

Impact Evaluation of the Integrated Safety Net Programme in the Amhara Region of Ethiopia Baseline Report

UNICEF Office of Research - Innocenti

August 2020











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UNICEF Office of Research – Innocenti

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ACRONYMS AND INITIALISMS

BCC behaviour change communication

BoWCA Bureau of Women and Children's Affairs

CBHI Community-Based Health Insurance (scheme)

CCC community care coalition

DHS Demographic and Health Surveys

ESS Ethiopia Socioeconomic Survey

IDI in-depth interview

IPWRA inverse probability weighted regression adjustment

ISNP Integrated Safety Net Programme

KII key informant interview

PDS permanent direct support (unconditional PSNP benefits)

PSNP Productive Safety Net Programme

PW public works (PSNP benefits conditional on the performance of public works)

SD standard deviation

TDS temporary direct support

TLU tropical livestock unit

UNICEF United Nations Children's Fund

LIST OF CONTEXTUAL TERMS

Woreda

Fourth-level administrative division equivalent to district in other countries. The first administrative level is the federal, the second is the regional, and the third is the Zonal.

Kehele

Fifth level administrative division equivalent to communities or wards or village clusters. Several kebeles make up a Woreda.

M-Birr

A local mobile money service that has banking services linked to mobile phone numbers.

Tahśaś

Taḫśaś is the fourth month based on the Ethiopian (Julian) calendar. The equivalent is December or January in the Gregorian depending on the exact day.

Hədar

Hedar is the third month based on the Ethiopian (Julian) calendar. The equivalent is November or December in the Gregorian depending on the exact day.

EXECUTIVE SUMMARY

The United Nations Children's Fund (UNICEF) is currently supporting the Government of Ethiopia to implement a pilot Integrated Safety Net Programme (ISNP) in the Amhara Region. Among the goals of the programme is to facilitate enrolment in the Community-Based Health Insurance (CBHI) scheme and strengthen the links to social services among the clients of the Productive Safety Net Programme (PSNP). The objective is to harness the potential synergies that can be realized by integrating social protection policies and programs. This is a test of a strategic principle of the National Social Protection Policy of 2014. According to the principle, actors in the social protection space should be enabled to work collaboratively and effectively on social protection programmes through shared commitment, sufficient within-budget funding, strong partnership with ministries and other stakeholders, enhanced coordination and implementation capacities, and the availability of adequate systems and tools.

To assess and systematically document the added value of the complimentary features – the plus components – a quasi-experimental mixed methods impact evaluation has been designed to accompany the intervention. The plus components to be implemented through the pilot ISNP include enrolment in the CBHI, case management support and household responsibilities designed to enhance the access to and uptake of basic services among the clients of the PSNP. These interventions are the focus of this evaluation.

This report presents results of the impact evaluation baseline survey led by the UNICEF Office of Research – Innocenti and the BDS Centre for Development Research, Ethiopia, in collaboration with UNICEF Ethiopia.

Study design

Two woredas (fourth-level administrative division; district) – Dewa Chefa and Libo Kemkem – were purposively selected to pilot the intervention (treatment). Two other woredas – Artuma Fursi and Ebinat – were selected as comparison woredas based on their similarities with the treatment woredas on key observable characteristics such as topography, access to markets, socioeconomic development and available infrastructure. The survey design accordingly applies a methodology that allows for the isolation of the treatment effect, considering the non-random selection of treatment and comparison woredas.

During the baseline survey, data were collected from households, health facilities and about kebeles (communities or wards). The sampling frame for the household survey included all active PSNP clients based on administrative records provided by the PSNP administration in each woreda in October 2018. Of a target of 5,400 households, a total of 5,398 household interviews were completed in both the treatment and comparison woredas, with near equal distribution among conditional clients (PW, that is, performing public works) and unconditional clients (PDS, that is, permanent direct support) of PSNP. Data were collected on key characteristics of 91 of the 93 kebeles covered and from 113 primary health care facilities in 92 of the kebeles. The qualitative component of the survey collected data in treatment woredas from key informants, such as woreda CBHI and PSNP coordinators; frontline workers, such as social workers and health extension workers; and selected client households involved in the quantitative survey.

Client status and income

The results of the survey show that the sampling frame was reliable. More than 95 per cent of households reported that they were in the proper, designated PSNP category based on administrative

records. Clients are considered active if they have participated in PW or received PDS benefits in the 12 months prior to the survey, that is, between Taḫśaś 2010 (December 2017) and Ḥədar 2011 (November 2018). Following this definition, about 93 per cent of PW households and 95 per cent of PDS households are active. Despite the objective of transitioning to electronic payments through M-BIRR, a mobile money service, more than 70 per cent of clients are still paid in cash. The average annual benefit receipt from PSNP was about ETB 3,700 and ETB 3,181 among PW and PDS households, respectively. The results presented in this report are based on the full sample of households rather than the active sample. This is consistent with the intent-to-treat principle.

Household economic and demographic profile

Relative to PDS households, PW households were found to be generally larger, more likely to have members of working age, and more likely to have members who are not disabled. The average age of members of PW households was 27, compared with 43 among PDS households. These differences are to be expected given the differential eligibility criteria for PDS and PW households, and the differences help confirm PSNP targeting effectiveness in the study woredas.

Household socioeconomic status is generally low. About 76 per cent of PW households and 68 per cent of PDS households were food insecure at least one month in the year previous to the survey. The average household experienced food insecurity for about 4 months in the 12 months preceding the survey. About half the households have no improved source of drinking water, and about 90 per cent do not have a toilet facility. Diversification in sources of income is limited. Only one fifth of households rely on a non-farm enterprise or livestock to complement farming activities. Moreover, only 7 per cent of PW households and 2 per cent of PDS households have joined a PSNP livelihood group, and awareness about the new PSNP livelihoods component remains limited (13 per cent and 6 per cent among PW and PDS households, respectively). About 1 household in five carries debt of some sort. About 40 per cent of households reported a negative shock in the 12 months preceding the survey, and 40 per cent of the coping strategies implemented by the households to offset the shocks were negative which is usually an indication of low resilience.

The CBHI and health seeking behaviour

On the key question of CBHI enrolment, 65 per cent and 51 per cent of PW and PDS households, respectively, reported that they were currently enrolled. Among the enrolled households, 28 per cent and 42 per cent of the PW and PDS households, respectively, received a premium waiver for enrolment. Overall satisfaction with the CBHI among those enrolled was 7 in 10 on a scale of 1 to 10, and more than 80 per cent of households believe that enrolling in CBHI makes proper health seeking behaviour easier and more affordable. The main reason given by respondents for non-enrolment in the CBHI is the fees and premiums, which they cannot readily afford. There were some misconceptions about the coverage and full entitlements of CBHI enrolment even among those enrolled. Addressing the misconceptions could improve participation and enhance sustainability.

The average amount households were willing to pay for CBHI premiums was ETB 144 among PW households and ETB 98 among PDS households. These amounts are much lower than the annual premiums that households must pay for CBHI enrolment, which range from ETB 240 for a household with one to five members in rural woredas to a high of ETB 1,700 for a household with eight or more members that is classified as a category A taxpayer. Among households currently enrolled in the CBHI, the average premium paid was ETB 220 and ETB 198 for PW and PDS households, respectively.

Health seeking behaviour among the target population has not been encouraging. About half (53 per cent) of the members in PW households who had an illness sought care from a health provider. The corresponding share among PDS households was even lower, at 41 per cent. The more positive result is that if care has been sought, it has almost universally been sought from a health professional. The total health expenditure among individuals seeking care in the month previous to the survey was about ETB 230 and ETB 242 among PW and PDS households, respectively. About 60 per cent of household members seeking care for an illness had CBHI coverage. Health expenditures were substantially lower among household members using the CBHI. The ratio was about 1: 10 among PW households (ETB 57 versus ETB 564), while, among PDS households, the relative expenditures were ETB 38 versus ETB 500.

Child protection

The data on child protection are concerning. The births of only 19 per cent of children ages 12–23 months were registered. About 60 per cent of children ages 12–59 months were subjected to violent discipline in the month prior to the survey. Child marriage among girls remains a challenging problem. The mean age at first marriage among women who have ever been married is 16, and 62 per cent of women who have ever been married were married before age 18. The corresponding shares among men is age 22 and 9 per cent, respectively. About 60 per cent of caregivers believe that the ideal age of marriage among girls is before age 18, and about 7 per cent favoured the view that girls should be married before age 15. Overall, awareness of the legal age of marriage is limited; only a third of caregivers were aware that there is a legal age of marriage for girls.¹

Schooling and early childhood development

Data on schooling indicate that about 44 per cent of household members ages 4–24 in PW households are currently enrolled in school; the corresponding share is 46 per cent among PDS households. Among children of primary school age (ages 7–14), the enrolment rate is higher, at about 65 per cent. There are no significant differences between current enrolment rates among girls and boys. Regular school attendance is a challenge. Among children enrolled in school, 7 in 10 had been absent from school for the equivalent of more than a week during the term previous to the survey because of household activities or because they had to work. There is limited support for early childhood learning. Only one child in five ages 36–59 months in PW households had engaged in four or more early childhood development activities with an adult household member during the 24 hours preceding the survey. The share was slightly larger, at 26 per cent, among children in PDS households.

Child health and nutrition

Child health and nutritional status is worrisome. About 47 per cent of children ages 6–59 months are stunted; 28 per cent are underweight, and 11 per cent are wasted. Fewer than 3 per cent of children ages 6–23 months consume a minimum acceptable diet. Fewer than half the children ages 12–23 months have received all recommended vaccinations. Knowledge about foods rich in iron and vitamin A is deficient among caregivers as fewer than 30 per cent of them could correctly identify foods that are rich in these key nutrients. On average, caregivers themselves consumed food in only 4 of 12 broad food groups. In contrast, knowledge about exclusive breastfeeding is relatively extensive, at 81 per cent and 67 per cent among caregivers in PW and PDS households, respectively.

According to the revised Family Code 2000, the legal age of marriage is 18 among girls and boys. However, exemptions for marriage at ages 16 or 17 are available upon application by the individuals or their parents through the Ministry of Justice. Girls often marry before age 18 in religious and customary marriages in any case.

Reproductive health

Contraceptive use among women of reproductive age (12-49 years) is about 12 per cent. However, mainly modern methods of contraception are prevalent, and these methods tend to be more reliable in preventing unplanned pregnancies. About 3 per cent of women ages 12–49 were pregnant at the time of the survey, and about 50 per cent of these women had sought antenatal care from a provider at least once. Approximately 15 per cent of the main survey respondents reported that at least one of their children had died.

Health and social support

Among the main women respondents, physical health status was moderate. The respondents reported an average of 2.8 on a 5-point self-rated scale of health where 1 is excellent and 5 is poor. About 32 per cent of the respondents face difficulty in performing at least one key activity of daily living out of four. Women's control over their lives and over decision-making was moderate, at around 5 on a 10-point scale. Approximately 20 per cent of the women had some savings; the overall average savings was ETB 12. Reported mental health was generally good. Based on an enhanced life distress index ranging from 0 to 36, with higher scores indicating greater distress, women in PW and PDS households reported, respectively, an average of around 8 and 7. Measured using the Medical Outcomes Study–Social Support score on a scale ranging from 0 to 100 on which higher scores show more positive results, the level of social support among women appeared moderate, with an average standardized score of about 40. Women exhibit limited trust in their communities. Only about 16 per cent show a positive perception of their community relationships, and only 18 per cent "feel part of the community".

Programme links and interaction with health extension workers and social workers

Exposure to the activities of health extension workers is quite high, but relatively little is known about the existence of social workers. About 61 per cent of caregivers in PW households know the health extension worker in their community. The corresponding share associated with social workers is only 11 per cent. The relevant shares among caregivers in PDS households are 45 per cent and 7 per cent, respectively. Smaller proportions of caregivers have had contact with health extension workers or social workers in the three months prior to the survey. Few caregivers have ever attended a food and health demonstration, and only about 1 caregiver in 10 listens to the radio. These interactions are among the targets of planned interventions of the ISNP and can therefore be expected to become more important in the treatment kebeles over the pilot period.

On the integration of the PSNP and the CBHI, as well as the transition to temporary direct support (TDS), the findings show a generally high level of understanding among the implementing partners. The interagency steering committee and task force seem to be working well. Meanwhile, the qualitative results of the survey indicate that the TDS provisions for pregnant and lactating women and caregivers with malnourished children have not yet been fully implemented in practice. Among the challenges that have been identified are the overlap in the mandates and responsibilities of frontline agencies, including health extension workers, development agents and social workers; limited staffing allocations and inadequate training among newly hired staff; high staff turnover; difficulties in harmonizing PSNP and CBHI waiver targeting and client selection; and budgetary constraints.

Triangulation of findings

The qualitative component of the survey generally supports the quantitative findings and provides additional contextual explanations that are helpful in programme implementation. Whenever possible, the indicators derived from the survey have been compared with the rural Amhara sample in the 2016

Ethiopia Demographic and Health Survey (DHS) or the Ethiopia Socioeconomic Survey (ESS) 2015–2016 (CSA and ICF, 2016; CSA and World Bank, 2017). The magnitude of the indicators shows consistently that the PSNP population is generally less well off or, at best, comparable with the general rural Amhara sample. This gives some assurance of the data quality and targeting effectiveness of the PSNP.

Baseline balance

There are noticeable differences in the characteristics of the treatment and comparison kebeles, including in access to services and the experience of shocks over the 12 months prior to the survey. This was expected in view of the quasi-experimental design (see section 3.8). Balancing weights were therefore used to make the treatment and comparison households comparable following the weighting. Households in the treatment and comparison arms were balanced on a majority of the key variables once the matching weights had been applied (see Table ES.1).

Conclusion

Overall, the baseline data provide a rich snapshot of all the indicators of interest and offer leads on the emphasis to be adopted in the programme efforts to realize the overall objectives of the ISNP. The behaviour change communication (BCC) sessions on feeding practices, child discipline and early marriage are critical. Facilitating participation in PSNP livelihood groups would help income strengthening and diversification. Health extension workers, social workers and the activities of the community volunteers known as the health development army are important in assisting with case management among malnourished children, monitoring school enrolments, and fostering timely transitions to TDS for eligible women and caregivers in PW households.² Ensuring that health extension workers and social workers are motivated and engaged is critical to achieving the desired results. The development and deployment of a management information system to provide timely data about PSNP households would help strengthen case management and monitoring. A steering committee to facilitate institutional coordination between the CBHI and the PSNP across woredas and the regions would aid in ensuring the harmonization of standards and sufficient budgetary allocations so all eligible households may benefit from the fee waiver.

Table ES.1. Summary of Key Indicators

| Indicator | | PW | | PDS | |
|--|--------|--------|--------|--------|--|
| | | Т | С | Т | |
| PSNP status and income | | | | | |
| Client in designated category at any time | 0.94 | 0.95 | 0.96 | 0.97 | |
| Active client in designated category | 0.93 | 0.91 | 0.95 | 0.95 | |
| Income from PSNP in 12 months prior to the survey, ETB | 3886.9 | 3675.6 | 3207.4 | 3279.9 | |
| Per capita income from PSNP in 12 months prior to the survey, ETB per person | | 840.5 | 1381.1 | 1335.7 | |
| Household food security and economic well-being | | | | | |
| Meals per day, number | 2.81 | 2.79 | 2.70 | 2.70 | |
| Three meals per day | 0.81 | 0.79 | 0.70 | 0.71 | |
| Has never worried about food | 0.22 | 0.23 | 0.24 | 0.23 | |

The health development army, an initiative launched in 2010 and 2011, consists of community volunteers. Unlike community health workers in other lowand middle-income countries, these volunteers, primarily women, are not formally integrated within the health system, but typically consider themselves part of the community. Indeed, their activities are often seasonal and time limited.

| | PW | | PDS | |
|---|--------|--------|--------|--------|
| Indicator | С | Т | С | Т |
| Food insecure at least one month in the year | 0.75 | 0.78 | 0.67 | 0.71 |
| Months of food insecurity, number | | 4.28 | 4.19 | 4.48 |
| Improved source of drinking water | 0.58 | 0.53 | 0.54 | 0.60 |
| TLU currently owned | 0.51 | 0.55 | 0.50 | 0.47 |
| Has an outstanding debt | 0.18 | 0.21 | 0.13 | 0.12 |
| Experienced a shock in 12 months prior to the survey | 0.43 | 0.44 | 0.36 | 0.39 |
| Negative coping to shocks | 0.44 | 0.40 | 0.44 | 0.40 |
| Any distress sale of assets in 12 months prior to the survey | 0.16 | 0.22 | 0.17 | 0.19 |
| CBHI enrolment, willingness to pay, understanding and attitudes | | | | |
| Currently enrolled in CBHI | 0.67 | 0.64 | 0.51 | 0.51 |
| Among households enrolled | | | | |
| Received premium waiver for CBHI | 0.22 | 0.36 | 0.34 | 0.57 |
| Annual fee paid for entire household, ETB | 207.2 | 245.7 | 187.6 | 225.1 |
| Overall satisfaction with CBHI on a 10-point scale with 1 = lowest and 10 = highest | 6.81 | 6.87 | 6.89 | 6.89 |
| Maximum amount willing to pay, ETB | 133.2 | 160.54 | 89.9 | 112.73 |
| Must pay some costs in advance even if registered with CBHI | 0.32 | 0.35 | 0.32 | 0.33 |
| Enrolment in CBHI will make health care more affordable | 0.84 | 0.84 | 0.88 | 0.82 |
| Household health, utilization and cost of health services | | | | |
| III in month prior to the survey | 0.11 | 0.13 | 0.15 | 0.18 |
| Among those with an illness | | | | |
| Sought care | 0.53 | 0.53 | 0.41 | 0.47 |
| Care in public facilities | 0.83 | 0.83 | 0.80 | 0.79 |
| Care provided by a professional | 0.97 | 0.93 | 0.99 | 0.95 |
| Used CBHI | 0.71 | 0.60 | 0.57 | 0.55 |
| Expenses without CBHI | 622.07 | 509.45 | 534.81 | 459.95 |
| Expenses with CBHI | 30.29 | 96.74 | 39.50 | 37.12 |
| Disabled (WG-SS) ^a | 0.05 | 0.07 | 0.18 | 0.20 |
| Children's health, nutrition, education and care | | | | |
| Child sick (diarrhœa, cough, fever) in the two weeks prior to the survey | 0.22 | 0.22 | 0.17 | 0.26 |
| Received oral rehydration therapy with continued feeding during episode of diarrhœa | 0.66 | 0.47 | 0.43 | 0.37 |
| No treatment for diarrhœa during the most recent episode | | 0.37 | 0.35 | 0.55 |
| Children ages 12–23 months with all required vaccinations | | 0.39 | 0.48 | 0.40 |
| Children ages 4–59 months who are stunted | 0.45 | 0.50 | 0.47 | 0.43 |
| Children ages 4–59 months who are wasted | 0.11 | 0.11 | 0.13 | 0.11 |
| Children ages 4–59 months who are underweight | 0.27 | 0.29 | 0.27 | 0.27 |
| Children ages 6–23 months who received minimum acceptable diet | 0.04 | 0.01 | 0.05 | 0.05 |

| | P | W | PDS | |
|---|-------|-------|-------|-------|
| Indicator | С | Т | С | Т |
| Children given deworming drug during the six months prior to the survey | 0.17 | 0.16 | 0.21 | 0.18 |
| Material well-being satisfied | 0.20 | 0.19 | 0.17 | 0.15 |
| Child is vulnerable | | 0.33 | 0.30 | 0.26 |
| Children ages 6–17 attending school | 0.55 | 0.58 | 0.57 | 0.52 |
| Children ages 12–59 months who received violent discipline during 12 months prior to the survey | 0.61 | 0.56 | 0.67 | 0.59 |
| Adults engaged in four or more learning activities with children ages 36–59 months | 0.21 | 0.20 | 0.29 | 0.22 |
| Nutrition and feeding knowledge | | | | |
| Identifies food rich in vitamin A | 0.21 | 0.30 | 0.19 | 0.23 |
| Identifies food rich in iron | 0.26 | 0.28 | 0.26 | 0.24 |
| Believes in exclusive breastfeeding until age 6 months of the child | 0.84 | 0.76 | 0.70 | 0.62 |
| Child should be fed more than usual if sick | 0.44 | 0.40 | 0.39 | 0.34 |
| Child should be fed more often than usual if sick | 0.45 | 0.44 | 0.39 | 0.38 |
| Correctly identifies food that the mother can make to complement breastfeeding | 0.65 | 0.69 | 0.60 | 0.61 |
| Caregiver dietary diversity index | 3.88 | 3.77 | 3.66 | 3.70 |
| Women's health, empowerment and social capital | | | | |
| Self-rated health (1 = excellent; 5 = poor) | 2.75 | 2.78 | 2.81 | 2.95 |
| Enhanced life distress index (0–36) | 7.87 | 7.93 | 6.98 | 6.93 |
| Agency score | | 3.13 | 2.46 | 2.66 |
| Satisfied with life some, most, all of the time | | 0.42 | 0.41 | 0.37 |
| Woman's level of control over her life | | 5.30 | 4.96 | 5.01 |
| Woman's level of decision-making ability | 5.45 | 5.36 | 5.30 | 5.18 |
| Woman has savings | 0.22 | 0.17 | 0.23 | 0.21 |
| Average personal savings (all women), ETB | 12.21 | 10.65 | 14.05 | 19.96 |
| Social support score, standardized | 2.71 | 2.79 | 2.60 | 2.67 |
| Feels part of the community | 0.15 | 0.22 | 0.20 | 0.20 |
| Trusts the community | 0.08 | 0.09 | 0.11 | 0.09 |
| Belongs to an iddir ^b | 0.51 | 0.51 | 0.60 | 0.50 |
| Belongs to Eqqub ^c | 0.02 | 0.03 | 0.02 | 0.03 |
| Exposure to health and nutrition services | | | | |
| Knows health extension worker in area | 0.60 | 0.62 | 0.44 | 0.47 |
| Among those who know health extension workers | | | | |
| Had contact with a health extension worker in the three months prior to the survey | 0.50 | 0.37 | 0.39 | 0.38 |
| Visited at home by a health extension worker in the three months prior to the survey | 0.70 | 0.56 | 0.57 | 0.58 |
| Knows the social worker in area | 0.10 | 0.14 | 0.04 | 0.12 |

| Indicator | | PW | | PDS | |
|---|-------|-------|-------|-------|--|
| | | Т | С | Т | |
| Among those who know social workers | | | | | |
| Had contact with a social worker in the three months prior to the survey | 0.46 | 0.46 | 0.20 | 0.36 | |
| Has been visited at home by a social worker | 0.06 | 0.24 | 0.19 | 0.36 | |
| Has attended a food demonstration | 0.07 | 0.05 | 0.01 | 0.03 | |
| Had information on breastfeeding, child feeding and nutrition in the three months before the survey | | 0.13 | 0.08 | 0.12 | |
| Early marriage prevalence and attitudes | | | | | |
| Age at first marriage among women who have ever been married | 15.94 | 16.12 | 15.24 | 15.81 | |
| Ideal age of marriage, girl | 16.74 | 16.69 | 16.63 | 16.56 | |
| Ideal age of marriage under age 18, girl | 0.59 | 0.55 | 0.60 | 0.59 | |
| Ideal age of marriage under age 15, girl | 0.06 | 0.08 | 80.0 | 0.09 | |
| Knows legal marital age for girls | 0.85 | 0.77 | 0.85 | 0.73 | |
| Knows legal marital age for boys | 0.22 | 0.33 | 0.15 | 0.35 | |
| Knows there is a legal age of marriage | 0.09 | 0.10 | 0.04 | 0.08 | |

Note: C = comparison group. T = treatment group. TLU = tropical livestock unit.

a. WG-SS = Washington Group short set of disability measures. See 'Methodology: Washington Group on Disability Statistics', Statistics Division, Department of Economic and Social Affairs, United Nations, https://unstats.un.org/unsd/methodology/citygroups/washington.cshtml.

b. The iddir is a form of indigenous social insurance. It is a voluntary association established primarily to help members during bereavement and in burial matters, but also to address other community concerns (Pankhurst and Mariam, 2000). Iddirs are found throughout Ethiopia.

c. The Eqqub is an informal, voluntary association that provides rotating savings and lending facilities and also fosters information sharing in traditional communities.

1. INTRODUCTION

1.1 Background

Ethiopia has made considerable progress in economic growth and social development in the last two decades. In 1999, about 56 per cent of the population was living on less than \$1.90 a day. This share had declined to 27 per cent by 2014 (in 2011 purchasing power parity U.S. international dollars) (World Bank, 2015). While this represents a drop in the poverty rate of more than half over the period, a poverty rate of 27 per cent implies that about 27 million of the country's estimated 100 million population (2017) are still living in monetary poverty (UNDESA, 2017). Moreover, food insecurity is chronic in many rural areas, often exacerbated by weather shocks such as droughts and floods.

In view of the enormous challenge of poverty in Ethiopia, the Government and development partners have been implementing various social protection programmes aimed at poverty reduction and the economic empowerment of the poor and vulnerable. The social protection landscape currently consists of many diverse interventions, including the nationwide flagship rural Productive Safety Net Programme (PSNP), which has been in operation since 2005, a formal social security scheme for civil servants and private sector employees, the Community-Based Health Insurance (CBHI) scheme, and health and education fee waiver schemes. In 2017, the Government also rolled out an urban PSNP in major urban centres of the country to address the challenge of rising urban poverty.

These programmes have been fragmented in terms of policy, institutional coordination and budget allocations. The Government has recognized the potential for better coordination and cooperation and is therefore seeking to establish a comprehensive, integrated social protection system in line with the Social Policy Framework for Africa, which "aims to provide an overarching policy structure to assist African Union Member States to strengthen and give increasing priority to their national social protection policies and hence promote human empowerment and development" (African Union, 2008, p. 4). The success of this endeavour in addressing multidimensional poverty and vulnerability will depend on the establishment of a coordinated multisectoral collaboration and the integration of basic social services.

In early 2016, the National Social Protection Platform, which is hosted by the Ministry of Labour and Social Affairs, supported the drafting and endorsement of the National Social Protection Policy and Strategy. The platform was created to offer a framework for a National Social Protection Policy. One of the three key principles of the platform is that a social protection system enables actors to work collaboratively and effectively on social protection programmes through shared commitment, sufficient budget funding, strong partnership with ministries and other stakeholders, enhanced coordination and implementation capacities, and systems and tools.

The United Nations Children's Fund (UNICEF), one of the main stakeholders, is working closely with the Government to facilitate the integration of services and reach the most vulnerable. As part of this effort, it is supporting the Ministry of Labour and Social Affairs in building an integrated safety net system in the regions in favour of the most vulnerable women and children in rural and urban areas. This work builds on past UNICEF-supported initiatives, such as the Tigray Social Cash Transfer Pilot Programme (2011–2014) and the Integrated Nutrition and Social Cash Transfer Pilot Programme (since 2015). UNICEF is currently supporting the Government with a new initiative, the Integrated Safety Net Programme (ISNP) in the Amhara Region. The goal of the programme is to facilitate CBHI enrolment among PSNP clients.

As with other UNICEF-supported interventions, a rigorous impact evaluation has been considered crucial to determine the impacts of the ISNP on the target population and inform policy and related initiatives accordingly. The present document represents a baseline report for the ISNP impact evaluation. It provides an overview of the ISNP, including the conceptual framework, the design of the impact evaluation and the baseline survey, and a thorough analysis of the baseline data gathered through the survey.

1.2 The ISNP

The ISNP builds on two previous UNICEF-supported pilot programmes that linked PSNP clients and other services through the initiative of social workers and community care coalitions (CCCs). Similar to the other two pilot programmes mentioned above, the ISNP focuses on providing integrated interventions in nutrition and health, but, in addition, the ISNP facilitates the enrolment of PSNP clients in the CBHI scheme. The pilot programme will exempt unconditional PSNP permanent direct support (PDS) clients from paying the CBHI premium while PSNP clients in the conditional public works (PW) arm will receive information on CBHI enrolment, but will still be required to pay the CBHI premium. Social workers involved in the programme will also promote the enrolment of children in school, monitor school attendance and provide information and guidance to PSNP households on a range of issues.

The innovations of phase 4 of the PSNP include the integration of the PSNP and the provision of social services in health and nutrition, an increase in the duration of the monthly transfers among direct support clients to 12 months a year, the expansion of household programme responsibilities beyond the previous focus on public works, strengthening the focus on gender equity, and the introduction of extra responsibilities among pregnant and lactating women and caretakers of malnourished children.

In line with the operationalization of the gender, social development and nutrition provisions of phase 4 of the PSNP, a comprehensive case management system is a major component of the ISNP. The system allocates extra responsibilities for related basic health and nutrition services to temporary direct support (TDS) clients of the PSNP. These clients include pregnant and lactating women and caretakers of malnourished children. Principal activities are implemented by social workers, who form the crucial link between frontline workers and clients in communities.

The three components of the package being delivered to PSNP clients within the integrated model are:

- Behaviour change communication (BCC) on nutrition, health, early marriage, gender equality, and adolescent sexual and reproductive health
- The facilitation of CBHI enrolment and exemptions among PSNP direct support clients on the payment of enrolment premiums
- Case management by social welfare workers to support the links between PSNP clients and health and social services, inform clients of their extra programme responsibilities, including children's school enrolment and attendance and health service visits, monitor compliance with the new responsibilities and provide follow-up advice or support in cases of non-compliance.

Additional details on the ISNP design and implementation are contained in a PSNP project implementation manual available through the UNICEF Ethiopia social protection team (see Ministry of Agriculture, 2014).

2. CONCEPTUAL FRAMEWORK

The conceptual framework guiding the impact evaluation is illustrated in Figure 2.1, which shows the various components of the ISNP relative to the PSNP, identifies the relevant individual and household indicators, and suggests potential pathways of impact.

Figure 2.1. Conceptual Framework, Integrated Safety Net Programme

CASHTHROUGH PSNP (PW/DS) ISNP (PNSP CASH+) ASSETS FROM **INTERMEDIATE OUTCOMES** MID & LONG-TERM OUTCOMES INTERVENTION / PATHWAYS programme Increased access to SRH Improved and **ECONOMIC** diversified nutrition for voung airls **CAPITAL** NUTRITION · Reduced food insecurity INFORMATION · Increased service Enhanced social support seeking behavior · Better knowledge of SOCIAL · Increased mental and education needs CAPITAL physical health · Increased knowledge of **FACILITATE** feeding practices and Increased school **CBHI** general nutrition attendance ENROLMENT · Reduced health-related **HEALTH** expenses CAPITAL Increased state-citizen relationship · Increased access to social & financial services Improved resilience SOCIAL WFI FARF & Increased aspirations **EDUCATION** CCCs SUPPORT and expectations · Delayed sexual debut. **CAPITAL** marriage & pregnancy Enhanced social capital MODERATORS Integrated Safety Net Programme Productive Safety Net Programme Community Based Health Insurance Availability and quality of public services Prices PSNP Shocks Infrastructure, access to markets Community social norms Power relations, class structure Household composition Customary & religions law Community Care Coalitions

First, all PSNP clients receive cash support through either cash conditional on work during the lean season (PW households) or unconditional support for households with no able-bodied members (PDS households). Phase 4 of the PSNP has introduced an additional category, the TDS, which covers pregnant and lactating women in PW households who are exempted from work requirements until the child reaches age 12 months. It also covers caregivers of malnourished children. Direct support (PDS) clients receive a regular, monthly cash transfer during the entire year. These transfers are associated with certain responsibilities, including antenatal and postnatal checkups, attendance at BCC sessions, growth monitoring among infants and regular school attendance of children ages 6–18. Social workers are tasked with verifying compliance with these commitments, but there is no penalty for noncompliance. The cash grant allows households to smooth consumption and purchase basic necessities, such as food, but also pay for other household expenditures, such as health care and education.

Second, the major innovation of the ISNP is the integrated service package, including case management, and these extra or plus components are the main focus of this evaluation. The plus package is expected to strengthen four types of assets among households: economic capital, social capital, education capital, and health capital. Economic capital will increase because of the cash transfers, the productive impacts of the cash transfers, and, potentially, a decline in out-of-pocket health expenditures because of enrolment in the CBHI or a reduction in the distressed sale of assets.

Social capital will expand through participation in the BCC sessions, the support of social workers and CCCs, and participation in the CBHI. Education capital will be enhanced in several ways, as follows:
(a) among caregivers, through attendance at BCC sessions and the support of social workers and CCCs; (b) access to more extensive information about sexual and reproductive health; (c) among children, through increased school attendance; and (d) greater community awareness of issues revolving around gender equality and the harms of early marriage. Health capital may improve because of enrolment in the CBHI and through improved practices on nutrition, health and sanitation as a result of the BCC sessions.

Third, strengthened household assets would improve intermediate outcomes. These include, for example, reduced food insecurity and the higher-quality diets resulting from increased economic capital and more knowledge about good feeding practices and nutrition through the enhanced education capital pathway. Positive impacts on intermediate outcomes may also emerge through the greater time availability among caregivers deriving from the drop-off in the time necessary for public works. More time may be freed up for care, rest – essential for pregnant and lactating women – and health seeking. Furthermore, social support networks should expand through the programme. The improved education and social capital assets are expected to boost the access to social and financing services and the awareness of gender and social development. Greater enrolment in the CBHI is anticipated to reduce out-of-pocket health expenditures, thereby fostering more economic security.

Fourth, an aim of the ISNP is to affect mid- and long-term outcomes through these intermediate pathways. For instance, better nutrition can result from reduced food insecurity and better knowledge of feeding practices. CBHI enrolment can lead to more health seeking behaviour through the cut-back in out-of-pocket expenditures on health services. The rise in economic security may allow households to manage shocks and economic stress more effectively, thereby lessening the need for negative coping strategies, such as marrying off young children to manage debt, decreasing household consumption, or selling off livestock and other productive assets. The social worker sensitization efforts can expand the access of adolescents to sexual and reproductive health services, ultimately leading to delayed sexual debut and pregnancy. While addressing community gender norms on early marriage, these activities may also empower young girls at risk of early marriage by offering them information about where to seek help. Through the extra household responsibilities tied to the programme and monitored by the social welfare workforce, school attendance may increase. The resilience of households could be enhanced by the services provided by the ISNP and the related influence on intermediate outcomes. Greater interaction with the social welfare workforce and social protection programmes may promote better State-citizen relationships.

Fifth, the framework reflects the fact that the ISNP is not being implemented in a vacuum. Contextual factors may shape programme effectiveness. The impact of the ISNP may thus be weaker or stronger depending on conditions in the community, such as household composition, infrastructure and service availability, market access, shocks, local social and gender norms, power relations, gender equality and women's empowerment, socioeconomic structure, and customary and religious practices.

Using this conceptual framework, the impact evaluation seeks to answer the following primary research questions:

- Do the plus components of the integrated PSNP positively impact the health and nutrition status of PSNP clients? What are the pathways of such an impact?
- Do the plus components of the integrated PSNP influence health seeking behaviour or the ability and willingness to pay for health insurance among PSNP clients?

- Are there supply side barriers to service access among PSNP clients?
- Do PSNP links to the CBHI mitigate the effect of health shocks on PSNP clients?

Secondary questions of interest include the following:

- What are the main barriers to CBHI enrolment and access to other available services among PSNP clients?
- Do the plus components of the integrated PSNP boost CBHI access among PSNP clients?
- Does the ISNP raise the awareness of PSNP clients about the activities and services managed by social workers?
- Does the ISNP encourage client households to seek assistance from social workers?
- Does the ISNP raise the social support received by PSNP clients?
- Does the ISNP increase children's school attendance?
- Does the ISNP improve multisectoral collaboration and coordination among social workers, health extension agents, development agents and service providers?
- Does the ISNP enhance the links and coordination between the PSNP staff and the CBHI staff?
- Is the ISNP leading to changes in perceptions and attitudes towards early marriage among PSNP clients?

The survey instruments used for the data collection were designed to cover all these topics in establishing a baseline. Future surveys would collect fresh data on these topics to facilitate the measurement of trends and of the added value of the integration of the PSNP, the CBHI and other, complementary programmes and services under the ISNP.

3. STUDY DESIGN, SURVEY IMPLEMENTATION AND DATA PROCESSING

3.1 Study design

The design of the impact evaluation is constrained by the approach used in the selection of the treatment (ISNP) group. The UNICEF Ethiopia Country Office, in collaboration with district and regional partners, decided that the treatment should be undertaken at the woreda level given that the woreda serves as the main administrative unit for the PSNP and CBHI interventions. The selection of the treatment woredas entailed both an inclusive approach and an objective needs and capacity-based assessment. A workshop was first held among the shortlisted woredas (Borena, Dewa Chefa, Enebsie Sarmider, Libo Kemkem, and Mekdela). The country office then performed an in-depth analysis of the five woredas using an assessment tool that helped objectively select the woredas. The tool captured the needs of the woredas in education, nutrition and health. In addition, woredas were assessed on health insurance (CBHI availability in the woreda); nutrition (the relevant interventions being carried out); the links and coordination between the Woreda Office of Labour and Social Affairs and woreda food security and nutrition–sensitive agriculture; management, technical and administrative capacity; links to other UNICEF interventions; and accessibility and practicability in terms of UNICEF support. Based on the results of the implementation of the assessment tool during field visits in the five woredas, Dewa Chefa and Libo Kemkem were selected as the treatment woredas.

Assessing programme impact (specifically, the impacts of the ISNP plus components) requires a counterfactual to estimate what would have happened with the ISNP households if the plus components had not been implemented. This requires the establishment of a comparison group of households that do not receive the ISNP, but that have characteristics that are near identical to the characteristics of the ISNP households. Thus, two groups of PSNP households would have to be compared: (a) a treatment group that receives the ISNP (the PSNP and the additional plus components) and (b) a comparison group that receives the PSNP only. Given that the ISNP woredas were purposely selected, a randomized control trial design was not possible though this is the preferred method for estimating causal impacts of an intervention. The evaluation reported here is therefore based on a prospective quasi-experimental difference in differences design. This design enables the estimation of impacts by comparing the changes in the ISNP programme areas between the 2018/2019 baseline and the subsequent follow-ups with the changes occurring in the comparison (PSNP only) areas over the same period, while controlling for differences between the treatment and comparison groups with respect to household and community characteristics.

The validity of this estimation strategy relies on the parallel trends assumption, according to which the change in a comparison group provides a good approximation of the change that would have occurred in the treatment areas if the ISNP programme (the plus component) had never been implemented there, conditional on controlling for relevant differences between the groups. To find an appropriate comparison group in the absence of randomization, the team explored the possibility of using matching methods in communities or wards (kebeles), but this was not feasible because of the lack of data disaggregated at the community level or at another lower administrative unit. Instead, the team relied on the expertise of technical staff at the UNICEF Ethiopia Country Office who are knowledgeable about the PNSP intervention areas in Amhara to select comparison woredas with similar characteristics relative to the treatment areas. The criteria included a similarity in socio-demographic profile, health

³ Details available upon request.

service supply, programme organization, culture and ethnicity, ecological characteristics, and level of economic development. The two comparison woredas were selected in the same zones in which the treatment woredas were located, as follows:

- For Dewa Chefa, the comparison woreda is Artuma Fursi, which, like Dewa Chefa, is also in the Oromo Zone of Amhara
- For Libo Kemkem, the comparison woreda is Ebinat, likewise in the Debub/South Gondar
 Zone of Amhara

Given that the treatment and comparison woredas have not been randomly allocated, the study utilizes matching techniques to address the underlying issue of selection bias. The matching technique the team applied is the doubly robust inverse probability weighted regression adjustment (IPWRA). The IPWRA was chosen over more common approaches, such as propensity score matching, for a number of reasons. First, with standard (non-parametric, that is, nearest neighbour, kernel) matching estimators, it is not possible to interact the treatment variable with other covariates to understand moderating impacts. The analysis the team planned for in this study entails heterogenous analyses that test for moderation of treatment impacts. The IPWRA, instead, is more flexible because, in a second step, the outcome model is fully specified and can be modelled with the functional form that is most suitable. In addition to permitting the inclusion of interaction terms, this estimator allows explicit control for variables that are important in modelling the outcome.

In an assessment of child well-being, for instance, the characteristics of the child, such as gender and age, are crucial in the estimation of outcomes, and the controls can reduce the potential bias arising from heterogeneity in the error term (Outes and Porter, 2013). In the case of this study, whereas treatment as at the household level, the evaluation includes several indicators at the individual level. It is plausible to assume that some characteristics are more relevant for inclusion in the model of a certain individual outcome than in the participation equation. Matching does not control for these differences; the inclusion of these controls thus improves the efficiency of the final impact estimates on the outcomes of interest. An additional feature of the IPWRA is the balancing condition. Balance across the baseline characteristics included in the participation equation – that is, there are no statistically significant differences between treatment and comparison groups in these characteristics – is no longer needed because these also appear in the IPWRA.

Because it relies on weighting, the IPWRA is superior to propensity score matching with respect to statistical precision. Propensity score matching compares each treatment observation with only one or a few control observations with a similar probability of being treated. Instead, the IPWRA uses weights and thus compares every treated observation with every control observation by assigning higher weights to those observations with a greater likelihood of being treated and lower weights to those observations that are more dissimilar. Because more observations are used, precision is enhanced. The IPWRA has another appealing feature: it is doubly robust to misspecification of either the propensity score model or the conditional means (ordinary least squares) (Wooldridge, 2010). If either the treatment or the outcome model is mis-specified, the estimates will still be consistent.

In this baseline report, matching and sampling weights are combined to generate key indicators of interest (see section 3.7). The results presented show the baseline estimates of the indicators and also allow a check for balance between the treatment and comparison subgroups of PW and PDS households.

3.2 Power and sample size

To determine the minimum sample size for the evaluation, the team conducted power calculations based on estimates of baseline values and the expected impacts on the following indicators:

- Individuals using health services during the month previous to the survey (among those who were sick)
- Individuals who consulted a health practitioner or traditional healer or visited a health facility in the four months previous to the survey
- Enrolment in the CBHI
- Children ages 6–23 months who consume a minimum acceptable diet
- Children ages 12–23 months who have received all basic vaccinations
- Children ages 12–23 months who have received no vaccinations
- Children ages 12–23 months who have received age-appropriate vaccinations
- Women who received antenatal care from a skilled provider during the last pregnancy

For each indicator, the sample size required to detect a desired change of delta () with a minimum power of 80 per cent is calculated based on the assumption of simple random sampling and a zero non-response rate. A one-side statistical test is assumed because the proposed interventions have an expected direction of change. The calculations use the observed values of these indicators for the Amhara Region in the 2016 Ethiopia Demographic and Health Survey (DHS) (CSA and ICF, 2016). For example, in the case of the individuals using health services during the prior month, the desired change is an increase of 10 percentage points from a base of about 56 per cent. In the case of antenatal care from a skilled provider during the last pregnancy, the desired change is an increase of 5 percentage points from a base of 67 per cent.

After estimating the number of individuals required for each indicator, the team used the available information on household size and age-sex distribution to determine the number of households required in each arm. The number of desired households was then adjusted for an attrition of 10 per cent between baseline and the follow-up data collection 24 or 36 months later. Based on these calculations, the available client populations in each woreda, and budget considerations, a target sample size of 5,400 households was identified, consisting of 2,700 households in treatment (T) woredas and 2,700 households in comparison (C) woredas. The sample was equally split between PW and PDS households. Additional details of the sample size computation are available in the inception report.

3.3 Sampling frame, sample allocation and sampling

The sampling frame for the study was constructed from a list of all active PW and PDS client households that was received from the PSNP administration in each woreda as of October 2018. Data were provided on a total of 93 kebeles, including 24 kebeles each in Artuma Fursi and Ebinat, 23 in Libo Kemkem, and 22 in Dewa Chefa. The frame had a total of 21,520 PW households and 8,601 PDS households. The distribution was not even across the woredas: the comparison woredas had more households relative to the treatment woredas (*see Table 3.1*).

Table 3.1. Population and sample size, by client type and Woreda

| Zana | Mayada | Treatment status | | PW house | eholds | PDS households | | |
|-------------|--------------|---------------------|----|------------|--------|----------------|--------|--|
| Zone | Woreda | | | Population | Sample | Population | Sample | |
| Debub/South | Libo Kemkem | Treatment | 23 | 3,714 | 601 | 1,547 | 679 | |
| Gondar | Ebinat | Comparison | 24 | 5,431 | 578 | 2,813 | 706 | |
| 0 | Dewa Chefa | Treatment | 22 | 4,791 | 771 | 1,582 | 694 | |
| Oromo | Artuma Fursi | Comparison | 24 | 7,584 | 798 | 2,659 | 669 | |
| Total | | | 93 | 21,520 | 2,748 | 8,601 | 2,748 | |

The total sample of 2,700 households per study arm was equally allocated to PDS and PW households. Within the client type, the sample was allocated to the woredas in proportion to the total number of households of that type in the sampling frame. For treatment woredas, there were a total of 8,505 PW households, of which 3,714 were in Libo Kemkem, and 4,791 were in Dewa Chefa. These represent 43.7 per cent and 56.3 per cent, respectively, of the total population of PW households. Accordingly, 43.7 per cent of the required sample of 1,350 PW households in treatment woredas was allocated to Libo Kemkem, and the rest was allocated to Dewa Chefa. This percentage allocation rate was then applied in the kebeles, and the resulting sample allocation was rounded up to the nearest whole number, effectively adding households to the desired sample size. The total number of households in each category and the allocated sample size at the woreda level is given in Table 3.1. Simple random sampling was then used to select the number of allocated households in the kebeles from each category of household.

3.4 Data collection instruments

The impact evaluation is designed as a mixed-methods study consisting of quantitative and qualitative components. The quantitative component is based on three survey instruments, as follows:

- A household questionnaire administered to each household in the sample
- A community questionnaire administered to kebele leaders in each kebele
- A health facility questionnaire administered to focal persons and administrators in all health facilities in the kebeles in the sample

The instruments were first developed by the research team at the UNICEF Office of Research – Innocenti. They draw on earlier questionnaires implemented by the research team in the region, as well as other household surveys in Ethiopia. Survey items have been pulled from national surveys, such as the Household Consumption and Expenditures Surveys, the Welfare Monitoring Survey, the Ethiopia Socioeconomic Survey (ESS), the DHS, Young Lives, the Multiple Indicator Cluster Surveys, and modules previously implemented in Ethiopia and sub-Saharan Africa as part of the Transfer Project, a joint initiative of Food and Agriculture Organization of the United Nations, UNICEF, and the University of North Carolina at Chapel Hill that aims to produce rigorous evidence on cash transfer programmes in sub-Saharan Africa and to facilitate the policy uptake of this evidence.

The UNICEF Office of Research – Innocenti has extensive experience in conducting impact evaluations of social protection programmes in sub-Saharan Africa. It has worked with local partners to administer large household surveys for these evaluations. This work has been carried out as part of the Transfer

Project. The questionnaires have been shared with the UNICEF Ethiopia Country Office for feedback on both the specific thematic areas and the dimensions of analysis. The instruments have also been critically reviewed and adapted to the local context by BDS Centre for Development Research, a research firm based in Ethiopia and recruited through a competitive bidding process to partner with the UNICEF Office of Research on the survey.

The instruments have been developed to cover multiple topics. They have evolved from the program's theory of change, which is outlined in the conceptual framework (chapter 2). A brief overview of the instruments follows.

Household surveys were administered to one woman in each household. Priority was assigned to child caregivers. If no eligible or willing woman was available in the household, then man primary child caregiver was surveyed. The main respondent could be assisted by any household member who was more knowledgeable on a given topic. The key thematic areas covered included economic productivity, health expenditures, health and nutrition status, knowledge of and access to health services, child protection and other services, violence victimization and perpetration, school attendance, women's empowerment, CBHI enrolment and perceptions, shocks and the distress sale of assets, PSNP participation activities and benefits, and access to social services. There was also a module on marriage asking about women ages 12-24, including those who have lived in the household within the past 5 years, even if no longer currently living in household. The survey instrument also examined topics related to potential moderators of programme impacts, such as perceived social support. Data on the geolocation of households and other services were also collected, and anthropometric measurements were taken of all children ages 6–59 months in the households.

Community surveys were administered to a knowledgeable individual or group of individuals in each community – community leaders, teachers, and so on – to probe topics such as access to markets, health facilities, and schools; kebele marriage customs (matrilineal, patrilineal, and so on) and caregiving practices (who would be expected to take in a child if the parent dies); and covariate community shocks.

Health facility surveys were administered to all government dispensaries and primary health care facilities in treatment and comparison areas. Data were collected from official logbooks and through face to face interviews with health care workers on child preventive care and sick visits, nutrition-related services, family planning, and the availability of personnel, supplies, and services.

The **qualitative component** of the study involved in-depth interviews (IDIs), key informant interviews (KIIs) and focus group discussions to elicit information from various categories of respondents across kebeles, woredas, and the region. Qualitative data were collected in the two treatment woredas, that is, Dewa Chefa and Libo Kemkem. In each woreda, one kebele was selected for the interviews. The kebeles selected were Gula in Dewa Chefa and Shemo in Libo Kemkem. In woredas and the region, KIIs were undertaken with PSNP coordinators, UNICEF ISNP coordinators, CBHI coordinators, and the staff at the Woreda Office of Labour and Social Affairs, the Bureau of Labour and Social Affairs, and the Bureau of Women and Children's Affairs (BoWCA). In the kebeles, KIIs were conducted with social workers, health extension workers and development agents. Focus group discussions were also held with kebele CCCs. Customized semi-structured interview guides facilitated the IDIs, KIIs and focus group discussions.

