Impact Evaluation of Improved Nutrition through Integrated Basic Social Services and Social Cash Transfer Pilot Program (IN-SCT) in Oromia and SNNP Regions, Ethiopia

Endline Impact Evaluation Report
2020

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Acronyms

BMI	Body Mass Index
CAPI	Computer-Assisted Personal Interview
CCC	Community Care Coalition
CS	Case study
CSPro	Computer-Assisted Personal Interview program
DA	Development Agent
DDS	Dietary Diversity Score
DHS	Demographic and Health Survey
DS	Direct Support
EA	Enumeration area
EC	Ethiopian Calendar
FAO	Food and Agriculture Organization of the United Nations
FGD	Focus group discussion
FIES	Food Insecurity Experience Scale
FSTF	Food Security Task Force
HAZ	Height-for-age Z-score
HESPI	Horn Economic and Social Policy Institute
HEW	Health Extension Workers
HH	Household
IDS	Institute of Development Studies
IFPRI	International Food Policy Research Institute
IN-SCT	Integrated Nutrition and Social Cash Transfer
KII	Key informant interview
MAM	Moderate acute malnutrition
MIS	Management Information System
MoLSA	Ministry of Labor and Social Affairs
MUAC	Mid-upper arm circumference
NGO	Nongovernmental organization
PDS	Permanent Direct Support
PIM	Program on Policies, Institutions, and Markets
PLW	Pregnant and lactating women
PSNP	Productive Safety Nets Program
PW	Public Works

RCTs	Randomized controlled trials
SAM	Severe acute malnutrition
SCT	Social Cash Transfer
SNNPR	Southern Nations, Nationalities, and People's Region
SW	Social worker
TDS	Temporary Direct Support
UNICEF	United Nations Children's Fund
WHZ	Weight-for-height Z-score

Executive Summary

1. In 2015, UNICEF in collaboration with the Ministry of Labor and Social Affairs (MoLSA) introduced the Integrated Nutrition–Social Cash Transfer (IN-SCT) pilot program in Oromia and SNNP Regions of Ethiopia, through funding from Irish Aid. The IN-SCT program aims to support and enhance the implementation of Phase 4 of the Productive Safety Net Program (PSNP4) by providing an integrated package of multisectoral nutrition services and engaging in activities to strengthen the quality of health services offered. The International Food Policy Research Institute (IFPRI), Institute of Development Studies (IDS) at University of Sussex, and Cornell University conducted an impact evaluation of the IN-SCT program. A baseline survey for the impact evaluation, including both quantitative and qualitative components, was conducted from March–May 2016 in SNNP and Oromia regions. A qualitative midline survey was conducted in March–April 2017. For the endline survey, the qualitative component was conducted in March–April 2018 and the quantitative component was conducted from August–September 2018.

2. Under the umbrella of the PSNP4, the IN-SCT program supported and enhanced some of the more innovative components of the PSNP4, including intersectoral components that link client households to health and nutrition services, built the capacity of MoLSA structures to manage the Permanent Direct Support clients (PDS) of PSNP, and tested the social protection Management Information System (MIS) (Chapter 2). The IN-SCT program in Oromia and SNNP regions enhanced access to social services through co-responsibilities for two groups of PNSP4 clients: permanent direct support (PDS) clients who received 12 months of transfers per year under PSNP4, and temporary direct support (TDS) clients, including pregnant and lactating women and caregivers of malnourished children. The IN-SCT also supported the community mobilization of the Behavior Change Communication sessions for male and female public work clients.

3. This impact evaluation of the IN-SCT program has the following objectives (Chapter 1)

   i. assess the impacts of the IN-SCT program on the clients and the communities in which they live on a set of child-specific nutrition and health-related outcomes including those relating to chronic undernutrition as measured by height-for-age z-scores (HAZ); participation in growth monitoring; antenatal care visits by pregnant mothers; postnatal visits; deworming of children and adolescent girls; vitamin A supplementation; and attendance by guardians at community conversation sessions;

   ii. look at the effectiveness with which it reaches the target group and delivers the expected social outcomes in nutrition, health, education, and child protection;

   iii. assess the impacts of the co-responsibilities related to nutrition – Is the household dietary diversity of Permanent Direct Support clients and Temporary Direct Support clients improved as a consequence of the exposure to the program?; and

   iv. evaluate the operational linkages and coordination effectiveness for the system approach of the program including recording its capital and recurrent costs at kebele, woreda, and regional levels.

4. The impact evaluation study is designed as a mixed methods evaluation, including both quantitative and qualitative evaluation components (Chapter 3). The quantitative data collection is centered around a baseline household survey, conducted from April - June 2016 and an endline household survey that was conducted in August-September 2018. Impacts of the IN-SCT and PSNP programs are measured from the quantitative survey data using the matching techniques of covariate matching (for the SNNP2 panel) and propensity score matching (for the SNNP1 repeated cross section).[1] The qualitative data collection includes a series of structured key informant interviews conducted in three rounds: at baseline (March-April 2016), midline (March-April 2017) and endline (March-April 2018). The midline qualitative assessment provided evidence on the performance of the program early enough to allow for mid-course corrections or improvements to implementation, as needed. Using a mixed methods approach makes it possible to measure causal impacts of the IN-SCT program and also understand in greater detail the factors that contributed to those impacts or constrained the benefits of the program.

5. In order to meet the objectives of the evaluation, the study includes a relatively complex sample design (Chapter 3), making it possible to compare outcomes and characteristics between (i) beneficiaries of the combined IN-SCT and PSNP programs (T), (ii) households not participating in either the IN-SCT or PSNP (C1), and (iii) beneficiaries of the PSNP alone (C2). In addition, the sample has three parts: (i) an Oromia sample of 300 households to inform the process evaluation in Oromia, (ii) a repeated cross section sample of 1,920 households with pregnant or lactating women or children age 6-23 months (SNNP1) to measure impacts on child nutrition, child feeding practices and maternal nutrition knowledge, and (iii) a sample of 1,200 households with children under 5 (SNNP2) in a panel survey on which estimates are made of impacts of the program on household food security, consumption, poverty and health.

6. The evaluation estimated the absolute impact of the IN-SCT program compared to no program (T vs C1) and the relative impact of the IN-SCT program compared to the PSNP4 alone (T vs C2) in both samples in SNNPR (Chapter 3). In the repeated cross section SNNP1 sample, a propensity score matching (PSM) model was used based on Blundell and Dias (2009). In the panel survey sample of SNNP2, a nearest neighbor matching (NNM) form of covariate matching was used because it is more efficient than PSM and feasible with panel data.

1. See the Inception Report, Devereux et al. 2016.

7. The mixed methods process evaluation (Chapter 4) revealed some successes, but several shortcomings in the delivery of the IN-SCT. SWs were somewhat successful in promoting multisectoral collaboration through work with the DAs and HEWs. However, SWs faced many challenges: SWs were few in number, were overburdened with reporting requirements in the MIS, and had little logistical support to travel to communities to meet with clients and conduct BCC trainings. Moreover, there were frequent changes in staffing, which ultimately undermined the effectiveness of the SWs. The project also had limited interaction with the CCCs. As a result of these weaknesses in delivery and the difficulties for SWs to visit communities, HEWs became overburdened with the demands on their time and delivery of BCC sessions appears to have suffered. Although the IN-SCT developed an extensive BCC manual that is being used throughout the PSNP4, DAs and HEWs in some areas report that lack of access to the manual has limited their ability to make improvements in programme delivery.

8. The impact evaluation on the SNNP2 panel sample (Chapter 5) found substantial evidence that the IN-SCT program has improved outcomes and knowledge for client households and that these improvements are greater than were achieved for clients in other PSNP4 woredas. The nutrition-sensitive approach to the PSNP4 provided by IN-SCT has led to meaningful improvements in household dietary diversity and food security, asset holdings, child schooling and child protection relative to the PSNP4 alone. The results show that the IN-SCT increased the household dietary diversity score (HDDS) by 1 food group out of the 12 considered for the sample overall. This effect was larger, at 1.5 food groups, for IN-SCT PDS households compared to their PNSP4 only counterparts. The IN-SCT program also improved the share of women consuming a minimally acceptable diet and reduced the food gap by roughly 1 month compared to the PSNP4 alone. Also, women in the program learned important nutrition messages and improved some practices, such as breastfeeding.

9. We found that the IN-SCT program significantly increased holdings of livestock, productive and total assets, but reduced holdings of consumption assets, when compared to other PSNP4 beneficiaries. IN-SCT had a positive effect overall on asset holdings, but also changed the composition of asset holdings, toward livestock and productive assets and away from consumer durables. Regarding schooling, households with children age 7-14 in the IN-SCT communities report that their children's school was open nearly one half additional day on average in the past week than households in the matched comparison group of PSNP4 clients. The activities of SCT service providers, whether coordinators, HEWs, or SWs, appears to have caused schools to remain open on more days. This had a weakly significant effect on child school attendance for children age 7-14, which increased by one quarter day on average in the past week.

10. In the SNNP1 sample, we compared the impact of the IN-SCT program on children in client households compared to children in the other PSNP4 woredas (C2). The estimates show no impact on child anthropometry, except for an unexplained statistically significant negative impact on HAZ. Results also showed no impact of the IN-SCT program on children in client households compared to children in neighbouring households not in the program. The weak effects on anthropometry may arise in part because children age 6-23 months in TDS households may not have been exposed to the program for very long. Also, there is no impact of the program on household food and nonfood consumption, suggesting weak effects on poverty reduction.

11. The lack of evidence for impacts of the IN-SCT on client households compared to non-client households in the same communities weakens the support from this evaluation that the impacts of the IN-SCT were broad in scope. It is plausible that benefits from the program spread to neighbouring households, leading to spillover effects that erode our estimates of impact compared to that counterfactual of non-participant neighbouring households. There is little other evidence to draw on to inform the presence of such spillover effects, leaving the results of the T vs C1 comparisons indeterminate. In the face of such evidence, we conclude that there were no impacts in the T vs C1 comparisons, but with the caveat of potential spillover effects.

12. Taking all of the evidence together, the impact evaluation shows that progress has been uneven. Gaps in delivery and budgetary and supervisory problems kept Social Workers from routinely traveling to communities to do their jobs. As a result, a greater burden for providing nutrition trainings and support fell to HEWs, rather than SWs. These challenges in delivering new nutrition programming also coincided with familiar challenges for the PSNP4 program, including small transfers and sometimes burdensome work requirements, as well as delays in making payments. Ultimately, all of these challenges meant that the IN-SCT program had almost no measurable impact on child nutrition outcomes, with the exception of creating a weakly significant reduction in child underweight prevalence. The program was able to remove some constraints to resources and knowledge to make improvements along the impact pathway, but the interventions were not sufficiently resourced and managed to be able to reduce child malnutrition. An important question now for the Government of Ethiopia, UNICEF and their partners, is whether changes can be made to make IN-SCT more effective, in order to justify these continued investments in nutrition for poor households.

Introduction

1. Introduction

In 2015, UNICEF in collaboration with the Ministry of Labor and Social Affairs (MoLSA) introduced the Integrated Nutrition–Social Cash Transfer (IN-SCT) pilot program in Oromia and SNNP Regions of Ethiopia. The IN-SCT program aims to support and enhance the implementation of Phase 4 of the Productive Safety Net Program (PSNP4) by providing an integrated package of multisectoral nutrition services and engaging in activities to strengthen the quality of health services offered. The International Food Policy Research Institute (IFPRI), Institute of Development Studies (IDS) at University of Sussex and Cornell University have conducted an impact evaluation of the IN-SCT program. A baseline survey for the impact evaluation, including both quantitative and qualitative components, was conducted from March–May 2016 in SNNP and Oromia regions. A qualitative midline survey was conducted in March–April 2017. For the endline survey, the qualitative component was conducted in March–April 2018 and the quantitative component was conducted from August–September 2018.

This Endline Impact Evaluation Report presents findings from a process evaluation and impact evaluation of the IN-SCT program, combining both quantitative and qualitative methods.

1.1. The policy context for the IN-SCT pilot program

Since its launch in 2005, the Productive Safety Net Program (PSNP) has been one of the Ethiopian government's main programs to address poverty and food insecurity. Periodic evaluations of the program have shown that the PSNP has had positive effects on a number of outcomes, including improved food security and increased household assets (Berhane et al. 2011; Berhane, Hirvonen, and Hoddinott 2015; Kumar and Hoddinott 2015). In 2015, the government launched Phase 4 of the PSNP. PSNP4 involves a new round of targeting of the program, most of which was completed late in 2015. In addition, the new phase of the PSNP includes several innovations designed to strengthen the program as a form of social protection and risk management, including improved integration with delivery of social services (especially health and nutrition) for its Public Works (PW) and Direct Support (DS) clients; increases in quantity and duration of transfers, including 12 months of support for Permanent Direct Support (PDS) clients; and the creation of a Temporary Direct Support (TDS) category for clients that are pregnant and lactating women (PLW) or caretakers of malnourished children, who are public works clients.[2]

Under the umbrella of the PSNP4, the IN-SCT program supports and enhances some of the more innovative components of the PSNP4, including intersectoral components that link client households to health and nutrition services, build the capacity of MoLSA structure to manage the Permanent Direct Support clients (PDS) of PSNP, and test the social protection Management Information System (MIS). As noted above, the IN-SCT program in Oromia and SNNP regions enhances access to social services through co-responsibilities for two groups of PNSP4 clients: permanent direct support (PDS) clients who now receive 12 months of transfers per year, and temporary direct support (TDS) clients including pregnant and lactating women and caregivers of malnourished children. The IN-SCT also supports the community mobilization of the Behavior Change Communication sessions for male and female public work clients. In addition, under funding from UNICEF and Irish Aid, the

2. See Productive Safety Net Program Phase IV Program Implementation Manual. December 2014. Addis Ababa: Ministry of Agriculture.

IN-SCT program is a pilot program that expands the IN-SCT by offering an integrated package of multisectoral nutrition services in selected PSNP woredas (UNICEF 2015). The pilot in SNNP supports the nutrition sensitive interventions under PSNP and undertakes activities to improve the quality of health services offered. In addition, the IN-SCT pilots various other multisectoral linkages, including those with schools, child protection services, and agriculture. Among other things, the pilot provides the opportunity to test PSNP4 nutrition and gender sensitive provisions, identify lessons learned, and develop tools for further scale-up. The pilot is implemented in two woredas of SNNPR, namely Halaba Special Woreda and Shashago Woreda, Hadiya Zone. This IN-SCT program builds on lessons learned from the UNICEF SCT pilot program conducted in two woredas in Tigray region from 2011-2014, and will provide lessons in linking clients with Basic Services and on the contribution of social workers to managing PDS.[3] In Oromia region, the programme piloted the MIS, began the integrated case management system and introduced SWs in the Dodota and Adami Tulu Woredas, but it did not implement the nutrition-sensitive component of the IN-SCT..

1.2. Study objectives, research questions, and outcome indicators

This impact evaluation of the IN-SCT program has the following objectives:

1. assess the impacts of the IN-SCT program on the clients and the communities in which they live on a set of child-specific nutrition and health-related outcomes including those relating to chronic undernutrition as measured by height-for-age Z-scores(HAZ); participation in growth monitoring; antenatal care visits by pregnant mothers; postnatal visit, deworming of children and adolescent girls; vitamin A supplementation; attendance by guardians at community conversation sessions;
2. look at the effectiveness with which it reaches the target group and delivers the expected social outcomes in nutrition, health, education, and child protection;
3. assess the impacts of the co-responsibilities related to nutrition- Is the household dietary diversity of Permanent Direct Support clients and Temporary Direct Support clients improved as a consequence of the exposure to the program?; and
4. evaluate the operational linkages and coordination effectiveness for the system approach of the program including recording its capital and recurrent costs at kebele, woreda, and regional levels.

Work on these four objectives feeds into the fifth objective, identifying challenges and lesson learned. The full list of indicators included in the study are provided in Table A.1 of Appendix 1 of this report. Further details on the motivation and design of the study can be found in the project Inception Report (Devereux et al. 2016).

1.3. Conceptual framework and theory of change

1.3.1. Conceptual framework

This study grounds its conceptual approach in the UNICEF nutrition framework (Figure 1.1), which was developed in 1990 but remains a powerful tool for understanding the pathways to child malnutrition.

A crucial insight captured by this framework is the recognition that malnutrition in children is explained not only by inadequate access to food, but also by inadequate care for children and women, insufficient health services and an unhealthy environment as well as inadequate education, especially of mothers and other caregivers. These are the 'underlying causes' in Figure 1.1. Beyond this level are several 'Basic causes', related to the bigger economic, institutional and political context.

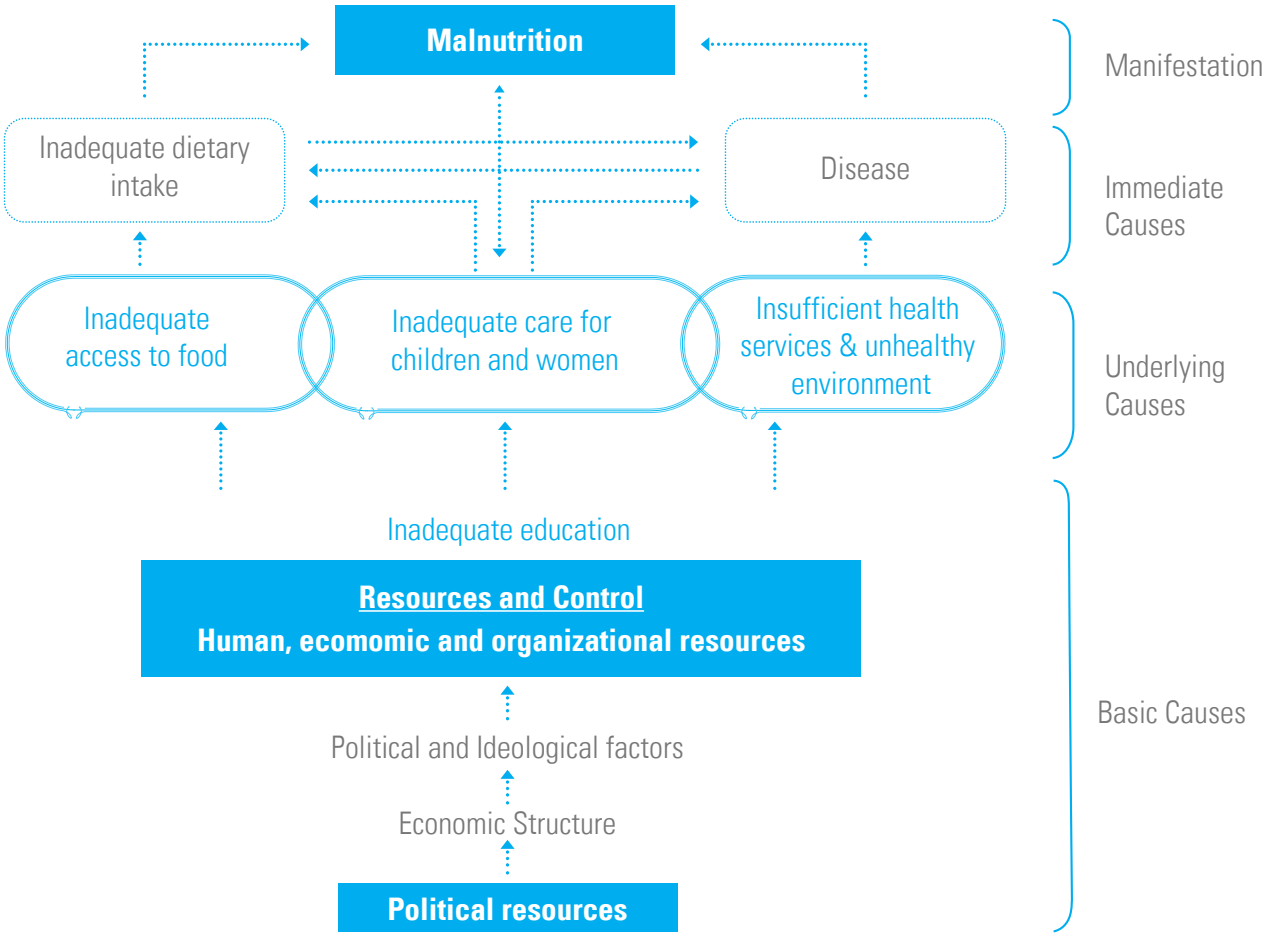
3. IFPRI and IDS also conducted an evaluation of the UNICEF SCT pilot program in Tigray (see Berhane et al. 2015).

Social protection acts mainly on constraints at the household level, and mainly on the left-hand side of the diagram. For instance, the thinking underlying cash transfer programs is that poor households face binding income constraints that result in 'inadequate access to food', which cash transfers will alleviate. If poverty is indeed the constraint that results in 'inadequate dietary intake' and the persistence of child malnutrition, then cash transfers are an appropriate and sufficient intervention. However, from a social protection perspective, the implication of the UNICEF conceptual framework is that cash transfers alone are not enough – and empirical evidence seems to confirm this.

Cash transfers have been found to improve indicators of food security such as food expenditure and dietary diversity, but this rarely translates into expected improvements in child nutrition status. Figure 1.1 provides a possible explanation: if the child's food intake improves but the health or sanitation environment remains detrimental, then diseases such as diarrhoea can eradicate all the nutritional gains that were financed by the cash transfers. A holistic approach requires addressing both the income and health drivers of child malnutrition.

The design of the IN-SCT pilot interventions aims to address the limited success of cash transfer programs in terms of improved nutrition outcomes, by adding components that explicitly target all the underlying causes of child malnutrition, not only income constraints and inadequate access to food. In particular, the IN-SCT pilot supports several nutrition-sensitive interventions under PSNP4, including BCC that addresses women's education deficits and inadequate care practices for children. The IN-SCT also engages in activities to strengthen the quality of health services offered, including by ensuring that Social Workers and Health Extension Workers work closely together at the community level to ensure that PSNP clients are referred to appropriate services, and are transferred between Public Works and Direct Support when required.

Figure 1.1 UNICEF conceptual framework for the causes of child malnutrition

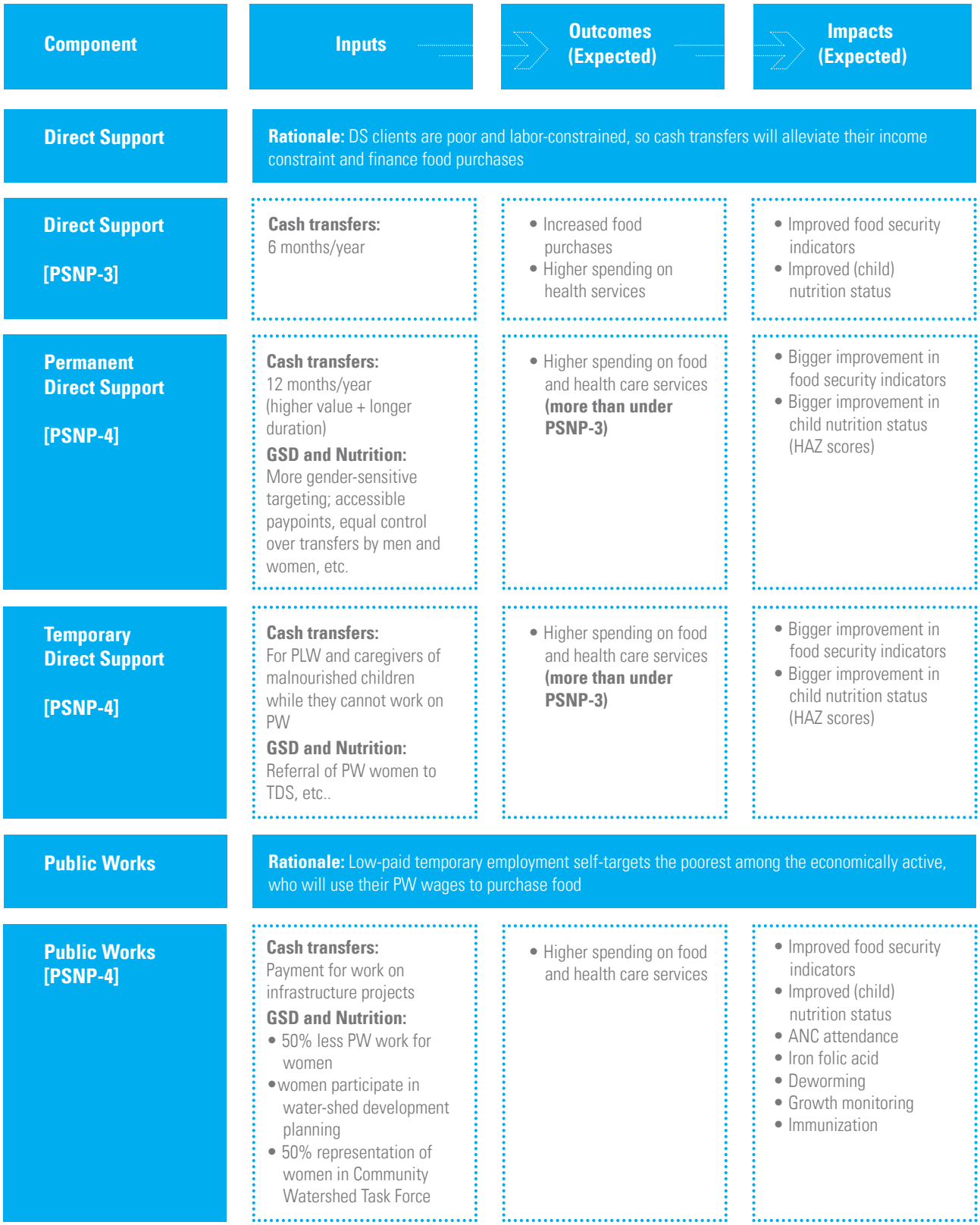


Source: UNICEF, 1990.

1.3.2. Theory of change

Figure 1.2 below draws on the UNICEF conceptual framework and the rationale of the IN-SCT, as elaborated in the RFP and baseline report, to illustrate the theory of change underlying each major component of the intervention. As can be seen, some components – Direct Support and Public Works – aim to improve food security and nutrition outcomes by improving access to food. Other components – notably Access to Services and BCC – operate on the other pathways to child malnutrition, by improving health, hygiene and sanitation. The overall objective is to improve child nutrition outcomes, as measured by stunting rates (height-for-age) through a holistic set of interventions that tackles all the underlying causes of child malnutrition.

Figure 1.2 Theory of change: IN-SCT



Access to Services	**Rationale:** Children are malnourished partly because they and their caregivers lack access to essential services such as basic health care		
Access to Services **[IN-SCT]**	Enhanced access to basic services through co-responsibilities and referrals	Increased uptake of nutrition and primary health care services among PLW	• Improved health status • Lower prevalence of diarrheal disease • ANC attendance • Iron folic acid • Deworming • Growth monitoring • Immunization
BCC	**Rationale:** Children are malnourished partly because of poor knowledge, attitudes and practices around sanitation and hygiene		
Behavior Change Communication (BCC) [IN-SCT]	BCC sessions with IN-SCT clients	Improved KAP around toileting, hand-washing, potable water, etc. Higher proportion of children 6-11 months in PSNP households report regular access to Minimum Accept-able Diet (MAD) HEW, DA and SW trained on Nutrition PSNP linkages, MIYCN messaging Kebeles hold monthly cooking demonstrations	• Lower prevalence of diarrheal disease • Improvement in child nutrition status (HAZ scores • Children <2 years consume nutrient dense foods from 4+ food groups • PSNP beneficiary pregnant women attend ANC service • PSNP beneficiary post-partum women receive postnatal follow up care • Children <2 in PSNP households attend GMP
Farming	**Rationale:** Nutrition outcomes can be enhanced through practicing nutrition-sensitive agriculture		

Nutrition-sensitive agriculture [Concern]	Support to agriculture	• FTC established as demonstration sites for model farmers/ schools, produce source seeds & saplings • Model farmers & master farmers are trained (male and female, PSNP and non-PSNP) • Woreda FSTC and DA trained on improved farming tech-niques for better nutrition • Technical advice to community members by HEW promotes diverse food production and consumption	• Model farmers establish home garden plots • PSNP Public Works clients practice improved farming techniques • More diverse food production and consumption among female and male PSNP clients
Adolescent awareness	**Rationale:** Increased nutrition and health awareness and optimal nutrition practices among school going adolescents will promote sustainable improvements in nutrition and health outcomes		
Raising adolescent awareness of nutrition and health issues [Concern]	Increase nutrition and health awareness and ensure nutrition optimal practices among school-going adolescents	• Health and nutrition clubs are established at target schools • Target schools establish garden plots for nutrition demonstration • Schools receive support from FTC (technical advice, seed/ saplings) for school gardens	• % of target schools with health and nutrition clubs • % of nutrition clubs with >70% regular attendance • % of schools that benefit from Public Works to support the establishment of school gardens

2 Description of the IN-SCT program and context

2. Description of the IN-SCT program and context

2.1. The IN-SCT program

The Productive Safety Net Programme (PSNP) in Ethiopia, which has been implemented since 2005, has been Ethiopia's largest social protection program, providing transfers in cash or kind to chronically food insecure households. Beneficiaries are required to carry out Public Works, or in the case of labor constrained or ultra-poor households, receive unconditional transfers or Permanent Direct Support. Under the new National Social Protection Strategy, the fourth phase of the PSNP was launched. This new phase included a system of integrated service delivery (especially, health and nutrition) for its Public Works (PW) and Direct Support (DS) clients; increases in quantity and duration of transfers, including twelve months of support for Permanent Direct Support (PDS) clients; and the creation of a Temporary Direct Support (TDS) category for clients that are pregnant and lactating women (PLW) or caretakers of malnourished children, who are public works clients.

The IN-SCT pilot program set to develop and test the integration of social cash transfers and basic social services accessed by two groups of PSNP beneficiaries: PDS clients who now receive 12 months of transfers per year, and TDS clients including pregnant and lactating women and caregivers of malnourished children. The program linked social workers (SWs) and community care coalitions (CCCs) with PSNP beneficiaries to strengthen access to health and nutrition services, complementary social services such as birth registration of children, and education for children 6 to 18 years of age. In addition, it developed behavior change communication (BCC) and gender and social development (GSD) materials with the community to develop the capacity of the CCCs and the Women's Development Army (WDAs).

The pilot has also implemented a Management Information System (MIS) by the WoLSAs to capture information on each PDS household. This helps facilitate linking of households to services by assessing their needs through the MIS platform and in maintaining compliance with a list of client co-responsibilities. These co-responsibilties include a list of activities that client households are expected to undertake, but receipt of payments under PSNP4 is not meant to be conditional on whether the client household has met it co-responsibilties. These co-responsibilities include the following requirements (Schubert 2015):

- Pregnant women should attend four antenatal care visits; women should completed one visit to the health post six weeks after birth;
- Follow recommended immunization schedules for infants at during the first 9 months of life;
- Growth monitoring: Take infants up to age 2 years to monthly outreach sessions conducted by Health Extension Worker for growth monitoring, vitamin A supplementation and deworming;
- For children under 5 years old suffering from acute malnutrition, follow guidelines for receiving check-ups and supplementarhy and therapeutic feeding at local health clinics;
- Pregnant and lactating women and caretakers of malnourished children should attend monthly nutrition BCC sessions conducted by Health Extension Worker; and
- Assure that school-age children are enrolled in school and attending at least 80 percent of school days.

The four pilot woredas were assigned several SWs and IN-SCT coordinators to ensure implementation of all the programs features. SWs were also tasked with coordinating with the Health Extension Workers (HEWs) and Development Agents (DAs) to make sure that TDS clients were aware of their rights as per the new PSNP4 guidelines.

The IN-SCT program supports the PSNP4 under the leadership of the Ministry of Labour and Social Affairs (MoLSA) in two woredas in each of the SNNPR and Oromia regions. The two woredas in SNNPR are Halaba Special Woreda and Shashago Woreda, Hadiya Zone. In Oromia region, the programme piloted the MIS, began the integrated case management system and introduced SWs in the Dodota and Adami Tulu Woredas, but it did not implement the nutrition-sensitive component of the IN-SCT.

2.2. The context for the IN-SCT pilot program

The IN-SCT Impact Evaluation Baseline Survey Report (Gilligan et al. 2017) provides detailed summary statistics of the context for the study in Oromia and SNNPR. Here, we summarize information about the IN-SCT sample woredas on selected outcomes for the purpose of informing this endline report. Interested readers are encouraged to access the Baseline Survey Report for a more thorough description of the context.

At the time of the baseline survey, measures of food security show a challenging food security environment in Oromia and SNNPR, in part due to the 2015 drought. The mean food gap (number of months in the last 12 months that the household had problems satisfying its food needs) for all households was 4.0 months in SNNP and 3.5 months in Oromia. To put these numbers in context, bi-annual evaluations of the PSNP found that in SNNP the mean food gap was 2.9 and 2.0 months in 2012 and 2014 respectively while in Oromia, it was 2.3 and 1.9 months (Berhane et al. 2015). The 12 month recall period for this question covers the period from January to December 2015 and thus these large food gaps reflect the severity of the 2015 drought. Many households adapted by reducing dietary quality with 67 percent of SNNP households and 78 percent of Oromia households consuming less preferred foods. Sixteen and 49 percent of households in SNNP and Oromia reported consuming wild foods. A high percentage of households, 53 and 93 percent in SNNP and Oromia, respectively, report consuming their seed stock.

The baseline survey in SNNPR collected child anthropometry data to measure child nutritional status. The survey collected child height and weight which can be combined with age and gender data to construct standardized measures of child nutritional status. Height-for-age Z-score (HAZ) measures the number of standard deviations (Z-scores) that a child's length or height is below or above the mean for a reference population of children with the same age and gender. HAZ measures chronic malnutrition, or the accumulation of nutritional deficits. Weight-for-height Z-scores (WHZ) measure the number of standard deviations a child's weight-divided-by-height is relative to a reference population of children of the same age and gender. WHZ is a measure of acute malnutrition. For children age 6-59 months, the mean height-for-age Z-score was -1.43 and the mean weight-for-height Z-score was -0.48. Overall, 42.3 percent of children age 6-59 months in the SNNP sample were stunted (HAZ<-2), which is roughly in line with the national stunting rate in Ethiopia of 40 percent. Estimates

on measures of acute malnutrition indicated a serious nutrition situation in the sample groups in study areas. On average, 17.7 percent of children age 6-59 months in the sample were wasted, which was higher than the 9 percent prevalence of wasting nationally. This difference reflects in part that most children in the sample lived in households poor enough to qualify for PSNP transfers. It may also reflect effects of the recent drought in this area. The prevalence of children age 6-59 months suffering from MAM was 10.4 percent and the prevalence for SAM was 7.4 percent.

The baseline survey in both regions captured information about parents' knowledge, attitudes and practices nutrition, health and education. Both the qualitative and quantitative interviews revealed high baseline levels of knowledge about the importance of breastfeeding for child health. Baseline levels of knowledge, attitudes and practices on hand-washing were high. There seemed to have been a significant shift recently in sanitation behavior in the study communities, from unhygienic open defecation in the past toward the use of latrines, mainly because of behavior change communication messages from HEWs around this issue. Regarding education, only 3 out of 4 primary school age children were enrolled in school two years prior to the baseline, but enrollment rates have climbed since then to roughly 95 percent at the time of the baseline survey. At the secondary level, enrollment rates were roughly 80 percent. In the past, children in the study communities were often "roaming or watching animals", but most children now go to school.

3 Mixed methods evaluation design and methodology

3. Mixed methods evaluation design and methodology

3.1. Overview of study design

The impact evaluation study is designed as a mixed methods evaluation, including both quantitative and qualitative evaluation components. The quantitative data collection is centered around a baseline household survey, conducted from April - June 2016 and an endline household survey that was conducted in August-September 2018. Impacts of the IN-SCT and PSNP programs are measured from the quantitative survey data using the matching techniques of covariate matching (for the SNNP2 panel) and propensity score matching (for the SNNP1 repeated cross section).[4] The qualitative data collection includes a series of structured key informant interviews conducted in three rounds: at baseline (March-April 2016), midline (March-April 2017) and endline (March-April 2018). The midline qualitative assessment provided evidence on the performance of the program early enough to allow for mid-course corrections or improvements to implementation, as needed. Using a mixed methods approach makes it possible to measure causal impacts of the IN-SCT program and also understand in greater detail the factors that contributed to those impacts or constrained the benefits of the program. By comparing evidence from quantitative and qualitative components, it is often possible to better understand the program impact pathways of the contextual factors shaping results.

More detail about the design of the impact evaluation study can be found in the Inception Report (Devereux et al. April 13, 2016). The Inception Report describes the approach and methodology for the impact evaluation. It describes how the mixed methods evaluation will measure impact of the program and inform the pathways for impact; provides details on the sample for the quantitative household survey rounds; and summarizes the work plan and schedule for the evaluation activities.

3.2. Quantitative study design

3.2.1. Process evaluation design and study sample in Oromia and SNNPR

In order to meet the objectives of the evaluation, the study includes a relatively complex sample design, making it possible to compare outcomes and characteristics between (i) beneficiaries of the combined IN-SCT and PSNP programs, (ii) beneficiaries of the PSNP alone, (iii) and households not participating in either the IN-SCT or PSNP. In addition, the sample of PSNP beneficiaries includes PW, PDS and TDS clients, and TDS clients are further disaggregated between pregnant women and those with children under age 2. This section provides a detailed description of the quantitative survey sample, repeating information provided in the Inception Report, so that the tables of summary statistics for the various sample components included in this report can be well understood.

The details of this sample design are summarized in Figure 3.1 and Table 3.1. Table 3.2 shows the actual number of households in the sample for each component of the design. A comparison of Table 3.1 and Table 3.2 shows that the sample obtained is very close to the complete sample design. Table 3.3 summarizes the actual household sample according to location and IN-SCT and PSNP beneficiary status.

4. See the Inception Report, Devereux et al. 2016.

There are three distinct household survey samples, one in Oromia and two in SNNP Region:

1. **Oromia sample:** the purpose of the Oromia sample is to conduct PSNP program monitoring and to undertake an operational assessment on implementation of the program. The Oromia baseline household survey sample and interviews are designed according to the following criteria:

    - sample selection criteria: households with children under 5 years of age, stratified by PNSP beneficiary status;
    - sample size: 150 households per woreda in two woredas (Dodota and Adami Tulu); a total of 300 households in the sample. In Dodota, which has only 12 kebeles, all kebeles are included. Half of these kebeles have 13 households interviewed and half have 12 households interviewed, with 7 or 6 clients, respectively, and 6 non-clients in each kebele. In Adami Tulu, 15 kebeles are sampled with probability proportional to size. In each kebele, 10 households were sampled, 5 clients and 5 non-clients;
    - survey type: longitudinal (panel) household survey; same households interviewed in each survey round;
    - interview length: baseline household questionnaire set for interview length of approximately one hour.

2. **SNNP mother/child sample (SNNP1):** this sample consists of pregnant and lactating women (PLW) and their children under age 2 years. This is the primary sample for measuring impact of the IN-SCT and PSNP activities on health practices and knowledge of PLW and on the nutrition, health and caring practices of young children for evaluation objectives 1 and 3. The SNNP1 baseline survey sample and interviews were designed according to the following criteria:

    - sample selection criteria: pregnant and lactating women and children under age 2 years, stratified by PNSP beneficiary status
    - sample size: sample in two woredas: 960 households per woreda; a total of 1,920 households in the sample, comprised of two sample groups stratified by the presence of a PLW or child age 6-23 months:

        i. PLW: 192 TDS IN-SCT beneficiary households (T), 192 IN-SCT non-beneficiary comparison group 1 households (C1—from the same community), 192 PSNP beneficiary comparison group 2 households (C2—from communities in non-SCT woredas)

        ii. Child age 6-23 months: 480 TDS or PW IN-SCT beneficiary households (T), 480 IN-SCT non-beneficiary comparison group 1 households (C1—from the same community), 384 PSNP comparison group 2 households (C2—from neighbouring non-SCT woredas)

    - survey type: repeated cross-section survey; in each survey round, a new sample of pregnant women and mother/child pairs will be drawn, stratified on program beneficiary status
    - interview length: baseline household questionnaire set for interview length of approximately 1.5 hours

3. **SNNP household sample (SNNP2):** this sample consists of households with children under 5 years of age. This is the primary sample for measuring impact of the IN-SCT and PSNP activities on household food security, household dietary diversity, and other household level outcomes for evaluation objectives 1 and 3. The SNNP2 baseline survey sample and interviews were designed according to the following criteria:

- sample selection criteria: households with children under 5 years of age, stratified by PNSP beneficiary status
- sample size: sample in two woredas: 600 households per woreda; a total of 1200 households in the sample, comprised of 360 PW IN-SCT beneficiary households and 180 PDS IN-SCT beneficiary households (T), 360 non-beneficiary comparison group 1 households (C1—from the same community), 300 PSNP beneficiary comparison group 2 households (C2—from neighbouring non-SCT communities)
- survey type: longitudinal household survey; the same households will be interviewed in each survey round, stratified on program beneficiary status
- interview length: baseline household questionnaire set for interview length of approximately 1.5 hours

Here, we explain the motivations for this sample design and describe the contribution of each sample to the evaluation.

Oromia sample

The Oromia sample is designed for the purpose of conducting IN-SCT program monitoring and to undertake an operational assessment on implementation of the program. The sample includes 15 kebeles from each of the two IN-SCT woredas in Oromia. One enumeration area (EA) per kebele is selected with probability proportional to size. Ten households are interviewed in each EA. With 300 households in the sample, this sample is well designed to capture variation in household's experience with the PSNP and IN-SCT program components, in order to provide reliable estimates of the progress of program implementation. Because no impact evaluation analysis is being conducted for Oromia, we have not undertaken power calculations. A sample of 300 households will be sufficient for the planned descriptive analysis. The household survey in Oromia will be a longitudinal survey, which will make it possible to learn from the same households how their experience with the IN-SCT and PSNP programs developed over time, relative to their baseline context. Information from the Oromia household surveys will also be used to inform the qualitative analysis both in terms of context from the baseline survey and households' experience with the programs in the later survey rounds.

SNNP1 sample

This sample includes 1,920 households and is designed to provide the data to estimate the impact of the IN-SCT program on pregnant and lactating women and on children age 6-23 months. The sample size for each component of the SNNP1 sample was determined based on power calculations (e.g., sample size estimates). This sample is stratified in two different dimensions:

- demographically: PLW and children age 6-23 months
- by beneficiary status:
  - T: TDS IN-SCT clients
  - C1: IN-SCT and PSNP non-clients in the same IN-SCT kebeles, and
  - C2: PSNP clients in non-IN-SCT woredas

For this sample, PLWs are defined as pregnant women or women with a child under age 12 months. Women in poor households who meet these criteria are the target group for TDS transfers. As shown in Table 3.1, 384 households with PLW are sampled from 96 EAs in IN-SCT/PSNP kebeles, with 4 such households per EA. Half of these households will be TDS clients (T group) and half will be non-clients (C1 group). In addition, the sample should include representative proportions of pregnant women and lactating women (those with a child under age 12 months). To assure this balance, in each EA in the

IN-SCT kebeles, two households with a pregnant woman member will be sampled, one for the T group and one for the C1 group. The other two households sampled in these EAs will each have a child under age 12 months. This approach assures balance in the sample of PLWs with pregnant women and children under age 12 months. If necessary, sample weights can be applied to make these proportional to the share of each group in the population.

For the PLW sample, the C2 group includes 192 TDS client households in 64 EAs from kebeles in non-SCT woredas. Three households are sampled in each of these EAs, and the sampling was managed so that roughly 50 percent of the 192 reference women in this sample were pregnant. This leads to a total of 576 households in the PLW sample.

Next, a sample of households with children age 6-23 months was drawn. This sample includes 960 households in the same 96 EAs in IN-SCT kebeles used for the PLW sample (for the T and C1 samples), plus 384 households that are in woredas outside the IN-SCT program but are in the PSNP program. In the IN-SCT EAs, 10 households are sampled, 6 from households with a member in the TDS program (T group) and 6 from households with no IN-SCT/ PSNP clients (C1 group). The 384 households in PSNP kebeles but not in the IN-SCT program (C2 group) all have members receiving TDS. In all, the "child" component of the SNNP1 sample provides 1,344 households with children age 6-23 months. Notice that the PLW sample will also contain households with children age 6-23 months. On average, we expect that two of the PLW households in each EA will have a child in this age range, which adds another 192 children age 6-23 months to the sample, for a total of at least 1,536 children in the SNNP1 sample.[5] At endline, children in client households will have been exposed to the intervention both in utero and for the first 12 months of life (for those age 12-23 months) thus maximizing their temporal exposure to the intervention.

The SNNP1 sample provides a useful structure for the impact analysis. The T and C1 samples are used to estimate the average impact of the IN-SCT program on TDS clients relative to a counterfactual in which similarly poor households containing a PLW or child age 6-23 months does not receive any components of the IN-SCT or PSNP programs, or receives only some of the IN-SCT services.[6] This analysis will provide estimates of the impact of the IN-SCT program for TDS clients compared to no program for all outcomes for children age 6-23 months (e.g., anthropometry, minimally acceptable dietary diversity) and for PLWs (e.g., nutrition knowledge, attendance at) for objectives 1 and 3. In addition, the T and C2 samples will be used to estimate the average impact of the IN-SCT program on TDS clients relative to TDS clients who did not receive the IN-SCT program, but were part of the regular PSNP4. This analysis measures whether the IN-SCT program had an incremental effect on outcomes for PLWs and children age 6-23 months above any impact of the TDS program itself. Finally, the C1 and C2 samples can be used to estimate the impact of the TDS program relative to a counterfactual of no program for PLWs and children age 6-23 months. In this analysis, C2 is the TDS treatment and C1 is the comparison group with no program.

As noted above, the SNNP1 sample is designed as a repeated cross-section survey in order to have representative samples in each round of pregnant and lactating women and children age 6-23 months. Repeated cross-section designs are common in evaluations

5. If some sampled households contain more than one child age 6-23 months, outcomes for all children in this age range will be captured in the surveys. As a result, it is likely that the SNNP1 sample will include more than 1,800 children age 6-23 months for the impact analysis.
6. This assumes that health workers are able to identify and target PSNP clients and that the PSNP has no local spillover effects. The first assumption may hold as community health workers may be well-informed about the members of the community in general. Some modest provision of IN-SCT services to non-PSNP clients or spillover effects from PSNP to non-PSNP households will lead to a downward bias in the impact estimates. Thus, any significant impacts identified will be an underestimate of the impact of the program without such spillovers. We will assess the potential size of these spillovers at endline by comparing exposure to IN-SCT services between T and C1 households. Also, the effect of the IN-SCT services alone on PSNP clients will be assessed by the comparison T-C2, where no such spillover effects are expected.

measuring the impact of interventions on subjects in a narrow age range of the population (see, for example, Ruel et al. 2008). The baseline survey will use the sample just described to measure outcomes, like child anthropometry or minimum acceptable diet and women's nutrition knowledge, as well as individual, household and community contextual variables. In the endline survey, new samples of households with PLW and children age 6-23 months will be drawn from the same EAs using the same sampling criteria on demographic and beneficiary status.

