFORMANT INTERVIEW GUIDE

Key Informant Number: \_\_\_\_\_



**Bonded Labor Research Project**  
**FXB Center, Harvard University and Institute for Human Development**  
**Key Informant Survey**

Date of interview: \_\_\_\_\_ Interviewer name: \_\_\_\_\_

**NOTES:**

Consent: Prior to initiating the survey, field researchers will obtain the key informant's consent.

Bonded Labor

Interviewer read out loud: *For purposes of this research project, we are primarily researching the efficacy of interventions to eradicate bonded labor. However, we are also researching the effects that these interventions have had on human trafficking, child labor and forced labor. I will begin with questions about the particular site of the interventions.*

A. Are you familiar with Giriyan, Bisapur and/or Mahuapur panchayats?

**If yes:**

1. How would you describe the general population that lives in these communities? What are their common socio-economic characteristics? How do you interact with these communities?
2. Would you describe any of the communities in these panchayats as being subjected to bonded labor? If so, which ones? On what basis do you make this assessment? Have you interacted with anyone from these communities in this context? Can you describe the incidence of bonded in the panchayats or in the state?
3. If an individual in one of these communities is subjected to bonded labor, what access do you think he or she would have to redress the situation?
4. How would you describe the access to legal remedies and government programs/schemes in these panchayats?
5. How would you describe the access to health care in these panchayats? Please be as specific as possible. Are there differences between villages in the panchayats? If so, can you explain why?
6. How would you describe the access to education in these panchayats? Please be as

Key Informant Number: \_\_\_\_\_

specific as possible. Are there differences between villages in the panchayats? If so, can you explain why?

7. How would you describe the access to financial inclusion in these panchayats, especially access to savings and loans accounts that are regulated?
8. How would you describe the financial status of households in these panchayats? Please be as specific as possible. Are there differences between villages in the panchayats? If so, can you explain why?
9. Are you familiar with Community Vigilance Committees? If yes, can you please describe their role in these panchayats? What is your assessment of the efficacy of the Community Vigilance Committee?
10. Are you familiar with any organizations that are working on any social, economic, civil or political programs or advocacy in these panchayats? If so, can you please list them and describe the type of work that they are doing?

**If no:**

1. Can you describe the problem of bonded labor in the state of Uttar Pradesh? Can you describe the incidence of bonded labor?

Bonded Labor Eradication

B. Are you familiar with Manav Sansadhan Evam Mahila Vikash Sansthan ("MSEMVS")?

**If yes:**

1. Please describe the type of work that they do.
2. What is your assessment of the efficacy of their work? Do you think that they are making progress in achieving their goal of eradicating bonded labor?
3. Do you think that the persons living within the villages that MSEMVS' works in have seen any changes or improvements in their living conditions? Please describe.
4. Do you think that the work that MSEMVS does is replicable in other panchayats where there are high levels of bonded labor? Please describe why or why no.

APPENDIX 6 – REGRESSION MODELS

Logistic Regression of Household Debt on Intervention Exposure

	<i>Dependent variable:</i>		
	Household Has Any Debt		
	(1)	(2)	(3)
Any Treatment (ref- control)	1.918* (0.969, 3.602)		
TX-Eradication (ref- control)		1.870* (0.939, 3.534)	
TX-Eradication (ref No-Eradication)			0.893 (0.464, 1.613)
Work- Agricultural	0.727 (0.233, 2.132)	0.858 (0.207, 3.101)	0.555 (0.173, 1.668)
Work- Weaving	0.541 (0.175, 1.569)	0.653 (0.158, 2.333)	0.543 (0.171, 1.611)
Work:-Construction	0.502 (0.156, 1.517)	0.576 (0.135, 2.136)	0.675 (0.202, 2.129)
Work- Brick Kiln	0.556 (0.170, 1.723)	0.688 (0.156, 2.669)	0.647 (0.190, 2.092)
Work- Other	0.569 (0.182, 1.667)	0.725 (0.174, 2.627)	0.451 (0.141, 1.349)
Educational Level	0.940 (0.791, 1.119)	0.945 (0.789, 1.132)	0.945 (0.785, 1.139)
Caste Mushar	0.881 (0.557, 1.356)	1.291 (0.779, 2.085)	0.965 (0.592, 1.530)
Caste Rajbhar	0.514** (0.263, 0.996)	0.662 (0.338, 1.277)	0.747 (0.366, 1.514)
Caste Saro	0.443** (0.212, 0.851)	0.496* (0.235, 0.970)	0.356** (0.141, 0.777)
Post	0.190*** (0.080, 0.430)	0.251*** (0.105, 0.575)	0.028*** (0.012, 0.060)
Intervention Effect - Any Tx vs. Control	0.209*** (0.093, 0.485)		
Intervention Effect -Eradication vs. Control		0.230*** (0.101, 0.543)	
Intervention Effect -Eradication vs. No Eradication			1.811 (0.771, 4.505)
Constant	6.872*** (1.887, 26.730)	4.105* (0.908, 21.154)	13.799*** (4.118, 50.862)
Observations	1,290	1,078	1,143
Log Likelihood	-586.312	-501.450	-495.265
Akaike Inf. Crit.	1,198.624	1,028.900	1,016.530

