THAILAND CHILD SUPPORT GRANT (CSG) Impact Assessment Endline Report

9 June 2019

สสส
สำนักงานกองทุนสนับสนุนการสร้างเสริมสุขภาพ

TDRI

Economic Policy Research Institute

มหาวิทยาลัยขอนแก่น

unicef
for every child

Table of Contents

List of Tables

List of Figures

©UNICEF/UN056403/Thuentap

1 Overview

1.1 Introduction

Decades of sustained economic growth and social development supported by proactive public policies have enabled Thailand to achieve upper middle-income status and virtually eradicate extreme poverty. Economic gains have reinforced remarkable social improvements as a wide range of developmental indicators demonstrate. There has been sustained political commitment to ensure that women and children benefit from Thailand's economic progress. This commitment has enhanced the realisation of their rights and their well-being, leading to substantial reductions in child mortality and disease, increased access to education, and other improvements.

Despite these achievements, Thailand still experiences multiple challenges to inclusive development. Malnutrition remains especially challenging for children in Thailand. An analysis of the Multiple Indicator Cluster Survey (MICS) identified a prevalence of wasting of 4.1 per cent in 2009, 6.7 per cent in 2012, and 5.4 per cent in 2016. Similarly, the prevalence of overweight was reported to be 6.9 per cent in 2009, increasing to 10.9 per cent in 2012 and falling to 8.2 per cent in 2016. These values are higher than expected, given Thailand's exceptional progress in tackling poverty and vulnerability. The coexistence of overweight and wasting, coupled with underweight (6.7 per cent) and stunting (10.5 per cent) among children demonstrates the multiple burdens of malnutrition faced by children in Thailand.

Children comprise an estimated 21.6 per cent of Thailand's population, and approximately 30 per cent of the nation's children face developmental delays owing to factors including malnutrition, poor child-rearing practices, and the lack of adequate and efficient early childhood education (child-care centres and kindergartens).

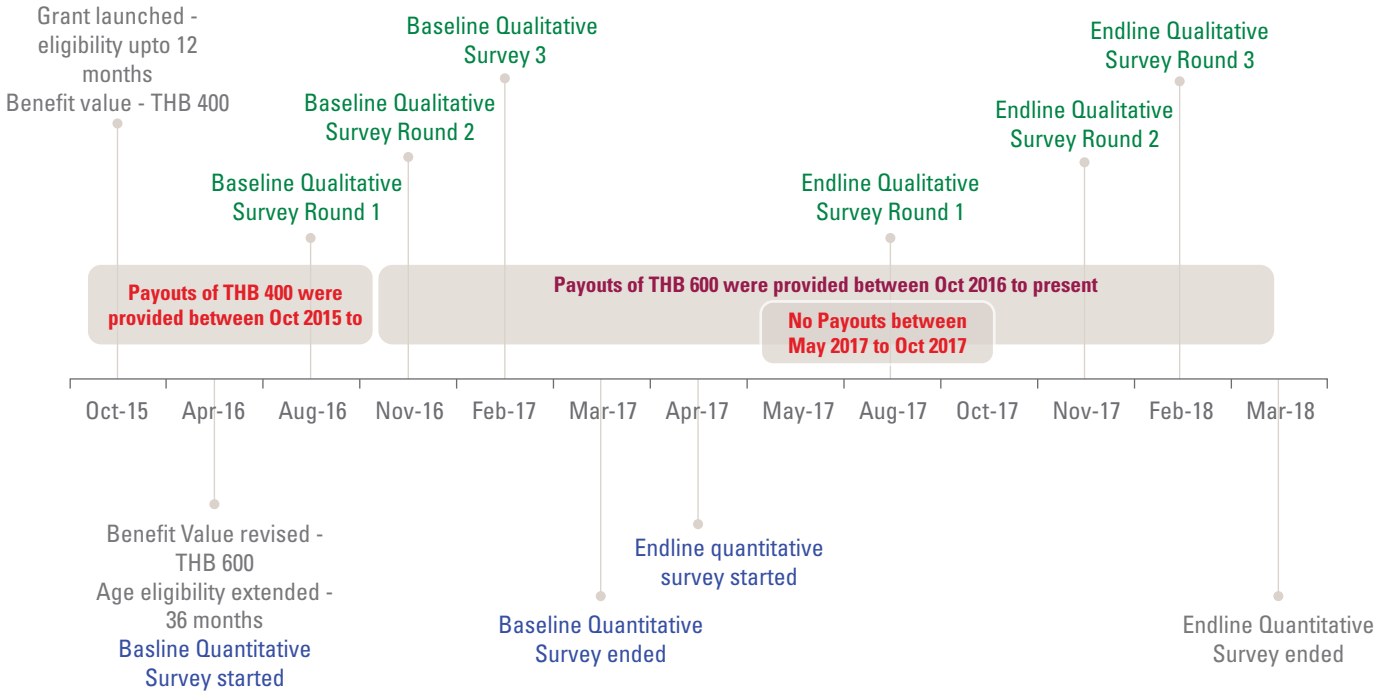
Developing the human capital of young children, the workforce of the future, by ensuring adequate physical, social, and cognitive development, improved educational outcomes, and higher future labour productivity will pre-empt the impending middle-income trap in the context of Thailand's ageing population. A country whose workforce productivity rises faster than the nation ages can sustain shared prosperity for everyone.