To understand the nature and dynamics of integrated programming and the PSNP-CBHI, IDIs were carried out with a subsample drawn from the quantitative survey sample based on certain household

eligibility criteria. The embedded sample was disaggregated to include woman caregivers in three categories, as follows:

- PW and PDS client households with at least one child age under 18
- PW households with pregnant or lactating women
- Caregivers in households with malnourished children ages 6–59 months

For each category, a random subsample of three households was selected from the list of eligible households in each of the two kebeles sampled for the qualitative interviews. The interviews focused on the views and experiences of clients of PSNP and the programme's operational and complementary features, such as transfer size, payment delivery, the extra household programme responsibilities, BCC, case management referral systems, and rights and grievance mechanisms. IDIs with TDS clients explored the dynamics and implementation of the transition to TDS from PW status among this vulnerable group.

IDIs were also conducted with a matched sample of adolescent girls (ages 12–17) who are currently not married, but who are at risk of child marriage, as well as with their parents or guardians. Similar interviews were held with girls and women ages 12–24 who are currently married and were married before age 18. The interviews sought to understand the experiences of these young women and their perceptions of the impacts of early marriage on their life trajectories.

3.5 Survey organization and management

BDS Centre for Development Research led the survey organization and management. A total of 95 enumerators were recruited to undergo training on data collection from 12 November to 6 December 2018. The training sessions were facilitated by staff of BDS and the UNICEF Office of Research – Innocenti. The training sessions included an overview of the study, a refresher on research ethics, in-depth training on the survey instruments, field piloting of the instruments, and a debriefing session of the field piloting exercise. During the training sessions, questionnaires were further adapted to the local context based on the feedback of the local enumerators and supervisors. The enumerators were required to demonstrate a reasonable understanding of the questionnaires and field protocols through two written tests administered by the BDS and UNICEF Office of Research – Innocenti team. For the actual fieldwork, the 60 best-performing enumerators were selected.

Data collection took place between 16 December 2018 and 5 February 2019. The 60 enumerators were divided into 12 teams. Each team consisted of a supervisor and four interviewers. Enumerators who spoke Oromo were deployed to Artuma Fursi and Dewa Chefa, which have more Oromo speakers. Team membership was balanced in the numbers of women and men to increase the likelihood that the number of women was sufficient to administer the more sensitive sections of the questionnaire (such as reproductive health) among women respondents. Each team also included an expert trained in taking anthropometric measurements of children.

The research team adhered to the Ethical Principles and Guidelines for the Protection of Human Subjects of Research outlined in the Belmont Report (HHS 1979). Enumerators received instruction on ethical data collection and informed consent at data collection training sessions. Informed consent was obtained from all individuals interviewed ages 18 or more, and caregiver or parental consent and youth assent was obtained for all youth ages 12–17. Ethics approval for the study was granted by the Amhara Public Health Institute. The study has also been registered with the Pan African Clinical Trial Registry and the Registry for International Development Impact Evaluations.

All informed consent includes the ethical components on the following: (a) the objectives and content of the study, (b) privacy and data security, (c) voluntary participation, (d) the right to refuse or skip any questions without consequences, and (e) communication of a source to follow up with complaints or to obtain more information on the study. The quantitative interviews lasted approximately one hour per household, and the qualitative interviews lasted approximately 1.5 hours per individual.

3.6 Output of the fieldwork

The response rate from the field was 98 per cent because of the various monitoring strategies of the field coordinating teams. The field protocol required at least three visits to each household to make contact. If households could not be found, help was sought from the kebele development agent or PSNP focal persons to locate the households. If the response rate was less than 92 per cent in each kebele, the decision was made to sample a replacement set of households to try and boost the response rate to at least 95 per cent. This second stage sampling was considered in the construction of sample weights for the analysis.

Table 3.2 shows the distribution of the response rate by woreda and client type. The distribution shows that the response rate was comparable across woredas and client type. The distribution across kebeles is similar.

| Woreda | PW households | | | PDS households | | |
|--------------|---------------|-------------|---------------|----------------|-------------|---------------|
| | Sampled | Interviewed | Response rate | Sampled | Interviewed | Response rate |
| Libo Kemkem | 601 | 594 | 98.8 | 679 | 666 | 98.1 |
| Ebinat | 578 | 571 | 98.8 | 706 | 698 | 98.9 |
| Dewa Chefa | 771 | 756 | 98.1 | 694 | 685 | 98.7 |
| Artuma Fursi | 798 | 780 | 97.7 | 669 | 639 | 95.5 |

Table 3.2. Field Output and Response Rates

The qualitative fieldwork was successful in achieving a high number of IDIs, KIIs and focus group discussions. Fewer than 3 of the more than 60 planned IDIs were missed, and all the KIIs and focus group discussions were conducted.

3.7 Challenges, data quality, and data cleaning

The high response rate was achieved despite challenges. The main challenge was the difficulty of travel across the vast highlands and mountainous terrain and the great distances among the households selected within the kebeles. The initial workload of the enumerators had to be reduced to ensure they were not overly stretched to complete their assignments.

The struggles of interviewees to recall the dates of birth of their children, the number of days they had worked on PSNP public works during the previous 12 months and other important information represented another challenge. Whenever documentation was available, this challenge could be met, but there were many instances when there was no documentation, and the enumerators had to guide the respondents to make precise estimates.

Another problem was created by the survey calendar. The first month of the survey – 15 December to 15 January – coincided with the annual fast among adherents of the Ethiopian Orthodox Tewahedo Church, the majority religious group, and this may have partly affected the survey responses on food

consumption. This should not be an issue, however, because the next round of data collection would be conducted at the same time of year to ensure that there is no bias.

Overall, data quality appears to be high because of the effectiveness of monitoring mechanisms. First, the computer data entry application was programmed with all the necessary skips and advanced validation checks to guide enumerators in uploading only data that had passed basic consistency criteria. Second, the research team at the UNICEF Office of Research – Innocenti was on hand each day to run data quality controls and flag any issues to be resolved immediately by the field teams through household revisits. The final field data were carefully reviewed and cleaned by the study team.

3.8 Sampling and matching weights

Sampling weights were calculated as the inverse of the inclusion probabilities for each client type within the kebeles. Thus, the weights are different among PW and PDS households in each kebele. The base sampling probabilities were first adjusted for kebele response rates before the calculation of the inverse. If replacement households had to be activated to reach the desired number of interviews, the probabilities associated with the two steps were combined.

In view of the quasi-experimental design, there was no expectation that the treatment and comparison groups would be automatically balanced with respect to key covariates or outcome variables. Preliminary checks for balance between the two groups showed that the samples were unbalanced in many domains. A set of demographic, health, asset and community level characteristics were used to model the likelihood of treatment. Significant variables derived during the first step were retained, and a secondary model, including the squares and interaction terms of the significant variables, was used to generate the propensity scores. Weights were then normalized to give each treatment household a weight of 1. Most of the variables that were not balanced without the matching were balanced after the matching weights had been applied. This was the outcome expected because of the design.

The effective analytic weight for each observation is the product of the matching and sampling weights. These weights are used in this report to render the balance test between the treatment and comparisons groups meaningful in the results.

4. SAMPLE CHARACTERISTICS

4.1 Kebele characteristics

This section provides context on the areas of Ethiopia highlighted in the study. The information is gathered from analysis of a community questionnaire that was administered to key informants, such as kebele representatives and administrators, community leaders, traditional leaders, health workers, village secretaries, and development agents. Supervisors administered the questionnaire, which elicited responses on selected events in the community since 2016; on views on marriage and aspects of PSNP implementation; and on basic service provision, including access to roads, schooling and health care.

4.1.1 Access to services and facilities

Table 4.1 reports on the access of kebeles to roads and basic services, such as electricity and piped water. Means are reported separately for treated and comparison kebeles. About 55 per cent of the comparison kebeles and 61 per cent of the treated kebeles are accessible by roads with surfaces of tar, asphalt, or gravel. Among 14 per cent and 17 per cent of the comparison and treated communities, respectively, have asphalt road within the kebele. Among 16 per cent and 10 per cent of the comparison and treatment communities, respectively, the nearest asphalt road is 1–5 kilometres away. Although the comparison kebeles seem to be more remote from asphalt roads and further away from the woreda capitals, the mean distances are not statistically significant.

Table 4.1. Access to Basic Services, by Treatment

| Indiana, unichia | Mean | | |
|---|------------|-----------|--|
| Indicator, variable | Comparison | Treatment | |
| Main access road surface: tar, asphalt, or gravel | 0.55 | 0.61 | |
| Distance to the nearest asphalt road | | | |
| Within the community | 0.14 | 0.17 | |
| 1–5 kilometres | 0.16 | 0.10 | |
| 6–10 kilometres | 0.09 | 0.24 | |
| 11–30 kilometres | 0.39 | 0.41 | |
| 31–180 kilometres | 0.23 | 0.07 | |
| Average distance (kilometres) | 25.5 | 16.5 | |
| Vehicles pass on the main road in this kebele | 0.57 | 0.50 | |
| Distance to the nearest woreda capital | | | |
| 0–10 kilometres | 0.23 | 0.25 | |
| 11–20 kilometres | 0.17 | 0.34 | |
| 21–40 kilometres | 0.49 | 0.36 | |
| +40 kilometres | 0.11 | 0.05 | |
| Average distance to woreda capital, kilometres | 24.2 | 20.3 | |
| Kebele has access to public grid | 0.28 | 0.39 | |
| Kebele has access to piped water | 0.45 | 0.52 | |
| Communities, number | 47 | 44 | |

Another indicator of remoteness or lack of communication access gauges whether vehicles are able to circulate on the main road. In more than 50 per cent of the kebeles, vehicles are able to circulate on the main road. The share is slightly higher in the comparison kebeles. While almost half the kebeles have access to piped water, only 28 per cent of the comparison kebeles and 39 per cent of the treated kebeles are able to access electricity through the public grid.

Access to health services and health facilities is a major component of the ISNP. Table 4.2 reports on indicators of the access of PSNP clients to health facilities and on the main problems faced by communities in relation to health services. There is a location in 24 per cent of the kebeles where widely used medicines may be purchased. There are health centres in 30 per cent of the treated kebeles and 38 per cent of the comparison kebeles, but the nearest health facility is 10 kilometres away from 36 per cent and 50 per cent of the comparison and treated kebeles, respectively. Satisfaction with the quality of the nearest health facility is quite high, at 57 per cent. Respondents in each kebele were asked to select the most common problem in health service delivery. A lack of access to high-quality health centres or hospitals was the difficulty most often cited, followed by a lack of medicine, medical supplies, and qualified personal and the great distance to the nearest health centre. In 34 per cent of the comparison kebeles and 25 per cent of the treated kebeles, most women give birth at home. Immunization campaigns have been conducted in nearly 65 per cent of the kebeles.

Table 4.2. Access to Health Services and CBHI, by Treatment

| Indicates posicials | Mean | |
|---|------------|-----------|
| Indicator, variable | Comparison | Treatment |
| There is a place in the kebele to purchase widely used medicines | 0.21 | 0.27 |
| Distance to nearest health centre | | |
| In the kebele | 0.38 | 0.30 |
| Within 10 kilometres | 0.36 | 0.50 |
| More than 10 kilometres | 0.26 | 0.20 |
| Community members satisfied with quality of nearest health facility | 0.57 | 0.57 |
| Most common problem with health service delivery | | |
| Lack of health facilities | 0.43 | 0.32 |
| Lack of qualified personnel | 0.19 | 0.18 |
| Lack of medicine and medical supplies from government facilities | 0.19 | 0.25 |
| Distance to health centre | 0.09 | 0.14 |
| Most women give birth at home | 0.34 | 0.25 |
| Immunization campaign in previous six months | 0.62 | 0.68 |
| Nearest health facility admits people covered by the CBHI | 0.98 | 0.91 |
| Main reasons why residents are not registered with the CBHI | | |
| Premium too expensive | 0.57 | 0.50 |
| The excessive travel time or cost | 0.21 | 0.07 |
| Waiting time at enrolment too long | 0.19 | 0.20 |
| Poor quality care for those with the CBHI | 0.62 | 0.55 |
| Preferred services are not covered | 0.34 | 0.36 |
| Rely on clinics or traditional healers that do not accept the CBHI | 0.11 | 0.07 |
| Do not understand the CBHI | 0.15 | 0.20 |
| Communities, number | 47 | 44 |

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The main innovation of the ISNP is the free access to CBHI offered to direct support PSNP clients. For this reason, the survey included questions on the supply side of the CBHI services. In almost all kebeles, the nearest health facility admits people covered by the CBHI. In the comparison kebeles, the reasons most often given by residents to explain why they are not registered with the CBHI is the poor quality of the care available through the scheme (62 per cent), the cost of premiums (57 per cent), the lack of coverage for services the respondents prefer (34 per cent), the excessive cost or travel time (21 per cent), the length of the wait at enrolment (19 per cent), a lack of understanding of the scheme (15 per cent), and reliance on clinics or traditional healers that do not accept the CBHI (11 per cent). In the treated kebeles, 55 per cent of respondents said the care offered to CBHI clients was poor; 50 per cent, that premiums were too expensive; 36 per cent, that their preferred services were not covered; 20 per cent, that waiting time at enrolment is too long and that they do not understand the scheme; and 7 per cent, that the travel time or cost is excessive or that they use clinics or traditional healers that do not accept the CBHI.

Half the kebeles have access to pre-primary schools within the kebele, while more than 20 per cent have pre-primary schools less than 10 kilometres away (see Table 4.3). A much higher share of kebeles have primary schools (87 per cent and 63 per cent in comparison and treated kebeles, respectively), and almost none have a primary school more than 10 kilometres away. About 68 per cent of comparison kebeles and 45 per cent of treated kebeles have secondary schools. Meanwhile, 18 per cent of comparison kebeles and 33 per cent of treated kebeles have secondary schools within 10 kilometres. Around half the kebele residents are satisfied with the quality of the nearest public primary school. Enrolment in junior high school is low: only 5 per cent of the comparison kebeles and 19 per cent of the treated kebeles show an enrolment rate at between 81 per cent and 100 per cent. The main reason children are not attending junior high school is a lack of parental interest, followed by financial difficulties, the distance to the nearest school, and the lack of interest among the children.

Table 4.3. Access to School, by Treatment

| Later and the la | Me | an |
|--|------------|-----------|
| Indicator, variable | Comparison | Treatment |
| Distance to preschool | | |
| Within the community | 0.50 | 0.50 |
| Less than 10 kilometres | 0.23 | 0.28 |
| More than 10 kilometres | 0.27 | 0.23 |
| Distance to primary school | | |
| Within the community | 0.87 | 0.63 |
| Less than 10 kilometres | 0.13 | 0.33 |
| More than 10 kilometres | 0.00 | 0.05 |
| Distance to secondary school | | |
| Within the community | 0.68 | 0.45 |
| Less than 10 kilometres | 0.18 | 0.33 |
| More than 10 kilometres | 0.14 | 0.21 |
| Community members are satisfied with the quality of the nearest public primary school | 0.50 | 0.45 |
| Share of enrolled junior high school-age students | | |
| 0%–10% | 0.36 | 0.31 |
| 11%–50% | 0.36 | 0.36 |
| 51%–80% | 0.23 | 0.14 |
| 81%–100% | 0.05 | 0.19 |
| Main reasons children are not attending junior high school | | |
| Financial reasons | 0.22 | 0.18 |
| Lack of parental interest | 0.41 | 0.30 |
| Lack of interest among the children | 0.11 | 0.16 |
| Distance to the school | 0.11 | 0.25 |
| Communities, number | 46 | 44 |

4.1.2 PSNP implementation

To clarify selected implementation-related aspects of the PSNP, communities were surveyed on the number of clients, the frequency of targeting, and whether BCC activities had been conducted as part of the PSNP or separately from the PSNP. In more than 80 per cent of the kebeles, the PSNP has been operating since 1998 in the Ethiopian calendar (2005), the year in which the programme was launched. This means the programme has been active in these locations for 14 years (as of 2019). In the remaining kebeles, the PSNP has been in operation for 11–13 years. The average number of households covered in each kebele is 1,294. Among these, an average of 327 households in the comparison kebeles and 203 households in the treated kebeles are classified as PW households. The number of reported TDS households is low: 16 in the comparison kebeles and 8 in the treated kebeles. On average, there are 125 and 74 PDS clients in the comparison and the treatment kebeles, respectively.

PDS retargeting is performed more than once a year in 17 per cent and 29 per cent of the comparison and treated kebeles, respectively, while, in 83 per cent and 67 per cent, respectively, retargeting is performed annually. The frequency of retargeting is almost the same among PW and PDS clients. BCC is an important component of the PSNP. Although BCC sessions are part of the ISNP, they have been implemented in both the treated and the comparison kebeles, covering 74 per cent and 68 per cent of

kebeles, respectively (see Table 4.4). Moreover, BCC sessions have also been implemented outside the PSNP, and the share of kebeles covered is high among both the treatment group (49 per cent) and the comparison group (62 per cent).

Table 4.4. PSNP Implementation, by Treatment

| Indiantes sociales | Me | an |
|---|------------|-----------|
| Indicator, variable | Comparison | Treatment |
| Years PSNP has operated, number | 13.3 | 12.9 |
| PW households in the kebele, number | 327 | 203 |
| PDS households in the kebele, number | 125 | 74 |
| Frequency of targeting, PDS, % | | |
| More than once a year | 0.17 | 0.29 |
| Yearly | 0.83 | 0.67 |
| Every five years | 0.00 | 0.05 |
| Frequency of targeting, PW, % | | |
| More than once a year | 0.17 | 0.31 |
| Yearly | 0.83 | 0.64 |
| Every five years | 0.00 | 0.05 |
| BCC has been conducted as part of the PSNP, % | 0.68 | 0.74 |
| BCC has been conducted outside the PSNP, % | 0.62 | 0.49 |
| Communities, number | 47 | 43 |

4.1.3 Shocks

Table 4.5 reports the prevalence of negative or positive shocks that have had a substantial impact on many residents of the kebeles during the year preceding the interviews. It is clear from the table that a crop disease and sharp price increases significantly affected both treated and comparison kebeles. To a less important extent, flooding, a loss of key social services, and a development programme affected both treated and comparison kebeles in similar ways. Other shocks, such as a drought, the spread of a disease among livestock, interruptions in the water supply, and power outages, affected the residents of the comparison and treated kebeles quite differently. In all these cases, the treated kebeles were more highly affected than the comparison kebeles by the shocks. The likelihood of a stronger effect ranged from 9 to 19 percentage points in the case of the former.

Table 4.5. Shocks That Significantly Impacted Many Kebele Residents, by Treatment

| Shock | Me | an |
|------------------------------|------------|-----------|
| Shock | Comparison | Treatment |
| A drought | 0.09 | 0.18 |
| A flood | 0.23 | 0.27 |
| A crop disease | 0.45 | 0.39 |
| Livestock disease | 0.11 | 0.25 |
| Interruption in water supply | 0.13 | 0.32 |
| Sharp change in prices | 0.34 | 0.45 |
| Loss of key social services | 0.17 | 0.16 |
| Power outages | 0.09 | 0.23 |
| A development programme | 0.17 | 0.11 |
| Communities, number | 47 | 44 |

4.2 The characteristics of health facilities

As part of the ISNP survey, data were collected on all primary health facilities in the woredas participating in the study. The survey was administered among facility staff. Because one of the main objectives of the ISNP is to improve health and nutrition by easing the access to and use of health services, it is important to map the supply side to assess the level of the available health services and also to assess whether the supply is similar across comparison and treatment woredas. This section reports on various characteristics of the available health facilities to derive a comprehensive overview of the quality of the health services in the areas of the study.

4.2.1 Basic facility characteristics

A total of 113 health facilities were surveyed in the four woredas involved in the study. The shares of the facilities in the comparison and treatment woredas were similar, 47.8 per cent and 52.2 per cent, respectively. Three main types of health facilities are evident: health posts, health centres, and clinics. There is a large predominance of health posts (80.5 per cent), followed by health centres (14.2 per cent) and clinics (5.3 per cent). The health posts and health centres are part of the public system, and the clinics are mostly private facilities. While the share of health posts and clinics is similar between the comparison and treatment woredas, health centres are in the majority in treatment woredas (62.5 per cent vs 37.5 per cent in the comparison woredas).

Table 4.6 reports summary statistics on the basic characteristics of the facilities surveyed. On average, the health facilities were built in 2004 and are open 6 days a week. Trained providers are available 24 hours a day in 69 per cent and 64 per cent of the facilities in comparison and treatment woredas, respectively, and, in four facilities in five, trained providers are on call after normal hours. On average, the catchment population of the facilities is slightly larger in the treatment woredas. A reasonably good share of the health facilities are supplied by electricity, generator, or solar panels. The share, though, is higher in treatment woredas (69.5 per cent) compared with the comparison woredas (59.3 per cent). The largest share of the facilities are supplied by solar panels. Only 5 per cent of the health facilities have landline telephones, while the vast majority (98 per cent) rely on mobile phones. In both woreda types, 81 per cent of the facilities have access to improved sources of water, that is, water from boreholes, protected wells, a public tap, or a private tap. More facilities in the comparison woredas provide housing to their personnel compared with the facilities in treatment woredas (41 per cent vs 25 per cent). While the numbers are low, more health facilities in the treatment woredas have functioning computers (17 per cent) than in comparison woredas (7 per cent). This is not particularly surprising given the small share of facilities that have access to electricity. According to national guidelines, all health centres should have health management information systems. In the sample, of 16 health centres, 13 (81.3 per cent) have functioning computers, and, among these, only 7 (53.9 per cent) enter patient data into a computerized system.

Table 4.6. Health Facilities, Basic Characteristics, by Treatment

| Characteristics | Comparison | Treatment |
|--|------------|-----------|
| Year built | 2004 | 2005 |
| Days open | 6.48 | 6.44 |
| Trained provider present 24 hours a day, % | 0.69 | 0.64 |
| Trained provider available on call after hours, % | 0.80 | 0.83 |
| Catchment population, number | 7,048 | 7,469 |
| Any source of electricity, % | 0.59 | 0.69 |
| Electricity (grid), % | 0.28 | 0.22 |
| Generator, % | 0.06 | 0.15 |
| Solar power, % | 0.50 | 0.53 |
| Landline phone, % | 0.04 | 0.05 |
| Mobile phone, % | 0.98 | 0.98 |
| Improved water source, % | 0.81 | 0.81 |
| Housing provided, % | 0.41 | 0.25 |
| Functioning computer, % | 0.07 | 0.17 |
| Number | 54 | 59 |
| Among facilities with a computer: | | |
| Patient data entry on computer, % | 0.75 | 0.50 |
| Data entered into a management information system, % | 0.50 | 0.20 |
| Number | 4 | 10 |

4.2.2 Equipment and facilities

The health facilities in the areas of the study are quite poorly furnished and equipped (*see Table 4.7*). The facilities in treatment woredas appear to be slightly more well equipped because the share of the facilities that have the items listed in the table are larger. Fewer than 1 medical facility in 10 has operating rooms (9 per cent and 5 per cent in comparison and treatment woredas, respectively). Laboratories are available in 13 per cent and 24 per cent in comparison and treatment woredas, respectively. Most (71.4 per cent) are found in health centres, which are required by national guidelines to possess laboratories. Among health centres, 93.8 per cent (15 centres in 16) are equipped with a laboratory. A bit larger, but still low in absolute terms, is the share of facilities that are equipped with refrigerators (39 per cent and 49 per cent of facilities in the comparison and treatment woredas, respectively). Fewer than one facility in five owns vehicles. The majority of facilities have weighing scales for adults and children under age 5. The share is larger in treatment areas. Around 65 per cent of facilities have equipment for the measurement of height. These last two are important tools for monitoring malnutrition.

Table 4.7. Health Facility Equipment, by Treatment

| Facilities and equipment | Comparison | Treatment |
|--|------------|-----------|
| Medical facilities | | |
| Operating room | 0.09 | 0.05 |
| Laboratory | 0.13 | 0.24 |
| Refrigerator | 0.39 | 0.49 |
| Vehicles | 0.17 | 0.19 |
| Instruments and equipment | | |
| Blood pressure machine | 0.57 | 0.73 |
| Stethoscopes | 0.59 | 0.68 |
| Microscope | 0.15 | 0.20 |
| Slides | 0.35 | 0.34 |
| Weighing scale for adults | 0.65 | 0.92 |
| Weighing scale for under-5-year-olds | 0.80 | 0.88 |
| Height measurement equipment for under-5-year-olds | 0.65 | 0.64 |
| Clinical thermometer | 0.76 | 0.85 |
| Latex gloves in stock | 0.78 | 0.73 |
| Number | 54 | 59 |

4.2.3 Services provided by facilities

Table 4.8 reports four indicators on the services provided by the health facilities surveyed. All the facilities offer outpatient consultations. Health facilities in treatment woredas are slightly better than those in comparison woredas in terms of services provided. Services for women giving birth are supplied in 22 and 19 per cent of the facilities in comparison and treatment woredas, respectively. The large majority (60.9 per cent) of delivery services are provided in health centres, and, among the health centres, 87.5 per cent provide such services. About 69 per cent and 83 per cent of facilities provide antenatal care in the comparison and treatment woredas, respectively. Mobile clinics represent a service that is rarely offered by health facilities in the areas of study, while treatment for acute malnutrition is provided in 76 per cent and 81 per cent of facilities in comparison and treatment woredas, respectively. HIV treatment is provided in only a few facilities (7 per cent). Services to treat cases of gender-based violence are provided in one health facility in five in both types of woredas.

Table 4.8. Health Facility Services, by Treatment

| Service | Facili providing % | service, | Hours p | er week | Patien mon prov | th, if | Number providing service | |
|----------------------------------|--------------------------|----------|---------|---------|-----------------------|--------|--------------------------|-----|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | С | Т | С | Т | С | T | C | Т |
| Outpatient consultation | 1.00 | 1.00 | 66.57 | 67.51 | 164.45 | 100.27 | 54 | 59 |
| Deliveries | 0.22 | 0.19 | 18.28 | 12.31 | 41.36 | 23.18 | 12 | 11 |
| Well baby clinics | 0.57 | 0.71 | 26.07 | 28.24 | 58.32 | 41.71 | 31 | 42 |
| Antenatal clinics | 0.69 | 0.83 | 26.13 | 23.49 | 23.81 | 20.43 | 37 | 49 |
| Family planning | 0.94 | 0.98 | 38.44 | 29.37 | 45.33 | 41.91 | 51 | 58 |
| Mobile clinics | 0.17 | 0.14 | 1.85 | 2.12 | 75.33 | 71.50 | 9 | 8 |
| Treatment for acute malnutrition | 0.76 | 0.81 | 17.17 | 20.24 | 20.20 | 11.94 | 41 | 48 |
| HIV testing and counselling | 0.31 | 0.34 | 15.11 | 7.02 | 57.18 | 39.00 | 17 | 20 |
| HIV treatment | 0.07 | 0.07 | 2.57 | 3.25 | 10.00 | 12.50 | 4 | 4 |
| Gender-based violence services | 0.20 | 0.20 | 4.76 | 5.90 | 128.45 | 71.92 | 11 | 12 |

Note: C = comparison group. T = treatment group.

4.2.4 Drugs and medical supplies

Information on drugs and medical supplies was also elicited in the survey (see Table 4.9). For each item on the survey, interviewees were asked if the medicine was normally carried. If so, they were asked if it was in stock at that moment, and, if the item was not in stock, they were asked about the average number of days needed to replenish the stock. Overall, health facilities in the treatment woredas seem to be slightly more well supplied than health facilities in the comparison woredas.

Table 4.9. Availability of Medicines and Medical Supplies, by Treatment

| Item | iteiii | | | ities with the c (if normally ried) | (if carried and | nish, number currently not |
|----------------------------------|------------|-----------|------------|-------------------------------------|-----------------|-------------------------------|
| | Comparison | Treatment | Comparison | Treatment | Comparison | Treatment |
| Condoms | 0.93 | 0.97 | 0.94 | 0.98 | 25.82 | 21.32 |
| Spermicides | 0.04 | 0.03 | 1.00 | 0.50 | 30.00 | 30.00 |
| Contraceptive pills | 0.91 | 0.90 | 0.94 | 0.91 | 25.79 | 20.21 |
| Intra-uterine device | 0.35 | 0.36 | 0.89 | 0.95 | 24.11 | 23.88 |
| Injectable contraceptive | 0.83 | 0.95 | 0.96 | 0.95 | 20.14 | 21.17 |
| Contraceptive implants | 0.74 | 0.80 | 0.90 | 0.94 | 25.13 | 22.61 |
| Paracetamol, Panadol | 0.70 | 0.81 | 0.87 | 0.88 | 20.04 | 27.14 |
| Aspirin | 0.13 | 0.20 | 0.71 | 0.83 | 46.25 | 31.00 |
| Oral rehydration salt | 0.87 | 0.83 | 0.94 | 0.98 | 17.69 | 24.93 |
| Coartem | 0.76 | 0.81 | 0.98 | 0.90 | 22.50 | 26.00 |
| Fansidar | 0.06 | 0.15 | 1.00 | 0.89 | 13.67 | 30.17 |
| Iron tablets for pregnancy | 0.80 | 0.88 | 0.91 | 0.88 | 19.64 | 23.77 |
| Folic acid tablets | 0.50 | 0.46 | 0.85 | 0.85 | 30.35 | 25.50 |
| Penicillin injection, tablets | 0.22 | 0.32 | 0.92 | 0.95 | 60.20 | 32.92 |
| Cotrimoxazole | 0.43 | 0.54 | 0.87 | 0.75 | 27.21 | 26.55 |
| Antiretroviral drugs for adults | 0.22 | 0.25 | 0.83 | 1.00 | 36.00 | 28.73 |
| BCG injection | 0.70 | 0.75 | 0.79 | 0.70 | 19.72 | 23.81 |
| DTP injection | 0.72 | 0.78 | 0.74 | 0.70 | 19.33 | 25.96 |
| Tetanus injection | 0.70 | 0.78 | 0.71 | 0.78 | 26.41 | 25.10 |
| Measles injection | 0.61 | 0.66 | 0.76 | 0.72 | 15.85 | 21.54 |
| Polio injection | 0.70 | 0.73 | 0.63 | 0.70 | 15.32 | 21.41 |
| Meningitis injection | 0.46 | 0.34 | 0.60 | 0.65 | 12.60 | 24.30 |
| Insecticide-treated mosquito net | 0.59 | 0.73 | 0.38 | 0.58 | 111.78 | 331.18 |
| Micronutrient powder | 0.19 | 0.19 | 0.80 | 0.91 | 40.00 | 54.00 |
| Ready-to-use therapeutic food | 0.61 | 0.59 | 0.73 | 0.89 | 13.95 | 21.96 |
| Deworming medicines | 0.72 | 0.75 | 0.92 | 0.91 | 18.16 | 23.40 |
| Vitamin A droplets | 0.81 | 0.88 | 0.91 | 1.00 | 18.54 | 22.54 |

With the exception of spermicides and intra-uterine devices, a large share of health facilities normally carry and have in stock several types of modern contraceptives. The most commonly stocked contraceptives are condoms (93 per cent and 97 per cent of health facilities in comparison and treatment woredas, respectively), followed by contraceptive pills (91 per cent and 90 per cent), injectable contraceptives (83 per cent and 95 per cent), and contraceptive implants (74 per cent and 80

per cent). Among common, basic medicines, 70 per cent and 81 per cent of facilities in comparison and treatment woredas, respectively, normally carry paracetamol, while only 13 per cent and 20 per cent normally carry aspirin. Oral rehydration therapy was available in 87 per cent and 83 per cent of facilities in comparison and treatment woredas, respectively. As with paracetamol, these shares are large, but not as large as one would expect given that these are basic drugs. Coartem and fansidar are among the widespread medicines for the cure of malaria. While coartem is normally carried by large shares of health facilities (76 per cent and 81 per cent, respectively, in comparison and treatment woredas), fansidar is normally carried by only 6 per cent and 15 per cent of these facilities, respectively.

Iron tablets and folic acid tablets are recommended for pregnant women to improve micronutrient status during pregnancy and to prevent anæmia. The majority of facilities (80 per cent and 88 per cent in comparison and treatment woredas, respectively) usually carry iron tablets, while only about half usually have folic acid tablets. Both cotrimoxazole and penicillin, common drugs for the treatment of infections, are normally available in health facilities. Almost half have cotrimoxazole, and one in five has penicillin. One fourth of facilities carry antiretroviral drugs.

Between 61 per cent and 78 per cent of facilities normally carry the main basic vaccinations, such as BCG, DTP, tetanus, measles, and polio vaccines, while vaccines for meningitis are carried by 46 per cent and 34 per cent of facilities in comparison and treatment woredas, respectively. In comparison and treatment woredas, respectively, 59 per cent and 73 per cent of health facilities reported they normally carry insecticide-treated mosquito nets. However, among these, only 38 per cent and 58 per cent, respectively, had them in stock, and several months were reportedly required to replenish stocks. Among the facilities, only 19 per cent normally carry micronutrient powder for children, while 60 per cent carry ready-to-use therapeutic food. Deworming tablets and vitamin A droplets are carried by most facilities in similar proportions in comparison and treatment woredas (more than 70 per cent in the case of deworming medicines and more than 80 per cent in the case of vitamin A droplets). Overall, the number of days required to replenish medicines normally carried but momentarily out of stock is quite high, usually between 15 and 25 days.

4.2.5 Personnel and staffing

In the Ethiopian health system, the type of personnel in a facility depends on the type of facility. Health posts have only health extension workers, while health centres have health officers, nurses, midwives, and health assistants, and primary hospital have doctors, midwives, nurses, and more. Health facilities in treatment woredas seem to have more personnel relative to facilities in comparison woredas (see Table 4.10). Because no primary hospitals were surveyed, it is not surprising that no facilities surveyed had doctors or medical assistants. The most common personnel in the facilities are health extension workers, who are responsible for managing health posts. These personnel are available in 37 per cent and 41 per cent of facilities in comparison and treatment woredas, followed by classified daily employees, professional nurses, public health nurses and professional midwifes. Only a small share of facilities employ other types of personnel.

Table 4.10. Health Facility Personnel, by Treatment

| Personnel | Share of faci perso | | Share of facilities time person | | Share of facilities with full-time personnel | | |
|-------------------------------|------------------------|-----------|---------------------------------|-----------|--|-----------|--|
| | Comparison | Treatment | Comparison | Treatment | Comparison | Treatment | |
| Medical doctors | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Medical assistants | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Public health nurses | 0.17 | 0.17 | 0.04 | 0.00 | 0.17 | 0.17 | |
| Professional midwives | 0.09 | 0.14 | 0.00 | 0.00 | 0.09 | 0.14 | |
| Professional nurses | 0.17 | 0.12 | 0.06 | 0.00 | 0.17 | 0.12 | |
| Midwives assistants | 0.02 | 0.05 | 0.00 | 0.00 | 0.02 | 0.05 | |
| Auxiliary nurses | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.02 | |
| Pharmacists | 0.07 | 0.10 | 0.00 | 0.00 | 0.07 | 0.10 | |
| Pharmaceutical assistants | 0.02 | 0.08 | 0.00 | 0.02 | 0.02 | 0.08 | |
| Dispensing technicians | 0.06 | 0.02 | 0.02 | 0.00 | 0.06 | 0.02 | |
| Lab technicians | 0.09 | 0.17 | 0.00 | 0.02 | 0.09 | 0.17 | |
| Nutrition technician officers | 0.02 | 0.03 | 0.00 | 0.00 | 0.02 | 0.03 | |
| Ward assistants | 0.00 | 0.02 | 0.00 | 0.02 | 0.00 | 0.02 | |
| Environmental health officers | 0.00 | 0.02 | 0.00 | 0.02 | 0.00 | 0.02 | |
| Classified daily employees | 0.17 | 0.17 | 0.00 | 0.02 | 0.17 | 0.17 | |
| Health extension officers | 0.37 | 0.41 | 0.07 | 0.02 | 0.35 | 0.39 | |

4.3 Household and individual characteristics

This section presents the characteristics of the households and the household members in the study. These include the characteristics of the household head, the age-sex composition of household members, marriage profiles, children's' living conditions with respect to parents, educational attainment, current school enrolment, illness, health seeking behaviour, disability, and the time use for various household chores. The specific age group to which the measures apply are specified for the various indicators. The indicators are compared with the sample of the ESS 2015–2016 to provide a sense of the similarity of the PSNP clients to the general rural Amhara population (CSA and World Bank, 2017).

4.3.1 Household composition

Household composition is examined in terms of age, sex, marital status and religion. Table 4.11 shows the distribution of these variables across the heads of household. About 41 per cent of the PW households have a woman head, while 61 per cent of the PDS households have a woman head. The share of woman-headed households is much higher than in the ESS sample, where only 21 per cent of households have a woman head. The mean age of heads of household was about 50 among the PW households, which is comparable with the mean age of 49 among the ESS households. However, the mean age was much higher, at about 61, among the PDS households, which may be expected given that, by the design of the programme, PDS households would usually have an elderly head.

Table 4.11. Characteristics of Household Heads

| | | Р | W | | | PDS | | | | |
|------------------------------|-------|-------|-------|---------|-------|-------|-------|---------|---------------|--|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | data, 2015 | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | |
| Head is a woman | 0.41 | 0.42 | 0.39 | 0.396 | 0.61 | 0.60 | 0.62 | 0.624 | 0.21 | |
| Age of head | 49.61 | 49.67 | 49.52 | 0.815 | 60.97 | 61.03 | 60.86 | 0.879 | 48.52 | |
| Head has no formal schooling | 0.92 | 0.92 | 0.92 | 0.936 | 0.94 | 0.95 | 0.92 | 0.121 | 0.84 | |
| Head is married | 0.58 | 0.57 | 0.60 | 0.420 | 0.30 | 0.30 | 0.30 | 0.976 | 0.74 | |
| Head is widowed | 0.22 | 0.22 | 0.24 | 0.452 | 0.48 | 0.48 | 0.46 | 0.572 | 0.14 | |
| Head is Muslim by religion | 0.54 | 0.53 | 0.56 | 0.816 | 0.48 | 0.44 | 0.53 | 0.462 | 0.18 | |
| Head is Orthodox by religion | 0.45 | 0.46 | 0.43 | 0.831 | 0.52 | 0.55 | 0.46 | 0.466 | 0.80 | |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | 696 | |

Note: Indicators are compared with the ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

More than 9 heads of household in 10 in the PW and PDS households have no formal education, which is higher than the rate of 84 per cent among the ESS households. About 6 heads in 10 among PW households are married, compared with 3 in 10 among PDS households and 7 in 10 among the ESS sample. The share of households headed by a Muslim is 54 per cent among PW households and 48 per cent among PDS households, while the share of Orthodox Christian heads is 45 per cent among PW households and 52 per cent among PDS households. In contrast, in the ESS sample, about 80 per cent of the heads identify as Orthodox Christian. The C and T subgroups within PW and PDS households are balanced across all these indicators.

Table 4.12 illustrates the demographic characteristics of all household members. The average is about five members among PW households and about three among PDS households. Females make up about 53 per cent of the members in PW households and 65 per cent in PDS households. Both shares are higher than the shares in the ESS sample, in which females are about 48 per cent. The mean age is 27 in PW households, 43 in PDS households, and about 29 in the ESS households. The composition by age shows that about 4 members in 10 in PDS households are ages 60 or more, compared with 1 member in 10 at this age in the PW and ESS samples. This age compositional difference is also likely an artifact of the eligibility criteria for PDS and PW households.

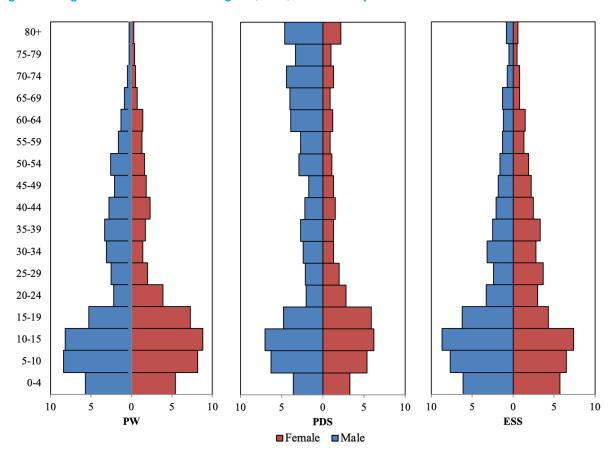
Table 4.12. Characteristics of Household Members

| | | P | W | | PDS | | | | ESS |
|-----------------------------------|-------|-------|-------|---------|-------|-------|-------|---------|---------------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | data, 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Household size | 4.91 | 4.89 | 4.94 | 0.820 | 3.20 | 3.13 | 3.32 | 0.309 | 5.74 |
| Share of females | 0.53 | 0.52 | 0.54 | 0.172 | 0.65 | 0.65 | 0.66 | 0.663 | 0.48 |
| Percentage of children 0-4 years | 0.09 | 0.09 | 0.09 | 0.880 | 0.04 | 0.04 | 0.04 | 0.806 | 0.09 |
| Percentage of children 5-17 years | 0.37 | 0.37 | 0.37 | 0.959 | 0.24 | 0.24 | 0.25 | 0.745 | 0.27 |
| Percentage of adults 18-59 years | 0.44 | 0.44 | 0.44 | 0.883 | 0.32 | 0.32 | 0.33 | 0.792 | 0.35 |
| Percentage of elder (60+) | 0.10 | 0.10 | 0.10 | 0.844 | 0.39 | 0.40 | 0.39 | 0.560 | 0.09 |
| Mean age (years) | 26.76 | 26.78 | 26.73 | 0.955 | 43.14 | 43.30 | 42.86 | 0.727 | 28.51 |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | 696 |

Note: Indicators are compared with the ESS sample of 2015 for rural Amhara. If missing, the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

Figure 4.1 shows population pyramids for the age-sex composition of the members in the PW, PDS and ESS households. The shape of the pyramids depicts the higher share of females and the greater representation of more elderly individuals within the PDS households. The PW households have fewer members in the age groups of 70 years and above compared with the ESS sample.

Figure 4.1. Age-Sex Distribution among PW, PDS, and ESS Populations



The marriage profiles of household members was a domain of interest. Household respondents ages 10 or more were asked about their current marital status. Among PW households, 33 per cent of such members were married or living together with a partner; 9 per cent were divorced or separated; 7 per cent were widowed, and 51 per cent had never married. Among PDS households, 25 per cent were married or living together with a partner; 11 per cent were divorced or separated; 24 per cent were widowed, and 40 per cent had never married. The share of the widowed among PDS households is about three times the corresponding share among PW households, which is a likely outcome of the differences in the programme eligibility criteria for PW and PDS households.

Among PW households, the age at first marriage is about 16 among females who have ever been married, compared with 22 among males. The mean age at marriage among males in PDS households is also 22, while the mean age at marriage among females is about 15. In both PDS and PW households, about 60 per cent of women who had ever been married had married before age 18 (see Table 4.13).

Table 4.13. Marriage Profiles (household members ages 10 or more)

| | | Р | W | | | PDS | | | |
|--------------------------------------|-------|-------|-------|---------|-------|-------|-------|---------|-------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Currently married or living together | 0.33 | 0.32 | 0.35 | 0.233 | 0.25 | 0.26 | 0.25 | 0.696 | 0.47 |
| N | 9,243 | 4,563 | 4,680 | | 6,089 | 2,875 | 3,214 | | 2,249 |
| Divorced or separated | 0.08 | 0.08 | 0.08 | 0.986 | 0.11 | 0.10 | 0.12 | 0.146 | 0.07 |
| N | 9,243 | 4,563 | 4,680 | | 6,089 | 2,875 | 3,214 | | 2,249 |
| Widowed | 0.08 | 0.07 | 0.08 | 0.355 | 0.24 | 0.24 | 0.22 | 0.219 | 0.06 |
| N | 9,243 | 4,563 | 4,680 | | 6,089 | 2,875 | 3,214 | | 2,249 |
| Never married | 0.51 | 0.52 | 0.49 | 0.109 | 0.40 | 0.40 | 0.41 | 0.548 | 0.40 |
| N | 9,243 | 4,563 | 4,680 | | 6,089 | 2,875 | 3,214 | | 2,249 |
| Age at first marriage, man | 22.01 | 21.92 | 22.12 | 0.681 | 22.20 | 22.13 | 22.30 | 0.769 | |
| N | 1,369 | 656 | 713 | | 773 | 351 | 422 | | |
| Age at first marriage, woman | 16.02 | 15.94 | 16.12 | 0.669 | 15.46 | 15.24 | 15.81 | 0.072 | |
| N | 2,334 | 1,093 | 1,241 | | 2,112 | 1,039 | 1,073 | | |
| Age at first marriage | 18.15 | 18.04 | 18.31 | 0.516 | 17.37 | 17.19 | 17.64 | 0.224 | |
| N | 3,703 | 1,749 | 1,954 | | 2,885 | 1,390 | 1,495 | | |
| Married before age 18, man | 0.09 | 0.09 | 0.09 | 0.946 | 0.10 | 0.10 | 0.10 | 0.912 | |
| N | 1,769 | 889 | 880 | | 999 | 461 | 538 | | |
| Married before age 18, woman | 0.62 | 0.62 | 0.62 | 0.995 | 0.61 | 0.62 | 0.61 | 0.844 | |
| N | 2,897 | 1,401 | 1,496 | | 2,739 | 1,373 | 1,366 | | |
| Married before age 18 | 0.42 | 0.42 | 0.42 | 0.965 | 0.47 | 0.47 | 0.46 | 0.878 | |
| N | 4,666 | 2,290 | 2,376 | | 3,738 | 1,834 | 1,904 | | |

Note: Indicators are compared to ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

Table 4.14 shows the living arrangements of parents with children ages 0–17. The fathers of about 30 per cent of the children in PW households are not in the household; the mothers of 8 per cent are not in the household, and neither parent of 6 per cent is in the household. Among PDS households, the fathers of 46 per cent are not in the household; the mothers of 24 per cent are not in the household, and 21 per cent have neither parent in the household. Only a negligible share of the children have both parents deceased.

Table 4.14. Status of Parents, Children Ages 0-17

| | | · | W | | PDS | | | | ESS |
|--|-------|-------|-------|---------|-------|-------|-------|---------|---------------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | data, 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Mother not in household | 0.08 | 0.08 | 0.08 | 0.884 | 0.24 | 0.23 | 0.25 | 0.527 | 0.11 |
| N | 6,812 | 3,503 | 3,309 | | 2,898 | 1,353 | 1,545 | | 1,511 |
| Father not in household | 0.30 | 0.31 | 0.27 | 0.208 | 0.46 | 0.46 | 0.48 | 0.708 | 0.20 |
| N | 6,797 | 3,494 | 3,303 | | 2,874 | 1,342 | 1,532 | | 1,512 |
| Neither mother nor father in household | 0.06 | 0.06 | 0.05 | 0.298 | 0.21 | 0.21 | 0.22 | 0.774 | 0.07 |
| N | 6,795 | 3,494 | 3,301 | | 2,872 | 1,341 | 1,531 | | 1,511 |
| Both mother and father deceased | 0.00 | 0.00 | 0.00 | 0.354 | 0.01 | 0.01 | 0.01 | 0.924 | 0.10 |
| N | 6,795 | 3,494 | 3,301 | | 2,872 | 1,341 | 1,531 | | 124 |

Note: Indicators are compared with the ESS sample of 2015 for rural Amhara. If missing, the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

4.3.2 Education

The survey included questions about educational attainment and literacy among all household members ages 4 or more and about current school enrolment among household members ages 4–24 (see Tables 4.15 and 4.16). Among PW households, about 34 per cent of members ages 4 or more are literate, and 41 per cent have attended school at some point. Among PDS households, the corresponding shares are 28 per cent and 35 per cent. The highest level of education completed is generally low; more than 50 per cent of those who had ever attended school had not completed primary school.