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## Appendix 6: Table 2

### Logistic Regression of Household has Debt Greater than 10,000 Rupees on Intervention Exposure

	<i>Dependent variable:</i>		
	Household has Debt Greater than 10,000 Rupees		
	(1)	(2)	(3)
Any Treatment (ref- control)	1.596 (0.913, 2.994)		
TX-Eradication (ref- control)		1.578 (0.898, 2.973)	
TX-Eradication (ref No-Eradication)			1.045 (0.689, 1.619)
Work- Agricultural	0.958 (0.393, 2.696)	1.331 (0.417, 5.923)	0.813 (0.326, 2.325)
Work- Weaving	0.796 (0.329, 2.228)	1.097 (0.346, 4.860)	0.910 (0.372, 2.573)
Work:-Construction	0.716 (0.281, 2.080)	0.939 (0.281, 4.285)	0.839 (0.323, 2.471)
Work- Brick Kiln	1.192 (0.468, 3.462)	1.529 (0.452, 7.039)	1.330 (0.514, 3.909)
Work- Other	0.624 (0.255, 1.759)	0.842 (0.262, 3.762)	0.618 (0.248, 1.768)
Educational Level	0.922 (0.785, 1.079)	0.946 (0.799, 1.114)	0.912 (0.767, 1.078)
Caste: Mushar		1.141 (0.700, 1.884)	0.808 (0.526, 1.246)
Caste Rajbhar		0.852 (0.449, 1.590)	0.677 (0.362, 1.234)
Caste Saroj		0.665 (0.277, 1.423)	0.473 (0.157, 1.157)
Post	2.046* (0.987, 4.372)	2.334* (1.009, 5.545)	0.307*** (0.124, 0.679)
Intervention Effect - Any Tx vs. Control	0.217*** (0.094, 0.488)		
Intervention Effect -Eradication vs. Control		0.241*** (0.102, 0.553)	
Intervention Effect -Eradication vs. No Eradication			1.522 (0.629, 4.004)
Constant	0.232** (0.071, 0.674)	0.152** (0.029, 0.607)	0.434 (0.145, 1.143)
Observations	1,607	1,341	1,415
Log Likelihood	-733.958	-618.357	-638.426
Akaike Inf. Crit.	1,487.916	1,262.715	1,302.852

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## Appendix 6: Table 3

### Logistic Regression of Household having Medical Debt on Intervention Exposure

	<i>Dependent variable:</i>		
	Household Has Medical Debt		
	(1)	(2)	(3)
Any Treatment (ref- control)	2.272*** (1.386, 3.892)		
TX-Eradication (ref- control)		2.204*** (1.339, 3.786)	
TX-Eradication (ref No-Eradication)			0.854 (0.600, 1.219)
Work- Agricultural	0.547 (0.233, 1.286)	0.394* (0.133, 1.136)	0.473* (0.199, 1.122)
Work- Weaving	0.478* (0.205, 1.116)	0.356* (0.121, 1.017)	0.479* (0.204, 1.125)
Work:-Construction	0.586 (0.243, 1.413)	0.453 (0.150, 1.336)	0.714 (0.293, 1.739)
Work- Brick Kiln	0.445* (0.180, 1.095)	0.312** (0.099, 0.954)	0.502 (0.200, 1.251)
Work- Other	0.460* (0.196, 1.078)	0.353* (0.120, 1.014)	0.437* (0.185, 1.029)
Educational Level	0.888* (0.770, 1.021)	0.908 (0.782, 1.052)	0.868* (0.747, 1.007)
Caste: Mushar	0.672** (0.458, 0.981)	0.724 (0.459, 1.138)	0.776 (0.518, 1.159)
Caste Rajbhar	0.218*** (0.119, 0.385)	0.238*** (0.125, 0.441)	0.278*** (0.149, 0.503)
Caste Saroj	0.496 (0.182, 1.138)	0.535 (0.194, 1.254)	0.355* (0.083, 1.050)
Post	0.718 (0.327, 1.571)	0.758 (0.336, 1.702)	0.088*** (0.034, 0.196)
Intervention Effect - Any Tx vs. Control	0.142*** (0.063, 0.321)		
Intervention Effect -Eradication vs. Control		0.151*** (0.065, 0.349)	
Intervention Effect -Eradication vs. No Eradication			1.443 (0.578, 3.992)
Constant	1.019 (0.362, 2.855)	1.225 (0.353, 4.355)	2.421* (0.975, 6.097)
Observations	1,607	1,341	1,415
Log Likelihood	-843.663	-706.258	-747.295
Akaike Inf. Crit.	1,713.326	1,438.517	1,520.590
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01	