SNNP2 sample

This sample includes 1,200 households and is designed to provide the data to estimate the impact of the IN-SCT program on household level outcomes related to food security, program participation and overall well-being for objectives 1 and 3. The sample size for the SNNP2 sample was determined based on power calculations (e.g., sample size estimates). This sample is stratified by beneficiary status:

- T: IN-SCT clients receiving PW and PDS
- C1: IN-SCT and PSNP non-clients in the same IN-SCT kebeles, and
- C2: PSNP clients (PW and PDS) in non-IN-SCT woredas

This sample is restricted to households that have at least one child under age 5 years. As shown in Table 3.1, 900 households with children under age 5 were sampled from 90 EAs in IN-SCT/PSNP kebeles, with 10 households sampled per EA. These 90 EAs are a subset of the 96 EAs in the SNNP1 sample. Out of these 900 households, 360 are PW clients, 180 are PDS clients and 360 are non-clients of any PSNP programs. The 360 non-client households are stratified so that one-third of them meet the targeting criteria for the PDS program in that they include labor-constrained households (e.g., disabled adults or elderly members). These 120 households provide the comparison group (C1 group) for the IN-SCT PDS client households. The remaining 240 households in this sample provide the C1 comparison group for the IN-SCT PW client households. In addition, the C2 group includes 300 client households in 30 EAs from non-SCT kebeles, with 10 households interviewed per EA (see Table 3.1). These EAs are a subset of the 64 EAs from the SNNP1 sample. Of these 300 households, 200 are PW clients and 100 are PDS clients.

In order to improve the comparability of comparison group C1 to the IN-SCT and PSNP clients, we applied a novel technique to selecting households for the sample. When households were first visited for the listing of households in the EA, the household respondent was asked to rank their household in terms of overall well-being on a decreasing 7-point scale. Households in the non-client comparison group (C1) that rank themselves in the wealthiest two scales (1 or 2) of this ladder of well-being will be excluded from the sample. This approach should provide significant advantages to the matching analysis, which relies on the assumption that clients and non-clients can be matched on observable characteristics. Using a ranking of well-being like this helps to remove households from the sample who are unlike the poor households in the PSNP program for reasons that are unobservable or not captured in our survey. This helps to improve the quality of the matches and reduce bias in the impact estimates.

Figure 3.1 UNICEF Integrated Nutrition and Social Cash Transfer (IN-SCT) Pilot Impact Evaluation, Quantitative Sample Design

Sample Overview

3,400 households in Oromia and SNNPR

1. Oromia: 300 households; two woredas in PSNP4 and IN-SCT

2. SNNP1: 1,920 households; two woredas in PSNP4 and IN-SCT; one woreda in PSNP4 only

3. SNNP2: 1,200 households; two woredas in PSNP4 and IN-SCT; one woreda in PSNP4 only

By Region/Sample

1. Oromia*

Household Panel Sample

2 woredas in the PSNP4 and IN-SCT program **(Adami Tulu and Dododa)**

Enrollment

15 kebeles in one woreda; 12 kebeles in another woreda, both PSNP4/IN-SCT woredas, 1 EA/kebele sampled to reach 300 households with children < 5 years

27 EAs **(clusters)** in PSNP4/IN-SCT

T
(PSNP4/IN-SCT)

Allocation

27 EAs in PSNP4/IN-SCT to sample client households for baseline and endline

Children under 5 years of age (n=300)

2	woredas
15	kebele in larger woreda
12	kebele in smaller woreda
1	EA/kebele
27	EAs
10	households/EA in larger woreda
12.5	households/EA in smaller woreda
300	households
100	households - PW/IN-SCT
100	households - PDS/IN-SCT
100	households - TDS/IN-SCT
100	children - PW/IN-SCT
100	children - PDS/IN-SCT
100	children - TDS/IN-SCT

* Children under age 5 years in PSNP4/IN-SCT client households have adult household members receiving Public Works (PW), Permanent Direct Support (PDS), or Temporary Direct Support (TDS), as enumerated in the table. All children under 5 years in sample households will be included in the study. Analysis on this sample is a descriptive, observational study.

2. SNNP1* Repeat Cross-Section Sample	2 woredas in the PSNP4 and IN-SCT program (Shashego and Alaba); 2 woredas in PSNP4, not in IN-SCT **(Analemo and Kedida Gamela)**		
Enrollment	12 kebeles/woreda in PSNP4/IN-SCT woredas, 8 kebeles/woreda in PSNP4-only woreda. 4 EAs/kebeles sampled to reach 1,920 households with pregnant and lactating women or children age 6-23 mos.		
	96 EAs **(clusters)** in PSNP4/IN-SCT and 68 EAs in PSNP4-only		
	T (PSNP4/IN-SCT)	**C1 (No PSNP4/IN-SCT)**	**C2 (PSNP4 only)**
Allocation	96 EAs in PSNP4/IN-SCT to sample households in Treatment Group **(T)** and Comparison Group 1 **(C1)**		64 EAs in PSNP4 only woredas to sample households in Comparison Group 2 **(C2)**
Children under 5 years of age (n=300)	**2** woredas **12** kebele/woreda **4** EA/kebele **96** EAs **2** households/EA (1 -pregnant woman; 1 - lactating woman with child under 12 mos) **192** households - PLW-TDS/IN-SCT **86** pregnant women-TDS/IN-SCT **86** lactating women with child under 12 mos-TDS/IN-SCT	**2** woredas **12** kebele/woreda **4** EA/kebele **96** EAs **2** households/EA (1 -pregnant woman; 1 - lactating woman with child under 12 mos) **192** households - PLW **86** pregnant women **86** lactating women with child under 12 mos	**2** woredas **8** kebele/woreda **4** EA/kebele **64** EAs **3** households/EA (1.5 -pregnant woman; 1 - lactating woman with child under 12 mos) **192** households - PLW-TDS only **81** pregnant women-TDS **81** lactating women with child under 12 mos-TDS
Children age 6-23 months (n=1,344)	**2** woredas **12** kebele/woreda **4** EA/kebele **96** EAs **5** households/EA **480** households - PSNP4/IN-SCT **480** children age 6-23 mos-PSNP4/IN-SCT	**2** woredas **12** kebele/woreda **4** EA/kebele **96** EAs **5** households/EA **480** households **480** children age 6-23 mos	**2** woredas **8** kebele/woreda **4** EA/kebele **64** EAs **6** households/EA **384** households - PSNP4 only **384** children age 6-23 mos – PSNP4 only

* PLW who are PSNP4/IN-SCT or PSNP4-only clients should be receiving Temporary Direct Support (TDS) under PSNP4. Children age 6-23 months in PSNP4/IN-SCT or PSNP4-only client households should have parents receiving payments either under Temporary Direct Support (TDS) or Public Works (PW), as enumerated in the table. All children fitting the age restrictions in sample households will be included in the study. Impact analysis on the SNNP1 sample uses the repeated cross-sectional matching approach of Blundell and Dias (2009).

3. SNNP2* Household Panel Sample	2 woredas in the PSNP4 and IN-SCT program (Shashego and Alaba); 2 woredas in PSNP4, not in IN-SCT **(Analemo and Kedida Gamela)**		
Enrollment	15 kebeles/woreda in PSNP4/IN-SCT woredas, 5 kebeles/woreda in PSNP4-only woreda. 4 EAs/kebele sampled to reach 1,200 households with children under 5 years of age		
	90 EAs **(clusters)** in PSNP4/IN-SCT and 30 EAs in PSNP4-only		
	T (PSNP4/IN-SCT)	**C1 (No PSNP4/IN-SCT)**	**C2 (PSNP4 only)**
Allocation	90 EAs in PSNP4/IN-SCT to sample households in Treatment Group **(T)** and Comparison Group 1 **(C1)**		30 EAs in PSNP4 only woredas to sample households in Comparison Group 2 **(C2)**
Children under 5 years of age (n=1,200)	**2** woredas **15** kebele/woreda **3** EA/kebele **90** EAs **6** households/EA **540** households - PSNP4/IN-SCT **360** households - PW/IN-SCT **180** households - PDS/IN-SCT **360** children-PW/IN-SCT **180** children-PDS/IN-SCT	**2** woredas **15** kebele/woreda **3** EA/kebele **90** EAs **4** households/EA **360** households **360** children	**2** woredas **5** kebele/woreda **3** EA/kebele **90** EAs **10** households/EA **300** households - PNSP4 only **200** households – PW **100** households – PDS **300** children-PNSP4 only **200** children – PW **100** children – PDS

* Children under age 5 years who are in PSNP4/IN-SCT or PSNP4-only client households should have parents receiving Public Works (PW) or Permanent Direct Support (PDS) under PSNP4, as enumerated in the table. All children fitting the age restrictions in sample households will be included in the study. Impact analysis on the SNNP2 sample uses the covariate nearest neighbor matching approach of Abadie and Imbens (2006).

Table 3.1 Sample design for three IN-SCT evaluation samples

			Full Sample							By Beneficiary Status					
										SCT Clients			SCT Non-clients		
	Survey type	Sampling criteria	Arms: T, C1, C2	Woredas	Kebele per woreda	EA per kebele	Clusters	Household per EA	Sample size	PW	PDS	TDS	Same EA	PSNP in other EA	Sample size
1. Oromia	Household panel	Households with children < 5 y		1	15	1	15	10	150	50	50	50	--	--	150
		Households with children < 5 y		1	12	1	12	12.5	150	50	50	50			150
		Total													300
2. SNNP1	Repeat cross-section	Pregnant and lactating women	T,C1	2	12	4	96	4	384			192	192		384
		Children age 6-23 months	T,C1	2	12	4	96	10	960			480	480		960
		Pregnant and lactating women	C2	2	8	4	64	3	192					192	192
		Children age 6-23 months	C2	2	8	4	64	6	384					384	384
		Total							1,920						1,920
3. SNNP2	Household panel	Children < 5 y; SCT kebele	T, C1	2	15	3	90	10	900	360	180	--	360	--	900
		Children < 5 y; non-SCT kebele	C2	2	5	3	30	10	300			--		300	300
		Total							1,200						1,200
		Total, All Samples							3,420						3,420

Table 3.2 Actual sample obtained for three IN-SCT evaluation samples

			Full Sample					By Beneficiary Status					
								SCT Clients			SCT Non-clients		
	Survey type	**Sampling criteria**	Arms: T, C1, C2	Woredas	Clusters (EAs)	Household per EA	Sample size	PW	PDS	TDS	Same EA	PSNP in other EA	Sample size
1. Oromia	Household panel	Households with children < 5 y		1	15	10	150	48	51	51	--	--	150
		Households with children < 5 y		1	12	12.5	150	52	49	49			150
		Total											300
2. SNNP1	Repeat cross-section	Pregnant and lactating women	T,C1	2	96	4	397			204	193		397
		Children age 6-23 months	T,C1	2	96	10	952			481	471		952
		Pregnant and lactating women	C2	2	64	3	198					198	198
		Children age 6-23 months	C2	2	64	6	368					368	368
		Total					1,915						1,915
3. SNNP2	Household panel	Children < 5 y; SCT kebele	T, C1	2	90	10	932	373	188	--	371	--	932
		Children < 5 y; non-SCT kebele	C2	2	30	10	268			--		268	268
		Total					1,200						1,200
		Total, All Samples					3,415						3,415

Table 3.3 Sample sizes, by location and beneficiary status

Beneficiary status	Woreda			
SNNP1	**Halaba**	**Shashago**	**Kedida Gamela**	**Analemmo**
PSNP and IN-SCT beneficiaries	325	360	0	0
Non-beneficiaries of PSNP and IN-SCT (in IN-SCT areas)	334	330	0	0
PSNP beneficiaries but non-beneficiaries of IN-SCT (in non-IN-SCT areas)	0	0	289	277
Total	659	690	289	277
SNNP2	**Halaba**	**Shashago**	**Kedida Gamela**	**Analemmo**
PSNP and IN-SCT beneficiaries	286	275	0	0
Non-beneficiaries of PSNP and IN-SCT (in IN-SCT areas)	185	186	0	0
PSNP beneficiaries but non-beneficiaries of IN-SCT (in non-IN-SCT areas)	0	0	135	133
Total	471	461	135	133
Oromia	**Dodota**		**Adami Tulu**	
Public Works beneficiary	52		48	
Permanent Direct Support beneficiary	49		51	
Temporary Direct Support beneficiary	49		51	
Total	150		150	

Notes: The total sample sizes are 1,915 households in the SNNP1 sample, 1,200 households in the SNNP2 sample and 300 households in the Oromia samples.

3.2.2. Matching methods used for measuring impact

Purposive selection of treatment localities and clients prior to the baseline survey ruled out the possibility of conducting an experimental impact evaluation of the IN-SCT program. Therefore, it was necessary to conduct the impact analysis using a quasi-experimental matching design. As noted above, it was also necessary to draw two distinct samples of IN-SCT beneficiaries in SNNPR in order to measure the impact of the program on child- and household-level outcomes. The SNNP1 sample is designed as a repeated cross section sample of household with pregnant or lactating women or children under age two years (6-23 months), with data collection two years apart. This sample structure makes it possible to compare changes in outcomes related to nutritional status (anthropometry), feeding practices and health service utilization for children in the 6-23 month age range over a two year period. That is, the repeated cross section sample design in SNNP1 makes it possible to measure changes in outcomes for 6-23 month olds, two years apart. We also collected information on health service utilization of pregnant women in this sample and of nutrition knowledge of mothers. The SNNP2 sample is a panel (longitudinal) sample of households with children under age 5 years at baseline. The same households are followed up at endline in the SNNP2 sample to see how household-level outcomes including consumption and food security have changed over time in the same households.

We used different matching methods for the SNNP1 and SNNP2 samples. This was done in order to implement the matching approach that provided the most rigorous approach possible given the needed sample designs. We now describe these matching methods. For more detailed information about these approach, see the project Inception Report (Devereux et al., 2016).

Matching method for SNNP1

For the SNNP1 sample, we used a form of propensity score matching (PSM) described by Blundell and Dias (2009) for use with repeated cross section data. In order to explain this approach, we first describe how PSM measures impact in the more common case in which panel data are available on a treatment group (beneficiaries) and a comparison group (nonbeneficiaries). PSM estimates the average treatment effect of a program by matching treated observations to their "most similar" comparison group observations, calculating the individual treatment effect as the difference in outcomes between that treated unit and a weighted average of outcomes in the nearest comparison group units, then computing the average treatment effect in the group. To quantify the idea of "most similar," the technique weights observations by their degree of similarity using a propensity score, which is the predicted probability of being in the program from a model that regresses a dummy variable for program participation on observable characteristics (typically from the baseline) that determine program participation and are related to the outcome of interest. Rosenbaum and Rubin (1983) showed that the innovation behind PSM is that matching on the predicted propensity score includes as much information as matching directly on the observable variables, but is simpler to calculate with the number of observables is large. PSM provides valid estimates of the impact of the treatment under the assumption that, after controlling for the observable variables in the model, the outcome variables in the comparison group would be identical to the outcome variables in the treatment group had the treatment group not received the program.

An advantage of the PSM model is that it weights differences in outcomes between clients and nonclients using a probit model for the probability that a household participates in a specific component of the PSNP program (e.g., PW, PDS, TDS) as a function of observable household and community characteristics that affect the probability of treatment and the outcome variable. As a result, factors shaping program eligibility and the outcome contribute to the impact estimate. However, a significant empirical disadvantage of PSM methods is that hypothesis tests for whether the estimated impacts are significant cannot use typical analytical standard errors (estimated from the regression model) because it is not possible to calculate analytical standard errors for these complex models. Instead, the typical approach for PSM models is to calculate bootstrapped standard errors, which involve repeated random draws of the data from within the sample to measure its variance properties. Methods for calculating standard errors by bootstrap are less efficient than estimating analytical standard errors, which can increase the probability of type II error in the hypothesis tests, or failing to identify an impact of the program when in fact there was an impact (Abadie and Imbens, 2008).

For repeated cross section data like the SNNP1 sample, it is not possible to match on baseline observable variables because the households in the endline data are different than those at baseline. Blundell and Dias (2009) describe an approach to overcoming this problem in which treated endline observations (individuals or households) are matched to all other sample groups (treated baseline, comparison endline and comparison baseline) separately to create the propensity score weights needed to construct the difference in outcomes across these groups. The weights from these three models are used to construct the average treatment effect. The common support region is made up of the treated sample that has suitable comparators in all three matching models.

Calculating the treatment effect using the repeated cross section PSM approach requires doing the the following: for each treated endline outcome observation,

subtract the weighted average treated baseline outcome and the difference in the weighted average outcome between endline and baseline in the comparison group. The average of these differences in weighted averages across treatment observations is the estimated impact of the program. As with other PSM models, standard errors for measuring significance levels must be constructed using bootstrapping. For estimated impacts on child nutritional status, child feeding practices, health service utilization and maternal nutrition knowledge, we applied the repeated cross section approach to estimate impacts from the SNNP1 sample for two sets of models, one for each comparison group: thus, comparing T vs C1 and comparing T vs C2.

Matching method for SNNP2

Because the SNNP2 sample is a panel of households from baseline to endline, we used another matching method for estimating impacts on the SNNP2 sample called nearest neighbor matching (NNM) (see Abadie and Imbens, 2006) that has some better properties than PSM. The NNM estimator shares many of the useful properties of the PSM estimator: (i) it relies on the same identifying assumptions, (ii) it matches clients to one or more non-clients using pre-program characteristics, and (iii) it estimates the average impact as the average of the difference in the outcome for each client from a weighted average of outcomes for matched non-clients. The differences between NNM and PSM derive primarily from the rule used to select comparable nonclients and the weights used to construct the difference in weighted average outcomes. NNM, a form of "covariate matching," matches clients to nonclients based directly on the observable characteristics. Each client is matched to the group of nonclients with the smallest average difference in pre-program characteristics, where this difference is determined using a multi-dimensional metric across all control variables. This approach does not use program eligibility information to create the weights, but does use information from all control variables. However, unlike PSM, NNM uses analytical standard errors. This makes NNM more efficient than PSM, leading to fewer type II errors.

An alternative quasi-experimental technique is Inverse Probability Weighted Regression Adjustment (IPWRA). This approach estimates impact by regressing the outcome variable on a treatment dummy variable (and other control variables) in which the observations of the regression are weighted by the predicted propensity score of being in the program, from the same probit model used to estimate impact using PSM. This approach has the advantage that it is possible to control for other variables directly in the outcome model. However, the IPWRA model shares a limitation with the PSM model in that the standard errors must be estimated by bootstrap. For this reason, we elected to use NNM for estimating impact in the SNNP2 sample. In the SNNP2 sample, we estimated separate impact estimates using each comparison group: T vs C1 and T vs C2.

Matching model diagnostics

Baseline covariates were selected for the matching models using a theory-based approach, in which baseline variables were selected that met two criteria: (i) criteria shaping participation in IN-SCT, and (ii) determinants of the outcome variables. In the SNNP1 models, these variables included linear and higher order terms of household head age and education, quantile indicators of household size, housing conditions, asset holdings, household's standing in the community and presence of any disabled adults in the household. Models for child level outcomes included age and gender of the child. The SNNP2 models included similar variables as well as additional measures of asset holding and community infrastructure variables, which plausibly affect the size of the program in the community.

The first step of calculating the impact estimates involved estimating a probit model of IN-SCT participation regressed on these variables. The matching routine tested for common support in these models between the treatment and comparison group by running tests of equality of means between T and C1 (or C2) for each covariate and for the outcome variable in intervals of the predicted propensity score. Only variables that were balanced within these intervals were retained in the matching model. Also, the distribution of the predicted

propensity scores led to weak common support at the tails of the distributions, were there was little overlap between treatment and comparison group. As a result, we trimmed the predicted propensity score distributions below 0.1 and above 0.9. The resulting distributions are graphed in Figures A.4.1-A.4.4 in Appendix 4.

Tables A.4.1-A.4.4 in Appendix 4 present the means of the covariates used in the matching models for T vs C1 or T vs C2 for SNNP1 and SNNP2 for the covariates and sample that satisfied common support. These tables show that these variables are relatively balanced in the common support samples. In the impact estimates, this balance is further improved because outcome variables are weighted by kernel functions of the predicted propensity score, which Rosenbaum and Rubin (1983) showed was as good as matching on the variables themselves. In other words, balance on the predicted propensity score is assured in the repeated cross section PSM model and balance across the set of covariates is high in the covariate nearest neighbor matching model.

3.3. Qualitative data collection and sample

The qualitative endline survey built on two previous rounds of qualitative data collection within this evaluation, namely at baseline and midline. The sample for the qualitative endline survey included the same woredas and kebeles in Oromia and SNNP as included in the qualitative baseline survey, and in SNNP as included in the midline survey. The sample for the qualitative endline survey also included one PSNP (non IN-SCT) woreda and kebele in each region. This allows for more comparative analysis across the themes of multisectoral collaboration and impact.

The qualitative endline survey focused on three themes and questions within these themes, namely (1) multisectoral collaboration in providing case management for TDS and PDS clients, including implementation of individual program elements, (2) understanding impact (or lack thereof) of the IN-SCT, and (3) sustainability of the IN-SCT model beyond UNICEF's support. Findings from across these themes were analysed in conjunction with quantitative findings.

Fieldwork was undertaken in March and April 2018 by a team of four fieldworkers. A range of methods were used to explore issues at the group and individual level. Methods consisted of: (i) key informant interviews (KIIs), (ii) focus group discussions (FGD), and (iii) case studies (CS). KIIs were primarily used to gain insights from program staff at regional, woreda and kebele level, allowing for structured discussions to implementation and impact of the IN-SCT and new provisions in PSNP4. FGDs were used to explore perceptions and experiences of clients with respect to process and impact using semi-structured interview techniques and participatory tools. The group activities aimed to gain insight into the sets of opinions and experiences available among group members in an engaging manner. Finally, CSs were used to gain in-depth insight into clients' experiences regarding participation in the IN-SCT and PSNP. Clients were interviewed in their homes using structured interview guides. Enumerators also developed project history diagrams together with the interviewees to map changes in self-perceived wealth over time and events associated with those changes.

Interviews and discussions were subsequently transcribed (in English) on the basis of audio recordings and fieldwork notes. Transcripts were restructured in line with key themes and questions for the endline survey, allowing for a systematic analysis of perceptions, opinions and experiences across different respondent groups in IN-SCT and PSNP areas.

Table 3.4 provides an overview of the overall sample for the qualitative component of this evaluation, divided by region and type of data collection activity, and Table 3.5 indicates the different respondent groups per level of data collection. A more detailed overview of all types of respondents per data collection activity and level of data collection can be found in Appendix 2.

Table 3.4 Overview of qualitative endline sample

		Key Informant Interview (KII)	Focus Group Discussion (FGD)	Case Study (CS)
Federal		1		
Oromia	Regional	4		
IN-SCT	Woreda	4		
	Kebele	3	7	6
PSNP	Woreda	2		
	Kebele	3	6	6
SNNP	Regional	4		
IN-SCT	Woreda	4		
	Kebele	3	7	6
PSNP	Woreda	2		
	Kebele	3	6	6
		33	26	24

Table 3.5 Overview of respondent groups per level of data collection

	Federal	Regional	Woreda	Kebele
Program staff	Concern staff	SCT coordinator	SCT coordinator	SW
		MIS officer	WoLSA SP core process owner	HEW
		ALSA/BoLSA staff		DA
		Food Security (MoANR) staff	PSNP coordinator	
			MIS focal person	
Clients	Kebele			PDS (female)
				PDS (male)
				TDS (pregnant and lactating women)
				TDS (caregivers of malnourished children)
				PW (female)
				PW (male)

3.4. Ethics procedures and approval

The evaluation team met the obligations of evaluators espoused by the United Nations (United Nations Evaluation Group 2016), including independence, impartiality, credibility, no conflicts of interest, and accountability. IFPRI was selected to conduct the evaluation through a competitive proposal process (independence) and has no prior assessment of the effectiveness of the IN-SCT interventions (impartiality). Multiple members of the IFPRI team have more than 15 years of experience conducting rigorous impact evaluations of related programmes, including of the Productive Safety Net Programme (credibility). The research team declares no conflict of interest regarding the programme or its funding (no conflict of interest). This report has undergone extensive review (accountability).

The survey training, field visits and interview process included numerous ethical safeguards for participants. The training of enumerators took place over 10 days and covered essential components of ethical safeguards for the interview process, including respect for the dignity and diversity of the respondents, their families and communities; the respondents' right to self-determination (of their views); fair representation (of their responses); compliance with codes for vulnerable groups; confidentiality; and avoidance of harm. Approval to conduct the interviews was received by local leaders. The enumerator training included a detailed review of consent procedures. Respondents to the household survey interviews were informed of the purpose of the study, the topics being covered and the potential risk to them, which was considered to be minimal. Respondents were told that they could opt out of the interview at any time. All leaders and respondents gave verbal consent. Ethics approval for the endline quantitative survey was received from the IFPRI Internal Review Board on August 6, 2018 (see Appendix 6). Confidentiality of the data was protected at all times: survey data were downloaded onto IFPRI servers following the interviews and then removed from the tablets used during the interviews. Personal identifying information collected during the interview were removed from the data files and stored separately on password-protected computers in files that can only be accessed by the Lead-Principal Investigator and Lead Research Analyst. Anonymized data were used by the research team for analysis.

3.5. Caveats and limitations

Despite the integration of quantitative and qualitative methodologies and a careful approach to the study design, sample design and data collection, this study is subject to several caveats and limitations:

1. A significant limitation in the study design was the inability to conduct the evaluation as a randomized control trial (RCT). An RCT design would have made it possible to obtain more robust impact estimates. However, as is often the case, it was not possible to randomly assign the location of the IN-SCT program for the purpose of creating treatment and control groups for the evaluation. As a result, matching was selected as a feasible identification strategy. However, the comparison groups available for matching – nonclient households in the same IN-SCT communities (C1) and PSNP4 households from other woredas (C2) – could face some sources of potential bias shortcomings (spillovers for C1 and violations of SUTVA for C2) which can only be known empirically after the data are collected and which are difficult to fully eliminate. Although the impact estimates between the IN-SCT households (T) and other PSNP4 households (C2) provide credible estimates of impact that are reasonably robust to modest changes in model specification, some treatment effects have an unexpected sign (e.g., consumption). The unexpected negative impact estimates on consumption are not easily explained: mean consumption was modestly lower in C2 than in T at baseline, so this is not likely due to bias caused by unobserved wealth in C2 households. The overall weak or counterintuitive estimates when comparing IN-SCT client households (T) to neighbouring households in the same community (C1) suggest that spillover effects swamp out the treatment effects or that bias from omitted matching variables affects the results.

2. A survey recall issue that affects the impact estimates is the challenge of accurately measuring participation of survey respondents in the components of the PSNP4 or IN-SCT. In particular, PW clients who were eligible for TDS were not always aware of whether or when they were transitioned from PW to TDS, leading to underestimates of participation in the TDS component of IN-SCT and of its duration. For example, of the 498 women in the SNNP2 sample who report being pregnant sometime in the past two years, only 12.6 percent of them report receiving any direct support payments over that period. This measure of transition to TDS is highest, though, in IN-SCT beneficiary households at 19.6 percent, which is 3.1 percent higher than for pregnant women in PSNP4 households in non-IN-SCT woredas (though this difference is not significant). It is possible that women are underreporting their pregnancies to programme staff due to a (misguided) fear of being kicked out of the PSNP4 program, though the qualitative interviews suggest this type of concern was declining among PSNP4 households. Nonetheless, the implication is that it is not possible to accurately measure the impact of participation in TDS alone, since participation is not accurately observed. We also explored the potential to use data on monthly PW work activities and payments received to proxy for the duration of TDS participation (for months when transfers were received without work), but it was not possible to accurately identify TDS payments with this approach. As a result, we cannot separately measure the impact of the TDS programme. Instead, we estimate impact of the IN-SCT programme overall based on exposure to the programme (known as intent to treat) rather than based on actual participation (known as treatment on the treated), which leads to lower, more conservative estimated impacts.

3. Another limitation is relatively small samples for assessing impact on some subgroups (such as PDS households) given the need to have two samples and that there are three programme components.

4. During the baseline quantitative survey, enumeration teams were not able to find enough households to fit all of the sample enrollment criteria in the sampled villages, so the teams went to other villages (clusters) to complete the sampling. As a result, there are more clusters in the sample than originally planned. These errors in following the complex sampling plan may contribute to making the treatment and comparison groups less comparable.

5. During the endline quantitative survey, enumeration teams were unable to locate Social Workers in one of the IN-SCT woredas. This means that we had more limited information available for learning about Social Worker's characteristics and activities. As one of the findings is that Social Workers were not able to interact with households as intensively as expected based on information from the household survey, the lack of data on Social Workers hampers our ability to understand the constraints that Social Workers faced in conducting their work. As a result, we have a limited ability to explain this crucial shortcoming in program delivery.

6. Another caveat to this study design is that two years is a relatively short period in which to observe improvements in nutrition outcomes from a new program. It is feasible that a very intensive nutrition program may have impacts on child nutritional status over this timeframe, but a new program would have to scale up quickly to be effective in just two years. The IN-SCT program appeared to have some delays in initiation of activities, which may have contributed to limited impacts.

7. A minor limitation is the approach to collecting baseline survey data on child education and child labor. The baseline survey module on child school attendance did not include information on the number of days that schools were open, which can vary considerably across schools. This contributed to measurement error in the baseline variable for child school attendance. Also, data on child labor were not collected at baseline. Both issues were resolved at endline by including these variables in the endline survey. The lack of baseline data made it impossible to observe trends in these variables, but it was still possible to measure impact on these outcomes at endline.

4 Process evaluation findings

4. Process evaluation findings

4.1. Introduction

The Integrated Nutrition–Social Cash Transfer (IN-SCT) pilot program in Oromia and SNNP aims to support and enhance the implementation of Phase 4 of the Productive Safety Net Program (PSNP4) by providing an integrated package of multisectoral nutrition services and engaging in activities to strengthen the quality of health services offered. This chapter provides descriptive data on the extent to which these activities took place along with explorations into the reasons why implementation elements were or were not successful.

A major innovation in the IN-SCT program was the employment of Social Workers (SW) and so we begin this chapter with an overview of their characteristics, the resources available to them and their workload (section 4.2). We then turn to the key sections of this chapter – the extent of multisector collaboration between Social Workers, Health Extension Workers (HEWs), Development Agents (DAs) and others (section 4.3) and client interaction with these actors (section 4.4). We then consider specific aspects of program implementation: whether transitions to Temporary Direct Support occur in accordance with what is stipulated in the PSNP4 Programme Implementation Manual (section 4.5), understandings of co-responsibilities (section 4.6), the reach of nutrition behavior change communication (BCC) activities (section 4.7) and the use of the Management Information System (section 4.8). We discuss issues surrounding sustainability (section 4.9) before summarizing other aspects of implementation relating to nutrition, health and education services (section 4.10).

4.2. Social Workers, overview

SWs are nearly all male with an average age of 32 years. Most have worked either 1-2 years (61%) or more than 2 years (36%). All the SWs interviewed in SNNP (but not Oromia) had an office with electricity and access to a computer. All SWs in SNNP had access to government motorcycles for transport. It may seem surprising to find such a preponderance of male social workers. Our qualitative fieldwork noted that reasons for low numbers of female SWs included the need to travel by motorcycle and the high workload, which makes it difficult for work to be combined with childcare and other responsibilities.

In Oromia, SWs are responsible for only one kebele. In SNNP SWs are required to cover a large population spread out over relatively wide areas; 62.5% were responsible for five kebeles each and 37.5% responsible for three kebeles. This wide range of coverage leads to concerns regarding workload. We asked SWs to describe selected activities that they undertook over the previous three days (Table 4.1). These descriptions are not exhaustive - that is, they do not cover all activities SWs undertake – but it does provide some insights into how they spend their time.

Table 4.1 Time allocation of SW on selected activities, three-day recall

		Yesterday	Day before yesterday	Three days ago
Time spent visiting new temporary Direct Support households, all SW	Hours	0.4	0.3	0.1
Time spent on home visits to discuss non-compliance with co-responsibilities, all SW	Hours	0.0	0.0	0.0
Time spent travelling to and from these home visits, all SW	Hours	0.7	0.5	0.1
Time spent supporting HEW in mobilizing Public Works clients for community BCC sessions, all SW	Hours	0.2	0.1	0.1
Time spent filling out forms and entering data into the Management Information System (MIS), all SW	Hours	3.6	3.5	2.2
Number of visits to new temporary Direct Support households	Number	1.3	0.5	0.6
Average visit time, conditional on visit occurring	Mean	1.0	1.0	0.5
How many home visits did you do to discuss non-compliance with co-responsibilities?	Number	0	0	0

Source: SW endline questionnaire.

The most time-intensive activity reported by SWs reported was completing forms and entering data into the MIS, averaging between 2.2 and 3.6 hours per day. Between 0.1 and 0.4 hours per day were spent visiting new TDS households and no time was spent visiting clients to discuss non-compliance with co-responsibilities.

Our qualitative data corroborates these findings. SWs reported a high workload, limiting their ability to do home-visits on a regular basis and making it difficult to attend to all clients adequately. This high workload as well as low wages and logistical difficulties in undertaking theirs jobs contributed heavily to high turnover of SWs (As noted earlier, most had worked for less than two years):[7]

"Yes, there have been changes of personnel. At project level, 5 SWs has left the project due better opportunities in other organizations out of 8 SWs who were employed at the beginning of the program. We have employed 5 SWs and replaced the posts but again 2 SWs has left recently.[…] ." **[SN-H-KII-SCT]**

"SWs were leaving their job due to unfavorable working environment such as salary, transportation and remoteness and high number of the kebeles where they were assigned." **[SN-H-KII-SP]**

7. Quotes from respondents in the qualitative interviews are tagged in brackets with a code that describes the sample characteristics of the respondent, without revealing the respondent's identity. The structure of these codes is described in Appendix 3.

4.3. Multisectoral collaboration: SWs, HEWs, DAs and others

Social Workers (SW) play a crucial role in the implementation of the IN-SCT, particularly in linking clients to services. Their tasks include: collection of information on PDS and TDS clients; monitoring and responding to non-compliance with co-responsibilities; provision of psychosocial support to PDS and TDS client households; supporting the provision of services and community mobilization for assisting the most vulnerable; collaboration with DAs and HEWs to raise awareness about access to basic services; strengthening community-based coalitions and committees; day-to-day implementation of IN-SCT pilot; and the integration of services provided by Health Extension Workers (HEW) and Social Workers (SW) into the operations of the PSNP. This is to be accomplished, in part, through integrating these service providers into PSNP structures but, even more importantly, through efforts to ensure that HEWs and SWs, along with Development Agents (DAs) collaborate. Examples described in the IN-SCT's November 2015 (revised) Manual of Operations include: SW becoming members of administrative structures of the PSNP 4, including the Kebele Food Security Task Force and the Kebele Appeals Committee; and Facilitating the implementation of the provisions linking temporary Direct Support Clients to health and social services, supporting the HEW and DA where needed.

This section provides descriptive statistics on the extent of this multisectoral collaboration, drawing heavily on our endline quantitative surveys of SWs and HEWs. This includes collaborations aimed at identifying new Temporary Direct Support (TDS) clients, meetings to discuss existing PSNP or SCT clients,) and meetings to strengthen the provision of nutrition services. We report on the extent to which SWs meet with school officials to discuss if children in PDS households are attending school and the integration of both HEW and SW into PSNP administrative structures. This is complemented by insights from our qualitative data on service providers' perceptions, at the kebele, woreda and regional level from both IN-SCT and PSNP woredas in SNNP and Oromia, of multisectoral collaboration based on qualitative data.

Table 4.2 Number of times SW and DA met in last three months to identify new Temporary Direct Support clients, by region

	Oromia	SNNP	All
0	1	0	1
2	0	9	9
3 (monthly)	0	15	15
More than 3 times	3	0	3

Source: SW endline questionnaire.

Table 4.2 tells us that in SNNP, most (15/24) SWs meet with a DA monthly to identify new Temporary Direct Support clients, though a sizeable fraction do so less frequently. All SWs in SNNP report that they also met with a HEW to collect information on new TDS clients and just under half (47%) report that a HEW accompanied them when first meeting a new TDS client.

Table 4.3a Number of meetings between HEW and SW in last three months to discuss PSNP or SCT program clients as reported by SW, by region

	Oromia	SNNP	All
	Percent		
0, 1	25.0	37.5	35.7
2	0	62.5	53.6
3	0.0	0.0	0.0
4 or more	75.0	0.0	10.7

Source: SW endline survey. Sample size is 28 SW (4 in Oromia; 24 in SNNP)

Table 4.3b Percent health posts reporting that in last month they met with a SW and a DA to discuss how to ensure that PSNP PW clients participate in nutrition BCC sessions, by region

	Oromia	SNNP	All
	Percent		
0, 1	72.3	75.7	75.1
2	10.6	14.1	13.4
3	10.6	6.6	7.4
4 or more	6.4	3.5	4.1

Source: HEW endline survey. Sample size is 245 HEW (47 in Oromia; 198 in SNNP)

Table 4.3c Number of meetings between health post and SW in last three months to discuss PSNP or SCT program clients as reported by HEW, by region

	Oromia	SNNP	All
	Percent		
0, 1	77.3	64.3	66.7
2	0.0	10.2	8.3
3	0.0	4.1	3.3
4 or more	22.7	21.4	21.7

Source: HEW endline survey. Sample size is 120 health posts (21 in Oromia; 99 in SNNP)

We asked both SWs (Table 4.3a) and HEWs (Table 4.3b) if they met with each other to have more general discussions about PSNP or SCT clients. In SNNP, SWs report that such meetings take place, but they are relatively infrequent and most (62%) HEWs report that no such meetings occur. Since there are more than one HEW per health post, we also aggregated reports of these meetings to the health post level (Table 4.3c) but doing so does not change this result. While Table 4.3a and 4.3b seem to present contradictory findings, this is not the case. Collectively, they tell us that SW strive to meet with HEWs but because there are relatively few SWs (Table 4.1) and because HEWs have a large number of tasks to perform, it is difficult for SWs and HEWs to meet frequently.

Table 4.4a Percent HEW reporting that in last month they met with a SW and a DA to discuss how to ensure that PSNP PW clients participate in nutrition BCC sessions, by region

	Oromia	SNNP	All
	Percent		
Met with SW and DA	40.4	44.4	43.7

Source: See Table 4.1a

Table 4.4b Percent health posts reporting that in last month they met with a SW and a DA to discuss how to ensure that PSNP PW clients participate in nutrition BCC sessions, by region

	Oromia	SNNP	All
	Percent		
Met with SW and DA	47.4	46.5	46.7

Source: See Table 4.5

Table 4.5 SW and HEW meeting in last month to identify newly malnourished children in PSNP households, by region

	Oromia	SNNP	All
	Percent SW reporting that they met with a HEW		
Met with HEW	50.0	100.0	92.9
Met with SW	Percent HEW reporting that they met with a SW		
	10.6	28.8	25.3
Met with SW	Percent any HEWS in a health post reporting that they met with a HEW		
	13.6	28.6	25.8

Source: HEW and SW endline questionnaire.

Just under half the HEWs in our sample (Table 4.4a) and just under half the health posts (Table 4.4b) report that they coordinated with both a SW and a DA on ways of ensuring that PSNP PW clients participate in nutrition BCC sessions. All SW in SNNP report that they met with a HEW to identify newly malnourished children in PSNP households (Table 4.5), but only 28% of HEWs reported such a meeting. This divergence likely comes about because there are relatively few SWs (often one per five kebeles) attempting to meet over-committed DAs and HEWs. SW meetings with school officials are also relatively rare. In SNNP, only 12.5 percent of SW reported meeting more than once with a school official in the last three months.

Table 4.6 indicates that HEWs are deeply embedded into PSNP structures in a variety of ways. In SNNP, all SWs report being part of a Kebele Food Security Task Force, but unlike HEWs, they are not part of Community Based Social Protection Committees (CBSPC).[8]

8. SW were not asked if they were part of Kebele Appeals Committees.

Table 4.6 Integration of HEWs and SWs into PSNP structures

	All HEW			Health Post			SW		
	Oromia	SNNP	All	Oromia	SNNP	All	Oromia	SNNP	All
					Percent				
Is the HEW (or anyone from the health post) or SW a member of:									
Kebele Food Security Task Force	74.5	94.4	90.6	81.0	96.0	93.3	0.0	100.0	85.7
Kebele Appeals Committee	27.7	56.1	50.6	33.3	61.6	56.7	-	-	-
Community Care Coalition (CCC) / Community Based Social Protection Committee (CBSPC)	17.0	43.4	38.4	14.3	42.4	37.5	0.0	0.0	0.0
Received Training on:									
Implementation of the PSNP	83.0	83.8	83.7	90.5	81.8	83.3	37.5	75.0	42.9
Monitoring of co-responsibilities of PSNP participants	53.2	87.9	81.2	66.7	84.9	81.7	-	-	-
Were you/was anyone involved in:									
PSNP public works planning sessions?	42.6	88.4	79.6	42.9	87.9	80.0	-	-	-

Source: HEW and SW endline questionnaire.

Our quantitative data tells us about the extent of multisector collaboration, but it does not tell us about the enablers and barriers and that facilitate, or not, these interactions. We use our qualitative data to redress these limitations. We also draw comparisons between IN-SCT and PSNP woredas.

At the **kebele level in IN-SCT woredas**, SWs, DAs, HEWs highlighted the importance of collaboration between themselves and with school directors and CCCs. There is recognition that they are responsible for ensuring effective implementation of the PSNP including co-responsibilities, transition into TDS, and BCC. Collaboration at kebele level is perceived to work well. That said, answers to questions about actual engagement with other service providers, challenges in effective implementation of co-responsibilities and other program components and recommendations for improvements indicate that collaboration was not as frequent and effective as desired. SWs, DAs and HEWs providers saw that limited capacity and staff turnover were major constraints to effective implementation. CCCs and especially HEWs expressed concerns regarding workload. The challenge of staff turnover was seen as a significant obstacle to effective program implementation. Reasons for staff leaving their posts include high workloads and finding other jobs with higher pay.

> "Yes, the school director changed his position because he was promoted to Woreda education office. Sometimes there are shortages of DAs at kebele level to provide the necessary service to clients due to DA upgrading for six months." **[OR-AT-KII-SW]**

> "Yes, there have been changes of DA, Kebele Chairperson and Kebele Manager at Kebele level since IN-SCT started. They have left the Kebele due to transfer, demotion and education, respectively." **[SN-H-KII-HEW]**

Changes in staffing lead to gaps in collaboration and implementation. It takes time to replace staff and when new staff are in place, it takes for them to familiarize themselves with their post and the program. There is a shortage of training to ensure full awareness of program implementation and the roles and responsibilities of all sectors. At the kebele level, continuity of implementation is further complicated by staff turnover as new service providers also have to familiarize themselves with their clients.

> "Yes, the staff turnover had caused differences/ variability in program implementation across different kebeles. Whenever there are changes of SWs, it takes time until the new SW 1) fully engages in interventions of the program, 2) becomes familiar with the project and clients, 3) adapts to the new environment and culture of the community. There are performance differences in program implementations in areas where there are senior SWs and newly hired SWs. When new SWs are hired, they come here without any training. They learn about the program and engage in work by themselves. They lack information about the status of existing clients and their co-responsibilities that the predecessor social workers were closely monitoring. Therefore, all these would have significant impact on the program. In an effort to bring the new person on board, we provide updates about the program. We provide information as to how program activities have been implemented and how to proaceed with the implementation of the program in the future. This reduces the problem to some extent." **[SN-H-KII-SW]**

Service providers at the **woreda level in IN-SCT woredas** in SNNP and Oromia highlighted the contribution of multiple sectors with collaboration between WoANR, WoLSA and woreda health and education offices frequently mentioned. Collaboration between WoANR and WoLSA is considered key, both by woreda SP core process owners and PSNP coordinators.

Multisectoral collaboration was deemed to be working well. From the WoLSA perspective, linkages with WoANR are strong as well as with woreda health and education offices. Regular meetings at woreda level contribute to this strong level of collaboration.

> "Yes, the collaborations between the most important service providers are working well. WoLSA has strong collaboration: First, with Agriculture and Natural Resource Office and Health Office; Second, with Education Office and; Third, with Women Affairs Office." **[OR-AT-KII-SP]**

PSNP coordinators were also positive about the working relationship with WoLSA but voiced challenges in working with woreda health and education offices as a result of their absence from meetings, work burden and lack of prioritization. Limited time to meet and plan together as bureau heads and sectoral staff have a high work burden, leading to irregular meetings and inconsistent communication.

> "Work burden of bureau heads sometimes affects our work. [. . .] In case we do not able to find bureau heads we my face challenges as the directors do not hear us directly." **[SN-H-KII-PSNP]**

Staff turnover also presents considerable challenges at the woreda level, posing a constraint to multisectoral collaboration.

> "Reshuffling of sector heads mostly affects our collaborations because when one come and one goes, we will start from scratch; aware them about the program and their role and how they cooperate with us." **[SN-H-KII-PSNP]**

> "Yes, there were changes of personnel and heads. If we take Food Security Office as an example, managers have changed three times in the past two years." **[OR-AT-KII-PSNP]**

Service providers operating at the **regional level** in SNNP and Oromia point to three main stakeholders at federal and regional level, namely labour and social affairs (LSA), agriculture and natural resources (ANR) and health. SCT coordinators and representatives from regional bureaus of ANR highlighted the important roles by all three partners in implementing IN-SCT and PSNP. Other key partners included UNICEF and Concern (the latter in SNNP only). At the woreda and kebele level, other important collaborations included the offices of women affairs, kebele administration and frontline service providers such as DAs, HEWs and SWs. The SCT steering committee was considered an important mechanism through which to stimulate multisectoral collaboration, as noted by regional SCT coordinators and FS staff.

> "At regional level, the most important collaborations are with Food Security and Bureau of Health, because they do nutrition. At woreda level there are many more partners, including international organizations like UNICEF and Concern." **[SN-KII-SCT]**

> "At federal level, the federal food security directorate in collaboration with Ministry of Health and UNICEF produced the GSD and nutrition guide, and BCC manual. At regional level, BoLSA, BoANR and BoH were collaboratively working to cascade these important PSNP guidelines along with the necessary capacity building." **[OR-KII-FS]**

Respondents were generally positive about collaboration between partners while noting gaps and challenges. One SCT coordinator noted that collaboration was strong at the beginning of IN-SCT but faded over time as people changed position and faced other pressures or time constraints. A representative of Food Security/ regional bureau of ANR highlighted that service providers were working together well in the IN-SCT woredas, particularly when compared to the PSNP woredas. This difference was attributed to training about Gender and Social Development (GSD) and Behaviour Change Communication (BCC) in the IN-SCT woredas, which did not take place in the PSNP woredas.

The Food Security representative also highlighted collaborations with Labour and Social Affairs in relation to a new livelihoods component of PSNP, and indicated the need for closer collaboration between Food Security/ ANR and Labour and Social Affairs:

> "We are closely working with BOLSA on two PSNP aspects – as related to PDS clients of PSNP and employment pathway of the PSNP livelihood component. We have prepared and signed MoU with BoLSA on these. According to PSNP 4 PIM, BoLSA is responsible for these two key activities. My bureau and BoLSA have jointly provided training on employment pathway and social protection to selected woreda staffs last year. However, we never discussed on soft conditionality and TDS with BoLSA so far. Moreover, we never had joint supervision and monitoring to PSNP woreda with BoLSA as well." **[OR-KII-FS]**

Challenges that hampered strong linkages between partners operating at federal, regional and woreda level included budgetary issues, changes in personnel, and limited technical capacity of key staff, including higher level officials, technical officers and frontline service providers.