Table 4.15. Educational Attainment, All Household Members Ages 4 or More

| | | P | W | | | Р | DS | | ESS |
|------------------------------|--------|-------|-------|---------|-------|-------|-------|---------|---------------|
| Indicator | All | С | Т | p-value | All | С | T | p-value | data, 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Able to read and write | 0.34 | 0.34 | 0.32 | 0.486 | 0.29 | 0.28 | 0.32 | 0.231 | 0.46 |
| N | 11,634 | 5,775 | 5,859 | | 7,073 | 3,351 | 3,722 | | 2,709 |
| Has ever attended school | 0.41 | 0.42 | 0.40 | 0.538 | 0.35 | 0.33 | 0.37 | 0.181 | 0.48 |
| N | 11,634 | 5,775 | 5,859 | | 7,073 | 3,351 | 3,722 | | 2,709 |
| Attended some primary school | 0.58 | 0.57 | 0.59 | 0.300 | 0.53 | 0.51 | 0.55 | 0.416 | 0.55 |
| N | 4,556 | 2,203 | 2,353 | | 2,419 | 1,038 | 1,381 | | 1,273 |
| Completed primary school | 0.10 | 0.11 | 0.08 | 0.143 | 0.09 | 0.11 | 0.07 | 0.040 | 0.06 |
| N | 4,556 | 2,203 | 2,353 | | 2,419 | 1,038 | 1,381 | | 1,273 |
| Secondary and above | 0.03 | 0.03 | 0.02 | 0.147 | 0.04 | 0.04 | 0.04 | 0.962 | 0.03 |
| N | 12,810 | 6,410 | 6,400 | | 7,489 | 3,552 | 3,937 | | 3,909 |

Note: Indicators are compared to ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

Table 4.16. Current enrolment, attendance and expenditure (members 4-24 years)

| | | P | W | | | P | DS | | ESS |
|---|--------|--------|--------|---------|--------|--------|--------|---------|---------------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | data, 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Currently attending school | 0.44 | 0.42 | 0.45 | 0.495 | 0.49 | 0.46 | 0.54 | 0.126 | 0.32 |
| N | 6,948 | 3,489 | 3,459 | | 3,131 | 1,432 | 1,699 | | 2,709 |
| Weeks, out of school to help in household activities | 1.23 | 0.99 | 1.57 | 0.026 | 1.28 | 1.08 | 1.57 | 0.079 | 0.17 |
| N | 2,982 | 1,415 | 1,567 | | 1,564 | 651 | 913 | | 869 |
| Absent from school for more than a week because of work | 0.69 | 0.68 | 0.70 | 0.749 | 0.76 | 0.87 | 0.63 | 0.003 | 0.57 |
| N | 255 | 96 | 159 | | 128 | 38 | 90 | | 133 |
| Total educational expenditures (12 months) | 316.11 | 291.64 | 351.81 | 0.315 | 593.27 | 685.21 | 462.60 | 0.562 | 111.47 |
| N | 2,797 | 1,343 | 1,454 | | 1,470 | 612 | 858 | | 869 |

Note: Indicators are compared to ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

Among PW households, about 44 per cent of members ages 4–24 are currently enrolled in school, and total educational expenditure had been ETB 316 in the 12 months before the survey. Among PDS households, 49 per cent of the members ages 4–24 are currently attending school, and the average educational expenditure had been ETB 593 during the corresponding 12 months.

4.3.3 Health

Improving health outcomes is one of the key objectives of the integration of the CBHI with the PSNP. An understanding of health status, care seeking, and disability is therefore a critical aspect of the baseline survey. About 12 per cent of members in PW households had experienced an illness or injury in the month preceding the survey, and only 53 per cent of these had sought care. Among PDS households, about 16 per cent of the members had suffered an illness or injury in the previous month, and 43 per cent had sought care. More than 80 per cent of the care was sought through a public health facility, and the care was provided by a health professional in more than 95 per cent of the cases, which is encouraging.

About 66 per cent of the members of PW households who had sought care paid through the CBHI, while 56 per cent of the members in PDS households paid through the CBHI (see Table 4.17). Total expenditure on health seeking the month prior to the survey was ETB 229 among members in PW households and ETB 242 among members in PDS households. There is a sharp gap in the expenditure by members covered by the CBHI and members who are not covered. Among PW households, the average expenditure among members without the CBHI was ETB 563.4, compared with ETB 57.0 among members with the CBHI. Among PDS households, the corresponding amounts were ETB 499.7 and ETB 38.4. Although this comparison does not consider potential differences in the type and severity of the illnesses reported by the various groups, the amounts are in a ratio of about 1: 10, and the difference in payment is sufficient to enrol an entire household in the CBHI.

Table 4.17. Illness, Health Seeking and Disability

| | | P | W | | | ESS | | | |
|--|--------|--------|--------|---------|--------|--------|--------|---------|---------------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | data, 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Illness previous month | 0.12 | 0.11 | 0.13 | 0.183 | 0.16 | 0.15 | 0.18 | 0.083 | 0.12 |
| N | 12,713 | 6,369 | 6,344 | | 7,432 | 3,532 | 3,900 | | 3,059 |
| Stopped working/ activities because of illness/injury previous month | 0.51 | 0.48 | 0.55 | 0.148 | 0.56 | 0.57 | 0.55 | 0.725 | 0.65 |
| N | 1,440 | 614 | 826 | | 1,269 | 555 | 714 | | 341 |
| Sought care for illness previous month | 0.53 | 0.53 | 0.53 | 0.999 | 0.43 | 0.41 | 0.47 | 0.320 | 0.60 |
| N | 1,440 | 614 | 826 | | 1,269 | 555 | 714 | | 341 |
| Sought care from health professional | 0.95 | 0.97 | 0.93 | 0.017 | 0.97 | 0.99 | 0.95 | 0.014 | 0.50 |
| N | 783 | 343 | 440 | | 581 | 248 | 333 | | 341 |
| Sought care from public health facility | 0.83 | 0.83 | 0.83 | 0.837 | 0.80 | 0.80 | 0.79 | 0.833 | 0.83 |
| N | 783 | 343 | 440 | | 581 | 248 | 333 | | 215 |
| Paid with CBHI for health services, curative care | 0.66 | 0.71 | 0.60 | 0.113 | 0.56 | 0.57 | 0.55 | 0.734 | |
| N | 783 | 343 | 440 | | 581 | 248 | 333 | | |
| Expenditures on medication and consultation (previous month), curative care | 79.01 | 69.85 | 90.56 | 0.686 | 82.28 | 80.97 | 83.84 | 0.946 | 116.45 |
| N | 781 | 343 | 438 | | 580 | 248 | 332 | | 216 |
| Expenditures on medicines and medical supplies (previous month), curative care | 150.47 | 134.02 | 171.21 | 0.428 | 160.17 | 172.80 | 145.23 | 0.571 | |
| N | 781 | 343 | 438 | | 581 | 248 | 333 | | |
| Total health expenditures (previous month), curative care | 229.48 | 203.87 | 261.76 | 0.495 | 242.34 | 253.77 | 228.82 | 0.760 | |
| N | 781 | 343 | 438 | | 581 | 248 | 333 | | |
| Total health expenditures (previous month), curative care – No CBHI | 563.56 | 622.07 | 509.45 | 0.547 | 499.65 | 534.81 | 459.95 | 0.666 | |
| N | 275 | 100 | 175 | | 270 | 119 | 151 | | |

| Total health expenditures (previous month), curative care: covered with CBHI | 57.04 | 30.29 | 96.74 | 0.339 | 38.43 | 39.50 | 37.12 | 0.934 | |
|--|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| N | 506 | 243 | 263 | | 311 | 129 | 182 | | |
| Individual is disable - WG-SS definition | 0.06 | 0.05 | 0.07 | 0.325 | 0.19 | 0.18 | 0.20 | 0.210 | 0.02 |
| N | 11,381 | 5,652 | 5,729 | | 6,973 | 3,295 | 3,678 | | 2,698 |

Note: Indicators are compared to ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group. WG-SS = Washington Group short set of disability measures (see 'Methodology: Washington Group on Disability Statistics', Statistics Division, Department of Economic and Social Affairs, United Nations, https://unstats.un.org/unsd/methodology/citygroups/washington.cshtml).

4.3.4 Time use on household chores

The time use for household chores can affect the engagement in productive activities as well as schooling among school-age children. It is a domain that tends to be gendered: females usually spend disproportionally more time than males in household chores. Overall, a typical person ages 5 or more spent about 1.86 hours doing chores in the day preceding the survey. The main contributory activities were the time spent caring for children, cooking, or cleaning, the time spent collecting water, and the time spent collecting firewood (see Table 4.18).

Table 4.18. Time Use on Household Chores, All Household Members Ages 5 or More

| | | F | W | | | Р | DS | | ESS |
|--|--------|-------|-------|---------|-------|-------|-------|---------|---------------|
| Hours spent yesterday | All | С | Т | p-value | All | С | Т | p-value | data, 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Collecting water | 0.46 | 0.46 | 0.46 | 0.825 | 0.44 | 0.42 | 0.48 | 0.107 | 0.13 |
| Collecting firewood | 0.45 | 0.42 | 0.48 | 0.208 | 0.39 | 0.35 | 0.44 | 0.011 | 0.18 |
| Collecting fruits, other for consumption, sale | 0.03 | 0.02 | 0.04 | 0.038 | 0.03 | 0.03 | 0.03 | 0.745 | |
| Caring for children, cooking, or cleaning | 0.84 | 0.81 | 0.87 | 0.414 | 0.79 | 0.79 | 0.79 | 0.903 | |
| Taking care of elderly or disabled | 0.09 | 0.07 | 0.12 | 0.021 | 0.20 | 0.17 | 0.26 | 0.011 | |
| On all chores | 1.86 | 1.78 | 1.97 | 0.030 | 1.85 | 1.77 | 1.99 | 0.045 | 0.30 |
| N | 11,381 | 5,652 | 5,729 | | 6,973 | 3,295 | 3,678 | | 2,545 |

Note: Indicators are compared to ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

There are some significant differences between the T and C subgroups in PW and PDS households in terms of the time spent taking care of elderly or disabled members and the total time spent on chores. In addition, the time spent collecting fruits is significantly different between the T and C subgroups in PW households, and the time spent collecting firewood is also significantly different between the T and C subgroups in PDS households.

If household members are disaggregated by age and sex, female children ages 5–17 and adult women ages 18–60 are found to spend more time on chores than the corresponding male children and adult men (see Table 4.19). For example, adult women spent more than 4.0 hours on chores on average, compared with about 0.6 hours among adult men. This is the case in both PW and PDS households.

Table 4.19. Time Use on Household Chores, Various Groups

| | | F | PW | | | Р | DS | | ESS |
|------------------------------------|-------|-------|-------|---------|-------|-------|------|---------|---------------|
| Hours spent doing chores yesterday | All | С | Т | p-value | All | С | Т | p-value | data, 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Male children | 0.67 | 0.62 | 0.75 | 0.101 | 0.88 | 0.85 | 0.91 | 0.709 | 0.16 |
| N | 2,776 | 1,440 | 1,336 | | 1,144 | 532 | 612 | | 550 |
| Female children | 1.77 | 1.66 | 1.91 | 0.090 | 2.06 | 1.90 | 2.33 | 0.097 | 0.41 |
| N | 2,609 | 1,305 | 1,304 | | 1,240 | 565 | 675 | | 448 |
| Adult men | 0.62 | 0.57 | 0.69 | 0.233 | 0.75 | 0.66 | 0.91 | 0.058 | 0.20 |
| N | 2,368 | 1,117 | 1,251 | | 1,049 | 468 | 581 | | 609 |
| Adult women | 4.36 | 4.24 | 4.54 | 0.205 | 4.05 | 4.06 | 4.04 | 0.914 | 0.49 |
| N | 2,776 | 1,374 | 1,402 | | 1,525 | 704 | 821 | | 677 |
| Elderly | 1.28 | 1.23 | 1.35 | 0.569 | 1.25 | 1.18 | 1.36 | 0.201 | 0.21 |
| N | 852 | 416 | 436 | | 2,015 | 1,026 | 989 | | 261 |

Note: Indicators are compared to ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

5. PSNP PARTICIPATION, INCOME AND EXPERIENCE

This chapter describes household participation in key PSNP components, the frequency and mode of PSNP benefits, the income associated with participation, and the perceptions of clients on the PSNP implementation, including the predictability of payments, the retargeting process and the adequacy of the benefits.

5.1 PSNP participation

All PW households and 99 per cent of the PDS households indicated that they had been enrolled in the PSNP. If the administrative records are plumbed to identify households that have ever been enrolled in the PSNP in these designated categories, that is, PW households that have ever been enrolled in the PSNP as PW households or PDS households that have ever been enrolled in the PSNP as PDS households, then one finds that about 95 per cent of households fulfilled the relevant condition. If one considers current PSNP enrolment, that is, enrolment between Taḫśaś 2010 (December 2017) and Ḥədar 2011 (November 2018), regardless of whether the enrollee is in the designated PW or PDS category, then 98 per cent of PW and PDS households are currently enrolled. However, 6 per cent of households administratively designated as PW households identified themselves only as PDS households, while 3 per cent of households administratively designated as PDS households identified themselves as PW households. In effect, 93 per cent of households administratively designated as PW households are currently enrolled as only PW, and the corresponding share for the PDS households is 95 per cent. The average household has been enrolled in the PSNP for 4.5 of the previous 5.0 years (see Table 5.1).

Table 5.1. PSNP Participation Status

| | | | PW | | PDS | | | | |
|---|-------|-------|-------|---------|-------|-------|-------|---------|--|
| Indicator | All | С | Т | p-value | All | С | T | p-value | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Has ever been enrolled in the PSNP | 1.00 | 1.00 | 1.00 | 0.151 | 0.99 | 0.99 | 1.00 | 0.145 | |
| Has ever been a client in the designated category | 0.95 | 0.94 | 0.95 | 0.599 | 0.96 | 0.96 | 0.97 | 0.519 | |
| Currently enrolled in the PSNP | 0.98 | 0.99 | 0.96 | 0.001 | 0.98 | 0.98 | 0.97 | 0.409 | |
| Currently enrolled as PW only | 0.91 | 0.92 | 0.90 | 0.206 | 0.03 | 0.03 | 0.03 | 0.963 | |
| Currently enrolled as PDS only | 0.06 | 0.06 | 0.05 | 0.772 | 0.94 | 0.94 | 0.93 | 0.626 | |
| Currently enrolled as PW and PDS | 0.01 | 0.01 | 0.01 | 0.483 | 0.02 | 0.02 | 0.02 | 0.917 | |
| Currently enrolled in designated category only | 0.93 | 0.93 | 0.91 | 0.275 | 0.95 | 0.96 | 0.95 | 0.499 | |
| Years in the PSNP over past five years | 4.54 | 4.74 | 4.23 | 0.000 | 4.53 | 4.69 | 4.24 | 0.000 | |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | |

Note: Values are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

Given that this impact evaluation is conducted only among PSNP households in both the treatment and comparison arms, one would expect 100 per cent agreement between the administrative records on client type and the situation on the ground. The qualitative explorations provide some insight on how the discrepancies might arise. Those PDS households reporting PW participation may have been in the PW scheme before they were transferred to the PDS category, likely because of the erosion of labour in the household, such as through migration or the death or disability of previously able-bodied members. Furthermore, local administrators may sometimes enrol chronically ill individuals, such as HIV patients, in PW client groups through retargeting if there is extra budgetary space for public

works even though these individuals may not work. The households involved may be placed among PDS households in the administrative records, but identified as PW households in local registries and paid through the PW budget. There are also cases in which a PDS client is alone and moves into another household that is already a PW household. The household may therefore identify as both a PDS household and a PW household, although, in the survey, the household would have been sampled as one or the other. Likewise, a child in a PDS household might reach working age or an able-bodied adult might move into a PDS household. The household then becomes a PW household, although administrative records would still display it as a PDS household. If a kebele faces a budget shortage in the PDS quota, some PDS clients may be transferred to the PW category and given light work, such as taking care of children at work sites.

In this report, the administrative status of client type is maintained in the analysis in keeping with the principle of intent to treat. During the analysis of impacts, the necessary distinctions and adjustments will be made accordingly.

When they were asked about the main advantages of PSNP enrolment and how they used the benefit payments, respondents in the qualitative interviews reported that, though the value of the benefits was small, the benefits were used for various purposes, particularly food and clothes, followed by educational materials for children.

"With the payment, I bought food and educational materials for my child. The main advantage is that, with the money, we buy food grains for our family . . . because we don't have anything to eat." – IDI with PW client, Libo Kemkem

"It covers lots of expenses. We use it to buy gesho (hops) [used to prepare local alcoholic drinks, such as tella], children's clothes, coffee, salt, blankets, shoes, and other expenditures." – IDI with pregnant woman client, Libo Kemkem

"The PSNP payment is used to teach my children. I borrow money to send my children to school, then repay it with the PSNP transfer." – IDI with PW client, Dewa Chefa

Cash payments are critical among the poorest and most vulnerable clients, such as women who are heads of household with children, who often live in precarious circumstances and typically lack alternative means of support. They use the resources to care for their families, thus reducing the stress of poverty, which may improve the caregiver's physical and mental state, resulting in more positive parenting behaviour.

"I am taking care of my children as a single mother. . . . Their father, who is currently married with [another] woman, is not supporting us. When the money comes, I use part of it for food and another part for clothes. That is how we survive." – IDI with a pregnant PDS client, Dewa Chefa

"It cannot be said that the problems of the PDS [household] is resolved: the yearly transfer is not sufficient to fulfil their needs. However, relative to other poor households that are not clients of the programme, we can see that they are in a better situation." – KII with a social worker, Libo Kemkem

The cash provided to PW clients during harvest season enables households to smooth their consumption and maintain their food security when stocks are low. The cash is also used to purchase food when market prices are low to establish food stocks for the low agricultural season, that is, the hungry season.

"The advantage of being enrolled in the PSNP is getting birr to provide for our daily consumption, feed our children; we save money and buy seed for the farm. We have high hopes because they give us the payments during the good months. When they give us [the money] during this time when food prices are low, we purchase food and store it before it gets expensive. We buy pepper, salt, cereals, and legumes when the prices are low because of the harvest seasons. We also buy seed and store it for the next planting season." – IDI with caregiver of malnourished child, Libo Kemkem

Several respondents reported using the cash to purchase seeds to expand food production, clear debts, and pay the premiums to enrol in the CBHI.

"Related to nutrition, they have shown positive changes. The safety net programme has supported them for six months, in addition to their [own food] production. This means a person who has meals for 6 months is now able to have meals for 12 months." – KII with CBHI coordinator

Generally, however, respondents and key informants expressed concern about the limited role of the PSNP in fostering the economic empowerment of clients and helping them to graduate from poverty. Some suggested that long-term participation in the PSNP fosters dependency on external support, rather than building the capacity of the clients to establish resilient livelihoods.⁴

"I fear the PSNP will make people dependent aid users. But if we control that, it can be effective in the future." – KII with health extension worker, Libo Kemkem

"If you tell the person that he will be graduated [from the programme] because he has accumulated wealth, he will spend the night working in darkness. . . . They are not committed to eradicating poverty, not willing to change themselves though work. For example, if you give him ETB 10,000 to change himself, he will use the money for unplanned purposes or for transportation to migrate from the area. People are not motivated to change through work when they are informed that they will be graduated; there is a lot of complaining and conflict with community members. So, people don't want to be excluded from the programme and include others." – KII with development agent, Libo Kemkem

"It is surprising that society considers the PSNP service as a guarantee. Even when someone is asked to marry, membership in the PSNP is considered a criteria for marriage. This should be corrected; PSNP support should not be considered a pension or a livelihood mechanism. Society should be aware that the PSNP support should be an extreme option, targeted only on those who are not self-sufficient." – KII with CBHI coordinator

While transfers are important in meeting practical daily needs, the small value of the benefit is not sufficient to expand income-generating activities, accumulate savings and assets and overcome poverty.

"No, I cannot be a witness for change because I have not seen any significant change." – IDI with PDS client. Libo Kemkem

Key informants stressed that more proactive efforts are required to link people to livelihoods support, such as credit and financial management and skills development training, to facilitate their route out of poverty and vulnerability.

Indeed, asked when their household had enrolled in the PSNP, the majority of clients said they had been part of the programme for a considerable time, ranging from 5 years to 13 years. Some even had difficulty remembering when they first enrolled in the programme.

"We didn't get any benefit from it. . . . My husband keeps sheep and gives money for household expenses, but the safety net programme does not provide us with any benefit except a bit of payment, which is not enough." - IDI with lactating woman, Dewa Chefa

"Generally it is better to give a loan to poor people so they can generate income, such as through animals and poultry, and change will come. A client who graduated from the PSNP last year is still destitute and poor [today]. So, this is a way to achieve long-lasting change." – KII with development agent

"I don't think it will continue like this. As I learn more about this programme, there are people who benefit from food, but without any change. The people who have not benefited from the PSNP have changed their lives by constructing homes and buying oxen. The PSNSP is not an option; the main option has to be giving loans and land to youth and creating job opportunities. If this continues, we will not see changes in the community." – KII with development agent, Dewa

5.2 Frequency of payment

The effectiveness of the PSNP in smoothing consumption and improving access to social services partly depends on the regular and predictable delivery of the transfers (Davis et al., 2016). The PSNP phase 4 implementation manual states that PSNP clients have to know about the type of transfer they will receive, the amount of the transfer and the schedule for receiving the transfer. The manual states that PDS clients will be entitled to 12 months of transfers beginning on the Ethiopian financial year, and transfers are expected to be sent out every month. It also indicates that woredas should tailor PW and transfer schedules to their needs and, that regardless of the transfer schedule, they are bound by the 20- and 30-day transfer targets for cash and food, respectively. This means that, for public works implemented in December, transfers should be made within 20-30 days after the end of December (Ministry of Agriculture, 2014). Thus, payments should effectively be received monthly, with a maximum of a one-month lag for PW households.

Data on the frequency of payments show that 46 per cent of PW households and 64 per cent of PDS households receive payments monthly. About 44 per cent of PW households and 34 per cent of PDS households receive payments every two months. The remainder of the households receive payments quarterly or twice yearly, except for a few that had not received any payments in the 12 months before

the survey (see Table 5.2).

| | | P' | W | | PDS | | | | | |
|------------------|-------|-------|-------|---------|-------|-------|-------|---------|--|--|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | | |
| Monthly | 0.46 | 0.43 | 0.49 | 0.439 | 0.64 | 0.61 | 0.69 | 0.341 | | |
| Every two months | 0.44 | 0.47 | 0.38 | 0.275 | 0.34 | 0.38 | 0.28 | 0.239 | | |
| Quarterly | 0.02 | 0.03 | 0.02 | 0.893 | 0.01 | 0.01 | 0.01 | 0.149 | | |
| Twice yearly | 0.07 | 0.06 | 0.08 | 0.409 | 0.00 | 0.00 | 0.01 | 0.313 | | |
| No payment | 0.01 | 0.00 | 0.02 | 0.026 | 0.00 | 0.00 | 0.01 | | | |
| N | 2,514 | 1,266 | 1,248 | | 2,342 | 1,188 | 1,154 | | | |

Table 5.2. Frequency of Payment, Previous 12 Months

Note: Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

These payment schedules can be considered reasonably reliable and predictable from the point of view of programme implementation. In the qualitative interviews, when asked about their experience with

the payment schedule, many respondents reported significant delays with the payments. The delays might range from a few days to six months, which is consistent with the data in Table 5.2.

"They give us everything, but not on time. Payment may be delayed for five to six months." – IDI with PW client, Libo Kemkem

"No, we don't get it regularly. We get it after two months. Sometimes [the benefit] is even delayed three months." – IDI with PW client, Dewa Chefa

Delays in payment are attributed to administrative hurdles related to problems with payment systems and the disbursement of funds. In some instances, priority in payments is given to the elderly, chronically ill and disabled clients in consideration of their higher levels of financial vulnerability.

"They serve first elderly and weak members." – IDI with PW client, Libo Kemkem

"They give us some reason for the delay of payment such as electricity failure and give us [the payment] after two or three days." – IDI with PW client, Dewa Chefa

Some households might prefer the delays to receive a larger sum rather than receive the monthly instalments, which may be too small for any capital investments. There is also the issue of the transaction costs associated with the regular monthly payments.

"Yes, I get ETB 50 per month, and they give it to me all at once by putting three or four months of benefits together." – IDI with PDS client, Dewa Chefa

5.3 Mode of payment

The study also collected information on how households receive their benefit payments. The programme implementation manual states that, while cash can be given in areas where markets function well, in-kind food transfers may be appropriate in areas where food is not available in markets or prices are extremely high (Ministry of Agriculture, 2014). PSNP coordinators in both Dewa Chefa and Libo Kemkem woredas said that the payment method used to disburse transfers to clients has changed from cash-based payments to electronic payments, using the M-Birr system. The new technology provides mobile banking services, allowing clients to process financial transactions over their phones. As a result, payments are being transferred more quickly and in a way that is more convenient and reliable for clients, who are no longer required to travel and queue long hours at pay points to collect the transfers. Mobile money can also expand financial inclusion among the poor by making financial and non-financial services affordable and accessible.

Table 5.3 summarizes the usual mode of payment over the 12 months prior to the survey. There are two main payment methods: in-cash payments, which account for about 70 per cent of the payments and payments through a local agent–operated M-Birr system, which accounts for a quarter of all payments. M-Birr accounts owned by households represent about 3 per cent of the payments.

Table 5.3. Usual Modes of Benefit Payment

| | | P' | W | | PDS | | | | | |
|---------------------------------|-------|-------|-------|---------|-------|-------|-------|---------|--|--|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | | |
| In cash | 0.68 | 0.68 | 0.69 | 0.958 | 0.70 | 0.70 | 0.70 | 0.960 | | |
| M-Birr (local agent) | 0.25 | 0.26 | 0.24 | 0.806 | 0.25 | 0.26 | 0.25 | 0.950 | | |
| M-Birr (for household) | 0.03 | 0.02 | 0.05 | 0.317 | 0.03 | 0.02 | 0.04 | 0.323 | | |
| M-Birr (for friend or relative) | 0.00 | 0.00 | 0.00 | 0.017 | 0.00 | 0.00 | 0.00 | | | |
| In kind | 0.02 | 0.04 | 0.00 | 0.050 | 0.00 | 0.00 | 0.00 | 0.212 | | |
| Mix of in cash and in kind | 0.00 | 0.00 | 0.00 | 0.360 | 0.01 | 0.02 | 0.00 | 0.283 | | |
| N | 2,571 | 1,283 | 1,288 | | 2,382 | 1,198 | 1,184 | | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

In the qualitative interviews, respondents were asked about their experiences with the method of benefit payment. None of the respondents reported receiving electronic payments. This was confirmed through the KIIs with development agents in Dewa Chefa.

"People are going long distances to collect their payments; so, social workers have to work on behalf of the community. In other kebeles, there is a system known as M-Birr or ACSI [Amhara Credit and Savings Institution; these are the banking services used to make payments.] So, in this kebele (it should be], too." – KII with development agent, Dewa Chefa

Several respondents expressed their frustration with the time and cost burdens involved in travelling to pay points and queuing for long hours to collect benefits. This has been particularly cumbersome for elderly clients and women who are pregnant or nursing. In some cases, social workers are reportedly playing a key role in facilitating access to payments by bringing transfers to client homes.

"We travel four hours on foot to the nearby town to receive the payment." – IDI with lactating woman, Dewa Chefa

"The payment system is time consuming. Other than this, being enrolled in the PSNP has no drawbacks for me." – IDI with PW client, Libo Kemkem

5.4 Amount received over previous 12 months

An adequate transfer among safety net clients is important for two reasons. First, it ensures that poor clients can meet their practical daily needs for food and other essential items. Second, a larger benefit can enable households to increase and diversify productive investments and strengthen their livelihood security. Among PW households, about 28 per cent received between ETB 1,000 and ETB 2,999, while 36 per cent received between ETB 3,000 and ETB 4,999, and 31 per cent received between ETB 5,000 and ETB 9,999 (see Table 5.4). The average total amount received by the PW households was ETB 3,805, which translates to about ETB 881 per person. Among PDS households, the average total amount received was ETB 3,233. The corresponding payment per person was ETB 1,365.

Table 5.4: Amount Received (ETB), Previous 12 Months

| | | P | W | | PDS | | | | | |
|-----------------------|----------|----------|----------|---------|----------|----------|----------|---------|--|--|
| Indicator | All | С | T | p-value | All | С | T | p-value | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | | |
| Less than 1000 | 0.05 | 0.03 | 0.09 | 0.008 | 0.04 | 0.02 | 0.07 | 0.000 | | |
| Between 1000 and 2999 | 0.28 | 0.28 | 0.28 | 0.984 | 0.54 | 0.54 | 0.53 | 0.855 | | |
| Between 3000 and 4999 | 0.36 | 0.36 | 0.36 | 0.859 | 0.27 | 0.29 | 0.23 | 0.050 | | |
| Between 5000 and 9999 | 0.31 | 0.32 | 0.27 | 0.479 | 0.14 | 0.14 | 0.15 | 0.800 | | |
| 10,000 or higher | 0.00 | 0.00 | 0.00 | 0.078 | 0.01 | 0.00 | 0.02 | 0.015 | | |
| Total (absolute) | 3,805.64 | 3,886.88 | 3,675.55 | 0.427 | 3,233.10 | 3,207.35 | 3,279.88 | 0.711 | | |
| Total (per capita) | 880.98 | 906.24 | 840.54 | 0.104 | 1,365.00 | 1,381.14 | 1,335.68 | 0.526 | | |
| N | 2,453 | 1,252 | 1,201 | | 2,302 | 1,178 | 1,124 | | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

Putting this in the context of poverty line and cost of living, the mean real per capita food expenditure in rural Ethiopia was estimated at about ETB 4,807 in 2015/2016. Food poverty line for rural Ethiopia in 2015/2016 was estimated at about ETB 2,000. This means that even PDS households are receiving only about 70 per cent of what is required to keep them non-food poor.

Several important findings emerge from the qualitative analysis about the size of entitlements and the actual amounts transferred to PSNP clients. First, several PW clients reported reductions in their wages in the previous year. In some cases, the reductions are quite substantial.

"This year the amount has decreased. Last year, we were receiving ETB 1,000 for three household members, but, last time, we received ETB 380." – IDI with PW client, Libo Kemkem

This is confirmed in the KIIs, which suggested that daily wages paid to PW clients has decreased from ETB 41 to ETB 31 per day. Several key informants expressed concerns that the current value of payments is too small to change meaningfully the consumption and broader welfare of clients.

"We are worried too much. What I mean is, when we started phase 4 of the PSNP, they were paid ETB 41 per day. When you see other woredas the payment exceeds ETB 42, ETB 45, ETB 46, and ETB 47 per day. Because of a shortage of hard currency, the payment has reduced to ETB 31 per day. Clients had complained to us. Nowadays they are paid ETB 155 per month. Even families tell us that it is better not to come and engage in public works to be paid this amount of money. Most of the time they insist to take after salaries that are accumulated for four or five months. Because ETB 155 is too little even to buy soap." – KII with PSNP coordinator

The wage-based payments are set at a level that is lower than a market wage to attract poor households to participate in public works. However, some key informants suggested that payments should be adjusted in line with a daily market wage to incentivize the poor to participate in the PSNP.

"Finally, the payment should be adjusted. For example, a daily labourer may earn ETB 100 per day. After he works for an hour or two or three hours he asks for ETB 200 or ETB 250. But the safety net client earns ETB 34 per day. There should be some considerations when they determine the wage rate. It should not be decided simply while sitting in the office." – KII with development agent, Dewa Chefa

Moreover, the recent switch from employing full to partial family targeting as part of the PSNP phase 4 guidelines, whereby up to five adult members are listed as clients and qualify for payment (and thus variable payment amount according to household size is capped), has led to a substantive drop in net income among clients residing in large, extended families.

"We have huge family size in PSNP. There is exclusion of family members; because in one family we can include only five family members, other family members don't have any support or any income. Because five out of ten have food whereas the remaining five wonder here and there in search of a donor. So how can this person graduate from the PSNP? If successful graduation in PSNP is really the main aim, then these persons should be included in the system." – KII with development agent, Dewa Chefa

Second, several respondents reported that part of their benefit is deducted for savings, with some indication that clients are being forced by PSNP administration to save money in credit institutions, for example, the Amhara Credit and Savings Institute.

Interviewer: Did they reduce the payment with your consent?

Respondent: No, they reduce the money by themselves. I wish to make it by myself, but they won't trust me. They did not give us our saved money when we need it. For example, in September we needed money to buy chickpea seeds. But we could not use the saved money for this purpose." – IDI with lactating woman, Libo Kemkem

"They deduct some amount for saving from the aid without our permission. . . . They force us to save without our consent . . . ETB 80 or ETB 50 per month."

There are also indications that clients may not be able to withdraw their savings when they need/want their money, resulting in negative spillovers on their consumption.

"When I said, my children are hungry; they give me some amount of money from my saving. They didn't give me all the money that I saved." – IDI with lactating woman, Libo Kemkem

According to both key informants and respondents, some PSNP clients lack basic knowledge about the value of the benefits they are expected to receive or how the savings contributions are calculated. Additional effort is needed to sensitize clients properly about the details of the entitlements, programme requirements and the rights related to personal savings.

"We take what they give us as full amount of payment. We did not know whether it is full or not." – IDI with PW client, Dewa Chefa

"We will check how much they received in a year and by six months and how much they saved. The problem we repeatedly observed is they go to saving and credit institution, if they reserved ETB 1,000 the saving and credit institute will give them ETB 400, but they would not know how much they saved. The client will go home and say the development agent has deducted my money. This is created because they do not know about the amount of money they will receive. If they know it, they will ask about how much is deducted and why it is deducted. So we gave all trainings about these issues." – KII with development agent, Libo Kemkem

5.5 Decision-making on the use of PSNP benefits

Allocation of the income from PSNP requires an intrahousehold decision-making process. Payments are primarily made to the head of household, even for the PW contributed by other members of the household. The decision-making dynamics can have substantial effect on the outcomes that are sought in the ISNP. For example, if women are systematically excluded in the decision-making on how to spend the money, then training women on nutrition and feeding practices may not yield the desired results.

To assess potential impacts of the ISNP on the dynamics of household decision-making, the survey asked respondents about the household member who makes the decision on spending the PSNP benefit. Possible responses included the head alone, the spouse alone, the head and spouse together, the adult children, the head and the adult children, the spouse and the adult children, the head and a parent, the head and brothers, or other. The modal category for decision-making in the PW and PDS samples is that the household head alone makes the decision; which is more likely among PDS households than among PW households (62 per cent versus 43 per cent) (see Table 5.5). In PW households, the spouse alone makes the decision in about a quarter of the cases, whereas the spouse alone makes the decision in only 10 per cent of PDS households. In total, at least 66 per cent and 72 per cent of PW and PDS households, respectively, have a sole decision maker (head or spouse). If the population is stratified by whether the head is a man or a woman, 50 per cent of the PW households have a sole woman decision maker, while 55 per cent of the PDS households have a sole woman decision maker.

Table 5.5. Household Decision-Making: How Are PSNP Benefits Spent?

| | | P | W | | PDS | | | | |
|--------------------------------|-------|-------|-------|---------|-------|-------|-------|---------|--|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Head alone | 0.43 | 0.43 | 0.44 | 0.739 | 0.62 | 0.61 | 0.64 | 0.318 | |
| Spouse alone | 0.23 | 0.24 | 0.21 | 0.278 | 0.10 | 0.10 | 80.0 | 0.290 | |
| Head and spouse jointly | 0.19 | 0.16 | 0.23 | 0.004 | 0.09 | 0.08 | 0.10 | 0.225 | |
| Adult children | 0.01 | 0.01 | 0.01 | 0.848 | 0.03 | 0.02 | 0.03 | 0.484 | |
| Head and adult children | 0.09 | 0.10 | 0.07 | 0.299 | 0.11 | 0.12 | 80.0 | 0.054 | |
| Other | 0.05 | 0.06 | 0.03 | 0.048 | 0.06 | 0.06 | 0.06 | 0.819 | |
| Sole decision maker is a man | 0.17 | 0.17 | 0.16 | 0.678 | 0.17 | 0.18 | 0.14 | 0.216 | |
| Sole decision maker is a woman | 0.50 | 0.50 | 0.49 | 0.813 | 0.55 | 0.53 | 0.57 | 0.229 | |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

5.6 Participation in PSNP livelihood component

PSNP phase 4 introduced a livelihoods component, which focuses on individual clients and aims to increase participation of women and the youth, nationally defined as those ages 15–29 (MYSC, 2004). It is expected that women (including female youth) constitute at least 50 per cent of all livelihood clients. The livelihood component provides tailored trainings to help participants diversify their

⁵ Participation in the PSNP livelihoods component is primarily based on interest or self-selection. At most, two household members may participate in the livelihoods intervention. However, if more people are interested than can be accommodated by the available resources in terms of budget and capacity to provide training, the community food security task force prioritizes the targeting of poorer clients (Ministry of Agriculture, 2014).

livelihoods to other income-generating activities such as in crop and livestock (ox and sheep fattening, fruit seedling and vegetable production, poultry and beekeeping). The livelihood options also include off-farm enterprises including petty trading, sand collection, tailoring, carpentry and employment in construction and textiles. Like women, youth from PSNP households, who tend to be landless and under- or unemployed, also receive special attention in the livelihoods component, and are taught in the livelihood options identified in consultation with women and youth themselves and discussed with woreda and regional experts (Ministry of Agriculture, 2014).

Table 5.6 summarizes respondent's knowledge and whether any household members participate in the livelihoods component. Among PW households, 13 per cent have heard about this new PSNP livelihoods component, and 7 per cent joined the livelihoods component as a group or individually and received the service and technical support, such as in preparing business plans. Among PDS households, about 6 per cent have heard about the PSNP livelihoods component, and 2 per cent of the households have joined the scheme.

Table 5.6. Awareness of and Participation in the Livelihood Component of the Safety Net

| | | F | w | | PDS | | | | |
|---|-------|-------|-------|---------|-------|-------|-------|---------|--|
| Indicator | All | С | Т | p-value | All | С | T | p-value | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Aware of the new PSNP livelihoods component | 0.13 | 0.13 | 0.14 | 0.951 | 0.06 | 0.04 | 0.08 | 0.029 | |
| Household or individual member joined | 0.07 | 0.07 | 0.06 | 0.709 | 0.02 | 0.02 | 0.03 | 0.211 | |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

5.7 PSNP during pregnancy, lactation and identification of a severely malnourished child

A new subcomponent of phase 4 of the PSNP is the links to social services under which pregnant women and lactating mothers are not expected to undertake physical tasks in public works, while keeping their eligibility for the PW scheme. Under this component, pregnant women and lactating mothers transit to TDS status from the time the pregnancy is identified by the health extension worker until the child turns one year old. On the other hand, they bound with conditionalities which are expected to improve their and children's health and nutrition condition. PW households with a malnourished child are also expected to be transitioned to TDS provided there are adequate funds to accommodate additional PW households in the budget.

During the survey, the main women respondents were asked about pregnancy and birth during the previous two years and whether their households had been receiving PSNP benefits at any time during their pregnancies and nursing for up to two years after birth. In the PW sample, 23 per cent of women respondents had been pregnant at some point during the two years, that is, any time between Taḫśaś 2009 (December 2016) and the interview date. Among the women who had not given birth in the previous two years, but who were currently pregnant, 67 per cent of the associated households had been receiving PSNP benefits at some point during the pregnancy; 89 per cent of currently pregnant women reported that the household had been receiving PSNP benefits when they first learned about pregnancies. Furthermore, 25 per cent of currently pregnant women had also been involved in public works. Among PDS households, 14 per cent of women respondents had been pregnant in the previous two years, of which 85 per cent had given birth. Among those who had not given birth in the same

period, 17 per cent reported that they were currently pregnant; the households of 58 per cent of these had received PSNP benefits at any time during the current pregnancy. In the case of currently pregnant women, while 90 per cent of the households had been receiving PSNP benefits when the women first learned of their pregnancies, 5 per cent had also been involved in public works (see Table 5.7).

Table 5.7. PSNP Participation during Pregnancy and Birth, Previous Two Years

| | PW | | | | PDS | | | |
|--|-------|-------|-------|---------|-------|------|------|---------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Was pregnant at any time in the previous two years | 0.23 | 0.22 | 0.25 | 0.30 | 0.14 | 0.14 | 0.13 | 0.82 |
| N | 2,229 | 1,107 | 1,122 | | 1,211 | 560 | 651 | |
| Gave birth in the previous two years | 0.88 | 0.92 | 0.83 | 0.01 | 0.85 | 0.84 | 0.87 | 0.63 |
| N | 583 | 304 | 279 | | 186 | 99 | 87 | |
| Currently pregnant | 0.15 | 0.10 | 0.21 | 0.00 | 0.17 | 0.16 | 0.20 | 0.59 |
| N | 583 | 304 | 279 | | 186 | 99 | 87 | |
| Received PSNP benefits at any time during pregnancy | 0.67 | 0.70 | 0.65 | 0.69 | 0.58 | 0.61 | 0.53 | 0.71 |
| N | 98 | 38 | 60 | | 36 | 19 | 17 | |
| Was receiving PSNP benefits when first learned pregnancy | 0.89 | 0.88 | 0.90 | 0.87 | 0.90 | 0.90 | 0.89 | 0.89 |
| N | 66 | 27 | 39 | | 23 | 14 | 9 | |
| Participated in public works at any time during this pregnancy | 0.25 | 0.35 | 0.18 | 0.29 | 0.05 | 0.00 | 0.11 | 0.26 |
| N | 66 | 27 | 39 | | 23 | 14 | 9 | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

Information was also collected on safety net participation during the pregnancy that led to the most recent birth event in the previous two years. Women respondents were asked whether the household had been receiving PSNP benefits during the pregnancy, the participation of the women or other household members in public works, and whether they had stopped working at any time during the pregnancy and, if so, at which month of pregnancy had they stopped working. Table 5.8 summarizes the responses to these inquiries. It shows that, at any time during the pregnancy that had led to the most recent birth (referring to the last completed pregnancy since December 2016), 83 per cent of the PW households had been receiving PSNP benefits. In 79 per cent of the households, other members besides possibly the women were participating in public works, and 30 per cent of these women were active in public works. Women who stopped participating in public works during the pregnancy did so, on average, during the fifth month of pregnancy. Among the PDS sample, 54 per cent of the households had been receiving PSNP benefits at some point during the pregnancy; in 17 per cent of the households, other members had been participating in public works, and 10 per cent of the women had also participated in public works. In addition, among the women who reported that their households had been receiving PSNP benefits at any time during their pregnancy, 96 per cent of the women in the PW sample and 87 per cent in the PDS sample had first learned of their pregnancy when their households were PSNP clients. Among PW households, the decision to stop working at any time during pregnancy was unbalanced between comparison households (40 per cent) and treatment households (63 per cent). Among PDS clients (a negligible number of households), the number of months of pregnancy after which the women had stopped working was unbalanced between the study arms (4.51 months for C and 3.00 months for T).

Table 5.8. PSNP Participation during the Most Recent Completed Pregnancy

| | PW | | | | PDS | | | |
|---|------|------|------|---------|------|------|------|---------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Household received benefits at any time during the pregnancy | 0.83 | 0.84 | 0.82 | 0.531 | 0.54 | 0.55 | 0.54 | 0.912 |
| N | 507 | 276 | 231 | | 156 | 80 | 76 | |
| Participated in public works at any time during the pregnancy | 0.30 | 0.33 | 0.26 | 0.307 | 0.10 | 0.11 | 0.07 | 0.595 |
| N | 421 | 233 | 188 | | 84 | 43 | 41 | |
| Household was receiving benefits when first learned of pregnancy | 0.96 | 0.96 | 0.96 | 0.963 | 0.87 | 0.90 | 0.83 | 0.454 |
| N | 421 | 233 | 188 | | 84 | 43 | 41 | |
| Other household members participated in public works during pregnancy | 0.79 | 0.77 | 0.83 | 0.492 | 0.17 | 0.16 | 0.19 | 0.693 |
| N | 421 | 233 | 188 | | 84 | 43 | 41 | |
| Stopped participating in public works at any time during pregnancy | 0.48 | 0.40 | 0.63 | 0.028 | 0.81 | 1.00 | 0.33 | |
| N | 113 | 64 | 49 | | 6 | 3 | 3 | |
| Month of pregnancy when the woman stopped working | 5.00 | 5.02 | 4.97 | 0.917 | 4.34 | 4.51 | 3.00 | 0.073 |
| N | 71 | 40 | 31 | | 4 | 3 | 1 | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

To explore the decision to stop participating in public works during the most recent completed pregnancy since December 2016, women were asked whether it had been their decision to stop working, and how various frontline workers were involved in the decision making. Women were also asked about their public works participation after the birth and the effects on breastfeeding. Among women who had stopped participating in public works during the last completed pregnancy, 58 per cent made their own decisions to stop working, while 42 per cent did so because they were transferred to TDS (see Table 5.9).

Table 5.9. Decision to Stop Working during the Last Pregnancy

| | | PW | | | | | | |
|--|------|------|------|---------|--|--|--|--|
| Indicator | All | С | Т | p-value | | | | |
| | (1) | (2) | (3) | (4) | | | | |
| It was my decision to stop working during the last pregnancy | 0.58 | 0.54 | 0.62 | 0.644 | | | | |
| N | 71 | 40 | 31 | | | | | |
| Transferred to TDS and stopped working | 0.42 | 0.46 | 0.38 | 0.644 | | | | |
| N | 71 | 40 | 31 | | | | | |
| Advised by a health worker to stop working | 0.22 | 0.20 | 0.27 | 0.425 | | | | |
| N | 113 | 64 | 49 | | | | | |
| Advised by a development agent to stop working | 0.27 | 0.24 | 0.33 | 0.363 | | | | |
| N | 113 | 64 | 49 | | | | | |
| Food security task force discouraged me from stopping work | 0.19 | 0.17 | 0.22 | 0.587 | | | | |
| N | 113 | 64 | 49 | | | | | |
| Participated in public works after giving birth | 0.13 | 0.16 | 0.10 | 0.177 | | | | |
| N | 507 | 276 | 231 | | | | | |
| Participation in public works affected breastfeeding | 0.46 | 0.41 | 0.57 | 0.376 | | | | |
| N | 70 | 47 | 23 | | | | | |

Note: Means are adjusted for sampling and matching weights. TDS = temporary direct support. C = comparison group. T = treatment group.

Furthermore, 22 per cent and 27 per cent of women in the PW sample who had been pregnant and who had been participating in public works at any time during the pregnancy had been advised, respectively, by extension workers or development agents to stop taking part in public works. The community food security task force had discouraged 19 per cent of pregnant women from stopping work. In addition, 13 per cent of women who had given birth in the two years previous to the interviews had participated in public works after giving birth, and, of those who did so, 46 per cent reported that participating in public works after giving birth affected their ability to breastfeed.

Another reason for transition of PW households to TDS status is the presence of a malnourished child in the household. The information collected indicates that less than 4 per cent of PW households have been transitioned to TDS status for this reason even though about 40 per cent of households have a malnourished child.

Qualitative in-depth interviews were conducted with pregnant and lactating women and caregivers with malnourished children to explore their awareness of and experience with the transition into TDS, and their current programme status in the PSNP. These were complemented by KIIs with actors responsible for or involved in the implementation of the TDS process. Overall, the KIIs reveal that most informants are well informed of the TDS provisions for pregnant and lactating women and caregivers with malnourished children; however, these provisions are not fully implemented in practice.

"Once a [female client] is identified as pregnant, the coordinator send us report or referral. . . . They will be fully paid without engaging in works. Even she can proceed to one year after delivery. Also she will engage in simple activities after she come back to the programme. She is not forced to engage in heavy activities because she is breastfeeding her baby [...]. Also this condition applies to a mother who has a baby with malnutrition. And the baby should be client of the programme. But I can't say we fully achieve [this] and do it at the grass root." – KII with PSNP coordinator

In Gula kebele in Dewa Chefa, at the time of data collection, it was reported that the TDS process is not implemented at all, owing to a recent halt of safety net activities due to political instability and recent turnover of staff involved in the PSNP.

"I don't have any information on this. But we don't have this kind of transition." – KII with social worker, Dewa Chefa

Interviews with pregnant and lactating women reveal that most respondents are not aware of this gender-sensitive programme provision, and consequently do not transition into TDS during pregnancy and lactation.

"Interviewer: "Did your household transition into the TDS?"

Respondent: "No. We didn't see any of this kind of service in this community. My husband works. I work under him. There is nothing special given to me as pregnant women." – IDI with pregnant woman, Libo Kemkem

"No they didn't pay for us freely without participating on it. There is no such tradition." – IDI with lactating woman, Libo Kemkem

A number of challenges have been identified among transitioning clients. Eligible women experienced several obstacles in realizing their entitlement to TDS including difficulties in obtaining timely and reliable information on their entitlements and the admission process, as well as problems with timely referrals from health extension workers.

"There was a gap in relation to transparency. Women with babies and pregnant women were not well aware about workload reduction. We are frequently conducting refreshment about this condition." – KII with development agent, Libo Kemkem

"Previously pregnant mother would not inform us about her pregnancy because she would fear that by being pregnant she may not receive the benefit. To overcome this challenge social workers and development agents create transition. But now, she knows that she will receive the benefits even if she gets pregnant." – KII with health extension worker, Libo Kemkem

According to the PSNP phase 4 rules, pregnant women should be exempted from public works activities from the fourth month of the pregnancy, which was confirmed through Klls with health extension workers and social workers. However, interviews indicated this was not implemented in practice. Most women were only allowed to transition into TDS in the sixth month of their pregnancy. It is unclear whether women's failure to transition to direct support after pregnancy was caused by the lack of understanding among clients about how TDS entitlements function (that is, eligibility criteria and the admission process) or because the clients were expected by PSNP programme administrators to work until later in the pregnancies.