## Appendix 6: Table 4

### Logistic Regression of Household Member Making less than Minimum Wage (less than 200 Rps per day) on Intervention Exposure

	<i>Dependent variable:</i>		
	Household Member Makes Less than Min Wage		
	(1)	(2)	(3)
Any Treatment (ref- control)	0.863 (0.537, 1.363)		
TX-Eradication (ref- control)		0.892 (0.551, 1.420)	
TX-Eradication (ref No-Eradication)			1.164 (0.791, 1.703)
Work- Agricultural	0.063* (0.015, 0.187)	0.062*** (0.009, 0.229)	0.056*** (0.013, 0.167)
Work- Weaving	0.395* (0.092, 1.168)	0.437 (0.067, 1.617)	0.383 (0.089, 1.141)
Work:-Construction	0.212 (0.049, 0.641)	0.273** (0.042, 1.033)	0.174* (0.040, 0.531)
Work- Brick Kiln	0.379 (0.086, 1.179)	0.410 (0.061, 1.624)	0.359 (0.081, 1.132)
Work- Other	0.116* (0.027, 0.341)	0.128*** (0.020, 0.472)	0.122*** (0.028, 0.362)
Educational Level	1.003* (0.881, 1.143)	0.952 (0.829, 1.093)	1.028 (0.895, 1.181)
Caste: Mushar	0.846 (0.598, 1.190)	0.611 (0.396, 0.933)	0.904** (0.629, 1.293)
Caste Rajbhar	0.693*** (0.442, 1.084)	0.507 (0.305, 0.836)	0.608*** (0.378, 0.977)
Caste Saroj	0.459* (0.279, 0.749)	0.453*** (0.267, 0.768)	0.456*** (0.261, 0.786)
Post	0.631*** (0.316, 1.255)	0.475 (0.229, 0.977)	0.406** (0.229, 0.713)
Intervention Effect - Any Tx vs. Control	0.784 (0.399, 1.545)		
Intervention Effect -Eradication vs. Control		0.891 (0.445, 1.791)	
Intervention Effect -Eradication vs. No Eradication			1.386 (0.747, 2.582)
Constant	14.796* (4.374, 69.018)	19.954*** (4.580, 142.107)	10.928*** (3.469, 48.788)
Observations	1,607	1,341	1,415
Log Likelihood	-965.100	-795.453	-847.613
Akaike Inf. Crit.	1,956.199	1,616.907	1,721.227
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01	