> "Stuff turnover is a key challenge in our region. […] Moreover, the region has also rolled out new job grading that has led to significant technical staff turnover in Agriculture bureau/offices in woredas. At woreda level, woreda agriculture office and WoLSA usually don't agree to work closely because of administration budget related issues. Woreda agriculture usually resists to share administrative budget with WoLSA to implement activities. Note that WoLSA manages work related to PDS and employment creation pathway but the administrative budget for these activities is in the hand of woreda Agriculture offices." **[OR-KII-FS]**

A comparison of these qualitative findings in IN-SCT woredas in SNNP and Oromia with PSNP woredas in both

regions clearly suggests that despite the implementation challenges, the support through IN-SCT facilitates more effective implementation of new provisions in PSNP4, notably co-responsibilities and transition to TDS.

When service providers in **PSNP woredas** were asked about the most important collaborations for ensuring strong overall functioning of PSNP, responses differed depending on the respective service provider. The WoLSA SP core process owners that were interviewed in Oromia and SNNP regions emphasised the importance of collaboration between WoLSA and the woreda Agriculture and Natural Resource (WoANR) offices. Woreda PSNP coordinators in both regions highlighted the collaboration between WoANR and woreda health and water resources offices. They did not mention the collaboration with WoLSA in relation to implementation of PSNP.

Cross-sectoral collaboration was generally considered to be weak. In Oromia, a MoU was signed in 2016 and various activities have since taken place to foster collaboration, particularly in terms of PDS. Nevertheless, the SP core process owner highlighted that there have been issues in relation to transfer of resources, and that WoLSA is tasked with implementing PDS without receiving the appropriate budget from WoANR. In SNNP, collaboration was deemed to be weak with WoANR taking on the majority of work within PSNP, and without open communication about working together.

> "[Collaboration is] not working well. The woreda Agriculture and Natural Resource office has transferred to us only PDS related activities to implement, not the associated resource. They refuse to share with us PSNP administration budget and hence we have short of budget to properly function and provide necessary support to PSNP clients." **[OR-AN-KII-SP]**

> "I observed good collaboration between health and education offices, while other collaborations are so weak. There is very weak collaboration between WoLSA and food security unit. We have requested for open discussion about collaboration on PSNP. […] We have never had a joint meeting and collaborative works. The food security department is not willing to be open and engage our office in the matters of PSNP implementation." **[SN-KG-KII-SP]**

The woreda PSNP coordinator in Oromia also indicated that collaboration between service providers is weak, primarily referring to lack of woreda leadership and constraints at kebele level such as limited awareness of co-responsibilities among DAs, HEWs and SWs.

> "[…] the involvement of relevant woreda sector offices in implementing co-responsibilities is still weak. Though PSNP is a multi-actors project, however, the experiences so far shows that the project is mainly left to Woreda Agriculture and Natural resource office (WoANR)." **[OR-AN-KII-PSNP]**

At kebele level, service providers highlighted the importance of collaboration between DAs, HEWs, kebele chairperson/ administration and school directors. The SW offers support when possible, but this appears to occur mostly in special cases rather than in relation to routine follow-up or case management of PDS or other clients.

> "The most important collaboration at kebele level as far as I am concerned is that of DA with HEW, DA with kebele administration and DA with school director. With respect to implementing co-responsibilities and other nutrition related issues our collaboration is with HEW. We will collaborate with them on: (i) data on PLW, malnourished children and HIV infected people received from them, and (ii) they also provide BCC sessions organized by us (DAs)." **[SN-KG-KII-DA]**

Opinions regarding the effectiveness of collaboration at the kebele level are mixed. Some service providers considered the degree of collaboration to be weak,

highlighting lack of awareness and lack of leadership from woreda level. Others noted that service providers were working well together, referring to HEWs and DAs providing education or BCC at health posts and FTCs.

> "They are working well. Both the HEWs and the DAs are providing education sessions to the clients at FTC compound and through home to home visits." **[SN-KG-KII-PSNP]**

Service providers at woreda level were asked about main challenges in multisectoral collaboration. A number of key challenges emerged from the discussions:

- Lack of leadership on behalf of woreda Food Security Task Force (FSTF) in bringing all sectors together, leading to lack of transparency and follow-up regarding implementation of PSNP by sectoral partners;
- Limited awareness within sectoral woreda offices of co-responsibilities and sectoral roles and responsibilities in implementing these co-responsibilities;
- Shortage of resources for WoLSA for implementing tasks as budget is not transferred from WoANR;
- Shortage of staff, particularly lack of SWs with WoLSA.

Staff turnover was also considered to be a serious constraint, undermining continuity of program implementation and causing loss of knowledge among service providers at woreda and kebele level. Staff were said to leave their roles due to promotion, to take up educational or other opportunities and for political reasons. SP core process owners and PSNP coordinators highlighted how staff turnover and general shortage of staff (coupled with logistical constraints) impede service providers' ability to work effectively:

> "Yes, [staff turnover] creates difficulty to understand each other and work together. This is in turn creating gaps in implementation of the program. We do not know the status of PDS as we do not know details of their conditions. It takes times for new staff to understand the program that needs time of the program implementation." **[SN-KG-KII-SP]**

4.4. Client Knowledge of DA, SW and HEW

Sections 4.2 and 4.3 explored some of the opportunities and constraints associated with collaborations across sectors from the perspective of service providers. In this section, we take a different perspective, that of IN-SCT clients. We begin by showing, in Table 4.7, the frequency of contact with these service providers for our sample of women residing in households that participate in the PSNP.

Table 4.7 Client interactions with DAs, SWs and HEWs

	Oromia	SNNP
	Percent	
Health Extension Worker		
Knows the Health Extension Worker (HEW) working in this area	41.6	83.9
Knows the Health Extension Worker and had contact with a HEW in the past 3 months? (at home, at the health post, or in the community)	13.9	21.1
Visited the health post for any reasons related to your child or yourself in the last 3 months	11.1	37.6
Visited by a HEW at home in the past 3 months	17.7	18.6
Development Agents		
Had contact with a local Development Agent in the last 12 months to discuss livestock production or marketing, dairy, poultry or beekeeping	15.3	22.2
Social Workers		
Knows the Social Worker working in this area	7.9	11.1
Knows Social Worker and had contact with a Social Worker in the past 3 months (at home, at the health post, or in the community)	46.7	32.3
Had contact with a Social Worker in the past 3 months (at home, at the health post, or in the community)	3.7	3.6

Awareness of HEWs is high in SNNP where 83 percent of women report knowing who the HEW is in their community; the comparable figure for Oromia is lower at 41 percent. In SNNP, about one woman in five (21 percent) has had contact with a HEW in the last three months with most of these contacts resulting from the woman visiting the health post. Contact levels are lower in Oromia with only 13 percent of women reporting meeting a HEW at the health post, at home or elsewhere in the community.

A feature of the nutrition-sensitive component of PSNP4 is the encouragement of new agricultural activities that would diversify diets (livestock production, dairy, poultry) or increase incomes (livestock production, dairy, poultry, beekeeping). DAs are expected to take a lead in this activity and there is some evidence that they are doing so, with 15 percent of women in Oromia and 22 percent of women in SNNP reporting that had had contact with a DA to discuss these activities in the last 12 months.

Knowledge of who is the SW in their locality is low in both Oromia (seven percent) and SNNP (11 percent). Of those who know who the SW is, 46 percent (Oromia) and 32 percent (Oromia) had any contact with a SW at home, at the health post, or in the community in the last three months. This means that of all women in households receiving PSNP payments, only three percent (in both regions) had any contact with a SW in the last three months. While we would not expect that all women would have need for such a contact, this represents very low coverage. One reason for this is, as discussed above, the relatively low numbers of social workers that were in post, the turnover of existing staff and the administrative burdens that SW faced.

Our qualitative research explored clients' experiences with service providers in relation to co-responsibilities, transition to TDS, BCC sessions and case management. These suggest relatively frequent interaction with service providers in **IN-SCT woredas**, with clients referring to check-ups, monitoring visits and BCC sessions.

"Both the SW and the HEWs monitoring my co-responsibilities through home visiting and asking me whether I and the family members doing those things or not. Especially the HEWs visiting our home at least once in a month." **[SN-H-CS-PDS-M]**

"These [BCC] sessions are provided by health extension workers, school director and social workers. It was provided both at PW sites and kebele office." **[OR-AT-CS-PW-M]**

We also considered clients' interactions with the Community Care Coalitions. The level of engagement was generally very low with most clients being either unaware of CCCs or having had very little exposure to or interaction with them. Most had no contact with CCCs, because no CCC has been established in their community or because it is not functioning well.

"We don't know CCCs" **[OR-AT-FGD-PDS-F]**

"Currently it is not active and it needs to be active. I think it is useful but it needs to be functional and able to provide support to the community members" **[OR-AT-CS-PW-F]**

Experiences in IN-SCT woredas compare favorably to those in **PSNP woredas**. Clients' interactions with service providers in PSNP woredas in Oromia and PSNP appear mostly non-existent. Clients reported to have very little knowledge of these new co-responsibilities and did not receive any information or follow-up from service providers. HEWs were known in their capacity to provide community health services and DAs were mentioned in relation to follow-up on use of transfers. These interactions appear largely in line with existing roles of HEWs and DAs in relation to community health provision and PSNP.

"No one [has told about co-responsibilities]. But sometimes the chairman and DA ask us about how we are using the transfer in general terms, but it is not specifically about monitoring of any aspect of our use of the cash." **[SN-KG-FGD-PDS-M]**

"The HEW sometimes comes to our village and advises and educates us about cleaning our village, houses and do hand washing, told us to construct latrine, delivery at health facility, proper use of mosquito nets. She also distributes supplementary foods to malnutrition children and mosquito nets to prevent for malaria disease." **[SN-KG-FGD-PDS-M]**

Clients were not aware of SWs or their roles: "There is no Social Worker in our Kebele." **[OR-AN-CS-TDS(PLW)]**

Similar observations hold with respect to CCCs. In PSNP woredas without IN-SCT, key informants confirmed that CCCs are either not yet established or not yet delivering a full set of services to their communities.

"CCCs are not established so far. As head of the Woreda Food Security and PSNP department, I don't clearly understand what CCC is and what it is meant to address. No training or awareness was given to us on CCC so far from the region" **[OR-AN-KII-PSNP]**

"No CCC yet for PSNP, but we will establish a CCC that will support PSNP clients" **[SN-KG-KII-SP]**

4.5. Temporary Direct Support

An important nutrition-sensitive innovation with the introduction of PSNP4 was the provision of a new category of assistance, Temporary Direct Support (TDS). Pregnant women can shift to TDS as soon as they receive a letter from a health worker (usually at 4 months into the pregnancy or before). Pregnant and lactating women (up to 12 months after giving birth) are excused from public works, receive Direct Support payments and are required to comply with co-responsibilities aimed at improving their children's and their own health and nutrition. The links to social services is a new sub-component of the PSNP introduced in recognition of the importance of coordinating interventions in order to ensure rapid progress in reducing maternal mortality and improving nutrition. TDS is also available to the primary caregivers of malnourished children.

Our quantitative data indicate that service providers were aware of these provisions. Among HEWs, 96 and 87 percent (in SNNP and Oromia respectively) knew that pregnant women in PSNP households were eligible for TDS and around 90 percent of HEWs in both regions knew that this should occur by the fourth month of pregnancy. There was widespread awareness that women were eligible for 12 months of TDS after giving birth with 91 percent of HEWs in SNNP correctly identifying this provision as did 74 percent in Oromia. (In Oromia, 18 percent of HEWs thought this occurred six months post-partum. Among SWs, 88 and 100 percent of SWs (again in SNNP and Oromia respectively) knew that pregnant women in PSNP households were eligible for TDS and it was nearly universally understood that this should happen at latest by the fourth month of pregnancy. All SWs in SNNP knew that women could retain TDS for 12 months post-partum but in Oromia, most that this occurred at six months or earlier.

We wondered if these new provisions were being followed and so we asked women residing in households that participate in the PSNP whether they had been pregnant in the last two years. Women who did report a pregnancy were then asked a series of questions aimed at ascertaining whether they had been shifted to TDS.

Table 4.8 PSNP benefits during pregnancy

Indicator	Oromia	SNNP
Among those ever pregnant since Ginbot EC 2008 (May 2016)[a]:	**N = 92**	**N = 1346**
HH received PSNP benefits when pregnant	13.0%	65.4%
Respondent worked on public works	14.1%	28.4%
Other HH members on public works	19.5%	62.2%
Among those working on public works when pregnant:	**N = 13**	**N = 383**
Stopped working after first learning pregnant	0.0%	2.3%
When stopped working (months pregnant) (N=259)	6.4 months	4.5 months
Continued to work until birth	54.5%	12.4%
Wished to have stopped earlier	80.0%	40.9%
Advised by health worker to stop work	36.3%	53.4%
Advised by Development Agent to stop work	27.2%	51.7%
Discouraged from stopping work by Community Food Security Task Force	54.5%	29.0%
Household received Direct Support payments after stopped working	9.0%	6.5%
Other household members worked more days after stopped working	18.1%	32.4%

[a] **N = 292 currently pregnant.**

Source: Endline household survey

We focus on SNNP as the sample size for Oromia is small. Among those women who were working on public works when they became pregnant, very few (2 percent) stopped work on discovering they were pregnant (Table 4.8). On average, they stopped work when 4.5 months pregnant. Just over half (53 percent) were advised by a HEW and 51 percent were advised by a DA to stop work. However, 29 percent reported that they were discouraged from doing so by the CFSTF. Very few women (6.5 percent) reported that they were transitioned to TDS; instead (incorrectly) other household members were required to undertake additional days of public work after the woman stopped working.

We asked women what happened after they gave birth (Table 4.9) focusing again on SNNP as the sample size for Oromia is small. Not all women return to PSNP employment (43 percent); in many cases this was because either PSNP public works were not operating or because women did not wish to return to work. Very few women (3 percent) reported receiving TDS after giving birth even though they were entitled to 12 months of transfers. Returning to work prematurely adversely affected breastfeeding behaviors for more than half (55 percent) of the women who resumed PSNP employment either because women had to leave the child at home or because there was no place to breastfeed where public works were taking place.

Table 4.9 PSNP benefits during lactation

Indicator	Oromia	SNNP
Among those who worked on public works when pregnant [a]:	**N = 11**	**N = 290**
Resumed working after giving birth	-	43.7%
When resumed working (months after giving birth), mean (median)	-	7.10 (6) Months
Among those who did not resume working after giving birth:	**N = 7**	**N = 163**
Reasons for not resuming work:		
Public works not operating	-	24.5%
Advised by health worker not to return to work	-	8.5%
Did not want to return to work	-	21.4%
Household received direct support	-	3.0%
Other	-	42.3%
Among those who resumed working after giving birth:	**N = 4**	**N = 127**
Work affected breastfeeding	-	55.9%
Ways work affected breastfeeding:	-	
No place to breastfeed at worksite	-	39.4%
Had to leave child at home	-	85.9%
Too tired from work	-	19.7%
Not produced enough breastmilk	-	2.8%
Supervisors did not permit breastfeed during work hours	-	15.4%
Other	-	0.0%

[a] **90 women currently pregnant.**

Source: Endline household survey

Our qualitative data also show that there were cases where the TDS provisions were being followed. Both PLW that were receiving TDS at the time of data collection and male and female PW clients conveyed awareness of the process and shared experiences consistent with the PSNP PIM. In contrast to findings from the quantitative data, clients did not report an overwhelming return to work after having given birth to their child. PLW in receipt of TDS explained that the starting point for the transition consisted of going to a health centre to get a pregnancy test, after which the HEW would supplied them with a confirmation letter to be handed to the DA. The DA subsequently facilitated the transition into TDS and provided them with information about the time period after which they should return to PW. The SW played a pivotal role in this process by ensuring awareness about the transition from PW into TDS for PLW and by following up in case of any difficulties.

> "We would normally be transferred into TDS starting from the 4th month of our pregnancy but we can also get the transfer beginning the 2nd month or earlier if it is confirmed. The last time we got pregnant, we went to a health center and tested for pregnancy. We brought the test result to the HEW as were told. The HEW gave us a note written on piece of paper and told us to give it to the DA. We gave the paper to the DA and he transferred us into TDS. Before we left, he (the DA) told us the duration of the leave and the exact time when we should get back to PW. The SW, the HEW and the DA were involved in the process of transition into TDS. The SW usually comes to our house and he gives us orientation about transition into TDS and our rights in PW as PLW. When the SW does this, he sometimes comes by his own and sometimes with others. The HEW also told us about the process of taking leave from public work. They (SW & HEW) taught us to take pregnancy test and bring result from a health centre in order to be transferred into TDS. She (the HEW) advised us to visit the health post and do follow-ups when we are on leave." **[OR-AT-FGD-TDS(PLW)]**

PW clients – both female and male – displayed awareness of the right of female PW clients to be transitioned into TDS from four months of pregnancy onwards, and of the process to shift from PW into TDS.

> "As soon as a PW woman is found herself to be pregnant, she tells her case to HEW and the HEW sends her to Tuka health centre for a test. Then she brings test result and give to HEW and DA. Then the DA gives her permission to be a TDS. Then she will not come to PW site for 17 months, (until the child become 1 year old). During this period, she will receive PSNP transfer for free." **[SN-H-FGD-PW-F]**

TDS clients indicated that the process of transition greatly improved over time in the last few years as clients are now aware of their rights and the process itself is smoother and quicker than before. As a result, women are now also less likely to hide their pregnancy in fear of losing their transfers.

> "The transition process has improved from time to time because it is quicker now than before and we know our rights as TDS now which we did not before. Previously, PLWs used to hide their pregnancy and continue doing PW for long in fear of losing PSNP transfers." **[OR-H-FGD-TDS(PLW)]**

TDS clients who transitioned into TDS as a result of pregnancy reported many positive changes as a result. Not having to take part in PW allowed them to rest, take care of themselves and their babies and to attend antenatal and postnatal check-up, all of which were considered to contribute to improved health.

"The transition into TDS has helped us to keep our personal hygiene, to give birth without any problem (for healthy delivery), to keep our children's cleanliness, to feed our children properly and to provide proper care for our children." **[SN-AT-FGD-TDS(PLW)]**

TDS clients in IN-SCT woredas also reported positive experiences in terms of their transition once their child had been diagnosed as malnourished. The identification process appeared rather ad hoc, with SWs and HEWs playing key roles in this process. Respondents indicated that they were made aware about their rights by SWs during home visits, which created general awareness. HEWs are responsible for malnutrition screening and would provide PW clients with a letter to hand to their DA to allow exemption from work. Sometimes SWs also identify children as being malnourished during their home visits and would make referrals to the health post for screening.

"The awareness about our rights to transit into TDS (when a child gets sick due to malnutrition) was given to us by the social worker. Based on his advice, we go to the health post for check-up and she gave us food treatments and also a letter explaining that our children are malnourished. Then, we present our case to DAs and immediately transited us from PW into TDS. In the transition process, the social worker (oriented about our rights when we get pregnant), the HEWs and DAs were involved. Both the HEWs and DAs informed us about our responsibilities what we should comply during the leave periods such as to provide the food treatments on time and to give appropriate care for the sick child. They also informed us to return to the PW when the child fully recovered." **[OR-AT-FGD-TDS(care)]**

TDS clients did not report to have experienced major challenges in the transition process. They expressed positive opinions, particularly in reference to the past when they were given any exemptions from PW.

"In the past, we weren't well aware about our rights and the DAs were not respect our rights due to lack of full awareness about the TDS transition. Thus we faced threats of transfer cuts if we are not involved in PW. We had no option but to remain in work. In the past, we used to carry our children on our back and go to the PW sites. The DAs and foremen were used to tell us "until some old people come seat and carry your children, and when they come give your child to them and involve in PW". Since we got the appropriate orientation from the social worker, our transition into TDS improved. Now we have been freed as soon as our children identified as malnourished." **[OR-AT-FGD-TDS(care)]**

PW clients conveyed strong awareness of the transition into TDS for caregivers of malnourished children. Responses by female and male clients confirm that this understanding is gendered; respondents mostly refer to women, mothers and female caregivers as being allowed to take time out from PW to care for their malnourished child. One group of male clients specifically indicated that the transition refers to both male and female caregivers, making particular reference to their own situation.

"Either it is a male headed or female headed household; they are exempted from PW and linked to health services. For example, I faced the same problem during 2nd round of PSNP and again under PSNP4 for which in both cases I was exempted from PW and allowed to take care of my child. I obtained health services from health extension workers, and also referred to the health centre for further treatment. I was transferred back to PW after my son recovered from malnutrition." **[SN-H-FGD-PW-M]**

Service providers in IN-SCT woredas also reported that the transition of PLW into TDS in IN-SCT woredas is well-implemented. Interviews with all woreda and kebele staff convey awareness of the process and reflect positive experiences and strong collaboration.

"The transition for pregnant and lactating women into TDS is going well. When women feel they are pregnant, they come to us (HEWs). We (HEWs) confirm their pregnancy and follow-up their status. When PLWs reach on the 4th months of their pregnancy, we (HEWs) write transfer letter to the DA and the DA would immediately transfer them into TDS." **[SN-H-KII-HEW]**

"It is being well implemented. We DAs and the HEWs are working together to transit the PLW into TDS. The HEWs examine the pregnant women and send them to us with paper that confirms the woman gets pregnant. Based on this evidence we give them 17 months leave; usually starting from 4 months of pregnancy up to 1 year after delivery." **[OR-AT-KII-DA]**

Although challenges were considered limited, some respondents referred to difficulties in collaboration between service providers at kebele level. Collaboration between HEWs and DAs is crucial for a smooth transition of PLW into TDS and this was not always deemed optimal, with reasons including that HEWs are very busy and that there are no formal procedures for HEWs and DAs and communicating in relation to TDS. Strong personal connections between service providers are therefore crucial. SWs were seen as playing a valuable role in establishing and nurturing such connections.

"The challenges we (HEWs) encountered with respect to implementing the transition of PLWs into TDS were the following: […] There is no formal information sharing mechanism and reporting format to exchange information between the HEWs and the DA. To overcome this I work closely with the DA in the kebele to minimize such problems. We do oral reporting and update each other every month and/or every two months. I sometimes write him notes to transfer PLWs into TDS." **[OR-AT-KII-HEW]**

Recommendations by service providers include the need for regular and continuous training of HEWs and DAs as well as CCCs regarding TDS procedures, the development and use of standard reporting format – particularly to facilitate the collaboration between HEWs and DAs – and stronger involvement of SWs to smooth the process.

"All responsible bodies should take TDS seriously and regular follow-up and training is important. Continuous awareness and support to the CCC is also crucial." **[SN-H-KII-SP]**

"There is a need for HEWs to regularly record and share data on PLWs to DAs and SWs timely. Information available in the hands of HEWs should be shared with the DAs and SWs. So that PLWs are transferred into TDS on time and co-responsibilities are easily monitored." **[OR-AT-KII-SP]**

Service providers in IN-SCT woredas indicate that the transition of caregivers of malnourished children from PW into TDS is reasonably well implemented in IN-SCT woredas. All respondents explained that caregivers of children who were diagnosed as being malnourished would be exempted from PW until the child has recovered. Mothers will be given a letter by the HEW that she can show to the DA, after which she will be moved into TDS.

Nevertheless, discussions about challenges suggest that the transition of caregivers of malnourished children may suffer from inconsistencies and inefficiencies. One SW explained that it is not necessarily clear that the provision holds for both men and women and does not only apply to female caregivers. A more commonly discussed concern pertains to the exclusion of malnourished children from this provision as malnutrition screening does not occur on a regular or systematic basis. Awareness about the transition into TDS in case of malnutrition is also reportedly low among community members.

"SWs cannot test children for malnutrition, so maybe some children are left out. This might be why the number of cases is also very small. Also the capacity of HEWs to measure children's nutrition status might be limited." **[SN-KII-SCT]**

"There is no regular screening of malnutrition. In areas where there are no food transfers, HEWs do not do malnutrition screening." **[OR-H-KII-SP]**

Recommendations for improving the transition into TDS for caregivers of malnourished children include regular screening for malnutrition, improving information sharing between HEWs, DAs and SWs – both in terms of identification of malnutrition and when a caregiver is to be moved back to PW – and greater clarity about when a caregiver returns to PW. One respondent suggested that it would be helpful to introduce a fixed time period after which a caregiver goes back to PW – as in the case for PLW – so as to avoid confusion among both service providers and clients.

"I think we have to have some sort of form to communicate with the HEWs to monitor whether their child recovered or not." **[OR-H-KII-DA]**

"It would be better if the time of return back to PW for caregivers of malnourished child should be specified like the case in PLWs. There is also a need to provide additional time (months) for caregivers after the child had recovered to prevent relapse of malnutrition." **[SN-AT-KII-SCT]**

When we contrast these findings with experiences of clients and service providers in **PSNP woredas**, we can clearly observe that the support provided through IN-SCT makes transition to TDS more effective. Transition to TDS for both PLW and caregivers of malnourished children was relatively poorly understood and implemented in PSNP woredas.

Interviews with PLW in PSNP woredas who had been transitioned into TDS revealed that many women were not actually receiving Direct Support. Instead, the most common scenario that was described was for them to have been given respite from work, and for the husband to take their place in PW. This is consistent with the data reported in Table 4.12. Women displayed little to no awareness of TDS procedures, such as when they would be allowed to leave PW and for how long or about their entitlement to payments. Across all respondents, only one woman indicated to know about the process for moving into TDS and to be receiving TDS. She had received this information very recently from the PSNP coordinator.

"No one of transferred to TDS, we do not know this provision of getting rest for us. We participate in PW until we get weak i.e., when we our pregnancy is about six and seven. Then the DA allows us to stay home but we must replace someone who can work on the PW activities. At a conference meeting they told us to send our husbands or elder son when we get weak due to pregnancy. Our pregnancy is known by our husbands and some of us do not go to PW as early as two months since husbands can replace us. Those whose husbands are not able to replace have to work until they get weaker (6-7 months of pregnancy). For example, my neighbor has worked for about six months during her pregnancy and she appealed to the kebele chairman and then she got permission to stay at home without replacing someone as her husband is sick." **[SN-KG-FGD-TDS(PLW)]**

"We received some awareness on the rights of pregnant and lactating women. The DA has told us that pregnant and lactating women do not work on PWs, but not informed us at how many months of pregnancy should we stop working on PWs and at how many months after delivery should we come back to PW implementation. There is not clear process communicated to us on this and we often

work on PWs until six months of pregnancy. We were replaced by our husband when not able to come for PWs implementation up until 6th of our pregnancy. Usually we stop working only after six months of pregnancy and up until one year of the newborn kid. The DA has told us not to come for PWs after six months of pregnancy, but he didn't refer us to the HEWs for prenatal and postnatal care. We visit the HEWs on our own at a time convenient to us." **[OR-AN-FGD-TDS(PLW)]**

These experiences are mirrored by general awareness among both male and female PW clients. In response to the question about what happens when a female PW client, both male and female clients talked about how women may be given respite from PW but that they would need to find someone else to replace them at the work site in order to benefit from payments.

"As soon as a PW woman is found to be pregnant, i.e., when her pregnancy is visible to others, she will be pardoned to be at home. Howwever, she has to be replaced by another person who can cover for her labor, either her husband or son. If there is no one who can replace her, she has to come for attendance but does not have to perform PW activities. After her pregnancy is known, husbands are also advised to replace her starting from as early as two months. But if there is nobody who can replace her, she will continue appearing until she is weak, like 6 and 7 months and then she will be allowed to go home without replacement." **[OR-AN-FGD-PW-M]**

Clients indicated that finding someone to replace a PLW can be problematic, as women may be widows or their husbands may be away. Male and female clients indicated that young children do not replace PLW, although children in their teenage years might do so:

"No, small children do not do PW replacing their parents because the supervisors do not allow them to work. Children below the age of 15 years are not allowed to do PW activities." **[SN-KG-FGD-PW-F]**

"If we have children at the age of teenagers, we usually send them to the PW to replace us. But we are giving major focus for their education; if the child is not on education, he/she works in the PW otherwise, he/she goes to school." **[SN-KG-FGD-PW-M]**

Given the limited scope of implementation, clients report limited impacts as a result of this new provision in PSNP. Women whose husbands were able to replace them in PW appreciated the rest that they were able to take as a result. The female respondent who had fully transitioned into TDS echoed the importance of rest, and also highlighted the value of monetary support.

"You know PW are difficult activities. Thus, exemption from it gave me adequate rest. I can tell you that it is if the mother is ok, the child will be ok. This exemption saved a lot of energy that I would have lost which might have negative health implications on me and my child. [. . .]You know in Oromo Proverb we used to say 'Tolaa fi kabala hin tufatanii' meaning you cannot undermine what is given to you freely because it is small. Thus, I am really appreciative of this provision." **[OR-AN-CS-TDS(PLW)]**

For most women included in this research, the interviews posed their first exposure to information about transition from PW into TDS for PLW. The most frequent recommendation in relation to improving the process was to improve awareness among PW clients and PLW.

"There should be awareness on rights of women under PW during pregnancy and lactation. The rights mentioned under PIM manual should be properly implemented. The same problem I faced whereby my husband replaced in PW contradicts with my right that I should be freely paid for the transition period." **[SN-KG-CS-TDS(PLW)]**

Clients' knowledge of and experiences with the transition of caregivers of malnourished children from PLW into TDS mirror those of service providers and point to poor implementation. Caregivers of malnourished children mostly elaborated on the support that they received from HEWs in terms of food supplements and check-ups for their children. Caregivers were offered respite from PW by the DAs or kebele leader, but answers suggest that no standard procedure was followed in terms of how long caregivers were allowed to stay away from work. No one reported to have transitioned into TDS, or to know about the possibility to receive Direct Support when their child is malnourished.

"All of us have been taking supplementary food for our children and benefited from the service of HEW. But we were not given any rest to take care of our malnourished kids. We leave them with elder children or their grandmothers. We are still participating in PW activities. There is no information as nobody told us about transferring to TDS or get rest from PW to take care of our sick kids." **[OR-AN-FGD-TDS(care)]**

"The HEW took measurements on the arms of my child and she told me that he is malnourished. She gave me plumpy nut to give to my child and she told me to bring the child for check up. She gave me rest for a month so that I can take care of my child. The village leader came to my house and he asked me why I was absent from public work. I told him that my child got sick. Then he agrees and told me to return back to PW when my child recovers. [..]. As soon as the HEW identified my child is sick, she told me to stop work and care for my child until he recovers. She did not give me anything in writing. She just told me orally. **[SN-KG-CS-TDS(care)]**

Discussions with male and female PW clients confirmed this picture, suggesting that there is no awareness of the transition into TDS for caregivers of malnourished children. All respondents refer to the standard response by HEWs in terms of providing supplementary feeding and check-ups. Responses in terms of respite from PW are mixed; some respondents indicate that caregivers may forego work when they have to attend check-ups with their children or a short period of time, while other respondents indicated that caregivers can take rest until the condition of the child has improved.

"There is no special thing for such kind of issues. Like any other health problems, the mother may ask permission by mentioning as her child is sick and then the DA will give permission for few days may be about one week." **[SN-KG-FGD-PW-M]**

Respondents learned about the transition into TDS for caregivers of malnourished children through their participation in this evaluation, and indicated that this process would be beneficial:

"I heard it now and I think TDS must have been implemented. I am doing PW and there is no one who take care of my sick kid. Had I get proper TDS privilege, my child could have been recovered. Now, I am busy and hopeless to improve the health status of my child." **[OR-AN-CS-TDS(care)]**

Service providers' knowledge of and experiences with transition of pregnant and lactating women (PLW) from PW into TDS in PSNP woredas are mixed. Interviews in both Oromia and SNNP suggest that SWs and the SP core process owners have limited knowledge and engagement with the transition of PLW to TDS. PSNP coordinators at the woreda level and DAs and HEWs at kebele level confirmed this, with responses describing how HEWs and DAs collaborate in establishing pregnancy and ensuring transition into TDS. Exact knowledge of procedures differs across individuals though, with one DA suggesting that the move into TDS means that women are exempted from work and (incorrectly) husbands are to take the woman's place.

"I think the transition of PLWs into TDS is going well and we are giving rest time for pregnant women by discussion with DA. When women miss their menstrual periods and they feel they are pregnant, they come to us (HEWs) and tell us. After confirming their pregnancy, we (HEWs) provide information to the DA. We (the HEW and the DA) transfer pregnant women into TDS starting from the 6th or 7th months when their months of pregnancy progresses, they start follow-up at the health post. During this period they have to send some who replaces them on PW activities." **[SN-KG-KII-HEW]**

Service providers identified lack of awareness of the provisions regarding transition to TDS to be a major challenge in relation to its implementation. Other challenges include collaboration between HEWs and DAs; smooth transitions into TDS are highly dependent on strong collaboration between these service providers at kebele level. Insufficient structural support to underpin this work, including sufficient number of frontline workers, consistent training opportunities and commitment on behalf of FTSF were mentioned as barriers to the functioning of TDS.

"I think the clients lack awareness on this issue. Even, I myself have no adequate awareness on TDS. Let alone to overcome the problem, we don't know the problem itself. We as HEWs have limited knowledge on provisions applicable to PSNP clients let alone to help them. We even got this information from the clients, because when we asked them why you wanted the letter to be written they told us that because we wanted to be exempted from PW during our pregnancy and lactation period." **[SN-KG-KII-HEW]**

The provision of training and capacity building was frequently mentioned by service providers at woreda and kebele level as a crucial aspect for improving the transition into TDS. Awareness among clients should also be raised, in order for them to demand the support that they are entitled to. Greater coordination and follow-up, including a greater role for WoLSA in the process, was also referred to as important for making improvements.

"Proper training should be given to all concerned staffs in the woreda and for all concerned service providers at kebele level. The clients should also aware about it as it is their own right and how to transit from PW to TDS." **[SN-KG-KII-SP]**

Service providers' views in PSNP woredas indicate that the transition of caregivers of malnourished children from PLW into TDS is also poorly implemented. Awareness of this provision appears to be very low on behalf of SP core process owners and SWs. Awareness of this provision is slightly better among DAs and HEWs, although they have limited knowledge of the details of the process. HEWs describe the process of identifying malnourished children and their process, but also indicate that the transition to TDS of their caregivers is not currently implemented. One DA referred to female caregivers being given respite from participation in PW but does not refer to transition into TDS.

"The transition for caregivers of malnourished children into TDS is not going well. If we (HEWs) find malnourished children when we do malnutrition screening, we refer them to start supplementary feed which was provided by UNICEF. The food distributer would give the supplementary feed to caregivers. We provide the information to the DA orally. The DA gives permission to caregivers to visit health facility to get treatment. Caregivers will bring the malnourished children to the health post monthly for checkup. We measure the MUAC (Mid Upper Arm Circumference) and weight of the children. We also do follow-up on the utilization of the supplementary feed through house to house visit. We teach the caregivers not to share the treatment (supplementary feed) with other children in the house." **[SN-KG-KII-HEW]**

4.6. Co-responsibilities

The implementation of co-responsibilities requires that these are understood by service providers. Table 4.10 that there are high levels of knowledge of these by both SWs and HEWs in both Oromia and SNNP.

Table 4.10 Understanding of PSNP co-responsibilities by SW and HEW, by region

	Social Workers		Health Extension Workers	
	Oromia	SNNP	Oromia	SNNP
	Percent providing correct response			
How many ante-natal consultations must pregnant women receiving Temporary Direct Support receive? *(Correct answer: 4)*	100.0	100.0	95.7	52.6 (Another 33.7% stated that 6 ANC visits should occur
How many nutrition behavior change communication (BCC) sessions must pregnant women receiving Temporary Direct Support attend? *(Correct answer: At least 2)*	75.0	100.0	100.0	98.5
How many post-partum health facility visits must lactating women with a child less than one year old attend if they are receiving Temporary Direct Support? *(Correct answer: At least 1)*	100.0	100.0	100.0	100.0
Do lactating women with a child less than two year old have to attend growth monitoring and promotion/behavioural change communication sessions if they are receiving Temporary Direct Support? *(Correct answer: Yes)*	100.0	100.0	100.0	95.6
Do lactating women with a child less than one year old who are receiving Temporary Direct Support have to ensure that the child receives routine immunizations? *(Correct answer: Yes)*	100.0	100.0	100.0	96.0
Are Direct Support beneficiaries required to register the birth of their children? *(Correct answer: Yes)*	100.0	100.0	100.0	98.0

Source: Endline SW survey

Service providers at kebele and woreda levels indicated that co-responsibilities related to health and education were most successful. Pre- and postnatal care, vaccination of children, treatment of malnourished children and school attendance were highlighted as being effective. Strong collaboration between SWs and HEWs, and between SWs and school directors were considered to be key factors in this success, as was improved awareness among clients regarding the importance of use of services. It should be noted that responses are subject to bias, with service providers appearing most positive about services that they offer themselves.

> "The co- responsibilities that are being implemented well in our kebele are vaccinating children, ANC and PNC visits and growth monitoring. Sending children to school have also been implemented well due to the house to house visit and recoding of school age children made by teachers. This happened because of 1) the health education in BCC sessions by HEWs, 2) advice of SW, 3) the house to house recording of data on school-age children and strengthened follow-up by school community together with SW and kebele chairperson." **[SN-H-KII-HEW]**

> "The co-responsibilities that are being implemented well in our Woreda are ANC and PNC visits, vaccinating children and sending children to school. This is because of the improved awareness among women due to the education provided by HEWs. They have also seen its benefits." **[OR-AT-KII-PSNP]**

Responses to the question about which co-responsibilities were not implemented well focused on both supply-side and demand-side constraints. From a supply-side perspective, service providers suggested that co-responsibilities are implemented well while expressing concerns regarding capacity and logistical constraints. An inadequate number of social workers and their high caseloads was a commonly voiced challenge. Others included the remoteness of some communities and clients, lack of adequate transportation to reach them, HEWs being unavailable or not at their post to coordinate monitoring and follow-up.

> "In general, I can mention the following challenges: I faced work overload because I am responsible for 5 kebeles, inadequate budget for capacity building and monitoring of the implementation of co-responsibilities, nutrition and BCC sessions. Two of the kebeles on which I was assigned are not easily accessible. There normal route of travel was completely damaged." **[OR-AT-KII-SW]**

> "There is gap in terms of following up the full implementation of co-responsibilities as Health Extension Workers usually travel from place to place for different trainings and social workers would find it hard to work jointly with HEWs. In addition, SWs would sometimes get difficulty of collecting data on health services that TDS clients received from HEWs." **[OR-AT-KII-SP]**

From a demand-side perspective, service providers pointed to challenges with school attendance, feeding and hygiene practices, attendance of BCC sessions and delivery at health clinics. Service providers listed various reasons for why clients were not meeting these co-responsibilities included lack of cash (or small amount of cash transfers), poor supply of safe drinking water close to the community and the need to travel far for the health centre.

> "The co-responsibilities that are not implemented fully or that have implementation gaps are those related to education. The main reasons are water supply problem which forces parents to send their children to fetch water in distant places during school days; and lack of cash to buy scholastic materials and clothing. This makes the problem

more complex. The School Director, the teacher, the DA, the SW and Keble Chairperson are all working hard to increase school enrolment and proper attendance of children as part of implementing co-responsibilities. But beyond this, there are challenges like work load at household level as a result of water supply problem at woreda level." **[SN-H-KII-SW]**

"PLWs are implementing breast feeding very well with the exception of the frequency it should be provided /given to children. There is also gap in providing nutrient dense diet to children by resource poor households when it comes to providing additional foods. […]The challenges with respect to implementing co-responsibilities are shortage of resource availability affected complementary feeding as many HHs targeted in PSNP are poor and lack resources (like meat, grain flour, etc.) to prepare diverse foods; and reduction in production due to drought, inspection frequency of visit." **[OR-AT-KII-HEW]**

Knowledge of co-responsibilities is high among PDS and TDS clients in IN-SCT woredas. Respondents readily reported their co-responsibilities and listed the activities that they were advised to undertake. This included program-stipulated co-responsibilities, such as sending children to school, attending antenatal care visits and vaccination of children, but also other actions that are not part of co-responsibilities, such as handwashing, nutrition, keeping a clean home environment and building a latrine.

"the social worker told us what is expected from us as PDS clients such as child education, child nutrition, hygiene and sanitation, and use of the transfer for food. The SW and HEW also advised us on malaria control by using net and by cleaning stagnant water." **[SN-H-FGD-PDS-F]**

A few respondents in Oromia indicated to have received a form that outlined the co-responsibilities, but these respondents did not appear to have more precise knowledge of co-responsibilities versus general advice. The majority of clients did not receive a form, however, both in Oromia and SNNP regions.

Clients' experiences with monitoring of co-responsibilities suggest substantial cross-sectoral collaboration at kebele level among SWs, HEWs, school directors, DAs, the kebele chairman and 1 to 5 groups. Patterns of collaboration look considerably strong for PDS clients in Oromia, with clients indicating that they receive home visits from SWs as well as HEWs and DAs and receive check-ups on school attendance by both the school director and kebele leaders. TDS clients refer to receiving support from SWs and HEWs. In SNNP, TDS clients specifically refer to the role of the development army and 1 to 5 groups.

"The social worker goes to school and check the student's attendance, the kebele chairman and his co-workers also check child education with the school director. Thanks to the SW as he usually comes to our house every two weeks and asks whether we are sending our children to school or not, checks our house for cleanliness and latrine use." **[OR-AT-CS-PDS-M]**

"The SW and HEW usually monitor the co-responsibilities by conducting house to house visits. The follow up is being conducted mainly by the SW and next by the HEW. They also provided me with further orientation/training when I fail to comply with the co-responsibilities." **[OR-AT-CS-TDS(PLW)]**

"When there is problem, for example the HEW informs to the leader of Kebele Development Committee and the Development Committee leader informs to 1 to 5 group leader and 1 to 5 group leader would finally communicate

the individual who is not fulfilling the co-responsibilities. […] The co-responsibilities were being monitored primarily by the HEW, the DA and the SW. In addition, Development Committee and 1 to 5 group leaders monitor co-responsibilities." **[SN-H-FGD-TDS(PLW)]**

Most clients indicated that there were no direct consequences when not adhering to co-responsibilities, but that they would receive follow-up training or advice. Examples of such follow-up advice suggests that service providers mostly repeat the messages that were offered previously but do not actively engage with clients to seek solutions.

"They strongly and continuously provide pieces of advice and orders. Nothing will happen apart from advice. But for school attendance, the kebele chairman and cabinet also seriously follow up as a priority responsibility." **[SN-H-CS-PDF-F]**

Some clients in both Oromia and SNNP reported being threatened with transfers being discontinued if they continued to fail to comply with co-responsibilities, although such discontinuation did not actually occur. Some also reported receiving fines for not meeting co-responsibilities. In Oromia, the kebele administration had set a fine of 100 Birr for those whose children were not in school. In SNNP, a male PDS client reported having to pay 100 Birr to the development army for not having built a latrine while a group of female TDS reported that the kebele administrators had set a fine of 500 Birr for not building a latrine. Despite being associated with co-responsibilities, these fines do not appear to be specifically linked to PSNP participation but apply across the community.

"We have been told by DAs that if we do not send our children to schools and take care of their health, the cash transfers will be cut, but so far such problem didn't happen and no one was punished." **[OR-AT-FGD-PDS-F]**

"With regard to the latrine, the kebele administrators already set 500 Birr penalty to those households who don't have latrine. This penalty is set to all households in the kebele, not only to the PSNP clients. If you don't have a latrine, the penalty may be applied; thus every household has been taken the latrine issues very seriously due to fear of the penalty." **[SN-H-FGD-TDS-F]**

"Nothing will happen, he [SW] just advises us not repeat if there is any non-compliance with co-responsibilities. But for school case there is 100 Birr penalty decided by the kebele if children are absent from school. So everybody sends children to school strictly." **[OR-AT-FGD-PDS-M]**

Most clients consider co-responsibilities to be a good idea, indicating that they provide them with valuable knowledge and stimulate them to offer good care for their children. TDS clients also linked co-responsibilities to being exempted from public works, commenting that the reduced workload benefited their own and their children's health.

"Yes, responsibilities told to us by social workers raised our awareness level and enabled us to know our roles and rights in the program such as the amount of transfers we should get, and the need to work on our children education and improvement in our sanitation and health." **[OR-AT-FGD-PDS-F]**

"Yes, it is a good idea because it has improved our care for children and reduced our workload. We used to do public work without taking rest in the past. There were times we got sick by being exposed to direct sunlight and by doing heavy work while we are pregnant and lactating." **[OR-AT-FGD-TDS(PLW]**

These experiences in IN-SCT woredas in Oromia and SNNP regions compare favorably to the situation in PSNP woredas. Service providers at kebele level, including SW, HEWs and DAs displayed limited knowledge of co-responsibilities. SWs and DAs indicated that they were offered some awareness training of co-responsibilities but that no implementation had occurred. HEWs referred to co-responsibilities in relation to nutrition, but they were not able to indicate whether these were specific to PSNP or part of their wider work on health and nutrition.

> "I don't know much about co-responsibilities and we didn't do anything about it." **[SN-KG-KII-SW]**

> "I think the co-responsibilities are given as a training and improve care to children. Apart from this, I don't know about co-responsibilities." **[OR-KG-KII-DA]**

SP and PSNP coordinators at woreda level are relatively well informed about co-responsibilities, but also emphasized that implementation has been very limited. Lack of implementation was attributed to lack of awareness among service providers and commitment to their implementation at woreda and kebele level.

> "I know that there is a list of soft conditionality/co-responsibilities that the PSNP clients should fulfil in the PSNP PIM (such as sending their children to school, following their health conditions, to build latrine, etc). But in our woreda its implementation is almost none. The main reason is no training given to the concerned staffs at woreda level and the service providers at kebele level. Moreover, no one follow its implementation at all levels starting from the region, then to the zone and to the woreda." **[SN-KG-KII-PSNP]**

> "None [of the co-responsibilities have been implemented] in this woreda. Because co-responsibility understanding is so poor and implementation not started. This is because of] limited understanding on co-responsibilities both at woreda and community levels; limited commitment of woreda leadership to ensure implementation of co-responsibilities; and also shortage of budget on the part of WoLSA to hire SWs and implement activities at community level. No collaborative engagement among DAs, HEWs and SWs on implementation of co-responsibilities." **[OR-AN -KII-SP]**

Responses from PSNP clients were consistent with this narrative. When asked, clients could describe requirements in relation to public works but not to information or forms about co-responsibilities linked to receipt of transfers: "No, we have not been informed. We don't know anything about it." **[SN-FGD-PDS-F]**

4.7. Nutrition Behavior Change Communication

Virtually all health posts included in our quantitative survey (100 percent in SNNP and 91 percent in Oromia) undertake nutrition Behavior Change Communication (BCC) activities. On average, HEWs report holding these seven times over a 12 month period. However, this average figure hides some variability in the frequency of these events. HEWs report that these are held bi-monthly (ie six times per year) with a smaller fraction (20-25 percent) reporting having monthly (or near monthly) sessions and another 20-25 percent holding these once, twice or three times per year. In SNNP, HEWs report relatively high levels of attendance; 77 percent of health posts report that more than 30 people attend. Attendance figures in Oromia tend to be a little lower. 95 percent of health posts report that they hold cooking demonstrations.