"If there is a pregnant woman I will consult her that she can be registered for temporary direct support just beginning from the fourth month of her pregnancy and inform the development agent by sharing her name." – KII with health extension worker, Libo Kemkem

"After delivery, and until her child becomes one year old, she is eligible for TDS." – KII with social worker, Libo Kemkem

"[I worked] until I was six months [pregnant]. Out of the weekdays we worked three days on the PSNP." – IDI with lactating woman, Libo Kemkem

Furthermore, there is an indication that, to claim their benefits, women's labour had to be substituted by other able-bodied members of the household – mainly husbands and, in some cases, their children.

"We get payment based on the public work we participate. The problem is they don't give permission for a pregnant woman. Rather they only substitute any other member of the household who is capable of participating in the public work." – IDI with pregnant woman, Dewa Chefa

"Yes, up to six months of the pregnancy, I am expected to participate. Even if I cannot, my husband or my children are expected to participate." – IDI with caregiver of malnourished child, Libo Kemkem

Finally, the process and operational mechanisms used to identify, refer and ultimately transition eligible clients into TDS seem to be complex, cumbersome and somewhat arbitrary. According to the guidelines in the project implementation manual, several stakeholders are involved in this process at the community level. Social workers are responsible for identifying pregnant women through home visits; health extension workers identify them during their visits to health posts; and development agents deliver information about TDS provisions to PSNP clients during pay days and public work activities. It appears that both health extension workers and social workers are supposed to inform the development agent of a women's pregnancy, so that the development agent can initiate transition into TDS. TDS provisions are also said to appear explicitly on the membership cards of clients. However, the line of reporting is not entirely clear, and referrals may not be functioning effectively.

While, according to the PSNP phase 4 guidelines, health extension workers play an important role in identifying pregnant clients and referring them to development agent coordinators for exemption, no in-depth interview with respondents reported the involvement of health extension workers in such a process.

"Pregnant women are not accessing health care during pregnancy." – KII with health extension worker, Dewa Chefa

"Sometimes we are informed after they deliver." - KII with social worker, Dewa Chefa

It also appears that guidelines are not strictly and consistently followed by all responsible parties, but rather may depend on the discretion of kebele officials and PSNP administrators.

Interviewer: "Did you know that pregnant and lactating women are not required to participate in public works?"

Respondent: "Yes, during my pregnancy, they came to our village to mobilize the community to participate in the public work. Then they said you are pregnant and cannot participate in the public work. When they mobilized the village, my husband was not at home. When one of the administrators asked me to go for work, another said that I should not. Since then I knew that I should not work. Even after I delivered, they said I should not work." – IDI with lactating woman, Libo Kemkem

Rather than enlisting the support of health extension workers to identify and register pregnant women, the transition into TDS seems to depend on arbitrary observation and identification by kebele officials,

who lack the qualifications to assess whether a woman is pregnant and her stage of pregnancy. This may partly explain why most of the women in our qualitative sample are transitioned into TDS at later stages of pregnancy.

Interviewer: "Did you know that pregnant and lactating women are not required to participate in public works?"

Participant: "Yes, if they recognized your problem they will pay you."

Interviewer: "Who can recognize it?"

Participant: "Officials, kebele managers. If they don't recognize your problem, you will get your payment only if you participate in the work." – IDI with lactating woman, Libo Kemkem

However, the process of identification of eligible clients has improved somewhat with the engagement of social workers.

"When social workers were not assigned, many challenges were faced such as pregnant women were included for 6 months in PW activities, in addition lactating mothers also participated in PW by carrying baby. They were not waiting up to one year. But now when social workers got assigned, they communicated with us and we will be informed." – KII with health extension worker, Libo Kemkem

5.8 The retargeting process

The targeting and retargeting process is a critical mechanism to ensure that eligible people are registered to participate in the programme while those no longer eligible are removed. This is to ensure that inclusion and exclusion errors are reduced to the barest minimum. This section explores the process of retargeting within the PSNP, in particular how retargeting works, who is involved, and the key challenges. The report on findings draws mainly on the insights of key informants.

5.8.1 Key characteristics and actors involved in retargeting

Retargeting refers to the replacement of PSNP clients who have dropped out or who have died since the last round of targeting, as well as the screening and identification of non-eligible individuals and households that may then be replaced by individuals or households that qualify for the benefits but were originally excluded from the PSNP. According to KIIs, retargeting is carried out annually, in June, after the new budget is released. Several actors are involved in the retargeting process to screen and identify new clients and address targeting errors. At the local level, actors such as social workers, development agents, health extension workers and kebele administrators have responsibilities at different points in the formation of the screening and selection of candidates.

They also identify clients who do not qualify for the programme or who have been enrolled incorrectly, including those who have falsified eligibility, and identify eligible individuals and households to be included in the scheme. Social workers then prepare lists of eligible clients and submit these lists to PSNP coordinators for review and approval.

"Screening through home visits and sending names of the poorest people, elderly and those with chronic illness to be helped by the woreda and to screen them for any possible assistance is part of our job." – KII with social worker, Libo Kemkem

"We cross-check whether the previous year cohabitants still exist, have migrated, or died and enrol the poorest people [into the safety net]." (KII with social worker, Libo Kemkem)

"There may be people who are excluded from PSNP so the [social worker] will identify them and present to the team." – KII with health extension worker, Libo Kemkem

The screening process during retargeting ensures that targeting errors are addressed and clients are assigned to the correct programme category.

"During the process of identification, we have identified that able-bodied people are listed as weak, incapable of working. And then all those who are listed as capable of working are actually not able to do anything." – KII with development agent, Libo Kemkem

Sometimes PDS households try to falsify their status to qualify as PW clients, who can list up to five adult household members as clients and thus are able to receive larger payments than PDS clients. The latter category is typically registered as individual members and generally receives smaller benefits.

"Some clients who should be registered as PDS actually enrol as PW, and use co-habitants "Tibis" to claim that status. In addition, we transfer them to PDS rejecting the para members ["tibis"] from the list. However, sometimes the clients refuse to be PDS if there is a reduction in the household size because the PW with better household size increases the transfer." – KII with social worker, Libo Kemkem

The screening process is also assisted by the Bureau of Women and Children's Affairs who – through the CCCs – ensure that the poorest and vulnerable children and women, such as orphans and female heads of households are identified and proposed to be selected in the programme.

"In addition, we are also engaged in a community care coalition, and we make sure that children identified by the CCC have been included in the PSNP during retargeting." – KII with BoWCA, Libo Kemkem

The community food security task force approves the client lists by the end of June and forwards them to the woreda for final approval and the selection of new members. After the confirmation of PSNP eligibility based on these criteria, households are assigned to public works or direct support.

5.8.2 Challenges of community-based targeting

PSNP community-based targeting is used to identify and select eligible households, which are then assigned to public works or direct support depending on available labour, poverty and vulnerability levels (Ministry of Agriculture, 2004). Community-based targeting provides a flexible strategy that uses local members and takes advantage of their knowledge of household circumstances to identify the neediest households. Social workers, members of the CCCs and development agents all play a role in this process. However, such an approach presents several challenges.

First, there are difficulties in adopting simple and transparent eligibility criteria and verification processes to select the poor. Interviews with key informants reveal that complex criteria – based on poverty, labour endowments and demographic characteristics (e.g. disability, age, illness) is used in eligibility assessments. Which characteristics are prioritized?

"We make home-to-home visit and screen who is poor and who is not? Who is wealthy and who is not? Who is disabled and who is not? Who is chronically ill and who is not? The screening

process has its own steps and prioritization. The first priority will be given to the people with disability to be included in the PDS. The next is the poorest households, followed by the chronically ill members including HIV cases" – KII with social worker, Libo Kemkem

However, challenges remain in developing and using easily observable, objective, and verifiable characteristics to identify the poor. Likewise, Klls reveal a lack of consensus among key stakeholders as to which criteria should be adopted in the screening of potential clients.

For example, poverty-related criteria (landholdings and assets and so on) are often not clear and easily understood by the actors involved in targeting and the community itself, while the selection of individuals and households can be arbitrary when a large swathe of the population is considered poor.

"Social workers try to explain the criteria to identify the poor by telling community members that in farming communities, poverty is not having two oxen. If the person has two oxen, he can farm. He can rent in and farm. They really become helpful in identifying the eligible clients not only for PSNP but also for the CBHI. The social workers have good understanding in identifying the right poorest from the society, perhaps you [UNICEF] taught them. For local leaders and farmers, poverty is relative. They can identify a person with one ox or two oxen as poor. Social workers did irreplaceable jobs in correcting this perception." – KII with CBHI coordinator

Demographic characteristics (household composition, age and disability), on the other hand, are more easily observable criteria by the community and relatively simpler to verify. But not everyone agrees that demographic criteria should be prioritized in selecting PDS clients into the PSNP or their eligibility for the premium waiver.

"The major challenge is related to your criteria, first, it says that PDS clients should be above 65 years of age and the person should be disabled. We think that the inclusion into PDS should not be dependent on age and disability. We believe that the parameter should be poverty status. For example, there are aged persons, above 65 years of age, but who are wealthier. There are also disabled persons who are wealthier. This confuses us. To select those who actually deserve the support, we discussed with food security [task force] and agreed on the way forward." – KII with CBHI coordinator

Second, inclusion and exclusion errors emerging from community-based targeting remain a recurrent challenge. The primary risk in this approach is that it allows room for local interest groups to exert undue influence on the targeting process. The majority of key informants highlighted that the targeting process is characterized by elite capture and indications that benefits are distributed to better-off households including families or friends of project staff or village leaders.

Interviews with social workers and development agents confirm that considerable retargeting efforts are directed towards removing non-eligible clients from the programme. For example, many key informants mentioned para-household members, referred to locally as "Tibis" (aka parasites) who are registered as members in client households, despite not being eligible for the programme. Many of these are described as family members of the kebele leadership. They not only draw on PSNP benefits, but have been accused of capturing premium waivers, which allow them to register for CBHI for free.

"In the screening and verification period among clients, we found some "Tibis" which means cohabitants with clients who did not deserve the support of the programme and when we screen and reject them from the programme, they usually become angry and fight with us. The presence of members in the community who are interested to be part of the programme while they are

not eligible for it is a challenge that sometimes we communicate with the woreda to stop their interruption." – KII with social worker, Libo Kemkem

"[Tibis] do not deserve the free services [CBHI] but may have access to waiver. These are mainly family members of the kebele administrative leaders." – KII with CBHI coordinator

Social workers faced considerable problems and challenges when trying to address inclusion errors and ensure that the programme identifies and reaches the poorest members. During the screening process, social workers have encountered numerous political intrusions and obstacles from local elites, as well as intimidation from "Tibis" themselves.

"Sometimes some of the "Tibis" tend to harass me physically but this problem is now solved with the help of the woreda and PSNP task forces." – KII with social worker, Libo Kemkem

"The screening of eligible and the rejection of the illegible was our first task and when you do this with the administrative officials, they usually mislead and corrupt the process. Because of this, [we] as a social worker, do the screening by ourselves. This makes the administrators offensive. Sometimes we find a single member household registered a household with four or more members by the administrators and it was a big challenge to resolve this corrupted process." – KII with social worker, Libo Kemkem

Perceived unfairness and lack of transparency in targeting processes can create community divisions and intercommunity conflicts. Several respondents benefiting from the programme expressed concern that programme involvement had led to community divisions and grievances between clients and non-clients because of perceived inclusion or exclusion errors related to unfairness with the targeting process.

"There is a problem like people competing with each other to be included in the PSNP." – KII with development agent, Libo Kemkem

"My husband is guard for the kebele. Although they know our poverty and economic hardships some people complain why he is enrolled in the PSNP thinking that he does not deserve the aid and have enough income [...] Whenever he is on duty and travels somewhere they plot to get him arrested and remove from the safety net." – IDI with caregiver of malnourished child, Libo Kemkem

On a positive note, the recent engagement of social workers in the retargeting and screening process has led to significant improvements to the process and its outcomes. Several key informants have expressed great appreciation and satisfaction with social workers' involvement in retargeting. According to key informants, social workers have contributed significantly to making the targeting process more transparent and accurate, thus ensuring that non-eligible members are removed from the PSNP and cannot access the CBHI premium waiver.

"They really become helpful in addressing the right eligible people not only for PSNP but also for the CBHI." – KII with CBHI coordinator

"There is a change when she assigned as social worker in the community. At the end of June, we are told to recruit the names for existing clients for PDS inclusion during retargeting. We already did that. She brings this direction, so we know who is PD this year, and who will be PDS next year." – KII with development agent, Dewa Chefa

"Because we fight against the Kebele administrators to ensure the proper screening of clients the woreda is now supporting us in our ideas." – KII with social worker, Libo Kemkem

5.9 Client rights and the grievance mechanism

According to the PSNP implementation manual, PSNP coordinators and development agents are required to provide clear and transparent information to clients about their basic rights and responsibilities. This includes information related to programme participation, admission criteria and enrolment process, the type and size of entitlements, co-responsibilities, and available grievance mechanisms to lodge complaints related to programme implementation. According to key informants, this basic information is also imprinted onto the IDs of clients.

"We tell every client the amount of payment per month per member clearly, which is their right to know. The other thing is also we will include their right and responsibilities on their identity cards and also development and extension workers are mandated to create awareness about their rights and responsibilities." – KII with social worker, Libo Kemkem

"The first thing is they need to know how much they are paid on daily and monthly basis, when and how clients are going to appeal, what requirements must be fulfilled when clients are going to be graduated, where should the client appeal when his payment is reduced. They also need to know that they have to engage in community development works." – KII with development agent, Dewa Chefa

Findings suggest that clients are relatively well informed about work requirements and basic aspects of their entitlements (for example, the size of the transfer and payment schedule), as well as how and where to lodge complaints.

"We know that we have to work. They tell us amounts of money that we get." – IDI with PW client, Dewa Chefa

"Yes, we can make complaint about PSNP. We make complain at Kebele administration. If it is not resolved at kebele level, we will go to Addis Zemen to make complain to woreda finance." – IDI with PW client, Libo Kemkem

At the same time, clients have limited awareness about the process of identification and transition of into TDS (particularly how this occurs, who identifies eligible clients, the duration of enrolment, and benefits). There is an indication that rural women may experience additional obstacles in obtaining information about their rights as a result of their social exclusion and limited participation in the public domain, as well as work burdens. These barriers hinder their mobility outside their household and access to information and grievance mechanisms.

"I have never attended any meetings as I simply go monthly to receive the payment. I spend most of my time at home to take care of my mother. Thus, I do not know my rights." – IDI with PDS client, Libo Kemkem

Interviewer: "If you have any complaint regarding the programme, do you know where and how to make it?"

Respondent: "I don't know. I don't attend any meeting and I don't know how to do it."

Interviewer: "So you have never made a complaint. Am I right?"

Respondent: "Never. I have a child to take care of that I could not leave and go anywhere. Even when I go to market, I face difficulty." – IDI with PDS client, Dewa Chefa

Some respondents are aware of the grievance and complaints system in their kebele. Several have used these to lodge complaints about programme implementation, mainly related to the reduction in payment amounts and problems with targeting.

"Yes, it is possible to make complaint about the PSNP. We complained about payment reduction." – IDI with PW client, Dewa Chefa

Grievance committees are set up at each kebele to enable clients to lodge complaints in their communities. If these cannot be resolved at the kebele level, complaints are referred to the woreda administration.

"If we face any problem on PSNP we report to social workers, and kebele leaders and woreda level until we get solution." – IDI with caregiver with malnourished child, Libo Kemkem

"Wherever they come we need to serve them or we will send them to their kebele to get solution. Also there is appeal committee in every kebele. If the condition is beyond the kebele appeal committee they will be referred to us and we will try to solve the problem. However, according to the regulation, the appeal technical committee should meet every month and need to solve problems on a monthly basis. But it is impossible to push someone to be there every month without benefit." – KII with PSNP coordinator

Key informant interviews reveal that, in practice, grievance committees do not meet regularly. As a result, social workers seem to be the entry point for many clients who wish to lodge complaints.

"A PSNP task force is responsible for addressing the complaints of clients. I am also responsible for dealing with the complaints. The clients will tell me their problem. For example, a microfinance client who saved money, but was denied a benefit would come to me about this problem of not receiving his money though he had saved properly. I will discuss this issue with the task force and resolve it. Once they save their money, they have the right to use it at any time they need it." – KII with social worker, Dewa Chefa

Some revealed that their rights to transparent information are not always respected by programme administrators. Clients may also face mistreatment by programme managers when they request information related to their entitlements and lodge their complaints.

"This year they told us they will pay us at the end of January. When we asked about the payment they insult us." – IDI with PW client, Dewa Chefa

"Last year we received every two months ETB 800 and in this year we didn't receive the payment. When we said we have a problem please give us the money, they said why are you in a hurry to eat." – IDI with PW client, Libo Kemkem

Box 5.1. Example of a Complaint Lodged by a PDS Client

Respondent: "I said to the woreda safety net officer that he has a sister at Ambo meda and I argued that he enrolled his sisters and [is] not doing the same to ours. That was the main reason for him to remove me from the safety net. The committee came three times to ask me why I was removed from the safety net. They also say that I have nothing like cattle and it is wrong to exclude me. He said that I sell fuel wood and grass. But, they said that this is not accepted. He was asked to tell them if I have assets, but nothing. So, I was included into the safety net again."

Interviewer: "How did you present your complaint?"

Respondent: "When the person terminated me, I went to the woreda and report to the PSNP and the woreda has investigated the case and allowed me to return back to PSNP." – IDI with PW client, Libo Kemkem

6. CBHI ENROLMENT AND PARTICIPATION

Increasing health insurance coverage has attracted the attention of governments and policymakers in many lower- and middle-income countries as a way to facilitate access to preventive and curative health care utilization. Health insurance coverage, which could be in terms of social health insurance, private health insurance, and CBHI, is meant to protect participating households from unexpected and catastrophic out-of-pocket health expenditure; and is also a promising strategy to achieve universal health care coverage (Spaan et al., 2012).

The INSP aims to increase CBHI enrolment by facilitating access to fee waivers under the CBHI indigent category for direct support households and by encouraging PW households to enrol, though the latter must still pay the premiums. The survey asked about the willingness of households to buy a health insurance package for one year, how much they were willing to pay, their understanding of how CBHI works, household enrolment in the CBHI, and reasons for not enrolling in the CBHI. Information was also collected about satisfaction of households with their CBHI enrolment. This chapter presents the findings on these issues.

6.1 CBHI Enrolment

In health financing strategy, the CBHI is considered a novel approach to minimizing risks related to unexpected and high health expenditures and improving the access to health care among rural and poor households and informal workers. Introduced in 2010/2011 in 13 pilot rural woredas in the regions of Amhara, Oromia, Tigray, and Southern Nations, Nationalities and Peoples, the CBHI aims to reduce the risks among targeted groups (EHIA, 2015). Currently, more than 4 million households in 360 rural woredas are enrolled in the CBHI. The CBHI enrolment rate is about 47 per cent in the targeted regions, with a 77 per cent renewal rate (EHIA, 2018). The scheme is based on voluntary enrolment, although there may be tacit administrative compulsion, and uses the core principles of risk-sharing, community-based decision-making, and community support. The government facilitates the enrolment of vulnerable members of the society through premium waivers.

Each woreda has a target number of households to be enrolled in the CBHI based on the population. According to information obtained from woreda CBHI coordination offices for the year 2018, overall CBHI enrolment ranges from a low of 47 per cent in Libo Kemkem to a high of 78 per cent in Dewa Chefa (see Figure 6.1). All woredas in the current study have either achieved or exceeded the national CBHI enrolment average of 47 per cent while Ebinat and Dewa Chefa woredas have enrolment rates above the Amhara region's average of 61 per cent in 2018.

⁶ Interviews by study personnel with woreda CBHI coordinators suggest that, in some woredas, to increase enrolment and fulfil the minimum requirement (the willingness of 50 per cent of eligible households in the woreda to enrol) to launch the CBHI scheme, PSNP benefits tend to be attached (conditioned) with CBHI enrolment, and CBHI premiums are automatically deducted from PSNP payments without any active decision by households to enrol and pay.

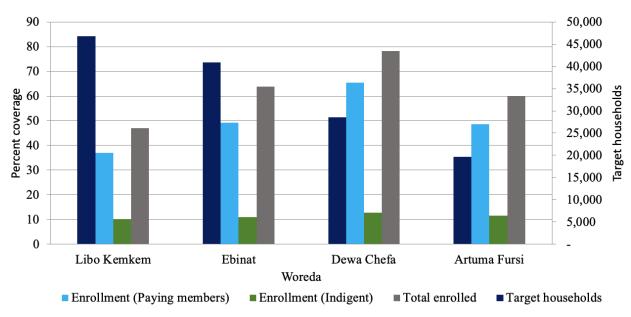


Figure 6.1. CBHI: Enrolment Rate and Target Households, Select Woredas, December 2018

The data show that about 67 per cent of PW households and 52 per cent of PDS households are currently covered by health insurance (*see Table 6.1*). All household members were insured in about 71 per cent and 76 per cent of PW and PDS households, respectively. For the CBHI, 65 per cent and 51 per cent of PW and PDS households are currently enrolled. Furthermore, 98 per cent of PW and PDS CBHI-insured households have valid CBHI cards or in the process or renewal, enabling them to access health care services effectively. This shows that dropping out or the non-renewal of CBHI membership has been low (less than 2 per cent). However, although all PDS sample households that enrolled in the CBHI may technically be expected to renew their membership automatically because of fee waiver, some PDS households were not still covered with a CBHI fee waiver, making it likely that they would be left out of the scheme.

Table 6.1. Enrolment in the Community-Based Health Insurance Scheme

| | | Р | W | | | P | DS | |
|--|-------|-------|-------|---------|-------|-------|-------|---------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Currently covered by health insurance | 0.67 | 0.67 | 0.67 | 0.971 | 0.52 | 0.51 | 0.53 | 0.648 |
| All members have insurance coverage | 0.71 | 0.72 | 0.71 | 0.876 | 0.75 | 0.76 | 0.72 | 0.475 |
| Currently covered by CBHI, among all | 0.65 | 0.67 | 0.64 | 0.55 | 0.51 | 0.51 | 0.51 | 0.98 |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | |
| Household has valid CBHI card or in process of renewal | 0.98 | 0.98 | 0.98 | 0.72 | 0.98 | 0.98 | 0.97 | 0.38 |
| N | 1,828 | 969 | 859 | | 1,234 | 602 | 632 | |
| Received health fee (premium) waiver for CBHI | 0.28 | 0.22 | 0.36 | 0.00 | 0.42 | 0.34 | 0.57 | 0.00 |
| N | 1,792 | 952 | 840 | | 1,207 | 592 | 615 | |

Note: Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

This finding shows that although the fee-waiver is targeted at indigent households such as those included in the PDS category, a sizeable portion of PW households that would typically not meet the

profile for an indigent household by PSNP definition (because PW households are expected to have able-bodied members to work and earn income) have also received a fee waiver. This potentially indicates the difficulties in discerning those qualifying for the indigent category and hence CBHI fee waiver. It further highlights the inadequate harmonization between PSNP and CBHI programmes to identify the right households for inclusion and exclusion.

In the qualitative interviews, respondents were asked about the perceived benefits of enrolling in the CBHI. The majority reported benefits such as reduced out-of-pocket expenditure, reduced exposure to catastrophic health expenditures, reduced negative coping strategies such as falling into debt, and an increased ability to save money that would otherwise be spent on health care.

"We don't have health expenses; we got free medical treatment, which would have been costly."

– IDI with pregnant woman, Libo Kemkem

"It is advantageous, as we know that these days the medical care expenses are costly. People who are not members of the CBHI would be exposed to prohibitive costs such as ETB 30,000 to ETB 40,000 that a farmer cannot afford unless they sell their properties." – KII with social worker, Libo Kemkem

For several respondents, CBHI enrolment increased their ability to manage and reduce health-related costs and led to a reduction in associated stress and anxiety.

"We are big family. We are about 7 people. But we don't worry about how we get money for treatment when we become sick. Hadn't we been enrolled, getting treatment would have been difficult for us. We will have to borrow money from other people." – IDI with pregnant woman, Libo Kemkem

Finally, CBHI membership has contributed to increased health seeking behaviour and uptake of services, particularly among PDS clients who report more frequent visits to health facilities.

"Since I already paid, I got medical treatment more often. Since CBHI is useful, not only for myself but I also advise others to join health insurance." – IDI with PDS Client, Dewa Chefa

"Previously, we may not go to the health facilities if we don't have money, even if we needed services. Now, that has changed. One can take the card and get the treatment. It is the money saved once a year." – IDI with PDS Client, Dewa Chefa

This finding is confirmed through the KIIs as well.

"It doesn't have any drawbacks. Before they didn't visit health centres even for a year even when they are sick but now, they use it up to three times in a month. So this process shows us the benefit of CBHI." – KII with health extension worker, Dewa Chefa

Clients are generally motivated to enrol as a result of awareness raising and sensitization activities, which promote the advantages of health insurance (i.e. reducing health care expenditures) and encourage people to enrol.

"The health extension workers told us about the importance of being covered by the CBHI, they also advise us that all the medical expenses will be covered by the CBHI when you don't have money on your hand. So, we joined and get the benefits. It is useful." – IDI with PDS client, Dewa Chefa

It is important to note that several respondents, including very poor clients, were said to have been under pressure by the local authorities to register, which was also confirmed through the Klls.

"When they [go] to take to the support/aid [safety net], he [husband] was requested to buy insurance and he bought it immediately just there. So, we did not think about it. It was unplanned." – IDI with pregnant woman, Libo Kemkem

"They told us that this kind of order (to enrol in CBHI) has come from the government. Then we paid, took our picture, and they brought the printed photo." – IDI with pregnant woman, Libo Kemkem

"Some of them were not the member of CBHI and some of them were forced to pay the payment. These people have to get free service through CBHI." – KII with health extension worker, Libo Kemkem

To understand the factors behind the lack of insurance coverage among about a third of PW and a half of PDS households, the survey probed the main reasons why they were not insured. Table 6.2 summarizes the responses. The dominant reason for non-enrolment is that fees or premiums are too high. This accounted for 72 per cent and 71 per cent of the reason for non-enrolment among PW and PDS households, respectively. The second most important reason for non-enrolment in CBHI is a lack of understanding of health insurance (10 per cent and 11 per cent among PW and PDS household, respectively). Other reasons for non-enrolment include the long waiting times at enrolment sites, excessive cost and time required to travel to register, perceived poor quality of the care when using the CBHI and complete lack of knowledge about CBHI. However, most of these reasons account for less than 5 per cent of the reason for non-enrolment.

Table 6.2. Main Reasons for non-coverage currently in health insurance

| | | | PW | | | P | DS | |
|---|------|------|------|---------|-------|------|------|---------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Fees or premium is too expensive | 0.72 | 0.73 | 0.71 | 0.787 | 0.71 | 0.71 | 0.69 | 0.751 |
| Travel time or cost is too high | 0.06 | 0.05 | 0.07 | 0.589 | 0.06 | 0.05 | 0.07 | 0.427 |
| Long waiting time at enrolment site | 0.06 | 0.05 | 0.07 | 0.341 | 0.04 | 0.03 | 0.06 | 0.017 |
| Poor quality care with insurance | 0.04 | 0.03 | 0.06 | 0.291 | 0.03 | 0.03 | 0.03 | 0.872 |
| Do not understand insurance | 0.10 | 0.12 | 0.08 | 0.428 | 0.11 | 0.11 | 0.10 | 0.859 |
| Never heard about insurance | 0.03 | 0.02 | 0.04 | 0.374 | 0.05 | 0.06 | 0.04 | 0.678 |
| Eligible for health care fee waiver | 0.03 | 0.04 | 0.02 | 0.409 | 0.05 | 0.06 | 0.03 | 0.238 |
| Do not have photos for registration | 0.01 | 0.01 | 0.01 | 0.612 | 0.01 | 0.02 | 0.01 | 0.413 |
| Missed registration deadline | 0.01 | 0.00 | 0.01 | 0.347 | 0.01 | 0.01 | 0.01 | 0.736 |
| Not interested in the CBHI | 0.00 | 0.00 | 0.00 | 0.323 | 0.00 | 0.00 | 0.01 | 0.059 |
| Fee is paid, but the card has not been received | 0.03 | 0.02 | 0.04 | 0.326 | 0.01 | 0.01 | 0.02 | 0.037 |
| N | 745 | 316 | 429 | | 1,158 | 605 | 553 | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

In the qualitative interviews, as barriers to enrolling (or planning to enrol) in the CBHI, participants also cited low income, the inability to save for registration, high premiums and risk of incurring debt.

"Our income is not enough to save [for CBHI registration].... Sometimes when we receive income from safety net we just cover our food expense by it.... it is not enough for us.... Our life is hand to mouth." – IDI with lactating woman, Libo Kemkem

"We did not enrol in CBHI. We are poor with many children that we take care of, and hence we could not manage additional expense like CBHI yearly contribution. It is shortage of money." – IDI with caregiver of malnourished child, Dewa Chefa

"Even after we made screening and when we asked them to give us their photograph they are not willing to do this. Last year we have identified nearly 38 clients, but they can't bring us the photo because of financial problem and they didn't get the services because of this." – KII with health extension worker, Libo Kemkem

For some respondents, PSNP benefits are not sufficient to cover the costs of CBHI premiums and additional out-of-pocket expenses.

"The PSNP payment with the deduction of saving is too small to cover any expense, even for coffee. We get ETB 300 per month from PSNP and ETB 100 is deducted for saving. The net ETB 200 is partly expended as a remittance for his child and, his ex-wife who lives in other household." – IDI with pregnant woman, Libo Kemkem

When asked whether they plan to renew their CBHI membership and why, many expressed an interest in doing so. Those who are not planning to renew said this was due to prohibitive costs, dissatisfaction with the services, and delays in the enrolment process.

"No, we do not want to be. Because it charges us the yearly payment that we cannot afford. This is the only problem." – IDI with caregiver of malnourished child, Libo Kemkem

"They recently asked me for the payment, but I told them that I am not going to pay again because they didn't give me my membership ID." – IDI with lactating woman, Dewa Chefa

6.2 CBHI enrolment fees and willingness to pay

The most common reason for non-enrolment in health insurance was that premiums/fees are too expensive. Information was collected from the Amhara Regional Bureau of Health about the premium schedule for enrolment in the CBHI (see Table 6.3). Premiums vary by household size and income bracket, but the poorest households who do not have any sources of income and remittances, without able-bodied labour to work and earn, and disabled or elderly could have free access to CBHI and are exempt from premium payment. For the latter category, also identified as indigent members, the woreda covers 30 per cent of the budget required to enrol and retain them in CBHI while the other 70 per cent is subsidized by the regional government. Paying members pay legally stipulated annual premiums according to their household size.

In rural woredas, households with one to five members (regardless of members' age) pay ETB 240; households with six or seven members pay ETB 290, and households with eight members or more pay ETB 340 as an annual premium (ARBoH, 2017). Upon registration of new members, regardless of the size of the household under consideration and age of the new member, households must pay ETB 20 per person, and continue paying the existing premium if the addition of the new member does not change the household's category. However, if the addition of the new member changes the status of the household or moves it to the next household size, they must pay ETB 50 and the premium will be adjusted accordingly.

Table 6.3. Annual Premiums in Rural and Urban Areas, by Household Size and Income

| Categories | Basic househo | Basic household size, number of members | | | | | | | |
|--------------------------------|---------------|---|-----------|--|--|--|--|--|--|
| Categories | 1–5 | 6–7 | 8 or more | | | | | | |
| In rural woredas | 240 | 290 | 340 | | | | | | |
| In urban, town administrations | 350 | 420 | 490 | | | | | | |
| Category C taxpayer traders | 400 | 480 | 560 | | | | | | |
| Category B taxpayer traders | 700 | 840 | 980 | | | | | | |
| Category A taxpayer traders | 1,200 | 1,450 | 1,700 | | | | | | |

Source: ARBoH, 2017.

Note: Basic household size in the data is defined as those people living in the household, including the spouse of the head and children ages under 18. It also includes children with mental illness who cannot support themselves even if they are above 18.

Table 6.4 illustrates the distribution of premiums paid by households that are currently enrolled. The average payment among PW households was ETB 221, while the average among PDS households was about ETB 198. Among PW households, the modal payment was in the range of ETB 240 to ETB 289, while the modal payment was in the range of ETB 1 to ETB 239 among PDS households. About 4 per cent of households paid ETB 340 or more to enrol in the CBHI. The differences in the amounts paid are substantial between the C and T groups among PW and PDS households. The implications of this would have to be carefully factored into future analysis of the programme impacts.

Table 6.4. Premium Payments (in ETB) among Households Enrolled in CBHI

| | | P | W | | | P | DS | |
|---|--------|--------|--------|---------|--------|--------|--------|---------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1–239 | 0.36 | 0.44 | 0.20 | 0.008 | 0.54 | 0.61 | 0.35 | 0.002 |
| 240–89 | 0.51 | 0.47 | 0.58 | 0.197 | 0.37 | 0.33 | 0.48 | 0.048 |
| 290–339 | 0.09 | 0.06 | 0.15 | 0.000 | 0.05 | 0.03 | 0.10 | 0.009 |
| 340 or more | 0.04 | 0.03 | 0.07 | 0.006 | 0.04 | 0.03 | 0.08 | 0.017 |
| Annual household fee or premium is paid | 220.52 | 207.24 | 245.69 | 0.000 | 197.99 | 187.55 | 225.14 | 0.001 |
| N | 1,297 | 765 | 532 | | 642 | 376 | 266 | |

Note: Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

Households were surveyed about the maximum amount of money they would be willing to pay to buy a health insurance package covering the entire household for one year. Referred to as willingness to pay, this is an important indicator in understanding how households value health insurance. Before respondents were asked about their willingness to pay, they were read an informative text on health insurance containing information on the payment schedules (once every year), services coverage (diagnosis, treatment, laboratory tests, surgeries, hospitalization, drugs, delivery, consultations, and so on), inclusion of all household members in the insurance coverage, and its importance to save them from unexpected future health expenditure if they decided to be insured. They were also informed that insured persons who do not need medical treatment in the same year do not get the premiums back at the end of the insurance period; instead, the premiums are kept by the insurance to pay for the medical bills of other insured persons or for expenditures in future years. The text also included information about the possibilities that, in some cases, individuals can also be offered to become members at no

cost and are exempted from paying premiums if these premiums are subsidized by the government. Then, the respondents were asked whether, considering the advantages associated with the proposed scheme, their monthly income, and also that, there are other items their money could be spent on, how much they be willing to pay for the entire household if they decided to enrol in CBHI, or if they are already enrolled at no cost, but suddenly had to pay to be part of the insurance system.

The majority of households, regardless of their PSNP client type and treatment status, would be willing to pay a maximum of between ETB 1 and ETB 239 for the CBHI. This is below the current lowest premium legally assigned to households with one to five members (ETB 240) (see Table 6.5). In the PW sample and in the PDS sample, 71 per cent and 66 per cent, respectively, would be willing to pay a maximum of ETB 1–ETB 239. The next most common range of the premium households would be willing to pay is between ETB 240 and ETB 289. About 12 per cent of PW households and 6 per cent of PDS households were willing to pay premiums in this range. This is above the premium officially expected from households with one to five members, but less than the corresponding premium among households with six or seven members (ETB 290). Furthermore, in the PDS sample, 4 per cent of households stated that they would be willing to pay a maximum of between ETB 290 and ETB 339. About 8 per cent of PW households and almost three times as many PDS households would not be willing to pay any amount to buy health insurance.

Table 6.5. Maximum Amount (ETB) Households Are Willing to Pay to Enrol in the CBHI

| | | P | w | | | PI | os | |
|-------------------------------------|--------|--------|--------|---------|--------|--------|--------|---------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Willing to pay no amount | 0.08 | 0.07 | 0.09 | 0.168 | 0.22 | 0.22 | 0.22 | 0.910 |
| 1–239 | 0.71 | 0.75 | 0.65 | 0.010 | 0.66 | 0.68 | 0.64 | 0.307 |
| 240–289 | 0.12 | 0.14 | 0.11 | 0.431 | 0.06 | 0.06 | 0.05 | 0.550 |
| 290–339 | 0.04 | 0.02 | 0.07 | 0.000 | 0.04 | 0.03 | 0.04 | 0.379 |
| 340 or more | 0.04 | 0.02 | 0.08 | 0.000 | 0.02 | 0.01 | 0.05 | 0.001 |
| Amount willing to pay | 144.07 | 133.20 | 160.54 | 0.026 | 98.20 | 89.94 | 112.73 | 0.119 |
| N | 2,580 | 1,285 | 1,295 | | 2,392 | 1,206 | 1,186 | |
| Amount willing to pay, enrollees | 165.84 | 156.52 | 180.65 | 0.066 | 128.43 | 121.93 | 139.88 | 0.339 |
| N | 1,784 | 961 | 823 | | 1,206 | 599 | 607 | |
| Amount willing to pay, not enrolled | 102.88 | 86.59 | 125.47 | 0.001 | 66.56 | 56.47 | 84.32 | 0.013 |
| N | 796 | 324 | 472 | | 1,186 | 607 | 579 | |
| Amount willing to pay, 1–5 members | 132.78 | 126.50 | 142.59 | 0.180 | 80.75 | 73.40 | 93.71 | 0.094 |
| N | 1,561 | 770 | 791 | | 2,017 | 1,039 | 978 | |
| Amount willing to pay, 6+ members | 162.70 | 144.63 | 188.72 | 0.007 | 180.61 | 168.42 | 201.86 | 0.171 |
| N | 1,019 | 515 | 504 | | 375 | 167 | 208 | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

On average, the maximum amount PW households are willing to pay for a full year coverage for the entire household is about ETB 144 with a corresponding amount of ETB 98 in PDS households. It is instructive to note that willingness to pay is much higher among households currently enrolled than

those not enrolled, and rationally, households with six or more members are willing to pay more than households with one to five members. Clearly, the average values that households are willing to pay to enrol in CBHI, regardless of household size, are all lower than the official minimum premium that is paid by rural households with one to five members.

6.3 Understanding how insurance works and the perceived benefits of the CBHI

A lack of understanding of how health insurance works is the second most important reason given by households that are currently not enrolled in the CBHI (see *Table 6.2*). To explore the issue of understanding of CBHI, respondents were prompted to imagine they enrol their households in the CBHI. They were then asked questions to gauge their understanding of how the CBHI works (*see Table 6.6*). Respondents were asked whether CBHI would cover the costs of a medical consultation, the purchase of drugs, or a checkup for pregnancy, even though this service is free independent of the CBHI. The responses show that, in PW and PDS households alike, 63 per cent of respondents believe that the CBHI covers medical costs and consultations, the purchase of drugs, and checkups. Respondents were then asked whether, if they need access to certain expensive drugs or surgery, these costs would be completely covered by the CBHI.

If they need access to certain drugs or surgery, 77 per cent of PW households believe the CBHI fully covers the costs, while 12 per cent understand that, although the CBHI covers the costs of certain drugs or surgery, the households would still have to pay part of the costs. A third of households in both the PW and the PDS samples think that, if they are registered with the CBHI and go to a health facility, they must pay some of the costs or fees in advance. These outcomes are balanced between the two study arms.

Table 6.6. Understanding How CBHI Works

| | | F | W | | | P | DS | |
|---|-------|-------|-------|---------|-------|-------|-------|---------|
| Indicator | All | С | Т | p-value | All | С | T | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| CBHI covers medical costs related to pregnancy | 0.63 | 0.62 | 0.66 | 0.283 | 0.63 | 0.64 | 0.62 | 0.633 |
| CBHI fully covers certain drugs or surgery | 0.77 | 0.78 | 0.76 | 0.744 | 0.79 | 0.83 | 0.73 | 0.004 |
| I need to pay part of the cost of drugs or surgery | 0.12 | 0.12 | 0.11 | 0.810 | 0.09 | 0.07 | 0.11 | 0.080 |
| Premiums are to be returned if no care is sought | 0.07 | 0.03 | 0.14 | 0.000 | 0.07 | 0.04 | 0.12 | 0.000 |
| I must pay some costs in advance with CBHI | 0.33 | 0.32 | 0.35 | 0.372 | 0.32 | 0.32 | 0.33 | 0.899 |
| CBHI allows visits at public health facilities | 0.98 | 0.98 | 0.99 | 0.654 | 0.98 | 0.98 | 0.97 | 0.279 |
| CBHI allows visits to private health facilities | 0.01 | 0.02 | 0.01 | 0.234 | 0.02 | 0.02 | 0.01 | 0.384 |
| CBHI allows visits to non- governmental facilities | 0.00 | 0.00 | 0.00 | 0.383 | 0.00 | 0.00 | 0.00 | 0.106 |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | |

Note: Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

This shows that, although a majority of households have adequate knowledge of some aspects of the CBHI, such as the coverage of services related to pregnancy, other features, including the coverage of surgery and certain drugs and whether individuals have to pay some costs in advance, show that the woreda CBHI coordination offices, the CBHI focal persons, the community sensitization committee on CBHI enrolment, health extension workers, social workers and kebele administrators must still fill the information gap on the services included in the CBHI service package.

The Amhara Region CBHI implementation manual states that CBHI-insured rural households are allowed to seek medical care from contracted government health facilities, including health centres and woreda and zonal hospitals, depending on their location and following the referral system. The woreda CBHI office, in consultation with the community, makes contractual agreements with nearby, accessible government health facilities, even if they are located in neighbouring woredas. Accordingly, households seeking services need to go to these health facilities to obtain medical assistance. The referral system must also include contracted health facilities. The service package for all types of CBHI members covers both inpatient and outpatient services and drugs purchased at health facilities and pharmacies, including private and non-governmental facilities, based on the physician's prescription. Accordingly, respondents were asked what types of health facilities they may visit using the CBHI. They were offered a list of possible answers (see Table 6.6). The results show that 98 per cent of households in the PW and PDS samples report that they can go to a government hospital, health station, or health centre, a health post, or other public facility or pharmacy to obtain medical services. Only 1 per cent of PW households and 2 per cent of PDS households believe they may visit private health facilities to seek medical services using the CBHI. However, no household reported that non-governmental health facilities can be accessed using the CBHI.

6.4 Perceptions of the CBHI

Household perceptions of the CBHI is a key source for understanding how the CBHI is functioning and to anticipate its future progress and uptake by non-participants. Households currently registered with the CBHI were surveyed about their levels of satisfaction on a scale of 1 to 10 – where 1 is the least satisfaction and 10 is the greatest – and about the potential benefits of CBHI enrolment. The average level of satisfaction was 6.83 among the PW sample and 6.89 among the PDS sample (see Table 6.7). Thus, overall, households show above average satisfaction with CBHI services, and the level of satisfaction is similar in PW and PDS households. Among PW households, 82 per cent believe that CBHI enrolment will make the search for health care easier and 84 per cent believe that CBHI enrolment will make health care more affordable. The respective shares in the PDS households are 83 per cent and 86 per cent. The outcomes are balanced between comparison and treatment households.

Table 6.7. Satisfaction with the Community-Based Health Insurance Scheme

| | | F | W | | | Р | DS | |
|--|-------|-------|-------|---------|-------|-------|-------|---------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Overall satisfaction with the CBHI | 6.83 | 6.81 | 6.87 | 0.777 | 6.89 | 6.89 | 6.89 | 0.993 |
| N | 1,792 | 952 | 840 | | 1,207 | 592 | 615 | |
| CBHI enrolment will make seeking health care easier | 0.82 | 0.82 | 0.82 | 0.973 | 0.83 | 0.84 | 0.80 | 0.180 |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | |
| CBHI enrolment will make health care more affordable | 0.84 | 0.84 | 0.84 | 0.948 | 0.86 | 0.88 | 0.82 | 0.073 |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | |

Note: Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

The qualitative interviews also probed about satisfaction with the CBHI scheme. Respondents who are currently enrolled have identified several drawbacks and challenges related to their CBHI membership.

First, many CBHI clients still incur out-of-pocket expenses mainly for medications, as these are often not available in government-run pharmacies. Clients are regularly referred to private pharmacies to obtain medications but may be refused refunds for incurred expenses. Additional research is needed, however, to unpack the reasons why these households still had out-of-pocket expenditures for health care, and how this may have affected their utilization of health services, and other non-health expenditures as well as their household functions (for example, food security, productive investments, and so on).

"When we go to receive the service they inform us to wait more time. They would not give detail diagnostics, and give us tablets. They will also tell us 'we don't have medicine and you can go to private pharmacy'. So, we will pay ETB 80–ETB 100 and receive the medical treatment. [Private pharmacies] will be not willing to provide the receipt and medicine, because they said they are told not to give proofs. We can't claim refunds without proofs. Generally we are not satisfied with the services." – IDI with lactating woman, Libo Kemkem

Second, several respondents complained that they are treated unfairly by health staff and receive different treatment compared to non-CBHI users of health care. The latter are said to be prioritized because they pay for services in full and in cash. Respondents also expressed concerns about the quality of services, particularly limited access to drugs and injections in the government-run pharmacies. Importantly, this appears to discourage families from enrolling or renewing their memberships.

"The health professionals prefer those who pay in cash to us who are covered with health insurance. Even if we are in urgent need of the service they give priority to those who pay in cash."-IDI with pregnant woman, Libo Kemkem

"The health workers are not serving us [CBHI members] as other patients. They send us to buy medication from private pharmacy." – IDI with PDS Client, Dewa Chefa

This finding was confirmed through KIIs with CBHI coordinators.

"Improve the quality of the services for the CBHI clients. The service should be delivered for the clients of CBHI without bias." – KII with CBHI coordinator

"To improve services, the people have to obtain the medications through injection rather than in tablet form; they have to stop sending clients to private clinics and try to provide the services at health centres. But how are the drugs, which are not available at government facilities, being made available at private clinics? You have to verify this." – KII with development agent, Libo Kemkem

Third, several respondents, especially in Gula Kebele in Dewa Chefa, have faced various administrative challenges with CBHI enrolment, including delays with registration and not receiving their membership IDs on time to claim benefits or receive refunds, which has jeopardized their timely access to and uptake of services.

"They paid ETB 260 for a premium and take the family member photo but they don't get the identification card on time." – IDI with lactating woman, Dewa Chefa

"The other issue is that we have no treasurer and cashier. After treatment, when clients come back with a voucher to be refunded for medication cost, there is no payer with guarantee." – KII with CBHI coordinator

It appears that clients were also not always informed about the status and administrative problems of their enrolment.

Interviewer: "When did you register?"

Participant: "Two years ago . . . , but I am still not benefiting because I don't have my ID card"

Interviewer: "Do you know the reason why you don't have the membership card?"

Participant: "I don't know." - IDI with lactating woman, Dewa Chefa

However, CBHI coordinators complained that problems stem from clients who lack a basic understanding of how registration works, thereby leading to false expectations and dissatisfaction with service providers.

"The activity is burdensome. I mean it's so loaded. Our society lacks awareness and expects you to take immediate action. For example, as per regulation of the region, a new member must wait two months [to be enrolled and start obtaining services], but their wish is to pay now and get identity cards immediately. Such situations lead to the collapse of progress in the health insurance system. So, it is challenging to prevent this." – KII with CBHI coordinator

7. HOUSEHOLD ECONOMIC STATUS AND ACTIVITY

7.1 Food security

Table 7.1 presents various indicators that assess the food security status of the PSNP households. All households have, on average, close to three meals per day. Among PW households, 80 per cent have three meals a day, whereas 20 per cent have two meals a day. Among PDS households, the share that have three meals a day is slightly lower, at around 70 per cent, while 30 per cent of households have two meals a day. Only 20 per cent of households, both among the PW and PDS households, never worried that the household would not have enough food in the previous month. Moreover, more than 76 per cent of PW households and 68 per cent of PDS households were food insecure at least one month in the previous 12 months, and the average number of months when households were food insecure was four. These indicators were balanced between treatment and comparison arms in both the PW and PDS categories. The last column shows food insecurity status based on the ESS data. The levels of food insecurity are lower compared with the dataset here: less than 16 per cent of households were food insecure at least one month in the previous year, and the average number of months households were food insecure was 2.6. These statistics comparing ESS with the sample here indicate that the sample is even more food insecure and deprived than the average household in rural Amhara.

Table 7.1. Food Security

| | | ı | PW | | | F | PDS | | ESS |
|--|-------|-------|-------|---------|-------|-------|-------|---------|---------------|
| Indicator | All | С | T | p-value | All | С | T | p-value | data, 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Meals per day, number | 2.80 | 2.81 | 2.79 | 0.788 | 2.70 | 2.70 | 2.70 | 0.959 | |
| Two meals per day | 0.19 | 0.19 | 0.20 | 0.872 | 0.29 | 0.30 | 0.28 | 0.702 | |
| Three meals per day | 0.80 | 0.81 | 0.79 | 0.821 | 0.70 | 0.70 | 0.71 | 0.870 | |
| Never worried about food | 0.22 | 0.22 | 0.23 | 0.974 | 0.23 | 0.24 | 0.23 | 0.920 | |
| All HH members have sufficient food | 0.35 | 0.37 | 0.33 | 0.422 | 0.32 | 0.32 | 0.34 | 0.605 | |
| Food insecure at least one month in the year | 0.76 | 0.75 | 0.78 | 0.543 | 0.68 | 0.67 | 0.71 | 0.294 | 0.16 |
| # of months of food insecurity | 4.36 | 4.40 | 4.28 | 0.614 | 4.30 | 4.19 | 4.48 | 0.334 | 2.57 |
| Child eats nutritious food | 0.15 | 0.15 | 0.14 | 0.738 | 0.07 | 0.06 | 0.07 | 0.614 | |
| Child has enough food | 0.17 | 0.17 | 0.17 | 0.807 | 0.08 | 0.08 | 0.08 | 0.988 | |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | |

Note: Indicators are compared to ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

Households with children ages under 5 were asked

- Whether there was a time (in the past four weeks) when any of the children younger than 5 years old did not eat healthy and nutritious foods because of a lack of money or other resources; and
- Whether, over the same period, a child was not given enough food due to lack of money or resources

These indicators have been reversed coded to indicate increasing food security and Table 7.1 indicates whether children always had nutritious foods or enough food. Among PW households, 15 per cent

reported of children always eating nutritious food compared to 6 per cent among PDS households. On children always having enough food, the corresponding shares were 17 per cent and 8 per cent for PW and PDS households, respectively. These statistics show that, even among households receiving the PSNP, majority is still food insecure or at risk of not having enough food every month of the year. All of the food security outcomes are balanced between treatment arms in both the PW and PDS categories.