©UNICEF/UN040369/N.

2 Object of Evaluation

2.1 Scale and Complexity

In April 2015, the Government of Thailand announced its decision to introduce an unconditional Child Support Grant for children up to one year of age living in poor and near-poor households across the nation. The Cabinet passed a resolution on 31 March 2015 approving the principles of the Child Support Grant (CSG) and approved its implementation in May 2015, following a Cabinet review of the global evidence. The CSG was rolled out and implemented in October 2015 at a globally unprecedented pace for a grant of its kind. The CSG provided THB 400 per month for 12 months to the mothers of children up to one year of age living in households with a per capita income less than THB 3000 per month.[1] In March 2016, a cabinet resolution revised the age-eligibility criterion to cover the currently eligible children up to the age of three years (extending the initial age limit of one year), with an increase in the benefit value to THB 600 per month effective October 2016.[2]



These revisions to the eligibility criteria and the benefit value during the study period do not directly affect the impact evaluation of the CSG. Before the baseline study began, the government had already announced the revision in the grant value and eligibility criteria. What could potentially affect the study is the expectations of beneficiaries. Study participants interviewed in the initial months of the rolling baseline period potentially started receiving the CSG in the second or third quarter of 2016. In these initial months, caregivers would receive the lower benefit (THB 400 – 6.5% of average household consumption for poor households in the sample) with an expectation of payments for children up to one year of age. Pregnant women interviewed at the end of the