## Appendix 6: Table 5

### Generalized Linear Regression of Number of Daily Meals on Intervention Exposure

	Dependent variable:			
	Number of Meals Per Day			
	Unadjusted	Fully Adjusted	Unadjusted	Fully Adjusted
Any Treatment	-0.057 (-0.092, -0.022)	-0.082 (-0.125, -0.039)		
TX-Eradication (ref No-Eradication)			0.094 (0.044, 0.144)	0.090 (0.034, 0.147)
Work- Agricultura l		-0.033 (-0.162, 0.095)		-0.077 (-0.209, 0.055)
Work- Weaving		0.023 (-0.104, 0.151)		-0.006 (-0.136, 0.124)
Work-Construction		0.018 (-0.114, 0.149)		0.010 (-0.126, 0.147)
Work- Brick Kiln		-0.032 (-0.165, 0.102)		-0.049 (-0.188, 0.090)
Work- Other		-0.010 (-0.138, 0.117)		-0.030 (-0.161, 0.100)
Educational Level		0.012 (-0.007, 0.031)		0.022 (0.001, 0.043)
Cast e Mushar		0.181 (0.134, 0.229)		0.227 (0.172, 0.282)
Cast e Rajbhar		0.168 (0.106, 0.230)		0.187 (0.114, 0.261)
Cast e Saroj		0.051 (-0.023, 0.124)		0.062 (-0.026, 0.150)
Post	0.176 (0.116, 0.236)	0.314 (0.227, 0.401)	0.410 (0.335, 0.486)	0.498 (0.410, 0.587)
Intervention Effect - Any Tx vs. Control	0.272 (0.202, 0.342)	0.213 (0.124, 0.301)		
Intervention Effect -Eradication vs. No Eradication			0.061 (-0.026, 0.147)	0.083 (-0.014, 0.179)
Constant	1.981 (1.952, 2.010)	1.831 (1.694, 1.967)	1.848 (1.803, 1.893)	1.644 (1.504, 1.784)
Observations	2,570	1,885	1,831	1,452
R <sup>2</sup>	0.203	0.220	0.246	0.274
Adjusted R <sup>2</sup>	0.202	0.215	0.245	0.268
Residual Std. Error	0.352 (df = 2566)	0.339 (df = 1872)	0.367 (df = 1827)	0.344 (df = 1439)
F Statistic	217.351 (df = 3; 2566)	44.084 (df = 12; 1872)	199.072 (df = 3; 1827)	45.282 (df = 12; 1439)

Note:

p<0.1; p<0.05; p<0.01

## Appendix 6: Table 6

### Logistic Regression of Animal Ownership (any animal) on Intervention Exposure

	<i>Dependent variable:</i>			
	Whether Household Owns Any Animal			
	(1)	(2)	(3)	(4)
Any Treatment (ref- control)	1.159 (0.845, 1.600)		1.434 (0.919, 2.281)	
TX-Eradication (ref No-Eradication)		2.753*** (1.986, 3.870)		2.757*** (1.833, 4.246)
Work- Agricultural			0.708 (0.325, 1.571)	0.585 (0.262, 1.326)
Work- Weaving			1.009 (0.467, 2.219)	0.922 (0.418, 2.064)
Work-Construction			0.891 (0.398, 2.024)	0.780 (0.338, 1.817)
Work- Brick Kiln			0.591 (0.259, 1.370)	0.498 (0.210, 1.191)
Work- Other			0.834 (0.384, 1.840)	0.772 (0.348, 1.732)
Educational Level			0.935 (0.824, 1.059)	0.926 (0.811, 1.057)
Caste: Mushar			1.429** (1.017, 2.026)	1.372* (0.949, 2.000)
Caste Rajbhar			4.730*** (3.000, 7.563)	3.592*** (2.209, 5.925)
Caste Saroj			2.221*** (1.363, 3.694)	1.905** (1.114, 3.321)
Post	2.113*** (1.390, 3.231)	3.703*** (2.374, 5.827)	4.516*** (2.322, 8.923)	3.678*** (2.057, 6.661)
Intervention Effect - Any Tx vs. Control	0.950 (0.592, 1.517)		0.494** (0.255, 0.943)	
Intervention Effect -Eradication vs. No Eradication		0.486*** (0.291, 0.806)		0.575* (0.307, 1.071)
Constant	0.570*** (0.422, 0.764)	0.290*** (0.211, 0.390)	0.395* (0.152, 1.003)	0.292*** (0.118, 0.703)
Observations	2,028	1,666	1,550	1,358
Log Likelihood	-1,368.718	-1,104.821	-1,009.555	-875.096
Akaike Inf. Crit.	2,745.437	2,217.642	2,045.111	1,776.191