Exposure to information on improved infant and young child feeding practices is also an important component of PSNP4. Table 4.11 reports on the extent to which women in PSNP households have been exposed to nutrition behavior change communication (BCC) messaging. In SNNP, 39 percent of women report having had a contact with a HEW in the last three months with these contacts occurring largely at the health post (72 percent) or during a home visit (62 percent). The distribution of the location of these contacts is similar in Oromia but far fewer women (13 percent) reporting a contact with the HEW. Home visits are a likely place where the HEW talks to the woman about breastfeeding, child feeding or nutrition. Relatively few women have had contact with a member of the Health Development Army (HDA). Food demonstrations and community conversations about nutrition do take place - more so in SNNP than Oromia – but the prevalence of these is low.

In our qualitative fieldwork, we asked PW clients and service providers about the implementation of nutrition BCC. This was not an easy task, in large part because clients and service providers are not able to differentiate between PSNP-specific or general BCC sessions. We report findings based on clients' and service providers' perspectives, and report these for both IN-SCT and PSNP woredas in SNNP and Oromia regions. The implementation of BCC sessions at PW sites and linked to PSNP appear relatively well implemented in IN-SCT woredas, certainly in comparison to PSNP woredas. PW clients have participated in multiple sessions, and mostly linked these sessions to PSNP. Service providers seem have a clear understanding of their remit, and how they differ from general health extension, and about their responsibilities in the delivery of sessions.

Table 4.11 Exposure to nutrition messaging

Indicator	Oromia	SNNP
Any contact with a HEW in the past 3 months? (at home, at the health post, or in the community)	13.6%	39.0%
Conditional on having contact, did this occur		
At home	72.2%	62.7%
In the community	34.6%	36.9%
At the health post	68.0%	72.3%
For contacts at home, % women reporting that HEW talked about breastfeeding, child feeding or nutrition	100.0%	70.1%
For contacts in the community, % women reporting that HEW talked about breastfeeding, child feeding or nutrition	77.7%	62.2%
For contacts at health post, % women reporting that HEW talked about breastfeeding, child feeding or nutrition	27.2%	37.6%
% of all women in sample who had conversation with HEW about breastfeeding, child feeding or nutrition	61.2%	54.9%
% of women who had contact with HEW in last 3 months AND had conversation with HEW about breastfeeding, child feeding or nutrition	41.0%	34.9%
Any contact with a HDA in the past 3 months? (at home, at the health post, or in the community)	1.5%	7.2%
Ever attended a food demonstration in your community?	6.3%	12.7%
Conditional on attending, % attending demonstration in last 3 months	25.0%	34.5%
Ever attended a community conversation in your community to discuss breastfeeding, child feeding or nutrition?	7.8%	16.9%
Conditional on attending, % attending community conversation in last 3 months to discuss breastfeeding, child feeding or nutrition	33.3%	22.9%

Source: Endline household survey

PW clients in **IN-SCT woredas** reported to have participated in many BCC sessions last year. Clients appeared to link these sessions to PSNP and participation in PW.

> "I have attended 12 BCC sessions last year and 3 sessions this year. The sessions were being conducted twice per month and I have attended all the session as the schedule is attached with PW." **[SN-H-CS-PW-F]**

> "We conduct PW for six months each season and we have a regular BCC session every two weeks, twice per month. So we have participated in 12 sessions of BCC last year and twice this year. As a group consensus, we agreed to have two sessions per month lasting for shorter period of time as we do it after PW schedule instead of one BCC session per month that lasts for more than an hour. The last session was conducted last Thursday which is the second session for this season." **[OR-AT-FGD-PW-M]**

Sessions were usually held at the PW sites, and occasionally in the FTC compounds or kebele office. HEWs, DAs, SWs and school directors were all involved in the delivery in sessions, with HEWs and DAs delivering most of the sessions and social workers only being involved occasionally. Sessions lasted anywhere from 40 minutes to 3 hours.

> "The sessions were undertaken at public work sites where we do PW activities. The training has been given to us after finishing our public work activities on scheduled days before leaving to our homes. The DA and the Foreman was doing the coordination and the HEW was providing the education." **[SN-H-CS-PW-F]**

> "HEW, DA and sometimes the social worker provide the BCC sessions at PW sites. The HEW workers were regularly coming to the PW sites with DA and teaching us. While the social worker used to come rarely." **[OR-AT-FGD-PW-M]**

Sessions covered many different areas, including hygiene, sanitation, family planning, antenatal and postnatal care, gender equality, farming, home gardens and savings. Topics related to health, sanitation and hygiene were usually covered by HEWs, while DAs covered topics related to agriculture and livelihoods. Both male and female PW clients reported on both sets of topics and having learned from HEWs and DAs.

> "The HEW thought us to deliver babies at the health centre, to call for an ambulance in cases of labor while at home, about family planning, to keep our hygiene and sanitation (of ourselves and the environment), to construct latrine, about utilization of latrine, to check-up health/ follow up PNC visits." **[OR-AN-FGD-PW-F]**

> "The foremen called the clients to gather one place for education, accordingly we gather at on convenient place, then the session started. The topics were selected by the provider. We simply listen them and sometimes we raised questions if there are unclear issues. The HEWs usually discussed about hygiene and sanitation, about latrine use and its advantage. DAs usually discussed about saving, different income generation activities, fertilizer application, land preparation and last time discussed on how to return back the credit money we have taken for fertilizer during May and June, 2017." **[SN-KG-FGD-PW-M]**

Answers about absence from BCC sessions were mixed. Some female and male PW clients in Oromia and SNNP explained that absence from sessions would lead to deductions from transfers. They based this on the information that was provided by the DA; no one reported having experienced a deduction from their transfers. One female client in Oromia reported that absenteeism was fined with 10 Birr, and that the total amount of fines was used for a ceremony at the end of the PW season. Finally, female clients in SNNP indicated that nothing would happen in relation to the program, but that they would suffer the consequences in terms of poor health and sanitation outcomes.

> "From my view point, non-attendance to BCC sessions results in health and sanitation problems. For example, in the past we used to eat food without washing utensils; used for food preparation and drinking without washing. Also, we used to feed our children before they reach the age of six months. Thus, attendance to BCC improved our knowledge and attitude. We (PW clients) were told that non-attendance to BCC sessions results in cut of transfer. But, nothing happened so far in terms of penalties. Knowing this, I will make caution to avoid non-attendance." **[SN-H-CS-PW-F]**

"During initial time the foremen and DAs warned us that if anyone misses a session he/she will be penalized 30 birr. But later we agreed pay 10Birr if we miss one session on the BCC next session. So there is 10 birr penalty that we agreed as a bylaw. The collected money as a penalty was used for recreation during the closing ceremony of the seasonal PW program. No one penalized from women but men are being penalized 10 birr." **[OR-AT-CS-PW-F]**

When asked whether the BCC sessions were helpful and resulted in behavior change, respondents were unanimously positive. Respondents particularly noted changes in behavior regarding hygiene and sanitation, such as washing hands with soap, latrine use and keeping the compound clean. Other changes included more respectful behavior towards women and children. Positive changes were reported by both female and male PW clients.

"Yes. Now we are taking care of our wives and support them in household chores such as fetching water, washing clothes, providing soap, we are respecting women's right as we are not beating them and we discuss with them to decide on different issues, Most of us are taking care of our children such as cleaning, washing their cloths, feeding them with prepared food and buying nutritious food from market for children. We are changing the above behaviors because we understood its benefit for children and mothers' health and nutrition. We are also observing improved harmony in the households due to good relationship between husband and wife, unlike the tradition of husbands' supremacy of Arsi community in this locality." **[OR-AT-FGD-PW-M]**

"Yes, we properly wash our hands using soap and ash before food preparation, before child feeding, before eating and after latrine. We are also using latrine for defecation and our backyard is becoming cleaner now. As a result our health and children health is improved as there no diarrhoea cases in our kebele. The changes are due to the education and practical benefits that we saw in the past. Some of us planted fruits at our back yard and practicing home gardening." **[SN-H-FGD-PW-F]**

Clients also offered various recommendations to improve the BCC sessions. Several indicated that it would be preferable for sessions to be planned at a different time rather than be attached to PW sessions. The availability of reference materials and more use of demonstrations during session were also flagged as possible improvements.

"It would be good if the BCC sessions are conducted separately instead of conducting it at the end of the PW activities, and if the time is increased to more than two hours. And the session should be considered as work on separate day." **[SN-H-FGD-PW-F]**

"Yes, it is better if there are reference materials in addition to oral teaching as some of us can read and most of us have children who can read for us. Some of us have wives who are able to read too. They only talk to us for some minutes and leave. Additionally, practical demonstration should also be considered during the some sessions." **[OR-AT-FGD-PW-M]**

Consistent with our quantitative data, service providers in IN-SCT woredas reported providing multiple BCC sessions in the past year, primarily at PW sites. BCC sessions were reportedly planned to take place twice per month, although did this not happen in practice. Sessions are mostly provided by HEWs but also by DAs and sometimes SWs, depending on the topic.

"We have bi-monthly sessions and due to several reasons I only properly conducted 6 BCC sessions last year and 2 sessions this year for PSNP clients. Oher sessions were done jointly with the DA and some others 3 only by DA." **[OR-AT-KII-HEW]**

"In last year, BCC sessions were conducted at public work sites every other week but I remember there were interruption 2 times due to campaign works. (i.e., in the 6-month PWs there were 10 BCC sessions)." **[SN-H-KII-DA]**

Sessions are generally planned to take place at the PW site after the end of work activities. Work activities may stop earlier in order to allow time for the sessions. DAs hold primary responsibility for planning the BCC sessions.

"During the day scheduled for the BCC sessions, when sometimes remaining to complete the public work (about an hour before completion time), we gathered the clients at convenient place, then provide the BCC sessions as planned. At the end of the session we noted attendance. The role of the DAs is making a proper planning, sharing the schedules with the HEWs and the SW, and facilitation of the sessions. Sometimes we handle the sessions on different agriculture and natural resource related topics." **[OR-AT-KII-DA]**

HEWs and DAs listed various challenges in providing sessions, including lack of a manual or materials to support the implementation of sessions and lack of staff – notably HEWs – for implementing all sessions. A manual would help with planning sessions, both in terms of sequencing of topics and with respect to specific content within sessions. One DA indicated that she provides sessions on the basis of her own notes rather than official materials. Insufficiency of staff means that HEWs are not able to provide sessions as frequently as required; a HEW in Oromia relies on community volunteers to support with the delivery of BCC sessions.

"The challenges with regard to implementing BCC sessions are: 1) Unavailability of standard manual to conduct BCC sessions properly. I don't have any BCC manual when I have worked in this Kebele for 7 years. 2) Difficulty of covering households with limited number of HEWs, particularly when HEWs are on holiday for different reasons like annual leave, summer education, etc. In order to overcome these challenges: 1) I base myself on existing knowledge from my previous trainings. I prepare my own notes to deliver BCC sessions. I refer my notes when I do BCC sessions. 2) I use community volunteers to deliver BCC sessions covering some areas in case of missing HEWs." **[OR-AT-KII-HEW]**

"As some constraint, there is no standard manual that can guide how BCC sessions should give, what topics should be covered by whom or how to select appropriate topics, and so on. We don't have teaching aid materials for agriculture related topics to facilitate the BCC sessions in a better way." **[SN-H-KII-DA]**

When asked about how to improve the delivery of BCC sessions, DAs called for stronger support and monitoring by SWs and woreda-level bodies with planning and delivery.

"We have to make proper planning and timely communicate to the HEWs and the SW. Strict monitoring from the SW and from the woreda concerned body is also required for better implementation." **[OR-AT-KII-DA]**

Implementation of BCC sessions for PW clients in PSNP woredas appears limited. Responses by both service providers and clients suggest general confusion around whether BCC sessions constitute sessions that are specific to PSNP or belong to general health extension work. Probing and observations by the fieldwork team

coupled with cross-verification of answers suggest that BCC sessions that are being referred to are mostly part of general outreach rather than sessions that are specifically related to PSNP.

Responses by PW clients offer contradictory accounts. Male PW clients refer to frequent provision of training and knowledge sessions at PW sites. Female PW clients also referred to having attended sessions at the PW site but also indicated that these were not BCC sessions. Further probing by the fieldwork team suggests that PW clients did not receive BCC sessions at the PW site.

> "We have not attended any training/BCC sessions at public work sites. But we have participated in awareness creation sessions at the health post and our homes." **[SN-KG-FGD-PW-F]**

> "We have three days schedule of PW activities and there has been education and advices by the DA and health extension worker after PW by calling meeting at FTC and health post. We also have literacy program at FTC, but not a BCC. We cannot remember the number of sessions as they were teaching us every week. And there in no education and discussion session this season. As we can understand from your questions, there were no organized and scheduled BCC sessions but a regular advices and FTC trainings, community meetings etc." **[OR-AN-FGD-PW-M]**

Clients offer mixed responses in terms of the existence of any repercussions in case they do not attend sessions. Clients referred to negative consequences of not attending sessions as a result of not having the appropriate knowledge to stay healthy, for example, but also mentioned that they might be listed as absent on the PW attendance list and having their transfers cut.

> "If we don't attend the different sessions we cannot able to understand new way of doing things. They told us to attend the sessions on time otherwise there will be transfer cut." **[SN-KG-CS-PW-F]**

> "If I don't attend training and education sessions, I would get hurt. Because if I am not aware about the importance of using latrine and the problems it causes, I cannot prevent myself from diseases. So, it is for my benefit." **[OR-AN-CS-PW-M]**

Service providers in PSNP woredas – HEWs and DAs – provided mixed answers about BCC. HEWs referred to the provision of a wide range of sessions covering hygiene, vaccination and antenatal and postnatal care. However, there was little clarity regarding the remit of such BCC sessions: HEWs and DAs provided conflicting answers with HEWs suggesting that BCC sessions had taken place, but DAs indicating that these were not PSNP-related sessions.

> "The BCC sessions included awareness raising on (i) child nutrition, (ii) latrine construction and its use (iii) immunization etc. There was also women conference in the Kebele every month in which different health related issues discussed." **[OR-AN-KII-HEW]**

> "HEWs are hardly doing BCC sessions at public work sites. In fact, it is not organized BCC session, as there is no difference from other orientation and discussions." **[OR-AN-KII-DA]**

HEWs and DAs described various challenges of providing BCC sessions. One HEW indicated that the PW site is not an appropriate place for providing sessions as people are tired from work and it often take place in an open site without shelter. The FTC or health post were considered to be more appropriate locations. One DA highlighted that HEWs and school directors are overburdened and do not have enough time to provide sessions.

"I think it should be good that the training site and the PW site should have to be distinguished. In my view it is good to provide these training at FTC or health posts where it is comfortable to provide training. It is difficult to organize long our training at PW sites particularly when they finish PW activities it became mid-day and sunny." **[OR-AN-KII-HEW]**

4.8. Management Information System

An important innovation in the IN-SCT program is the Management Information System for PDS and TDS clients. In our qualitative fieldwork, respondents viewed the development and implementation of the MIS as a good idea. It was considered a vital element for implementation, particularly in relation to monitoring compliance with co-responsibilities. When working well, it can make work more efficient and facilitate reporting and sharing of information. Testing this MIS was also deemed to be an important exercise. One regional SCT coordinator also highlighted that it provided MoLSA ownership of IN-SCT (and thereby PSNP).

> "Yes, it is a very good idea. Without it, co-responsibility and compliance tracking is difficult. It also ease reporting, improve efficiency and reduce cost by avoiding paper work." **[OR-KII-MIS]**

Use of MIS was well integrated into program implementation. All SWs in our quantitative sample report using the MIS and nearly all (96%) report inputting data into the system. As reported above, SWs spend 2.2 – 3.6 hours per day entering information into the MIS. But SWs are not especially enthusiastic about the MIS. When asked how helpful they found the MIS for case management, only 7% reported that it was "very helpful" with the rest, 93%, describing it as "somewhat helpful". They are somewhat more enthusiastic on its usefulness for improving service delivery, with 39% reporting it to be "very helpful" (and 61% reporting it to be "somewhat helpful"). Only 11% of SWs (and none in SNNP) thought that they MIS system worked "very well".

Some of the information needed for the MIS comes from HEWs. We asked both SWs and HEWs about this in the quantitative survey. Virtually all SWs (93%) reported that in the last three months, that had been given monthly monitoring reports on PSNP/SCT co-responsibility updates from a HEW; however, only 39% reported that in the last month that they had collected family folders from a HEW. However, again reflecting the relatively small number of SWs who were employed, only 22% of HEWs reported that in the last three months, that had given monthly monitoring reports on PSNP/SCT co-responsibility to a SW. 33% reported that in the last month they had completed family folders and only 13% reported that they had given completed family folders to a SW. A further constraint on the implementation of the MIS is that few HEWs (15%) report that they had received training on how to complete the family folders.

Qualitative data confirm considerable engagement with MIS by SWs as well as dedicated MIS officers that are posted in each woreda office and SCT coordinators at the woreda level. But it highlights many concerns and challenges in relation to implementation of the MIS, which explain the ambivalence of SWs regarding its use. These should not come as a surprise in light of technical and other issues with the MIS that persisted throughout the implementation of the IN-SCT. Respondents noted that the MIS was updated and improved throughout the program period, which resulting in clear improvements but did not resolve all issues. Although the roll-out of the MIS was delayed at the start of program implementation (and a paper-based registration was held instead), all data have now been entered into the system and all backlog appears to have been cleared. All PDS and TDS clients in IN-SCT woredas are reportedly registered within the MIS, their co-responsibility forms have been generated and their co-responsibilities monitored concordantly. Given the many technical issues in the build-up to using the MIS and those that remain unresolved, offices still operate a paper-based system in parallel to ensure that no information is lost.

> "Yes, we are using both the paper and the electronic in parallel because the electronic version still lacks perfection. [. . .] The software had many and the responses to fix those issues were

lagged and took a long time. Now we are using a version-3 application (i.e., version 3.1.1) which is relatively better than the previous versions, but still has some issues, such as when we enquire reports, it takes longer time (so slow) to display. For some of the report types, still error messages are displayed. Except some of the above issues, it works fine. Especially, if those issues are fixed it will be helpful to the project implementation." **[OR-AT-KII-MIS]**

"Currently, the MIS is working well because the development of the system has been finalized and data of 1,010 households who are living in 48 kebeles has been entered into the system. The development of the system has improved data management of clients through automating the manual working system in monitoring co-responsibilities." **[SN-H-KII-SCT]**

A range of challenges persist:

- Lack of technical capacity in-country or in-house that allows for quick responses to queries and timely revisions to versions of the MIS, leading to delayed rollout of improved versions of MIS and frustration on behalf of MIS officers, SWs and other staff:

"You know, the person who can fix the software-related problems came from Kenya. Due to this, the data entry started very late and paper-based data accumulated." **[OR-AT-KII-MIS]**

"Lack of timely response on system related problems from the system developers were also a challenge. Previously, I was directly communicating the system developer, but recently UNICEF didn't want us to communicate with the system developer directly. So increased communication hierarchy means delay response." **[OR-KII-MIS]**

- Staff turnover meant a loss of crucial technical expertise and of continuity in implementation of the MIS:

"The challenge with respect to MIS was the high turnover of staffs working on the system. Three MIS staffs have resigned since the start of the project due to better offers in other organizations. The current MIS focal person is newly recruited and he was employed three months ago. He has not received sufficient training yet. We provide support to the new person as much as we can together with those people who were trained previously. The MIS person from the region has also provided orientation to the new woreda MIS." **[SN-H-KII-SCT]**

- The heavy workload faced by SWs hampered their ability to collect timely information on compliance from clients and to use the MIS for case management. The clearing of the backlog and entry of all client information once the MIS was rolled was also mentioned as a placing a particular burden on SWs.

"Imputing of compliance data into the system was rarely happened in both woredas due to different factors. On the one hand, the number of SWs are not adequate to collect compliance data from all clients." **[OR-KII-MIS]**

"SWs capture data using the manual forms from PDS and TDS clients and register them on the system. SWs spent 3 months inputting data from paper forms to computers. SWs are still editing the forms which delays them inputting the forms to the computerised database." **[SN-KII-MIS]**

- Logistical challenges with respect to power supply and internet access (as the system only works when connected to the internet), hampered effective use of the MIS. A few respondents also raised concerns regarding the building in which the server was stored, indicating that the structure is in appropriate and that water leaks may damage the server.

"The biggest challenge is power interruption […] We sometimes use generator but for limited time as we do not have budget for fuel." **[SN-H-KII-SCT]**

"The system can only be used online, but woredas often have problems getting online." **[SN-KII-MIS]**

- Technical issues persist, undermining its usefulness for reporting purposes and for case management. Issues with import and export functions mean that data from woredas cannot be combined at regional level, requiring reports to be generated manually rather than automatically. Also, clients cannot be removed from the system, which is particularly problematic for TDS as clients move in and out of support depending on their eligibility.

"There is no complete clients' profile/data transferred from the two pilot woredas to region so far because the export/import function of the software was not working. As a result, I could not generate project level reports so far." **[OR-KII-MIS]**

"Challenge is that the final version is still not given by UNICEF or consultant. There are still issues with import and export. We have to use the flashdisk for getting data from woredas and there are some import and export issues." **[OR-KII-SCT]**

"It is good, but it has some software related issues. For instance, if a person was excluded from the program, the software does not delete his name from the MIS. It will continue to hold his name for many years." **[OR-AT-KII-SCT]**

A number of suggestions for improving the MIS and the process surrounding its development and implementation were offered by respondents:

- Ensure in-country technical assistance to facilitate more direct interactions and shorter lines of communication until technical problems are solved;
- Adequate skill training to the users of the MIS, plus additional in-depth training to MIS officers on server management and troubleshooting of common errors in the system;
- Ensuring internet connectivity and improved power supply;
- Upgrading the server's RAM capacity to speed up the server function to get the required reports quickly.
- Improved salary and benefit packages for MIS officers in order to retain staff and key skills;
- More complete development and pre-testing of the system before it is rolled out into the pilot.

Finally, regional and woreda-level officers were skeptical regarding the sustainability of the MIS in the long-term. Respondents highlighted the need for government to take ownership and cultivate the necessary skills in order to adopt the current system. Without such ownership, the continued use of the MIS after program end was deemed unlikely. The fact that the system is not yet complete and fully functioning, lack of in-country technical capacity and resource constraints required to further develop and maintain the system as well as train staff were mentioned as considerable constraints.

4.9. Other aspects of implementation and utilization of the IN-SCT and PSNP

In this chapter, we describe other aspects of the implementation and utilization of the IN-SCT and PSNP4: (i) Access to health services by pregnant women and children; (ii) Implementation of nutrition-sensitive components by Concern Worldwide; (iii) School nutrition clubs; and (iv) Case management.

i. Access to health services

Table 4.12 and Figure 4.1 report access to health services by pregnant women and children respectively.

Table 4.12 Access to services during pregnancy

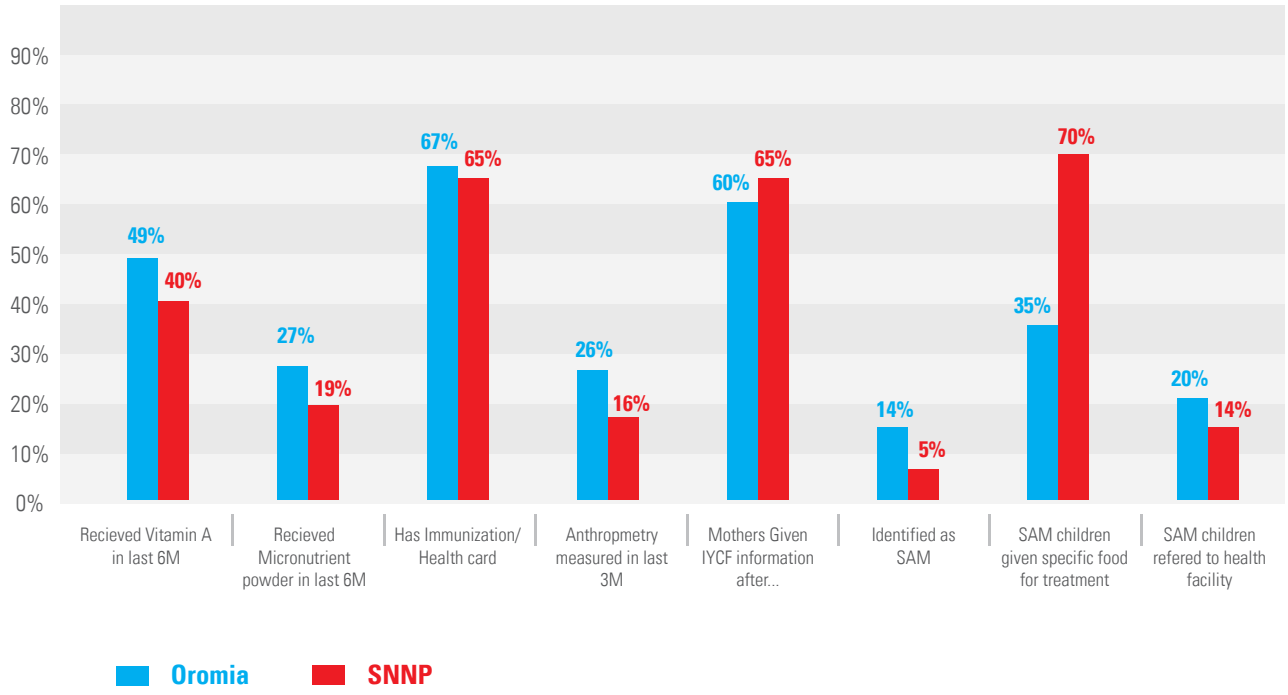
Indicator	Oromia	SNNP
Number of women who had been pregnant between Ginbot EC 2008 and date of interview	92	1346
All descriptives below are restricted to women who reported at least one pregnancy		
% getting any home visit during last pregnancy	10.8%	31.3%
Mean number of visits to health facility (all pregnant women)	3.4	3.7
% who went to health facility at least once	95.2%	96.5%
Mean number of visits to health facility conditional on at least one visit	3.5	3.8
% Took iron supplements	61.1%	65.0%
% women giving birth in a health facility	49.4%	85.7%

Source: Endline household survey

Access to services during pregnancy is high. Nearly all women went to a health facility at least once and mean number of ANC visits, conditional on visiting once, were 3.5 in Oromia and 3.8 in SNNP; both figures are close to the recommended four visits. Around 60 percent of women took iron supplements and in SNNP, an impressive 85 percent of pregnant women gave birth in a health facility.

Access to nutrition services by children is widespread but not universal (Figure 4.1). Between 40 and 48 percent had received a dose of Vitamin A in the last six months and 18 – 26 percent had received micronutrient powders. Between 16 percent (SNNP) and 26 percent (Oromia) had anthropometric measurements taken in the last three months; when these occur, most (60-65 percent) of mothers are given advice about feeding the child.

Figure 4.1 Access to health and nutrition services, youngest child under the age of 5 years



ii. Implementation of nutrition-sensitive components by Concern Worldwide

In SNNP, Concern Worldwide was engaged in implementation of nutrition-sensitive components of IN-SCT. Concern described their role as follows: "Our major role was to coordinate and implement the health and nutrition components of the IN-SCT pilot project. Other components of this project such as activities related to PSNP transfer, PDS support and case management, women and child rights, are the responsibilities of WOLSA and woreda Agriculture/food security office." **[Federal-KII-Concern]**

Concern staff identified various key stakeholders in terms of multisectoral collaboration. At federal level, these include MoLSA and UNICEF. At regional and kebele level, Concern collaborated with regional bureaus of women affairs, education, ANR and water. The link to the regional bureau of health was deemed to be particularly important given the remit of Concern's work being nutrition and health. All such linkages were underpinned by collaboration with regional and woreda bureaus of labour and social affairs.

> "Yes, it is working well among many. For instance, there is good collaborative engagement between CONCERN and regional health bureau and this helped us to easily mobilize the support of woreda health office in the implementation of the IN-SCT. At woreda level, there is good collaborative engagement between woreda agriculture office, WoLSA, health, water and women affairs offices. CONCERN has been exercising joint planning and implementation with these woreda actors, and many of these are committed to the project. Also, good collaborative engagement among DAs, HEWs and SWs at community level." **[Federal-KII-Concern]**

While collaboration with all offices and their service providers at kebele level was evaluated positively by Concern, links to the bureaus of ANR, the Food Security Task Force and PSNP coordinator were seen to be weak. This was attributed to the fact that the IN-SCT is primarily implemented by labour and social affairs, and that ANR is not a 'signatory' of IN-SCT. This complicated implementation of some components of Concern support, such as capacity building of Farmer Training Centers (FTCs):

> […] However, we had limited working relationship with the regional Food security/PSNP because this is not the signatory for the IN-SCT project. […] Regional food security and disaster risk reduction agency is not happy and we couldn't help much because this agency is not signatory for IN-SCT project. We tried to visit their office to help them understand the project status, but it seems this didn't bring much improvement in our relationship. At woreda level, the woreda agriculture offices have refused to take ownership and implement the FTC capacity building in both woredas. CONCERN has brought together communities, DAs, woreda agriculture experts and the NGO implementing the FTC capacity building, but this couldn't lead to much improvement. […] Ensuring the involvement of regional food security and disaster risk reduction authority is essential. This has affected our relationship at regional level and should be improved in the future." **[Federal-KII-Concern]**

These experiences mirror those held by other service providers. Overall, other service providers are positive about the support that Concern provided within IN-SCT, although it was noted that activities were limited and time-bound. A representative from MoANR/ food security, however, pointed out that they were unaware of Concern's role in supporting IN-SCT, and that they voiced their concerns with UNICEF.

> "Concern is an institution that has done a lot of works within a short period of time. It has supported: 1) file management of the family folder through introducing stickers on files of TDS clients; 2) the establishments of school nutrition clubs and school gardens; 3) demonstrations on vegetable production; 4) through seed distributions; 5) cooking demonstrations by provided inputs required for the demonstration; 6) water expansion and rehabilitations. They have provided a lot of support." **[SN-H-KII-SCT]**

> "We have tried in all woredas to improve collaboration. There are some improvements compared to the past in collaboration between health, education and ALSA. We have not given specific support to the pilot woredas. We did not know about Concern's involvement and there was lack of transparency. We complained to UNICEF and now we have improved collaboration between Concern and UNICEF." **[SN-KII-FS]**

iii. School nutrition clubs

School nutrition clubs were promoted in IN-SCT woredas in SNNP in collaboration with Concern. We collected qualitative information about the extent to which nutrition clubs were established and operational within broader questions about nutrition-sensitive agriculture activities provided by Concern.

Concern Worldwide staff identified three areas where they have provided support – water-points, school nutrition, and farmer training – and are optimistic about the sustainability of two of these.

1. **Water-points:** "We provided training, maintenance tools and spare parts for Woreda Water Offices in both woredas. Hence, these offices can continue supporting these water points. Community ownership of the constructed water-points has also improved. Many of the water-points are fenced, water fee collection

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mechanisms have been put in place for maintenance in case of damage, and community water committees are functional and overseeing the management of the water-points."

2. **School nutrition:** "Nutrition clubs are functional in the majority of schools and linked with the schools and education offices to ensure their continuity."

3. **Farmer training:** "The Farmer Training Centre capacity building effort is unlikely to continue in many kebeles because of limited ownership by DAs and woreda Agriculture and Natural Resource offices in both woredas."

Clients expressed appreciation for the water-points, training and other support they received.

> "We had a community pond constructed for us which we value as the most important activity. If we don't have water-points we will travel long distances in search of water for our livestock and for washing clothes" **[SN-H-FGD-PW-M]**.

Clients' responses suggest that nutrition clubs were operational and contributed to knowledge about nutrition.

> "When we started vegetables, I tried to give nutritious meals made from different food items including vegetables. My daughter who is a member of the nutrition club at school also assisted me by sharing knowledge of nutritious foods as she learned from school" **[SN-H-CS-TDS(PLW)].**

Service providers' responses also suggest that nutrition clubs were in place in communities where Concern was active. By contrast, no nutrition clubs were operation in PSNP woredas. DAs were asked if they had observed any changes in terms of nutrition-sensitive agriculture (e.g., home gardens, nutrition clubs or poultry production) – positive impact, no impact, or negative impact – since the PSNP4 and IN-SCT started. In two IN-SCT kebeles, the DA reported improvements in household awareness, positive attitude and practice with respect to making their farming more nutrition-sensitive. However, only limited positive impacts were achieved due to a range of constraints, as one DA explained.

> "There is some limited difference. Concern Worldwide supplied vegetable seeds and chicks to some households. Nutrition clubs were also established in selected schools. With this support, the households started producing vegetables and eggs, mainly used for household consumption. Students' knowledge about nutrition issues developed and was transferred to their family members. The awareness of community members about nutrition also increased through BCC sessions and cooking demonstrations. But vegetable production in home gardens is only possible during rainy seasons, and the produce was insufficient due to climate changes and plant diseases. Also, the number of households supported by Concern is very limited – very small coverage compared to the number of households that are eligible for support." **[SN-H-KII-DA]**

While service providers were positive about Concern's contribution, they were also cautious about its sustainability in future.

> "Concern adds additional value – for example, the school gardens show the community how to grow healthy foods – but my concern is the impact of Concern's activities will not be sustained, because who will take their work forward? They are not well connected to government so I don't know if government will take it over." **[SN-KII-SCT]**

Other key informants also see the value of Concern's contribution and identified why some of these interventions will be sustained, but also how their sustainability could be expanded and enhanced.

"The support provided by Concern contributes to sustainability as it created adequate capacity on nutrition and health-related issues, good demonstration of cooking, and construction of water-points that helped the community to reduce the burden of moving far distances in search of water." **[SN-H-KII-PSNP]**

"The support provided by Concern has helped to improve sustainability because they have shown what the community can change using available resources. For example, women who used to buy cabbage in the past are now producing in their backyard. Women who used to take all eggs for sale in the market have now started to use for feeding their children." **[SN-H-KII-HEW]**

"Part of these activities will be continued, such as nutrition clubs and school gardens, because the schools already own these activities." **[SN-H-FGD-CCC]**

iv. Case management

We asked service providers and clients in IN-SCT and PSNP woredas in SNNP and Oromia about the provision of case management, primarily focusing on case management that pertained to child protection or other social concerns beyond the monitoring of co-responsibilities. Although this is not a core function of SWs, their presence and expertise may contribute to greater identification of and response to social issues.

The implementation of case management of vulnerable children and other individuals in IN-SCT woredas is limited. Case management focuses on monitoring and following up co-responsibilities with some but little space for other types of support in relation to child protection issues. Lack of clear guidance and procedure, and alleged non-existence of child protection issues or social conflicts are listed as reasons for limited implementation of case management. Service providers indicated that little case management takes places outside of the remit of co-responsibilities. Respondents in Oromia emphasized the focus on co-responsibilities, and providing advice in relation to children being out of school. Some suggested that further case management is not required as issues in relation to violence or child protection no longer exist in the kebele:

"For the time being it is limited to the PSNP clients. They are given co-responsibilities and the SWs monitor these monthly. If they don't comply, the SWs start case management from that moment. […] The manual doesn't refer to child protection issues. Sometimes it is mentioned in the steering committee but I haven't come across case management of other cases. […] There is no case management for violence against women and girls such as child marriage issues because no such problem exists in our kebeles. However, our social workers manage cases of children who drop out of school because of cattle rearing service for their families. We followed and provided awareness raising for 5 children and helped them to join classes again." **[OR-AT-KII-SCT]**

SNNP respondents highlighted that case management was primarily focused on co-responsibilities. Respondents also described an example of child abduction and early marriage that was identified by SWs and followed up on in collaboration with the Women's Affairs office, police and Justice office. This case was also described during interviews for midline data collection, suggesting that the number of cases that are identified and managed in relation to child protection, violence or other issues beyond co-responsibilities is very low.

"Yes, there was a school girl who was abducted and ultimately returned back to her parents in Girme kebele in 2008 Ethiopian Calendar. When these kinds of cases happen, we work with Women Affairs Office, the police and Justice Office to solve the problem. The issues that can be solved in the court of law will go to law enforcement bodies. The SW provides psychosocial support to the affected and creates linkage with services of other sectors and reports to concerned bodies. Case management for us is the process of providing co-responsibilities, following-up clients that are not meeting co-responsibilities, identifying their problems and enabling them to implement their co-responsibilities and use services." **[SN-H-KII-SCT]**

Despite its occurrence being limited, respondents indicate that SWs play a key role in identification of vulnerable people and in the response to their needs. Their presence at kebele level and the home visits that they undertake with PDS and TDS places them in a unique position to identify issues of concern. Clients may also voice their concerns directly with the SWs. SWs will then respond by referring to the relevant other offices such as Women's Affairs office or the police, and will provide psychosocial support, advice or seek support with providing material support.

"When there is any violence, the SW gets the information as he is there at kebele level. The committee and the kebele chairperson are also there. They communicate each other and discuss what should be done to solve the problem. They collect information from parents and work with police, Women Affairs and Peace and Justice Affairs representatives at kebele level. When these kinds of cases happen, it comes to Woreda Women Affairs Office. Basically, we work on child protection to prevent these kinds of issues before happening. But after it happens, our role is to link the affected person with services of other actors." **[SN-H-KII-SCT]**

"Once the case identified, I link the issue with responsible institutions such as OCCSCO, WoLSA, and Woreda food security up to regional level that I believe have the power to address the problems." **[OR-AT-KII-SW]**

Actual examples of this taking place are limited. Challenges contributing to this lack of engagement include lack of guidance within the IN-SCT manual, current procedures not supporting case management beyond co-responsibilities, difficulties in identifying cases as people keep quiet about their issues and capacity constraints on behalf of SWs.

"The child protection aspect is not well advanced. It should be strengthened. We don't have a formal process for case management in the program. It was an action point that we raised with our child protection colleagues at UNICEF, but this was a missed opportunity. Although this is a UNICEF project, it is more focused on social protection than child protection." **[SN-H-KII-SCT]**

"The challenge is that there are limited cases that come to our attention. There is no means of identifying cases unless report by the victims. Additionally, there is a tendency to keep quite by women even if violence happened to them. We did not take any action but waiting to get reported cases." **[SN-H-KII-SP]**

"The challenges are shortage of fuel, frequent vehicle breakdown and limited number SWs to cover many clients. One SW is expected for cover 5 Kebeles. In each Kebele, there are TDS and PDS clients' to be monitored by the SW through house to house visits. This reduces the number of clients that needs to be visited per each SW."

The implementation of case management of child protection or other social issues in PSNP woredas is very limited. Key constraints are lack of knowledge and awareness regarding rules and procedures, and not having enough social workers on the ground to provide required support. No clients reported no experiences with case management and only one out of four service providers who were interviewed at woreda level did so. The SP core process owner in one SNNP woreda indicated that they had started case management, and highlighted that this is not linked to PSNP or co-responsibilities but that this referred to general case management:

> "Yes, we started case management in one kebele but not through PSNP. Our targets are non-PSNP clients who needs support, e.g., early marriage, those who face rape, widows who needs urgent support, HIV patients. We organized a committee at kebele level and mobilize resources for needy persons. For example, we supported one poor women during delivery by providing 700birr. […] We provide psychological support, material (cloths, school uniform) financial, food, and legal support. We mobilize resources from others, wealthy people and offices. For instance, health offices support if they are sick." **[SN-KG-KII-SP]**

The SP core process owner explained that they work with kebele staff and community volunteers for the identification of those in need, and that they prioritize support who are in most need. Implementation challenges include lack of budget and limited availability of social workers. In KG in SNNP, volunteer social workers are being trained to overcome the capacity constraints. It should be noted, however, that the social worker who was interviewed in KG was not aware of any case management being undertaken in this woreda:

> "No, we didn't do such kind of activities anywhere in this woreda. Because we are not aware about how to do it and when we should do it. Secondly, there is no adequate social workers in the woreda to do such activities." **[SN-KG-KII-SW]**

Lack of knowledge about case management, both within the remit of co-responsibilities and beyond, and capacity constraints were also mentioned by respondents in Oromia as the main reasons for not implementing case management:

> "No, our office is not clear in terms of what to do as related to co-responsibilities and case management. That is partly why we focused on PDS screening/targeting and their food/cash transfer only. Moreover, we have only two SWs and these can't cover all of the PSNP kebeles in this woreda." **[OR-AT-KII-SP]**

4.10. Sustainability

We close this chapter by presenting research respondents' feedback regarding the sustainability of PSNP and IN-SCT. As part of our qualitative fieldwork, IN-SCT staff, service providers and clients in both Oromia and SNNP regions were asked for their opinions about the future of specific components of PSNP4 and IN-SCT and about the future of PSNP and IN-SCT overall.

Sustainability was assessed for key components of IN-SCT and PSNP 4. A recurrent theme in these conversations was that the sustainability of many components hinges on the continued (and greater) involvement of SWs. The continued engagement of CCCs, implementation of co-responsibilities, and provision of case management was deemed to be closely related to the availability of SWs.

Service providers were asked how they see **the long-term position of SWs** and whether they will remain in place. SCT Coordinators at regional level expressed positive views but also concerns regarding the future of the IN-ST SWs. There was some optimism that some of these SWs would be retained.

> "Social Workers should be absorbed in the government structure to sustain this program, because they have the knowledge and capacity. In Dodota, some social workers have already transitioned to government." **[OR-KII-SCT]**

> "As for retaining the Social Workers and other staff it will require a lot of financial resources – but it will be good to do this. We wrote a proposal to implement the SCT components of IN-SCT to 4 other woredas – especially case management aspects, co-responsibilities and the forms for linking clients to other services – and BoLSA agreed and allocated budget for this." **[SN-KII-SCT]**

> "We are negotiating with the Regional Government to place one Social Worker in every kebele, like the HEWs and DAs, but it's difficult. There are 8 Social Workers in Halaba and 7 in Shashego. Government might take on 2 or 3 of these but the rest will not be retained" **[SN-KII-SCT]**.

Woreda level service providers also argued SWs should be retained, even if the program does not continue.

> "PSNP without Social Workers is a toothless program that can only provide cash. Without them, follow-up and monitoring of PDS will be difficult" **[OR-AT-KII-SCT].**

> "If the project phases out, the government should or put in place Social Workers that support the collaboration at grassroots level. Otherwise, things will be difficult" **[OR-AT-KII-SW]**.

Clients in IN-SCT woredas agreed that there is a risk of losing much of the gains and benefits they have received through the program, if support from the Social Worker is withdrawn.

> "Without the Social Worker, most things – especially the follow-up and support of PDS clients and monitoring of co-responsibilities – will be compromised" **[SN-H-CS-PDS-M].**

> "If there is no social worker, we will lack support and follow-up, and things will not continue as it started. He really improved our level of awareness, but we have not reached a point where we can stand by ourselves. We hope he should continue with us in the future" **[OR-AT-FGD-TDS-F].**

By contrast, opinions were mixed with respect to the **future role of CCCs**. At regional level, SCT Coordinators agreed that CCCs should continue and be expanded. "CCCs should be established in every kebele and strengthened through capacity-building and resource mobilisation" [SN-KII-SCT]. But at the woreda level, key informants in IN-SCT woredas are less convinced about the future of CCCs. In some cases, this was tied into the need for continued support from SWs or kebele structures.

> "I am not sure about the continuity of the CCCs, because they are weak now" **[OR-AT-KII-HEW].**

> "The future of CCC is questionable. Its functionality as well as its continuity depends on more commitment by the kebele administrators and the Social Worker" **[OR-AT-KII-DA].**

CCC members mentioned three things that are needed to ensure they continue to perform their important functions: training, reduced workloads, and resources.

> "We need training about our roles and responsibilities. The workload of the major actors, especially the kebele chairman, cannot continue like in previous times" **[SN-H-FGD-CCC].**

"It is difficult to mobilise the funds we need to provide support to the needy" **[OR-AT-FGD-CCC].**

The role of SWs also emerged in relation to ensuring **continued monitoring and follow-up of co-responsibilities.** The consensus opinion among service providers in IN-SCT woredas was that co-responsibilities are important and should continue, but they need SWs to implement them.

"The monitoring and follow-up of co-responsibilities will continue even after the IN-SCT project, because we believe it is crucial and we already have the system, as long as the Social Worker is there" **[OR-AT-KII-SP].**

"We are planning to take over from the program and continue supporting and monitoring the co-responsibilities, but I cannot guarantee you that it will be as strong as it is now. Now we are trying to train volunteer Social Workers from the kebeles, but they will have less capacity compared to the current Social Workers" **[SN-H-KII-SP].**

Service providers were pessimistic about **the future of case management of child protection issues.** Even though the extent of case management of social issues is limited within IN-SCT, they associate this service with the IN-SCT program and its SWs. Discontinuation of IN-SCT would undermine the ability to provide case management services.

"The case management system cannot continue after the IN-SCT project ends because it will not get a responsible body or person who can deal with it. Under the current situation it is the Social Workers who are handling related cases" **[OR-AT-KII-SW].**

"I don't think the case management system will continue because there is a need for someone who plays this role by making house to house visits" **[SN-H-KII-SW]**.

Other key informants were more optimistic, provided that SWs remain in post and CCCs continue to function.

One key informant even argued that the need for child protection services has diminished in local communities, thanks to the awareness raising efforts of SWs.

"There is improved awareness due to IN-SCT interventions like education by the Social Worker. The community are now more aware about children's rights. They don't deny the rights of their children to get education. They don't force children to do heavy work. Rural people tend to use children for agricultural work, since they don't have money to pay for labour. This made child protection issues difficult in the past. But over time this has improved, through advice by the Social Worker" **[OR-AT-KII-SP].**

Considerable concerns were raised in relation to the **sustainability of the MIS.** One problem identified by Social Workers is the lack of qualified MIS officers to run the MIS.

"The MIS that was built through IN-SCT won't continue. The server and the computers are there. People were also trained. But in the absence of hired professionals to work using the system, it is difficult to think the MIS will be used continually" **[SN-H-KII-SW].**

Service providers were more confident about the **sustainability of BCC sessions**. DAs and HEWs were asked about their implementation in the future. Both see the value of BCC sessions and believe they will continue in future.

"Yes, it will continue as is because it doesn't need additional resources, but it needs proper planning, timely communication and commitment of both the HEWs and DAs" **[OR-AT-KII-DA].**

"Yes, the BCC sessions will continue in the future because it has made significant contribution in bringing about improved behaviour and attitude change" **[SN-H-KII-HEW].**

Multi-sectoral collaborations that have been created are expected to continue, but key informants noted the importance of SWs, SCT Coordinators, and CCCs in ensuring that this happens.

"If the Social Workers do not continue to serve at kebele level, I don't think the collaboration among service providers will continue at that level. At woreda level, collaboration through the Food Security Steering Committee will continue. There should be 1 to 2 Social Cash Transfer Coordinators or people who pass information about PSNP to WoLSA people" **[SN-H-KII-PSNP].**

"Without the IN-SCT, collaboration among service providers cannot be thought. It is because of the Social Workers component of this program that the collaboration with different service providers exists. Otherwise, things will move back to the PSNP2 and 3 conditions, where I heard of limited or no collaboration between different actors in the program" **[OR-AT-KII-SW].**

Three relevant points were made by key informants about the sustainability of the IN-SCT approach: that it needs to be scaled up, that it needs to be properly financed, and that innovative features such as SWs and the MIS need to be retained.