7.2 Assets

Table 7.2 summarizes the assets that households own. Not included in the table are those assets owned by fewer than 1 per cent of the households. Fewer than 5 per cent of households own any kind of stove (kerosene, gas, or electric). More than 60 per cent, however, own a blanket, and between 20 per cent and 30 per cent of households own a mattress or a bed. Few households own a radio (less than 5 per cent) or a clock or watch (less than 10 per cent). Ownership of any kind of phone (mobile or fixed line) is higher at around 20 per cent. More than 60 per cent of households own a non-electric stove.

Table 7.2. Assets

| | | P | W | | | PI | os | |
|--------------------------|-------|-------|-------|---------|-------|-------|-------|---------|
| Assets | All | С | Т | p-value | All | С | Т | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Household assets | | | | | | | | |
| Any stove | 0.04 | 0.04 | 0.03 | 0.449 | 0.03 | 0.03 | 0.03 | 0.673 |
| Blanket | 0.65 | 0.67 | 0.63 | 0.545 | 0.63 | 0.62 | 0.64 | 0.789 |
| Mattress or bed | 0.25 | 0.27 | 0.23 | 0.248 | 0.28 | 0.29 | 0.28 | 0.817 |
| Clock or watch | 0.09 | 0.09 | 0.09 | 0.964 | 0.05 | 0.05 | 0.05 | 0.762 |
| Any phone | 0.20 | 0.19 | 0.21 | 0.702 | 0.14 | 0.13 | 0.16 | 0.358 |
| Radio | 0.03 | 0.03 | 0.03 | 0.764 | 0.02 | 0.01 | 0.03 | 0.017 |
| Non-electric mitad | 0.73 | 0.76 | 0.69 | 0.096 | 0.64 | 0.63 | 0.65 | 0.655 |
| Agricultural assets | | | | | | | | |
| Sickle | 0.81 | 0.81 | 0.81 | 0.960 | 0.56 | 0.55 | 0.59 | 0.392 |
| Axe | 0.05 | 0.04 | 0.07 | 0.089 | 0.04 | 0.03 | 0.04 | 0.584 |
| Pickaxe | 0.23 | 0.23 | 0.24 | 0.915 | 0.12 | 0.11 | 0.14 | 0.311 |
| Traditional plough | 0.35 | 0.36 | 0.33 | 0.483 | 0.18 | 0.18 | 0.19 | 0.676 |
| Land | 0.43 | 0.44 | 0.42 | 0.463 | 0.38 | 0.39 | 0.37 | 0.656 |
| Total assets (out of 12) | 3.86 | 3.92 | 3.77 | 0.208 | 3.08 | 3.02 | 3.17 | 0.315 |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

Moving to agricultural assets, more than 80 per cent of PW households and more than 50 per cent of PDS households own a sickle. Less than 5 per cent of household own an axe in both PW and PDS household categories. Ownership of pickaxe is much high at 23 per cent and 12 per cent among PW and PDS households respectively. Ownership of a traditional plough is higher: around 35 per cent in PW households and 20 per cent in PDS households. Finally, ownership of land is around 40 per cent.

The average PW household owns about 4 out of the 12 items while the average PDS household owns 3 of them. The ownership of assets is balanced between T and C subgroups of the PW and PDS households.

7.3 Housing conditions and water, sanitation and hygiene

This section analyses the housing as well as water, sanitation and hygiene conditions of households. The first indicator is the number of persons per room, which is slightly better in PDS households than in PW households (see Table 7.3). On average, the occupancy is about 4 persons per room in PW households and 3 persons per room in PDS households. Most households have some source of lighting. While approximately 10 per cent have electricity from meter or generator, around 20 per cent have solar energy, between 30 and 40 per cent have electric-chargeable battery depending on the household type, and between 15 and 25 per cent have a kerosene lamp. Although DHS data did not have disaggregated information on the source of lighting, they showed that more than 95 of households had access to some source of lighting, which matches the information provided here.

Table 7.3. Housing Conditions

| | | P | W | | | Р | DS | | DHS, |
|---|-------|-------|-------|---------|-------|-------|-------|---------|-------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | 2016 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Persons per room, number | 3.91 | 3.90 | 3.93 | 0.880 | 2.56 | 2.52 | 2.61 | 0.477 | |
| Source of lighting | | | | | | | | | |
| Electricity | 0.10 | 0.10 | 0.09 | 0.662 | 0.13 | 0.13 | 0.13 | 0.866 | |
| Solar energy | 0.24 | 0.27 | 0.20 | 0.135 | 0.20 | 0.21 | 0.19 | 0.590 | |
| Electric chargeable battery | 0.44 | 0.44 | 0.43 | 0.862 | 0.37 | 0.38 | 0.35 | 0.594 | |
| Kerosene lamp | 0.18 | 0.16 | 0.22 | 0.094 | 0.23 | 0.22 | 0.26 | 0.394 | |
| Wall: natural or rudimentary | 0.99 | 0.98 | 1.00 | 0.032 | 0.98 | 0.97 | 0.99 | 0.038 | 1.00 |
| Roof: natural or rudimentary | 0.48 | 0.47 | 0.50 | 0.609 | 0.48 | 0.49 | 0.48 | 0.860 | 0.33 |
| Flooring: earth or sand | 0.70 | 0.65 | 0.77 | 0.054 | 0.74 | 0.72 | 0.77 | 0.225 | 0.33 |
| Flooring: dung | 0.27 | 0.30 | 0.22 | 0.162 | 0.21 | 0.22 | 0.20 | 0.619 | 0.65 |
| No toilet facility | 0.89 | 0.88 | 0.90 | 0.359 | 0.86 | 0.86 | 0.87 | 0.834 | 0.99 |
| Makes water safe | 0.02 | 0.02 | 0.02 | 0.820 | 0.01 | 0.01 | 0.01 | 0.825 | 0.09 |
| Has water, soap, or other cleansing agent | 0.00 | 0.00 | 0.00 | 0.322 | 0.00 | 0.00 | 0.00 | 0.316 | 0.03 |
| Improved source of water | 0.56 | 0.58 | 0.53 | 0.528 | 0.56 | 0.54 | 0.60 | 0.406 | 0.56 |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | 1,615 |

Note: Indicators are compared to DHS sample of 2016 for rural Amhara. If missing, then the indicator is not available in the DHS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

The majority of household have a natural or rudimentary wall as opposed to a finished wall (made of cement, stones, bricks, and so on). More than 45 per cent of the households from all groups have natural (no roof, mud, sod) or rudimentary roofing (plastic sheet, bamboo, wood planks, cardboard). This percentage is higher if compared with DHS data, where a higher percentage of households in rural Amhara have finished roofing. Most of the households have a floor made either of earth or sand, or of dung (around 70 per cent and 20 per cent, respectively). The DHS data show a different statistic: while more than 90 per cent of households have a floor made of earth or sand, or dung (as in the dataset here), a higher percentage have a floor made of dung and a lower percentage have a floor made of sand or earth.

Fewer than 1 per cent of households make water safe to drink even if the water comes from an unimproved source, and nearly all households have no water and soap or other cleansing agents to wash hands. The shares shown in Table 7.3 are similar to the estimates derived from the DHS data.

Only 10 per cent of households have a sanitation facility, which includes a flush toilet, an improved pit latrine, or a pit latrine with slab. Approximately half the sample has access to an improved source of water, including piped water, a protected well or spring, or bottled water. All these indicators are balanced between the comparison and treatment subgroups of the PW and PDS categories.

7.4 Livestock ownership

In rural Ethiopia, livestock, a key component of economic capital and household economic activity, is an important productive asset and source of food that facilitates farming and marketing activities, contributing to mid- and long-term outcomes such as improved nutrition directly and indirectly. Furthermore, rural households also tend to sell off livestock, in addition to other coping strategies, in times of shocks and economic stresses and when they are not insured against these shocks. With this understanding, information was collected on the livestock ownership of households, both on- and off-farm. The reference period is 12 months before the survey date.

Respondents were asked whether their households own various types of animals, and, if so, the numbers owned on- and off-farm were recorded, along with information on the numbers of the various types of animals the households had owned exactly one year previously in any location. Among the PW sample, the distribution of livestock ownership was as follows: oxen, 19 per cent; cows, 20 per cent; sheep, 11 per cent; goats, 9 per cent; heifers, 5 per cent, and young bulls, 1 per cent (*see Table 7.4*). However, no PW household owned horses, mules, or camels. In the PDS sample, the distribution was as follows: cows, 20 per cent; oxen, 15 per cent; calves, 15 per cent; goats, 10 per cent; sheep, 8 per cent; donkeys, 8 per cent; bulls, 5 per cent, and heifers, 5 per cent. No PDS households owned mules or horses. These outcomes are balanced between comparison and treatment households. The results show that cows, oxen, calves (in the PDS sample only), goats and sheep are the most prevalent animals owned by both PW and PDS households. However, the ownership of some animals is unbalanced between the two study arms.

Table 7.4. Livestock Ownership, by Animal Type

| | | F | PW | | | P | DS | |
|-----------------|-------|-------|-------|---------|-------|-------|-------|---------|
| Livestock owned | All | С | T | p-value | All | С | Т | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Calves | 0.14 | 0.12 | 0.18 | 0.002 | 0.15 | 0.14 | 0.17 | 0.316 |
| Bulls | 0.07 | 0.05 | 0.09 | 0.001 | 0.05 | 0.04 | 0.06 | 0.165 |
| Oxen | 0.19 | 0.19 | 0.19 | 0.947 | 0.15 | 0.14 | 0.15 | 0.941 |
| Heifers | 0.05 | 0.04 | 0.06 | 0.176 | 0.05 | 0.04 | 0.05 | 0.619 |
| Cows | 0.20 | 0.19 | 0.21 | 0.284 | 0.20 | 0.21 | 0.18 | 0.336 |
| Sheep | 0.11 | 0.11 | 0.11 | 0.977 | 0.08 | 0.08 | 0.08 | 0.933 |
| Goats | 0.09 | 0.09 | 0.09 | 0.995 | 0.10 | 0.11 | 0.08 | 0.379 |
| Horses | 0.00 | 0.00 | 0.00 | 0.319 | 0.00 | 0.00 | 0.00 | 0.326 |
| Donkeys | 0.12 | 0.14 | 0.09 | 0.098 | 0.08 | 0.09 | 0.06 | 0.209 |
| Young bulls | 0.01 | 0.01 | 0.01 | 0.624 | 0.00 | 0.00 | 0.01 | 0.020 |
| Chickens | 0.25 | 0.20 | 0.33 | 0.000 | 0.21 | 0.20 | 0.22 | 0.513 |
| Beehives | 0.01 | 0.01 | 0.01 | 0.033 | 0.01 | 0.01 | 0.01 | 0.949 |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | |

Note: Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

Next, the number of animals currently owned (on the farm and away) is aggregated as cattle (calves, bulls, oxen, heifer, cows, and young bulls), pack or draught animals (horses, donkeys, mules and camels), sheep, goats and chickens using the tropical livestock unit (TLU) conversion factor, and new household-level variables have been created (Jahnke, 1982; Storck et al., 1991). The following conversion factors have been used for the aggregation: camels = 1.0, cattle (including bulls, oxen, young bulls, and cows) = 0.7, horses = 0.8, mules = 0.7, donkeys and asses = 0.5, heifers = 0.5, calves = 0.2, sheep = 0.1, goats = 0.1, and chickens = 0.01. Although information was also collected on beehives owned by households, this indicator is excluded from the analysis because of the lack of a TLU conversion factor.

The results show that PW households owned 0.41TLU cattle, 0.07TLU pack animals, 0.03TLU sheep, and 0.02TLU goats (see Table 7.5). PDS households owned 0.39TLU cattle, and 0.06TLU pack animals, 0.02TLU sheep, 0.02TLU goats and 0.01TLU chicken. These outcomes are balanced between the two study arms. The results show that while cattle are by far the highest number of animals owned by both PDS and PW households, pack animals make the second highest owned animals.

Table 7.5. Livestock Currently Owned by Households, in Tropical Livestock Units

| | | P | W | | PDS | | | | | |
|--------------|-------|-------|-------|---------|-------|-------|-------|---------|--|--|
| Animals | All | С | Т | p-value | All | С | Т | p-value | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | | |
| Cattle | 0.41 | 0.38 | 0.44 | 0.210 | 0.39 | 0.39 | 0.39 | 0.963 | | |
| Pack animals | 0.07 | 0.09 | 0.06 | 0.152 | 0.05 | 0.06 | 0.04 | 0.318 | | |
| Sheep | 0.03 | 0.02 | 0.03 | 0.221 | 0.02 | 0.02 | 0.02 | 0.919 | | |
| Goats | 0.02 | 0.02 | 0.02 | 0.787 | 0.03 | 0.03 | 0.02 | 0.493 | | |
| Chicken | 0.01 | 0.01 | 0.01 | 0.003 | 0.01 | 0.01 | 0.01 | 0.210 | | |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

The values in Table 7.5 were also aggregated according to the current household ownership of livestock on the farm, away from the farm, and in total and the values exactly one year previously to gain an understanding of the changes (see Table 7.6). Among the PW sample, of the total animals owned (0.54 TLU), 0.52 TLU of animals are owned on the farm and 0.02 away while 0.49 TLU animals owned by PDS sample are on the farm and 0.01 TLU are away from the total number of animals owned (0.50 TLU). Looking at the total number of animals owned exactly one year ago, it shows that the number of animals owned increased by 0.04 TLU in PW sample and by 0.02 in PDS sample. All outcomes in Table 7.4.3 are balanced between the comparison and treatment households.

Table 7.6. Changes in Livestock Ownership, in Tropical Livestock Units

| | | ı | PW | | PDS | | | | |
|---|-------|-------|-------|---------|-------|-------|-------|---------|--|
| Indicator | All | С | Т | p-value | All | С | T | p-value | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Animals currently owned on the farm | 0.52 | 0.51 | 0.55 | 0.480 | 0.49 | 0.50 | 0.47 | 0.758 | |
| Animals currently owned but away | 0.02 | 0.02 | 0.02 | 0.649 | 0.02 | 0.01 | 0.02 | 0.141 | |
| Animals currently owned, total | 0.54 | 0.52 | 0.57 | 0.454 | 0.50 | 0.51 | 0.49 | 0.844 | |
| Animals owned exactly one year ago, total | 0.50 | 0.50 | 0.50 | 0.891 | 0.48 | 0.49 | 0.46 | 0.746 | |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

7.5 Non-Farm Enterprises

Information was also collected on household non-farm enterprises or household business ventures that had been operating or that had been permanently or temporarily shut down during the 12 months prior to the survey. Non-farm enterprises include non-agricultural businesses, such as the processing and sale of agricultural by-products, trading businesses, the sale of goods on streets or in markets, the offices of professionals, the provision of professional services, transportation services, and bars and restaurants. Information was elicited on all non-farm enterprises owned or otherwise operated by any household members.

Rural non-farm enterprises are expected to diversify livelihoods. They also represent a strategy to protect households from negative outcomes because of a decline in agricultural productivity caused by unfavourable agroclimatic conditions, resulting in poverty and food insecurity (Rantšo, 2016). They provide employment and incomes and contribute to reducing poverty and inequality (de Janvry, Sadoulet, and Zhu, 2005). They may potentially establish forward and backward links with agriculture (Sinha, 2007). They likewise play an important role in agricultural value added, thereby encouraging the expansion of rural industries (Varma and Kumar, 1996). In Ethiopia, studies have found that one rural household in five owns a rural non-farm enterprise (Nagler and Naudé, 2017). There is empirical evidence indicating that, although rural enterprises are less productive than urban enterprises, the productivity of rural non-farm enterprises is greater in locations where farms are generally less productive, suggesting that rural non-farm enterprises could represent important economic activities in the drought-prone areas where the PSNP also operates (Rijkers, Söderbom, and Loening, 2010; Owoo and Naudé 2017).

Table 7.7 illustrates the number of non-farm enterprises owned by the PW and PDS households during the 12 months previous to the survey. Approximately 82 per cent of PW households and 90 per cent of PDS households had not owned or operated a non-farm enterprise during the 12 months prior to the survey. In the PW sample, 15 per cent of households had owned or operated one non-farm enterprise, while only 3 per cent had owned or operated two or more non-farm enterprises. Overall, PW households owned or operated an average of 0.22 non-farm enterprises during the previous 12 months. Similarly, the results also show that, while 8 per cent of households in the PDS sample had owned or operated one non-farm enterprise, only 2 per cent of households had owned or operated two or more non-farm enterprises. The average number of non-farm enterprises owned or operated by PDS households during the previous 12 months was 0.13, showing that, relative to PDS households, PW households owned about twice as many non-farm enterprises. This makes sense because the latter are, by programme design, expected to be more involved in economic activities than the former. All indicators in Table 7.7 were balanced between the comparison and treatment households within the PW and PDS categories.

Table 7.7. Household Ownership of Non-farm Enterprises

| | | P | W | | PDS | | | | |
|--|-------|-------|-------|---------|-------|-------|-------|---------|--|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Household does not have a non-farm enterprise | 0.82 | 0.81 | 0.84 | 0.455 | 0.90 | 0.90 | 0.90 | 0.657 | |
| Household owns one non-farm enterprise | 0.15 | 0.16 | 0.12 | 0.308 | 0.08 | 0.08 | 0.08 | 0.610 | |
| Household owns two and more non- farm enterprises | 0.03 | 0.03 | 0.04 | 0.412 | 0.02 | 0.02 | 0.02 | 0.917 | |
| Total number of non-farm enterprises owned | 0.22 | 0.22 | 0.21 | 0.855 | 0.13 | 0.12 | 0.13 | 0.897 | |
| N | 2,580 | 1,285 | 1,295 | | 2,392 | 1,206 | 1,186 | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

Information was also collected on the type of enterprises operated by households with at least one non-farm enterprise (*Table 7.8*). Processing and sale of agricultural by-products was the most common type of business among PW households (32 per cent) while trading business (not related to sale of agricultural by-products) was the most common type of business among PDS households. Business such as offering professional services, or driving owned taxi or pick-up trucks were much less prevalent as would be reasonable expected of this type households. Type of business owned was balanced between the comparison and treatment subgroups of the PW and PDS categories.

Table 7.8. Types of Non-farm Enterprises

| | | F | W | | PDS | | | | |
|--|------|------|------|---------|------|------|------|---------|--|
| Type of non-farm enterprise | All | С | Т | p-value | All | С | T | p-value | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Owned a non-agribusiness or provided non- agricultural services | 0.16 | 0.15 | 0.18 | 0.536 | 0.17 | 0.15 | 0.19 | 0.636 | |
| Processed and sold any agricultural by- products | 0.32 | 0.38 | 0.22 | 0.049 | 0.26 | 0.27 | 0.25 | 0.838 | |
| Owned a trading business | 0.29 | 0.24 | 0.38 | 0.073 | 0.36 | 0.36 | 0.36 | 0.982 | |
| Offered any services or sold goods on a street or in a market | 0.17 | 0.14 | 0.24 | 0.086 | 0.15 | 0.19 | 0.09 | 0.130 | |
| Owned a professional office or offered professional services | 0.02 | 0.02 | 0.03 | 0.349 | 0.05 | 0.04 | 0.06 | 0.553 | |
| Drove a household-owned taxi or pickup truck for transportation | 0.02 | 0.01 | 0.04 | 0.046 | 0.03 | 0.05 | 0.01 | 0.123 | |
| Owned horse-driven carts and pack animals for transportation | 0.02 | 0.03 | 0.02 | 0.626 | 0.01 | 0.01 | 0.02 | 0.211 | |
| Owned a bar or restaurant | 0.04 | 0.05 | 0.04 | 0.793 | 0.07 | 0.08 | 0.07 | 0.962 | |
| Owned any other non-agricultural business | 0.16 | 0.16 | 0.16 | 0.879 | 0.15 | 0.15 | 0.16 | 0.878 | |
| N | 394 | 184 | 210 | | 234 | 110 | 124 | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

7.6 Savings, debt, credit and transfers

Another dimension of poverty is financial inclusion. Poor people often need to borrow money to make ends meet, but face barriers in gaining access to finance. The results of the survey show that 19 per cent and 13 per cent of PW and PDS households, respectively, had outstanding debt (see Table 7.9). These shares are lower than the share in the ESS, which is slightly more than 30 per cent. Among PW households, half the loans are from informal sources, mainly family and friends, and half from formal sources, such as local moneylenders, banks, religious institutions, or non-governmental organizations. Among PDS households, the share of loans derived from informal sources is larger, around 70 per cent.

Table 7.9. Debt and Transfers

| | | PV | V | | | PD | S | | ESS |
|--------------------------------------|----------|----------|----------|---------|----------|----------|----------|---------|--------------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | data 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Outstanding debt, % | 0.24 | 0.22 | 0.28 | 0.184 | 0.14 | 0.14 | 0.14 | 0.761 | |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | |
| Has an outstanding debt | 0.19 | 0.18 | 0.21 | 0.248 | 0.13 | 0.13 | 0.12 | 0.711 | 0.31 |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | 696 |
| Loan from informal source | 0.50 | 0.47 | 0.54 | 0.421 | 0.64 | 0.61 | 0.69 | 0.384 | |
| N | 525 | 247 | 278 | | 285 | 142 | 143 | | |
| Receives remittances | 0.08 | 0.10 | 0.05 | 0.063 | 0.13 | 0.12 | 0.15 | 0.364 | 0.08 |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | 696 |
| Amount of remittances received | 1,794.02 | 2,065.47 | 1,022.19 | 0.046 | 1,456.46 | 1,377.65 | 1,574.71 | 0.451 | |
| N | 154 | 85 | 69 | | 340 | 168 | 172 | | |
| Sent out remittances | 0.01 | 0.01 | 0.01 | 0.394 | 0.01 | 0.01 | 0.02 | 0.000 | |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | |
| Amount of remittances sent | 1,216.63 | 1,754.52 | 810.99 | 0.225 | 1,586.35 | 1,697.57 | 1,536.70 | 0.845 | |
| N | 26 | 10 | 16 | | 39 | 14 | 25 | | |

Note: Indicators are compared with the ESS sample of 2015 for rural Amhara. If missing, the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

About 8 per cent of PW households receive remittances with an average remittance of ETB 1,794 among households receiving a remittance. The share of PDS households receiving remittances is about 12 per cent, with an average remittance of ETB 1,378. About 1 per cent of PW and PDS households send out remittances. The average remittances sent are ETB 1,217 and ETB 1,586 for PW and PDS households, respectively.

Household respondents were asked about the main purpose of the loans they had contracted (*see Table 7.10*). Routine consumption expenditures represented the most dominant use of the loans (46 per cent and 40 per cent of PW and PDS households, respectively), followed by agricultural investment (26 per cent and 21 per cent). Other household-related uses, such as paying for health care, other debt, education, or social events, were the third most dominant (17 per cent and 21 per cent).

Table 7.10. Purpose of Loan

| | | P | W | | | P | DS | | ESS data | |
|-----------------|------|------|------|---------|------|------|------|---------|----------|--|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | 2015 | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | |
| Agriculture | 0.26 | 0.25 | 0.27 | 0.759 | 0.21 | 0.24 | 0.17 | 0.289 | 0.62 | |
| Business | 0.04 | 0.06 | 0.02 | 0.351 | 0.02 | 0.01 | 0.04 | 0.132 | 0.13 | |
| Consumption | 0.46 | 0.48 | 0.43 | 0.436 | 0.40 | 0.41 | 0.38 | 0.651 | | |
| Assets | 0.05 | 0.04 | 0.06 | 0.367 | 0.04 | 0.03 | 0.06 | 0.260 | | |
| Family expenses | 0.17 | 0.16 | 0.19 | 0.428 | 0.25 | 0.21 | 0.33 | 0.106 | | |
| N | 525 | 247 | 278 | | 285 | 142 | 143 | | 197 | |

Note: Indicators are compared to ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

7.7 Time use in economic activities

Time use on economic activities is an important determinant of household welfare. The economic activities examined include household farming, livestock raising, fishing activities, non-farm enterprise operations and paid work outside the household, including PSNP. Income diversification allows households to supplement their incomes and also build resilience if some sources of income are affected by shocks. Table 7.11 shows the participation in various economic activities of household members ages 5 or more. Overall, participation is high in farming and livestock production activities, but less in fishing and non-farm business activities. When the age range is restricted to 15 or more, the participation rates generally increase. Table 7.12 shows the actual number of hours worked in the activities over the seven days prior to the survey. The pattern is generally the same as in the case of participation in the 12 months previous to the survey.

Table 7.11. Participation in Economic Activities, Household Members Ages 5 or More

| | | Р | W | | | Р | DS | | ESS |
|---|--------|-------|-------|---------|-------|-------|-------|---------|---------------|
| Activities in which some time was spent | All | С | Т | p-value | All | С | Т | p-value | data, 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Household farm activities, previous 12 months | 0.32 | 0.30 | 0.35 | 0.031 | 0.24 | 0.23 | 0.26 | 0.323 | 0.53 |
| Livestock activities, previous 12 months | 0.25 | 0.23 | 0.27 | 0.182 | 0.22 | 0.22 | 0.24 | 0.555 | |
| Fishing business activities, hours in previous 7 days | 0.00 | 0.00 | 0.00 | 0.024 | 0.00 | 0.00 | 0.00 | 0.353 | |
| Household non-farm enterprise, previous 12 months | 0.03 | 0.03 | 0.02 | 0.434 | 0.02 | 0.02 | 0.02 | 0.912 | 0.03 |
| Non-household work, previous 12 months | 0.04 | 0.04 | 0.03 | 0.499 | 0.03 | 0.03 | 0.03 | 0.590 | |
| PW programme, previous 12 months | 0.23 | 0.23 | 0.23 | 0.995 | 0.02 | 0.02 | 0.01 | 0.233 | 0.03 |
| N | 11,374 | 5,649 | 5,725 | | 6,969 | 3,292 | 3,677 | | 2,698 |

Note: Indicators are compared to ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

Table 7.12. Time Spent on Economic Activities in the Seven Days Prior to the Survey

| | | F | W | | | F | PDS | | ESS |
|---|-------|-------|-------|---------|-------|-------|-------|---------|---------------|
| Activities in which some time was spent | All | С | Т | p-value | All | С | Т | p-value | data, 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Household farm activities, hours in previous 7 days | 6.75 | 5.13 | 8.83 | 0.001 | 8.57 | 8.32 | 8.94 | 0.789 | 12.55 |
| N | 4,028 | 2,007 | 2,021 | | 1,768 | 804 | 964 | | 2,545 |
| Livestock activities, hours in previous 7 days | 11.64 | 10.91 | 12.57 | 0.126 | 13.07 | 13.38 | 12.59 | 0.583 | |
| N | 3,425 | 1,857 | 1,568 | | 1,655 | 787 | 868 | | |
| Fishing business, hours in previous 7 days | 6.52 | 0.19 | 8.43 | 0.199 | 0.27 | 0.25 | 0.33 | 0.853 | |
| N | 16 | 2 | 14 | | 8 | 5 | 3 | | |
| Household non-farm enterprise, hours in previous 7 days | 14.04 | 13.37 | 15.43 | 0.569 | 18.87 | 19.83 | 17.32 | 0.475 | 0.54 |
| N | 211 | 91 | 120 | | 143 | 62 | 81 | | 2,545 |
| Non-household work, hours in previous 7 days | 16.17 | 17.16 | 14.34 | 0.636 | 14.29 | 12.63 | 16.67 | 0.284 | 0.25 |
| N | 341 | 147 | 194 | | 195 | 75 | 120 | | 2,545 |
| PSNP work, days in previous 12 months | 71.83 | 70.12 | 74.39 | 0.352 | 74.52 | 67.18 | 92.30 | 0.089 | 62.18 |
| N | 2,759 | 1,427 | 1,332 | | 114 | 66 | 48 | | 88 |

Note: Indicators are compared to ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

Table 7.13 shows the time spent on economics activities by various age groups during the previous seven days. Among PW households, male children spent more than twice as many hours as female children on the activities, and adult men spent about three times as many hours as adult women. Among PDS households, male children spent more than twice as many hours as female children on the activities, and adult men spent about twice as many hours as adult women.

Table 7.13. Economic Activities in the Seven Days before the Survey, by Various Groups

| | | P | W | PDS | | | | | | |
|-------------------------------------|-------|-------|-------|---------|-------|-------|-------|---------|--------------|--|
| Group and unit | All | С | Т | p-value | All | С | Т | p-value | data 2015 | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | |
| Male children, number of hours | 4.90 | 4.14 | 6.12 | 0.014 | 7.84 | 8.12 | 7.37 | 0.736 | 14.74 | |
| Female children, number of hours | 2.05 | 1.73 | 2.50 | 0.072 | 2.94 | 3.19 | 2.52 | 0.538 | 7.44 | |
| Adult men, number of hours | 13.37 | 11.73 | 15.79 | 0.096 | 13.19 | 12.67 | 14.07 | 0.579 | 21.57 | |
| Adult women, number of hours | 4.47 | 3.61 | 5.77 | 0.006 | 6.02 | 5.95 | 6.11 | 0.926 | 10.06 | |
| Elderly, number of hours | 5.87 | 5.23 | 6.85 | 0.209 | 2.15 | 1.32 | 3.56 | 0.000 | 10.51 | |
| N | 852 | 416 | 436 | | 2,015 | 1,026 | 989 | | 261 | |

Note: Indicators are compared to ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

7.8 Shocks and coping strategies

Many poor households experience frequent shocks to their livelihoods that often exacerbate their already dire conditions. Often, households respond to these shocks by adopting negative coping strategies (such as eating less than usual or sending children to work) that affect long-term development outcomes. About 43 per cent of PW households and 37 per cent of PDS households experienced at least one shock in the 12 months preceding the survey (see Table 7.14). On average, households experienced about two of the 15 shocks that were listed. Shocks were classified as covariate (widespread at the community level such as floods, draught, pests) or idiosyncratic (specific to the household such as a death, theft of property, loss of earnings). Covariate shocks were more prevalent than the idiosyncratic shocks, about 80 per cent versus 41 per cent among PW households; 80 per cent versus 50 per cent among PDS households.

Table 7.14. Shocks and Coping Strategies during the 12 Months Prior to the Survey

| | | F | W | | | P | DS | | ESS |
|------------------------------|-------|------|------|---------|------|------|------|---------|---------------|
| Type of shock and coping | All | С | Т | p-value | All | С | Т | p-value | data, 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Any shock experience | 0.43 | 0.43 | 0.44 | 0.834 | 0.37 | 0.36 | 0.39 | 0.395 | 0.55 |
| Shocks experienced, number | 1.79 | 1.85 | 1.71 | 0.275 | 1.76 | 1.83 | 1.65 | 0.031 | 1.84 |
| Covariate shock | 0.80 | 0.78 | 0.84 | 0.265 | 0.80 | 0.81 | 0.78 | 0.629 | 0.77 |
| Idiosyncratic shock | 0.41 | 0.44 | 0.36 | 0.199 | 0.48 | 0.50 | 0.44 | 0.406 | 0.50 |
| Positive coping to shock, % | 0.37 | 0.35 | 0.40 | 0.505 | 0.41 | 0.39 | 0.44 | 0.385 | 0.45 |
| Negative coping to shock, % | 0.42 | 0.44 | 0.40 | 0.522 | 0.43 | 0.44 | 0.40 | 0.537 | 0.11 |
| Ambiguous coping to shock, % | 0.20 | 0.21 | 0.20 | 0.844 | 0.17 | 0.17 | 0.16 | 0.855 | 0.45 |
| N | 1,048 | 478 | 570 | | 926 | 461 | 465 | | 368 |

Note: Indicators are compared to ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

Among the PW households in the face of shocks, 42 per cent adopted negative coping strategies; 37 per cent adopted positive coping strategies, and the coping strategies of 20 per cent were ambiguous. Among PDS households, the respective shares were 44 per cent, 39 per cent, and 17 per cent.

Table 7.15 shows the five types of shocks experienced most frequently. Drought/irregular rain is the most frequently experienced shock which was experienced by 16 per cent of PW households and 13 per cent of PDS households. This is followed by unusually high prices of food experienced by 14 per cent of PW households and 13 per cent of PDS households. Floods, unusually high crop/livestock disease and high prices of agricultural inputs have been experienced to a lesser degree.

Table 7.15. The Prevalence of the Five Most Frequent Shocks

| | | Р | W | | | | ESS | | |
|-------------------------------------|-------|-------|-------|---------|-------|-------|-------|---------|---------------|
| Type of shock | All | С | Т | p-value | All | С | T | p-value | data, 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Drought or irregular rain | 0.16 | 0.15 | 0.16 | 0.844 | 0.13 | 0.14 | 0.12 | 0.638 | 0.29 |
| Flooding | 0.11 | 0.11 | 0.11 | 0.829 | 0.07 | 0.07 | 0.07 | 0.942 | 0.18 |
| Crop, livestock pests or disease | 0.05 | 0.05 | 0.05 | 0.895 | 0.03 | 0.03 | 0.03 | 0.848 | 0.05 |
| High prices for agricultural inputs | 0.06 | 0.05 | 0.06 | 0.873 | 0.03 | 0.03 | 0.03 | 0.744 | 0.12 |
| High prices for food | 0.14 | 0.14 | 0.14 | 0.824 | 0.13 | 0.13 | 0.14 | 0.711 | 0.13 |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | 696 |

Note: Indicators are compared to ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

All the indicators relating to shocks and coping strategies are balanced between the comparison and treatment subgroups of the PW and PDS categories.

7.9 The distress sale of assets

Selling or pawning assets in times of distress is a negative strategy for coping with shocks and stressors in life. It was therefore considered relevant to measure the extent to which households engage in distress sales of assets. Distress sales include the sale of productive assets, the renting or leasing of land, and the sale or rent of livestock. About one PW or PDS household in five had undergone at least one distress sale in the two years before the survey. Distress sales to finance household food needs were more prevalent than distress sales to meet emergency needs, such as health care or educational expenditure. The respective rates for the two types of distress sales were 88 per cent and around 50 per cent among both PW and PDS households (see Table 7.16). The prevalence of distress sales to finance household food needs is significantly different between the C and T groups of PDS households (92 per cent versus 81 per cent, respectively). The rental or exchange of land for food is significantly different between the T and C groups of PW households, 52 per cent and 34 per cent, respectively.

Table 7.16. The Distress Sale of Assets in the Two Years before the Survey

| | | Р | W | | PDS | | | | |
|--|-------|-------|-------|---------|-------|-------|-------|---------|--|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Any distress sale of asset | 0.18 | 0.16 | 0.22 | 0.043 | 0.18 | 0.17 | 0.19 | 0.654 | |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | |
| Number of sales events | 1.85 | 2.03 | 1.66 | 0.079 | 1.73 | 1.73 | 1.73 | 0.980 | |
| For food needs of household | 0.88 | 0.89 | 0.87 | 0.570 | 0.88 | 0.92 | 0.81 | 0.009 | |
| For emergency household needs | 0.50 | 0.53 | 0.48 | 0.491 | 0.49 | 0.44 | 0.58 | 0.058 | |
| Sale of productive asset for food needs | 0.10 | 0.10 | 0.10 | 0.890 | 0.13 | 0.16 | 0.08 | 0.400 | |
| Sale of productive asset for emergency | 0.10 | 0.12 | 0.08 | 0.442 | 0.08 | 0.06 | 0.11 | 0.194 | |
| Rent or exchange of land for food needs | 0.43 | 0.52 | 0.34 | 0.013 | 0.52 | 0.56 | 0.46 | 0.347 | |
| Rent or exchange of land for emergency | 0.23 | 0.28 | 0.18 | 0.157 | 0.27 | 0.29 | 0.23 | 0.397 | |
| Sale or rent of livestock for food needs | 0.48 | 0.48 | 0.48 | 0.939 | 0.34 | 0.36 | 0.31 | 0.399 | |
| Sale or rent of livestock for emergency | 0.22 | 0.22 | 0.22 | 0.978 | 0.18 | 0.14 | 0.25 | 0.034 | |
| N | 546 | 262 | 284 | | 454 | 235 | 219 | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

8. REPRODUCTIVE HEALTH OF WOMEN AGES 12-49

This chapter presents information on antenatal care, birth histories, and contraceptive use. Maternal and newborn health are priorities for the Government of Ethiopia as outlined in the Health Sector Transformation Plan, 2015/16–2019/20 (FMOH, 2015). Health care services during pregnancy and delivery are important for the survival and well-being of both the mother and the infant (CSA and ICF, 2016). Furthermore, contraceptive use facilitates healthy birth spacing and has positive effects on the health and well-being of women and increases survival rates of neonates and children (Ahmed, et al., 2012; Cleland, et al., 2012).

Questions on birth histories were asked about all women of reproductive age (12–49) in the households interviewed. Questions about contraceptive use were asked only about the main women respondents, and only pregnant women were asked about antenatal care. The latter group represented around 3 per cent of all the women interviewed.

Antenatal care is defined as pregnancy care received from skilled providers, such as doctors and nurses/midwives, health officers, and health extension workers. Looking at the two different types of clients, the percentage of pregnant women who have received antenatal care from a skilled provider at least once is 51 per cent in the PW sample and 50 per cent in the PDS sample (see Table 8.1). On average, pregnant women had their first antenatal care visit just before their fourth month (3.92 across PW households and 3.84 across PDS households). All these indicators are balanced between the treatment and comparison groups.

Table 8.1. Maternal and Newborn Health

| | | P | W | | | | PDS | |
|--|-------|-------|-------|---------|-------|------|------|---------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Currently pregnant | 0.03 | 0.03 | 0.04 | 0.166 | 0.02 | 0.02 | 0.03 | 0.731 |
| N | 3,260 | 1,603 | 1,657 | | 1,574 | 701 | 873 | |
| Received antenatal care from skilled provider during current pregnancy | 0.51 | 0.61 | 0.43 | 0.154 | 0.50 | 0.55 | 0.43 | 0.447 |
| Number of antenatal care visits - current pregnancy | 1.28 | 1.44 | 1.13 | 0.345 | 1.25 | 1.38 | 1.08 | 0.510 |
| N | 117 | 49 | 68 | | 49 | 26 | 23 | |
| First month of antenatal care - current pregnancy | 3.92 | 3.93 | 3.91 | 0.921 | 3.84 | 3.46 | 4.53 | 0.061 |
| First month of antenatal care in first trimester | 0.25 | 0.17 | 0.34 | 0.207 | 0.48 | 0.56 | 0.34 | 0.370 |
| N | 53 | 24 | 29 | | 21 | 12 | 9 | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

Apart from receiving antenatal care, women also try to enhance their diets during pregnancy and lactation. Approximately half the respondents in the qualitative interviews indicated they enhanced their diets by diversifying food choices and eating higher-quality food. As the following discussion illustrates, women perceive this to be an important strategy to maintain or improve their health during pregnancy.

"Yes, I changed my diet. I was eating egg, milk, yogurt, butter and meat. . . . I heard from educated sisters and brothers. They said that when you get pregnant you should have to eat this

kind of food to be strong and healthy during labour and delivery and to give birth to a healthy child." (IDI with lactating woman, Libo Kemkem)

Health extension workers counselled pregnant women about good nutrition during pregnancy and lactation mainly through BCC sessions and feeding demonstrations delivered during pregnant women conferences. Pregnant women who reported no changes in eating patterns associated this partly with financial constraints and limited food choices in own food production.

"How can I change? We don't have money to buy [divers food]. We are not hungry but our diet pattern is low. . . . We eat but it is every time injera. No other changes." – IDI with pregnant woman, Libo Kemkem

Half reported being hungry and experiencing food shortages during their pregnancy, which were exacerbated by the financial costs and seasonal shortfalls of food production. In some instances, women depended on external support to avoid hunger.

"I want to eat more but there is no enough food and variety at home. Sometimes I was hungry during pregnancy." – IDI with lactating woman, Libo Kemkem

"Doctors recommended to me to change my diet but I don't have any income to apply the recommendation. But some people helped me to survive; they give me some helpful foods when they heard about my case." – IDI with pregnant woman, Dewa Chefa

Table 8.2 shows the birth histories of all women of reproductive age in the households interviewed. About 17 per cent of women in PW households have ever had a child die compared to 13 per cent in PDS households. These rates are slightly lower than those reported in the DHS (23.8 per cent). One reason for this difference between samples may derive from a slight difference in the age groups interviewed: the ISNP study covers women ages 12–49, while the DHS data cover women ages 15–49. Among women who have ever lost a child, the average number of children who died was 1.84 and 1.82 in PW and PDS households, respectively.

Table 8.2. Birth History

| | PW | | | | | DHS, | | | |
|-----------------------------|-------|-------|-------|---------|-------|------|------|---------|-------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | 2016 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Ever had child die | 0.17 | 0.18 | 0.16 | 0.417 | 0.13 | 0.13 | 0.14 | 0.692 | 0.24 |
| N | 3,296 | 1,617 | 1,679 | | 1,596 | 711 | 885 | | 1,471 |
| Number of children died | 1.84 | 1.87 | 1.78 | 0.638 | 1.82 | 1.83 | 1.81 | 0.957 | 1.65 |
| N | 486 | 226 | 260 | | 209 | 86 | 123 | | 351 |
| Number of total live births | 2.49 | 2.57 | 2.38 | 0.276 | 1.84 | 1.92 | 1.73 | 0.239 | 2.88 |
| N | 3,295 | 1,617 | 1,678 | | 1,595 | 710 | 885 | | 1,471 |

Note: Indicators are compared to DHS sample of 2016 for rural Amhara. If missing, then the indicator is not available in the DHS data. Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

In terms of total live births, women in PDS households had on average 1.84 live births, while women in PW households had on average 2.49 live births. In comparison, the average from the DHS dataset was 2.9. Outcomes are balanced between treated and comparison groups, in both PDS and PW households.

Table 8.3 examines women's use of contraception. Contraceptive methods are classified as either modern methods or traditional methods. Modern methods include male and female sterilization, injectables, intrauterine devices (IUDs), contraceptive pills, implants, female and male condoms, the standard days method, the lactational amenorrhæa method, and emergency contraception. Traditional methods include withdrawal and periodic abstinence.

Table 8.3. The Use of Contraceptives

| | | PW | | | | PDS | | | | | |
|---------------------------|-------|------|------|---------|-------|------|------|---------|-----------|--|--|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | DHS, 2016 | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | | |
| Any contraception | 0.15 | 0.14 | 0.17 | 0.314 | 0.11 | 0.09 | 0.13 | 0.189 | 0.34 | | |
| Traditional contraception | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | | 0.00 | | |
| Modern contraception | 0.15 | 0.14 | 0.17 | 0.314 | 0.11 | 0.09 | 0.13 | 0.189 | 0.34 | | |
| N | 1,978 | 995 | 983 | | 1,053 | 485 | 568 | | 1,471 | | |

Note: Indicators are compared to DHS sample of 2016 for rural Amhara. If missing, then the indicator is not available in the DHS data. Sample for DHS include currently married women and sexually active unmarried women age 15-49, while the ISNP includes one main woman respondent in the household ages 12–49. Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

The data on contraceptive use reported in Table 8.3 refer to one woman of reproductive age per household. No woman interviewee reported the use of traditional contraceptive methods. Rates of traditional contraceptive use are equally low in the DHS (almost zero). In the ISNP sample, between 9 per cent and 17 per cent use modern contraception, and use is lower in PDS households (11 per cent overall) than in PW households (15 per cent). The most commonly used methods are injectables and the pill. DHS data report a higher rate of modern contraceptive use (34 per cent). One of the reasons for the discrepancy may be that women in the samples face barriers to accessing health care and family planning given their poverty and vulnerable status. Another factor may be the differences in sampling. While the DHS dataset includes married women or unmarried women ages 15–49 who are sexually active, the ISNP sample includes one woman of reproductive age (12–49) per household.

9. NUTRITION KNOWLEDGE AND PRACTICE

One of the main objectives of the ISNP is to improve children's nutritional outcomes. Caregivers play a crucial role in ensuring that children receive proper nutrition inputs and apply appropriate feeding practices. This chapter analyses nutrition knowledge among caregivers, as well as the food consumption patterns and exposure of caregivers to health and nutrition services. These are potential mechanisms that may affect the relationship between the programme and children's nutritional outcomes. Child nutrition is examined in more detail in chapter 11.

9.1 Food consumption by caregiver

Detailed data on food consumption were collected by asking caregivers about the amounts of their consumption of each particular food item in the week preceding the interview. To analyse the food consumption of caregivers, a dietary diversity score indicator was created that identifies 12 food groups based on a food composition table for use in Africa (HHS and FAO, 1968). The 12 food groups are: cereals; tubers and roots; vegetables; fruits; meat; eggs; fish and other seafood; legumes, nuts and seeds; milk and milk products; oils and fats; sweets, condiments and beverages. These were summed to establish an index representing food consumption. The index ranges from 1 to 12.

Table 9.1 indicates that the average dietary diversity represented by the index is less than 4.0 across all groups. Households in the PW sample are slightly more well off relative to PDS households (an average of 3.83 vs 3.67 food groups). Consumption of cereals is almost universal (98 per cent in PW and PDS households), while legumes, vegetables, oils and spices are also commonly consumed by many households. Food items such as fish, eggs, fruits, meat and dairy products are barely consumed at all by the households. The consumption is balanced between comparison and treatment subgroups of PW and PDS households.

Table 9.1. Dietary Diversity among Caregivers

| | | P | w | | PDS | | | | | |
|-------------------------|-------|-------|-------|---------|-------|-------|-------|---------|--|--|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | | |
| Meat | 0.03 | 0.04 | 0.01 | 0.018 | 0.04 | 0.06 | 0.01 | 0.003 | | |
| Fruits | 0.02 | 0.02 | 0.02 | 0.982 | 0.02 | 0.02 | 0.03 | 0.403 | | |
| Vegetables | 0.59 | 0.58 | 0.61 | 0.648 | 0.54 | 0.53 | 0.55 | 0.709 | | |
| Dairy | 0.05 | 0.06 | 0.04 | 0.166 | 0.05 | 0.05 | 0.04 | 0.247 | | |
| Cereals | 0.98 | 0.99 | 0.98 | 0.222 | 0.98 | 0.98 | 0.98 | 0.983 | | |
| Roots | 0.06 | 0.04 | 0.09 | 0.001 | 0.06 | 0.04 | 0.11 | 0.000 | | |
| Eggs | 0.02 | 0.02 | 0.01 | 0.611 | 0.02 | 0.02 | 0.01 | 0.534 | | |
| Fish | 0.01 | 0.01 | 0.01 | 0.986 | 0.00 | 0.00 | 0.01 | 0.473 | | |
| Legumes | 0.66 | 0.67 | 0.64 | 0.577 | 0.63 | 0.63 | 0.63 | 0.928 | | |
| Nuts | 0.06 | 0.08 | 0.05 | 0.212 | 0.06 | 0.06 | 0.06 | 0.816 | | |
| Oils | 0.56 | 0.58 | 0.54 | 0.591 | 0.55 | 0.55 | 0.53 | 0.749 | | |
| Spices | 0.78 | 0.79 | 0.76 | 0.157 | 0.73 | 0.73 | 0.75 | 0.512 | | |
| Dietary diversity index | 3.83 | 3.88 | 3.77 | 0.389 | 3.67 | 3.66 | 3.70 | 0.770 | | |
| N | 2,580 | 1,285 | 1,295 | | 2,387 | 1,203 | 1,184 | | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

9.2 Exposure to health and nutrition services

The changes and innovations in phase 4 of the PSNP include a major role for health extension workers, the health development army, and social workers. These actors are critical in ensuring that PSNP clients understand the programme, comply with household programme co-responsibilities, and receive information on nutrition and sanitation as well as food demonstrations. This section describes client knowledge and interactions with development agents, social workers and health extension workers. It is important to understand the pre-ISNP situation with respect to interaction with these workers to grasp the potential for improvement.

A series of questions was asked to assess this information. First, respondents were asked if they knew the health extension worker in their area. Next, they were asked about the services available to them from health extension workers. The respondents were subsequently queried about any contacts they had had with health extension workers during the previous three months, whether they had ever been visited at home by health extension workers, and, if so, whether this had occurred during the previous three months. The respondents who had received home visits were asked about the most recent visit and the topics that had been discussed. Specific questions were posed about any discussions by the health extension workers on breastfeeding or child feeding.