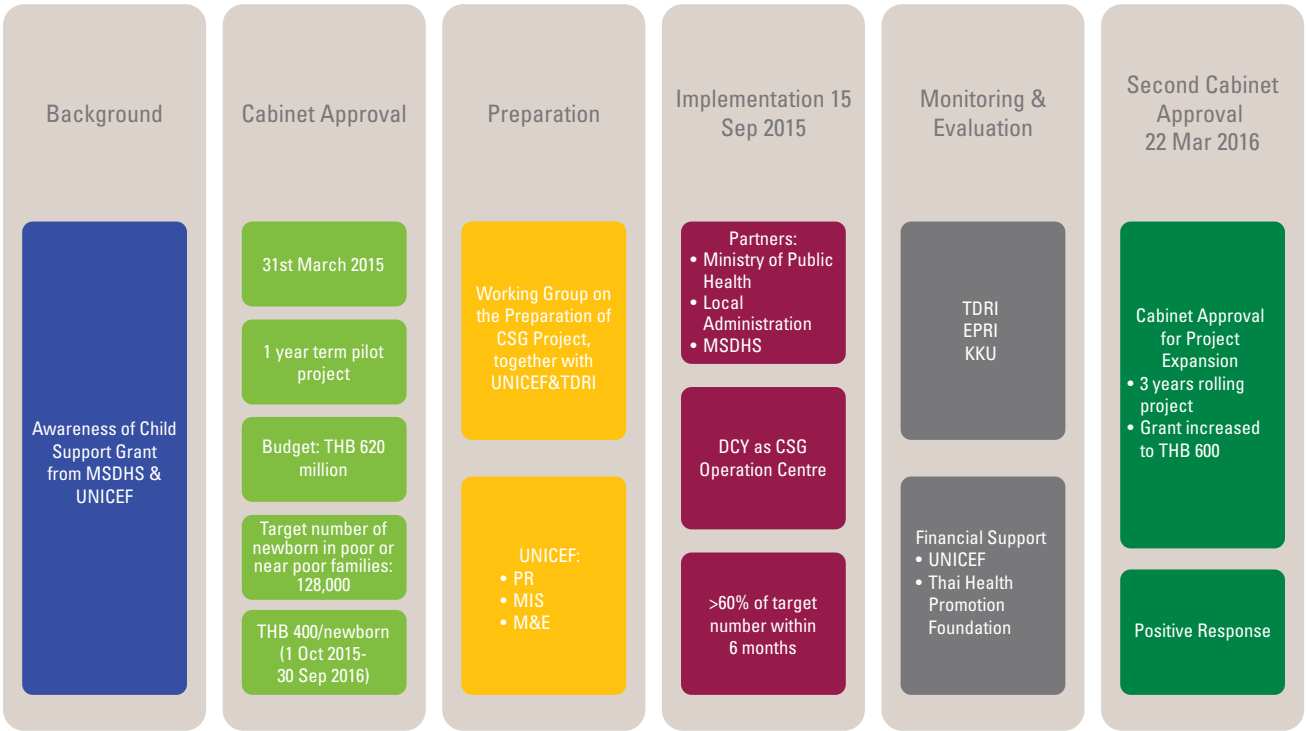
1 Means-test criteria is presented in the annexure section **A1 Means-Test/Eligibility Criteria for the CSG.**
2 Regulation of the Department of Children and Youth on the CSG criteria, 2016.

baseline period potentially started receiving the CSG in the first quarter of 2017 or later. In these later months, caregivers would receive a higher benefit (THB 600 - 9.8% of average household consumption for poor households in the sample) with an expectation of payments for children up to three years of age. At endline, all study participants receiving the CSG were to receive the revised benefit value of THB 600 per month per child up to three years of age. However, between May and October 2017 – six months of the endline data collection period – the CSG benefits were not paid out due to implementation challenges.

The study team recognises that the variation in the intensity of the treatment might create variations in impact. However, isolating and quantifying the impact of the variation in the intensity of treatment is beyond the scope of this study. The qualitative component of the study assesses the perceptions and attitudes of beneficiaries toward the change in benefit value and eligibility criteria as well as the effects of delayed payments. A post-endline study holds the potential to further evaluate the impact of the variation in the benefit delivery.

Nonetheless, while the impact evaluation aims to measure the impact of the grant on beneficiary households after one year of receipt, the extension of the eligibility criteria opens further avenues for a longer-term evaluation to assess the impact of the grant on beneficiary households after three years of benefit duration.

Figure 1: Evolution of the CSG Policy and Implementation



*Note: MSDHS – Ministry of Social Development and Human Security; EPRI – Economic Policy Research Institute; TDRI – Thai Development Research Institute.

2.2 Logical Model and Theory of change

2.2.1 Purpose and Goal of the Child Support Grant

As more countries seek efficient and effective interventions to address the challenges faced by mothers and infants, growing evidence documents the efficacy of social protection programmes in benefitting families and contributing to inclusive social development and equitable economic growth. International evidence, including evidence gathered in Asia, documents how child-focused social grants can enhance human capital development. As a result, many countries in the region, including Indonesia, China, Mongolia, and the Philippines, have invested substantially in processes to ensure that cash transfers reach children.