"The sustainability of the IN-SCT can be secured if the model is scaled up" **[SN-KII-SCT].**

"The approach will not be sustainable in the future if there is no adequate budget" **[OR-AT-KII-SCT].**

"Yes, I have concern about sustainability of the IN-SCT approach, because after this program ends the approaches adopted by this program such as Social Workers' support to kebeles may stop, hence affecting sustainability" **[OR-AT-KII-SW].**

In terms of the **PSNP more generally,** key informants at federal and regional levels expressed anxiety that the PSNP could continue as it is currently designed into the future, but without the beneficial components introduced by IN-SCT. They suggested how the PSNP should adapt, by learning lessons from the implementation of PSNP4, the positive experiences of IN-SCT, and the role of UNICEF.

We summarize the findings in this chapter by presenting main bottlenecks to program implementation as well as constraints to affecting change in Table 4.13.

Table 4.13 Bottlenecks in implementation of PSNP in IN-SCT woredas and kebels

Bottlenecks in implementation
Limited capacity of SWs: relatively low numbers of SWs leads to high caseload with SWs covering many kebeles and clients. Lack of capacity in conjunction with transportation constraints in reaching remote areas leads to limited awareness of and exposure to SWs.
High staff turnover: frequent changes in staff – including IN-SCT programme staff, SWs and other service providers – and lengthy procedures for replacement of staff undermines the effectiveness of programme implementation.
Limited engagement of CCCs: CCCs function sub-optimally or are inactive with very few PSNP clients being aware of or having received support from CCCs. Lack of incentives, conflicting responsibilities and limited training were mentioned as reasons for limited engagement.
Capacity constraints of HEWs: high workload of HEWs undermines their ability to engage with PSNP provisions, including collaboration with DAs to ensure smooth transition of female PW clients into TDS and timely delivery of BCC sessions.
Lack of materials and protocol for delivery of BCC sessions: DAs and HEWs reported that lack of an official topic guide and visual materials complicate the delivery of BCC sessions.
Lack of technical capacity to support MIS: lack of in-house technical expertise and high reliance on external consultants for updates to software and general trouble-shooting severely undermined effective use of MIS. This continues to be an ongoing concern as technical issues persist.
Constraints to achieving change
Inaccurate information about co-responsibilities and BCC sessions: although clients have fairly good knowledge of co-responsibilities and BCC sessions, they also receive inaccurate information about the set of co-responsibilities and repercussions when failing to meet co-responsibilities or attending BCC sessions, including the payment of fines.
Ineffective transition into TDS for caregivers of malnourished children: lack of clarity regarding rules for transition into TDS and lack of regular malnutrition screening undermines transition of caregivers of malnourished children from PW into TDS.
Limited case management of child protection issues: identification of and response to cases of child protection violations is very limited, in part because of limited numbers of SWs and low capacity to respond to such issues beyond their main responsibilities within PSNP4.

5

Impact of the IN-SCT in SNNP

5. Impact of the IN-SCT in SNNP

5.1. Introduction

In this chapter, we present impact estimates of the IN-SCT program. Using data from the baseline and endline surveys, we conducted a matching analyses to estimate the impact of IN-SCT on household-level outcomes in the SNNP2 longitudinal sample and on child nutrition outcomes and related measures of maternal nutrition knowledge and behaviors in the SNNP1 repeated cross-section sample. In the SNNP2 sample, the matching estimates are covariate nearest neighbor matching measures. In the SNNP1 sample, we use propensity score matching, for which methods have been developed for repeated cross section samples. In both the SNNP2 and SNNP1 samples, we estimate relative impacts of IN-SCT relative to the PSNP4 alone by comparing outcomes for the IN-SCT treatment group (T) to a weighted average of outcomes for PSNP4 client households (C2) living in other woredas. We also estimate absolute impacts of IN-SCT relative to no program by comparing outcomes for the IN-SCT treatment group (T) to a weighted average of outcomes for the comparison group of nonclient households living in the same kebeles (C1). Thus, for most outcomes, we present two sets of estimates for each comparison group. Within each set of outcomes, we present the T vs C2 comparisons first, to focus on the impact of the IN-SCT approach to integrating food security and nutrition into the program relative to the impact of PSNP4 itself. We then turn to the T vs C1 comparisons, to estimate absolute program impacts. We also disaggregate impacts by PW and PDS clients in the SNNP2 comparisons; all clients are TDS clients in the SNNP1 sample.

This chapter also includes clients' and service providers' perspectives regarding the impact of PSNP4 and IN-SCT in both IN-SCT woredas and PSNP-only woredas in SNNP and Oromia regions and the reasons for the impact, or lack thereof. Clients and service providers were asked to describe what changes they have seen across a range of outcomes since PSNP4 and IN-SCT started.

Impacts that were investigated in the qualitative fieldwork include nutrition (infant feeding, child nutrition, malnourished children); hygiene (hand-washing, latrines); education (school attendance, education outcomes); health (immunization, clinic attendance); child protection (child labor, early marriage, child-care facilities); and gender equality (improvements for women, differential impacts between male- and female-headed households).

Findings from the qualitative fieldwork are presented in section 5.4 under these thematic areas. Extensive use is made of direct quotations from transcripts of interviews and discussions, to give voice to the stakeholders and program participants themselves.

5.2. Household well-being and child education (SNNP2)

5.2.1. Dietary diversity and food security

The theory of change (as set out in Figure 1.2 above) predicts that dietary diversity in IN-SCT households will increase, signifying improved household food security, through a number of pathways. Firstly, cash transfers from IN-SCT will be used by all categories of participants (TDS, PDS, and PW) to finance purchases of a more diversified diet. Secondly, BCC messages and cooking demonstrations on nutrition and minimum acceptable diet will encourage the adoption of a more diversified diet. Thirdly, learners who join nutrition clubs at school will communicate messages about the importance of a diversified diet to their parents and caregivers.

Impact estimates show that the IN-SCT program led to a substantial improvement in household dietary diversity, as measured by the household dietary diversity score (HDDS). Using data collected for the consumption-expenditure module of the SNNP2 survey, the household dietary diversity score counts the number of the following 12 food groups in which any household member consumed food in the last 7 days: (1) cereals and grains; (2) roots and tubers; (3) legumes, seeds and nuts; (4) vegetables; (5) fruits; (6) meat and poultry; (7) eggs; (8) fish and other seafood; (9) milk and milk products; (10) oils and fats; (11) sweets; and (12) spices and beverages. Table 5.1 (column 1) presents the impact of IN-SCT on the HDDS of IN-SCT clients relative to PSNP4 clients living in other woredas. IN-SCT increased the HDDS by 1.05 food groups, which is statistically significant. This is a large effect, particularly considering that IN-SCT households in SNNP consumed food from only 3.35 groups on average at baseline, with little variation between IN-SCT and non-IN-SCT households (see Gilligan et al. 2017 for more detail).[9] This impact on the HDDS is maintained if we consider the impact of the public works component of IN-SCT compared to public works beneficiaries in other woredas. In that comparison, the IN-SCT increases the HDDS by 1.188 units. The impact of IN-SCT on the HDDS is even larger (1.52 food groups) when comparing IN-SCT PDS clients to PDS clients in the households.

9. Estimates of baseline means (and standard deviations) are for the full sample within each treatment or comparison group, and not the restricted common support sample included in the impact analysis.

Table 5.1. Impact of IN-SCT (T) on household food security, compared to other PNSP4 beneficiaries (C2)

VARIABLES	Household dietary diversity score	Minimum dietary diversity for women	Food gap	Household consumed 'less preferred' food in month with most food shortage
	(1)	(2)	(3)	(4)
T vs C2	1.045***	0.013	-0.308	-0.077
	(0.237)	(0.010)	(0.194)	(0.064)
Observations	638	638	638	633
T-PW vs C2-PW	1.188***	0.004	-0.270	-0.103
	(0.221)	(0.012)	(0.250)	(0.078)
Observations	432	432	432	428
T-PDS vs C2-PDS	1.522***	0.050**	-0.960**	-0.084
	(0.515)	(0.025)	(0.405)	(0.116)
Observations	196	196	196	196
Baseline means				
IN-SCT (T)	3.35	0.009	4.44	0.663
	(1.60)	(0.096)	(2.94)	(0.473)
Other PSNP4 (C2)	3.16	0.016	4.38	0.782
	(1.54)	(0.124)	(3.01)	(0.414)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP2.

*** p<0.01, ** p<0.05, * p<0.1

Disaggregating these impacts within the household, we find that the project had no impact on average on minimum dietary diversity score for women (WDDS-M), defined as consuming at least one food from four or more food groups in the last 24 hours (Table 5.1, Column 2). There are also no impacts of IN-SCT on women working in public works relative to women working on public works in the PSNP4 comparison group. However, women in PDS households in the IN-SCT experienced an increase in WDDS-M of 0.05 food groups. Using the food gap as a measure of food insecurity (Column 3), the IN-SCT did not have an impact on the food gap on average or for PW households. However, in PDS households, IN-SCT reduced the food gap by nearly one full month. IN-SCT had no impact on the coping strategy of eating less preferred foods, relative to PSNP4 only (Column 4).

When the comparison group is switched to C1, the positive impacts on HDDS disappear (Table 5.2). Instead, it appears that IN-SCT led to a weakly significant reduction in HDDS compared to households that are not clients of IN-SCT or PSNP4. Using this comparison group, there are no impacts on any of the other food security measures either.

Table 5.2. Impact of IN-SCT (T) on household food security, compared to neighbouring nonbeneficiaries (C1)

VARIABLES	Household dietary diversity score (1)	Minimum dietary diversity for women (2)	Food gap (3)	Household consumed 'less preferred' food in month with most food shortage (4)
T vs C1	-0.282*	-0.039	0.045	-0.001
	(0.147)	(0.025)	(0.198)	(0.048)
Observations	728	728	728	720
T-PW vs C1	-0.271*	-0.034	-0.051	0.025
	(0.165)	(0.026)	(0.217)	(0.053)
Observations	578	578	578	573
Baseline means				
IN-SCT (T)	3.35	0.009	4.44	0.663
	(1.60)	(0.096)	(2.94)	(0.473)
Nonbeneficiaries (C1)	3.64	0.016	2.96	0.592
	(1.77)	(0.125)	(2.64)	(0.492)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP2.

*** p<0.01, ** p<0.05, * p<0.1

It is unexpected that the impact of IN-SCT on household dietary diversity and food security is larger when compared to outcomes for other PNSP4 clients than when compared to similarly poor households who do not receive either program. Two factors may explain this result. First, local spillover effects of both PSNP4 transfers and nutrition information received by IN-SCT client households may have improved outcomes for households in comparison group C1, who live in the same kebeles as IN-SCT client households. If so, this would depress impact estimates that compare T vs C1. Second, although the matching model constructs a comparison group from C1 households that are identical to IN-SCT households based on observable characteristics, it is possible that unobserved differences between T and C1 households remain that reflect that C1 households are relatively better off. If so, an identifying assumption of matching is violated[10] and the matching estimates will be biased downward in this case. We suspect that spillover effects are partly to blame for the lack of impact relative to the C1 comparison group because the matching model appears to be performing well: using data from the same survey, matching on a rich set of variables that affect access to the program and the dietary diversity and food security outcomes, and selecting the sample that satisfies the common support property of the empirical distributions of the propensities scores for T and C1. Nonetheless, we cannot rule out some residual bias in the matching estimates.

Another measure of the impact of IN-SCT on diets is to compare its impacts on consumption of specific food groups. As shown in Table 5.3 for the comparison of T vs C2, IN-SCT increased the probability in the last 7 days that the household consumed cereals; legumes, seeds and nuts; and eggs compared to households in the PSNP4. This shows that diversification of the diets shown in Table 5.1 comes mostly from increased consumption of nutritious foods, like legumes and eggs. However, the proportion of households consuming sweets also increased for IN-SCT households relative to PSNP4 households. A similar pattern exists for PW households, but there were no effects on consumption patterns for PDS households.

Relative to the comparison group of households not in the PSNP4, the only impact of IN-SCT is to increase the proportion of households consuming roots and tubers (Table 5.4). There are no other significant impacts on the proportion of households consuming other food groups.

10. This identifying assumption is the Stable Unit Treatment Value Assumption (SUTVA), which states that, after controlling for observable variables, outcomes for the comparison group are identical to what those outcomes would have been for the treatment group had the treatment group not received the treatment.

Table 5.3 Impact of IN-SCT (T) on patterns of food consumption, compared to other PNSP4 beneficiaries (C2)

Variables	Cereals & Grains	Roots & Tubers	Legumes	Veggies	Fruits	Meat	Eggs	Fish	Milk	Oils & Fat	Sweets	Beverages
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
T vs C2	0.000***	-0.273***	0.144***	0.014	0.002	-0.003	0.025***	0.000	0.004	0.106*	0.107***	0.080
	(0.000)	(0.059)	(0.024)	(0.060)	(0.009)	(0.002)	(0.007)	(0.000)	(0.003)	(0.062)	(0.021)	(0.061)
Observations	638	638	638	638	638	638	638	638	638	638	638	638
T-PW vs C2-PW	0.000***	-0.367***	0.191***	0.005	-0.004	-0.009*	0.023**	0.000	0.003	0.111	0.070***	0.112
	(0.000)	(0.067)	(0.035)	(0.071)	(0.009)	(0.006)	(0.009)	(0.000)	(0.003)	(0.078)	(0.024)	(0.076)
Observations	431	431	431	431	431	431	431	431	431	431	431	431
T-PDS vs C2-PDS	0.000	-0.204	-0.033	0.095	0.014	0.000	0.000	0.000	0.007	0.110	0.066	0.174
	(0.000)	(0.140)	(0.054)	(0.111)	(0.010)	(0.000)	(0.000)	(0.000)	(0.007)	(0.126)	(0.065)	(0.121)
Observations	196	196	196	196	196	196	196	196	196	196	196	196
Baseline means												
IN-SCT (T)	0.955	0.057	0.200	0.664	0.016	0.000	0.018	0.000	0.007	0.537	0.136	0.764
	(0.207)	(0.233)	(0.401)	(0.473)	(0.126)	(0.000)	(0.133)	(0.000)	(0.084)	(0.499)	(0.343)	(0.425)
Other PSNP4 (C2)	0.862	0.388	0.041	0.649	0.034	0.007	0.007	0.000	0.000	0.433	0.052	0.683
	(0.346)	(0.488)	(0.199)	(0.478)	(0.180)	(0.086)	(0.086)	(0.000)	(0.000)	(0.496)	(0.223)	(0.466)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP2.

*** p<0.01, ** p<0.05, * p<0.1

Table 5.4 Impact of IN-SCT (T) on patterns of food consumption, compared to neighbouring nonbeneficiaries (C1)

Variables	Cereals & Grains	Roots & Tubers	Legumes	Veggies	Fruits	Meat	Eggs	Fish	Milk	Oils & Fat	Sweets	Beverages
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
T vs C1	0.000	0.029**	0.006	0.056	0.015	-0.001	0.002	0.000	-0.004	-0.020	0.016	0.032
	(0.000)	(0.014)	(0.041)	(0.044)	(0.010)	(0.002)	(0.010)	(0.000)	(0.005)	(0.045)	(0.031)	(0.037)
Observations	727	727	727	727	727	727	727	727	727	727	727	727
T-PW vs C1	0.000	0.022	-0.014	0.024	0.018	-0.005*	-0.005	0.000	0.001	0.003	0.012	0.022
	(0.000)	(0.017)	(0.047)	(0.048)	(0.012)	(0.003)	(0.012)	(0.000)	(0.004)	(0.049)	(0.037)	(0.040)
Observations	577	577	577	577	577	577	577	577	577	577	577	577
Baseline means												
IN-SCT (T)	0.955	0.057	0.200	0.664	0.016	0.000	0.018	0.000	0.007	0.537	0.136	0.764
	(0.207)	(0.233)	(0.401)	(0.473)	(0.126)	(0.000)	(0.133)	(0.000)	(0.084)	(0.499)	(0.343)	(0.425)
Nonbeneficiaries	0.973	0.046	0.284	0.684	0.022	0.005	0.041	0.000	0.035	0.600	0.173	0.778
(C1)	(0.162)	(0.210)	(0.451)	(0.466)	(0.146)	(0.073)	(0.197)	(0.000)	(0.184)	(0.491)	(0.379)	(0.416)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP2.

*** p<0.01, ** p<0.05, * p<0.1

5.2.2. Household consumption

The theory of change (Figure 1.2) predicts that IN-SCT households will increase their food and nonfood consumption relative to baseline and compared to other equally poor households, because the boost to their household income from cash transfers will allow them to purchase more food and nonfood items than before.

In the endline survey, households in the SNNP2 sample were asked about their food and nonfood consumption. For food consumption, the primary female respondent was asked to recall the quantity or value of all foods consumed by household members in the last 7 days, making it possible to extrapolate to a measure of monthly household food consumption per adult equivalent. Also, the primary male respondent answered questions about all nonfood expenditures by the household in the last 30 days.[11] Using the response to these questions, we developed measures of the value of monthly consumption per adult equivalent on food items, nonfood items and in total. Using the food consumption data, it was also possible to develop an estimate of the quantity of daily calorie consumption per adult equivalent in the household.

Estimates of the impact of IN-SCT on household consumption relative to consumption by PSNP4 beneficiaries in the C2 comparison group are presented in Table 5.5. Using consumption aggregates constructed from the raw data, we find no impact of IN-SCT on nonfood, food or total expenditure per adult equivalent in the T vs C2 comparison (Columns 1-3). Consumption aggregates are often noisy variables, containing substantial measurement error including substantial outliers. To reduce the effect of outliers on the impact estimates for consumption, we removed a small number of outlier observations by trimming from the sample observations with consumption levels more than 3 s.d. above the mean. This procedure removed 6-12 household observations from the estimates. We then took the natural logarithm of the consumption variables to further reduce the effect of very large values. Columns 4-6 of Table 5.5 present impact estimates for the consumption aggregates on the trimmed sample in natural log form. Those results show that the project significantly reduced the value of food consumption and total consumption relative to other PSNP4 beneficiary households. This result is not expected and is not easily explained by knowledge of the program. We cannot rule out that this negative impact on consumption may be due to bias in the matching model. We also estimate the impact of IN-SCT on daily calorie consumption per adult equivalent (Column 7) and find no impact of the program on this consumption measure.

Table 5.5 also reports impact estimates on consumption for Public Works clients in the SNNP2 sample. Estimates from consumption measures constructed using the raw data show statistically significant negative impacts on food consumption and total consumption per adult equivalent, and estimates on the logged trimmed measures show a negative impact on total consumption. In the sample comparing impacts on PDS clients, there are negative impacts on nonfood consumption and total consumption per adult equivalent in the logged, trimmed sample.

When comparing IN-SCT clients to comparison group households in the same community but not in the program (Table 5.6), there is no significant impact of IN-SCT on any of these consumption outcomes, except for a negative impact on food consumption per adult equivalent in the logged, trimmed sample.

11. For the food consumption module, the primary male respondent could answer questions for the food consumption module if the primary female respondent was not available. Similarly, the primary female respondent could answer questions on nonfood consumption if the primary male respondent was not available.

Table 5.5 Impact of IN-SCT (T) on household consumption, compared to other PNSP4 beneficiaries (C2)

Variables	Monthly nonfood expenditure per adult equivalent, raw data	Monthly food expenditure per adult equivalent, raw data	Monthly total expenditure per adult equivalent, raw data	Log monthly nonfood expenditure per adult equivalent, trimmed data	Log monthly food expenditure per adult equivalent, trimmed data	Log monthly total expenditure per adult equivalent, trimmed data	Daily caloric availability per adult equivalent, trimmed data
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
T vs C2	4.003	-311.818	-302.248	0.044	-0.421***	-0.440***	-97.872
	(17.791)	(219.665)	(222.564)	(0.128)	(0.162)	(0.105)	(273.553)
Observations	627	627	627	626	620	620	624
T-PW vs C2-PW	18.069	-403.598**	-382.362**	0.056	-0.267	-0.315***	92.857
	(20.599)	(192.313)	(193.301)	(0.141)	(0.164)	(0.106)	(349.858)
Observations	427	427	427	425	422	422	426
T-PDS vs C2-PDS	-60.418	-653.948	-713.392	-0.535**	-0.588	-0.776***	25.585
	(38.115)	(541.910)	(562.815)	(0.260)	(0.432)	(0.287)	(541.672)
Observations	191	191	191	191	188	188	189
Baseline means							
IN-SCT (T)	59.867	212.027	271.787	--	--	--	2914.662
	(57.728)	(143.762)	(175.368)				(1,560.843)
Other PSNP4 (C2)	46.419	192.777	239.196	--	--	--	2370.087
	(43.620)	(144.029)	(164.271)				(1,473.475)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP2. Baseline means for logged, trimmed expenditure variables not reported. Baseline means of daily caloric availability per adult equivalent are not trimmed.

*** p<0.01, ** p<0.05, * p<0.1

Table 5.6 Impact of IN-SCT (T) on household consumption, compared to neighbouring nonbeneficiaries (C1)

Variables	Monthly nonfood expenditure per adult equivalent, raw data	Monthly food expenditure per adult equivalent, raw data	Monthly total expenditure per adult equivalent, raw data	Log monthly nonfood expenditure per adult equivalent, trimmed data	Log monthly food expenditure per adult equivalent, trimmed data	Log monthly total expenditure per adult equivalent, trimmed data	Daily caloric availability per adult equivalent, trimmed data
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
T vs C1	6.585	-37.156	-30.644	-0.000	-0.160**	-0.122*	-306.338
	(19.952)	(22.783)	(30.319)	(0.078)	(0.072)	(0.068)	(292.977)
Observations	720	720	720	716	720	720	720
T-PW vs C1	6.728	-28.565	-21.485	0.032	-0.100	-0.078	-147.563
	(22.306)	(27.934)	(36.096)	(0.089)	(0.084)	(0.080)	(372.112)
Observations	574	574	574	570	574	574	574
Baseline means							
IN-SCT (T)	59.867	212.027	271.787	--	--	--	2914.662
	(57.728)	(143.762)	(175.368)				(1,560.843)
Nonbeneficiaries (C1)	83.467	252.987	336.229				3224.47
	(75.544)	(192.422)	(235.366)				(1,701.358)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP2. Baseline means for logged, trimmed expenditure variables not reported. Baseline means of daily caloric availability per adult equivalent are not trimmed.

*** p<0.01, ** p<0.05, * p<0.1

Overall, we find no evidence that IN-SCT had positive impacts on household nonfood, food or total consumption. Some estimates indicate that the impact of IN-SCT on consumption was negative. As noted above, this result is hard to reconcile with the expected impacts of this enhanced transfer program. Most of these negative, significant impacts were found in the logged, trimmed sample and it may be that this trimming approach was not balanced across groups in the analysis (T, C1 and C2). However, the impact estimates are also mostly negative in the results reported from the raw data, but they are less precisely estimated due to substantial measurement error. Nonetheless, based on the evidence provided from two methods of constructing the consumption aggregates, estimates from two comparison groups, and disaggregated impacts measured for all clients as well as PW and PDS clients, we conclude that IN-SCT had no beneficial effects on the total value of household consumption, on food and nonfood consumption or on calories consumed.

5.2.3. Assets

Using survey data from SNNP2 on assets owned by the household, we constructed indices of asset ownership across the following categories: livestock assets, productive assets, consumer durables, and all assets (all three combined).[12] Estimates of the impact of IN-SCT on asset holdings compared to PNSP4 clients living in other woredas (C2) are presented in Table 5.7. We found that the IN-SCT program significantly increased holdings of livestock, productive and total assets, but reduced holdings of consumption assets, compared to other PSNP4 beneficiaries. These results indicate that IN-SCT had a positive effect overall on asset holdings, but also changed the composition of asset holdings, toward livestock and productive assets and away from consumer durables. It is not clear why IN-SCT clients reduced holdings of consumer durables, but this pattern of effects reflects a change in asset portfolio that is somewhat more forward looking and savings oriented.

We also tested the probability that the household was in the poorest quartile in asset holdings (Column 5). We found that the IN-SCT program reduced the probability that a household was in the poorest quartile of the asset distribution by 15.3 percentage points.

Next, we turn to the comparison of the Public Works beneficiaries and find a similar pattern of mostly positive effects. IN-SCT Public Works beneficiaries experienced a growth in livestock, productive assets and total asset holdings compared to C2 households (Table 5.7). For Public Works households, there is no significant negative impact on consumer durables as there is with the program overall. When restricting the sample to Permanent Direct Support beneficiaries, we find no significant impacts of the program, except for the significant negative impact of the PDS program on consumer durables. This suggests that the negative impact on consumer durables estimated for all IN-SCT clients is driven by the behavior of PDS clients. Public Works clients did not reduce holdings of consumer durables, but they did not increase them either, in response to the program. It is not clear what is causing these negative impacts on consumer durables assets for PDS households.

Using the C1 comparison group yields a very different pattern of effects, as shown in Table 5.8, with significant negative effects of IN-SCT appearing for three of the four asset holdings, both for estimates among all IN-SCT clients and PW clients.

12. Each asset index was constructed by principal components analysis (PCA) using both baseline and endline asset ownership data. PCA aggregates assets owned into a quantity index, accounting for observed correlations in asset ownership in the data. Under PCA, assets that are complements or are typically owned together (e.g., a hoe and a shovel) get less weight as individual assets in the index than assets that are not generally owned together. An asset index was constructed using the baseline data for each category, and then the weights from the baseline PCA were used in constructing the endline asset indices. This assures that baseline and endline asset indices are comparable.

Table 5.7 Impact of IN-SCT (T) on asset holdings, compared to other PNSP4 beneficiaries (C2)

Variables	Index of livestock assets (baseline weights)	Index of production assets (baseline weights)	Index of consumption assets (baseline weights)	Index of all assets (baseline weights)	Poorest quartile - Asset index from baseline
	(1)	(2)	(3)	(4)	(5)
T vs C2	0.265***	0.636***	-0.199**	0.541***	-0.153***
	(0.054)	(0.083)	(0.100)	(0.078)	(0.051)
Observations	638	638	638	637	637
T-PW vs C2-PW	0.258***	0.773***	-0.020	0.689***	-0.265***
	(0.059)	(0.121)	(0.112)	(0.114)	(0.072)
Observations	432	432	432	431	431
T-PDS vs C2-PDS	0.264*	0.346	-0.453**	0.260	0.043
	(0.144)	(0.245)	(0.207)	(0.219)	(0.133)
Observations	196	196	196	196	196
Baseline means					
IN-SCT (T)	-0.193	0.185	-0.302	0.000	0.236
	(1.267)	(2.649)	(1.579)	(2.713)	(0.425)
Other PSNP4 (C2)	-0.672	-1.965	0.021	-2.093	0.433
	(0.782)	(2.161)	(1.462)	(2.269)	(0.496)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP2.

*** p<0.01, ** p<0.05, * p<0.1

Table 5.8 Impact of IN-SCT (T) on asset holdings, compared to neighbouring nonbeneficiaries (C1)

Variables	Index of livestock assets (baseline weights)	Index of production assets (baseline weights)	Index of consumption assets (baseline weights)	Index of all assets (baseline weights)	Poorest quartile - Asset index from baseline
	(1)	(2)	(3)	(4)	(5)
T vs C1	-0.263***	-0.132	-0.147*	-0.189**	0.009
	(0.074)	(0.092)	(0.085)	(0.087)	(0.042)
Observations	728	728	728	727	727
T-PW vs C1	-0.303***	-0.133	-0.171**	-0.199**	-0.011
	(0.071	(0.101)	(0.086)	(0.095)	(0.046)
Observations	577	578	578	577	577
Baseline means					
IN-SCT (T)	-0.193	0.185	-0.302	0.000	0.236
	(1.267)	(2.649)	(1.579)	(2.713)	(0.425)
Nonbeneficiaries (C1)	0.767	1.130	0.434	1.495	0.141
	(2.928)	(2.510)	(2.100)	(3.221)	(0.349)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP2.

*** p<0.01, ** p<0.05, * p<0.1

5.2.4. Mother's nutrition knowledge

The nutrition knowledge of women participating in the IN-SCT is expected to improve, thanks to BCC sessions on nutrition with IN-SCT clients facilitated by HEWs or SWs.

Most female respondents in the SNNP2 sample were the mother of a young child (under age 5). We asked these women a series of twenty questions about breastfeeding, nutrition and infant and young child feeding behaviors. Women in IN-SCT should have learned this information during project training sessions and in visits with HEWs and SWs. We estimated the impact of IN-SCT on nutrition knowledge for women in the SNNP2 sample. Results in Table 5.9 show that IN-SCT led to a significant increase in women's nutrition knowledge scores by 6.1 percentage points in the T vs C2 comparison. Estimated impacts on PW and PDS clients are positive, but are somewhat smaller and not statistically significant. When IN-SCT clients are compared to neighbouring households that are not in the program (T vs C1), there is no impact of IN-SCT on nutrition knowledge. It is possible that the absence of effects in this comparison is driving by local spillover effects of information that is being provided at local health clinics, through HEWs or through sharing of information by IN-SCT clients with their neighbors.

Table 5.9 Impact of IN-SCT (T) on mother's knowledge of breastfeeding and IYCF behaviors, compared to other PNSP4 beneficiaries (C2)

Variables	Proportion of nutrition knowledge questions that were answered correctly
	(1)
T vs C2	0.061**
	(0.029)
Observations	638
T-PW vs C2-PW	0.040
	(0.032)
Observations	432
T-PDS vs C2-PDS	0.056
	(0.054)
Observations	196
Baseline means	
IN-SCT (T)	0.492
	(0.258)
Other PSNP4 (C2)	0.498
	(0.249)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP2.

*** p<0.01, ** p<0.05, * p<0.1

Table 5.10 Impact of IN-SCT (T) on mother's knowledge of breastfeeding and IYCF behaviors, compared to neighbouring nonbeneficiaries (C1)

Variables	Proportion of nutrition knowledge questions that were answered correctly
	(1)
T vs C1	-0.013
	(0.017)
Observations	728
T-PW vs C1	-0.018
	(0.019)
Observations	578
Baseline means	
IN-SCT (T)	0.492
	(0.258)
Nonbeneficiaries (C1)	0.547
	(0.233)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP2.

*** p<0.01, ** p<0.05, * p<0.1

5.2.5.Child education and child protection

One of the main co-responsibilities of households participating in IN-SCT is to make sure that school age children are enrolled and attending school. In the qualitative assessments (see below), SCT coordinators in both regions emphasized the importance of SCT's support to schooling. We estimated the impact of IN-SCT on school enrollment and attendance for children in the SNNP2 sample in two age groups: 7-14 (primary school age) and 15-18 (secondary school age).

Impacts of IN-SCT on schooling in the T vs C2 comparison are presented in Table 5.11. The estimates show no impact of the IN-SCT on school enrollment when children in IN-SCT client households are compared to children in PSNP4 households in other woredas, either for children of primary school age (7-14) or secondary school age (15-18).

Impacts on school attendance show an interesting pattern. Households with children age 7-14 in the IN-SCT communities report that their children's school was open nearly one half additional day on average in the past week than households in the matched comparison group of PSNP4 clients. (In the unmatched comparison group of PSNP4 households (C2), schools were open 4.67 days per week on average.) The activities of SCT service providers, whether coordinators, HEWs, or SWs, appears to have caused schools to remain open on more days. This had a weakly significant effect on child school attendance for children age 7-14, which increased by one quarter day on average in the past week. Because the school attendance response was smaller than the school supply response of being open on more school days, the net effect of IN-SCT on the school attendance rate is negative among children age 7-14. We expect that school officials and education policy makers will be encouraged by this result, as children ended up spending more time in school, even though the attendance rate fell. Among children age 15-18, there is a weakly significant positive effect on having the school open more days, but there is no similar attendance effect. Impacts in the PW sample follow a similar pattern.

When schooling outcomes for children in IN-SCT households are compared to those of neighbouring children not in the program (Table 5.12), there is no impact of IN-SCT on enrollment or attendance. The only significant result is an increase in the number of days the school was open in the last 7 days for children age 15-18 in PW client households.

Next, we examine the impact of IN-SCT on child protection, specifically on measures of child labor. Targeted transfer programs like PSNP4 may reduce child labor because there is less demand on children's time to support income generating activities or household tasks. In addition, where the program increased school attendance, time spent in child labor should fall. Still, the labor requirements of PW in the PSNP means that children may be needed to substitute for adult labor either at household tasks, on farm, or in other activities. Although children are not supposed to work on public works projects, children sometimes do so to help meet the household labor requirement for PW transfers. Thus, the potential impact of the PSNP4 on child labor is ambiguous. In the IN-SCT program, there was an explicit focus on increasing child schooling and reducing child labor, so we expect that the impact of IN-SCT should be to reduce child labor, particularly relative to the PSNP4 alone. We focus on children in two age groups: ages 5-11 and ages 12-14. These age groupings are the ones recommended by UNICEF for studying child labor.

The impact of IN-SCT on child labor for children in client households compared to children in PSNP4 households is presented in Table 5.13. IN-SCT led to a weakly significant reduction in hours worked in economic activities (farming, tending cattle, or work in a business) by 1.7 hours per week for children age 5-11 and led to a significant reduction in hours worked in economic activities by 2.0 hours per week for children age 12-14. On average, IN-SCT reduced hours worked in economic activities by 1.6 hours per week for all children age 5-14 years. Estimates of the impact of IN-SCT on hours worked in domestic activities (fetching water, cleaning the home, caring for children) do not yield any significant impacts. The estimates are

negative, but none are significant. We also use UNICEF's definition of child labor for children in these age ranges to construct a binary variable for child labor: "(a) children 5 to 11 years of age that during the week preceding the survey did at least one hour of economic activity or at least 28 hours of domestic work, and (b) children 12 to 14 years of age that during the week preceding the survey did at least 14 hours of economic activity or at least 42 hours of economic activity and domestic work combined." Columns 7-9 of Table 5.13 show that IN-SCT did not have an impact on the prevalence of child labor in either of these age groups or in the combined group of children age 5-14. Estimates for the impact of PW within IN-SCT in Table 5.13 follow the same pattern as for IN-SCT as a whole.

When we estimate the impact of IN-SCT relative to no program in the T vs C1 comparison, we find no impact of IN-SCT on child labor for any of the outcomes considered or for the PW subgroup of IN-SCT beneficiaries (Table 5.14).

Table 5.11 Impact of IN-SCT (T) on child education, compared to other PNSP4 beneficiaries (C2)

Variables	Proportion children age 7-14 enrolled in last year	Proportion children age 15-18 enrolled in last year	Days school open in last week, children age 7-14	Days attended school in last week, children age 7-14	Attendance rate of children age 7-14	Days school open in last week, children age 15-18	Days attended school in last week, children age 15-18	Attendance rate of children age 15-18
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
T vs C2	-0.010	-0.112	0.446***	0.253*	-0.033**	0.241*	0.093	-0.026
	(0.007)	(0.075)	(0.136)	(0.149)	(0.013)	(0.141)	(0.192)	(0.025)
Observations	434	289	409	409	408	256	256	256
T-PW vs C2-PW	-0.009	-0.130	0.368**	0.124	-0.042***	0.270	0.306	0.011
	(0.010)	(0.087)	(0.172)	(0.193)	(0.016)	(0.175)	(0.214)	(0.028)
Observations	296	205	280	280	280	175	175	175
Baseline means								
IN-SCT (T)	0.954	0.757	--	--	--	--	--	--
	(0.210)	(0.430)						
Other PSNP4 (C2)	0.960	0.838	--	--	--	--	--	--
	(0.197)	(0.370)						

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP2. Data on school openings and child attendance rates were not collected at baseline.

*** p<0.01, ** p<0.05, * p<0.1

13. https://www.unicef.org/infobycountry/stats_popup9.html

Table 5.12 Impact of IN-SCT (T) on child education, compared to neighbouring nonbeneficiaries (C1)

Variables	Proportion children age 7-14 enrolled in last year	Proportion children age 15-18 enrolled in last year	Days school open in last week, children age 7-14	Days attended school in last week, children age 7-14	Attendance rate of children age 7-14	Days school open in last week, children age 15-18	Days attended school in last week, children age 15-18	Attendance rate of children age 15-18
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
T vs C2	-0.008	0.006	0.037	-0.016	-0.010	0.035	0.025	-0.001
	(0.007)	(0.035)	(0.051)	(0.089)	(0.015)	(0.070)	(0.151)	(0.029)
Observations	488	309	455	455	455	261	261	261
T-PW vs C2-PW	-0.009	-0.043	0.012	-0.066	-0.015	0.121**	0.217	0.020
	(0.009)	(0.042)	(0.048)	(0.095)	(0.017)	(0.059)	(0.165)	(0.033)
Observations	387	240	361	361	361	201	201	201
Baseline means								
IN-SCT (T)	0.954	0.757	--	--	--	--	--	--
	(0.210)	(0.430)						
Other PSNP4 (C2)	0.944	0.824	--	--	--	--	--	--
	(0.230)	(0.383)						
				--	--	--	--	--

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP2. Data on school openings and child attendance rates were not collected at baseline.

*** p<0.01, ** p<0.05, * p<0.1

Table 5.13 Impact of IN-SCT (T) on child labor in the last week, compared to other PNSP4 beneficiaries

Variables	Hours spent on economic activities, children age 5-11	Hours spent on economic activities, children age 12-14	Hours spent on economic activities, children age 5-14	Hours spent on domestic activities, children age 5-11	Hours spent on domestic activities, children age 12-14	Hours spent on domestic activities, children age 5-14	Proportion of children age 5-11 doing child labor	Proportion of children age 12-14 doing child labor	Proportion of children age 5-14 doing child labor
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
T vs C2	-1.689*	-2.001**	-1.638**	-1.204	-1.298	-0.498	-0.090	0.006	-0.046
	(0.950)	(0.852)	(0.729)	(1.079)	(1.471)	(0.747)	(0.079)	(0.011)	(0.060)
Observations	475	307	549	475	307	549	475	307	520
T-PW vs C2-PW	-1.492***	-1.934**	-1.340***	-0.917	-0.563	-0.980	-0.040	0.003	0.047
	(0.513)	(0.853)	(0.451)	(1.252)	(1.320)	(0.887)	(0.089)	(0.003)	(0.051)
Observations	330	223	373	330	223	373	330	223	358

Standard errors in parentheses. Estimates from sample SNNP2. Data on child labor were not collected at baseline, so baseline means are not reported.

*** p<0.01, ** p<0.05, * p<0.1

Table 5.14 Impact of IN-SCT (T) on child labor in the last week, compared to neighbouring nonbeneficiaries (C1)

Variables	Hours spent on economic activities, children age 5-11	Hours spent on economic activities, children age 12-14	Hours spent on economic activities, children age 5-14	Hours spent on domestic activities, children age 5-11	Hours spent on domestic activities, children age 12-14	Hours spent on domestic activities, children age 5-14	Proportion of children age 5-11 doing child labor	Proportion of children age 12-14 doing child labor	Proportion of children age 5-14 doing child labor
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
T vs C1	0.010	-0.545	0.017	0.278	-0.953	0.208	-0.003	0.002	0.010
	(0.186)	(0.425)	(0.205)	(0.355)	(0.682)	(0.328)	(0.046)	(0.002)	(0.035)
Observations	566	346	630	566	346	630	566	346	607
T-PW vs C1	0.046	-0.468	0.071	0.275	0.523	0.652*	-0.012	0.003	-0.003
	(0.205)	(0.512)	(0.226)	(0.407)	(0.658)	(0.354)	(0.049)	(0.003)	(0.040)
Observations	452	277	499	452	277	499	452	277	483

Standard errors in parentheses. Estimates from sample SNNP2. Data on child labor were not collected at baseline, so baseline means are not reported.

*** p<0.01, ** p<0.05, * p<0.1

5.3. Nutritional status and health (SNNP1)

According to the theory of change, the nutritional status of children in IN-SCT households (as measured by anthropometric monitoring) is expected to improve for several reasons, including higher household spending on food and health care services, BCC messaging on infant feeding practices, reduced prevalence of diarrheal disease, more diversified food production including in home gardens and school gardens, and healthier and more diversified diets.

Using the data from the SNNP1 sample, we investigate the impact of IN-SCT on child anthropometry, child feeding and breastfeeding practices, connection to health services, and nutrition knowledge. Recall that the SNNP1 sample is a repeated cross section sample of children in this age group. Matching estimates are constructed by PSM using the methods of Blundell and Dias (2009) in which treated individuals or households at endline are matched to all other sample groups (treated baseline, comparison baseline and comparison endline) to create the weights needed to construct the difference in outcomes across these groups weighted by the predicted probability of being in the treated endline group.

5.3.1. Child anthropometry

In each survey round for the SNNP1 sample, we collected data on height and weight for children age 6-23 months. We used those data to construct measures of child anthropometry, including height-for-age z-scores (HAZ), stunting prevalence (HAZ<-2), weight-for-height z-scores (WHZ), wasting prevalence (WHZ<-2), weight-for-age z-scores (WAZ) and underweight prevalence (WAZ<-2).

Table 5.15 shows the impact of the IN-SCT program on children in client households compared to children in the other PSNP4 woredas. The estimates show no impact on child anthropometry, except for a statistically significant negative impact on HAZ. It is not clear what may be responsible for this negative effect on HAZ.

Table 5.16 shows the impact of the IN-SCT program on children in client households compared to children in neighbouring households that are not in the program. There is no statistically significant impact on child anthropometry. The estimates show a weakly significant effect of IN-SCT in reducing the prevalence of underweight children, by 8.4 percentage points, but this effect is not significant at conventional levels.

The weak effects on anthropometry may arise in part because children age 6-23 months in TDS households may not have been exposed to the program for very long.

Table 5.15 Impact of IN-SCT (T) on child anthropometry for children age 6-23 months, compared to children in other PNSP4 beneficiary households (C2)

Variables	Height-for-age (HAZ) score	Proportion of stunted children	Weight-for-height (WHZ)	Proportion of wasted children	Weight-for-age (WAZ)	Proportion of underweight children	Child BMI score (BMIZ)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
T vs C2	-0.441**	0.054	-0.134	-0.037	-0.290*	0.020	1.967
	(0.214)	(0.057)	(0.164)	(0.033)	(0.158)	(0.045)	(3.013)
Observations	1,390	1,390	1,404	1,404	1,441	1,440	1,454
Baseline means							
IN-SCT (T)	-1.549	0.446	-0.575	0.206	-1.397	0.361	-0.331
	(2.216)	(0.498)	(1.737)	(0.405)	(1.594)	(0.481)	(2.838)
Other PSNP4 (C2)	-1.243	0.364	-0.351	0.164	-1.07	0.246	0.057
	(2.236)	(0.482)	(1.810)	(0.370)	(1.470)	(0.431)	(2.812)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP1.

*** p<0.01, ** p<0.05, * p<0.1

Table 5.16 Impact of IN-SCT (T) on child anthropometry for children age 6-23 months, compared to children in neighbouring nonbeneficiary households (C1)

Variables	Height-for-age (HAZ) score	Proportion of stunted children	Weight-for-height (WHZ)	Proportion of wasted children	Weight-for-age (WAZ)	Proportion of underweight children	Child BMI score (BMIZ)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
T vs C1	0.089	-0.066	0.216	-0.056	0.256	-0.084*	-2.163
	(0.192)	(0.056)	(0.165)	(0.035)	(0.158)	(0.044)	(5.207)
Observations	1,535	1,540	1,557	1,560	1,582	1,583	1,595
Baseline means							
IN-SCT (T)	-1.549	0.446	-0.575	0.206	-1.397	0.361	-0.331
	(2.216)	(0.498)	(1.737)	(0.405)	(1.594)	(0.481)	(2.838)
Nonbeneficiaries (C1)	-1.245	0.368	-0.369	0.154	-1.035	0.24	-0.231
	(2.089)	(0.483)	(1.697)	(0.361)	(1.508)	(0.428)	(2.058)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP1.

*** p<0.01, ** p<0.05, * p<0.1

5.3.2. Child feeding and breastfeeding

Next, we examine the impact of IN-SCT on infant and young child feeding (IYCF) practices. Compared to children in a matched sample of PSNP4 households in other woredas (C2), IN-SCT had no impact on the proportion of children receiving a minimum acceptable diet or on the proportion of children with a minimum dietary diversity (Table 5.17). This is not entirely surprising as the share of children meeting either of these criteria at baseline was low. IN-SCT did affect the composition of child diets, however, causing an increase in the proportion of children that consumed milk (7.1%) or vegetables (12.7%) in the last 24 hours, and a small decrease in the proportion of children consuming eggs (4.6%) in the last 24 hours. The IN-SCT program had a positive and significant impact on two measures of breastfeeding behavior: whether breastmilk was the first food given to the child immediately after birth (9.3%) and whether the child received colostrum (28.1%).

Comparing children in IN-SCT households to those in neighbouring households not in the program (C1), we find no impact of IN-SCT on any of these measures of child diets and breastfeeding behavior (Table 5.18).

Table 5.17 Impact of IN-SCT (T) on child feeding practices for children age 6-23 months and breastfeeding practices, compared to children in other PNSP4 beneficiary households (C2)

Variables	IYCF minimum acceptable diet	IYCF minimum dietary diversity (>=4 of 7)	Child consumed milk	Child consumed eggs	Child consumed veggies	Child consumed meat	Breast milk was first put in the baby's mouth immediately after birth	Child received colostrum
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
T vs C2	0.003	-0.007	0.071**	-0.046**	0.127***	0.009	0.093***	0.281***
	(0.008)	(0.017)	(0.030)	(0.020)	(0.029)	(0.006)	(0.026)	(0.049)
Observations	1,345	1,354	1,350	1,350	1,350	1,350	1,835	1,509
Baseline means								
IN-SCT (T)	0.006	0.025	0.042	0.042	0.082	0.002	0.906	1.327
	(0.079)	(0.157)	(0.201)	(0.201)	(0.274)	(0.046)	(0.293)	(0.544)
Other PSNP4 (C2)	0.008	0.013	0.068	0.018	0.152	0.005	0.958	1.304
	(0.088)	(0.114)	(0.252)	(0.134)	(0.359)	(0.072)	(0.201)	(0.514)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP1.

*** p<0.01, ** p<0.05, * p<0.1

Table 5.18 Impact of IN-SCT (T) on child feeding practices for children age 6-23 months and breastfeeding practices, compared to children in neighbouring nonbeneficiary households (C1)

Variables	IYCF minimum acceptable diet	IYCF minimum dietary diversity (>=4 of 7)	Child consumed milk	Child consumed eggs	Child consumed veggies	Child consumed meat	Breast milk was first put in the baby's mouth immediately after birth	Child received colostrum
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
T vs C1	-0.003	-0.006	-0.010	0.005	0.012	-0.005	-0.032	-0.050
	(0.009)	(0.013)	(0.030)	(0.019)	(0.028)	(0.008)	(0.023)	(0.047)
Observations	1,501	1,511	1,508	1,507	1,507	1,508	1,990	1,669
Baseline means								
IN-SCT (T)	0.006	0.025	0.042	0.042	0.082	0.002	0.906	1.327
	(0.079)	(0.157)	(0.201)	(0.201)	(0.274)	(0.046)	(0.293)	(0.544)
Nonbeneficiaries (C1)	0.006	0.017	0.058	0.045	0.076	0.000	0.939	1.344
	(0.080)	(0.131)	(0.235)	(0.209)	(0.265)	(0.000)	(0.239)	(0.511)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP1.