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01



## Appendix 6: Table 7

### Generalized Linear Regression of Number of Government Schemes Participated in by Households on Intervention Exposure

	<i>Dependent variable:</i>			
	Total Number of Government Schemes			
	(1)	(2)	(3)	(4)
Any TX vs Control (ref)	1.472*** (1.120, 1.824)	1.197*** (0.739, 1.655)		
Eradication vs Non-Eradication (ref)			0.198 (-0.228, 0.624)	0.612** (0.097, 1.127)
Work Type Agricultural		-0.342 (-1.689, 1.005)		-0.613 (-2.066, 0.840)
Work Type Weaving		-0.142 (-1.481, 1.197)		-0.247 (-1.680, 1.187)
Work Type Construction		-0.374 (-1.763, 1.015)		-0.415 (-1.929, 1.098)
Work Type Brick kiln		-0.725 (-2.122, 0.672)		-0.735 (-2.249, 0.779)
Work Type Other		-0.423 (-1.766, 0.920)		-0.386 (-1.822, 1.051)
Education		-0.021 (-0.237, 0.195)		-0.053 (-0.303, 0.198)
Caste Mushar		1.783*** (1.233, 2.334)		1.956*** (1.330, 2.582)
Caste Rajbhar		-0.254 (-1.084, 0.576)		-0.382 (-1.280, 0.516)
Caste Saroj		-0.073 (-0.554, 0.409)		-0.157 (-0.731, 0.418)
Constant	3.665*** (3.359, 3.971)	4.114*** (2.694, 5.533)	4.993*** (4.630, 5.356)	4.991*** (3.528, 6.454)
Observations	695	495	525	403
R <sup>2</sup>	0.089	0.146	0.002	0.106
Adjusted R <sup>2</sup>	0.087	0.128	-0.0003	0.083
Residual Std. Error	2.032 (df = 693)	1.968 (df = 484)	2.212 (df = 523)	2.093 (df = 392)
F Statistic	67.462*** (df = 1; 693)	8.241*** (df = 10; 484)	0.835 (df = 1; 523)	4.662*** (df = 10; 392)

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## Appendix 6: Table 8

### Logistic Regression of Job Assistance on Intervention Exposure

	<i>Dependent variable:</i>			
	Household has Job Card		Household has job through NREGA	
	(1)	(2)	(3)	(4)
Any Treatment (ref- control)	0.332*** (0.231, 0.469)	0.531*** (0.335, 0.822)	0.157*** (0.108, 0.225)	0.246*** (0.153, 0.384)
Work- Agricultural		0.536 (0.222, 1.210)		0.870 (0.384, 2.013)
Work- Weaving		0.642 (0.267, 1.437)		1.072 (0.477, 2.460)
Work:-Construction		0.687 (0.279, 1.587)		1.299 (0.560, 3.074)
Work- Brick Kiln		0.484 (0.194, 1.130)		0.827 (0.350, 1.994)
Work- Other		0.848 (0.352, 1.907)		1.266 (0.562, 2.915)
Educational Level		0.802*** (0.708, 0.906)		0.811*** (0.714, 0.920)
Caste: Mushar		1.213 (0.870, 1.698)		1.915*** (1.349, 2.756)
Caste Rajbhar		1.676** (1.070, 2.648)		1.868*** (1.184, 2.974)
Caste Saroj		0.750 (0.457, 1.246)		1.050 (0.634, 1.764)
Post	0.452*** (0.286, 0.708)	0.761 (0.392, 1.469)	0.246*** (0.154, 0.387)	0.565* (0.286, 1.106)
Intervention Effect - Any Tx vs. Control	6.059*** (3.669, 10.080)	3.921*** (2.051, 7.554)	16.363*** (9.894, 27.384)	11.430*** (5.955, 22.262)
Constant	3.222*** (2.327, 4.550)	4.194*** (1.610, 11.569)	3.610*** (2.581, 5.165)	1.852 (0.691, 4.899)
Observations	2,127	1,604	2,113	1,591
Log Likelihood	-1,375.385	-1,034.188	-1,343.606	-1,011.795
Akaike Inf. Crit.	2,758.771	2,094.376	2,695.212	2,049.589
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01			

Appendix 6: Table 9  
 Logistic Regression of Voter Participation Variables on Intervention Exposure