This compelling evidence in favour of cash transfers for children has motivated the government of Thailand to implement a Child Support Grant, aiming to promote the status of mothers and their young children, strengthen social outcomes, and reinforce the foundations for equitable economic growth.

The introduction of this grant fills a critical policy gap and achieves an important milestone in Thailand's efforts to protect the country's most vulnerable children and invest in longer-term socio-economic development.

The government of Thailand implemented the Child Support Grant with the following objectives:[3]

1. To facilitate newborns' basic rights to quality upbringing
2. To provide social protection that mitigates social and income inequalities
3. To encourage parents to register their children with public service systems and better ensure a higher quality of life for young children
4. To promote age-appropriate development for newborns and young children, providing a foundation for continuous improvement during subsequent life stages

2.2.2 Evaluation Theory of Change as a Basis for Evaluation Design

The analysis of the impacts of the cash transfer programme originates from a theory of change that recognises the global effectiveness of cash transfers in tackling economic inequalities, poverty, and the vulnerability of children, while simultaneously promoting broader developmental impacts.[4]

The theory of change rests on the premise that the impact of increased income on the well-being of the child includes both direct and indirect outcomes of the decisions made in the household. Therefore, increasing income alone may not be sufficient if the person whose interests are most likely to align with that of children; in most cases, the mother, does not have the decision-making power. Empowering women directly by providing them with income (i.e. making transfers to women/mothers) can influence household spending in ways that facilitate the investment in human capital necessary for sustainably eradicating poverty. In the case of Thailand, eradicating poverty involves eliminating malnutrition and enabling appropriate feeding and caring practices through the provision of complementary mechanisms that reduce the burden of poverty and gender inequality.

Figure 2 depicts the core pathways that lead to the intended outcomes of the Child Support Grant for both children aged 0–¬12 months (the first year of birth) and the households in which they live. Apart from an increase in income, which links directly to the receipt of the grant, the outcomes are dependent on the behavioural and attitudinal responses of the households that experience an increase in income.