Among PW households, 61 per cent know about health extension workers. The share is 45 per cent among PDS households (*see Table 9.2*). Among those who know health extension workers in their area, the share who had contact with a health extension worker during the previous three months was 45 per cent in the PW sample and 38 per cent in the PDS sample. Among those who had contact with health extension workers, the share visited at home by health extension workers was 45 per cent in both PW and PDS households. The share of caregivers who had contact with a health extension worker outside their home is lower, that is, 26 per cent and 20 per cent among the PW and PDS households, respectively.

Table 9.2. Exposure to Health and Nutrition Services, Health Workers, and Health Posts

| | | | W | | PDS | | | | |
|---|-------|-------|-------|---------|-------|-------|-------|---------|--|
| Indicator | All | С | Т | p-value | AII | С | Т | p-value | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Knows a health extension worker | 0.61 | 0.60 | 0.62 | 0.654 | 0.45 | 0.44 | 0.47 | 0.417 | |
| N | 2,580 | 1,285 | 1,295 | | 2,389 | 1,204 | 1,185 | | |
| Had contact with a health extension worker in the past 3 months | 0.45 | 0.50 | 0.37 | 0.009 | 0.38 | 0.39 | 0.38 | 0.814 | |
| N | 1,613 | 806 | 807 | | 1,086 | 526 | 560 | | |
| Have been visited at home by a health extension worker | 0.45 | 0.48 | 0.41 | 0.118 | 0.45 | 0.46 | 0.44 | 0.696 | |
| N | 1,613 | 806 | 807 | | 1,087 | 527 | 560 | | |
| Was visited by a health extension worker in the past 3 months | 0.65 | 0.70 | 0.56 | 0.021 | 0.57 | 0.57 | 0.58 | 0.845 | |
| N | 695 | 365 | 330 | | 502 | 254 | 248 | | |
| Had contact with a health extension worker in the community | 0.26 | 0.29 | 0.21 | 0.182 | 0.20 | 0.20 | 0.21 | 0.826 | |
| N | 1,613 | 806 | 807 | | 1,088 | 527 | 561 | | |
| Ever visited a health post | 0.43 | 0.42 | 0.44 | 0.769 | 0.33 | 0.32 | 0.34 | 0.648 | |
| N | 2,580 | 1,285 | 1,295 | | 2,389 | 1,204 | 1,185 | | |
| Visited health post for reasons related to your child or yours | 0.30 | 0.32 | 0.27 | 0.541 | 0.24 | 0.21 | 0.28 | 0.246 | |
| N | 1,112 | 542 | 570 | | 783 | 377 | 406 | | |
| Receive advice on breastfeeding, nutrition, or child feeding | 0.44 | 0.48 | 0.37 | 0.396 | 0.39 | 0.55 | 0.19 | 0.000 | |
| N | 285 | 128 | 157 | | 185 | 72 | 113 | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

Next, respondents were asked whether they had ever visited a health post, and, if so, what information they received during the visit. Among PW and PDS households, 43 per cent and 33 per cent, respectively, had ever visited a health post. Among these, 30 per cent in PW households and 24 per cent in PDS households visited a health post for reasons related to their children or themselves. Within this group, the shares receiving advice or information about breastfeeding, child feeding, or nutrition was 44 per cent in the PW households and 39 per cent in PDS households.

The knowledge and awareness of the health development army and social workers are much less extensive than the knowledge of health extension workers (see Table 9.3). Fewer than 1 per cent of respondents are members of a health development army, and between 6 per cent and 15 per cent of respondents know a health development army member or leader working in their area. Awareness of social workers is limited, although it is higher in treatment than comparison households in the PDS category. Among respondents who know a social worker in their area, 46 per cent of the PW households and 36 per cent of the PDS households have had contact with them. Among those who had contact, the shares receiving home visits were 15 per cent and 30 per cent, respectively, among PW and PDS households. The differences between treated and comparison households were statistically significant in PW and PDS households. Only a small share of households (less than 1 per cent in PW and PDS households) have attended a food demonstration. Finally, 15 per cent of PW households and 11 per cent of PDS households interviewed listen to the radio. Among these, 10 per cent in PDS households heard information about breastfeeding, child feeding, or nutrition. In the case of PW households, the share who heard such information was 6 per cent, but significantly higher in treatment than in comparison households.

Table 9.3. Exposure to Health and Nutrition Services and Other Health Actors

| | | F | W | | PDS | | | |
|---|-------|-------|-------|---------|-------|-------|-------|---------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Member of the health development army (HDA) | 0.07 | 0.07 | 0.07 | 0.968 | 0.03 | 0.02 | 0.05 | 0.091 |
| Knows a HDA/leader working in the area | 0.13 | 0.12 | 0.15 | 0.408 | 0.08 | 0.06 | 0.11 | 0.056 |
| Had any contact with the HDA/leader in the past 3 months | 0.06 | 0.07 | 0.05 | 0.498 | 0.04 | 0.04 | 0.04 | 0.782 |
| Knows the social worker working in the area | 0.11 | 0.10 | 0.14 | 0.132 | 0.07 | 0.04 | 0.12 | 0.000 |
| N | 2,580 | 1,285 | 1,295 | | 2,389 | 1,204 | 1,185 | |
| Had any contact with a social worker in the past 3 months | 0.46 | 0.46 | 0.46 | 0.982 | 0.36 | 0.20 | 0.45 | 0.011 |
| N | 248 | 60 | 188 | | 181 | 44 | 137 | |
| Ever been visited at home by a social worker | 0.15 | 0.06 | 0.24 | 0.000 | 0.30 | 0.19 | 0.36 | 0.041 |
| N | 248 | 60 | 188 | | 181 | 44 | 137 | |
| Had contact with a social worker in the community | 0.60 | 0.75 | 0.44 | 0.109 | 0.44 | 0.59 | 0.40 | 0.299 |
| N | 104 | 18 | 86 | | 75 | 13 | 62 | |
| Ever attended a food demonstration | 0.06 | 0.07 | 0.05 | 0.329 | 0.01 | 0.01 | 0.03 | 0.013 |
| N | 2,580 | 1,285 | 1,295 | | 2,389 | 1,204 | 1,185 | |
| Attended a food demonstration in the previous three months | 0.23 | 0.26 | 0.15 | 0.522 | 0.29 | 0.38 | 0.23 | 0.412 |
| N | 110 | 49 | 61 | | 41 | 11 | 30 | |
| Listens to the radio | 0.15 | 0.14 | 0.15 | 0.785 | 0.11 | 0.08 | 0.15 | 0.002 |
| N | 2,580 | 1,285 | 1,295 | | 2,389 | 1,204 | 1,185 | |
| During the past 3 months, did you hear any information about breastfeeding, child feeding or nutrition? | 0.06 | 0.02 | 0.13 | 0.002 | 0.10 | 0.08 | 0.12 | 0.348 |
| N | 343 | 145 | 198 | | 284 | 104 | 180 | |

Note: Means are adjusted for sampling and matching weights. HDA = health development army. C = comparison group.T = treatment group.

9.3 Knowledge on infant and child nutrition and feeding

Exposure to information on improved infant and young child feeding practices is a vital component of phase 4 of the PSNP. The survey asked caregivers of children a series of questions about breastfeeding, nutrition and child feeding behaviour. Table 9.4 shows the share of women in PW and PDS households who answered the questions correctly. Knowledge about proper breastfeeding is relatively widespread: most respondents (84 per cent in the PW sample and 77 per cent in the PDS sample) know that babies should be breastfed immediately after birth and should be breastfed exclusively until they reach 6 months of age (81 per cent and 67 per cent in PW and PDS households, respectively). A lower percentage of respondents, but still higher than 50 per cent, knows babies should get colostrum soon after birth.

Next, the survey asked a series of questions about the number of months at which babies are supposed to start receiving food and liquids, and how often they should be fed depending on their age. About 62 per cent of women in PW households and 55 per cent of women in PDS households reported that a baby should start receiving liquids at 6 months, and a slightly lower percentages reported that babies should start receiving solid food at 6 months.

Table 9.4. Knowledge about Nutrition

| | | F | W | | PDS | | | | |
|---|-------|-------|-------|---------|-------|-------|-------|---------|--|
| Indicator | All | С | T | p-value | All | С | T | p-value | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Baby should be breastfed immediately after birth | 0.84 | 0.86 | 0.80 | 0.058 | 0.77 | 0.79 | 0.73 | 0.045 | |
| Baby should get colostrum soon after birth | 0.65 | 0.64 | 0.67 | 0.645 | 0.54 | 0.53 | 0.57 | 0.347 | |
| Baby under age 6 months should be breastfed exclusively | 0.81 | 0.84 | 0.76 | 0.005 | 0.67 | 0.70 | 0.62 | 0.049 | |
| Baby should start receiving liquids at 6 months | 0.62 | 0.64 | 0.58 | 0.226 | 0.55 | 0.59 | 0.49 | 0.028 | |
| Baby should start receiving solid food at 6 months | 0.52 | 0.56 | 0.46 | 0.028 | 0.44 | 0.47 | 0.38 | 0.079 | |
| Baby between 6-8 months should eat 2-3 meals per day | 0.46 | 0.46 | 0.46 | 0.965 | 0.42 | 0.44 | 0.40 | 0.495 | |
| Baby between 9-11 months should eat 3-4 meals per day | 0.61 | 0.64 | 0.58 | 0.217 | 0.53 | 0.54 | 0.52 | 0.666 | |
| Infant between 12-24 months should eat 3-6 meals a day | 0.90 | 0.92 | 0.87 | 0.029 | 0.84 | 0.84 | 0.82 | 0.582 | |
| A child can eat alone without supervision | 0.08 | 0.08 | 0.08 | 0.739 | 0.09 | 0.09 | 0.09 | 0.847 | |
| Child should be fed more than usual when sick | 0.42 | 0.44 | 0.40 | 0.413 | 0.37 | 0.39 | 0.34 | 0.232 | |
| Child should be fed more often than usual when sick | 0.45 | 0.45 | 0.44 | 0.877 | 0.39 | 0.39 | 0.38 | 0.762 | |
| Salt is often fortified with iodine | 0.38 | 0.40 | 0.36 | 0.283 | 0.31 | 0.30 | 0.31 | 0.814 | |
| Knowledge about effect of lack of iron | 0.39 | 0.38 | 0.41 | 0.556 | 0.36 | 0.37 | 0.34 | 0.505 | |
| Identifies food rich in iron | 0.27 | 0.26 | 0.28 | 0.523 | 0.25 | 0.26 | 0.24 | 0.562 | |
| Knowledge about effect of lack of vitamin A | 0.24 | 0.21 | 0.30 | 0.047 | 0.20 | 0.19 | 0.23 | 0.245 | |
| Identifies food rich in vitamin A | 0.26 | 0.24 | 0.29 | 0.259 | 0.22 | 0.21 | 0.25 | 0.254 | |
| Identifies food a mother can make to complement breastfeeding | 0.67 | 0.65 | 0.69 | 0.383 | 0.60 | 0.60 | 0.61 | 0.675 | |
| N | 2,580 | 1,285 | 1,295 | | 2,393 | 1,207 | 1,186 | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

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Several questions were designed to assess the knowledge of respondents on nutrition, for example, on whether salt is fortified with iodine, and what can happen to children if they do not consume sufficient iron or vitamin A. In addition, respondents were asked to identify foods that are a rich source of iron and vitamin A. Around 30 per cent of caregivers knew that salt is fortified with iodine, and fewer than 30 per cent could identify at least one food that is rich in iron or one food that is rich in vitamin A. Knowledge on what can happen if children do not consume sufficient vitamin A is also low, below 30 per cent. In terms of what could happen to children if they do not consume sufficient iron, the correct answer is slightly higher, at around 40 per cent. Correct was defined as the ability to identify at least one negative consequence of not consuming sufficient iron, such as impaired learning, impaired development, low immunity, feeling tired, and so on. A higher share (more than 60 per cent) of respondents were able to identify foods that may complement breastfeeding.

10. WOMEN'S EMPOWERMENT, STRESS, PREFERENCES AND SOCIAL CAPITAL

The gender-sensitive design components of the PSNP programme include involving women in community decisions about the programme; gender-sensitive approaches to community assets created through PW activities (for example, land cultivation among woman-headed households and supporting water projects to reduce women's time poverty related to water collection); links to credit mechanisms; the transition to the TDS among pregnant and lactating women; reduced work requirements for women and allowing rest periods for lactating women to feed their children (Holmes and Jones, 2013). The ISNP has additional, complementary gender-sensitive components. For instance, it aims to operationalize gender and social development and the nutrition provisions of the PSNP through a comprehensive case management system. This system allocates certain household programme co-responsibilities related to basic health and nutrition services to pregnant and lactating women and caretakers of malnourished children in the TDS. Key activities are implemented by dedicated social workers, who form the crucial link between frontline workers and clients in the community. In addition, the ISNP focus on links to the CBHI can be seen as gender-sensitive, given that gender inequities often increase women's barriers to health care, and this component can help mitigate this. A final gender-sensitive component of the ISNP consists of the BCC sessions on topics related to child marriage, gender, and adolescent sexual and reproductive health. This chapter examines the situation of these links to social services and the CBHI, and the attitudes and behaviours targeted by BCC activities. Ultimately, gendersensitive social protection programming seeks to reduce poverty and gender inequalities sustainably by enhancing the ability of women and adolescent girls to enjoy healthy, productive lives, free from violence and other harmful practices.

Women's well-being is assessed across a range of dimensions, including empowerment, stress, preferences and social capital. The findings reported in this section result from questions asked to the main women respondents in the household surveys (one woman per household).

10.1 Women's empowerment, agency and life satisfaction

Women's agency was operationalized through a series of questions to each woman respondent about how often she felt that (a) life is determined by her own actions; (b) she has the power to make decisions that change the course of her own life; (c) she has the power to make important decisions that change the well-being of her children; (d) she has the power to make decisions that change the well-being of her household; (e) she is capable of protecting her own interests within the household; and (f) she is capable of protecting her own interests outside the home. Response options included none of the time (= 1), a little of the time (= 2), some of the time (= 3), most of the time (= 4), and all of the time (= 5). A binary indicator was created that assigned the woman an agency classification if she answered some of the time, most of the time, or all of the time. (The means are reported in Table 10.1.) Similar patterns were found in the PW and PDS groups in terms of where women believed they had the most or the least agency. Among the PW group, 48 per cent of women believed they were capable of protecting their own interests outside the home, and 57 per cent believed they were capable of protecting their own interests inside the home. Among the PDS group, 39 per cent of women believed they were capable of protecting their own interests outside the home, and 44 per cent believed they were capable of protecting their own interests inside the home. These shares were balanced between treatment and comparison groups in both PW and PDS categories.

The original response on each of these six items was then summed to create an agency score. The potential range was 6–30. The mean agency score was 15.4 among the PW sample and 14.3 among the PDS sample. The means were balanced between treatment and comparison groups in both the PW and PDS samples.

Table 10.1. Women's Empowerment: Decision-Making and Life Satisfaction

| | | | PW | | PDS | | | | |
|--|-------|-------|-------|---------|-------|-------|-------|---------|--|
| Indicator | All | С | T | p-value | All | С | Т | p-value | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Believes life is determined by own actions | 0.54 | 0.54 | 0.53 | 0.942 | 0.43 | 0.40 | 0.48 | 0.110 | |
| Believes in power to make decisions: life course | 0.54 | 0.54 | 0.54 | 0.982 | 0.44 | 0.42 | 0.47 | 0.330 | |
| Believes in power to make decisions: children's well-being | 0.55 | 0.57 | 0.53 | 0.454 | 0.42 | 0.41 | 0.43 | 0.730 | |
| Believes in power to make decisions: household well-being | 0.53 | 0.53 | 0.52 | 0.682 | 0.43 | 0.42 | 0.45 | 0.385 | |
| Believes in ability to protect own interests within the family | 0.57 | 0.59 | 0.54 | 0.296 | 0.44 | 0.43 | 0.45 | 0.610 | |
| Believes in ability to protect own interests outside the home | 0.48 | 0.50 | 0.46 | 0.399 | 0.39 | 0.38 | 0.39 | 0.684 | |
| Agency score (6–30) | 15.36 | 15.38 | 15.32 | 0.897 | 14.26 | 14.21 | 14.35 | 0.751 | |
| Satisfied with life some or most of the time or all the time | 0.44 | 0.46 | 0.42 | 0.325 | 0.39 | 0.41 | 0.37 | 0.235 | |
| Woman's level of control over her life | 5.37 | 5.41 | 5.30 | 0.640 | 4.98 | 4.96 | 5.01 | 0.786 | |
| Woman's level of decision-making ability | 5.42 | 5.45 | 5.36 | 0.666 | 5.25 | 5.30 | 5.18 | 0.582 | |
| N | 2,366 | 1,183 | 1,183 | | 2,136 | 1,077 | 1,059 | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

The woman was then asked how often she felt satisfied with her life using the same response options: none of the time (= 1), a little of the time (= 2), some of the time (= 3), most of the time (= 4), and all of the time (= 5). Among the PW and PDS households, 44 per cent and 39 per cent of the women, respectively, reported that they were satisfied with their lives. This outcome was balanced between treatment and comparison groups in both the PW and PDS samples.

Agency and decision-making were assessed using two vignettes referring to a ladder. The first vignette was as follows:

Some people feel they have completely free choice and control over their lives, while other people feel that what they do has no effect on what happens to them. Imagine a ladder where on the bottom step, the first step, are people who have no free choice and no control over their lives, and on the highest step, the tenth, are people who have completely free choice and total control over their lives.

The second was as follows:

To what extent do you feel able to make decisions in your household, for example, decisions about what to spend money on, decisions about your child's education or health or decisions on if you should work or not? Imagine a ladder where on the bottom step, the first step, are people with no decision-making power, and on the highest step, the tenth, are people who are able to make all decisions they wish.

Each woman was asked on which step of the ladder she feels she is today, ranging from 1 to 10. Means are presented in Table 10.1. For perceived control over their life, average scores ranged from 5.4 among the PW households and approximately 5.0 in PDS households. For decision-making, the average scores were 5.4 and 5.3 among PW and PDS households, respectively. Means were balanced between treatment and comparison groups in both the PW and PDS categories.

10.2 Women's savings and household savings

A key aspect of empowerment is financial empowerment. During the survey, women were asked whether they were currently saving money separately from the household for emergencies or to buy a special item. One woman in five reported that she had savings (20 per cent and 22 per cent of women in the PW and PDS households, respectively) (see Table 10.2). Next, the women were asked how much they were saving. Two means are reported for this outcome. The first includes zeros for women not saving (ETB 11 and ETB 16 per month among the PW and PDS households, respectively). The second mean is calculated only among those who report any savings (ETB 58 and ETB 73 per month among the PW and PDS households). All savings indicators on women, with the exception of savings excluding non-savers (zeros) in the PDS group, were balanced between the treatment and comparison groups.

Table 10.2. Women's Empowerment: Savings, Main Woman in the Household

| | | F | W | | PDS | | | | |
|--|-------|-------|-------|---------|-------|-------|-------|---------|--|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Woman has savings | 0.20 | 0.22 | 0.17 | 0.437 | 0.22 | 0.23 | 0.21 | 0.622 | |
| Amount of money saved by woman the previous month, including those who do not save | 11.59 | 12.21 | 10.65 | 0.735 | 16.25 | 14.05 | 19.96 | 0.207 | |
| N | 2,356 | 1,179 | 1,177 | | 2,130 | 1,075 | 1,055 | | |
| Amount of money saved by woman the previous month, excluding those who do not save | 58.19 | 56.66 | 61.09 | 0.803 | 72.53 | 59.92 | 96.64 | 0.025 | |
| N | 375 | 170 | 205 | | 421 | 203 | 218 | | |
| Household has savings | 0.23 | 0.22 | 0.24 | 0.639 | 0.22 | 0.25 | 0.18 | 0.179 | |
| Amount of money saved by household the previous month, including those who do not save | 16.50 | 14.46 | 19.62 | 0.313 | 17.81 | 18.82 | 16.07 | 0.615 | |
| N | 2,339 | 1,168 | 1,171 | | 2,110 | 1,068 | 1,042 | | |
| Amount of money saved by household the previous month, excluding those who do not save | 72.86 | 66.60 | 81.47 | 0.338 | 80.26 | 75.90 | 90.66 | 0.425 | |
| N | 581 | 298 | 283 | | 440 | 255 | 185 | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

Next, the survey asked whether the household was saving and, if so, how much. Similar proportions of PW and PDS households reported having savings, averages of 23 per cent and 22 per cent, respectively. Proportions of households reporting savings was balanced between treatment and comparison groups in both PW and PDS households. Average monthly household savings ranged from ETB 17 to ETB 18 in PW and PDS households, respectively. The second mean calculated only among those who report any savings ranged from ETB 73 to ETB 80 in the PW the PDS households, respectively. All household savings means were balanced between treatment and comparison groups.

10.3 Women's social capital, social support and group membership

Social capital and social support are important factors contributing to women's capabilities and resilience. Individuals with stronger and more diverse ties may be able to leverage these in times of need and therefore become able to weather shocks or adverse life events. This can reduce the effects of these stressful events on an individual's well-being (López and Cooper, 2011).

The survey first assessed social support using a modified version of the widely implemented and validated Medical Outcomes Study–Social Support score (Hays, Sherbourne, and Mazel, 1995). The study involved a series of questions focused on, for example, whether the respondent knows someone who would (a) help them if they were confined to bed, (b) take them to the doctor if this was needed, (c) prepare their meals if they were unable to do so themselves, (d) help with daily chores if they were are sick, and whether the respondent knows someone (e) with whom to have a good time, (f) to turn to for suggestions for dealing with a personal problem, (g) who understands their problems, and (h) who loves them and makes them feel wanted.

An overall social support score was obtained by averaging the responses to these 8 questions and then standardizing them into a possible range of 0–100. The average scores on this social support index were 43.6 and 40.6 among the PW and PDS households, respectively (see Table 10.3). The scores were balanced between the comparison and treatment groups in both the PW and PDS categories.

Table 10.3. Perceived Stress, Social Capital and Social Support

| | | | PW | | | | | |
|---|-------|-------|-------|---------|-------|-------|-------|---------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Woman's perception of community relationship | 2.93 | 2.91 | 2.95 | 0.564 | 2.93 | 2.95 | 2.90 | 0.480 |
| Woman's positive perception of community relationship (agree) | 0.15 | 0.13 | 0.18 | 0.151 | 0.17 | 0.17 | 0.16 | 0.557 |
| Woman feels part of the community | 2.97 | 2.94 | 3.03 | 0.148 | 2.98 | 2.98 | 2.99 | 0.909 |
| Feels part of the community (agree) | 0.18 | 0.15 | 0.22 | 0.094 | 0.20 | 0.20 | 0.20 | 0.991 |
| Woman's level of trust in the community | 2.49 | 2.54 | 2.41 | 0.062 | 2.47 | 2.52 | 2.41 | 0.105 |
| Woman's level of trust in the community (agree) | 0.08 | 0.08 | 0.09 | 0.651 | 0.10 | 0.11 | 0.09 | 0.493 |
| MOS-Social Support score (unstandardized) | 2.75 | 2.71 | 2.79 | 0.284 | 2.63 | 2.60 | 2.67 | 0.200 |
| MOS-Social Support score (standardized) | 43.63 | 42.86 | 44.79 | 0.284 | 40.63 | 39.89 | 41.87 | 0.200 |
| Number of groups in which woman participates or belongs to | 0.91 | 0.92 | 0.91 | 0.946 | 0.94 | 0.97 | 0.89 | 0.608 |
| Woman's participation in 1+ groups | 0.52 | 0.52 | 0.53 | 0.874 | 0.56 | 0.58 | 0.53 | 0.447 |
| People who would lend woman 100 ETB in emergency, number | 2.09 | 2.13 | 2.03 | 0.438 | 2.03 | 2.07 | 1.96 | 0.451 |
| Woman belongs to Iddir | 0.51 | 0.51 | 0.51 | 0.982 | 0.56 | 0.60 | 0.50 | 0.140 |
| Other household members belong to Iddir | 0.37 | 0.36 | 0.37 | 0.861 | 0.37 | 0.38 | 0.34 | 0.495 |
| Woman belongs to Eqqub | 0.03 | 0.02 | 0.03 | 0.407 | 0.02 | 0.02 | 0.03 | 0.154 |
| Other household members belong to Eqqub | 0.01 | 0.01 | 0.02 | 0.020 | 0.01 | 0.01 | 0.02 | 0.037 |
| N | 2,366 | 1,183 | 1,183 | | 2,136 | 1,077 | 1,059 | |

Note: Means are adjusted for sampling and matching weights. MOS–Social Support = Medical Outcomes Study–Social Support. C = comparison group. T = treatment group.

Next, the survey assessed women's social capital by asking women whether they strongly disagreed (= 1), disagreed (= 2), agreed (= 3), or strongly agreed (= 4) with the following statements: (a) the majority of people in this community generally get along with each other; (b) I feel part of this community; and (c) the majority of people in this community would try to take advantage of you if they got the chance. The means are reported for each question. Then, each of the questions is turned into a binary indicator

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equal to 1 if the woman agreed or strongly agreed with the statement. Both the separate continuous outcomes (increasing scores indicate more agreement with the statement) are reported in Table 10.3. Among the two indicators reflecting positive perceptions of the community (feels that community members get along and feels a part of the community), the indicators averaged 2.9 in both the PW and PDS households. The one question that indicates negative perceptions of social support (feeling that people in the community would cheat them, that is, gauging the level of trust in the community) averaged 2.5 in both the PW and PDS households. All these social capital outcomes were generally balanced between treatment arms.

Next, to assess another aspect of support networks, the survey asked women respondents how many people they could ask if they needed to borrow ETB 100. The means were about 2 among PW and PDS households. Another aspect of social ties assesses was group membership. It asked women how many Iddirs and Eqqub does she or other household members belong to, respectively. Among both women and households, the means were low: 51 per cent and 56 per cent women belonged to an Iddir in the PW and PDS households, respectively. Among other household members, 37 per cent reported they belonged to an Iddir in both the PW and PDS samples. Turning to Eqqubs, only 3 per cent and 2 per cent of women in the PW and PDS households, respectively, belonged to an Eqqub. Similarly low rates of other household members belonged to Eqqubs (1 per cent in both the PW and the PDS households).

10.4 Women's mental and physical health and functioning

An important pathway to increased productivity and well-being is mental and physical health. Poverty and poor physical health are mutually reinforcing. For example, poverty is associated with poor nutrition, which leads to poor physical health, and subsequently poverty may impede an individual's ability to seek health when sick. In addition, poor health may lead to lower productivity or missed days of work, which reduces income, reinforcing the cycle of poverty and poor health. Likewise, poverty and poor mental health are closely linked. Poverty often leads to chronic stress, as individuals and families worry about food security and how they will pay for school fees and other basic needs. Programmes such as the PSNP, that reduce poverty may therefore improve mental health by lowering stress levels. The enhanced life distress index has been used to assess women's self-perceived stress.7 It is a tool developed by UNICEF as an alternative way to measure chronic stress. Similar measures developed in the United States may be inadequate to capture stress in the context of sub-Saharan Africa (Hjelm, et al., 2017). The index asks whether the respondent has been worried about 12 items over the prior seven days. The categories include economic stressors (such as employment, education, and lack of access to food), relationship stressors (for example, with family or romantic partners), and other stressors (such as risk of theft or pregnancy). If they answer affirmatively for each item, respondents are then asked how distressed they were. Each of the 12 stressors is ranked on a scale ranging from 1 to 3. Higher values indicate greater distress. Respondents reporting no worry on an item are coded as zero, resulting in a scale with scores on all 12 items ranging from 0 to 36. Means reported on the index were 7.9 among PW households and 7.0 among PDS households (see Table 10.4). Means were balanced between treatment and comparison groups of both the PW and PDS categories.

⁷ The index is a new quantitative measure of stress being developed by researchers led by Tia Palermo and Jacob de Hoop at UNICEF Office of Research – Innocenti. It is loosely based on the life distress index described by Thomas, Yoshioka, and Ager (2000).

Table 10.4. Self-Reported Health and Physical Functioning, Main Woman in Household

| | | F | PW | | PDS | | | | |
|---|-------|-------|-------|---------|-------|------|------|---------|--|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Enhanced life distress index (0–36) | 7.89 | 7.87 | 7.93 | 0.925 | 6.96 | 6.98 | 6.93 | 0.932 | |
| Self-rated health 1=excellent, 5=poor | 2.76 | 2.75 | 2.78 | 0.696 | 2.86 | 2.81 | 2.95 | 0.122 | |
| Believes health is better now than a year ago | 0.27 | 0.29 | 0.23 | 0.153 | 0.23 | 0.23 | 0.24 | 0.708 | |
| Has difficulty with ADL | 0.32 | 0.28 | 0.38 | 0.034 | 0.34 | 0.32 | 0.38 | 0.245 | |
| Number of ADLs easily performed (0–4) | 3.10 | 3.23 | 2.91 | 0.030 | 2.97 | 3.06 | 2.83 | 0.196 | |
| Woman easily performs ADLs | 0.68 | 0.72 | 0.62 | 0.034 | 0.65 | 0.68 | 0.62 | 0.279 | |
| N | 2,086 | 1,039 | 1,047 | | 1,097 | 509 | 588 | | |

Note: Means are adjusted for sampling and matching weights. ADL = key activity of daily living. C = comparison group. T = treatment group.

Women were asked to assess their physical health on a scale as follows: poor (= 5), fair (= 4), good (= 3), very good (= 2), and excellent (= 1). The average health reported on this scale was 2.8 and 2.9 in among PW and PDS households, respectively. Women were also asked whether they believed their health was now better than it had been a year previously. The shares responding affirmatively to this question ranged was 27 per cent and 23 per cent in the PW and PDS households, respectively.

The survey asked about 4 key activities of daily living, namely: (a) engaging in vigorous activities; (b) engaging in moderate activities; (c) carrying a shopping bag of purchases weighing 10 kilograms a distance of 500 meters; and (d) bending, squatting, or kneeling; and walking 2 kilometres. Response options were: easily (=1), with some difficult (=2), with a lot of difficulty (=3) and not at all (4). The shares of women reporting difficulties in performing any of these tasks were 32 per cent among the PW households and 34 per cent among the PDS households.

Most of the indicators are balanced between the comparison and treatment subgroups of the PW and PDS categories. Indicators not balanced will be accounted for in the estimation of impacts after the follow-up data collection.

11. CHILD HEALTH, NUTRITION AND CARE

This chapter reports baseline statistics on children's health and care. Given the substantial vulnerability of children in the Amhara Region because the region exhibits the highest stunting rates and among the highest morbidity rates among the regions of Ethiopia (CSA and ICF, 2016), the focus of the ISNP components on health is particularly relevant for children. The domains that are reported in this chapter are antenatal care and postnatal care, morbidity and the care for illness, vaccination coverage, nutritional status and infant and young child feeding practices. Whenever the information is available, the same indicators are also reported using the 2016 Ethiopian DHS data restricted to rural Amhara (CSA and ICF, 2016). The indicators are constructed using the same definitions.

11.1 Antenatal, delivery and postnatal care

Health care during pregnancy, during delivery and after birth is important for the health and well-being of both children and mothers. Since one of main objectives of the ISNP is to facilitate the access to health services, particularly among pregnant women and recent mothers, a number of impacts are expected from antenatal care and postnatal care. Table 11.1 reports the indicators on antenatal care, delivery, birthweight and postnatal care among women with children ages 0–3 years. The indicators reported in this section are restricted to all children whose mothers answered the questions.

Overall, indicators from the ISNP show that women and children have higher access and use of antenatal care and postnatal care compared with data from the DHS. Mothers from PDS households report greater access and use of both antenatal care and postnatal care compared with mothers in PW households. Among women in PW households, 7 in 10 had received antenatal care from a skilled provider, while the proportion is slightly larger among women in PDS households (76 per cent). These figures are about 20 percentage points higher than those from the DHS (50 per cent). In terms of the frequency of antenatal care visits, 3 women in 10 in PW households and 4 women in 10 in PDS households had received four or more antenatal care visits during pregnancy, as recommended by the World Health Organization. The average number of antenatal care visits is 2.5 among women in PW households and 2.9 among women in PDS households. One woman in three and one woman in four in PW and PDS households, respectively, did not receive antenatal care.

Delivery with the assistance of skilled providers and in safe environments is important and contributes to mother and child health, especially in reducing maternal and neonatal mortality. Among women with children ages under 3, 38 per cent and 52 per cent from PW and PDS households, respectively, had delivered with the assistance of a skilled provider, and 34 per cent and 48 per cent had delivered in a health facility. The DHS data show that a smaller share of women in households in rural Amhara gave birth in health facilities (20 per cent) and delivered with the assistance of a skilled provider (20 per cent).

Provision of postnatal care is critical not only for treating complications that may arise after delivery but also to provide the mother with information about her own and child's care. Eleven and 17 per cent of women in PW and PDS households, respectively, received postnatal care within two days since giving birth. Seven and 6 women in 10 who had given birth during the previous three years in PW and PDS households, respectively, had never received postnatal care. The postnatal care data from the DHS sample show much lower rates: only 2 per cent of women in rural areas of the Amhara Region had received postnatal care within two days of delivery, while 91 per cent had never received postnatal care.

Low birthweight and small size can be predictors of child mortality and greater health vulnerability.

The number of children who have been weighed at birth in the sample is low (38 children). Therefore, statistics on birthweight at less than 2,500 grams are not reported. Mothers of children in the household were also asked to estimate the size of the baby at birth by choosing among the following options: very small, smaller than average, average, bigger than average, and very big. Around one mother in four reported that children were small or very small at birth in both client categories (23 per cent and 25 per cent in the PW and PDS households, respectively). The share reported in the DHS is larger (34 per cent).

Table 11.1. Antenatal Care, Delivery Care and Birthweight, Children Ages 0-35 Months

| | | | W | | | DHS | | | |
|---|------|------|------|---------|------|------|------|---------|-------------------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | 2016 ^a |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| ANC from skilled provider | 0.68 | 0.66 | 0.71 | 0.598 | 0.76 | 0.76 | 0.77 | 0.894 | 0.50 |
| ANC 4 times or more | 0.33 | 0.35 | 0.31 | 0.466 | 0.41 | 0.46 | 0.33 | 0.165 | 0.22 |
| ANC visits during pregnancy, number | 2.48 | 2.48 | 2.48 | 1.000 | 2.88 | 2.92 | 2.83 | 0.772 | 2.33 |
| N | 790 | 431 | 359 | | 265 | 132 | 133 | | 665 |
| No ANC visit during pregnancy | 0.32 | 0.33 | 0.29 | 0.612 | 0.24 | 0.24 | 0.23 | 0.894 | 0.28 |
| N | 798 | 433 | 365 | | 270 | 132 | 138 | | 842 |
| Delivery with assistance from skilled provider ^b | 0.38 | 0.37 | 0.40 | 0.680 | 0.52 | 0.55 | 0.48 | 0.434 | 0.20 |
| Delivery in health facility ^c | 0.34 | 0.35 | 0.33 | 0.774 | 0.48 | 0.51 | 0.43 | 0.387 | 0.20 |
| PNC checkup within 2 days of birth | 0.11 | 0.11 | 0.10 | 0.801 | 0.17 | 0.20 | 0.14 | 0.368 | 0.02 |
| No PNC received | 0.73 | 0.74 | 0.72 | 0.705 | 0.64 | 0.68 | 0.58 | 0.176 | 0.91 |
| Size at birth, small | 0.11 | 0.12 | 0.10 | 0.590 | 0.11 | 0.09 | 0.14 | 0.310 | 0.12 |
| Size at birth, very small | 0.12 | 0.13 | 0.11 | 0.830 | 0.13 | 0.13 | 0.14 | 0.780 | 0.22 |
| Size at birth, small or very small | 0.23 | 0.25 | 0.21 | 0.627 | 0.25 | 0.22 | 0.28 | 0.472 | 0.34 |
| N | 798 | 433 | 365 | | 270 | 132 | 138 | | 842 |

Note: Indicators are compared to DHS sample of 2016 for rural Amhara. If missing, then the indicator is not available in the DHS data. Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

11.2 Child health and care for illness

In this section, indicators of illness and care for illness among all children ages 0–59 months are reported. In particular, Table 11.2 reports indicators of health seeking behaviour, the health care expenditures for each child during the previous four weeks, the incidence of the most common child ailments (diarrhæa, acute respiratory infection and fever), and the treatments and the care adopted for diarrhæa. One child in four (26 per cent) and one child in three (36 per cent) living in PW and PDS households, respectively, had been taken to a health facility during the 12 months prior to the interviews. These rates are lower relative to the DHS data, according to which more than half (57 per cent) of children had been taken to a health facility in the previous 12 months. Health expenditures for each child during the previous four weeks averaged ETB 11 in the PW sample. The average was lower among the PDS sample, ETB 8 per child.

a. The indicators from DHS about antenatal care (ANC) are asked to women with children ages 0–5; the indicators on postnatal care (PNC) are asked to women who gave birth in two years preceding the survey. ANC and PNC questions in the ISNP survey are instead asked to women with children ages 0–3.

b. Skilled provider includes doctors, nurses, midwifes, health officers and health extension workers.

c. Health facility includes hospital, health centre, or village health post.

Table 11.2. Child Health Indicators and the Care of illness Children Ages 0-59 Months

| | | | PW | | | | PDS | | DHS |
|---|-------|------|-------|---------|------|------|-------|---------|------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | 2016 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Taken to a health facility in the previous 12 months | 0.26 | 0.22 | 0.32 | 0.035 | 0.36 | 0.34 | 0.41 | 0.356 | 0.57 |
| Total health expenditures (4 weeks) | 11.22 | 9.81 | 13.39 | 0.387 | 8.41 | 6.19 | 12.06 | 0.098 | |
| N | 1,351 | 732 | 619 | | 493 | 250 | 243 | | |
| Child was sick (diarrhœa/cough/fever)ª | 0.22 | 0.22 | 0.22 | 0.930 | 0.20 | 0.17 | 0.26 | 0.126 | |
| Diarrhœa in previous two weeks | 0.14 | 0.14 | 0.13 | 0.805 | 0.10 | 0.08 | 0.14 | 0.158 | 0.14 |
| N | 1,426 | 758 | 668 | | 516 | 257 | 259 | | 843 |
| Children with diarrhœa are given more liquids than usual | 0.10 | 0.11 | 0.09 | 0.720 | 0.09 | 0.12 | 0.06 | 0.491 | 0.29 |
| Children with diarrhœa are given as much food or more than usual | 0.64 | 0.76 | 0.43 | 0.000 | 0.46 | 0.47 | 0.45 | 0.936 | 0.30 |
| Received oral rehydration salts during episode of diarrhœa | 0.57 | 0.66 | 0.42 | 0.041 | 0.51 | 0.63 | 0.39 | 0.138 | 0.35 |
| Received recommended home fluid during episode of diarrhœa | 0.33 | 0.40 | 0.21 | 0.203 | 0.30 | 0.39 | 0.22 | 0.497 | 0.14 |
| Received zinc during episode of diarrhœa | 0.56 | 0.66 | 0.41 | 0.004 | 0.50 | 0.63 | 0.39 | 0.142 | 0.07 |
| Received oral rehydration therapy during episode of diarrhœab | 0.62 | 0.69 | 0.50 | 0.070 | 0.57 | 0.64 | 0.50 | 0.412 | 0.56 |
| Received oral rehydration therapy and continued feeding during diarrhœa episode | 0.58 | 0.66 | 0.47 | 0.084 | 0.40 | 0.43 | 0.37 | 0.557 | 0.26 |
| No treatment for diarrhœa during last episode | 0.34 | 0.32 | 0.37 | 0.693 | 0.46 | 0.35 | 0.55 | 0.216 | 0.57 |
| N | 152 | 62 | 90 | | 54 | 18 | 36 | | 113 |
| Symptoms of acute respiratory infection in the previous two weeks ^c | 0.01 | 0.01 | 0.01 | 0.564 | 0.01 | 0.00 | 0.02 | 0.194 | 0.07 |
| Fever in the previous two weeks | 0.09 | 0.08 | 0.11 | 0.134 | 0.08 | 0.06 | 0.11 | 0.167 | 0.11 |
| N | 1,426 | 758 | 668 | | 516 | 257 | 259 | | 837 |
| Sought no care for fever | 0.72 | 0.66 | 0.78 | 0.363 | 0.49 | 0.29 | 0.69 | 0.018 | |
| N | 119 | 45 | 74 | | 46 | 18 | 28 | | |
| Safe disposal of child stools ^d | 0.23 | 0.26 | 0.18 | 0.139 | 0.32 | 0.32 | 0.31 | 0.873 | 0.19 |
| Slept under insecticide-treated mosquito net yesterday | 0.27 | 0.26 | 0.29 | 0.632 | 0.30 | 0.28 | 0.33 | 0.480 | |
| N | 1,426 | 758 | 668 | | 516 | 257 | 259 | | |

Note: Indicators are compared to DHS sample of 2016 for rural Amhara. If missing, then the indicator is not available in the DHS data. Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

- a. The reference period for diarrhoea is four weeks; for fever and acute respiratory infection, it is two weeks.
- b. Oral rehydration therapy involves giving children with diarrhœa oral rehydration salts or a recommended home fluid.
- c. The symptoms of acute respiratory infection include a cough accompanied by short, rapid breathing.
- d. For a child who uses a toilet or latrine, safe disposal involves flushing stool down the toilet or latrine or burying it.

One child in five was sick in the two to four weeks preceding the survey in both client categories (22 per cent and 20 per cent of children among the PW and PDS households, respectively). According

to estimates of the World Health Organization and the Child Health Epidemiology Reference Group, diarrhœa is one of the major contributors to mortality among children ages under 5 in Ethiopia, leading to more than 1 child death in every 10 deaths (13 per cent) (WHO and CHERG, 2014). About 14 per cent and 10 per cent of children in PW and PDS households, respectively, experienced episodes of diarrhœa. The incidence of diarrhœa in the DHS was also 14 per cent. Among children who suffered from diarrhœa, 10 per cent and 9 per cent from PW and PDS households, respectively, were given more liquids than usual, and 64 per cent and 46 per cent of children were given as much food or more than usual in PW and PDS households, respectively. These figures are much lower than those from the DHS sample for the reported amount of liquids given to the child (29 per cent), while higher for those reported on feeding (30 per cent).

Slightly more than half of children who experienced diarrhæa received oral rehydration salts (57 per cent among children in PW households and 51 per cent among children in PDS households). One in three children received a recommended home fluid (33 per cent and 30 per cent of children in PW and PDS households, respectively), higher proportions than those from the DHS sample (14 per cent). Oral rehydration therapy includes receiving oral rehydration salts or a recommended home fluid which are simple and effective remedies to diarrhæa which can be easily managed at home. The proportion of children with diarrhæa who received oral rehydration therapy was 62 per cent and 57 per cent in PW and PDS households, respectively, and 56 per cent in DHS sample.

It is recommended for zinc supplements to be administered to children in case of diarrhœa as they help in reducing the severity, frequency and duration of the diarrhœa episode (CSA and ICF, 2016). The proportions of children who experienced episodes of diarrhœa and were given zinc supplements are similar to those who received oral rehydration salts (56 per cent and 50 per cent in PW and PDS households, respectively). However, for zinc supplements the difference with the DHS sample is considerable as only 7 per cent of children were treated also with zinc supplements. Finally, 34 and 46 per cent of children who had episodes of diarrhœa in PW and PDS households, respectively, did not receive any treatment (the child was not given any oral rehydration salts, no recommended home fluid, and no medicines). The percentage is higher in the DHS sample, where 57 per cent of children did not receive any treatment for the last episode of diarrhœa.

Acute respiratory infection, which includes pneumonia, is another leading cause of morbidity and mortality; it accounts for 18 per cent of deaths among children (WHO and UNICEF, 2013). Symptoms include a cough accompanied by short, rapid breathing or difficulty breathing that is chest related. Less than one percent of children in both PW and PDS households reported acute respiratory infection while DHS statistics indicate an incidence of 7 per cent among children in rural areas of Amhara Region. The share of children who suffered from fever in the two weeks preceding the survey was 9 per cent and 8 per cent among children in PW and PDS households, respectively, and 11 per cent among children in the DHS sample.

The safe disposal of children's stool and sleeping under an insecticide-treated mosquito net are both indicators of the health environment in which a child lives. Safe disposal of stool occurs if the child uses a toilet or latrine, if stools are flushed or rinsed down a toilet or latrine, or if stools are buried. About 23 per cent and 32 per cent of caregivers safely disposed of children's stool in PW and PDS households, respectively. The share is slightly lower in the DHS sample, in which 19 per cent of caregivers disposed of stools in a safe manner. Caregivers were asked whether the child had slept under an insecticide-treated mosquito net the previous night. This is an effective method to reduce the incidence of mosquito-borne disease. About one child in three had slept under the nets the night before (27 per cent of children in PW households and 30 per cent of children in PDS households).

11.3 Vaccination coverage

Vaccinations are effective in protecting children (and adults) from common and preventable diseases. The basic vaccinations are the following: one dosage of BCG, which protects against tuberculosis; three doses of polio vaccine; three doses of DPT/pentavalent vaccine, which protects against diphtheria, pertussis and tetanus; and one dose of measles vaccine. BCG and polio 0 should be given at birth or at first clinical contact. The three doses of polio and the pentavalent vaccine should be given at ages 6, 10 and 14 weeks, and the measles vaccine is given at age 9 months. A child should be fully vaccinated by the first birthday. A standard measure of vaccination coverage is by looking at children between 12 and 23 months of age. In 2011 the government of Ethiopia introduced two additional vaccines in the national infant immunization programme, the pneumococcal conjugate vaccine (PCV) and the human rotavirus vaccine (RV). PCV protects against streptococcus pneumoniae bacteria which cause severe pneumoniae, meningitis and other illnesses, while RV helps prevent diarrhœa.

Table 11.3 reports the indicators on vaccination cards and coverage. Caregivers were asked to show the vaccination card. While a large share of caregivers reported that they had cards (68 per cent and 78 per cent of children had vaccination cards, respectively, in PW and PDS households), a much smaller share was able to show the cards (34 per cent and 43 per cent, respectively, for children in PW and PDS households). In both cases, the data are similar to those estimated based on the DHS.

Table 11.3. Vaccination Coverage, Children Ages 12–23 Months

| | | F | W | | | DHS, | | | |
|--|------|------|------|---------|------|------|------|---------|------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | 2016 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Vaccination card ownership | 0.68 | 0.68 | 0.68 | 0.997 | 0.78 | 0.85 | 0.68 | 0.053 | 0.70 |
| Vaccination card availability (seen) | 0.34 | 0.34 | 0.33 | 0.900 | 0.43 | 0.56 | 0.23 | 0.022 | 0.43 |
| BCG | 0.76 | 0.79 | 0.71 | 0.454 | 0.78 | 0.86 | 0.66 | 0.073 | 0.75 |
| Polio 0 | 0.78 | 0.81 | 0.74 | 0.387 | 0.79 | 0.87 | 0.68 | 0.089 | 0.26 |
| Polio 1 | 0.69 | 0.68 | 0.69 | 0.912 | 0.66 | 0.70 | 0.59 | 0.354 | 0.86 |
| Polio 2 | 0.63 | 0.64 | 0.62 | 0.859 | 0.65 | 0.70 | 0.57 | 0.269 | 0.80 |
| Polio 3 | 0.58 | 0.60 | 0.55 | 0.657 | 0.61 | 0.65 | 0.55 | 0.364 | 0.66 |
| Penta 1 | 0.72 | 0.75 | 0.68 | 0.489 | 0.76 | 0.83 | 0.66 | 0.093 | 0.80 |
| Penta 2 | 0.60 | 0.61 | 0.58 | 0.750 | 0.68 | 0.75 | 0.57 | 0.107 | 0.74 |
| Penta 3 | 0.54 | 0.55 | 0.53 | 0.887 | 0.63 | 0.69 | 0.53 | 0.125 | 0.62 |
| Measles | 0.66 | 0.71 | 0.57 | 0.148 | 0.63 | 0.69 | 0.55 | 0.249 | 0.63 |
| Received all vaccinations ^a | 0.45 | 0.48 | 0.39 | 0.308 | 0.45 | 0.48 | 0.40 | 0.559 | 0.47 |
| Received 2 doses of RV (Rotavirus) | 0.58 | 0.56 | 0.61 | 0.595 | 0.64 | 0.71 | 0.53 | 0.115 | 0.59 |
| Received 3 doses of PCV (pneumococcal conjugate vaccine) | 0.51 | 0.52 | 0.49 | 0.757 | 0.61 | 0.68 | 0.49 | 0.063 | 0.61 |
| N | 305 | 168 | 137 | | 94 | 47 | 47 | | 166 |

Note: Indicators are compared to DHS sample of 2016 for rural Amhara. If missing, then the indicator is not available in the DHS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

a. All vaccinations include BCG, measles, and three doses each of pentavalent (DPT-HepB-Hib) and polio vaccine (excluding polio vaccine given at birth – OPV0).