*** p<0.01, ** p<0.05, * p<0.1

5.3.3. Connection to health services

The theory of change (see Figure 1.2 above) predicts enhanced access to basic services through co-responsibilities and referrals, specifically increased uptake of primary health care services among pregnant and lactating women (PLW) in IN-SCT households.

Participating in the IN-SCT program led to a weakly significant increase in the proportion of children who were registered at birth, when compared to children in PSNP4 households in other woredas (C2) (Table 5.19). However, children in IN-SCT households had a much lower probability of having a health card, by 27.3 percent, and this result is statistically significant. IN-SCT led to a significant increase in the share of women that received any antenatal care during pregnancy by 10.6 percentage points, but did not have a significant effect on the number of antenatal care visits.[14] The positive impact on participation in antenatal care is consistent with the findings from the qualitative study that IN-SCT support for access to antenatal care was effective (see section 4.6).

When comparing children in IN-SCT households to children in neighbouring households not in the program (C1), IN-SCT appears to significantly reduce birth registrations (12.9%) and the probability of having a health card (10.8%). The program had no impact on antenatal care visits in this comparison. We cannot rule out that children in the C1 comparison group are in households that are better off in some unobservable way, leading to bias in these estimates.

Table 5.19 Impact of IN-SCT (T) on connection to health services, compared to other PNSP4 beneficiary households (C2)

Variables	Children from client households registered at birth	Child has health card	Mother had any antenatal care	Antenatal care visits
	(2)	(3)	(3)	(4)
T vs C2	0.103*	-0.273***	0.106**	0.066
	(0.057)	(0.049)	(0.049)	(0.317)
Observations	1,445	1,835	1,417	1,368
Baseline means				
IN-SCT (T)	0.464	0.628	0.761	2.984
	(0.499)	(0.484)	(0.427)	(2.061)
Other PSNP4 (C2)	0.500	0.644	0.780	3.25
	(0.501)	(0.479)	(0.415)	(2.093)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP1.

*** p<0.01, ** p<0.05, * p<0.1

14. The impact of IN-SCT on participation in postnatal care sessions was not assessed in the quantitative evaluation, though the overall share women receiving any postnatal care after a birth was 84.2 percent in the quantitative endline survey. Access to postnatal care was addressed in more detail in the qualitative assessments.

Table 5.20 Impact of IN-SCT (T) on connection to health services, compared to neighbouring nonbeneficiary households (C1)

Variables	Children from client households registered at birth	Child has health card	Mother had any antenatal care	Antenatal care visits
	(2)	(3)	(3)	(4)
T vs C1	-0.129**	-0.108**	0.003	0.097
	(0.061)	(0.049)	(0.042)	(0.238)
Observations	1,535	1,990	1,515	1,443
Baseline means				
IN-SCT (T)	0.464	0.628	0.761	2.984
	(0.499)	(0.484)	(0.427)	(2.061)
Nonbeneficiaries (C1)	0.477	0.629	0.795	2.986
	(0.500)	(0.483)	(0.404)	(2.108)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP1.

*** p<0.01, ** p<0.05, * p<0.1

5.3.4. Nutrition knowledge

As in the SNNP2 sample, we asked women in the SNNP1 sample of households with children age 6-23 months old or pregnant and lactating women to answer 20 questions on child breastfeeding, nutrition and feeding practices. We estimated the impact of IN-SCT on the proportion of these questions that women answered correctly. We found that IN-SCT did not improve women's knowledge scores in the SNNP1 sample when compared to a matched sample of women in PSNP4 client households in other woredas (Table 5.21) or to a matched sample of women in neighbouring households who are not in the program (Table 5.22). It may be that women in the comparison groups of the SNNP1 sample households, who were pregnant or had young children, had other sources of information, which made their knowledge scores similar to those in the IN-SCT group.

Table 5.21 Impact of IN-SCT (T) on nutrition knowledge, compared to other PNSP4 beneficiary households (C2)

Variables	Proportion of nutrition knowledge questions that were answered correctly
	(1)
T vs C2	-0.022
	(0.020)
Observations	1,835
Baseline means	
IN-SCT (T)	0.505
	(0.223)
Other PSNP4 (C2)	0.514
	(0.187)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP1.

*** p<0.01, ** p<0.05, * p<0.1

Table 5.22 Impact of IN-SCT (T) on nutrition knowledge, compared to neighbouring nonbeneficiary households (C1)

Variables	Proportion of nutrition knowledge questions that were answered correctly
	(1)
T vs C1	-0.016
	(0.021)
Observations	1,989
Baseline means	
IN-SCT (T)	0.505
	(0.223)
Nonbeneficiaries (C1)	0.512
	(0.210)

Standard errors in parentheses for impact estimates. Standard deviations in parentheses for baseline means. Estimates from sample SNNP1.

*** p<0.01, ** p<0.05, * p<0.1

5.4. Clients' and service providers' perceptions of impact

5.4.1. Nutrition

Impacts on nutrition were explored in terms infant feeding practices and child nutrition.

Qualitative findings with respect to infant feeding practices, and breastfeeding in particular, indicate that perceptions of change are more positive than attributable impacts that emerge from the quantitative data, with the exception of breastfeeding practices which are positively affected in the IN-SCT/PSNP4 comparison. This finding of positive perceptions in IN-SCT woredas with less positive experiences in PSNP woredas suggests considerable program impact. This is substantiated for breastfeeding practices, but not for other feeding practices in the quantitative data.

Key informants at federal and regional levels believe that PSNP4 and IN-SCT have achieved positive impacts on infant feeding behavior, through two programming innovations:

- **Awareness raising:** *"Our intervention has improved knowledge of HEWs through trainings and BCC sessions for the TDS and other PSNP clients. Lactating mothers have improved their understanding on childcare due to BCC sessions" [Federal-KII-Concern]. "BCC sessions provide information about breastfeeding and other things on nutrition. Because of this, awareness has been created"* **[OR-KII-SCT].**
- **Releasing mothers from Public Works:** *"Lactating mothers were freed from Public Works implementation and now have adequate time to breast-feed their kids"* **[Federal-KII-Concern].**

Two concerns were also raised. Firstly: *"the focus is mostly on children – there is not enough focus on women's nutrition"* **[SN-KII-SCT].** Secondly, awareness raising might not have led to behavior change: *"Our engagement so far was mainly ToT trainings on BCC and nutrition at regional and woreda level and this not cascaded to DAs and HEWs in majority of woredas. Hence, we expected very limited or no improvement in infant feeding or child nutrition because of PSNP4"* **[OR-KII-FS].**

At the woreda level, key informants in IN-SCT woredas affirmed that positive behavior change has occurred in infant feeding following the awareness raising campaign through PSNP4 and IN-SCT, and the transition of pregnant and lactating women from Public Works to Temporary Direct Support.

> "There is positive change due to the health education (BCC) provided by HEWs. There are also posters at health posts that show about breastfeeding. Now, mothers are breastfeeding children properly. Although the health education was there in the past due to the introduction of the health extension program, it has been strengthened by IN-SCT" **[OR-AT-KII-PSNP].**

> "I think every woman practices exclusive breastfeeding. The BCC sessions provided by the HEWs increased the knowledge of the clients, and the co-responsibilities follow-ups also contributed to practicing it" **[SN-H-KII-DA].**

> "Lactating mothers are only giving breast-milk to their children until 6 months. They don't even give water" **[SN-H-KII-SW].**

> "The project had a positive impact because women's transition from PW to TDS helped women to get sufficient time to provide exclusive breastfeeding until 6 months of age" **[OR-AT-KII-DA].**

Key informants in PSNP4 woredas (without IN-SCT) were less positive about change in their areas.

> "We don't claim improved infant feeding or child nutrition among PSNP beneficiaries" **[OR-AN-KII-PSNP].**

> "Actually, we didn't do any intervention to enhance this behavior, but I think the community's awareness increased through mass media" **[SN-KG-KII-PSNP].**

> "PSNP4 has not implemented anything related to infant feeding in this woreda, and hence no impact" **[OR-AN-KII-SP].**

> "There is a positive change, but not necessarily by PSNP. The change is due to work by regular health programs, NGOs work and radio messages" **[SN-KG-KII-SP].**

Program participants confirmed that not only has their awareness of good infant feeding behavior improved, but that their behavior in this regard has also changed – specifically, that most or all women have switched from traditional feeding practices to exclusive breastfeeding. It is encouraging to hear that women are doing this not because they were advised to do so, but because they see the benefits for themselves. This effect was especially pronounced among IN-SCT participants.

> "From the awareness raising made by HEWs we learnt that until 6 months of age, exclusive breastfeeding is so important for children's health and growth. No woman among us provides other forms of food to the children except breastfeeding until 6 months" **[OR-AT-FGD-PDS-F].**

> "I see my daughters and in-law are practicing exclusive breastfeeding, by opposing my advice to give butter to their new-borns" **[SN-H-CS-PDS-F].**

> "Traditional practice, such as feeding cow milk and butter, is not being practiced, but giving breast-milk for six months. The reason is continuous education by the HEW" **[OR-AT-CS-PW-F].**

> "I practiced exclusive breastfeeding of my last-born child, not like the children I delivered before. This change was due to the education given by HEWs at the Public Works sites and the advice given at the health post during my ante-natal care and postnatal care visits" **[OR-AT-CS-TDS-F]**.

> "We were giving food to our babies, before we were educated. Since we started feeding our children like we were told by the HEW, our children have not been sick and are growing healthy" **[OR-AT-FGD-TDS-F-PLW].**

> "In previous times, we used to give infants supplementary food even before 4 months of their age and we were exposing our children to diseases as a result" **[OR-AT-CS-TDS-F-PLW].**

> "Now, we don't even give them water until 6 months. In the past, we used to give food to our babies before 6 months of their age thinking they would grow faster" **[SN-H-FGD-TDS-F-PLW].**

Apart from increased awareness, women also reported that they have increased opportunities to breast-feed their babies, thanks to the introduction of TDS. "*The work leave given to me helped me to have adequate time to provide breast-milk to the child as she demands"* **[SN-H-CS-TDS-F-PLW].** *"The transition of Public Works women to TDS contributed to this positive change"* **[OR-AT-FGD-PW-F].**

Women receive information and knowledge about good practice from different sources, mainly HEWs but also from the radio and even from their husbands.

"We have been getting information from different sources, such as radio" **[OR-AT-FGD-PW-M].**

"I also listened from the radio how much it [exclusive breast-feeding] is important for the child's health and growth" **[SN-H-CS-TDS-F-PLW].**

"I and my wife know to feed our children only breast-milk up to the age of six months. I also do awareness work on her in addition to what she got from the HEW. The sessions provided by the HEW contributed to my increased level of understanding on this" **[SN-H-CS-PW-M]**.

In PSNP woredas, either no change in infant feeding behavior was reported by PSNP participants, or positive changes were observed but attributed to HEWs and government messaging, not to the PSNP. *"The PSNP has done nothing on breastfeeding. But the HEW is educating women, and government is teaching through radio"* **[SN-KG-FGD-PDS-M].** *"Most of the mothers give exclusive breastfeeding up to 6 months. This is because of the knowledge gained through mass media and from the HEW's advice"* **[SN-KG-FGD-PW-M].** *"I feed my child cow milk in addition to breastfeeding, even during the first 6 months, because I think giving the baby additional food helps his growth"* **[OR-AN-CS-TDS-F-PLW].**

Service providers and clients were also asked about changes in nutrition outcomes for children. Respondents pointed at positive changes in behavior and nutrition practices but also highlighted challenges in terms of putting new knowledge in practice or translating practices into improved nutrition outcomes for children.

SCT Coordinators in both regions indicated several pathways to improved child nutrition outcomes through the PSNP4 and IN-SCT.

"Our Social Workers follow up with clients in terms of how to spend the cash on certain kinds of foods. Also now there are more women collecting the money and if she collects the money, she spends it on the nutrition of the household" **[OR-KII-SCT].**

"Positive improvements for children through the referral system and check-ups on children, also school gardens and cooking demonstrations" **[SN-KII-SCT].**

"Nutrition status of children has improved, because pilot woredas focus on these activities and initiate follow-up actions. Social Workers and CCCs are important for this" **[SN-KII-SCT].**

Another key informant explained how PSNP4 is more nutrition-sensitive than previous cycles, and claimed to have personally seen positive impacts on nutrition.

"Before PSNP4 there was a lack of implementing guidelines for nutrition. But this program is nutrition-sensitive. Now public works is more focused on nutrition, for example we see that many clients have started backyard gardening. That helps for nutrition. I visited the pilot woredas a few times and I can see that the benefits are greater in those pilot woredas" **[SN-KII-FS].**

At woreda level, key informants referred to several specific program impacts on child nutrition.

- **Higher income:** *"positive change in child nutrition due to the PSNP transfer"* **[OR-AT-KII-SP].**
- **Higher food production:** *"improved agricultural production"* **[OR-AT-KII-SP]**

- **Backyard gardens:** *"In some kebeles, households have started producing vegetables and fruit in their backyards, that helped improved access to diversified food"* **[SN-H-KII-SP].** *"The number of women who engage in vegetable production at home increased over time"* **[SN-H-KII-DA].**
- **BCC sessions on nutrition:** *"There is positive change in child nutrition because of improved awareness among women due to BCC sessions by HEWs"* **[OR-AT-KII-PSNP].** *"There is positive impact because of cooking demonstrations and training on children's feeding"* **[SN-H-KII-SW].**
- **Better quality diets:** *"Women have improved awareness about the need to prepare balanced diets for their children and how they can use available food items to prepare a variety of foods"* **[SN-H-KII-SCT].** *"Before, because of ignorance they were not providing balanced food to their children"* **[SN-H-KII-PSNP]**.
- **Temporary Direct Support:** *"The TDS transition also helped the clients to have adequate time to prepare food for their children"* **[SN-H-FGD-CCC].**
- **Co-responsibilities:** *"Nutrition activities are co-responsibilities that improved attention and improvement in those behaviors"* **[SN-H-KII-SP]**.

On the other hand, key informants also identified constraints to improved nutrition practices, namely unavailability or unaffordability of nutritious foods.

> "There is positive impact with some limitations. To feed different kinds of food is constrained by low production due to the climate change effects, ever-increasing food prices and low cash to purchase different food items" **[SN-H-KII-DA].**

> "Women lack the supplies to prepare and feed a variety of foods to their children as required, because the food items are bought from the market or produced by households. Child nutrition is better in areas where there are good harvests" **[OR-AT-KII-PSNP].**

> "When we see the PSNP clients, they lack different kinds of foods they produced and sufficient money to purchase those items, because crop production is challenged by climate changes and the cash they receive from PSNP is too small to buy different food items" **[OR-AT-KII-DA].**

> "There is positive change but the change is not as we expected – the change is small – since the community is poor and they are not providing variety foods to their children" **[OR-AT-KII-HEW].**

The same limitations were acknowledged by key informants in PSNP woredas without IN-SCT, as well as less comprehensive interventions to support improved child nutrition.

> "So far we did only one round of awareness creation in the communities. Actual implementation of co-responsibilities Whas not fully started. There is no specific action from HEWs to reach out to PSNP4 clients at Public Works sites and at home to improve their child-care practices. No farm inputs were provided from PSNP to communities to engage in nutrition-sensitive agriculture, to improve their dietary diversity and income. Hence we don't claim improved child nutrition among PSNP beneficiaries" **[OR-AN-KII-PSNP].**

IN-SCT clients acknowledged the advice they received on nutritious diets, and several women said that they are putting this knowledge into practice.

> "There is positive change because of education from the HEW and cooking demonstrations. For instance, I prepare a porridge from different type of food items, such as maize flour, wheat, egg, oil, butter and cabbage and feed to my grandchildren" **[SN-H-FGD-PDS-F].**

"We feed our child different food stuffs, particularly soft foods such as porridge and soup after six months of age, based on the awareness we got from HEWs" **[OR-AT-FGD-TDS-F].**

"We men are also supporting women by buying fruits and vegetables as much as possible, but before some years it was thought to be women's responsibility" **[OR-AT-FGD-PW-M].**

The introduction of TDS also helped. *"Because of the transition to TDS, we were able to get sufficient time to prepare meals for our children"* **[OR-AT-FGD-TDS-F-PLW].**

Constraints to feeding children nutritious diets were acknowledged on both the production side and the income side. *"We are able to produce vegetables only during the rainy season; we don't have irrigation access to plant those vegetables all year round"* **[SN-H-FGD-TDS-F].** *"We can't purchase different food items all the time, due to lack of adequate cash as we are poor"* **[SN-H-CS-PDS-M].**

According to PSNP participants, delays in transfer payments compromises their ability to purchase food. *"The PSNP transfer is used to fill the food gap, so there is positive change. I bought poultry from the PSNP transfer and I give eggs to my children. But getting the transfer is not uniform over the year, it is usually delayed, and it is of little use during peak food shortage period"* **[SN-KG-FGD-PDS-M].**

HEWs were asked if the number of cases of malnourished children presenting to their health post is more, less, or the same, since the PSNP4 and IN-SCT started. Child malnutrition in Ethiopia has fallen significantly in recent years, and the IN-SCT seems to be accelerating this positive trend, according to HEWs from IN-SCT kebeles. *"The number of cases of malnourished children has reduced significantly. Currently, there are 12 moderately malnourished children under 5. Only one of these is from a PSNP household while 11 are non-PSNP. In the past, we used to find 22 to 30 cases of malnutrition for children"* **[SN-H-KII-HEW].** *"Now we have six malnourished children in our kebele. Only two of them are PSNP while the other four are non-PSNP"* **[OR-AT-KII-HEW].** *"At this time one cannot find malnourished children among PSNP clients in this kebele"* **[OR-AT-KII-SW]**. *"Currently, MUAC [Mid Upper Arm Circumference] measures of many children are normal and good"* **[SN-H-KII-HEW].**

In two PSNP kebeles, child malnutrition has been falling and continues to fall, but possibly not as fast. *"There is a reduction in number of cases of malnourished children, but it is not significant. Last week there were 70 cases of moderate malnutrition. Two years back there were about 90 to 100 cases"* **[SN-KG-KII-HEW].** *"The number of malnutrition cases reduced over time. Severe malnutrition became zero. Moderate malnutrition is now 20. In the past, we had 60 to 80 malnutrition cases"* **[OR-AN-KII-HEW].**

This provides some indicative evidence that the IN-SCT had a positive impact on malnutrition in communities where it was operational, relative to communities where PSNP was operational without the additional inputs provided by IN-SCT. However, in line with quantitative findings, impacts are modest at best.

5.4.2. Hygiene

Program impacts on hygiene are explored by asking clients and service providers about changes in handwashing practices and availability and use of latrines.

Washing hands for hygiene reasons was actively promoted through BCC sessions, and discussions with clients suggest that knowledge and awareness improved. Qualitative findings also suggest that positive attitudinal change seems to have been achieved. Awareness raising campaigns on hygienic behavior such as hand-washing were being led by HEWs before PSNP4 and IN-SCT, so this behavior was reinforced by the program but cannot

be attributed entirely to PSNP4 or IN-SCT. But behavior change was constrained in many households by lack of water due to drought, and in others by lack of money to buy soap.

Program participants all reported heightened awareness and a positive attitude towards hand-washing for health reasons, which they attribute to education and advice received from HEWs. For most this was reportedly translated into a change in behavior, with knowledge, attitude and practice (KAP) have all been positively affected.

> "Now we know that we will be sick if we eat without washing our hands, and children are growing up knowing this" **[OR-AT-FGD-PDS-M].**

> "We learned about the benefits from the HEW, of washing our hands always with soap to prevent different diseases that can be caused by dirt on our hands that may not visible with the eye and may not remove by washing hands with only water" **[OR-AT-FGD-PW-F].**

> "Because of the teaching of the HEW, we wash our hands with soap and water after using latrine, when we prepare food, when we eat and before giving breast milk to babies. Now there is no diarrhoea, which was common in the past" **[SN-H-FGD-TDS-F-PLW].**

> "Whenever we use the latrine we have soap suspended in front of the gate that we all use to wash our hands" **[OR-AT-FGD-PDS-F].**

> "You can see small pieces of soap in the corner that we use for hand-washing and bathing. Our granddaughter usually buys soap for us when she receives PSNP transfer" **[SN-KG-CS-PDS-M].**

Several participants explained that they are forced to wash their hands without soap due to cash constraints, while others admitted that despite knowing of the importance of washing their hands they are unable to do so because of lack of water.

> "We are now using soap. But water shortage is a key challenge" **[OR-AT-CS-PDS-F].**

> "I am not washing my hands using soap due to lack of budget, but I use ash in place of soap" **[SN-H-CS-TDS-F].**

> "In the absence of soap and ash we wash our hands by water only, because of lack of money to purchase soap. But this may lead to diseases" **[SN-H-FGD-PW-M].**

Interestingly, one Public Works participant in Oromiya quoted a poem suggesting there was already indigenous knowledge about the health benefits of hand-washing. *"Oromo poem says: "The abdomen likes when the hand is washed, and god loves when one talks truth". Hence I knew that washing my hands is very important to my health"* **[OR-AT-CS-PW-M].**

As with messaging on hand-washing, government interventions to expand the construction and use of latrines pre-date the PSNP, and is a Ministry of Health priority area. However, as key informants explained, PSNP4 and IN-SCT have reinforced these messages. *"A number of different projects are working on this issue from the government, so there is improvement but not necessarily because of this project. But the program rehabilitated the ongoing discussions on hygiene" [OR-KII-SCT]. "Latrines are a focus from health sectors. This is government-wide and not only PSNP"* **[SN-KII-FS].**

The government drive for improved sanitation facilities has reportedly succeeded. *"You can find a latrine in every house. Our kebele was selected for a visit by people from Lesotho and Swaziland"* **[SN-H-KII-PSNP].** *"Some kebeles are preparing to declare open defecation free status"* **[SN-H-KII-SP]**. Direct Support beneficiaries are targeted for assistance in obtaining latrines. *"CCCs have supported the construction of latrines to PDS clients – the elderly and the weak or chronically ill"* **[SN-H-KII-SW].**

Compliance is also enforced by imposing fines, and by shaming those who do not yet have latrines. *"The kebele administration set a 500 birr penalty to influence the whole community to build or rebuild their latrine if the old one was damaged"* **[SN-H-FGD-CCC].** *"It is becoming shameful to defecate in the open. There is no place to hide for defecation, especially during the dry season"* **[SN-H-CS-PDS-F].** Others saw having a latrine as compulsory for PSNP participants. "*It is our responsibility of what we should do as a PSNP client"* **[OR-AT-CS-TDS-F]**.

But participants did not use latrines only because they were forced to do so. Thanks to BCC sessions and messaging, many now understand the positive health benefits of good sanitation practices. *"I built my latrine through the advice given by HEWs and Social Workers on sanitation and protecting my child's health against bacteria that cause disease"* **[SN-H-CS-TDS-F].** *"Without a latrine most of us in the community believe that our health is in danger"* **[SN-H-CS-PW-M].**

Even participants who cannot afford to maintain their own latrine are using other people's latrines rather than reverting to open defecation. *"We had a latrine but it was demolished after some years and I could not rebuild it due to lack of adequate money to cover the construction costs. So we are using and sharing our neighbour's latrine"* **[OR-AN-CS-PDS-F]**

5.4.3. Education

Perceptions of impacts in education are explored by considering school attendance and school enrollment. Service providers and clients were asked about their experiences or perceptions of changes as a result of IN-SCT or PSNP. Qualitative results suggest that IN-SCT improved school enrollment and also educational outcomes. Positive changes are hampered by low quality of schooling. These results are consistent with impact estimates from the quantitative data that IN-SCT increased the number of days that schools were open and school attendance, though there were no impacts on school enrollment.

SCT Coordinators in both regions see increasing school enrollment and attendance as one of their main responsibilities, and reported it to be a success of IN-SCT.

> "This is one of the co-responsibilities. The Social Worker goes to the household of PSNP clients together with the CCC if a child is not going to school to find out the issue, whether it is economic or social. After this program, the dropout rate has decreased in both woredas" **[OR-KII-SCT].**

> "IN-SCT had a positive impact because we are constantly checking and following up on school attendance, it is one of the most important jobs we do, making house visits and meeting with the school principals to ensure that children go to school" **[SN-KII-SCT].**

Other key informants agreed that there was a significant improvement in school attendance (in line with the quantitative results), which they explained by collaboration between SWs, CCCs, teachers and school directors, as well as changing attitudes due to sensitisation campaigns, and thanks to PSNP transfers. *"CCCs and social workers are working in collaboration with school directors. Government also conducts campaigns every year to ensure universal education"* **[SN-H-KII-SP].**

According to program participants, PSNP has facilitated behavior change, directly and indirectly. *"PSNP has contributed as we use cash transfer to buy exercise books and children's clothes"* **[SN-H-KII-SP].** *"PSNP transfers help families to feed children and send them to school"* **[OR-AN-FGD-TDS-F-PLW].**

Moreover, PSNP Public Works and school feeding also contributed to improved access to education. *"Schools are built in kebeles by Public Works and other programs. There are regular campaigns every year to enrol all school-aged children. Additionally, there are other projects that support education of children in our woreda, such as school feeding"* **[SN-KG-KII-SP].**

Attitudes towards education are more positive than in the past. *"There is improved understanding about the benefits of education. If our children are educated, they improve their lives as well as ours"* **[SN-KG-CS-TDS-F].** *"We know that educated persons are more productive and can change their community"* **[SN-KG-CS-PDS-M].**

This ensures that parents play their part in sending children to school, and children equally realise why school is important. *"In the past, I used to care less about my children's education. Now, I tell them to go to school early. I don't ask them to do other work during school hours"* **[SN-H-CS-PW-F].** "We never let our children be absent from school" **[SN-H-CS-PDS-F].** *"Our children got good awareness about the importance of education from the Social Worker, which encouraged them to attend their classes well"* **[SN-H-FGD-PDS-M].**

In terms of educational outcomes, key informants in IN-SCT woredas agreed unanimously that educational performance is improving, particularly among children of PSNP participants, partly due to attitudinal change. *"Our monitoring showed that all children in school pass from one grade to the other"* **[OR-AT-KII-SCT].** *"Many students are being promoted from one class to the next due to increased attention to their studies and improved awareness about the importance of education"* **[SN-H-KII-SCT].** "*There is a change in attitude. Before, communities as well as children used to believe that "education cannot get me anywhere". But now, parents say "I want my child to be a doctor""* **[SN-H-KII-SW].**

In woredas without IN-SCT, some key informants reported positive impacts on education outcomes. *"There is increased number of students who are promoted from one class to the next"* **[OR-AN-KII-DA].** *"One of the students who ranked first in grade six is a child of a PSNP client"* **[SN-KG-KII-DA].** Other key informants saw little impact on enrollment. *"Implementation of schooling-related co-responsibilities are not started"* **[OR-AN-KII-SP].** Alternatively, any observed improvements could not be attributed to PSNP. *"There is good improvement, but I don't know this program contribution"* **[SN-KG-KII-SW].**

Some service providers reported a link between improved attendance and learning outcomes. *"Often improvements are seen in grades because children are going to school more"* **[SN-KII-SCT].** In IN-SCT woredas, the role of the SW in monitoring compliance with co-responsibilities was seen as crucial in achieving improvements in both attendance and outcomes. *"Social Workers monitored the co-responsibilities and conducted case management when the clients failed to comply, so that every child – whose parents are PSNP clients – seriously attended their education, and that contributed to their success in passing from one grade to the next"* **[OR-AT-KII-DA].**

One key informant pointed out that increased enrollment does not necessarily result in improved educational outcomes – it depends on quality of teaching. *"There is increase in the number of enrolled students at all levels, but educational quality has been deteriorating over time"* **[SN-KG-KII-SP].** One informant from Concern emphasised how improvement in the broader context has positive spillovers for education outcomes. *"Through improving household food availability, we contributed to reduced absenteeism and this improves educational outcomes. Children also don't waste so much time fetching water. This means children focus more on their education"* **[Federal-KII-Concern].**

Clients explained how attitudes towards education have changed. *"The community understands the importance of education, as an uneducated person is useless and cannot support his community" [SN-H-FGD-PDS-F]. "We do not have large farm land and education is now taken as a way out of poverty"* **[SN-KG-FGD-TDS-F-PLW]**.

Changes in attitudes have been reflected in changed behavior to enhance education outcomes. *"Our children study even during the night, using solar"* **[SN-H-FGD-PDS-M].** *"We sell what we have to send children to continue their education in town until they join college"* **[SN-H-FGD-PDS-F].**

The role of SWs is acknowledged by many program participants. *"My children study well at home. The Social Worker advised them to study and to score good results, when he visited our homes for follow-ups"* **[OR-AT-CS-TDS-F].** *"The Social Worker's advice to our children also encouraged them to study hard and to score better results. Failure of students is not heard"* **[OR-AT-FGD-PW-F].**

One father in a PSNP (non-IN-SCT woreda) complained that positive education outcomes are limited by the poor quality of education in public schools. *"The education outcome for our children is positive but moderate, as the quality of education is not satisfactory. For example, grade 3 students from private school are better than grade 7 students at public school"* **[OR-AN-FGD-PDS-M].** Clearly, administering co-responsibilities that increases the demand for services such as education requires that more attention be paid to improving the quality of those services.

5.4.4. Health

We explore clients' and service providers' understandings of changes to health by looking at immunization and attendance and use of health services. Both groups suggest that most children are immunized, and in IN-SCT woredas this is partly attributed to the program. The program is also thought to have contributed to greater health-seeking behavior. The quantitative results have less evidence on health seeking behavior except for the unexpected finding that IN-SCT appears to reduce the probability that children have health cards.

Immunisation of children is a responsibility of HEWs but is also a co-responsibility of parents participating in the PSNP4 and IN-SCT. SCT Coordinators in both regions believe there has been an improvement in immunisation rates thanks to the program. *"We asked the HEWs and there has been much improvement in immunisation rates since the start of the IN-SCT"* **[OR-KII-SCT].** *"Once Social Workers identify children who are not immunised they follow up with the household and the HEW to ensure that all children are immunised"* **[SN-KII-SCT].**

In IN-SCT woredas, key informants attribute this success to collaboration between the program and the Ministry of Health. *"Positive change is due to improved awareness among women through the BCC sessions, vaccination campaigns and follow up on co-responsibilities. This result has been brought about by joint efforts of IN-SCT/PSNP and health extension program"* **[OR-AT-KII-PSNP].** A SW explained her role: *"Because of my monitoring and the link to co-responsibilities, all women in this kebele take their children to health posts for immunisation"* **[OR-AT-KII-SW].** A HEW explained the importance of following up: *"When women miss their appointment for vaccinating their children, we remind them through different mechanisms, like making calls or sending messages"* **[OR-AT-KII-HEW].**

In PSNP woredas, most key informants recognise that immunisation rates are high, but they do not see the program as being mainly responsible for this. *"No change or impact as a result of PSNP4. Immunisation of children is continuing as usual"* **[OR-AN-KII-PSNP].** *"Majority of children are receiving vaccinations. I think it is mainly due to the social mobilisation activities done by the Ministry of Health through different mass media channels"* **[SN-KG-KII-PSNP].**

Caregivers in IN-SCT woredas all claimed to be completing the full course of vaccinations for their children, because of their improved awareness through BCC sessions and because this is a compulsory co-responsibility under PSNP4. *"My last child received all vaccinations strictly as per the schedule, because I fully understood the importance of protecting against different kinds of diseases, from the BCC sessions I received during the ante-natal care and postnatal care visits. It has also been taken as mandatory to do it as a PSNP client"* **[OR-AT-CS-TDS-F].** Awareness raising has changed attitudes. *"Due to the education and follow-up by HEW and Social Worker we are aware about the benefits of immunisation. In the past, we used to fear vaccinating our children"* **[OR-AT-FGD-TDS-F-PLW].** *"Children's sickness has reduced after we started vaccinating our children"* **[OR-AT-CS-TDS-F-PLW].**

HEWs (HEWs) expressed confidence that pregnant and lactating women (PLW) are visiting health clinics for ante-natal care (ANC) and postnatal care (PNC) check-ups more than they did in the past, due to a combination of increased availability of services, awareness raising, and the introduction of co-responsibilities to PSNP4. *"Because of the BCC sessions, women are aware about the importance of ANC and PNC visits"* **[OR-AT-KII-HEW].** *"PLWS do not miss their appointment for ANC and PNC visits"* **[SN-H-KII-HEW].** *"Pregnant women attend their ANC visits properly. On the 4th appointment we send them to a health centre for further check-up and to arrange the delivery"* **[SN-KG-KII-HEW].** *"Most of the women deliver at health centres"* **[OR-AN-KII-HEW].**

This perception of changes in knowledge, attitudes and practice towards ANC and PNC appointments was confirmed by women themselves.

> "I followed four antenatal care visits during my pregnancy and two postnatal care visits after I delivered my last child. This is because of the co-responsibility of what I should do as informed by the HEWs and the DAs when I was free from Public Works. I had also adequate time to strictly follow my schedules as I was free from Public Works" **[OR-AT-CS-TDS-F].**

> "We are well aware about the importance of attending antenatal and postnatal visits for better health both of the mother and the new-born baby, from the BCC sessions given by the HEWs. Also it is one of our co-responsibilities that every pregnant woman should comply with when she transited from Public Works to TDS" **[SN-H-FGD-TDS-F].**

> "It is becoming mandatory for pregnant women to visit the health centre for check-ups, unlike our time" **[SN-H-CS-PDS-F].**

One mother on TDS claimed that women were warned that they would be fined if they give birth at home. *"In our kebele it has been said that if a woman delivers at home she will be penalised 1,000 birr. In fear of this, all women in our kebele deliver at health centres"* **[SN-H-CS-TDS-F].** However, this was not validated by any other respondent. Other mothers suggested that they chose to use reproductive health care services during and after their pregnancy willingly, because they recognised the benefits of these services. *"If the mother attends check-ups and delivers at health centres, both my health and my child's health will be protected. I delivered my first two children at home but after gaining knowledge from HEWs, I delivered my last three children at the health centre"* **[SN-KG-CS-TDS-F-PLW].**

Both mothers and fathers demonstrated awareness of the benefits of ante-natal and postnatal care visits. *"We know that if they did not get such care, the health of the baby and her might be negatively affected"* **[SN-H-FGD-PW-M].** *"The baby in the womb may not be healthy or properly positioned. So check-ups can help in identifying these problems"* **[SN-KG-FGD-TDS-F-PLW].**

5.4.5. Child protection

The qualitative component of the evaluation looked at impact in the area of child protection by exploring perceptions in relation to child labor, early marriage child care facilities.

Consistent with the quantitative impact results, child labor had reportedly fallen, in part because of IN-SCT. Key informants identified two ways in which child labor has fallen since the start of the program: by increasing school attendance, and by reducing children's participation in Public Works. Firstly, the IN-SCT has encouraged school attendance, which has reduced the time children have for work. *"There is positive change because of awareness created among the community that children have the right to go to school. […] IN-SCT has done a good job of registering children at school and ensure they go to school instead of working"* **[SN-H-KII-SCT].** *"The social worker assesses whether children under 18 are in school and if they find they are not in school because they are working, then the social worker follows up"* **[OR-KII-SCT]. [SN-H-KII-SCT].**

Secondly, children are actively discouraged from working on Public Works projects. *"There is positive change due to the transfer of pregnant women into TDS. In the past, pregnant women sent children to Public Works since they were penalised when they were absent from Public Works"* **[OR-AT-FGD-CCC].** *"Child labor has been discouraged by sending back children who come to Public Works, replacing their parents"* **[SN-H-KII-SCT]**.

On the other hand, child labor is unlikely to be eradicated. *"It is difficult to avoid the use of child labor completely in the rural areas of our country. For example, it is a must for children to look after livestock owned by the family"* **[OR-AT-KII-SP].** *"Orientations have been given by our officers so there is increased awareness among PSNP participants that children should be at school. But children are still involved in labor work due to poverty, to support their families"* **[SN-H-KII-SP].**

In IN-SCT woredas, it is clear that clients have received 'orientations' about child labor from SWs that has changed behavior, with support from DAs. *"The PNSP coordinator at the kebele and the Social Worker taught us about child labor, and school attendance is being promoted. So boys and girls under 18 are not going to Public Works sites"* **[OR-AT-CS-PDS-M].** *"I never send my children to work in Public Works to replace me, because we took orientation from the Social Worker that children less than 18 years are not allowed to work in the Public Works"* **[OR-AT-CS-TDS-F].** *"One time I sent my daughter whose age was 15 years but the DA returned her and informed her not to come again"* **[SN-H-CS-TDS-F-PLW].**

One IN-SCT client disputed the view that knowledge, attitudes and practice around child labor have changed. *"No difference. I am sending my boy to Public Works during the non-schooling season. Others also do the same"* **[OR-AT-CS-PDS-F].**

In PSNP woredas, some respondents confirmed that children do less heavy work and are less likely than before to work on Public Works. *"Now there is no abuse of child labor and children are attending school. We only order our children to do work when they don't have school"* **[SN-KG-FGD-PDS-F].** *"In the past I sent my child for Public Works in place of myself, but the DAs prevented him from working. Since then my husband and I cannot send our children to Public Works"* **[SN-KG-CS-TDS-F-PLW].**

However, the dominant view in PSNP woredas was that there has been little or no change. *"We send children to Public Works and other labor work when the situation obliges us. For example, I am sick and send my sons who are 15 and 17 years old to replace me, because attendance matters. We know that 18 years is the minimum age but it is understood that boys and girls above 15 years can perform many labor works"* **[OR-AN-CS-TDS-F].**

Responses in relation to early marriage suggest that awareness has somewhat improved, but that any changes in practice are modest and that the role of IN-SCT is likely to be small.

Key informants agreed that early marriage has declined but not disappeared in rural communities. *"There is positive change due to increased awareness among the community. Now, there is no early marriage in our area"* **[SN-H-KII-SCT].** *"We cannot say it is completely abolished, since we have not done much on this particular issue"* **[OR-AT-KII-SP].** *"There is no forced early marriage because of improved awareness. But still there are girls who willingly marry at an early age"* **[OR-AN-KII-DA].**

According to key informants, the contribution of IN-SCT to this positive trend is unclear, as other actors have engaged on this issue for many years. *"Early marriage has reduced thanks to BCC messages, though the government is also campaigning against early marriage so we don't know whether it is because of IN-SCT or because of government information campaigns that this is improving"* **[SN-KII-SCT].** *"There is extensive awareness raising through the media, Health Extension and Women and Children Affairs"* **[OR-AT-KII-SCT]**. *"UNICEF has also worked on this"* **[OR-KII-SCT].**

Even though awareness about the drawbacks of early marriage is almost universal in rural Ethiopia, program participants interviewed were divided in terms of their attitudes towards early marriage. Although the legal age is 18 years, some argue that adolescents are ready to marry by the age of 15. *"We believe 15 years and above are okay for marriage for girls. They can bear children at this age and can take responsibility as a wife"* **[SN-H-FGD-PDS-F].** Others have changed their attitude, thanks to the information campaigns. *"As a family we came to realise that early marriage is a bad culture and it may complicate health during delivery"* **[SN-H-CS-TDS-F].** *"Now we don't sell our daughters without their knowledge at an early age, as we used to do in the past"* **[OR-AT-FGD-TDS-F-PLW].**

Most parents do try to discourage early marriage, by prioritising education, especially for daughters. *"We encourage our children, the girls in particular, to follow their education and to graduate before marriage"* **[SN-H-FGD-TDS-F].** But behavior varies. In some villages, early marriage has disappeared. *"Early marriage is prevented in our kebele. There is a woman from Women and Children Affairs who goes home to home teaching people that early marriage should be avoided"* **[OR-AN-CS-TDS-F-PLW].**

In at least one kebele, early marriage might even be rising, as teenagers exercise their freedom to make their own choices. *"Early marriage is worsening. Girls less than 18 years of age are increasingly going for marriage, without any consultation with their families. Girls are saying this is their right and we don't have anything to say. PSNP has not contributed to halting this problem"* **[OR-AN-FGD-TDS-F-PLW].** One woman concluded that more needs to be done to enforce the law. *"A lot has to be done by the police and traditional leaders"* **[OR-AT-CS-PW-F].**

Key informants and program participants were asked if they had observed any difference in the provision of child-care facilities at Public Works sites. The dominant response across all categories of respondents was that this is an area where little has happened. Key informants at federal and regional level confirmed that the intention to introduce child-care facilities has not yet been implemented. *"PSNP has a plan to roll this out, but no progress so far"* **[Federal-KII-Concern].** *"Child-care centres at worksites are still lacking – they don't exist. Food Security has a plan to construct these child-care shelters but it has still not happened"* **[SN-KII-SCT].**

Most key informants at woreda level confirmed this lack of progress. *"We didn't do anything to build child-care centres. However it is one of the activities to be done according to the PSNP4 document. I think it is due to lack of focus by the CCC and also absence of follow-ups from the woreda PSNP section"* **[SN-H-KII-DA].** Most program staff, DAs, HEWs and SWs are aware that child-care facilities should be provided at Public Works sites, but a few have not heard of this requirement. *"Even the idea is not known to us"* **[OR-AT-KII-SW].**

There is no difference in this indicator between PSNP and IN-SCT communities – lack of facilities affects all equally. *"No child care facility was built in any PSNP kebele"* **[OR-AN-KII-SP].** *"There are no facilities at Public Works sites. The reason is lack of attention and implementation gaps in the program as a whole"* **[SN-KG-KII-SP].** However, one PSNP official asserted that two facilities have been built and are operational. *"There is a slight positive difference because child care centres have been constructed in two kebeles in 2015 and 2016. Both facilities are functioning"* **[OR-AT-KII-PSNP].**

As for participants themselves, those on Permanent Direct Support had no knowledge about this issue. *"I don't know about it, because I am not involved in Public Works activities"* **[SN-H-CS-PDS-M].** However, women who had transferred to Temporary Direct Support commented on the problems they had faced when employed on Public Works projects, because of the lack of child-care facilities.

- *"Knowing that there are no child-care centres at Public Works sites, I left my child with my husband at the time I went to Public Works"* **[SN-KG-CS-TDS-F-PLW].**
- *"We left our children with older mothers and engaged in Public Works"* **[OR-AT-FGD-TDS-F].**
- *"We left our children at home because it is not a comfortable place for children because of dust, stones and sun that will affect our children"* **[OR-AN-CS-TDS-F-PLW].**
- *"I personally left my baby at home and usually returned home earlier by telling the foremen that I have to give breast milk"* **[SN-H-CS-TDS-F-PLW].**
- *"I have seen that some lactating women came to the work-site with their baby and suffered to work while carrying their babies, breast-milk and working. Some were ashamed to breast-feed at the Public Works sites."* **[SN-H-CS-TDS-F-PLW].**

5.4.6. Gender equality

Respondents were asked whether they observed any improvements for women thanks to the program (e.g., more decision-making power, more control over resources, lower workloads).

Service providers mentioned several changes in program design and implementation that have favored women. *"These include 50% women workload reduction for women participating on Public Works, and photos of both husband and wife printed on PSNP client cards"* **[Federal-KII-Concern].** *"Women come to Public Works sites later and leave earlier, thanks to the 50% workload reduction"* **[OR-AT-KII-SCT].**

Another positive innovation was to name women as recipients of cash transfers even in male-headed households. *"Social Workers discussed with the community to shift payment from men to women, and the community agreed. If women get money in their hands that gives some self-esteem and social empowerment"* **[OR-KII-SCT].** The rationale was that women spend money more wisely than men. *"Women are taking control of cash transfers, because she spends it on children's needs"* **[SN-KII-SCT].**

Interestingly, the introduction of the electronic payment system took control of PSNP cash transfers away from women, since the ATM cards are given to the household head – usually a man. However, local government structures have discretion to change this, as happened in at least one case. *"Three wives complained last year to the kebele council when their husbands refused to share cash transfers, and their cases were addressed. The ATM PIN codes controlled by the husbands was closed out and new PIN codes were given to the wives"* **[OR-AN-KII-PSNP].** One TDS beneficiary told her story:

> "Men used to spend household income including PSNP transfers, but now we control them and if

there is a problem we report it to the DA or kebele chairman. There are women who appealed and changed the payment to their name. We learned this from the government and Women Affairs. My husband used to receive PSNP payments for my family. He spent the cash on other matters and I was getting nothing for my children. So I complained to the DA and changed the entitlement to my name" **[OR-AN-FGD-TDS-F].**

Beyond the PSNP, raising awareness about gender equality has been a government campaign for some years. Women Affairs, CCCs and Social Workers all sensitised women about their rights in BCC sessions. *"Women's decision-making power has improved, due to improvement in awareness. Woman Affairs Office and Justice Office have done a lot"* **[OR-AT-KII-SP]**. *"Women know their rights through different awareness creation by the CCCs, Women Affairs and Social Workers in their kebeles"* **[SN-H-KII-SP].**

There are signs that relations between men and women are changing for the better, thanks to these gender equality campaigns, which have even reduced incidents of gender-based violence. *"There is also reduced domination of husbands over wives due to improved awareness among the community. Women are saying they used to be hit by their husbands, but today even donkeys would not be hit"* **[SN-H-KII-HEW].** Conversely, other key informants acknowledged that culture is difficult and slow to change. *"There are cultural challenges in our area. There is still dominance by men over women. Resources are still controlled by men"* **[SN-H-KII-PSNP].**

Female participants gave details about how their rights and decision-making power with respect to men have improved in recent years, and confirmed that gender-based violence is less prevalent now. *"During my time I used to be beaten by my husband. But now women are aware of their rights and they never allow husbands to punish them"* **[SN-H-CS-PDS-F].** *"In previous times, my husband used to sell our household assets and spend the money the way he liked it. But now unless we agree he does not sell a single chicken. We do things through consultation and agreement"* **[OR-AT-CS-TDS-F-PLW].** *"We decide on the use of PSNP transfers together with our husbands. They bring the payment home and give it to us. They don't spend it recklessly"* **[SN-H-FGD-TDS-F-PLW].**

Male participants gave further examples of women's increased decision-making within the household and more active participation in community activities. *"Some years ago, women were not allowed to go out of home and participate in meetings. Now women are everywhere. Also, husbands cannot sell cattle or grain without their permission"* **[OR-AT-FGD-PDS-M].** *"My wife receives the cash transfer and is managing it as she wants. She uses it to fill the food gaps for the household"* **[SN-H-CS-PDS-M].**

Respondents were also asked if they have observed any difference in program impacts between male-headed and female-headed households, and if so, how they explain these differences. Key informants gave several reasons as to why women and female-headed households may have benefited more from the PSNP and IN-SCT than men and male-headed households.