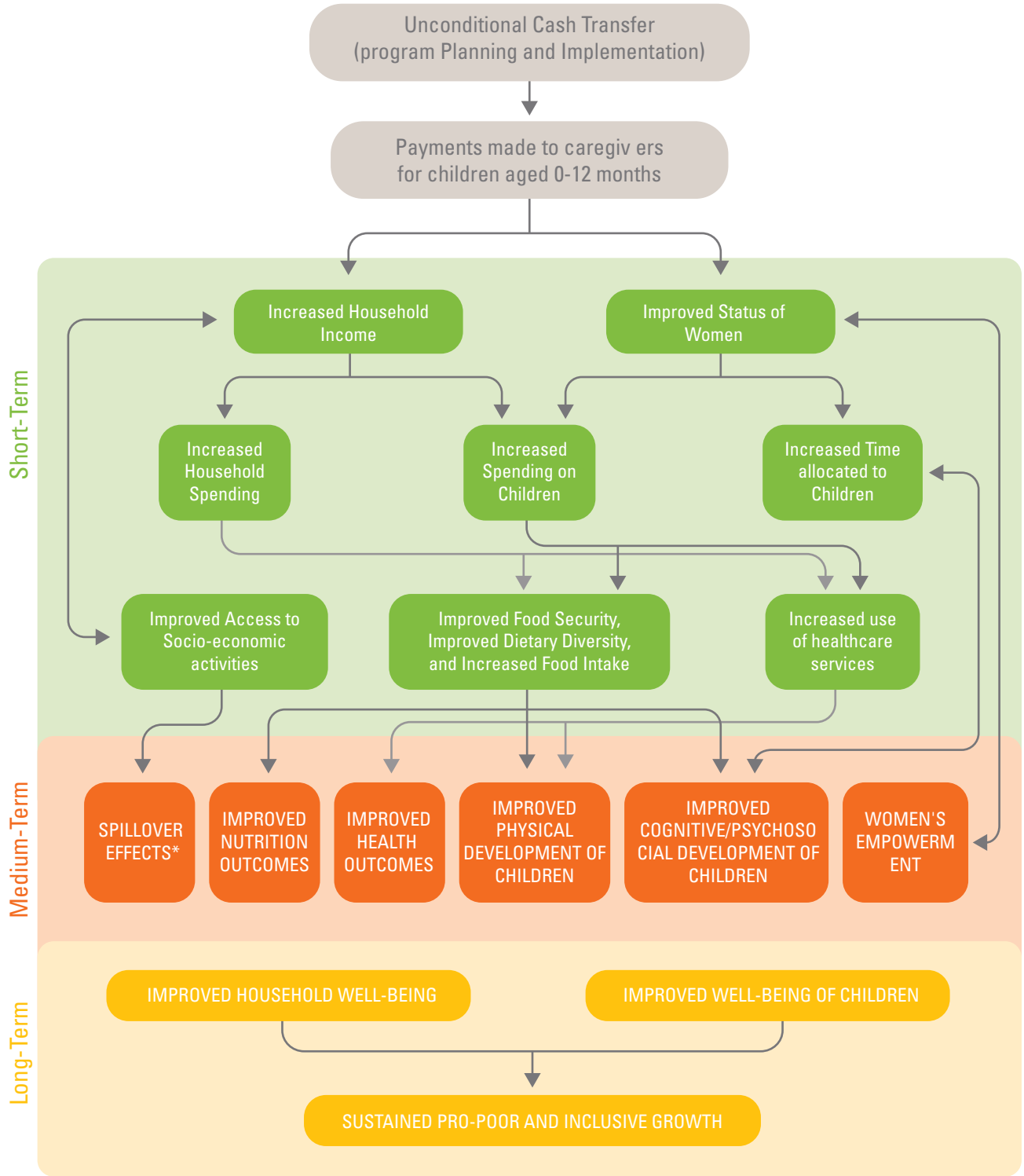
3 CSG Guideline for 2017 Fiscal Year, p. 2.
4 The baseline study provides a detailed review of global evidence supporting the rationale for the grant.

Core Assumptions

The analysis of programme impacts originates from a theory of change that recognizes the effectiveness of cash transfers in tackling poverty and child vulnerability, while promoting broader developmental impacts. The global evidence based on cash transfers for children provides some understanding of the possible impacts of the Child Support Grant programme. Several core assumptions, based on the studies analysing the impact of child-sensitive social protection, inform the theory of change:

- The mother is the primary caregiver.
- There is a critical window of opportunity for growth and development — while a mother is pregnant and through the first 24 months of a child's life — when proven nutrition interventions offer children the best chance to survive and reach optimal growth and development. The deficits acquired at this age are difficult to compensate for later.
- Investing in nutritional interventions in early childhood can improve cognitive function, schooling outcomes, and economic productivity later in adulthood.
- Many aspects of children's economic and social vulnerabilities coincide with those of their households and communities.
- The well-being (health and nutritional status, mental health etc.) of caregivers can significantly affect the well-being of children.
- Cash transfers are effective in increasing the use of preventive healthcare, which consequently improves overall health status.
- Improvement in a mother's nutritional status will, in turn, improve the nutritional status of her children.
- There is an adequate supply of good-quality educational and health care facilities

Figure 2: Theory of Change



*Spill-over Effects – Improved Education, Improved Household Health, Improved Employment Opportunities, Increased Access to Credit

Short-Term Impact: Socio-economic Outcomes

Increase in Household Income

Cash transfers increase household income, directly addressing poverty and inequality and relaxing the liquidity constraints preventing households from investing in essential goods and services.[5] They also represent a predictable income source, which enables low-income households to mitigate unexpected economic shocks, make different consumption decisions, participate in productive economic activities, and invest in the future productivity of the household members.[6] There is substantial evidence globally that demonstrates the impact of an increase in predictable income on household savings, investments in productive assets, participation in the labour force, improvements in quality and diversification of livelihood activities, and increased returns on economic activities.[7]