In terms of vaccination coverage, 45 per cent of children in both PW and PDS households had received all basic vaccinations. This share is similar to the share estimated based on the DHS data (47 per cent). The coverage of individual vaccines is higher: 76 per cent and 78 per cent of children in the PW

households and the PDS households, respectively, had been vaccinated for BCG; 69 per cent and 66 per cent of children in the PW households and PDS households, respectively, had been vaccinated for polio 1, and 72 per cent and 76 per cent of children in the PW households and PDS households, respectively, had been vaccinated for DPT 1. The coverage of the vaccination for measles is somewhat lower: 66 per cent and 63 per cent of children in the PW households and PDS households, respectively. The DHS average for children living in rural areas in Amhara is close, with 63 per cent of children vaccinated for measles. The coverage of the more recently introduced vaccinations, PCV and RV, is lower than the coverage of basic vaccinations: 58 per cent and 64 per cent for children in the PW households and PDS households, respectively.

11.4 Nutritional status

Among the main objectives of the ISNP, reducing malnutrition is a critical yet difficult one. Indicators of nutritional status are calculated using height, weight and age of children. A specialized team was specifically trained in the collection of anthropometric data on all children ages 4–59 months. Weight was measured using a digital standing scale and height using a portable measuring board and an infantometer for children ages up to 2.

Table 11.4 reports the standard indicators of nutritional status, which are calculated using the 2006 World Health Organization growth standards (WHO, 2006). The measures are expressed in standard deviation units from the median of the World Health Organization reference group. Height-forage represents the long-term effects of malnutrition in a population and is not sensitive to recent short-term changes in dietary intake. Children whose height-for-age z-score is less than minus two standard deviations (-2 SD) from the median of the World Health Organization reference population are considered short for their age (stunted), or chronically malnourished. Children who are less than minus three standard deviations (-3 SD) are considered severely stunted. Stunting reflects a failure to provide or receive adequate nutrition over a long period of time and is affected by recurrent and chronic illness. Weight-for-height measures body mass in relation to body height. Children with z-scores below minus two standard deviations (-2 SD) are considered thin (wasted) or acutely malnourished. Wasting represents a failure to receive or provide adequate nutrition in the period immediately preceding the survey and may be the result of inadequate food intake or a recent episode of illness that causes loss of weight and the onset of malnutrition. Children with a weight-for-height index below minus three standard deviations (-3 SD) are considered severely wasted. Weight-for-age is an indicator of underweight. Children with z-scores below -2 and -3 SD are considered moderately and severely malnourished, respectively. Table 11.4 reports the indicators described.

Table 11.4. Nutritional Status, Children Ages 4–59 Months

| | | F | PW | | | | DHS, | | |
|------------------------------------|-------|-------|-------|---------|-------|-------|-------|---------|-------|
| Indicator | All | С | Т | p-value | All | С | T | p-value | 2016 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Length/height-for-age Z-score | -1.75 | -1.67 | -1.88 | 0.272 | -1.74 | -1.75 | -1.73 | 0.945 | -1. |
| Stunted (HAZ < -2 SD) | 0.47 | 0.45 | 0.50 | 0.331 | 0.45 | 0.47 | 0.43 | 0.640 | 0.48 |
| Severely Stunted (HAZ < -3 SD) | 0.20 | 0.16 | 0.25 | 0.063 | 0.21 | 0.20 | 0.22 | 0.757 | 0.20 |
| N | 1,290 | 689 | 601 | | 456 | 226 | 230 | | 889 |
| Weight-for-length/height z-score | -0.42 | -0.44 | -0.40 | 0.856 | -0.37 | -0.42 | -0.30 | 0.551 | -0.59 |
| Wasted (WHZ < -2 SD) | 0.11 | 0.11 | 0.11 | 0.963 | 0.12 | 0.13 | 0.11 | 0.699 | 0.10 |
| Severely Wasted (WHZ < -3 SD) | 0.05 | 0.05 | 0.04 | 0.630 | 0.06 | 0.07 | 0.04 | 0.408 | 0.02 |
| N | 1,282 | 689 | 593 | | 452 | 227 | 225 | | 885 |
| Weight-for-age z-score | -1.27 | -1.21 | -1.37 | 0.176 | -1.30 | -1.35 | -1.23 | 0.478 | -1.47 |
| Underweight (WHZ < -2 SD) | 0.28 | 0.27 | 0.29 | 0.503 | 0.27 | 0.27 | 0.27 | 0.937 | 0.30 |
| Severely Underweight (WHZ < -3 SD) | 0.06 | 0.05 | 0.08 | 0.016 | 0.07 | 0.06 | 0.08 | 0.640 | 0.09 |
| N | 1,294 | 693 | 601 | | 458 | 229 | 229 | | 899 |

Note: Indicators are compared to DHS sample of 2016 for rural Amhara. If missing, then the indicator is not available in the DHS data. Means are adjusted for sampling and matching weights. C = comparison group. HAZ = height-for-age.T = treatment group. WHZ = weight-for-height.

Height-for-age for both client categories is below zero and similar (–1.75 and –1.74 for children in PW and PDS households, respectively), indicating that the children in the sample are less well nourished than the healthy sample of children in the World Health Organization reference population. These values are slightly smaller (better off) than the values in the DHS, according to which the average heightfor-age of children in rural Amhara is –1.82. The share of stunted children in Ethiopia (38.0 per cent) is slightly above the average in East Africa (35.6 per cent) and a bit more relative to the African average (30.8 per cent) (CSA and ICF, 2016; UNICEF, WHO, and World Bank, 2018). However, the Amhara Region is the most highly affected; there is incidence of stunting among children is 46.0 per cent. Almost half of children in the study sample are stunted (47 per cent and 45 per cent among children in the PW and PDS households, respectively). Similar rates of stunting are found among children in the DHS sample used for comparison (48 per cent). One child in five is severely stunted in both client groups (on average, 20 per cent and 21 per cent among children in PW and PDS households, respectively).

The mean weight-for-height index is also below the reference mean, but to a lesser extent than the height-for-age index. This is also reflected in the rate of wasting, which is 11 per cent and 12 per cent for children in PW and PDS households, respectively. The shares of severe wasting are 5 per cent and 6 per cent among children in PW and PDS households, respectively. These levels of wasting and severe wasting are slightly higher compared with the DHS (10 per cent and 2 per cent of children, respectively, are wasted and severely wasted in the DHS). Since the ISNP survey was undertaken during the dry season, the higher levels of wasting reported in the ISNP sample compared to the DHS figures could be partially explained by the fact that wasting is more sensitive to short term food variations thus higher during the dry season.⁸

⁸ Bega, in Amharic, refers to the dry winter season (October–February); Belg are the light rains of spring (March–May), and Kiremt is the wet summer season (June–September) (Mellander, et al., 2013).

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Weight-for-age and underweight rates are similar to the reported DHS rates: 28.0 per cent of children in the ISNP households are malnourished (similar figures for the two types of clients), while the share is 29.6 per cent in the DHS sample. Among ISNP children in PW and PDS households, respectively, 6 per cent and 7 per cent are severely malnourished, while, in the DHS, the rate is 9 per cent.

11.5 Infant and young child feeding practices

This section reports indicators on infant and young child feeding practices. Reported here are the core indicators proposed by the World Health Organization and UNICEF as the main indicators on recommended feeding practices (WHO, 2010). The indicators refer to breastfeeding and diet diversity and are calculated for specific age groups. The eight core indicators are as follows: immediate breastfeeding (children ages 0–23 months), exclusive breastfeeding among children ages under 6 months (children ages 0–5 months), continued breastfeeding at least until age 1 (children ages 12–15 months), introduction of solid or semisolid foods (children ages 6–8 months), minimum dietary diversity, minimum meal frequency, minimum acceptable diet, and consumption of ironrich foods (children ages 6–23 months). In addition to these eight core indicators, data on the intake of micronutrient supplements are also covered, namely, micronutrient powder (children ages 6–23 months), vitamin A, and iron (children ages 6–59 months).

Table 11.5 illustrates data on these indicators. Overall, indicators of breastfeeding show that particularly large shares of mothers are implementing good practices. In PW and PDS households, respectively, 76 per cent and 77 per cent of children had been breastfed within one hour of birth. In the DHS sample, the share is more than 10 percentage points lower (64 per cent). The share of children who are exclusively breastfed up to age 6 months is particularly high among the ISNP households. Among children in PW households, 93 per cent are exclusively breastfed up to age 6 months, and, among children in PDS households, the share is 84 per cent. These shares are high in absolute terms, but also compared with the shares in the DHS comparison sample (61 per cent): 20 and 30 percentage points higher. The share of children who are breastfed until they reach age 1 is also high: 97 per cent and 92 per cent of children in PW and PDS households, respectively. On this indicator, the share in the DHS sample is close (94 per cent). The indicator on the introduction of solid and semisolid foods is slightly larger among children in the ISNP households (51 per cent and 66 per cent, respectively, for PW and PDS households), compared with the DHS sample (50 per cent).

Table 11.5. Infant and Young Child Feeding Practices, Children Ages 0-23 Months

| | | | PW | | | DHS, | | | |
|---|-------|------|------|---------|------|------|------|---------|------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | 2016 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Breastfeeding within 1 hour of birth | 0.76 | 0.78 | 0.74 | 0.557 | 0.77 | 0.80 | 0.73 | 0.313 | 0.64 |
| Children 0–23 months | 798 | 433 | 365 | | 270 | 132 | 138 | | 336 |
| Exclusive breastfeeding under 6 months | 0.93 | 0.93 | 0.93 | 0.963 | 0.84 | 0.80 | 0.90 | 0.578 | 0.61 |
| Children 0–5 months | 136 | 67 | 69 | | 53 | 23 | 30 | | 92 |
| Continued breastfeeding at 1 year | 0.97 | 0.98 | 0.95 | 0.341 | 0.92 | 0.89 | 0.95 | 0.534 | 0.94 |
| Children 12–15 months | 135 | 77 | 58 | | 39 | 18 | 21 | | 65 |
| Introduction of solid, semisolid, or soft foods | 0.51 | 0.57 | 0.41 | 0.273 | 0.66 | 0.74 | 0.49 | 0.269 | 0.50 |
| Children 6–8 months | 77 | 43 | 34 | | 26 | 18 | 8 | | 38 |
| Minimum dietary diversity ^a | 0.03 | 0.04 | 0.01 | 0.409 | 0.05 | 0.05 | 0.06 | 0.805 | 0.03 |
| Minimum meal frequency ^b | 0.56 | 0.55 | 0.58 | 0.722 | 0.70 | 0.71 | 0.68 | 0.786 | 0.53 |
| Minimum acceptable diet ^c | 0.02 | 0.04 | 0.01 | 0.311 | 0.05 | 0.05 | 0.05 | 0.997 | 0.03 |
| Consumption of iron-rich or iron- fortified foods ^d | 0.09 | 0.08 | 0.10 | 0.593 | 0.10 | 0.09 | 0.14 | 0.509 | 0.07 |
| Received MNP in previous 7 days (6–23 months) | 0.06 | 0.04 | 0.08 | 0.225 | 0.09 | 0.06 | 0.14 | 0.284 | 0.03 |
| Children 6–23 months | 429 | 239 | 190 | | 143 | 77 | 66 | | 244 |
| Received vitamin A in previous 6 months (6–59 months) | 0.28 | 0.28 | 0.28 | 0.996 | 0.36 | 0.38 | 0.33 | 0.521 | 0.45 |
| Child given iron supply in previous 7 days | 0.11 | 0.10 | 0.11 | 0.820 | 0.09 | 0.07 | 0.11 | 0.183 | 0.05 |
| Child given deworming drug in previous 6 months | 0.17 | 0.17 | 0.16 | 0.941 | 0.20 | 0.21 | 0.18 | 0.476 | 0.09 |
| Children 6–59 months | 1,290 | 691 | 599 | | 463 | 234 | 229 | | 751 |
| | | | | | | | | | |

Note: Indicators are compared to DHS sample of 2016 for rural Amhara. If missing, then the indicator is not available in the DHS data. Means are adjusted for sampling and matching weights. C = comparison group. MNP = micronutrient powders. T = treatment group.

Responses were sought on four nutrition indicators that referred to the day and night preceding the survey (see the definitions reported in the note to Table 11.5). Overall, these indicators reflect extremely poor diversity and quality in diets, although a greater frequency. In particular, only 3 per cent and 5 per cent of children ages 6–23 months in PW and PDS households, respectively, consumed four or

a. Food groups include (i) foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; (ii) legumes and nuts; (iii) dairy products (milk, yogurt, cheese); (iv) flesh foods (meat, fish, poultry and liver/organ meats); (v) eggs; (vi) vitamin A-rich fruits and vegetables; and (vii) other fruits and vegetables.

b. For breastfed children, minimum meal frequency involves receiving solid or semisolid food at least twice a day for infants 6–8 months and at least three times a day for children 9–23 months. For non-breastfed children ages 6–23 months, minimum meal frequency involves receiving solid or semisolid food or milk feeds at least four times a day.

c. Breastfed children are considered to have a minimum acceptable diet if they receive food from four or more food groups and the minimum age-appropriate meal frequency (according to the definition of minimum meal frequency). Non-breastfed children have a minimum acceptable diet if they receive other milk or milk products at least twice a day, receive the minimum meal frequency, and receive solid or semisolid foods from at least four food groups, not including the milk or milk products food group.

d. Includes fortified baby cereal, meat, poultry, fish, shellfish, organ meats, and micronutrient powder.

more foods among seven food groups. The share in the DHS sample is close, 3 per cent of children had consumed a diversified diet during the previous 24 hours preceding the survey. Slightly more than half (56 per cent) and 7 children in 10 (70 per cent) had consumed a minimum frequency of meals in PW and PDS households, respectively, also in line with DHS data for rural Amhara (53 per cent). The indicator for minimum acceptable diet is a composite measure of three infant and young child feeding practices, including breastfeeding, diet diversity and meal frequency. In light of the low indicators on food diversity, the share of children satisfying the criteria for a minimum acceptable diet is also low: 2 per cent and 5 per cent of children, respectively, in PW and PDS households. The DHS share is also in line, with 3 per cent of children.

Iron deficiency can cause anæmia, which has serious health consequences. Iron may be supplied through the consumption of certain foods, but also through supplements. About 1 child in 10 children had consumed at least one food item rich in iron (9 per cent and 10 per cent of children in PW and PDS households, respectively), slightly more than the share in the DHS sample (7 per cent). Similar shares were found among children ages 6–59 months who were given iron supplements in the seven days preceding the survey (11 per cent and 9 per cent of children in PW and PDS households, respectively). The DHS share is lower: 5 per cent of children had received iron supplements in the seven days preceding the survey.

In addition to the intake of micronutrients from food, micronutrient supplements and fortification are provided to improve the nutritional status of children. Among nutritional supplements given to children that contribute to health and a reduction in morbidity are micronutrient powder, vitamin A, and deworming drugs. On average, 6 per cent and 9 per cent of children ages 6–23 months had received supplements of micronutrient powder in PW and PDS households, respectively. Vitamin A deficiency can cause eye damage and can increase the severity of certain illnesses, such as measles and diarrhœa. On average, one in three children in the ISNP sample received a supplement of vitamin A in the six months preceding the survey. The proportion is lower among children in PW households (28 per cent) than the one of children in PDS households (36 per cent). In this case, the proportion of children who received supplement is higher in the DHS sample (45 per cent). Deworming drugs were given to 17 and 20 per cent of children in PW and PDS households, respectively. A slightly smaller share of children in the DHS sample had received the deworming drug (9 per cent). None of the reported indicators show statistically significant differences between the treatment and comparison groups.

12. CHILD PROTECTION

Child protection generally refers to the prevention and response to violence, exploitation and abuse of children in all contexts. Many adverse child protection outcomes are driven by poverty. Thus, programmes such as the PSNP and additional programming and the links provided through the ISNP that aim to reduce poverty and build resiliency may mitigate against these negative outcomes. In addition, proper identification can help individuals protect and claim their rights, and thus birth registration is an important part of the work in which UNICEF engages through child protection interventions.

Dimensions of child protection examined are birth registration, early childhood development, child discipline (violence) and attitudes towards child marriage. The findings presented in this chapter have been gathered from answers to survey questions posed among the main women respondents in the households about the children in the household.

12.1 Birth registration and early childhood development

This section reports indicators on birth registration, on the reasons for non-registration and on child development. For each child under age 5, the main woman in the household was asked whether the birth was registered with the woreda or the kebele office, whether the household possessed the birth certificate, the amount spent for the registration and, in case the birth of a child was not registered, the main reasons for the non-registration. About one child in five (19 per cent and 21 per cent of children in the PW and PDS households, respectively) had their birth registered, compared to less than 1 per cent in the DHS data (Table 12.1).

Table 12.1. Birth Registration, Children Ages 0-59 Months

| | | | PW | | | DHS | | | |
|--|-------|------|------|---------|------|------|------|---------|------|
| Indicator | All | С | Т | p-value | All | С | T | p-value | 2016 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Birth registered | 0.19 | 0.16 | 0.24 | 0.096 | 0.21 | 0.20 | 0.23 | 0.581 | 0.01 |
| N | 1,426 | 758 | 668 | | 516 | 257 | 259 | | 881 |
| Has birth certificate | 0.58 | 0.45 | 0.72 | 0.004 | 0.60 | 0.53 | 0.70 | 0.163 | |
| Had to pay to register birth | 0.12 | 0.13 | 0.11 | 0.781 | 0.08 | 0.08 | 0.08 | 0.913 | |
| Birth registered within 90 days from birth | 0.60 | 0.57 | 0.64 | 0.466 | 0.70 | 0.65 | 0.77 | 0.324 | |
| Birth registered within one year of birth | 0.80 | 0.82 | 0.77 | 0.461 | 0.78 | 0.71 | 0.87 | 0.176 | |
| # of children whose births were registered | 268 | 108 | 160 | | 110 | 49 | 61 | | |
| Reasons for not registering birth | | | | | | | | | |
| Did not know it should be registered | 0.69 | 0.72 | 0.64 | 0.119 | 0.69 | 0.73 | 0.62 | 0.131 | |
| Does not know where to register | 0.18 | 0.17 | 0.22 | 0.231 | 0.20 | 0.18 | 0.22 | 0.454 | |
| Must travel too far | 0.06 | 0.07 | 0.06 | 0.784 | 0.03 | 0.04 | 0.02 | 0.613 | |
| Did not find it important | 0.03 | 0.03 | 0.04 | 0.413 | 0.04 | 0.04 | 0.04 | 0.896 | |
| Costs too much | 0.01 | 0.02 | 0.01 | 0.140 | 0.01 | 0.01 | 0.00 | 0.896 | |
| Could not fulfil requirement of both parents present | 0.01 | 0.00 | 0.01 | 0.007 | 0.01 | 0.00 | 0.03 | | |
| Registrar not present | 0.00 | 0.00 | 0.01 | 0.069 | 0.01 | 0.01 | 0.02 | 0.261 | |
| N | 1,158 | 650 | 508 | | 406 | 208 | 198 | | |

Note: Indicators are compared to DHS sample of 2016 for rural Amhara. If missing, then the indicator is not available in the DHS data. Means are adjusted for sampling and matching weights. C = comparison group.T = treatment group.

Among children whose births were registered, 6 households in 10 had the birth certificates available to show. About 12 per cent and 8 per cent of the PW households and PDS households that had registered the births of their children, had to pay fees for the registration process. Among those children that had births registered, the births of 6 children in 10 were registered within 90 days of the birth, and the births of 8 children in 10 were registered within the children's first year of life.

The survey also asked the women the reasons for not registering the birth of the child. The most frequent reported reason is lack of knowledge about registration. On average, 69 per cent of respondents reported they did not know they had to register. Almost one household in five reported that they did not know where they should register, with similar proportions across client categories and treatment status. Other reasons were also reported, but from a much smaller proportion of households. These included the need to travel too far to register, a feeling that registration was not important, the high cost, the requirement that both parents be present could not be met, and the absence of a registrar.

Table 12.2 reports estimates on the support for learning indicators. The survey asked respondents whether any household members over age 15 in the three days preceding the survey had engaged with the child in any of the following six activities: reading books to the child or looking at picture books with the child; telling stories to the child; singing songs to or with the child, including lullabies; taking the child outside the home, compound, yard, or enclosure; playing with the child; and naming, counting, or drawing objects or animals with the child. Standard indicators on the support for learning are calculated by analysing the number of activities in which household members engaged with children ages 36–59 months. In addition to the average number of activities, binary indicators are constructed to show whether adult household members engaged in four or more activities with the child and whether the mother or father engaged in one or more activities with the child. On average, children are engaged in 2.3–2.5 activities with any adult in the household in the PW and PDS households. One child in five and one child in four had engaged with adults in four or more activities in the PW and PDS households, respectively.

Table 12.2. Support for Learning, Children Ages 36–59 Months

| | | | PW | | PDS | | | | |
|---|-------|------|------|---------|------|------|------|---------|--|
| Indicator | All | С | T | p-value | All | С | T | p-value | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Activities with the child by an adult member of the household, number | 2.26 | 2.33 | 2.15 | 0.347 | 2.53 | 2.61 | 2.40 | 0.411 | |
| 4+ activities with an adult household member | 0.20 | 0.21 | 0.20 | 0.862 | 0.26 | 0.29 | 0.22 | 0.274 | |
| Children ages 36-59 months | 1,426 | 758 | 668 | | 516 | 257 | 259 | | |
| # of activities with the child by the mother | 1.79 | 1.81 | 1.76 | 0.774 | 2.06 | 2.01 | 2.14 | 0.538 | |
| 1+ activities with the mother | 0.72 | 0.74 | 0.71 | 0.553 | 0.79 | 0.79 | 0.77 | 0.683 | |
| Children living with the mother | 1,386 | 738 | 648 | | 483 | 241 | 242 | | |
| # of activities with the child by the father | 0.85 | 0.90 | 0.79 | 0.328 | 1.07 | 1.17 | 0.92 | 0.251 | |
| 1+ activities with the father | 0.45 | 0.46 | 0.43 | 0.522 | 0.51 | 0.55 | 0.45 | 0.159 | |
| Children living with the father | 1,200 | 637 | 563 | | 354 | 172 | 182 | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

Similar indicators are then analysed separately by focusing on the interaction of the child and the mother and the father separately. In this case, the binary indicator is equal to 1 if the parent engaged in one or more activities. On average, 1.8 and 2.1 activities are carried out by mothers in PW and PDS

households, respectively, and 72 per cent and 79 per cent of children were engaged in one or more activities with their mothers. The shares are lower for activities performed with fathers. On average, 0.85 and 1.10 activities are performed with fathers in PW and PDS households, respectively. And 44.5 per cent and 51.0 per cent of children performed one or more activities with their father. None of the indicators are statistically different by treatment status.

12.2 Child discipline

This section examines child discipline. Caregivers were asked 14 questions about their behaviour to address a behaviour problem with the child in the month preceding the survey (*see Table 12.3*). The questions were only asked with reference to children ages 1–4. Questions were taken from the Multiple Indicator Cluster Surveys with the addition of two questions to better reflect local norms. Violent discipline is composed of psychological aggression and physical punishment. A behaviour is defined as psychological aggression when the caregiver shout, yelled at or screamed at the child. Among children ages 1–4, one child in four received this type of discipline, with close proportions between children in PW and PDS households. Physical punishment happens when the caregiver either, shook the child; spanked, hit or slapped the child on the bottom with bare hands; hit on the bottom or elsewhere on the body with something like a belt, hairbrush, stick or other hard object; hit or slapped the child on the hand, arm, or leg; tied up and beat the child; tied up the child and smoked with fumes to cause burning sensation on eyes and nose, hit or slapped the child on the face, head, or ears; and beat the child up with an implement (hit over and over as hard as one could). The last two are used to define a severe physical punishment.

Table 12.3. Child Discipline, Children Ages 12-59 Months

| | | Р | W | | | os | | |
|----------------------------|-------|------|------|---------|------|------|------|---------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Psychological aggression | 0.26 | 0.28 | 0.23 | 0.410 | 0.24 | 0.23 | 0.25 | 0.810 |
| Physical punishment | 0.55 | 0.56 | 0.54 | 0.594 | 0.61 | 0.65 | 0.54 | 0.131 |
| Severe physical punishment | 0.07 | 0.05 | 0.09 | 0.212 | 0.07 | 0.07 | 0.07 | 0.966 |
| Any violent discipline | 0.59 | 0.61 | 0.56 | 0.361 | 0.64 | 0.67 | 0.59 | 0.234 |
| Any non-violent discipline | 0.40 | 0.40 | 0.40 | 0.991 | 0.51 | 0.57 | 0.42 | 0.031 |
| N | 1,165 | 619 | 546 | | 413 | 204 | 209 | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

The incidence of physical punishment is particularly high: 55 per cent and 61 per cent of children in PW and PDS households, respectively, have received at least one of the punishments described. Severe physical punishment is received by 7 per cent of children in both PW and PDS households. The figures of any violent discipline are similar to those for physical punishment suggesting that most of caregivers that inflict physical punishment are also physically aggressive with the child.

The indicator for non-violent discipline is equal to 1 if the caregivers report that they took away privileges, forbade something the child likes, or did not allow the child to leave the house; they explained to the child why the behaviour was wrong; or gave the child something else to do. Shares of 40 per cent and 51 per cent of caregivers had exhibited non-violent discipline with the child in PW and PDS households, respectively.

12.3 Attitudes towards child marriage

Child marriage is a human rights violation according to the United Nations Convention on the Rights of the Child, and it perpetuates an intergenerational cycle of poverty and disadvantage. The elimination of child marriage is a target under Sustainable Development Goal 5 related to gender equality and empowerment of all women and girls. Child and early marriage has many adverse consequences, including negative health effects for both adolescent girls and negative birth outcomes for their children. Another negative effect of child marriage is that it increases women's subsequent risk of intimate partner violence (Abramsky, et al., 2011). Furthermore, child marriage and childbearing can disrupt schooling, limiting females' earning potential in adulthood. Characteristics which increase the risk of child marriage include residing in rural areas, coming from poor households and having low educational attainment (Jensen and Thornton, 2003; UNFPA, 2012). Therefore, females living in PSNP households, who often face these overlapping risk factors, may be at increased risk of early marriage. In Ethiopia, the median age at first marriage has increased between 2011 and 2016, indicating some progress in delaying marriage. However, median age of first marriage among women ages 25–49 is still 17 years, and according to the latest EDHS data, 40 per cent of women reported being married before their 18th birthday (CSA and ICF, 2016).

A recent study found suggestive evidence that the PSNP may delay marriage among adolescent girls. When examining the impacts of PSNP on household size and composition, the study found that the PSNP led to an increase in household size, which is driven by an increase in the number of girls ages 12–18 (Hoddinott and Mekasha, 2017). The authors hypothesize that this is due to PSNP households delaying the out migration of girls ages 12–18, as girls are kept at home to act as substitutes for adult labour at public works sites, and this has positive spillover effects on the reduction of early marriage among girls in this age range. New components of the ISNP programming, such as BCC, education-related co-responsibilities and greater engagement of social workers in case management aim to increase community and PSNP client awareness about gender equality, importance of education for girls and the harms of child marriage. These sensitization activities may reduce early marriage, and subsequently delay sexual debut and pregnancy. In addition to aiming to challenge discriminatory gender norms at the community-level and facilitate shifts in attitudes towards child marriage, these activities may also empower young girls at risk of child marriage through increasing their knowledge of where to seek help and report if they perceive they are at risk of child marriage.

Knowledge and attitudes are examined around child marriage, intermediary outcomes which may be affected by the aforementioned sensitization activities undertaken as part of the ISNP. Ultimately, changes in these intermediary knowledge and attitude outcomes may lead to changes in behaviour and delaying of child marriages.

To assess attitudes around child marriage, respondents were asked what they thought was the ideal age at which a girl should get married. The mean ages reported were 16.7 years in the PW sample and 16.6 years in the PDS sample. Responses were converted to two binary indicators representing whether the respondent thought the ideal age of marriage for girls should be under age 18 or under age 15. The majority of respondents had favourable views towards child marriage; 58 per cent in PW households and 59 per cent in the PDS households thought the ideal age of marriage for girls was under age 18. Far fewer believed the ideal age of marriage was before age 15 (7 per cent and 9 per cent in PW and PDS households, respectively). Qualitative data are generally aligned with quantitative findings: the ideal age of marriage for girls is said to be between age 15 and age 18; however, in some instances according to religious customs, girls as young as age 8 were considered ready to be married. Girls are generally considered to be ready for marriage once they show physical signs of puberty.

Next, respondents were asked whether they knew that there was a legal age of marriage for boys and girls. Table 12.4 reports on whether the respondents knew that there is a legal age for both boys and girls. Overall, few respondents correctly answered that there are legal marital ages for both boys and girls (about 10 per cent in PW households and 6 per cent in the PDS households). Those who responded that there are legal marital ages for boys or girls, respectively, were then asked what that age was. Among those knowing that there is a legal age for girls (those that answered that there is a legal age for both boys and girls and those that reported that there is a legal age for girls only), an average of 82 per cent answered correctly among both PW and PDS households. Far fewer knew that there is a legal marital age also for boys, and, among these, only 27 per cent accurately reported the legal marital age for boys.

Table 12.4. Attitudes towards Child Marriage, Main Respondent

| | PW | | | | PDS | | | | |
|--|-------|-------|-------|---------|-------|-------|-------|---------|--|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Ideal age of marriage, girls | 16.72 | 16.74 | 16.69 | 0.837 | 16.60 | 16.63 | 16.56 | 0.789 | |
| Under 18 years | 0.58 | 0.59 | 0.55 | 0.499 | 0.59 | 0.60 | 0.59 | 0.841 | |
| Under 15 years | 0.07 | 0.06 | 0.08 | 0.578 | 0.09 | 0.08 | 0.09 | 0.664 | |
| Respondent knows there is a legal marital age for boys and girls | 0.10 | 0.09 | 0.10 | 0.645 | 0.06 | 0.04 | 0.08 | 0.021 | |
| N | 2,574 | 1,279 | 1,295 | | 2,366 | 1,188 | 1,178 | | |
| Respondent knows legal marital age for girls | 0.82 | 0.85 | 0.77 | 0.175 | 0.81 | 0.85 | 0.73 | 0.083 | |
| N | 733 | 370 | 363 | | 519 | 255 | 264 | | |
| Respondent knows marital legal age for boys | 0.27 | 0.22 | 0.33 | 0.238 | 0.26 | 0.15 | 0.35 | 0.041 | |
| N | 243 | 96 | 147 | | 153 | 57 | 96 | | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

Child marriage among girls seems to be a prevalent phenomenon, and there have been several efforts to try and reduce the incidence. Participants in the in-depth interviews were quite concerned about this harmful traditional practice and often demonstrated a solid understanding of the negative impacts of child marriage and early childbearing on girls' health, psychosocial well-being, and future education and employment opportunities, as evidenced by the following quotes.

"In this community, most girls get married when they are 15 years old." – IDI with parent of unmarried girl, Libo Kemkem

"Early marriage is a major concern in our area. We are engaged to protect early marriage and even terminate it if it happens and provide awareness creation. Many parents are engaged in early marriage while their daughters are 11 or 12 years of age. We had terminated three weddings last year because the brides were underage." – KII with respondent from BoWCA, Libo Kemkem

"Unlike girls, who are forced to marry before the age of 18, most boys get married between the ages of 19 and 29 years." – IDI with unmarried girl, Dewa Chefa

⁹ The answers were coded as follows: (a) Yes, for girls; (b) Yes, for boys; (c) Yes, for boys and girls; (d) No; (e) Don't know.

"This is our main challenge in the woreda, because the community [keeps being engaged] in a harmful cultural practice and also does not have awareness. . . . Girls are married at 10 years of age." – KII with respondent from BoWCA, Dewa Chefa

"There is the problem of death during childbirth, poor health, gemigna (fistula) during sexual intercourse, dropping out of school, moving to another home, disagreeing with parents and the husband. A girl who marries early may feel sad when she sees her friends going to school. They are also exposed to beating by their husbands." – IDI with married girl, Libo Kemkem

"There is a problem like complication during pregnancy, she may die during delivery and she may commit suicide because she may lack knowledge on how to look after her children when she gets married too early." – IDI with unmarried girl, Libo Kemkem

Moreover, in some communities, young girls (i.e. in some cases as young as six, seven or eight) are reportedly being married in accordance with local customs and the socially accepted age of their village (locally described as Ankelba or Dogobe).

Respondent: "In this community, some girls get married even if they are at the age of Ankelba or Dogobe."

Interviewer: "What do you mean by Ankelba and Dogobe?"

Respondent: "It means the girls gets married even if they are at an infant age. That means when they are at the age of 8, 9, 12 years old." – IDI with parent of unmarried girl, Libo Kemkem

It is not clear if such marriages among young girls take on a purely ceremonial form with girls remaining in their parental home until they reach puberty, or whether they are expected to immediately move in with the groom's family. There is some indication that young girls are not expected to leave their parental home when they enter into marriage, but rather leave home later, with important positive implications for their health and schooling outcomes.

"For example, I was married when I was 6 years old. First there was a kinship formation and next year I was formally married. When I turned 12, I moved to live in my own house, with my husband, leading my own life." – IDI with parent of unmarried girl, Dewa Chefa

While child marriage is still ongoing, both parents and girls alike responded that they do not necessarily view the practice in a positive light. Girls who were married as children, in particular, perceive child marriage as a violation of their right to education and an experience that has diminished their opportunities for self-development.

"In our culture a girl can be given for marriage even when she is 7 years of age. But we say that girls are considered physically and mentally ready for marriage, when they turn 14 or 15 years of age." – IDI with parent of unmarried girl, Dewa Chefa

Interviewer: "Did you feel this was a good age for you to be married?

Respondent: I didn't think it was a good age. I wanted to stay unmarried for longer because I didn't see any good thing in it. I even had a plan to continue my education but unfortunately my family strongly decided on the issue." – IDI with married girl, Dewa Chefa

"We want to be enrolled and continue our education and be successful. But our fathers never allow this and force us to get married and become mothers early." – IDI with married girl, Dewa Chefa

Interviewer: "What would have happened if you had insisted on waiting to get married later?"

Respondent: "I would be happy, I would finish my education and I will marry the one I love." – IDI with married girl, Libo Kemkem

When asked to cite what factors motivate families to marry their daughters during childhood, respondents mentioned a complex set of socioeconomic drivers. While poverty is an important contributor, the practice of child marriage is more often sustained by deeply entrenched sociocultural dynamics, such as gender and religious norms that restrict girls' premarital sexual activity, as well as the motivation to consolidate or demonstrate wealth through marriage and expand social ties with better-off families. Finally, limited value placed on girl's education and dearth of alternative development options for girls exacerbates their vulnerability to child marriage.

A separate report looks at the issue pertaining to child marriage in-depth, discussing the attitudes, knowledge and practice, the decision-making process and the pathways that predispose young girls to early marriage.

13. CHILD WELL-BEING AND SCHOOLING

This chapter examines children's material well-being and schooling before the introduction of the ISNP. Income from participation in the PSNP is expected to improve the material situation of clients, as well as increase school enrolment through reduced financial constraints. In addition, phase 4 of the PSNP introduced certain household programme co-responsibilities among PDS households in terms of child school attendance.

Among children ages 5-17, 38 per cent in PW households and 35 per cent in PDS households have no shoes or sandals, and 52 per cent in PW households and 49 per cent in PDS households do not have at least two sets of clothes (see Table 13.1). Slightly less than 50 per cent of the children have no blankets, and around 20 per cent have none of the three basic items (shoes, blankets, or two sets of clothes). Children are considered vulnerable if they have no shoes and lack two sets of clothes. According to this definition, 31 per cent of children in PW households and 29 per cent in PDS households are vulnerable. These indicators of material well-being are balanced between treatment and comparison groups in both the PW and PDS households.

Table 13.1. Children's Material Well-Being

| | PW | | | | PDS | | | |
|--|-------|-------|-------|---------|-------|-------|-------|---------|
| Among children 5-17 years: | All | С | Т | p-value | All | С | Т | p-value |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Has no pair of shoes or sandals | 0.38 | 0.36 | 0.40 | 0.415 | 0.35 | 0.36 | 0.34 | 0.764 |
| Does not have at least 2 sets of clothes | 0.52 | 0.51 | 0.54 | 0.538 | 0.49 | 0.51 | 0.45 | 0.303 |
| Child has no blanket to use | 0.47 | 0.49 | 0.44 | 0.507 | 0.43 | 0.44 | 0.40 | 0.540 |
| Child has none of all three basics | 0.20 | 0.20 | 0.19 | 0.865 | 0.16 | 0.17 | 0.15 | 0.736 |
| Child is vulnerable | 0.31 | 0.30 | 0.33 | 0.568 | 0.29 | 0.30 | 0.26 | 0.378 |
| N | 5,375 | 2,738 | 2,637 | | 2,377 | 1,092 | 1,285 | |

Note: Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

Table 13.2 shows school enrolment rates among children ages 4–17 by various age brackets (4–6, 7–14, 15–17) and by sex. Enrolment rates among boys ages 4–6 are 11 per cent in the PW households and 9 per cent in the PDS households, while, among girls ages 4–6, the enrolment rates are 9 per cent and 7 per cent, respectively. Among the 7–14 age group, enrolment rates were 63 per cent for children in PW households and 68 per cent in PDS households. The enrolment rates among boys ages 15–17 are 39 per cent in PW households and 52 per cent in PDS households. Among girls ages 15-17, enrolment rates were 42 per cent and 57 per cent in PW and PDS households, respectively. There is general balance in the enrolment rates by age and sex between the comparison and treatment households of the PW and PDS categories. The ESS data show slightly higher enrolment rates for each age-sex combination.

Table 13.2. Current School Enrolment, Children Ages 4–17, by Age Group and Sex

| | PW | | | | | ESS | | | |
|--------------------------------------|-------|------|------|---------|------|------|------|---------|--------------|
| Indicator | All | С | Т | p-value | All | С | Т | p-value | data 2015 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Currently enrolled, boys ages 4–6 | 0.11 | 0.12 | 0.10 | 0.643 | 0.09 | 0.05 | 0.13 | 0.060 | 0.22 |
| N | 548 | 270 | 278 | | 187 | 85 | 102 | | 94 |
| Currently enrolled, girls ages 4–6 | 0.09 | 0.07 | 0.12 | 0.160 | 0.07 | 0.02 | 0.16 | 0.001 | 0.26 |
| N | 506 | 259 | 247 | | 187 | 95 | 92 | | 74 |
| Currently enrolled, boys ages 7–14 | 0.63 | 0.62 | 0.65 | 0.716 | 0.68 | 0.65 | 0.72 | 0.227 | 0.75 |
| N | 1,769 | 923 | 846 | | 726 | 334 | 392 | | 415 |
| Currently enrolled, girls ages 7–14 | 0.67 | 0.63 | 0.72 | 0.119 | 0.64 | 0.58 | 0.75 | 0.013 | 0.83 |
| N | 1,750 | 877 | 873 | | 860 | 400 | 460 | | 355 |
| Currently enrolled, boys ages 15–17 | 0.39 | 0.41 | 0.35 | 0.466 | 0.52 | 0.54 | 0.48 | 0.553 | 0.62 |
| N | 589 | 311 | 278 | | 283 | 139 | 144 | | 133 |
| Currently enrolled, girls ages 15–17 | 0.42 | 0.36 | 0.51 | 0.120 | 0.57 | 0.56 | 0.59 | 0.746 | 0.57 |
| N | 476 | 228 | 248 | | 241 | 100 | 141 | | 88 |

Note: Indicators are compared to ESS sample of 2015 for rural Amhara. If missing, then the indicator is not available in the ESS data. Means are adjusted for sampling and matching weights. Means are adjusted for sampling and matching weights. C = comparison group. T = treatment group.

14. LINKING PSNP CLIENTS TO BASIC SERVICES THROUGH INTEGRATED PROGRAMMING

14.1 Introduction

The PSNP has been a major vehicle for improving food security and livelihoods. However, to date, the PSNP has exerted no substantial impact on access to and utilization of basic services, especially among the poorest clients. To improve the demand for and access to basic services among PSNP households, PSNP phase 4 includes several design innovations to promote the transition to an integrated system of social transfers and links with basic social services. The ISNP pilot will be used as a trial of an integrated system of social cash transfers and the promotion of links with basic social services, to promote nutrition and health-related outcomes for the PSNP households.

Several mechanisms within the PSNP and complementary programmes are used to achieve this. First, a demand for health, nutrition and education services is promoted through the introduction of "co-responsibilities" or soft conditionalities related to the health- and education-seeking behaviour of TDS and PDS clients. Monthly BCC sessions on health, nutrition, hygiene practices and sanitation will be used as a forum for messaging and counseling of both PW and PDS clients to promote positive health and social development practices. To make health services more affordable to PSNP clients, and increase their health seeking behaviour, PSNP will promote access to the CBHI scheme, ensuring free access to the poorest members.

PSNP phase 4 also acknowledges that the delivery of the integrated service provision depends on the coordination and collaboration across sectors. Consequently, PSNP phase 4 envisages the development of a set of institutional and operational arrangements, which will enable stakeholders to work together and effectively deliver various interventions in a coherent and aligned way. This involves (a) strengthening the existing interactions and coordination between key frontline agencies, such as development agents, social workers, CBHI coordinators and health extension workers involved in service provision, and (b) establishing processes and tools for a multisectoral collaboration, including integrated planning, targeting and monitoring of relevant interventions.

This chapter explores how an integrated approach to service provision currently functions in practice, assessing in particular the role of the extra household responsibilities and BCC in improving the access of clients to social services, satisfaction with complementary support and perceived changes in their well-being, the role of the main frontline agencies in linking clients with complementary measures, and opportunities and barriers to implementing intersectoral collaboration.

14.2 Programme responsibilities among client households

In Phase 4 of the PSNP, PDS and TDS client households are required to commit themselves to health and education-related responsibilities when they sign up for the safety net programme. These coresponsibilities or soft conditionalities are supposed to promote positive practices and investments into human capital development, such as children's education, health seeking and reductions in child labour. According to programme guidelines, the uptake of these services is promoted, but penalties are not applied in case of non-compliance. Hard conditionalities would have applied penalties for non-compliance.

TDS clients with infants and young children are required to attend nutrition counseling sessions, four antenatal care visits for pregnant women; post-natal care, monthly nutrition counseling and child vaccinations for lactating women; and monthly checkups of the child. PDS clients are responsible for

ensuring their children are enrolled in school and attend regularly. This section explores how extra household responsibilities function in practice, as well as the level of understanding among clients of their programme responsibilities and their effect on access to, and uptake of complementary services.

14.2.1 Type of extra responsibilities and compliance

The majority of respondents are aware of the co-responsibilities required to receive programme benefits and understand what they are. Those most frequently cited in interviews with PDS and TDS clients include requirements to send children to school regularly, to undertake health checkups such as antenatal care, and to participate in skilled childbirth. Other respondents cited requirements to practice good child nutrition, to save part of their PSNP payments in credit institutions, to attend financial literacy classes, and to disengage from harmful practices such as child marriage and child labour.

"They are expected to protect their children from labour abuse. Children are not expected to work up to the age of 14 years old and after that, they can carry out small tasks until they turn 18." – KII with social workers, Libo Kemkem

"They must buy exercise books, food, clothes and they need to send their children to schools." – KII with PSNP coordinator

"TDS clients also need to engage in four consecutive health treatments when they are pregnant, and postnatal services. They can receive antenatal care services from nearby health posts and they will receive the last services in health centre or hospitals." – KII with PSNP coordinator

In addition, according to key informants, TDS clients are expected to attend BCC sessions on maternal health and child nutrition.

"Lactating and pregnant women need to attend BCC session while they are enrolled in TDS." – KII with PSNP coordinator

"We will inform them to take care of themselves during pregnancy and inform her that she is exempted from the PW [and] is required to do all these [BCC] to do all these activities." – KII with health extension worker, Libo Kemkem

Most respondents said that they receive clear information about expected co-responsibilities, which are also recorded on their PSNP membership cards. Information is also delivered by health extension workers and social workers through visits to homes and health posts. Community-based platforms such as "1 to 5" have also been reported as valuable sources of information for communities. While both health extension workers and social workers advise and train clients, social workers are responsible for monitoring compliance.

"Yes, we have received clear information about attending antenatal care, institutional delivery and child nutrition from social worker and health extension workers." – IDI with PDS client, Dewa Chefa

"Yes, we have been informed through our cluster of one-to-five group structure we had in PSNP."

– IDI with pregnant woman, Libo Kemkem

"We tell clients that the purpose of the support is to enable them to teach their children and get necessities for their children. Moreover, advice is given to the parent that education is the way for his children to get out of poverty. The sharing of land to lead agricultural life is not sustainable

and shortage of land is happening and that means that not everybody can get land in the future."

– KII with social workers, Libo Kemkem

Clients typically perceive co-responsibilities in a positive light, as 'soft conditions' and do not associate them with punitive measures in case of non-compliance.

"Yes nobody told us to do so, but we did it by our own will and decision." – IDI with caregiver with malnourished child, Libo Kemkem

"They give training to educate our children, but nobody forced us to do any activities." – IDI with pregnant woman, Libo Kemkem

However, one respondent reported that programme household co-responsibilities are heavily enforced and may carry financial penalties for those who fail to fulfil them.

"We face sometimes [penalties] when our kids are absent from school. If they are absent without notice, they charge us money; . . . our kebele manager charged us." – IDI with lactating woman, Libo Kemkem

An interview with a social worker in Shemo kebele confirmed that punitive action is indeed sometimes used to punish caregivers for non-compliance.

"We gather information from teachers on absenteeism and if there are households who did not send their child to school we directly go to the household and ask for the reason of absenteeism. And if there are parents who refuse to send their children to school at all then the parent will be temporarily taken to jail for investigation and will be advised about the importance of education and how the community including himself is adversely affected due to lack of education." – KII with social workers, Libo Kemkem

14.2.2 Perceived impact of co-responsibilities on behaviour

Overall, respondents have positive attitudes towards the co-responsibilities and their effects on the utilization of services by clients. It appears that co-responsibilities have been effective in influencing positive behavioural changes and encouraging families to increase their health seeking behaviour, including the uptake of antenatal care services and increased investment in children's education. In other areas, such as institutional delivery and early marriage, progress is lagging.

"We increased health seeking behaviour, school enrolment, and awareness of health & saving of money. My children are attending school, it is a change." – IDI with caregiver with malnourished child, Libo Kemkem

"There is some behavioural change: As a result of co-responsibilities most pregnant women give birth at nearby health centre, pregnant women attend antenatal care service on time, they are aware about child growth monitoring/ they can practice how to measure child weight loss. But I can't witness progress in skilled births." – KII with health extension worker, Libo Kemkem

"Majority has gained better experience on how to prepare food & how to administer their livelihood. Also, a big impact is on health-related issues. But in early marriage it has some drawbacks." – KII with social workers, Dewa Chefa

Others, however, have not observed any positive changes in behaviour. Instead co-responsibilities are perceived as insufficient to motivate behavioural change and bring substantive improvements in access to social services and broader welfare.

"No, there have not been changes in our children's welfare status as a result of this coresponsibility. We do not have any change in the situation my children as a result of this service. This support helps us for survival not permanent change. It helps us to live and not to be dying."

– IDI with caregiver with malnourished child, Libo Kemkem

14.2.3 Challenges to implementation

Several challenges have been reported with respect to fulfilling co-responsibilities on behalf of clients and monitoring their compliance. First, staff responsible for co-responsibilities reported logistical and budgetary constraints as the main factors hindering regular follow-up and monitoring of compliance among clients.

"The challenges we have faced while we are implementing co-responsibilities is limited possibility to confirm information by phone. You need practically to be on the spot. To make confirmation and being on the spot, there is a budget constraint. Secondly there is a transportation constraint. Thirdly the road is not good. You can't easily access all places [and] the population is dispersed in Asta and more widely." – KII with PSNP coordinator, Libo Kemkem

Second, sociocultural and gender norms may restrict women's uptake of health services.

"But to deliver in health centres they [pregnant women] give reasons that the religion didn't allow them. Also they don't want to be treated by male nurses. We try to make ways to make them to use the service. We even prepare gifts and give them when they come for checkups." – KII with health extension worker, Dewa Chefa

"Unfortunately, some people don't want to uncover their bodies in front of others [midwives and other health professionals]." – KII with social workers, Libo Kemkem

Finally, inadequate access to, and limited quality of supply-side services were mentioned as key barriers to fulfilling co-responsibilities. Several respondents reported that financial constraints often limit their capacity to comply with co-responsibilities. In the case of school enrolment, for example, clients reported that a lack of basic materials and uniforms often prevented children from attending school, and in some instances an increase in household labour demands forced them to drop out. Long distances from schools also impacted children's ability to attend.