	<i>Dependent variable:</i>											
	Voter ID (1)	Male Vote (2)	Female Vote (3)	Voter ID (4)	Male Vote (5)	Female Vote (6)	Voter ID (7)	Male Vote (8)	Female Vote (9)	Voter ID (10)	Male Vote (11)	Female Vote (12)
Any TX vs Control (ref)	0.808 (0.553, 1.158)	0.729 (0.471, 1.094)	0.689* (0.446, 1.033)									
Eradication vs Non-Eradication				5.667*** (4.196, 7.680)	7.471*** (5.450, 10.279)	7.087*** (5.188, 9.713)	0.439** (0.218, 0.804)	0.219*** (0.064, 0.518)	0.197*** (0.060, 0.482)	4.963*** (3.405, 7.257)	6.432*** (4.310, 9.638)	5.934*** (3.999, 8.833)
Work Type Agricultural I							0.775 (0.214, 2.233)	0.458 (0.071, 1.654)	0.477 (0.074, 1.721)	0.512 (0.135, 1.560)	0.268* (0.040, 1.036)	0.317 (0.048, 1.217)
Work Type Weaving							0.712 (0.198, 2.023)	0.457 (0.071, 1.629)	0.415 (0.065, 1.473)	0.597 (0.159, 1.795)	0.354 (0.053, 1.353)	0.325 (0.049, 1.223)
Work Type Construction							0.981 (0.263, 2.964)	0.578 (0.088, 2.213)	0.584 (0.089, 2.231)	0.721 (0.184, 2.318)	0.360 (0.053, 1.471)	0.372 (0.055, 1.504)
Work Type Brick kiln							0.668 (0.178, 2.030)	0.323 (0.049, 1.214)	0.282 (0.043, 1.050)	0.543 (0.138, 1.758)	0.252* (0.037, 1.022)	0.216* (0.032, 0.800)
Work Type Other							0.723 (0.201, 2.058)	0.450 (0.070, 1.610)	0.401 (0.063, 1.429)	0.613 (0.163, 1.843)	0.355 (0.054, 1.358)	0.317 (0.048, 1.195)
Education							0.956 (0.806, 1.138)	1.024 (0.851, 1.241)	0.964 (0.807, 1.158)	0.873 (0.725, 1.056)	0.917 (0.748, 1.131)	0.871 (0.717, 1.063)
Caste Mushar							1.608** (1.063, 2.547)	1.208 (0.729, 1.970)	1.235 (0.796, 1.991)	1.095 (0.646, 1.825)	0.787 (0.494, 1.346)	0.821 (0.483, 1.379)
Caste Rajbhar							1.814* (0.980, 3.394)	2.952*** (1.366, 6.853)	2.689*** (1.300, 5.882)	0.889 (0.449, 1.765)	1.283 (0.566, 3.095)	1.247 (0.579, 2.822)
Caste Saroj							1.997 (0.341, 37.965)	0.876 (0.306, 3.151)	1.578 (0.522, 6.836)	1.146 (0.185, 22.094)	0.614 (0.205, 2.266)	1.836 (0.501, 11.855)
post	11.557*** (4.533, 39.135)	3.262*** (1.554, 7.511)	2.918*** (1.421, 6.481)	88.458*** (27.392, 542.900)	28.779*** (12.546, 83.372)	20.949*** (10.064, 51.114)	15.874*** (2.813, 299.715)	4.925 (0.675, 99.667)	1.500 (0.305, 8.174)	48.895*** (14.222, 308.662)	14.040*** (5.700, 42.669)	13.787*** (5.643, 41.594)
Intervention Effect Any TX vs. Control	3.124 (0.733, 12.528)	1.846 (0.721, 4.469)	1.823 (0.745, 4.244)				1.887 (0.093, 13.537)	1.209 (0.059, 9.076)	3.429 (0.616, 17.369)			
Intervention Effect TX Erad vs. No Erad				0.325 (0.042, 2.025)	0.113*** (0.035, 0.312)	0.151*** (0.055, 0.375)				0.452 (0.057, 2.905)	0.234** (0.067, 0.727)	0.180*** (0.053, 0.539)
Constant	3.634*** (2.599, 5.198)	5.552*** (3.802, 8.408)	5.552*** (3.802, 8.408)	0.797* (0.617, 1.028)	0.959 (0.744, 1.236)	0.927 (0.719, 1.195)	7.371*** (2.088, 31.516)	39.444*** (7.627, 339.507)	46.814*** (9.090, 391.413)	2.009 (0.643, 7.658)	5.312** (1.350, 35.561)	5.757** (1.481, 38.309)
Observations	2,129	2,122	2,127	1,767	1,760	1,765	1,606	1,600	1,604	1,414	1,408	1,412
Log Likelihood	-844.665	-815.636	-848.273	-662.265	-621.408	-653.581	-597.998	-528.549	-556.721	-523.926	-466.017	-488.630
Akaike Inf. Crit.	1,697.330	1,639.273	1,704.546	1,332.529	1,250.815	1,315.163	1,221.996	1,083.098	1,139.441	1,073.853	958.034	1,003.259

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01



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