Improved Status of Women

In households where the mother receives the grant, cash transfers can redress gender asymmetries and empower women. Despite increasing involvement in economic, social, and political activities, Thai women, especially those from marginalised and poorer communities, still face gender disparities stemming from a lack of access to resources, services, land, and credit.[8] The Gender Equality Index (GEI) 2012 indicates that, except education equality, which stands at 97 points, indices for women's empowerment and economic participation are relatively low at 37 and 59 points, respectively.[9] Gender inequalities are also the source of marginalisation in single-mother families. Stigmatisation and discrimination in society have significant impacts on the economic status of these families in Thailand.[10]

Although the evidence on the impact of cash transfers on women's empowerment is not conclusive, several studies have found that cash transfers have improved women's household bargaining power and increased their ability to save and invest.[11] Focus group discussions with potential CSG recipients in Thailand indicated that they would be in charge of making decisions related to the expenditure of the grant, even if their husbands or the household heads were normally the ones making such decisions. Evidence from around the globe demonstrates the potential these gains could have on empowering and elevating the status of women as providers and decision-makers.[12]

Short-Term Impact: Developmental Outcomes

Cash transfers enable increased expenditure on essential services which cumulatively enhance the physical, cognitive, and psychosocial development of children, thereby contributing to a generation of more productive and resilient adults. Improved food security – better dietary and nutritional choices, better educational opportunities, improved health care seeking behaviour, and enhancement in livelihood decisions – all enable the household to invest in the human capital development of their children. The results are particularly important for the most vulnerable households that use cash transfers for basic needs, including food, hygiene, clothing, and health care. In addition to funding consumption (increasing expenditure), cash grants enable poor households to make different consumption decisions (changing the composition of expenditure), participate in productive economic activity, and invest in the future productivity of the household and household members.[13]

5 Kabeer, Piza and Taylor (2012).
6 OECD (2009) in DSD, SASSA and UNICEF (2012).
7 Kabeer, Piza and Taylor (2012).
8 Rojanaphruk (2014).
9 Social Watch (2012).
10 Khumsuwan and Chokthananukoon (n.d.).
11 Fultz and Francis (2013: 31).
12 Adato, Briere et al. (2000); Attanasio, Battistin and Mesnard (2009); M. Molyneux (2008); Fultz and Francis (2013:31); Adato et al. (2004).
13 OECD (2009) in DSD, SASSA and UNICEF (2012).

Improved Dietary Diversity and Food Intake

One of the most consistent findings of cash transfer programmes is their contribution to reducing food insecurity and hunger, with more pronounced effects seen in lower-income countries where poverty is significantly higher. In addition to spending more money on better food, cash transfers can prevent negative coping mechanisms such as skipping meals and facilitate an adequate diet. Existing research documents the above outcome when poor households using a major part of their grants to purchase food.[14]

However, a mother's knowledge of nutrition and the nutritional needs of children at various ages are critical factors in determining the effect the CSG could have on nutrition and dietary diversity. Such knowledge is especially relevant for a breastfeeding mother, as sufficient intake of micronutrients is critical to nourish her infant adequately.

Furthermore, Thailand's double burden of malnutrition is partly attributed to the transitional phase of the economy, highlighting a shift from traditional, balanced, and nutritious meals toward pre-prepared meals that are unhealthy and high in animal fat.[15] In the absence of adequate knowledge (among mothers/primary caregivers) of healthy versus unhealthy foods groups, the requisite balance between food groups, and essential micronutrients, especially for maternal and neo-natal health, increased income is less likely to generate nutritional benefits effectively.