- **Female-headed households were deliberately targeted.** *"During targeting, more priority is given to single female-headed households. The program is more important for them"* **[OR-KII-SCT].**
- **Women are perceived as making better use of program resources than me**n. *"The impact is higher in female-headed households because women are stronger in properly managing resources since they use it for the intended purpose, particularly PSNP transfers"* **[OR-AT-KII-PSNP].** *"Female-headed households use transfers to solve problems of their house like to provide food for the family and to send children to school. But male-headed households have a tendency of using transfers for buying khat, cigarettes and alcohol"* **[OR-AT-KII-SP].**

- **Women participate more than men in BCC sessions.** *"It is mostly the women who participate in BCC sessions, hence they acquired better awareness compared to men"* **[SN-H-KII-PSNP].** *"Most of the BCC sessions on health and hygiene issues pass through women"* **[OR-AT-KII-SCT].**
- **Innovations in program design benefit women more than men.** *"The impact is higher in female-headed households, because women are benefiting more from this program, due to a reduced workload on Public Works and transition into TDS"* **[SN-H-KII-SW].**
- **Women's empowerment has increased.** *"Previously men used to dominate over women, but after this program they have stopped it"* **[SN-KG-KII-DA].** *"Women have developed a sense of power in controlling resources and making decisions"* **[OR-AN-KII-HEW].**

Program participants added their reflections, supporting the consensus view that female-headed households benefited more than male-headed households.

- **Women in female-headed households can take decisions independently of men.** *"As head of the household she can make better decisions. She usually manages her house better than male-headed households. She is also not affected by disputes that occur between husbands and wives about management of PSNP transfers and the household budget"* **[OR-AT-FGD-PDS-F].**
- **Women are now aware of their rights.** *"Women have got a good change in attitude, as we have learnt a lot of things which allows us to exercise our rights"* **[OR-AT-FGD-TDS-F].**
- **Women on PSNP now get paid maternity leave.** *"Females get transfers without participating in Public Works when they are pregnant, and they care for their children when they take a rest from Public Works"* **[SN-H-FGD-TDS-F-PLW].**

Female participants supported the dominant perception that women prioritise household needs in their spending decisions, whereas men tend to prioritise their own needs instead. *"We women spend PSNP transfers directly for household consumption, but men have other needs such as chewing khat, drinking alcohol and marrying an additional wife"* **[SN-H-FGD-PDS-F].** Female-headed households are therefore more likely to spend PSNP transfers wisely, rather than wasting it on personal consumption. *"Female-headed households are better than male-headed households for proper utilization of PSNP transfers for household consumption and child-care, as women spend all the transfer for day to day household needs and are good at saving from their income"* **[OR-AT-FGD-PW-M].**

Two men offered a dissenting view, arguing that male-headed households can make better productive use of incremental income such as PSNP transfers. *"Households where there is a husband can properly do cropping and contribute to better production. So the PSNP transfer is additional income for male-headed households to get higher impact"* **[SN-KG-FGD-PDS-M].** *"Those households with able-bodied and strong men have better impact, since men are stronger in farming and contribute to increased production"* **[SN-KG-CS-PDS-M].**

One TDS client agreed that women are better at maximizing the consumption impact of PSNP cash transfers, but men are better at maximizing the investment potential of this incremental income. "Women are good as compared to men in relation to utilization of PSNP transfers as we women spend it for food, health and children's education. But poor women like me cannot maximize the impact because we have labor shortage to use existing land and less overall income as compared to male-headed households. So PSNP is bringing bigger impact in male-headed households" **[OR-AN-CS-TDS-F].**

5.4.7. Assessment of impacts

Respondents were asked about reasons for change, how different components of PNSP4 and IN-SCT may have contributed to this change, external factors that may have impeded change and long-term sustainability of changes.

In terms of reasons for change, key informants pointed out that certain issues are prioritized in PSNP4, and are therefore registering better impacts.

> "We made a very good positive contribution in the areas of nutrition and health care, particularly in dietary diversity and school nutrition clubs, because we specifically focused on these and provided all round support. However, other areas such as early marriage were not our focus and hence we did not observe significant improvement in the community" **[Federal-KII-Concern].**

> "On some aspects such as gender equality and child labor, DAs know much about these from PSNP3 so are able to achieve improvement. Other issues such as nutrition and hygiene are newly introduced components and DAs have limited understanding on these. Our engagement so far was preparatory and not yet cascaded to kebele level, so changes are unlikely" **[OR-KII-FS].**

Some key informants answered this question by explaining why some communities are registering more significant impacts than others. One factor is the level of support provided, while another is the capacity of households and communities to implement interventions or to put advice into practice.

> "Kebeles frequently visited by Social Workers have better outcomes on all the variables indicated than those not frequently visited and supported" **[OR-AT-KII-SCT].**

> "Differences in change are due to awareness levels and intensity of intervention" **[SN-H-KII-SW].**

> "It is because of differences in providing education and reaching people with information. If people are aware about something, they implement it" **[SN-H-KII-HEW].**

> "In a few elements the changes are limited. This might be directly related to lack of capacity, due to low cash to practice the knowledge they gained from different sources" **[SN-H-KII-DA].**

Clients added their reflections, observing that progress was highest in areas where:

- **Government direction and program focus are strongest.** *"I think those good changes in nutrition, education, hygiene and sanitation are due to the efforts of Social Workers, HEWs, DAs and kebele managers. There have been continued awareness creation, education and food preparation demonstrations for many years"* **[OR-AT-CS-PW-F].**
- **Participants can see the benefits for themselves.** *"Positive changes happened because they are beneficial for us. For instance, if we do not wash our hands we will be sick, if we do not exclusively breastfeed our kids, they will get sick and be stunted"* **[SN-H-FGD-TDS-F-PLW].**
- **Information can be applied at low or zero cost.** *"Some changes do not need much investment and can be practiced just with knowledge, like hygiene and breastfeeding"* **[SN-H-FGD-PDS-F].**

Conversely, clients observed that progress was less positive on issues where:

- **Government and program staff gave lower priority.** *"If it is not taken seriously, there will be no change, such as the child-care facility at Public Works. Nobody mentioned it and took it seriously"* [OR-AN-CS-TDS-F]. *"I think it is an issue of attention. We have not considered the establishment of child-care centres, compared to other issues"* **[OR-AT-CS-PW-M].**
- **Social attitudes and cultural practices conflict with program objectives**. *"No improvement in early marriage, because of external factors such as distorted understanding of rights among boys and girls. They are deciding without consulting their family"* **[OR-AT-CS-PDS-F].**
- **Economic factors such as poverty constrain behavioral change.** *"Due to lack of budget I lag behind in sanitation – limited hand-washing using soap and absence of latrine maintenance"* **[SN-H-CS-TDS-F].** *"The limitation to feeding nutritious foods to our children is to a lack of adequate cash to buy different kinds of food items"* **[SN-H-FGD-TDS-F].**

In IN-SCT woredas, there was general agreement among key informants that the components that added most value to PSNP4 are home visits by SWs, BCC sessions, the introduction of Temporary Direct Support, and co-responsibilities.

"The biggest difference has been made by the transition into TDS, and the visit of Social Workers" **[OR-AT-KII-PSNP].**

"Visit of social workers, because we have seen significant changes in terms of implementation of co-responsibilities and BCC sessions" **[SN-H-KII-PSNP]**.

"Visits by social workers and BCC sessions, because communities achieved significant attitudinal change" **[OR-AT-KII-SCT].**

"First, the transition into TDS for PLWs. Second, the BCC sessions. Third, sending children to school" **[SN-H-KII-SCT].**

"Co-responsibilities and visits of social workers are the elements making the biggest difference in the program. These elements are new and are important for improving progress in achieving nutrition and social welfare outcomes" **[SN-H-KII-SP].**

"First is the Social Worker visits and second is the co-responsibilities that have made the biggest difference, because these have been properly implemented since the Social Workers started working in this project" **[SN-H-KII-SW].**

"The biggest difference has been made by the BCC sessions of the HEW, and advice of the Social Worker. Clients cannot be changed by cash transfers only" **[OR-AT-FGD-CCC].**

Some key informants recognised that PSNP4 and IN-SCT provides a package of support that cannot be disaggregated into separate components without reducing program effectiveness. *"It is difficult to prioritise. All components have their benefits"* **[SN-KII-FS].** *"Components of the program cannot be differentiated as they are all very important"* **[SN-H-KII-SCT].**

In PSNP woredas without IN-SCT, many of these innovations have not been introduced or were not fully operational. "*For instance, BCC sessions at Public Works site have not started"* **[OR-AN-KII-PSNP].** *"Transition of PLWs to TDS is better implemented because the DAs have better understanding of this"* **[OR-AN-KII-SP].** For this reason, cash transfers were often seen as the most important component in PSNP woredas. *"As far as I know,*

the cash transfer had the biggest impact" **[SN-KG-KII-SW].** *"Cash transfer, because it fills the food gaps of food insecure households"* **[SN-KG-KII-DA].**

Where BCC is operational, this is valued by key informants. *"The biggest difference is made by the BCC sessions, as it improved the awareness of the community in many aspects like hygiene and sanitation, vaccination, ANC and PNC visits"* **[OR-AN-KII-DA].** One HEW recognised that BCC and cash transfers reinforce each other. *"I think BCC sessions with cash transfer made the biggest difference because the two has to go hand in hand. If food insecure households get behavioral change capacity building side by side to the cash transfer, the community's food security and nutrition conditions will be improved"* **[OR-AN-KII-HEW].**

Despite many challenges in terms of support offered by SWs (see chapter 4) many clients in IN-SCT woredas expressed their appreciation for SW visits by ranking them first among program components. *"Visit of Social Workers, because we learned through them how to manage our transfers and not to waste them, and also that we should engage in different small business activities, such as vegetables and other trade to improve ourselves"* **[OR-AT-FGD-PDS-F].** *"We benefited much from the presence of the Social Worker. He opened our eyes"* **[OR-AT-CS-PDS-M].**

Other clients ranked cash transfers alongside SWs, or ranked cash transfers first. *"The cash transfer is very important for me, and the Social Worker is equally important"* **[SN-H-CS-PDS-F].** *"Given my food gaps it is the cash transfer that has made the biggest difference for my family, but I don't like to forget the support of the Social Worker, which saved the life of my son"* **[SN-H-CS-TDS-F].** *"Cash transfer has made the biggest difference as we use the money to cover our food, health and child education. We mostly depend on the transfer for our basic needs"* **[SN-H-FGD-PDS-F].**

Participants on Temporary Direct Support valued most the opportunity to move out of Public Works when they fell pregnant. *"Previously we were forced to work under any conditions as Public Works clients. The transition to TDS really improved health for us and our children"* **[OR-AT-FGD-TDS-F].**

Some participants explained why they ranked BCC sessions first, even ahead of transfers. *"BCC is more useful than cash, because we have learned lessons that can be used for a lifetime"* **[OR-AT-CS-PW-F].** *"BCC has made the biggest difference, as cash is needed to solve temporary problems while knowledge will stay and help to solve problems"* **[OR-AT-CS-PWF].**

In woredas without IN-SCT, most participants ranked cash transfers first, if only because they were not exposed to the full set of program components. *"First is the cash transfer. Nothing else because other elements are not implemented in our kebele"* **[OR-AN-FGD-PDS-F].** *"The cash transfer is very important for me, as I do not know any other component"* **[SN-KG-CS-PDS-M]**.

The only other component that was mentioned by several program participants was BCC training. *"For me the BCC sessions have equal importance with the cash transfer. I think the two have to go hand-in-hand, as the former helps us improve our knowledge while the latter closes our food gaps*" **[OR-AN-CS-TDS-F-PLW].** *"For me, knowledge lasts long but money will not. Thus I say the BCC sessions have more power to improve me and my family"* **[OR-AN-CS-PW-F].**

A number of factors were identified by service providers and clients as having hampered positive change. This includes climate related shocks, infrastructure constraints, political instability, price fluctuations and land shortage.

Natural disasters and climate change, mainly experienced as recurrent droughts and floods, were identified by key informants at federal, regional and woreda levels as undermining the positive impacts of PSNP and IN-SCT on participants. *"Drought is worsening the situation of clients in many areas"* **[OR-KII-FS].** *"Climate change created pressure on the livelihoods of the clients"* **[OR-AT-KII-SP].** *"Low productivity due to erratic rainfall hinders the impact of the IN-SCT program"* **[SN-H-KII-DA].** Water scarcity and drought also undermine other IN-SCT components. *"They also affect improvements in the hygiene and sanitation situation, no matter how the program promotes them"* **[SN-H-KII-SP].**

Other key informants in IN-SCT program areas referred to logistical and infrastructural challenges. *"The vast size of the woredas made it challenging for social workers to reach every household regularly. The household numbers they cover is not too many but the distances they need to travel are too large"* **[SN-KII-SCT].** *"Poor road infrastructure, particularly community roads, affects monitoring and follow-up. For example, two kebeles cannot be easily accessed"* **[OR-AT-KII-SW].**

In some areas, civil insecurity compromises the delivery of PSNP transfers. *"The ongoing social unrest and conflicts in border and lowland areas has been affecting the timely transfer of PSNP resource to clients"* **[OR-KII-FS].** On a positive note, one informant remarked: *"Sometimes there may be political interference that undermines programs, but I have not seen it with the IN-SCT"* **[SN-KII-SCT].** But a key informant at woreda level disagreed: *"Political interference and, specifically, different assignments given from woreda and political meetings has negatively impacted implementation"* **[OR-AT-KII-PSNP]**. Political issues also raised their head at the program level. *"Another challenge is the management of the program by MoLSA, and the need to move PDS clients to MoLSA from the Agriculture Office"* **[OR-KII-SCT].**

Focus group participants in IN-SCT communities concurred that erratic rainfall and food price inflation were two of the main factors limiting program impacts. *"Lack of rainfall has limited the impact of the program through resulting in loss of production. Inflation has also affected households by reducing the amount of food they can buy"* **[OR-AT-FGD-CCC].** *"If there is no rain it affects production of crops, and we cannot survive on PSNP transfers only"* **[SN-H-CS-PDS-F].** Price inflation also applies to farm inputs, further compromising agricultural productivity. *"There has also been a rise of input prices such as chemical fertilizers and improved crop seeds that also influenced our income to graduate from the program"* **[OR-AT-FGD-PW-M].**

Some problems experienced by IN-SCT participants are location-specific, as with this situation of polluted water experienced in one woreda of Oromia.

> "Our animals and children are using water that is polluted by chemicals discharged from commercial and flower farms surrounding the lake. Children swim in the water flowing out of the lake and we see children hurt as their skin is being affected and animal are drinking water from the same source. This has affected the health of our children and is reducing the productivity of cattle" **[OR-AT-FGD-PW-M].**

Climate change and erratic rainfall were also highlighted as factors that compromise program impacts by several key informants. *"Crop failure is becoming more frequent and people are increasingly dependent on PSNP"* **[OR-AN-KII-SP].** As food production falls so food prices rise, and inflation is another factor that reduces PSNP impacts, as more resource transfers are allocated to food purchases. *"Price inflation, especially the price of basic needs like food items"* **[SN-KG-KII-PSNP].** *"Everyone in this woreda is directly or indirectly affected by climate change and by price inflation of any items"* **[SN-KG-KII-SW].** One female Public Works participant explained how price inflation puts pressure on household budgets that PSNP transfers are unable to alleviate.

> "The rise in market prices and the increase in costs of living have affected us negatively. The transfers we are receiving cannot buy the food we need for our families. In addition, we need to buy seeds and fertilizers to produce more food, and we have to buy school materials for our children. The only choice we have is to use the transfers for these purposes. When we do that we reduce the amount we need to get what is required for our house" **[SN-KG-FGD-PW-F].**

Some clients in PSNP areas have observed the climate changing during their lifetime. *"During my younger age, the rain was so plenty and land was fertile, so we used to harvest high amounts of food grain with minimum effort. Now there is not enough rain"* **[SN-KG-CS-PDS-M].** Late or erratic rains reduces the usefulness of agricultural extension advice provided by Development Agents. *"The knowledge we got from DAs yielded very limited amount of change in production due to climate change. In our area rain is not coming at the right time and that has an implication on our production and productivity"* **[OR-AN-CS-PW-F].** *"The DA taught us to produce vegetables for market to increase our income. However, last year, market price was not good as it was very low during harvesting (e.g., 30 birr/kg for pepper) and it tripled after two months (90-100 birr/kg). But we could not store and get a good price due to the absence of facilities"* **[OR-AN-FGD-PW-M].**

Finally, key informants in PSNP areas mentioned two social issues that are challenging the ambitions of the PSNP to graduate people out of poverty and food insecurity – youth unrest due to landlessness, and 'dependency syndrome'. *"Land shortage is also creating social problems as there are many youth who are landless and unemployed"* [**SN-KG-KII-SP].** *"People have developed a dependency syndrome. They don't want to graduate from PSNP"* **[OR-AN-KII-HEW].**

In terms of long-term impacts, a common view among clients in IN-SCT woredas is that the positive impacts of the program will continue, especially because of the important knowledge – including about rights – that they have gained. *"Nobody can take gained knowledge from you. Changes related to hygiene and sanitation, child nutrition and education will continue"* **[SN-H-CS-PDS-F]**. *"Because the changes we mentioned are caused by education and expert advice and we also know the benefit of those changes in behavior – for instance breastfeeding, education attendance and hygiene – we will not stop doing them"* **[OR-AT-CS-PW-F].** *"We already know our rights and responsibilities, thus we will claim when our rights are affected"* **[OR-AT-CS-TDS-F].**

Others believe that positive impacts will be sustained in the future, but only with *"technical support and follow up from social workers*" **[OR-AT-FGD-PDS-F]**; and *"if the government helps us to get access to clean water and free us from fees"* **[OR-AT-CS-PDS-F].**

A minority of respondents held a more pessimistic view, that: *"If the program stops we don't think the positive changes will remain in the long-term"* **[SN-H-FGD-PDS-M].** The removal of social workers was seen as especially problematic: *"For us the positive changes, particularly women empowerment, will go back if the capacity building by the social worker is removed. We still want him to continue with us"* **[OR-AT-FGD-TDS-F].**

Some others feared the damage that could follow the loss of material support (cash transfers) from the program, especially on household food security. *"The knowledge we gained through BCC sessions can be used continuously whether this program continues or stops, but our capacity to feed our family may be reduced"* **[SN-H-CS-PW-M].** *The positive things in terms of closing the food gap through PSNP might be affected if this program happens to stop. Even, under the current rate its contribution towards this goal is somehow limited"* **[OR-AT-FGD-TDS-F].**

"If PSNP stops, my family food gap will widen and throw me into a difficult condition" **[SN-H-CS-TDS-F].** *"No it will not continue. If PSNP is not there I couldn't provide adequate food for my family"* **[OR-AT-CS-PW-M**].

Participants in PSNP woredas are even more concerned about the effects of a loss of program support on their well-being. *"It is difficult for us to survive without the support"* **[SN-KG-FGD-PDS-F].** *"If no PSNP, we would have died by this time"* **[OR-AN-FGD-PDS-M].** *"PSNP prevented us from death by covering our food. So if the program stops this will not continue"* **[OR-AN-CS-PDS-M].**

But many recognize that PSNP has brought lasting benefits apart from income transfers. *"There is not much change that happened due to PSNP, except those related to education. These will continue even if the Safety Net is not here, because we know the importance of education"* **[SN-KG-FGD-TDS-F-PLW]**. *"The changes are due to education and improvement in knowledge, so they will remain as they are becoming part of normal life"* **[OR-AN-FGD-TDS-F].** *"Yes, some of the positive changes may continue, such as those relating to conservation of water and soil"* **[SN-KG-CS-TDS-F-PLW].** *"I think some of the knowledge we gained through PSNP, such as watershed management, continues to help us. We also try as much as possible to use this knowledge for future development of our area"* **[SN-KG-CS-PW-M].**

6. Conclusions and policy implications

This quantitative and qualitative impact evaluation provides substantial evidence about the success and limitations in delivery of the IN-SCT program as well as its impacts on household wellbeing, maternal nutrition knowledge and child outcomes.

The process evaluation components revealed several areas of successful implementation as well as some areas in need of improvement in the delivery of the IN-SCT. Among the successes, the probability of attending any antenatal care sessions improved for TDS clients (quantative), and evidence suggests that participation in postnatal care sessions also improved (qualitative). Vaccination of children, treatment of malnourished children, and school attendance all improved. The IN-SCT also improved multisectoral collaboration among social workers and local development agents, health extension workers, and school officials, which improved client fulfilment of co-responsibilities in health and schooling, as did keener client awareness of the importance of using services. PSNP-linked BCC sessions held at public works sites improved, which also appeared to be implemented better in IN-SCT woredas than in PSNP-only woredas and were viewed positively by participants. Participants noted positive changes in behaviour related to hygiene and sanitation, such as washing hands with soap, latrine use, and keeping their compounds clean.

Among the areas that need improvement, SWs were few in number and had little capacity to travel to communities to conduct BCC trainings. There were frequent changes in staffing, which ultimately undermined the effectiveness of the SWs. The project also had limited interaction with the CCCs. As a result of these weaknesses in delivery and the difficulties for SWs to visit communities, HEWs became overburdened with the demands on their time and delivery of BCC sessions appears to have suffered. DAs and HEWs report that lack of an official topic guide on nutrition makes it difficult to target effective improvements in delivery. The introduction of MoLSA's new management information system was a positive development but it faced some challenges, including slow progress in developing in-house technical expertise which led to the need for external consultants for software updates and general troubleshooting. This caused some delays in reporting. Also, although clients have good knowledge of co-responsibilities, they receive inaccurate information about the set of co-responsibilities and repercussions if they fail to meet co-responsibilities or attending BCC sessions. The process evaluation also revealed a lack of clarity regarding rules for transition into TDS and lack of regular malnutrition screening. This undermines the transition of caregivers of malnourished children from PW into TDS. Finally, the evaluation found that identification of and response to cases of child protection violations was limited, in part because of too few SWs and also because of their low capacity to respond to such issues beyond their main responsibilities within PSNP4.

The IN-SCT program has improved outcomes and knowledge for client households and that these improvements are greater than were achieved for clients in other PSNP4 woredas. The nutrition-sensitive approach to the PSNP4 provided by IN-SCT has led to meaningful improvements in household dietary diversity and food security, asset holdings, child schooling and child protection relative to the PSNP4 alone. The results show that the IN-SCT increased the household dietary diversity score (HDDS) by 1 food group out of the 12 considered for the sample overall. This effect was larger, at 1.5 food groups, for IN-SCT PDS households compared to their PNSP4 only counterparts. The IN-SCT program also improved the share of women consuming a minimally acceptable diet and reduced the food gap by roughly 1 month compared to the PSNP4 alone. Women in the program also learned important nutrition messages and improved some practices, such as breastfeeding.

We found that the IN-SCT program significantly increased holdings of livestock, productive and total assets, but reduced holdings of consumption assets, when compared to other PSNP4 beneficiaries. IN-SCT had a positive effect overall on asset holdings, but also changed the composition of asset holdings, toward livestock and productive assets and away from consumer durables. Regarding schooling, households with children age 7-14 in the IN-SCT communities report that their children's school was open nearly one half additional day on average in the past week than households in the matched comparison group of PSNP4 clients. The activities of SCT service providers, whether coordinators, HEWs, or SWs, appears to have caused schools to remain open on more days. This had a weakly significant effect on child school attendance for children age 7-14, which increased by one quarter day on average in the past week.

In the SNNP1 sample, we compared the impact of the IN-SCT program on children in client households compared to children in the other PSNP4 woredas (C2). The estimates show no impact on child anthropometry, except for an unexplained statistically significant negative impact on HAZ. Results also showed no impact of the IN-SCT program on children in client households compared to children in neighbouring households not in the program. Also, there is no impact of the program on household food and nonfood consumption, suggesting weak effects on poverty reduction.

The lack of evidence for impacts of the IN-SCT on client households compared to non-client households in the same communities weakens the support from this evaluation that the impacts of the IN-SCT were broad in scope. It is plausible that benefits from the program spread to neighbouring households, leading to spillover effects that erode our estimates of impact compared to that counterfactual of non-participant neighbouring households. There is little other evidence to draw on to inform the presence of such spillover effects, leaving the results of the T vs C1 comparisons indeterminate. In the face of such evidence, we conclude that there were no impacts in the T vs C1 comparisons, but with the caveat of potential spillover effects.

Taking all the evidence together, the impact evaluation shows that progress was made in several areas, but it has been uneven. Gaps in delivery and budgetary and supervisory problems kept Social Workers from routinely traveling to communities to do their jobs. As a result, a greater burden for providing nutrition trainings and support fell to HEWs, rather than SWs. These challenges in delivering new nutrition programming also coincided with familiar challenges for the PSNP4 program, including small transfers and sometimes burdensome work requirements, as well as delays in making payments. Ultimately, this limited the impact of the IN-SCT program on child nutrition outcomes. The program was able to remove some constraints to resources and knowledge to make improvements along the impact pathway, but the intensity of the interventions were not sufficient to reduce child malnutrition. An important question now for the Government of Ethiopia, UNICEF and their partners, is whether changes can be made to make IN-SCT more effective, so that the efforts to expand the impact of the PSNP into improvements in child nutrition can finally be realized.

7. Recommendations

7.1. Recommendations from the impact evaluation team

Following the completion of the initial mixed methods impact evaluation analysis, the research team undertook a process to develop recommendations from the findings, including through discussions with key stakeholders in government and at UNICEF. The research team presented findings from the evaluation at a workshop in Hawassa in December 2018 attended by more than 60 participants, including staff from MOLSA. In addition, the research team conducted numerous discussions with their counterparts at UNICEF. Finally, the results of the evaluation were presented at the conference, "Diets, Affordability and Policy in Ethiopia: From Evidence to Action" held in Addis Ababa on December 12, 2019. The research team drew on the findings of the study and these consultations to develop a number of recommendations for how to improve implementation and service delivery in the IN-SCT and, thereby, improve impact on household food security, child anthropometry and other outcomes. Here, we present a number of recommendations based on the evaluation.

1. **Strengthen IN-SCT components that improve children's diets and nutrition:** IN-SCT had no impact on infant and young child feeding practices or on diet quality for children under 2. Also, service providers and clients indicated a need for more frequent nutrition screenings. IN-SCT should therefore focus more heavily on infant and young child feeding practices during BCC sessions and increase the frequency of nutrition screenings. BCC sessions were often conducted after public works sessions, limiting attendance and contained too many messages. Sessions should be reformed to assure greater attendance and higher satisfaction by participants. Other studies have found that larger cash transfers to mothers combined with high-quality BCC can improve child diets. UNICEF and its partners should consider providing a top-up transfer to lactating women receiving temporary direct assistance. Together, these changes could greatly increase IN-SCT's ability to improve child nutritional status.

2. **Expand IN-SCT components that improve diets of pregnant and lactating women:** IN-SCT's combination of transfers plus BCC sessions improved household food security and minimum dietary diversity for women overall, suggesting the potential for an even greater emphasis on improving the diets and food security of pregnant and lactating women. The pilot's success in reducing the food gap suggests that the approach is effective and efforts should be expanded.

3. **Emphasize maternal nutrition knowledge:** Despite having positive impacts on diets and food security, there is mixed evidence that IN-SCT improved women's nutrition knowledge in TDS relative to women in TDS in the PSNP4 alone or outside the programme. This gap in the impact pathway suggests a potential limitation in IN-SCT's effectiveness that could be bridged by giving increased attention to nutrition knowledge during BCC sessions.

4. **Reform the recruitment and training model for social workers and fund their travel:** Findings show a substantial need for reforms to the staffing of social workers. A promising approach would be to introduce para-social workers hired within each community who could be more readily tavailable to provide services following more modest training. These para-social workers would have lower qualifications but would be more accessible, reducing the need for travel. Retention of SWs would also likely improve. Social workers based at the woreda level currently are very well qualified but have too few resources and a burdensome scope of work, causing many to leave these jobs for other employment. Hiring junior social workers from within communities may be a feasible alternative.

5. **Improve and streamline the management information system:** The management information system is recognized as a useful approach to tracking programme delivery, but it took a long time to get the system operational, and SWs were overburdened with MIS reporting requirements. The system should be streamlined to reduce social workers' time spent on reporting. Additional technical support should be provided where needed to complete the transition from the paper-based system to the electronic system, to eliminate the need to continue to keep paper records. In-house capacity to troubleshoot the system should be increased in general to improve response times to technical issues.

6. **Increase the size of the PSNP4 transfers:** In response to increased need and budget shortfalls, PSNP removed pulses from the food transfer and similarly allowed the value of the cash transfer to erode. However, there is evidence from Bangladesh and elsewhere that the impact of transfer programs responds meaningfully to larger transfers, creating larger improvements in food security, assets and consumption, and greater potential for impacts on nutrition when intensive, high quality BCC programs are also included. In Bangladesh, larger unconditional transfers targeted to the poor, along with an intensive nutrition training for mothers, lead to substantial reductions in child stunting (Roy et al., 2018). This evidence, from the Transfer Modality Research Initiative in Bangladesh, was recently replicated in Ethiopia (Park 2018), showing the potential for this "cash plus" model in Ethiopia. This suggests that transfers should be increased in size and that the approach to training women on nutrition should be enhanced. However, clients in the PSNP4 are kept very busy with work requirements, so an improved design would allow even more of the work requirements to be fulfilled by having women attend nutrition trainings. This level of impact is the goal of the PSNP and many of the components are now in place to achieve it. What is needed is a commitment to provide modestly larger transfers and to further strengthen BCC sessions. This could substantially change the impact profile of the PSNP for years to come.

7. **Implement recommendations from clients and service providers:** Service providers focused on the need to increase the number of social workers and build the capacity of all service providers—in terms of numbers, programme knowledge, and resources. To improve impact, clients highlighted the need for larger transfers, an end to payment delays, more frequent nutrition screenings, and more frequent BCC sessions.

8. **Strengthen coordination and supervision mechanisms:** Implementation challenges reveal a lack of awareness of job requirements among service providers and weak commitment to implementation at woreda and kebele level. IN-SCT could be improved by stronger social worker training that emphasized their coordination role and an improvement in supervision mechanisms that hold service providers to account.

Recommendations 1-4 are targeted to UNICEF, the Government of Ethiopia and their partners who continue to improve and refine the model for nutrition programming designed to strengthen nutrition outcomes from the PSNP. Similarly, recommendation 5 is targeted to UNICEF and MOLSA, who are developing the Management Information System. Recommendations 6-8 are targeted to all stakeholders supporting the PSNP, including the relevant government ministries and the Donor Coordination Team.

7.2. Recommendations from service providers and clients

The qualitative fieldwork generated many recommendations that were offered directly by service providers and clients in both IN-SCT and PSNP-only woredas in Oromia and SNNP regions. Recommendations offer suggestions for how to improve the implementation of the PSNP4. Not surprisingly, many of these focus on increasing the numbers of SWs and capacity of all service providers in terms of numbers of people, their knowledge about PSNP and resources for undertaking their jobs. Further recommendations for improving multisectoral collaboration point towards the need for greater reporting and stronger accountability mechanisms. In terms of improving impact, clients in particular highlight the need for transfer amounts to be larger, issues with payment delays to be resolved and more frequent BCC sessions. We now turn to these recommendations received from service providers and from clients.

Service providers in IN-SCT woredas acknowledged innovative design features of both PSNP4 and IN SCT that are worth keeping. "PSNP4 has included many components compared to the previous PSNP3. We can take the co-responsibilities as an example" [OR-AT-KII-SP]. "PSNP4 has introduced many changes in terms of benefiting women and children, compared to the previous PSNPs" [SN-H-KII-SW]. "Having seen the difference with and without IN-SCT, I think PSNP might be improved to include the approaches adopted under IN-SCT" [OR-AT-KII-SW].

Key informants at federal and regional levels identified implementation challenges as the main area where the PSNP and IN-SCT could be improved to achieve bigger positive impacts. "It would be good for us to fully implement what is noted in the PSNP4 PIM" [OR-KII-FS]. "We need to strengthen current implementation of program" [SN-KII-FS]. Specifically, support for livelihoods needs more attention. "The focus should be given to the implementation of the livelihoods aspect of PSNP4. PSNP households should be supported with income generating activities and farming" [Federal-KII-Concern].

Specific suggestions were made by key informants about changes to design and implementation that could improve the PSNP, including:

- **Raising the amounts paid to households:** *"Increase in value of transfer"* **[OR-AT-KII-SCT].**
- **Improving the payment system:** *"Agents should be avoided and payments should be made by government institutions. The payment should be made every month timely"* **[OR-AT-KII-SP].**
- **Strengthening coordination mechanisms:** *"Steering committees at woreda level; improved collaboration with health and education; functional CCCs at kebele level"* **[OR-AT-KII-SW].**
- **Increasing the number of social workers** – *"It would be good if there is one social worker per kebele"* **[OR-AT-KII-SP]** – or linking social worker caseloads to availability of transport: *"One social worker covering two kebeles with a motor-cycle, or one social worker per kebele without a motor-cycle"* **[SN-H-KII-PSNP]** – or maintaining a manageable caseload, as originally planned: *"In*

the design of the program, it was planned that one Social Worker covers 150 PDS households. But from a practical point of view, this would be difficult because apart from TDS, there are PDS clients that should be covered by Social Workers. Therefore, one Social Worker is expected to cover about 300 households through house to house visits" **[SN-H-KII-SW].**

- **Extending Public Works employment to 9 months:** *"It is better to increase the payment months for the Public Works clients from 6 months to 9 months, because almost all the clients are suffering food gaps from July to mid-September. In these months there is no production as well as no cash transfer, so these households failed to fill their food gaps"* **[SN-H-FGD-CCC].**
- **Adding new livelihoods components:** *"Additional livelihood components that lead the clients to be economically empowered through the introduction of intensified and diversified income-generating activities that create credit access for clients to purchase technology like fertiliser, improved seeds and important tools that lead to improved productivity"* **[SN-H-KII-DA].**
- **Supporting women's livelihoods:** *"Organising women to do business in groups and providing them initial capital would help improve livelihoods"* **[OR-AT-FGD-CCC].**
- **Adding components that address early marriage and reproductive health of adolescents:** *"PSNP/IN-SCT should include interventions focused on adolescent boys and girls, particularly to create awareness about reproductive health and reduce early marriage"* **[OR-AT-KII-HEW].**
- **Producing more communications materials:** *"Learning documents like illustrated leaflets and manuals should be produced and shared with stakeholders and communities"*

Other recommendations offered by service providers can be summarised as follows:

- Having two instead of one SCT coordinator at woreda level;
- Strengthen cross-sectoral collaboration, partly through strengthening steering committee at woreda level and ensuring that there are monthly meetings;
- Including the aspect of collaboration in job descriptions and performance evaluation criteria;
- Improving data management and sharing regarding PDS and TDS clients, notably making copies of client lists available to service providers at the kebele level;
- Strengthening reporting mechanisms between HEWs and SWs;
- Developing and using standard reporting forms to facilitate communication between HEWs and DAs regarding transitions into TDS for PLW;
- Ensuring greater clarity about when a caregiver is to return back to PW. One respondent suggested that it would be helpful to introduce a fixed time period after which a caregivers is to go back to PW – like in the case for PLW – so as to avoid confusion among both service providers and clients;
- Provision of regular training for HEWs, DAs and others on rules regarding transition from PW into TDS for PLW and all other elements of PIM;
- Providing capacity building for social workers of case management;
- Integrating case management of child protection in the case management system of IN-SCT;
- Stronger monitoring and follow-up of BCC sessions by SWs and woreda committee/ bodies.

With respect to MIS, very specific recommendations were offered:

- Ensuring in-country technical assistance regarding MIS to facilitate more direct interactions and shorter lines of communication until technical problems are solved;
- Providing adequate skill training to the users of the MIS, plus additional in-depth training to MIS officers on server management and troubleshooting of common errors in the system;
- Ensuring internet connectivity and improved power supply (in support of MIS);
- Upgrading the server's RAM capacity to speed up the server function to get the required reports quickly (in support of MIS);
- Improved salary and benefit packages for MIS officers in order to retain staff and key skills;
- More complete development and pre-testing of the MIS before it is rolled out into the pilot.

Clients focused particularly on the support that they receive through IN-SCT and PSNP and how this may be more effective. The main challenge for clients to affect change pertains to the low amount of the transfer. Respondents noted that the transfer amount is insufficient to provide for basic needs, such as food, referring to rising prices and that transfers are no longer cover all family members. Other challenges are delays in payments and therefore not knowing when payments will be made next, and lack of labour capacity within the household (particularly for PDS clients) to construct the latrine.

> "The transfer amount we are getting is not enough. Some of our family members not targeted. For example, our living condition is worsening due to market situation; price of soap, cloth items and so is sky rocketing and we couldn't manage to cope up with it." **[INSCT-OR-AT-FGD-TDS-F]**

> "The only problem we have is that we mostly take credit to cover our expenses due to delay in transfer. We cannot predict when we receive and we feel ashamed of the debt." **[INSCT-SN-H-FGD-PDS-F]**

> "The delay of payment, as you remember I told you this problem last time when you interviewed, still the problem is not resolved, it even worsened. The other problem is related to the amount of payment; as I told you the family size is 8 but the payment effected with only 3 persons which is not fair and so small to support my family." **[INSCT-SN-H-CS-PDS-M]**

Clients in IN-SCT woredas offered the following suggestions to improve the impact of PSNP:

- **Raising the payment level and making payments more promptly:** *"There is a need to increase the payment and improve the timeliness of payments"* **[OR-AT-FGD-PDS-M].** *"The transfers should be timely, sufficient to cover our food consumption spending and able to compensate for delays by making two months payment at once"* **[OR-AT-FGD-TDS-F-PLW].**
- **Reverting to full family targeting:** "*If the PSNP cash amount increased based on our family size, it would have better impact"* **[SN-H-CS-PDS-M].** *"The new design should remove the family cap and replace it by considering our family size"* **[SN-H-FGD-PW-M].**
- **Providing asset transfers in the form of livestock:** *"This program would have brought change for me and my family if it provided us chickens, sheep, goats or other animals, either for production or fattening. The fact that it was only limited to awareness-raising and cash transfer slowed our progress in changing my family's food deficit situation"* **[SN-H-CS-TDS-F].**

- **Supporting women's livelihoods:** *"For women in our locality, milking cow is everything. Had there been distribution of cows for women, the program could have achieved significant results for women"* **[OR-AT-CS-PW-F].**
- **Addressing water constraints:** *"PSNP would have brought better change if it had created access to water. Why does the program not work on groundwater – give us a pump motor that will provide water for us, so we can produce whole year round"* **[OR-AT-FGD-TDS-F].**

Clients in PSNP woredas made similar recommendations:

- **Raising the payment level, and paying promptly:** *"We need the payment to be increased if possible, because the amount is not sufficient enough to buy food"* **[SN-KG-FGD-PDS-F].** *"If the PSNP cash comes on time and if the amount of cash increases, it would have better impact"* **[SN-KG-CS-PDS-F].** *"Improved timeliness of transfer"* **[OR-AN-FGD-TDS-F].**
- **Adding new livelihoods components:** *"If the program had credit services for agriculture inputs, it would have had better impacts on our livelihood"* **[OR-AN-FGD-PDS-F].** *"It would be nice if there were interventions that help us improve our livelihoods, diversify income sources, and improve production"* **[OR-AN-CS-PW-M].** *"I urge this program to engage us in livelihood activities such as fattening and poultry development"* **[SN-KG-CS-PW-M].**
- **Supporting women's livelihoods:** *"It is good if there are animal packages such as poultry, goat rearing and transfer of milking cows to women for a significant difference"* **[OR-AT-CS-PW-F].**

8. Lessons learned

results show that the role of social workers is having an effect, suggesting that a social-worker-based model could be effective, with other changes in place. However, overburdened social workers were not as effective as desired, leading many of them to resign. Social workers should be encouraged to spend more time in the communities, meeting with families and linking their work with that of HEWs and other service providers.

In IN-SCT, the development of the MIS is underway and the pilot provided an opportunity to practice using an MIS to inform its scale-up at the national level. Still, there are many dimensions of the MIS that need strengthening. The time cost of getting the MIS operational has been challenging for the social workers. It may be necessary to pause implementation of the MIS while the social workers, or new para-socials workers, gain more experience in the other aspects of their responsibilities before the MIS is reintroduced. Then a more streamlined version of the MIS could be rolled out again on a pilot basis to provide lessons for future scaling up. Ultimately, the objective of the MIS, to have a central database to track services received by households in the program, is a useful one, but this will take more time to be achieved.

Another lesson from IN-SCT is that the program appeared to work best when social workers were able to spend more time in the communities. This suggests alternative ways to recruit and assign social workers, focusing more on recruiting local, possibly lower skilled individuals to play this role, and training them to be useful counterparts to the Health Extension Workers in their communities. This approach might also allow more time for social workers to emphasize improvements in diets for pregnant and lactating women and to further improve learning on nutrition knowledge, which continues to be an area that needs improvement.

The impacts of IN-SCT on schooling are promising and suggest that having social workers prompt school officials to make sure that schools are open and then promoting good school attendance with families can have a large effect on school participation. This approach could be cost effective if is were included with other messaging on nutrition.

The PSNP requirement that pregnant and lactating women transition from public works to temporary direct support appears to help reduce the time burden from participation in PW projects, but more could be done to reduce gender inequalities in the provision of child care. This could include an expanded set of trainings on nutrition and caring practices that also include men. These trainings could discuss traditional gender roles and the potential to shift them, while also highlighting the potential role of men in child care activities.