"When we send our children to school they want to have all necessary materials like clothes and school materials. But we are not able to fulfil this, so they leave school. One of my children ceased to go to school because she failed to walk long distance to school." – IDI with PW client, Dewa Chefa

"Yes, they [dropped out] because they did not have clothes for schools and school materials such as pen, pencil exercise book, etc. It was difficult to fulfil all these things for them. So they refuse to go without these important things. Besides, the high school is too far from this locality though we have primary school nearby in our locality." – IDI with PW client, Dewa Chefa

"Sometimes when I am engaged in serious tasks, I am forced to make them absent from school to assist me. Lack of money to fulfill the expense related to education is the other problem I face." – IDI with PDS client, Dewa Chefa

14.3 Behaviour change communication sessions

The PSNP uses BCC to leverage the positive impacts of cash transfers and improve health, nutrition and general well-being outcomes through sessions on family planning and reproductive health, maternal and child health, and the prevention of infectious diseases. BCC is a process that teaches, advises and motivates people to adopt and sustain healthy behaviours and lifestyles. Sustaining such behaviour usually requires continuing investment in BCC as part of an overall health programme. Attendance in BCC sessions is considered a mandatory requirement for both PW and PDS clients. This section assesses BCC implementation.

14.3.1 Types of BCC sessions

The majority of people attend BCC sessions as part of the PSNP. BCC sessions cover a broad range of topics across five core areas: maternal and child health, food production and dietary diversity, environmental health and hygiene, gender equality, and financial management. It appears that BCC sessions are not implemented across the board, as noted by one of the development agents.

"As I told you earlier, the training in BCC itself is not clear to me. But to tell you the truth we didn't provide any BCC sessions to our clients." – KII with development agent, Dewa Chefa

BCC training sessions run by health extension workers focus on providing health education to pregnant and lactating women to enhance their knowledge of reproductive health and family planning, and to raise awareness about the importance of antenatal care and skilled birth delivery, maternal and child immunization, and protection from health risks such as malaria and HIV/AIDS. Specific sessions focus on infant and young child feeding practices to teach caregivers about child feeding and the importance of breastfeeding, and to advise on good hygiene practices and safe water and sanitation to prevent the spread of illnesses.

"We have pregnant women conference to teach them how to keep their health and nutrition, and there is also child food preparation demonstration organized for lactating mothers with a child up to 6 months, they have to attend to know the side effects and potential problems. If she didn't attend the pregnant women conference, she will not know what to do during the delivery how to protect her child if she has HIV AIDS." – KII with health extension worker, Libo Kemkem

Development agents also run livelihood development sessions to strengthen farmers' skills regarding sustainable food and livestock production, climate-smart agricultural practices and to enhance their knowledge of dietary diversity and home gardening.

"If farmers harvest products such as tomatoes and mangoes, they take it to the market, they don't consume at home. In our BCC training, we tell farmers to feed their families, they need to assign some portions of these produces for home consumption. They get balanced diet, their children will be healthy and protected from stunting. That is the major role of safety net programme." – KII with development agent, Libo Kemkem

BCC sessions are also used to promote certain programme objectives, deliver messages on the "best" use of transfers, and promote the importance of savings.

"We also encourage them to utilize the money they have got from the programme properly. Most of the time, our farmers don't have problem up to March or April. This is because they get some resources from their farmland. So we are recommending them to save money collected at that time. If they save that money they will utilize it when they have no harvest." – KII with development agent, Dewa Chefa

BCC sessions are used to raise awareness about harmful social practices including child marriage, domestic violence and substance abuse, and to promote positive social norms and attitudes towards gender equality and women's rights.

"They discussed about the risk of early marriage, feeding practice, antenatal care, skilled attendant delivery, child feeding, child school attending, sanitation and latrine construction, family planning, vaccinations."—IDI with lactating woman, Libo Kemkem

"They teach us about not to deliver at home, clean your compound and use bed net to prevent malaria, not to marry your daughters at early age, if you marry your daughter early, they will be exposed to problem like fistula. [They teach us] to send our children to school and send daughters to school and to marry her when she wants to get married." – IDI with PW client, Dewa Chefa

"Yes there is a meeting and they tell us do not get into dispute and conflict with each other, do not misuse your PSNP benefits in drinking, use it for saving." – IDI with PW client, Dewa Chefa

Certain knowledge gaps and topics have been identified that are currently missing from the BCC modules, but could be included in future programme content to enhance positive effects on maternal child health and nutrition and caregiver practices and well-being. Additional topics to be considered for inclusion in the modules are messages related to deworming, awareness raising on the transition into TDS, the importance of equal share of work burdens, and CBHI participation.

14.3.2 Delivery mechanisms

Health extension workers, social workers and development agents deliver trainings in their areas of expertise. For example, health extension workers train people on health and child nutrition-related topics; development agents advise clients about food production and water and sanitation; and social workers provide advice and guidance related to child education, risks of child marriage, and PSNP-related issues (e.g. savings, transfers and co-responsibilities).

BCC sessions are delivered through various forums and channels, including structured community trainings, informal community gatherings (e.g. vaccination and church days), and in some cases advice is shared informally to clients during home visits.

"I usually give the advice by touring house to house because there are weak and elderly households who are not comfortable to come to centre as they will suffer from the journey for nothing." – KII with social workers, Libo Kemkem

The ways in which sessions are structured and framed are important, as this appears to have a bearing on whether newly acquired knowledge is adopted or disregarded by participants.

"Sometimes we will not call this a training, we would frame it as messages or ideas. When we say this is training people will not be willing [to come] because of the work. We try to transmit information by saying that we have a community mobilization like trachoma treatment and will gather community together and people will come when they hear there is something to be given. With such kind of method, we will transmit information to the community." – KII with development agent, Libo Kemkem

14.3.3 Participant profiles

BCC sessions are open to the whole community, but according to key informants, PSNP clients are specifically encouraged to attend. Pregnant and lactating women who have transitioned into TDS are

required to attend antenatal care sessions as part of their programme household co-responsibilities.

In terms of gender composition, findings are also mixed. Some report that BCC sessions are typically attended by women, given that the content is relevant to women and girls; however, others state that husbands mostly attend these events, given that women face mobility and time constraints as a result of their domestic and care responsibilities.

"No, I don't have any idea about this session. Because only my husband has been participating in PSNP. My role is managing or serving at home." – IDI with PW client, Dewa Chefa

"Except for the PW no one forces us to do anything else. Mostly most of the members are not called for training and meeting. Only few women who have job and education are called for the training or meeting. In addition, as most women are involved in the household chores the husbands usually attend the meeting and training." – IDI with pregnant woman, Libo Kemkem

"The majority is female head and widowed females generally are attending the training. Male participants are less than 30%." – KII with development agent, Libo Kemkem

"Yes, I face a problem in attending the BCC sessions. Sometimes I have no support to care for my child to attend the BCC sessions." – IDI with lactating woman, Libo Kemkem

There are clients who have never attended BCC sessions delivered as part of the PSNP or externally but have reported benefiting indirectly from information shared by those who took part.

"I did not participate [in any training sessions]. But before some people came to our home and inform us about wastage, cleaning and other hygiene related issues." – IDI with pregnant woman, Dewa Chefa

14.3.4 Perceived changes as a result of BCC attendance

Findings highlight that BCC sessions play an important role in several ways. First, they raise people's awareness about important issues regarding health, nutrition and child protection. They also influence attitudes and beliefs related to traditional practices such as early marriage, and can even contribute to changes in behaviour related to health seeking, institutional delivery and hygiene practices, and substance abuse.

"I delivered three of my children at the health centre after I learned about the importance of skilled birth." – IDI with pregnant woman, Libo Kemkem

"Attending BCC sessions changed our behaviour on child school attendance, sanitation and antenatal care." – IDI with PW client, Dewa Chefa

"Health extension workers made us aware about the risks associated with early marriage and importance of saving money, to go to the health centre and get treatment, on feeding practice, and personal hygiene and to cover our food to protect it from contamination such as dust." – IDI with PW client, Libo Kemkem

"We get informed that when our daughters are involved in school she will be protected from early marriage. Also we start to care about our health and safety at all times. Hygiene is also the important improvement." – IDI with caregiver with malnourished child, Libo Kemkem

"Yes, there is change in behaviour. For instance denying education and early marriage was common in the society before but now through the consultation such threats are removed." – KII with social workers, Libo Kemkem

In some instances, BCC sessions have led to changes in behaviour related to child feeding and nutrition practices, skilled birth and hygiene practices.

"There is a change in child feeding. [Previously] women didn't want to feed during six months, and [now] they know the benefit of feeding child at six months and the benefit of iodized salt. They know the importance of birth delivery at health centres, growth monitoring follow up. These are the changes." – KII with health extension worker, Libo Kemkem

Clients also derived broader benefits, including improvements in emotional well-being and reduced stress levels as a result of the greater social interaction with the community:

"My behaviour changed. I become cool and interactive with the community because of the BCC sessions. My mind gets rest while I am attending the training". – IDI with caregiver with malnourished child, Libo Kemkem

There is also an indication that sessions with women can lead to shifts in women's empowerment, enhanced self-confidence and self-efficacy, and increased ability to challenge unequal power dynamics in their marriage and assert their preferences, with positive spillover effects on intra-household dynamics.

Interviewer: "Think about the last time you attended the BCC event, how did it affect you personally?"

Respondent: "Yes, I benefited. For example regarding our husbands' extravagance behaviour, like drinking alcohol while the household is in shortage of money for food, there is improvement as we are now, unlike in the previous days, capable of challenging them for such behaviour. We can even accuse them of such behaviour to kebele administration. The women are now capable of challenging their husbands." – IDI with caregiver with malnourished child, Libo Kemkem

14.3.5 Challenges to implementation and uptake

Several challenges have been highlighted in KIIs on the implementation of BCC training sessions. First, BCC attendance is low and irregular. This can in part be explained by participants' expectations for incentives to encourage their participation.

"Also to make [community] to participate in trainings is difficult because, they only expect and want material and to make a money in every process." – KII with development agent, Libo Kemkem

Second, several key informants complained that the uptake of messages by participants is generally low. Respondents have limited interest in applying advice and knowledge gained during BCC sessions and are reluctant to change their behaviour.

"In health packages, they will accept it but not change this into practice. . . . We teach them so many times and they are capable to teach you but they are not willing to do this practically." – KII with development agent, Dewa Chefa

However, several PSNP clients highlighted material and financial constraints and a general lack of agency and capacity to act as the factors preventing them from applying advice received during BCC sessions. While, for example, clients understand well the importance of using clean water and adequate sanitation for health and nutrition reasons, their access to piped water and safe sanitation remains a major challenge, due to both financial and infrastructural barriers.

"We are aware about feeding practices but we can't practice because of lack of money." – IDI with lactating woman, Libo Kemkem

Supply-side barriers also reduce the positive effects of BCC sessions. Those responsible for delivering training lack basic teaching aids and materials to deliver messages effectively and demonstrate practically, which may partly explain limited interest in participation and low uptake of learning among participants.

"Lack of teaching aid [visual materials] when we give the training to pregnant mother, we can't show posters to the clients, we are lacking family planning material and immunization materials to show them visually." – KII with health extension worker, Libo Kemkem

14.4 Accessibility to and client interaction and satisfaction with service providers

One of the key objectives of this qualitative research is to gain understanding about the presence and role of different frontline actors, such as health extension workers and social workers, and community platforms (for example, CCCs) involved in the integrated service provision in sample communities, as well as the nature and quality of their interactions with PSNP clients, and clients' experiences and perceived benefits of these interactions. Below, the findings of interviews with key informants and indepth interviews with PSNP clients are reported.

14.4.1 Experiences and interactions with social workers

PSNP phase 4 and the ISNP pilot initiative envisage a greater involvement and expansion of social workforce in the communities as key mechanisms for linking clients with social services. According to key informants, social workers operate in all kebeles across both woredas. They have been operating in Libo Kemkem woreda for the past two years, whereas in Dewa Chefa, it appears they have only recently started their operations.

The majority of PSNP clients interviewed in the sample are aware of social workers and have interacted with them on a relatively regular basis, but with some differences across treatment communities. Client interaction with and awareness of social workers are considerably more widespread and positive among respondents in Shemo kebele in Libo Kemkem, compared to Gula kebele in Dewa Chefa. This is mainly because the new social worker has only recently joined Gula community and is yet to fully engage in day-to-day implementation of its responsibilities, and direct interactions with PSNP clients. In Gula kebele, a few respondents reported not to be aware of social workers in their community, while others highlighted that they received little support to date.

Social workers perform a range of services and tasks related to the implementation of integrated service provision. First, social workers play a role in administrating safety nets, which can involve administering the system, payment processes assessment and providing psychosocial support. They are responsible for providing information and guidance on PSNP entitlements, monitoring coresponsibilities and addressing non-compliance issues, and providing support to ensure client benefits are paid regularly and on time.

"The current activities that I am doing include visiting the PDS home to home to assess their problems regarding different issues. I also ask them if there are payment and saving issues that they want to be addressed. We support them to keep their right whether to save or spend their payments based on their will." – KII with social workers, Libo Kemkem

"There are some weak clients who couldn't collect their benefits. Then the social workers are responsible to take action. Social workers also check whether legal agents for the elderly and incapable clients have given them the money or not. The community has the right to delegate social workers to collect and deliver their benefits to their home." – KII with PSNP coordinator, Libo Kemkem

Second, social workers facilitate links among PSNP clients, mainly PDS and TDS households, with social services through case management and the provision of psychosocial support. In collaboration with health extension workers and development agents, social workers are engaged in raising awareness about the access to basic services and the benefits of enrolment in the CBHI through their involvement in the facilitation of BCC sessions and home visits. Information is not available that would explain the relatively limited involvement of social workers in case management beyond helping clients with basic PSNP administrative issues. One possibility is that their management and administrative functions are time consuming, leaving less space for comprehensive case assessments and follow-up support.

Clients also reported receiving counselling and advice from social workers during pay days with regard to calculating their entitlements and other topics such as the importance of child education and financial literacy, management of money and savings.

"Before they give us the donation, the social workers train us on how to manage the money. They teach us to enrol our children to school. They tell us the amount of money that we should get." – IDI with PDS client, Dewa Chefa

According to the baseline data, while their official role is focused on case management for PDS clients, social workers provide similar support to PW clients as well.

"The social worker gives instruction and inform public work schedule & receives any compliant from the members about the PSNP." – IDI with lactating woman, Libo Kemkem

"The social worker facilitate the PSNP payment and she mobilizes us to participate in PW." – IDI with PW client, Libo Kemkem

"She helped us to process the ID card for the CBHI." – IDI with PDS client, Libo Kemkem

"She came to me and registered additional household members of mine that needed support." – IDI with pregnant woman, Libo Kemkem

Third, as discussed elsewhere in the report, social workers are involved in retargeting, including the screening and identification of client eligible for TDS, such as vulnerable children, the elderly and people with disabilities. This is done in collaboration with health extension workers and development agents, and with support from CCCs. Involving social workers more in programme targeting have led to more efficient coverage of programme benefits among clients.

"For instance if a woman is pregnant I will take data to calculate the month of her pregnancy and her pregnancy date will be registered. Again, I will visit her after delivery to know the date of delivery and I will register the date of delivery for the women and I advise her on child feeding like starting supplementary food at sixth month. I will visit the woman and the child at his first birthday and if the child is malnourished, I will tell the women to take the child to health facility to let him get plumpynuts." – KII with health extension workers, Libo Kemkem

According to the PSNP phase 4 guidelines, social (welfare) workers can act as a bridge between the formal child protection system and local community. However, interviews with staff working in the Bureau of Women's and Children's Affairs stressed that – currently few social workers are trained to play that role and future efforts are needed to build their capacity in this area.

Social workers appear to be liked and respected by the community as well as government counterparts. Clients expressed appreciation towards social workers and their commitment to helping and supporting the poorest members of the community, as well as their efforts to resolve PSNP-related problems faced by PDS clients.

"We ask her to make the payment as quickly as possible when we face financial difficulties. She knows when we have problems. Even when I am supposed to collect the payment in a month or two months time, she prepares and comes during the market days and informs me about the timing of the payment. This is because she is concerned if I miss the payment. There are improvements." – IDI with PDS client, Dewa Chefa

"We are happy since we heard that she will be promoted. She is so sociable. Whenever she talks during the public meetings, she speaks lots of good things. She is working hard. She is working better than the government worker." – IDI with pregnant woman, Libo Kemkem

"Nobody supports us except the social worker." – IDI with pregnant woman, Libo Kemkem

"The social workers are very good in covering different problems in the society. They are responsible in delivering works on time. They are committed." – KII with BoWCA staff, Dewa Chefa

They are also valued for providing psychosocial support among clients, which has led to observed improvements in emotional well-being, motivation and aspiration to improve behaviour related to work, savings, health and feeding practices.

"They initiate us to work more, she motivate us to work more and more." – IDI with lactating woman, Libo Kemkem

"Yes, social worker counsels and supports me to improve my health and to save money and to be able to feed ourselves like anybody else." – IDI with caregiver with malnourished child, Libo Kemkem

"Food is not the only target for these clients. For example we had visited one client with staff from UNICEF. When we ask the client what she intended to get support from social workers, she replied it is enough to have someone who greets her every day. So apart from food they also need social protection." – KII with health extension worker, Libo Kemkem

"They give additional power to our activities. Mainly, they are the ones who travel to farmers' homes." – KII with CBHI coordinator, Dewa Chefa

Social workers face several challenges in their work, including limited understanding from the kebele administration about their role and mandates (which impacts collaboration), as well as insufficient material support to implement their tasks, particularly home visits.

"...all implementers in kebele level didn't accept social workers. In addition, even they were not collaborative to share all data available at kebele level." – KII with development agent, Libo Kemkem "They face material problems, like umbrella and bags to do their home-to-home activities as desired." – KII with CBHI coordinator, Dewa Chefa

They also face high workloads, are employed on temporary contracts, have limited training, and experience delays in salary payment, all of which may affect their level of commitment and motivation – and ultimately their performance. It has been suggested that improving their work status (transitioning to permanent contracts, raising salary and providing incentives) would improve their results.

"There are social workers who are hired temporarily. Their achievements would improve if they are hired permanently and have better capacity." – KII with PSNP coordinator, Libo Kemkem

"Now they are paid ETB 1,500. But this is not sufficient. Even if the salary is too small it arrives lately. Sometimes this makes them discouraged." – KII with BoWCA staff, Libo Kemkem

"So her payment may lag for three and four months. She is suffering; she can't say I am employed or unemployed. If she is permanent employee, woreda has to pay her the regular payment. It is not good for her morale." – KII with health extension worker, Dewa Chefa

14.4.2 Experiences and interactions with health extension workers

Health extension workers are a central feature of the community-based primary health care system in Ethiopia. On average, two health extension workers operate in health posts in each kebele that serve a population of 5,000 an average.

All PSNP clients interviewed in the sample are aware of health extension workers and have interacted with them or received their support at some point (Storck, et al., 1991; Wooldridge, 2010). Health extension workers provide an integrated, essential health care package for mothers, infants and children at the community level, including, most importantly, a critical health education role. As the primary entry point to the health system for the rural communities health extension workers provide high impact interventions ensuring child survival and effective use of services as well as promote key family care practices. Health extension workers provide services during regular outreach services, child health days and campaigns.

Respondents reported receiving support and advice from health extension workers on maternal and child health and nutrition, the importance of reproductive health care and family planning, food safety and hygiene practices, and waste management. At health posts, health extension workers provide in-kind support including medical treatments for disease, (e.g. malaria, tuberculosis), contraceptives, vaccines, medicines and mosquito nets. They also provide treatment for children with diarrhœa and pneumonia (through oral rehydration salts, amoxicillin) or refer them to nearby health centres if they have more serious complications.

"They give advice to implement family planning, to visit the health centre every month if we are pregnant, how to treat our child, how to use contraceptive, about health checkup and the like." – IDI with pregnant woman, Libo Kemkem

"They tell us how to make fuel saving/ efficient stoves, how to prepare and use latrine, how to manage wastes and also they initiate us to follow-up pregnancy and to deliver in health centres." – IDI with lactating woman, Libo Kemkem

Several clients reported receiving treatment to manage severe and acute malnutrition of their children.

"They provide treatments and supports for our children. They usually give children vitamins, supplementary foods, biscuits and syrups." – IDI with PW client, Dewa Chefa

As previously discussed, health extension workers also play an important role in transitioning clients to TDS. They collaborate with social workers to identify and refer eligible women, and then refer them to development agents for TDS enrolment.

"Special thing that we did is informing the development agent if she is pregnant mother not to include in the PW and if she is lactating, until one year she has to be exempted in PSNP works." – KII with health extension worker, Libo Kemkem

"In addition if there is a mother with one year and have malnourished child, we will convince the development agent not to include in PW activities to enable her to focus on feeding and caring for her child." – KII with health extension worker, Libo Kemkem

"Without the report from the health extension worker, the agriculture sector will not be able to give leave to the pregnant women." – KII with social workers, Dewa Chefa

They also screen clients for CBHI membership.

"It is us who are doing screening of clients. We and kebele leaders work to enrol the community in the CBHI." – KII with health extension worker, Libo Kemkem

Health extension workers raise awareness about specific harmful traditional practices and customs, as well as child protection risks.

"They also encourage mothers in "1 to 5" group discussions to use family planning, deliver in health centres, use nutrition and encourage them not use and engage in harmful practices. We are still struggling to avoid harmful practices for example early marriage and swallowing butter and massaging the pregnant woman during delivery. We still cannot prevent women from home delivery. I suggest working in collaboration to solve this." – KII with BoWCA staff, Libo Kemkem

"They also report to kebele leaders if they have seen early marriage. If the condition is beyond the kebele administration, they need to report to us. But the result in this regard has not been satisfactory." – KII with BoWCA staff, Libo Kemkem

"They are also responsible for birth registration. This is vital in solving early marriage problems to identify age of girls." – KII with BoWCA staff, Libo Kemkem

Clients have profited from health extension services in various ways, including gaining greater awareness and knowledge of child feeding, family planning, waste management and hygiene practices.

"It changed my views about latrine, child feeding practice and antenatal care service." – IDI with PW client, Libo Kemkem

Some also reported specific changes in their behaviour as a result of health extension interventions, leading to perceived improvements in their health status.

"I give birth at the centre now." - IDI with lactating woman, Libo Kemkem

"For instance, so far I used to throw wastes just outside, but now, after they taught me I collect the waste and burn it. In addition, we clean what we eat on and what we drink with." – IDI with pregnant woman, Libo Kemkem "Health extension workers support helped me. I got contraceptive services when I was newly married and this gave me opportunity to time and space births. My children become healthy because the health extension worker taught us to feed and keep personal hygiene." – IDI with PW client, Dewa Chefa

At the same time, clients highlighted several drawbacks and challenges in their interactions with health extension workers. While health extension workers are expected to spend 70 per cent of their time at health posts in the community, clients have complained about their limited availability in these locations, which impacts access to timely medical treatments and family planning services.

"The problem with the support that we receive from health extension workers is they do not live in our community. When a woman wants family planning they will not be present in their work place all the time. We face problem to get service on time. The health extension workers don't treat sick children. They refer them to health centre. They should stay at health post." – IDI with caregiver with malnourished child, Libo Kemkem

Clients also complained about the lack of follow-up on trainings and awareness-raising activities delivered by health extension workers to ensure communities are able to apply their advice and newly acquired skills, and maintain changes in behavioural practices for sustainable and long-terms benefits.

"The toilet has to be reconstructed and the fuel saving stove has to be maintained. They [health extension workers] should follow up on these and the community will benefit and be healthy." – IDI with lactating woman, Libo Kemkem

Other key challenges to service provision include staffing constraints related to the relatively low numbers of health extension workers for each catchment area¹⁰, intensive workloads and language barriers.

"Because they are so busy. One health extension worker has engaged in 12 work processes. There is no one who is as busy like health extension workers. There is vaccination, family planning, health package, development group, nutrition that health extension workers are engaged with. They have so many commitments." – KII with CBHI coordinator, Libo Kemkem

"Because there is huge number of the community in that kebele. One extension worker can follow a limited number of cases. Also the woreda or the government itself has to assign the person who speaks community's language. It's difficult to follow the person who can't speak the same language and difficult to understand each other. Even sometimes they use translators from clients who are there for service." – KII with development agent, Dewa Chefa

14.4.3 Experiences and interactions with CBHI coordinators

CBHI coordinators are responsible for raising awareness among communities about the benefits of CBHI membership and encouraging households to enrol. In collaboration with health extension workers and social workers, they are responsible for identifying the poorest client who are able to access the premium waiver and join the scheme for free.

"My role is to make the community aware about CBHI programme and use the service. Then I work with other multi –sectors, to make our service more available for all." – KII with CBHI coordinator, Libo Kemkem

¹⁰ While the official standard for engaging two health extension workers per kebele – coverage of 5,000 members in the community – is usually achieved, this number of health extension workers appears, according to the respondents, to be insufficient to meet the demand for health care.

"My role as a coordinator, I am responsible to ensure coverage [universal] and equity in the health sector. Food security [task force] is working to help the poorest households to be food self-sufficient, and, in terms of health, we are working to protect their health by paying their health expenses." – KII with CBHI coordinator, Dewa Chefa

"They coordinate all CBHI process especially when there is a renewal process of IDs." – KII with social workers, Dewa Chefa

However, KIIs reveal that CBHI coordinators working at woreda level, are generally a small team of implementers, and as such are confronted with high workloads and limited capacity to directly engage in community mobilization and follow-up missions. As a result, they rely on the engagement of other frontline workers at the Ministry of Labour and Social Affairs and the Ministry of Health to carry out the promotional and registration activities, and screening of clients at the community level.

14.4.4 Experiences and interactions with community care coalitions

CCCs are envisaged to play a critical role in client selection and in the payment processes, but also in mobilizing additional funds to support poor families. The CCCs, with support by trained social workers, are also expected to promote community involvement in child protection issues.

In the Gula kebele of Dewa Chefa, CCCs were established one year ago with technical and financial support from World Vision; however, since their withdrawal of support, CCCs have ceased activities. In the Shemo kebele of Libo Kemkem, CCCs are not functional, but efforts are underway to strengthen the committee and expand their outreach in the community. CCCs include members of the PSNP, the Food and Agriculture department, the education sector, the kebele administration, and Women affairs and Health Extension workers.

Clients expressed a mixed level of awareness of the CCC platforms operating in their communities.

"I don't know them and I only know kebele leader, and I don't have any idea about what you are saying to me." – IDI with pregnant woman, Dewa Chefa

Those aware of CCCs primarily associate them with charitable support for the most vulnerable members of the community, such as orphaned children, the elderly, people with disabilities, and the homeless. Key informants stressed that CCCs have an important fundraising functions in the community, provide support to social workers in screening eligible members for inclusion in the PSNP, organizing public works community meetings and disseminating information about PSNP phase 4, and assisting and facilitating construction of community assets.

"Yes I heard. Although I don't know them, they build houses for disabled and orphans. But I don't know the committee members." (IDI with pregnant woman, Libo Kemkem)

"They build houses for elderly, they give sheep and cow to the poorest, they give money for students from poor family and also they give money during holidays for street and homeless people." – IDI with lactating woman, Libo Kemkem

"The committee will assess the community to screen the poor in the community and will identify their problems. if the household is in shortage of teaching materials the committee will solve the problem by negotiating with World Vision Ethiopia which is currently helping the community to cover the expenses of teaching materials." – KII with development agent, Libo Kemkem

"Health related work that CCCs are involved with is related to toilet construction by nearly 16 households. Seven CCC members coordinate and facilitate this work. In addition, water will be prepared. People were refusing it [at first], but after CCC raised the awareness in the community and two toilets were prepared in one day." – KII with development agent, Libo Kemkem

Few PSNP clients reported directly benefiting from CCC financial or in-kind support. Only one respondent indicated to have received support, while others highlighted that while CCCs registered their household for support, they did not receive benefits.

"Yes, CCC provides educational materials for my 10-year child. Yes, my child can learn now because they gave him educational materials." – IDI with PW client, Dewa Chefa

"As I told you they registered my children as a member of poor family, because their father does not help them, but they did not support them and give priority to others." – IDI with PDS client, Dewa Chefa

In addition, key informants criticized the CCCs and pointed out key challenges and gaps related to their effectiveness, including limited training and awareness of the PSNP (particularly its targeting process), lack of fundraising and financial management skills, and insufficient motivation and dedication to their work, which could be partly explained by inadequate incentives and lack of training.

"They have not done much to collect contributions from the community and use that money to help the poor. I would rate them to be effective about 70%. There were members of the community whose homes were in bad shape which does not protect them from rain and who had to endure the rainy season. But if the CCC was strong enough this wouldn't occur." – KII with social worker, Libo Kemkem

"The CCCs sometimes fail to transfer money timely for the poor after selling the food/cereals they contributed. They lack devotion in their work; they fail to make collection of the contribution from the society more effective." – KII with development agent, Libo Kemkem

In addition to their fundraising roles, CCCs assist PSNP coordinators, development agents, health extension workers and social workers with PSNP implementation. They provide clients with information about work and payment schedules, mobilize communities to participate in work activities, and assist health extension workers with health promotion campaigns and the delivery of mosquito nets. They are valued for their links and integration in the community, and good understanding of community needs and problems.

"CCCs participate in health related programs by distributing mosquitoes net. They also mobilize the community to participate in public work. Their information helped me to get all services from PSNP and government." – IDI with PW client, Libo Kemkem

Finally, CCCs link clients to kebele administrators, thus improving access to grievance mechanisms.

"They link us with administrators of the kebele in which we live [...]. They inform us about public works and our participation in that. They provide us with every information, like regarding the payment from safety net programme." – IDI with PW client, Dewa Chefa

"They do work on behalf of us in PSNP structure and they do monitor and follow up whether we have been benefiting from the programme." – IDI with PW client, Dewa Chefa

14.5. Integrated programming: opportunities and barriers to intersectoral collaboration

The evaluation will assess the impact of ISNP integrated service delivery on the access to and uptake of complementary social services among clients. The qualitative research sought to generate baseline data about the existing level of multisectoral collaboration and coordination of activities among key actors involved in the PSNP phase 4 and integrated programming, as well as the operational modalities used to establish processes and tools for a multisectoral collaboration, including integrated planning, targeting and monitoring of relevant interventions. Finally, it identifies opportunities and challenges for better alignment between programmes. Given the health-related focus of the ISNP, the analysis is focused on the links between PSNP and CBHI. This section reports only the findings derived from the KIIs.

14.5.1 Staff understanding and commitment towards integrated programming

This subsection focuses on how programme staff involved in implementing the PSNP and ISNP understands the objectives of integrated service provision and the need for intersectoral collaboration. All members involved in the PSNP and ISNP display a good awareness of the changes that occurred from PSNP phase 3 to phase 4 and the importance of integrated service provision. Staff is generally aware of the conditions to transition PW clients into TDS, the introduction of co-responsibilities for PDS and TDS clients, and the importance of BCC sessions in promoting positive attitudes and behaviour change related to health education and broader social development. The importance of promoting the enrolment of PSNP clients into CBHI, and linking PDS clients to premium waivers is also well understood, although some confusion exists about the enrolment criteria used to identify eligible PDS clients for premium waiver; and the exact role of the CBHI coordinators in the enrolment and registration process.

Key informants expressed a high degree of commitment to intersectoral collaboration. Intersectoral coordination between government agencies involved in implementing the integrated strategy is seen as crucial to ensuring integrated service provision for PSNP clients, improving programme efficiency, leveraging resources, and ultimately achieving stronger poverty reduction results.

"As the saying goes, "Unity is Strength", it is important to cooperate. The cooperation can reduce problems related to staff shortages as the population is settled in a scattered way. It will be difficult to understand their health, economic conditions and capability unless you go home to home. Together, we follow-up if households are getting the service, become food self-sufficient, if children are well nourished, children are taken to health facilities, and children are also attending school. We need to cooperate to make these activities attainable and augment our material and human resources. As the society is scattered we need to work together combining our manpower." – KII with development agent, Libo Kemkem

Key informants perceive the collaboration between the PSNP and CBHI, and the harmonization of targeting activities, to be of particular importance in ensuring that PSNP clients can leverage their benefits to enrol in CBHI, improve their uptake of health services, and health outcomes.

"The integration of PSNP with the CBHI, as suggested by UNICEF, has given us a great advantage in screening the right poorest that really need the support, for both food and health. The previous screening process was seriously abused and now it has substantially improved." – KII with CBHI coordinator, Libo Kemkem

Generally, awareness of coordination roles and responsibilities among staff (for instance, social workers, development agents, health extension workers and CBHI coordinators) to deliver integrated services, is relatively good. Key informants mentioned that many formal collaborations exist at the woreda/kebele level to ensure integrated service provision. For example, there is an active collaboration between frontline staff such as health extension workers, development agents, and social workers to identify, refer and register clients eligible for TDS, and provide complementary services such as BCC sessions. However, an integrated approach with the frontline actors working together is more widespread in Shemo kebele in Libo Kemkem woreda, compared to Gula kebele in Dewa Chefa woreda. In case of Dewa Chefa, recently appointed staff and political instabilities were considered as a major reason for the currently limited levels of collaboration and promotion of the integrated approach.

"The social workers, they are also always available in all places where development activities [public works] are performed. So we can say this work is done in collaboration and integration. In addition, when they are gathered to attend BCC training sessions, development workers, health extension, cooperative expert and social workers are participating together. They also have responsibility to give the training in collaboration." – KII with development agent, Libo Kemkem

"Also they have to work collaboratively with us because there may be TDS or lactating mother in PSNP. So they have to follow the case to ensure they attend antenatal care or pregnancy treatments. If pregnant mother shows the evidence from health extension workers [that she is pregnant] we will say you are exempted, so to this extent we are working with health extension workers. Then the development agent gives them time to rest from work." – KII with development agent, Libo Kemkem

14.5.2 Operational and institutional modalities for integrated programming

The PSNP phase 4 promotes a systems approach that encourages multisectoral collaboration and allows for integrated planning, targeting and monitoring of PSNP and other relevant complementary programme clients into the CBHI scheme. Social workers also support this process by identifying PDS clients eligible for premium waivers through home visits and referring them to development agents to be admitted to the scheme.

"With CBHI we [development agents] work with the health extension workers and kebele leaders to collect yearly premium payments." – KII with development agent, Dewa Chefa

"The responsible persons for the screening abuse it just by selecting relatives and their family members, which should not be screened to the programme. Now based on your [UNICEF] criteria for the poorest we are managing it better. . . . We got support from social workers, employed by labour and social affairs, recruited by your organization, and from health extension workers and having the manager [kebele] and work together. We also work with food security [task force]. Sufficient awareness is now created in the society on the criterion of the eligible [clients]." – KII with CBHI coordinator, Libo Kemkem

"There are more self-insufficient households that need to have support in both health and food security programs. Therefore, I expect to include more households in the programs in the next year." – KII with CBHI coordinator, Libo Kemkem

At a policy level, intersectoral collaboration and coordination is facilitated through multisectoral steering committees and a task force, which are important platforms for coordinated planning, budgeting and coordination of activities at the community level. The task force and technical committees also engage in the evaluation of PSNP activities.

"What makes the programme different is, it has so many stakeholders. There is no gap in relation to coordination of stakeholders. Secondly there is a task force, which is governed by agriculture office. There are 3 technical committees within the agricultural task force. These technical task forces include, transfer technical committee, livelihood technical committee, public work technical committee. When we are working and proposing plans we go through these technical committees. We are also going through these technical committees when we conduct work evaluation. When we execute activities in the field, it is also based on these technical committees." – KII with PSNP coordinator

14.5.3 Challenges hampering intersectoral programme delivery

Key informants were also asked about gaps and challenges in promoting and achieving effective collaboration between key implementing parties. Several challenges have been identified with respect to collaboration between key implementing agencies and PSNP service providers. Overall, substantive efforts are required to reduce fragmentation between different programmes (especially PSNP and CBHI), limit duplication of operational efforts and ensure that the poor can access all of the services that they need.

First, there is an indication that the mandates and responsibilities of various frontline agencies may overlap, and staff are not always clear about lines of reporting and referrals. These concerns were shared by social workers and development agents mainly in relation to TDS mechanisms, and health extension workers and development agents with regard to the exact mandates and responsibilities of CBHI coordinators in promotion of the enrolment of clients into CBHI. Second, staffing allocations may be too limited (in their capacity and guidance about the specific objectives of collaboration, the main roles and mandates of each actor, and technical expertise) to allow for effective integration of tasks and responsibilities across sectors.

"I don't have knowledge on health insurance issues. I didn't receive the training and it is not my job." – KII with development agent, Dewa Chefa

"Lack of awareness among health extension workers on the detailed activities of CBHI is a challenge. Sometimes they complain about how to accomplish some tasks without getting training." – KII with development agent, Libo Kemkem

This issue is particularly prominent among new staff members in Gula communities.

"It was difficult [to collaborate] because we are new in the area. Health extension worker is [also] new in the area and job so we don't have any clue about how to work in collaboration. Also with the social worker we have language barriers since she only speaks Afaan Oromo and we can't do anything." – KII with development agent, Dewa Chefa

Third, divergences between PSNP and CBHI programme targeting systems and eligibility criteria for the selection of clients remain. Frontline workers reported lack of clear guidelines for the identification of clients for CBHI premium waiver and stressed the importance of developing the common targeting of various complementary programmes. The weak links between the routine monitoring tools used by the health sector and the PSNP, respectively, exacerbate targeting fragmentation. For example, the availability could not be confirmed of the common data on the proportion of the subsidized CBHI households that are PSNP households.

PSNP woreda coordinators stressed the need for the urgent establishment of a harmonized social protection database system – including unified registries and a management information system – to

enable the management of information among sectors on clients of social protection programmes and their access to complementary services. All key informants reported that they are typically using rudimentary management information system tools (often paper based) to record and track the identification of clients, compliance with co-responsibilities, relevant benefit payments and other delivery processes, but also the monitoring of processes and outcomes.

Fourth, basic practical challenges, such as high staff turnover and language barriers in the case of Dewa Chefa woreda, hinder effective collaboration in practice. The staff and tools available to manage the woreda CBHI scheme were often not considered sufficient. Confronted with little engagement by other sectors, this resulted in a high workload for a small team of woreda implementers.

"But I can't say this condition is sustainable as I told you earlier. For instance, two of the administrators in the agriculture office were other people. We have now new administrators. There could be some gaps until these members understand the job well. There could be similar gaps in other sectors." – KII with development agent, Dewa Chefa

Finally, budgetary constraints affect the capacity of coordination bodies, such as steering committees and task forces, to promote integration and collaboration among key agencies and offer relevant trainings.

"The main challenge we have is asking for the budget. We have asked regional offices to give training so many times. We also asked to give the training by ourselves and they need to provide budget. But we received no response. Finally, we took alternative action through receiving budget from the steering committee and we conduct training for some of experts and administrators. The condition looks good after we made the awareness. Also, there are some experts that will be hired soon. They also need a training or awareness creation. We have talked with UNICEF. We are waiting for decision about their engagement." – KII with PSNP coordinator, Dewa Chefa

15. SUMMARY AND CONCLUSIONS

There is increasing recognition among governments and the international development community about the need for more integrated national social protection systems to help harness potential synergies between social protection and complementary services to enhance the magnitude and sustainability of poverty reduction outcomes. The Government of Ethiopia is duly heading in this direction and aims to establish a comprehensive and integrated social protection system in line with the Social Policy Framework for Africa, which "aims to provide an overarching policy structure to assist African Union Member States to strengthen and give increasing priority to their national social policies and hence promote human empowerment and development" (African Union, 2008, p. 4).

The social protection landscape in Ethiopia is currently comprised of many diverse interventions including the flagship PSNP, CBHI, health and education fee waivers, and a formal social security scheme for civil servants and private sector organization employees. A new national social protection policy and strategy adopted in 2016 aims to facilitate the integration of programmes, and UNICEF is accordingly supporting the ISNP in the Amhara Region primarily to test the differential effect of CBHI enrolment on health seeking behaviour and health outcomes among PSNP clients.

A quasi-experimental mixed methods longitudinal impact evaluation has been designed to rigorously test the ISNP over a 24-month period. The ISNP is to be implemented in two woredas (Libo Kemkem and Dewa Chefa) and two other woredas (Ebinat and Artuma Fursi) were selected as comparison based on expert knowledge of comparability to the treatment woredas on key observables such as socioeconomic development, topography, culture and accessibility to markets and social-services.

Baseline quantitative data were collected from a randomly selected sample of 5,389 PSNP client households (equal representation of PW and PDS). Data were also collected about key characteristics of the kebeles (such as population, access to services, and shocks in the past one year) as well as on all health facilities in the kebeles (including operating hours, personnel, equipment, medical supplies and services offered). Qualitative data were collected from some of the quantitative households and from frontline service providers (health extension workers, social workers, development agents), and PSNP and CBHI officials at the kebele, woreda and federal levels.

The quantitative analysis accounts for the quasi-experimental design and non-equal inclusion probabilities of households by using both matching and sampling weights. This analysis shows that the outcomes were generally balanced between treatment and comparison groups, indicating the internal validity of the study and that one may be confident that differences in the outcomes observed at follow-up can be attributed to the INSP intervention and not systematic differences that existed prior to INSP implementation. The analysis shows that the target population is deprived in many domains (food security, assets ownership, housing conditions and human capital). Even if compared with the whole of rural Amhara, the target population seems more deprived, which is indicative of the targeting efficiency of the PSNP. Households generally receive the benefits expected from the PSNP, and there is already evidence of the CBHI premium fee waivers for a non-negligible number of households.

Awareness of CBHI is high, and baseline enrolment rates are quite high as well. Nonetheless there is enough room left before universal coverage is achieved and the CBHI indigent enrolment can be expected to make a differential impact towards achieving this goal. The willingness to pay for CBHI is below the current threshold for enrolment by a margin of about ETB 100, and this means that the costing of the CBHI enrolment is probably prohibitive. Health seeking behaviour is quite low and given that CBHI holders were more likely to seek for health care when sick, it can be expected that increased enrolment in CBHI will boast health seeking behaviour and health outcomes.

Early marriage remains a huge challenge, and there appears to be entrenched positive attitude towards the practice of girls being married before age 18. Awareness about the legal age of marriage is low.

About 35 per cent of children of primary school going age (ages 6–13) are currently not enrolled in school, and even among those enrolled, regular attendance is a challenge for some children who must stay out of school (for one week or more) during regular sessions to help out with household chores or farming activities.

Dietary diversity was low among caregivers of children, much the same as the explicit knowledge about foods that are rich in iron or vitamin A. Nutritional status of children was not encouraging with about 47 per cent of children ages 4–59 months currently stunted. Less than half the children ages 12–23 months have received all the recommended vaccinations, and only 19 per cent have their births registered. There is also high prevalence of violent discipline as 60 per cent of children ages 12–59 months received violent discipline in the month preceding the survey.

Women's control over their lives, decision-making autonomy, physical health and mental health were all moderate, and majority of women have no savings at all. Social capital and belongingness in the community were also low with only 16 per cent of women having a positive perception about community relationships. About 50 per cent of the women participate in Iddirs but participation in Eqqubs is almost non-existent. Knowledge of the existence of health extension workers is quite high, but contact with health extension workers in the previous three months was limited. Comparatively, little is known about the existence of social worker and of interactions with them.

The qualitative findings are consistent with the quantitative findings and shed light on some of the underlying dynamics that need to be addressed in to realize meaningful impacts of the ISNP. In particular, the assessment of the institutional and operational arrangements for the integration of PSNP and CBHI as well as the links to social services show some gaps that need to be comprehensively addressed to ensure fidelity of the intervention to begin with.

The overarching conclusion from the baseline study is that there are indeed challenges to which the ISNP programme is appropriately conceptualized to respond. Realizing the potential would require detailed and more efficient implementation of the components, and there is the need for all the necessary financial, logistical and human resource bottlenecks to be adequately addressed. Towards this end, the following recommendations are offered. They are considered necessary to help ensure that the interventions proceed according to plan and that the intended objectives can be realized.

- Training of CBHI and PNSP coordinators and key frontline workers (health extension workers, social workers, development agents) on the shared targeting systems and eligibility criteria for the selection of clients for the CBHI fee waiver is essential. A simple stand-alone reference document is recommended that clearly outlines the targeting approach, responsibilities and routine monitoring protocols. Similar consideration should be given to how the transition to TDS would be operationalized and implemented.
- There is a need to intensify communication about the extra household responsibilities
 associated with the programme and the livelihood activities that have been introduced as part
 of PSNP phase 4 in general, as well as the ones that are specific to the ISNP.
- 3. There is the need to clarify the roles of frontline personnel to ensure there are no overlaps or gaps, and provide necessary technical and financial resources and operational systems so that they can effectively communicate and work with each other collaboratively.

- BCC sessions should include lessons on child discipline and child marriage and highlight
 the long-term effects of these harmful practices on the life prospects of children, and girls in
 particular.
- 5. Ensuring that the frontline personnel are adequately compensated and maintained. High turnover of staff would affect sustainability and cost more in terms of the training and retraining. A system of routine monitoring of the performance of frontline personnel is also important to ensure non-performing personnel are supported to get better or dismissed if they cannot keep up to the demands.
- 6. To meet the willingness to pay levels of households that are excluded from CBHI, there is the need to explore the possibility of an alternative package that provides services that are commensurate with what the households are willingness to pay. This could be a strategic step in increasing access.
- 7. Routine monitoring and evaluation of development activities in both treatment and comparison communities are necessary to track any interventions that could affect the outcomes of interest. This will not only help answer the question of attribution, but also help explain possible no impacts in case there are interventions that can produce similar impacts in the comparison communities.

The following observations and recommended action points are directed at various stakeholders.

15.1 Transition of households with malnourished children to TDS and case management schedule.

To achieve meaningful impact on the nutritional status of children, it is critical that all households with malnourished children and household with pregnant and lactating women are transitioned to TDS as expected in the intervention design. There is also the need for the case management to be implemented to the latter because cash from TDS alone will not be enough.

Action points

- The Bureau of Labour and Social Affairs and the Bureau of Health to share with UNICEF the approach used to identify all households with malnourished children and the list of all such households and children.
- The Bureau of Labour and Social Affairs and the Bureau of Health to provide evidence that all households with malnourished children have been transitioned to TDS.
- The Bureau of Labour and Social Affairs and the Bureau of Health to share with UNICEF the protocol for case management for malnourished children.
- The Bureau of Labour and Social Affairs and the Bureau of Health to provide monthly updates on what has been done for each malnourished child with regards to the case management.
- The Bureau of Labour and Social Affairs and the Bureau of Health to assess children on a quarterly basis to identify new malnourished children.

15.2 Recruitment, training and activities of social workers

At least one social worker is recommended per kebele with requisite training to provide the services requested of them. In addition, their terms of employment should be secured and adequately compensated to ensure they are committed. This will reduce rapid turnover and ensure continuity.

Action points

- The Bureau of Labour and Social Affairs to share the update on list of kebeles where social workers are currently working
- The Bureau of Labour and Social Affairs to share the terms of reference of social workers
- The Bureau of Labour and Social Affairs to provide monthly updates on the output of each social worker in terms of key intervention activities
- UNICEF and the Bureau of Labour and Social Affairs have to assess the potential role that social workers can play in acting as a bridge between the PSNP and formal child protection system and provide case management support to families and girls at risk of child marriage and other protection-related vulnerabilities

15.3 Management information system roll out and key information to track

The management information system of the ISNP seeks to build on the management information system of the Integrated Nutrition and Social Cash Transfer Pilot Programme. The management information system of the latter contains information on individual health family folder ID, age, lactation/pregnancy status, whether person has disabilities, whether person is chronically ill, nutrition status, and school enrolment (for children). For TDS clients, there is a need for additional data, including information on the nutritional status of the caretaker and child. Two key features identified to be included in the ISNP management information system are as follows:

- Links to health insurance (CBHI)
- Links to child protection case management system (module included as part of the ISNP management information system)

This implies that at the minimum, the management information system should provide information on household's enrolment in CBHI, premium-free access, childbirth registration, children's immunization status, case management activities, adherence to co-responsibilities and children nutritional status monitoring.

Action points

- The Bureau of Labour and Social Affairs to share a management information system at roll out and provide details of how it will be continuously updated (expected by November 2019).
- An application to be developed for social workers and health extension workers so they can directly feed information to the management information system during their field visits and maintenance of case files (expected by April 2020).
- All social workers and health extension workers to be trained on application for data entry to feed into the management information system,

15.4 Effectiveness of BCC sessions

There is a lot of expectation that information disseminated through the BCC sessions will lead to behavioural change on nutrition and feeding practices among others. In the qualitative interviews, respondents have indicated that information received from BCC sessions have been helpful. Nonetheless, there is the need to do a more holistic assessment of the effectiveness of the BCC

sessions in terms of mode of delivery, content relevance, segmentation of the clients for different sessions, sequencing of the messages, inclusion of males to the sessions, follow-up support.

Action points

- The Bureau of Labour and Social Affairs to share with UNICEF content material/modules used for the delivery of BCC sessions.
- Health extension workers to carry out rapid assessment of understanding of clients immediately following a BCC session.
- UNICEF and the Bureau of Labour and Social Affairs should assess the feasibility of including content on child marriage messaging in the BCC programme.

15.5 CBHI sustainability assessment

There are already reports of financial challenges to the CBHI programme. There is the need to have a comprehensive assessment outlining the expected revenue and expenditures in all 4 woredas and to have a clear plan as to how any funding gabs will be met. This assessment should model the scenario of full coverage of PDS households. The Bureau of Labour and Social Affairs should carry out a detailed actuary evaluation of CBHI in Amhara with woreda specifics.

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