Increased Take-up of Health Care Services

Cash transfers ease the economic barriers to accessing health care and encourage the use of healthcare services. Many studies from low- and middle-income countries in Latin America and Africa suggest that cash transfers increase recipients' utilization of health care facilities and medication.[16] Cash transfers, in addition to assisting with consultation fees, also reduce the burden of indirect costs such as transportation and the opportunity costs of taking time off work to utilize health facilities.

Increased utilization of preventive health services is much stronger in the case of children and is increasingly improving maternal health, particularly in Asia.[17] Both eventually affect the health outcome of children, especially when mothers utilize antenatal and post-natal health care.

Increase in Time Allocated to Children

Research in Thailand has found that poverty is a major reason for child abandonment.[18] Increasing the Child Support Grant and thus, the monthly household income of the caregivers reduces their financial burden, enabling them to take better care of their children, and reduces the risk of abandonment. Research has also indicated that, in Thailand, one of the causes of a child's aggressive behaviour and conflict with the law is insufficient time spent with parents.[19] Cash transfers can ease economic constraints, even temporarily, to allow caregivers more time for caregiving activities, which would otherwise not be feasible owing to the pressures of work, migration, or domestic chores.[20]

Another way the grant could increase the time available for caregiving is to enable mothers to take longer maternity leave to care for their newborns and young infants.

14 Samson et al. (2007); DFID (2011).
15 Kosulwat (n.d.).
16 Pantoja (2008); DFID (2011:27,28).
17 DFID(2011:28).
18 (Buranasing, 2015)
19 Department of Juvenile Observation and Protection, Thailand.
20 Aklu and Haile Kiros (2005), Oxfam (2005), Harvey and Savage (2006) in Bailey and Hedlund (2012); (SCUK 2009); Devereux et al (2007).

Medium-Term Impact: Developmental Outcomes

Improved Developmental Outcomes for Children

Cash transfers allow for increased expenditure on essential goods and services (such as adequate food, health care, and education), provide opportunities to invest in better caring practices and improve developmental outcomes for children. Increased uptake of preventive health care services or adequate antenatal and post-natal health care services can significantly improve the physical development of children during pregnancy and early childhood.

Higher income reduces mortality related to easy-to-treat illnesses such as diarrhoea as households can seek healthcare rather than opt for free alternative care such as home remedies. Although there is limited research on the risks associated with complementary and alternative medication (CAM), there is ample evidence of the adverse effects of these treatments (some life-threatening),[21] especially in situations where the conventional health care system does not integrate CAM, or families abandon or delay the use of conventional medicine.[22]

As the household increases its consumption of healthy foods, the nutritional outcomes for members will improve. Similarly, as cash transfers ease the burden of income insecurity, mothers are less likely to disregard better caring and feeding practices. Improved breastfeeding habits resulting from increased time for child care can have a substantial impact on the growth and developmental outcomes of a child.

Since early relationships affect a child's social development, improved household dynamics and atmosphere can result in measurable differences in an infant's psychosocial development in later years.[23]

There is robust evidence that cash transfers can improve the mental health of beneficiaries by, for example, reducing stress levels.[24] Furthermore, studies have found that an increase in parental income can improve the cognitive development of children and lead to better educational outcomes.

Long-Term Impact: Overall Well-being and Poverty Reduction Outcomes

Improved Well-being of Children and Households

By directly increasing household income and enabling investments in essential goods and services, cash transfers enhance the physical, social, and economic well-being of children and their households.

Researchers have documented the relationship between income and the psychological well-being of the family. Increased income can foster a household environment that is more conducive to healthy child development by reducing familial stress and conflict, which further supports cognitive development. Economic independence is essential for harmonious familial relationships. Improved income has the potential to improve household relations, increase opportunities for employment, and eventually enhance the emotional and financial well-being of the household.[25]