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Appendix 1
Quantitative Indicators

Table A.1.1 List of indicators in the Impact Evaluation of the Social Cash Transfer in SNNP and Oromia regions

	Indicators	Type of Survey	Sample	Type of indicator: Impact (I) or Process/ Monitoring (PM)	Chapter # and section # in the baseline report	Table # in the endline report	Baseline means	Impact or endline means
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Impact	Reduction in % of stunting in children under 5 (disaggregated by age groups) in operational areas	Quantitative	SNNP1	Impact	Ch. 4, Sec. 4.2	5.15, 5.16	Proportion of stunted children age 6-23 months T: 0.446 C2: 0.364 C1: 0.368	T vs C2: 0.054 T vs C1: -0.066
Outcome Level 1. Contribute to reduction of poverty and undernutrition of food insecure households (clients of PSNP); 2. Increase access to basic social services, with a focus on health, nutrition and child protection services for adolescents, pregnant women and young children;	1. % of Household with a minimum diet diversity (four or more food groups)* * Indicator no longer considered valid.	Quantitative	SNNP2	Impact	Ch. 3, Sec. 3.3	N/A	N/A	N/A
	1a. Household dietary diversity score	Quantitative	SNNP2	Impact		5.1, 5.2	T: 3.35 C2: 3.16 C1: 3.64	T vs C2: 1.045 T vs C1: -0.282
	1b. Minimum dietary diversity for women	Quantitative	SNNP2	Impact		5.1, 5.2	T: 0.009 C2: 0.016 C1: 0.016	T vs C2: 0.013 T vs C1: -0.039
	2. % of children 6-23 month that receive a minimum acceptable diet diversity (disaggregated by age group) (dietary diversity + meal frequency)	Quantitative	SNNP1	Impact	Ch. 4, Sec. 4.2	5.17, 5.18	T: 0.006 C2: 0.008 C1: 0.006	T vs C2: 0.003 T vs C1: -0.003

	Indicators	Type of Survey	Sample	Type of indicator: Impact (I) or Process/ Monitoring (PM)	Chapter # and section # in the baseline report	Table # in the endline report	Baseline means	Impact or endline means
Outcome Level	3. % of children from client households registered at birth	Quantitative	SNNP1	Impact	Ch. 5, Sec 5.5	5.19, 5.20	T: 0.464 C2: 0.500 C1: 0.477	T vs C2: 0.103 T vs C1: -0.129
	4. % of client households referred to services by SWs (education, health and protection) (disaggregated by age and client category)	Quantitative/ Qualitative	SNNP1	Impact	Ch. 4, Sec 4.4	5.19, 5.20	N/A	Endline means (referred by SW/HEW): All: 0.936 T: 0.919 C2: 0.936 C1: 0.952
	5. % of consumption expenditure of client household spent on basic needs (food, health, clothing, shelter, sanitation, education)	Quantitative/ Qualitative	SNNP2	Process/Monitoring	Ch. 3, Sec. 3.2	5.5, 5.6	Monthly food expenditure per adult eq. T: 212.027 C2: 192.777 C1: 252.987	Monthly food expenditure per adult eq. T vs C2: -311.818 T vs C1: -37.156
	6. % of client households reporting improved nutrition knowledge	Quantitative	SNNP1/ SNNP2	Process/Monitoring	Ch. 5, Sec. 5.2	5.9, 5.10, 5.21, 5.22	Proportion of nutrition knowledge questions answered correctly SNNP2 T: 0.492 C2: 0.498 C1: 0547 SNNP1 T: 0.505 C2: 0.514 C1: 0.512	

	Indicators	Type of Survey	Sample	Type of indicator: Impact (I) or Process/ Monitoring (PM)	Chapter # and section # in the baseline report	Table # in the endline report	Baseline means	Impact or endline means
SCT Result 1+3: 60% of pregnant women and mothers of children <2 year among clients of PSNP participate in nutrition services in the targeted Woredas 10% of children 6-23 months of age among household clients of PSNP have access to adequate dietary diversity (minimum 4 food groups) Access to social services is enhanced	1. % of public work clients attending at least 3 C-BCC session on health, nutrition and Wash per year (disaggregated by sex, public work clients, PW and non-PW season)	Quantitative	SNNP1	Process/Monitoring	SNNP1 female: MODULE E8_MF9, SECTION 1 (11c-g) SNNP 1 male: MODULE E5_M5, SECTION	N/A	N/A	Endline means All: 0.078 T: 0.087 C2: 0.034
	2. % of client households who can remember at least five optimal nutrition messages	Quantitative/ Qualitative	SNNP1	Process/Monitoring	SNNP1 female: MODULE E8_MF9, SECTION 1 (11c-g) SNNP 1 male: MODULE E5_M5, SECTION	N/A	N/A	Endline means All: 0.175 T: 0.175 C2: 0.182
	3. % of mothers who are PSNP clients with children 6-23 months who knVow about dietary diversity. (disaggregated by age group)	Quantitative/ Qualitative	SNNP1/ SNNP2	Process/Monitoring	Ch. 5, Sec 5.2	N/A	Can identify foods a mother could make to complement breastfeeding SNNP1 All: 0.578 T: 0.574 C2: 0.549 C1: 0.607 SNNP2 All: 0.646 T: 0.635 C2: 0.619 C1: 0.680	Can identify foods a mother could make to complement breastfeeding Endline means SNNP1 All: 0.498 T: 0.506 C2: 0.505 C1: 0.484 SNNP2 All: 0.421 T: 0.442 C2:0.316 C1: 0.465
	4. % PSNP HHs with a home garden (disaggregated by sex and category of clients);	Quantitative	SNNP1	Process/Monitoring	Ch. 4, Sec 4.4	N/A	All: 0.090 T: 0.078 C2: 0.106 C1: 0.088	All: 0.216 T: 0.264 C2: 0.106 C1: 0.262

	Indicators	Type of Survey	Sample	Type of indicator: Impact (I) or Process/ Monitoring (PM)	Chapter # and section # in the baseline report	Table # in the endline report	Baseline means	Impact or endline means
SCT Result 1+3	5. % of pregnant women transitioning to temporary direct support before 4 months on the basis of health facility referral	Quantitative/ Qualitative	SNNP1	Process/Monitoring	Ch. 3, Sec 3.6	N/A		Endline means All: 0.586 T: 0.536 C2: 0.633
	6. % of PLWs among PSNP clients attendance to at least 4 ante-natal care visit;	Quantitative	SNNP1	Process/Monitoring	Ch. 4, Sec. 4.4	N/A		Endline means: All: 0.545 T: 0.543 C2:0.598 C1:0.516
	7. % PSNP client women (PLW) who received postnatal follow up care	Quantitative	SNNP1	Process/Monitoring	SNNP1 Female: MODULE E6_MF8 Section 2, Q 5a and 5b	N/A		Endline means All: 0.842 T: 0.827 C2:0.869 C1: 0.836
	8. % of children in PSNP HHs under two years attending GMP sessions (disaggregated by age group /0-1 & 1-2))	Quantitative	SNNP1	Process/Monitoring	SNNP1 Female: MODULE E6_MF8 Section 4, Q18	N/A		Endline means All: 0.179 T: 0.177 C2: 0.220 C1: 0.149
	9. % of direct support PSNP clients who are attending at least 6 counselling sessions on health, nutrition and WASH per year(disaggregated by lactating women, pregnant women and caretakers of malnourished children)	Quantitative	SNNP1	Process/Monitoring	Ch. 4, Sec. 4.4	N/A		Endline means All: 0 T: 0 C2: 0
	10. % of PSNP clients visited by the SW at least once during the last 3 months (PDS and TDS)	Quantitative/ Qualitative	SNNP1/ SNNP2	Process/Monitoring	Ch. 4, Sec. 4.4	4.7	All PSNP: 0.024	All PSNP: 0.036
	11. % of children receiving deworming treatments in the past 12 months	Quantitative	SNNP1	Process/Monitoring	SNNP1 Female: MODULE E6_MF8 Section 4, Q17	N/A		

	Indicators	Type of Survey	Sample	Type of indicator: Impact (I) or Process/ Monitoring (PM)	Chapter # and section # in the baseline report	Table # in the endline report	Baseline means	Impact or endline means
Result 2: In SNNPR only: 70% of Kebeles with a school nutrition club in the Woreda enabling increased access to information on nutrition through primary and secondary schools using children as champions for change in their communities.	1. % of schools with a functional nutrition club established (>70 % attendance)	Qualitative			Information on nutrition clubs and nutrition information provided in schools was captured in the qualitative assessments. Community survey respondents did not have information to answer these questions.	Ch. 4 Sec. 4.9	N/A	N/A
	2. % of school children who know what a balanced diet is.	Quantitative/ Qualitative				N/A	N/A	N/A
	3. % of school children undertaking outreach on nutrition messages in their communities	Quantitative/ Qualitative				N/A	N/A	N/A
	4. % schools that established garden plot for nutrition demonstration	Quantitative				N/A	N/A	N/A
Result 4: Increased coordination of nutrition interventions at Federal, regional and Woreda level and integration of nutrition interventions into the PSNP	1. % of HEW, and SWs who are members of PSNP administrative structures	Qualitative			Information on indicators 1-3 not captured in the qualitative surveys. It is captured in the community questionnaire	4.6		SW: 41.7% HEW: 86.5%
	2. % of DAs, HEWs, and SWs that are aware of the new PSNP gender and nutrition provisions.	Qualitative				4.10		(see table)
	3. % of Kebeles where DAs, SWs and HEWs meet at least once a month.	Qualitative				4.4a		43.7%
	4. % of PW plans prepared following Gender and Social Development considerations	Quantitative/ Qualitative			Community questionnaire Module C Q47a	Ch. 4		N/A
	5. % of female clients who report PW are implemented following Gender and Social Development considerations	Quantitative/ Qualitative	SNNP1		SNNP1 Female: MODULE E8_MF9 Section 9, Q8	Ch. 4		N/A

	Indicators	Type of Survey	Sample	Type of indicator: Impact (I) or Process/ Monitoring (PM)	Chapter # and section # in the baseline report	Table # in the endline report	Baseline means	Impact or endline means
Result 4:	6. % of HPs keeping proper records of ANC, PNC, GMP, SAM management, immunization and number of BCC on Family Folder or other HP register	Quantitative/ Qualitative			HEW questionnaire Module A Q1-8	Ch. 4		N/A
	7. % of HPs sharing quarterly reports on PSNP household uptake with DAs and SWs	Quantitative/ Qualitative			Ch. 4, Sec. 4.4	Ch. 4		N/A
Result 5: 80% of the targeted kebele have child protection services in place	1. % of parents/caregivers of children among PSNP clients who attend at least three BCC sessions annually on CRVS including other child protection related issues (disaggregated by sex of participant and by public works/direct support)	Quantitative	SNNP1	PM	SNNP1 female: MODULE E8_MF9, SECTION 1 (11c-g) SNNP 1 male: MODULE E5_M5, SECTION 1			
	2. % of trained SWs providing case management services for vulnerable children of PSNP clients.	Quantitative/ Qualitative		PM	Social worker questionnaire Module B Q24a			
	3. % of kebeles which have Community based Care Committees which identify children in needs of protection and provide/ and or refer for services	Quantitative		PM	Ch. 4, Sec. 4.4 Added Community questionnaire Module F Q12	4.4.11		

Appendix 2
Overview of Quantitative Indicators

Table A.2.1 Qualitative sample by level of data collection, data collection type and respondent group

Location	Key Informant Interviews (KIIs)	Focus Group Discussions (FGDs)				Case Studies (CSs)		
		Committees	Permanent Direct Support [PDS]	Temporary Direct Support [TDS]	Public Works [PW]	Permanent Direct Support [PDS]	Temporary Direct Support [TDS]	Public Works [PW]
Federal	- Concern staff							
Region (Oromia)	- Regional SCT coordinator [RSCT] - Regional MIS officer - ALSA staff - Food Security (MoANR) staff							
Woreda (Adami Tulu)	- SCT coordinator [SCT] - WoLSA SP core process owner [WoLSA] - PSNP coordinator [PSNP] - MIS focal person [MIS]							
IN-SCT kebele (Dodicha kebele)	- Social Worker [SW] - Health Extension Worker [HEW] - Development Agent [DA]	- CCC	- 1 female group - 1 male group	- 1 female group (PLW) - 1 female group (caregivers of malnourished child)	- 1 male group - 1 female group	- 1 male PDS client with at least one child <18 - 1 female PDS client with at least one child <18	- 1 female TDS client (PLW) - 1 female TDS client (caregiver of malnourished child)	- 1 male PW client with at least one child <18 - 1 female PW client with at least one child <18

Location	Key Informant Interviews (KIIs)	Focus Group Discussions (FGDs)				Case Studies (CSs)		
		Committees	Permanent Direct Support [PDS]	Temporary Direct Support [TDS]	Public Works [PW]	Permanent Direct Support [PDS]	Temporary Direct Support [TDS]	Public Works [PW]
PSNP woreda (Arsi Negelle)	- WoLSA SP core process owner [WoLSA] - PSNP coordinator [PSNP]							
PSNP kebele (Rafu Hargissa)	- Social Worker [SW] - Health Extension Worker [HEW] - Development Agent [DA]	- CCC	- 1 female group - 1 male group	- 1 female group (PLW) - 1 female group (caregivers of malnourished child)	- 1 male group - 1 female group	- 1 male PDS client with at least one child <18 - 1 female PDS client with at least one child <18	- 1 female TDS client (PLW) - 1 female TDS client (caregiver of malnourished child)	- 1 male PW client with at least one child <18 - 1 female PW client with at least one child <18
Total	17	2	4	4	4	4	4	4
Region (SNPP)	- Regional SCT coordinator [RSCT] - Regional MIS officer - BoLSA staff - Food Security (MoANR) staff							
Woreda (Halaba)	- SCT coordinator [SCT] - WoLSA SP core process owner [WoLSA] - PSNP coordinator [PSNP] - MIS focal person [MIS]							

Location	Key Informant Interviews (KIIs)	Focus Group Discussions (FGDs)				Case Studies (CSs)		
		Committees	Permanent Direct Support [PDS]	Temporary Direct Support [TDS]	Public Works [PW]	Permanent Direct Support [PDS]	Temporary Direct Support [TDS]	Public Works [PW]
IN-SCT kebele (Girme kebele)	- Social Worker [SW] - Health Extension Worker [HEW] - Development Agent [DA]	- CCC	- 1 female group - 1 male group	- 1 female group (PLW) - 1 female group (caregivers of malnourished child)	- 1 male group - 1 female group	- 1 male PDS client with at least one child <18 - 1 female PDS client with at least one child <18	- 1 female TDS client (PLW) - 1 female TDS client (caregiver of malnourished child)	- 1 male PW client with at least one child <18 - 1 female PW client with at least one child <18
PSNP woreda (Kadida Gamella)	- WoLSA SP core process owner [WoLSA] - PSNP coordinator [PSNP]							
PSNP kebele (Holagoba)	- Social Worker [SW] - Health Extension Worker [HEW] - Development Agent [DA]	- CCC	- 1 female group - 1 male group	- 1 female group (PLW) - 1 female group (caregivers of malnourished child)	- 1 male group - 1 female group	- 1 male PDS client with at least one child <18 - 1 female PDS client with at least one child <18	- 1 female TDS client (PLW) - 1 female TDS client (caregiver of malnourished child)	- 1 male PW client with at least one child <18 - 1 female PW client with at least one child <18
Total	16	2	4	4	4	4	4	4

Appendix 3
Coding system for tagging quotes from qualitative interview respondents

Quotes from qualitative fieldwork are tagged using the following system:

[REGION-WOREDA-ACTIVITY-RESPONDENT]

An overview of tags is provided in Table A.3.1.

No tags for region or woreda are provided in case the respondent is from federal level. No tags for woreda are provided in case the respondent represents regional level.

Note that responses from respondents in IN-SCT and PSNP-only woredas can be identified through their woreda tags. Responses originating from Adami Tulu woreda (AT) in Oromia and from Halaba woreda (H) in SNNP denote experiences in IN-SCT woredas. Responses originating from Arsi Negelle (AN) woreda in Oromia and Kadida Gamella (KG) woreda in SNNP reflect experiences in PSNP woredas.

Table A.3.1 Codes for tags of quotes from qualitative interview respondents

Region		Woreda	
Oromia	OR	Adami Tulu (IN-SCT)	AT
		Arsi Negelle (PSNP)	AN
SNNPR	SN	Halaba (IN-SCT)	H
		Kadida Gamella (PSNP)	KG
Activity		**Respondent**	
Key informant interview	KII	Food Security staff	FS
		SCT coordinator	SCT
		WoLSA SP core process owner	SP
		PSNP core process owner/ coordinator	PSNP
		Social Worker	SW
		Development Agent	DA
		Health Extension Worker	HEW
		MIS officer	MIS
		Concern staff	Concern
Focus group discussion	FGD	CCC/CBSPC	CCC
Case study	CS	PDS clients male	PDS-M
		PDS clients female	PDS-F
		TDS clients female (includes both PLW and caregivers of malnourished children)	TDS-F
		TDS clients female (PLW)	TDS(PLW)
		TDS clients female and male (caregivers of malnourished children)	TDS(care)
		PSNP PW clients male	PW-M
		PSNP PW clients female	PW-F

Appendix 4

Matching diagnostics: common support and balanced covariates

Figure A.4.1 Common support for nearest neighbor matching model, SNNP2: T vs C1

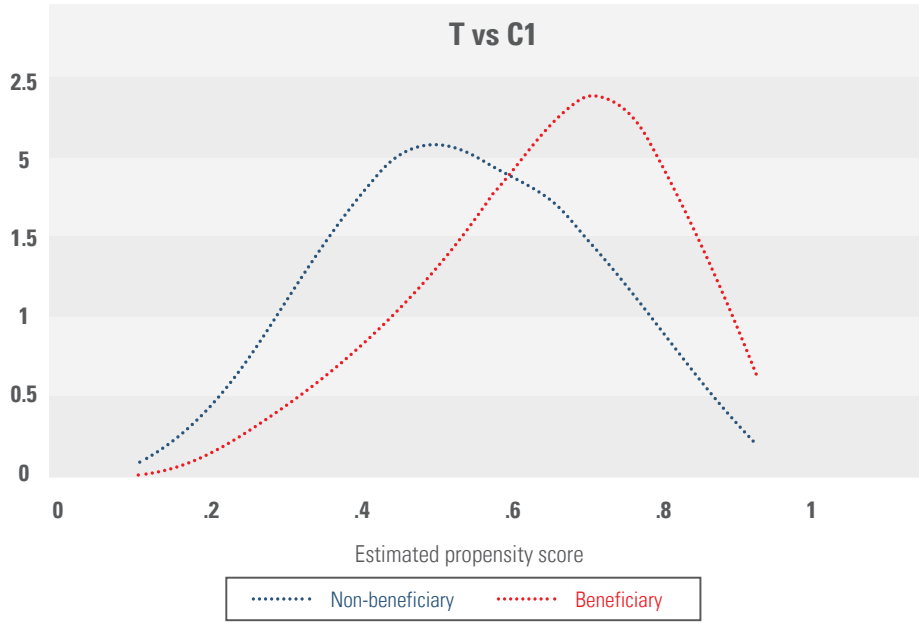

Figure A.4.2 Common support for nearest neighbor matching model, SNNP2: TT vs C2

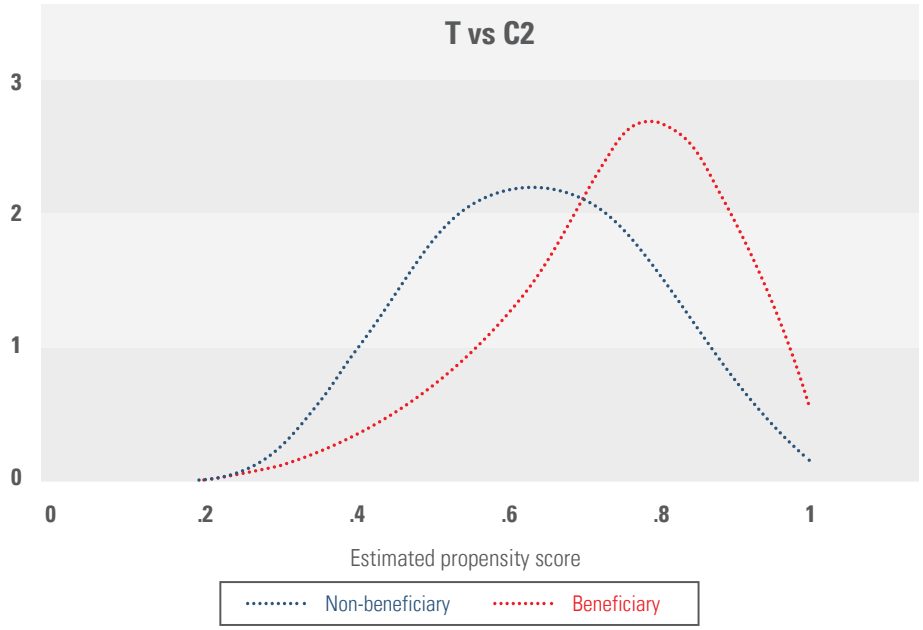

Figure A.4.3 Common support for repeated cross-sectional propensity score matching model, SNNP1: T vs C1

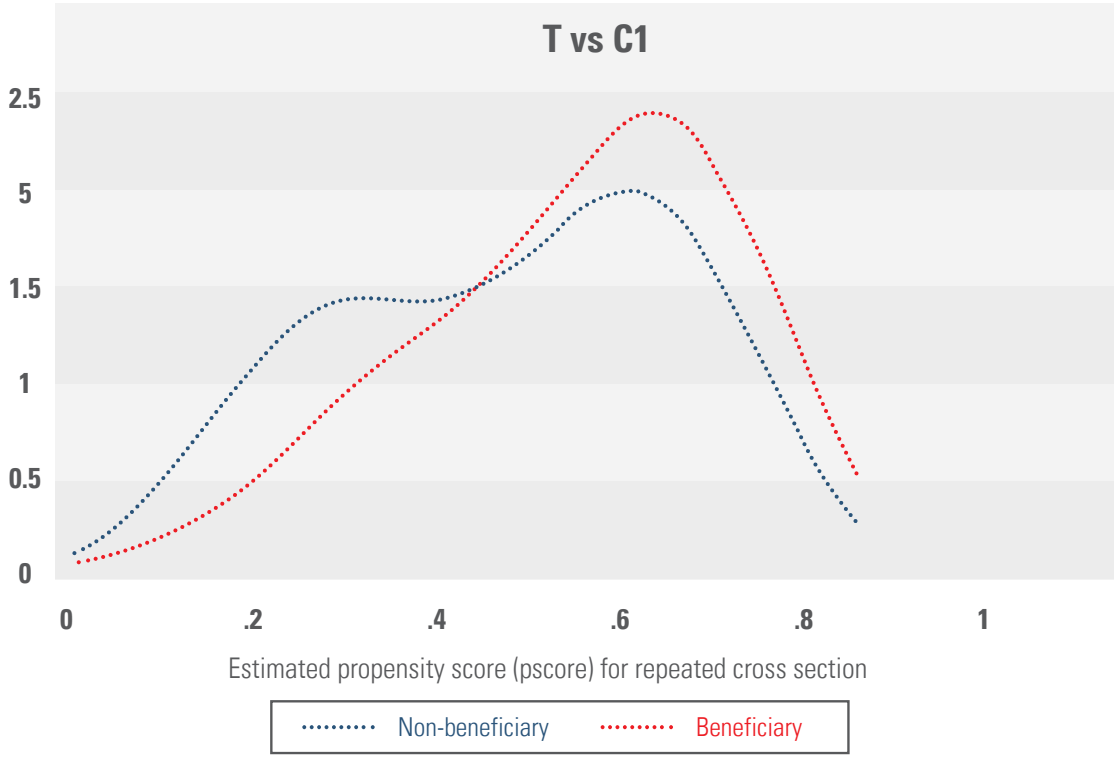

Figure A.4.4 Common support for repeated cross-sectional propensity score matching model, SNNP1: T vs C2

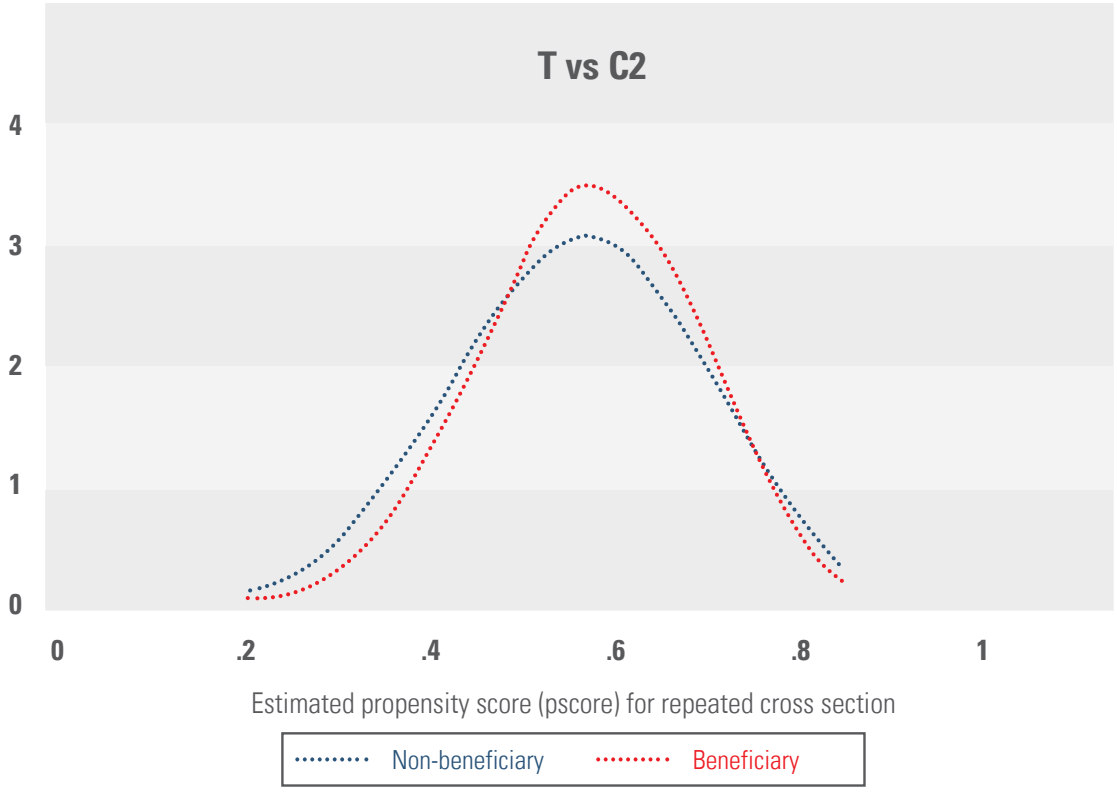

Table A.4.1 SNNP2 T vs C1, means of comparison and beneficiary group

	All	
	Comparison	Beneficiary
Head age in years	**38.717 (9.635)**	**42.733 (12.688)**
Head age squared	**1,591.614 (878.337)**	**1,986.814 (1,271.260)**
Head age in years ^3	**69,920.832 (66,210.821)**	**100,781.680 (104,133.837)**
Head's education (in years)	**2.617 (3.392)**	**1.814 (2.740)**
Head's education ^2	**18.323 (33.073)**	**10.782 (22.305)**
Head's education ^3	**152.079 (375.193)**	**76.161 (217.730)**
Household size is 2 or less	**0.005**	**0.007**
Household size is 3 to 4	**0.168**	**0.194**
household size is 5 to 6	**0.304**	**0.338**
household size is 7 to 8	**0.361**	**0.327**
HH has 1 or more oxen	**0.504**	**0.252**
Household has 3 or more heads of cattle	**0.349**	**0.130**
Household has 1 or 2 head of cattle	**0.354**	**0.336**
Household has 5 or more sheep/goats	**0.046**	**0.024**
Household has 1 or more chickens	**0.299**	**0.254**
Household owns no animals	**0.177**	**0.333**
Household has a corrugated iron roof	**0.134**	**0.071**
Household's dwelling is in bad or very poor state	**0.250**	**0.490**
Household owns a mobile phone	**0.392**	**0.239**
Tropical livestock units (TLU) owned by household	**1.649 (1.796)**	**0.776 (1.113)**
At least one adult with an injury/disability	**0.027**	**0.088**
Household thinks it's same as 2 years ago	**0.253**	**0.188**
Household thinks it's worse off than 2 years ago	**0.511**	**0.611**
Head's parent was an important person in the community	**0.285**	**0.302**
Household experienced a non-drought shock in the last 2 years	**0.147**	**0.145**
Head or spouse was born in this location	**0.981**	**0.973**
Productive assets pca	**1.139 (2.483)**	**-0.022 (2.644)**
Consumption assets pca	**0.556 (2.066)**	**-0.341 (1.414)**
Household experienced a drought shock in the last 2 years	**0.899**	**0.952**
Community access to piped water in rainy season	**0.822**	**0.831**
Community access to piped water in dry season	**0.833**	**0.841**
Community has any electricity	**0.342**	**0.382**
Community access to improved sanitation	**0.815**	**0.830**

Notes: Estimates from the comparison and beneficiary groups selected by the matching model.

Table A.4.2 SNNP2 T vs C2, means of comparison and beneficiary group

	All	
	Comparison	Beneficiary
Head age in years	**42.905 (12.572)**	**42.733 (12.688)**
Head age squared	**1,998.281 (1,263.452)**	**1,986.814 (1,271.260)**
Head age in years ^3	**101,337.506 (104,090.529)**	**100,781.680 (104,133.837)**
Head's education (in years)	**2.890 (3.336)**	**1.814 (2.740)**
Head's education ^2	**19.437 (27.496)**	**10.782 (22.305)**
Head's education ^3	**143.308 (249.063)**	**76.161 (217.730)**
Household size is 2 or less	**0.019 (0.137)**	**0.007 (0.085)**
Household size is 3 to 4	**0.304 (0.461)**	**0.194 (0.396)**
Household size is 5 to 6	**0.293 (0.456)**	**0.338 (0.474)**
Household size is 7 to 8	**0.255 (0.437)**	**0.327 (0.470)**
HH has 1 or more oxen	**0.118**	**0.252**
Household has 3 or more heads of cattle	**0.065**	**0.130**
Household has 1 or 2 head of cattle	**0.430**	**0.336**
Household has 5 or more sheep/goats	**0.008**	**0.024**
Household has 1 or more chickens	**0.251**	**0.254**
Household owns no animals	**0.331**	**0.333**
Household has a corrugated iron roof	**0.175**	**0.071**
Household's dwelling is in bad or very poor state	**0.441**	**0.490**
Household owns a mobile phone	**0.278**	**0.239**
Tropical livestock units (TLU) owned by household	**0.628 (1.071)**	**0.776 (1.113)**
At least one adult with an injury/disability	**0.091**	**0.088**
A little poorer than most households	**0.198**	**0.256**
Amongst the poorest in the village	**0.430**	**0.430**
The poorest in the village	**0.209**	**0.192**
Household thinks it's same as 2 years ago	**0.160**	**0.188**
Household thinks it's worse off than 2 years ago	**0.540**	**0.611**
Head's parent was an important person in the community	**0.221**	**0.302**
Household experienced a non-drought shock in the last 2 years	**0.114**	**0.145**
Head or spouse was born in this location	**0.947**	**0.973**
Consumption assets pca	**-0.031 (1.631)**	**-0.341 (1.414)**
Household experienced a drought shock in the last 2 years	**0.886**	**0.952**
Community has any electricity	**0.468**	**0.382**
Community access to improved sanitation	**0.910**	**0.830**

Notes: Estimates from the comparison and beneficiary groups selected by the matching model.

Table A.4.3 SNNP1 T vs C1, means of comparison and beneficiary group

	All	
	Comparison	Beneficiary endline
Head age in years	**37.724** **(9.266)**	**37.424** **(9.484)**
Head age squared	**1,508.917** **(829.043)**	**1,490.459** **(839.069)**
Head age in years ^3	**64,477.464** **(61,135.738)**	**63,607.279** **(61,263.703)**
Head's education (in years)	**2.980** **(3.575)**	**2.568** **(3.228)**
Head's education ^2	**21.653** **(41.834)**	**17.011** **(30.287)**
Head's education ^3	**197.355** **(655.060)**	**133.243** **(371.438)**
Household size is 2 or less	**0.001**	**0.002**
Household size is 3 to 4	**0.149**	**0.202**
Household size is 5 to 6	**0.323**	**0.322**
Household size is 7 to 8	**0.322**	**0.338**
Number of old members (60+ years)/household size	**0.012** **(0.044)**	**0.012** **(0.047)**
HH has 1 or more oxen	**0.416**	**0.317**
Number of cattle	**2.121** **(2.793)**	**1.254** **(1.624)**
Household has 3 or more heads of cattle	**0.325**	**0.169**
Number of sheep and goats	**1.235** **(1.942)**	**0.742** **(1.395)**
Household has 5 or more sheep/goats	**0.051**	**0.023**
Household's dwelling is in bad or very poor state	**0.261**	**0.372**
Productive assets pca	**0.732** **(2.543)**	**0.520** **(2.528)**
Main source of drinking water in rainy season is public tap outside compound	**0.878**	**0.803**
Main source of drinking water in dry season is public tap outside compound	**0.886**	**0.821**
Head's parent was an important person in the community	**0.341**	**0.288**
Head or spouse was born in this location	**0.948**	**0.962**
Any adult in the household has any disability	**0.058**	**0.042**

Notes: Estimates from the comparison and beneficiary groups selected by the matching model.

Table A.4.4 SNNP1 T vs C2, means of comparison and beneficiary group

	All	
	Comparison	Beneficiary endline
Head age in years	**38.492** **(9.478)**	**37.865** **(9.505)**
Head age squared	**1,571.441** **(893.527)**	**1,524.041** **(856.275)**
Head age in years ^3	**68,797.839** **(70,505.484)**	**65,716.759** **(63,490.298)**
Head's education (in years)	**3.172** **(3.400)**	**2.613** **(3.120)**
Head's education ^2	**21.613** **(34.128)**	**16.560** **(27.511)**
Head's education ^3	**173.787** **(450.266)**	**122.325** **(313.712)**
Household size is 2 or less	**0.000**	**0.001**
Household size is 3 to 4	**0.126**	**0.184**
Household size is 5 to 6	**0.381**	**0.360**
Household size is 7 to 8	**0.320**	**0.349**
Number of old members (60+ years)/household size	**0.015** **(0.051)**	**0.015** **(0.050)**
Household's dwelling is in bad or very poor state	**0.338**	**0.437**
Household has access to electricity	**0.250**	**0.119**
Household has a corrugated iron roof	**0.185**	**0.092**
Household uses an improved sanitation facility	**0.940**	**0.890**
Head's parent was an important person in the community	**0.326**	**0.271**
Head or spouse was born in this location	**0.960**	**0.965**
Any adult in the household has any disability	**0.071**	**0.053**

Notes: Estimates from the comparison and beneficiary groups selected by the matching model.

Appendix 5
Terms of Reference for the Evaluation

Terms of Reference

Background and purpose

This ToR outlines the objectives, design, methods, timetable, instruments and indicators for the evaluation of the Social Cash Transfer (SCT) programme for Permanent Direct Support Clients of the Productive Safety Net Programme (PSNP) phase-IV in two regions of Ethiopia. These terms of reference should be looked at in conjunction with the design document and the logframe for the phase-IV of the PSNP, the draft document that outlines the design of the SCT in Oromia and SNNP, and the operations manual drafted in October 2014.

The overall purpose of the evaluation is to provide the PSNP Steering Committee and Donor Working Group, and Regional Social Protection Committee with the information they need to take decisions regarding programme implementation modifications and to provide information they will need to facilitate a discussion with the Ministry of Agriculture (MoA), the Ministry of Labour and Social Affairs (MoLSA), the Ministry of Health (MoH) and Regional Council regarding possible scale-up to MoLSA and BoLSA of Permanent Direct Support Clients of Social Cash Transfers, soft conditionalities linked to nutrition as part of the PSNP and regional social protection plan of action. The implementation modalities of the national Social Protection Strategy and the system approach for the Social Protection sector will also be informed.

To do so the evaluation will:

i. Assess the impacts of the SCT programme on the clients and the communities in which they live (- % of children < 2years with a height for age> -2 Z-score (WHO standards); - % of children under one year participate in at least 6 GMP sessions per year, - % of PW attendance to at least 4 ante-natal care visit; - % of adolescent girls dewormed); children's dewormed and supplemented with vitamin A; guardians attended community conversation sessions

ii. Evaluate the operational linkages and coordination effectiveness for the system approach of the programme (the extent to which the programme operates in accordance with its design) including recording its capital and recurrent costs at kebele, woreda and regional levels;

- **a.** Assess the capacity of BOLSA to expand their responsibilities in the two regions for the Permanent Direct Support Clients of the PSNP.
- **b.** Assess the coordination between the implementing bodies and use of the MIS as case management tool (presence of an integrated PSNP and CBN M&E system).
- **c.** Has the process been implemented as expected in the operations manual?
- **d.** Have the transaction cost reduced? Or this system have just increased the transition cost of the programme?

iii. Assess the impacts of the soft conditionalities related to nutrition- Is the household dietary diversity of Direct Support Clients and Temporary support clients improved as a consequence of the exposure to the programme?;

iv. look at the effectiveness with which it reaches the target group and delivers the expected social outcomes in nutrition, health, education and child protection;

v. Identify challenges and lesson learned

The evaluation will employ several information collection methods: a quantitative household survey for welfare impact, soft conditionalities impact and operational performance, and quantitative community surveys (to understand issues such as supply side constraints); qualitative focus group discussions with clients, members of the community, programme managers and others; some in-depth interviews; an organisational review; and a cost analysis.

Evidence about social welfare impact, operational and coordination capacities, and soft conditionalities impact effectiveness is necessary to inform the decision on whether to scale up to regional/national levels. Information on operational effectiveness is also necessary in order to understand what changes to the design of the programme will be necessary if scaled up.

Customers for the evaluation

The evaluation is commissioned by UNICEF as member of the PSNP Donor Working Group, and the two Regional Social Protection Committee in Oromia and SNNP regions. The PSNP Steering Committee is chaired by a representative of the Ministry of Agriculture and includes members of the MOLSA, MOFED and MOH. At the regional level, the Social Protection Committee is chaired by the head of the Bureau of Labour and Social Affairs (BoLSA) and includes members from the Bureau of Finance and Economic Development, Bureau of Women's Affairs, Bureau of Health, Bureau of Education, Bureau of Agriculture and international partners providing technical and financial support for the sector.

Objectives

The evaluation questions address the widely-used five OECD-DAC criteria: efficiency, effectiveness, sustainability, relevance and impact. The overall objective of the evaluation is to answer the following main questions, which have been detailed in the programme document:

- What is the extent of impact on men and women participants attributable to the pilot programme?
- Has the SCT programme had a substantial impact on members of male and female HH's welfare?
- Have welfare improvements in nutrition, education and child protection, if any, been in proportion with the investments made, or the value for money of the prorgramme?
- Have soft conditionalities additional impact on male and female HH's welfare?
- What is the impact or incentive effect of imposing soft conditionalities on clients? What is the cost of doing so, for both households and the government? If households fail to comply with the soft conditions, why is this so?
- Has the coordination and operational modalities between the bureaus, i.e. social affairs, health and agriculture, involved in the implementation been efficient and effective to reach the targeted clients?
- Would be a similar region wide programme be affordable? And what would be the costs associated with a scale up at regional level?
- What have been the financial and human resources inputs from the regional government (bureaus/ woredas) into the program?
- On that basis, should the programme, or a variant of it, be scaled up to a regional/national level?
- If the programme is to be scaled up, which aspects of its operation and coordination mechanism must be modified or strengthened for it to operate effectively at a regional/national level?
- Which aspects of good practice should remain the same and be replicated in the PSNP Phase IV?

This evaluation distinguishes three types of information necessary to answer these questions: impact on participant households, especially impact on children and women; operational and coordination performance of the implementation, including costs broken down by capital and recurrent costs as well as identifying and addressing cross cutting issues like gender, and how they change in start-up and maintenance phase.

Four main activities will be undertaken: 1) a quantitative survey of households and communities; 2) an organisational review; 3) qualitative data collection; and 4) a cost analysis with a focus at the direct investment which will be required from the regional government in case of scaling up.

These activities will use a number of instruments: a) Quantitative surveys with anthropometric measure: Household and community surveys (baseline, follow-up, and endline); b) Qualitative: focus groups, with a range of different groups in beneficiary and comparison communities; and in-depth interviews; c) Cost analysis.

Evaluation design

In view of a criteria-based (non-random) assignment of locations to receive the SCT programme, a quasi-randomised evaluation is envisaged to determine the welfare impact of the SCT programme on the clients. With information collection using a household questionnaire through surveys, the evaluation will estimate the impact of the programme by comparing baseline, follow-up and endline on a series of indicators in both intervention and comparison communities. The evaluation should employ a panel design. The evaluation will attempt to estimate the impact of implementing soft conditionalities on clients' level welfare outcomes. Information on operational and coordination effectiveness will be derived from the final round of the quantitative survey. Some questions will be addressed through the qualitative studies and the organisational review. Costing information will come from the cost analysis. The activities that provide information on the main groups of indicators, together with their timing, are outlined in Table 1. Two follow-up quantitative surveys are envisaged. The follow-up survey is proposed to take place one year and half after the baseline survey, and the endline survey will be 3 years after the baseline survey.

Table 1 Key data collection activities for the evaluation

Indicators	Baseline March 2015	Mid-line September 2016	End-line Dec 2017
1. Welfare measures	HH & community survey	HH & community survey	HH & community survey
2. Programme operations and coordination:			
Beneficiary reports	--	Qualitative methods & in the HH & community survey	Qualitative methods & in the HH & community survey
Other operational measures	HH & community survey; Initial organisational review	Organisational review Case Management of clients MIS	Organisational review Case Management of clients MIS
Related services (health, nutrition, child protection and education)	HH & community survey (integrated)	HH & community survey (integrated)`	HH & community survey (integrated)
3. Cost	Cost analysis	Cost analysis	Cost analysis

Impact on Maternal and Child Health; Education, Child Protection and Poverty

Outcomes of the Programme:

1. Contribute to reduction of poverty and undernutrition of vulnerable and poor households; Increase access to basic social services, with a focus on health and nutrition services for adolescent, pregnant women and young children;

2. Generate information on the feasibility, cost-effectiveness and impact of multi-sectoral interventions including a social cash transfer scheme administered by BoLSAs and integrated into the next phase of Productive Safety Net Programme:

Indicators of outcomes:

1. % of children < 2years with a height for age> -2 Z-score (WHO standards);
2. % of children under one year participate in at least 6 GMP sessions per year,
3. % of PW attendance to at least 4 ante-natal care visit;
4. % of adolescent girls dewormed;
5. presence of an integrated PSNP and CBN MIS and M&E system.

Outputs of the programme

Result 1: 60% of pregnant women and mothers of children < 1 year among clients of PSNP participate in nutrition services in the targeted Woredas

Indicators Result 1: - % of HH under Direct Cash Transfer Clients, - % of Lactating women who are clients of PSNP attending at least 6 BBC session per year - % Pregnant women who are clients of PSNP attending at least 6 BCC session per year;

Result 2: 70% of Kebeles with a school nutrition club in the Woreda enabling increased access to information on nutrition through primary and secondary schools using children as champions for change in their communities.

Indicators Result 2: - % of schools with a nutrition club established; % of school children who know what a balanced diet is. % of Kebeles with a school nutrition club

Result 3: 10% of children 6-11 months of age among household clients of PSNP have access to adequate dietary diversity (minimum 4 food groups)

Indicators Result 3: - % of DAs trained on nutrition activities; % PSNP clients with a home garden; % of mothers who are PSNP clients with children 6-11 months who know about dietary diversity. % of children 6-11 months of age among household clients of PSNP have access to adequate dietary diversity (minimum 4 food groups).

Result 4: Increased coordination of nutrition interventions at Federal, regional and Woreda level and integration of nutrition interventions into the PSNP

Indicators Result 4: - Number of ToR with nutrition and PSNP integrated developed for coordination; Number of coordination meetings at the regional and Woreda level; Integrated M&E and MIS system linking CBN and PSNP available.

The main child and household welfare measures proposed are listed below:

Health and Nutrition:

- Number of antenatal and postnatal care visits and timing of first visit;
- Delivery at health facility;
- Time after delivery of mother's first postnatal check-up;
- Vaccination rates of children aged 12-36 months;
- Child malnutrition: stunting, underweight, wasting under 5; and
- Incidence of diarrhoea and fever in children under 5.

Education:

- Pre-primary, primary and secondary education enrolment rates and attendance rates.
- Rate of retention at primary and secondary levels.

Household consumption and poverty:

- Household spending on food, processed food, primary school costs, health services and associated costs including transport and medicines; and
- Total (per capita) consumption levels in the household.
- Poverty level (gap or head count)

Child protection

- Children labour and work: children in work, both on farm and off farm, at home and outside the home (extent of participation, time spent)
- Separation of children from their families
- Registration of children at birth

Adult labour:

- Time on farm and off farm, paid labour and domestic activities.

Use of cash disbursed:

- Proportion of cash disbursed to older persons spent on children
- Proportion of cash disbursed to disabled persons spent on children

In addition to the main welfare measures, the evaluation will seek to measure a set of related indicators. These include:

- Important health-determining behaviour, such as: maternal, carer and child attendance at health and nutrition education / growth monitoring sessions; carer knowledge of health issues covered by these sessions; prevalence and impact of adult chronic illness;
- Household relations around expenditure, including who makes decisions within the household on how to spend the cash;

Impact on support from other households and programmes

Impact on household economic and investment activities, in particular agriculture (crop and livestock). This includes production techniques related to climate change.

- Economic and social costs for households included in the scheme and impact on social relations; and
- More complex or subtle effects may only be investigated in the qualitative studies.

Operational and Coordination Effectiveness

Aside from questions of impact, the evaluation will assess the extent to which the programme is managing to operate according to its design. The main dimensions which are relevant are:

- Institutional relationships and coordination between different bureaus involved in the implementation;
- The adequacy of operational processes, particularly payment and in the application of soft conditionalities;
- The adequacy of operational process for the case management of clients between stakeholders;
- Beneficiary and other stakeholder perceptions of the programme;
- Cost and cost-effectiveness of programme delivery mechanisms;
- Management and Information System and its use for case management by Social Workers, Health Extension Workers, Development Agents etc.

These issues will be informed by the operational review, elements of the quantitative survey, the qualitative survey and the cost analysis. The more qualitative elements are outlined under the studies that will address them.

Validity

The following issues should be considered on the extent to which the findings from the SCT programme can be assumed to represent what would happen on a regional/ national scale.

Selection of places for programme operation: The selection of woredas for the SCT Programme was non-random which may introduce selection bias. The programme and comparison locations must remain as programme and comparison locations at least until the end line survey in 2017.

Extent of external support: The evaluation should seek to identify the difference between the operational aspects of the SCT Programme that would be replicated at scale up to regional/national level in PSNP areas, and those that would not – it should be as realistic a test as possible of the programme as it will scale up. The SCT programme should operate as far as possible with similar levels of financial and management support to those expected to be in place if the programme ran at regional/national level in PSNP areas, including the levels of support provided by UNICEF. Atypical start-up factors that cannot be avoided, and any limitations to the external validity of the pilot or implications for scaling up that result, should be identified by the evaluation.

Evaluation management

The evaluation will be managed by UNICEF as member of the PSNP DWG and the Regional Social Protection Technical Committee of each region chaired by the Head of the BoLSA. The evaluators will report to both i.e. UNICEF and BoLSA.

Timing and deliverables

No.	Description	Due Date
1	Draft inception report articulating the evaluation design, sampling methods and tools/ instruments for the baseline survey – at the start of the contract	February 2015
2	Final design of the evaluation approved by the technical committee for the pilot	February 2015
3	Baseline survey	March 2015
	Baseline survey report based on a review with the PSNP and regional technical committee completed report along with raw datasets with quality assurance using double data entry procedures in CSPro/SPSS/Stata format and completed questionnaires. Both clean raw as well as prepared data will be made available, accompanied by all statistical programmes required to prepare the data and carry out analysis, so the baseline results can be replicated independently. All household and community identifiers will be included with the data.	September 2015
4	Mid-line survey	September 2016
5	Mid-line survey report based on analysis and review by the PSNP and regional technical committee completed capturing any conclusions and action points taken by the PSNP and regional technical committee to modify any aspect of the programme along with raw datasets with quality assurance using double data entry procedures in CSPro/SPSS format and completed questionnaires. Both clean raw as well as prepared data will be made available, accompanied by all statistical programmes required to prepare the data and carry out analysis, so the mid-line results can be replicated independently. All household and community identifiers will be included with the data.	December 2016
6	Workshop for technical and steering committees reviewing the results of the baseline and follow-up surveys	December 2016
7	End-line survey	December 2017
8	Comprehensive impact evaluation report and its Social Policy Brief, including analytical findings using raw data from baseline and follow-up surveys along with raw data sets (CSPro/SPSS/Stata format) for the endline survey and completed questionnaires and monitoring and evaluation instruments. Both clean raw as well as prepared data will be made available, accompanied by all statistical programmes required to prepare the data and carry out analysis, so the final results can be replicated independently. All household and community identifiers will be included with the data. The findings of the end-line quantitative survey, the costing work, the operational review and final qualitative work will be synthesised into a single report addressing the main evaluation questions.	March 2018

Expected background and experience

The evaluation will be conducted by a registered institution or a team of freelance consultants. It is proposed that the evaluation team consist of one or two international experts in social cash transfer evaluation teamed with a national research firm experienced in quantitative and qualitative household surveys. The team leader will have the responsibility for all negotiations, decisions, and deliverables. The technical work is to be divided between the team leader and the team members.

Therefore, bidders for this contract are expected to provide:

One team leader:

- Extensive evaluation expertise and experience (at least 8 to 10 years) and a strong commitment to undertake the evaluation.
- Knowledge of institutional issues related to development programming (including funding, administration, the role of the UN system, partnerships, human rights and sustainable development issues)
- Familiarity with social protection policies and programmes with a focus on social cash transfer programmes and their evaluation
- Team leadership and management, interpersonal/ communication skills
- Excellent analytical and writing skills

National Institution

- Strong evaluation expertise and experience (at least 5 years), including methodological and data collection skills;
- Demonstrated skill in conducting evaluations including cost analysis and household surveys in Ethiopia
- Team work and inter-personal communication.

All members of the team should be established experts in their respective fields and have an excellent knowledge of evaluation norms, standards and approaches.

The UNEG Norms and Standards[15] will be applied in the course of this evaluation.

The institution will be responsible for the administrative management of the evaluators taking part in field work. UNICEF will have no liabilities in terms of provision of transport or insurance.

Structure of the Bid

Institutions should submit to the Ethiopia UNICEF Country Office supply section with a proposal detailing: (1) how they are going to undertake the evaluation, including a detailed budget breakdown (2) Proposed activity timeline in accordance to the timeline above (3) credentials of the institution and structure of the evaluation team including the c.v. of the team leader and the manager of the national institution. (4) along with copies of legal and registration documents of the institution.

15. http://www.uneval.org/docs/ACFFC9F.pdf

Appendix 6
Ethics Approval Letter from IFPRI IRB

Date: August 6, 2018
IRB Application Approval Number: PHN-18-1047
IRB #00007490
FWA #00005121

Study Project Title: Impact Evaluation of the UNICEF Social Cash Transfer Pilot Programs in Oromia and SNNP Regions, Ethiopia
Division: PHN
PI: Daniel Gilligan
Country of study: Ethiopia

Date of IRB approval: 08/06/2018
Date of Expiration: 08/05/2019

Dear Dr. Gilligan,

Your application to conduct the study entitled, Impact Evaluation of the UNICEF Social Cash Transfer Pilot Programs in Oromia and SNNP Regions, Ethiopia, has been reviewed and approved by IFPRI's Institutional Review Board. The study meets the criteria for expedited review using survey procedures as set forth in the code of federal regulations (45 CFR 46.110 Category 7) and presents no more than minimal risks to human subjects. Proper consent requirements have also been met. The IRB has taken note that the Study project code is 43239903.

This approval is for the period of one year. If you wish to continue this study beyond that time you must submit an application to continue along with the instruments/documentation 6 weeks in advance of the expiration date listed above. Should any changes become necessary (i.e. procedures, methodologies) or be made or added to this study, you must immediately notify the IRB. No activity should commence without IRB modification approval.

As a reminder the IRB requires that all staff directly working with human subjects in research complete IFPRI'S CITI ethics training course. This letter indicates that the project complies with the IFPRI IRB's ethical guidelines. In cases where local approval is needed, it is the responsibility of the researcher to obtain this approval and comply with local guidelines. Please keep the IRB advised of this.

We wish you all the best in your research efforts. If you have any questions please do not hesitate to contact Olivette Burton, IFPRI IRB Coordinator via phone or the email address copied on this correspondence.

Sincerely,

Eduardo Maruyama
IRB Chair
IFPRI-IRB@cgiar.org

Impact Evaluation of Improved Nutrition through Integrated Basic Social Services and Social Cash Transfer Pilot Program (IN-SCT) in Oromia and SNNP Regions, Ethiopia

Endline Impact Evaluation Report

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