Poverty Reduction and Inclusive Growth

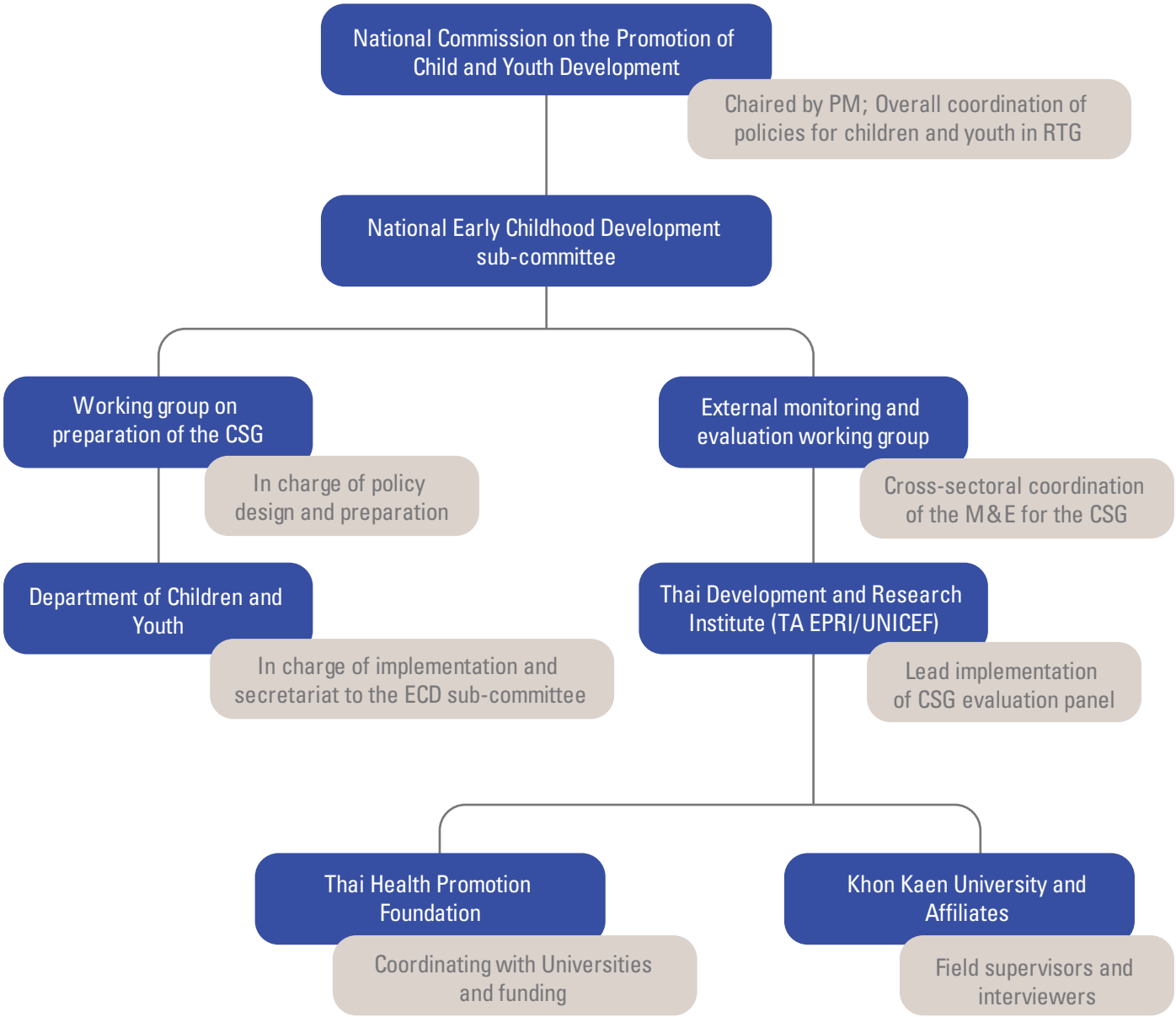
Enhancing the physical and cognitive development of children with lesser means and enabling improvements in their future labour productivity ultimately generates higher lifetime earnings and helps break the intergenerational transmission of poverty. Cash transfers aim to provide more than a short-term financial solution and ultimately act as an investment in the long-term human capital of future generations by enabling households to participate in health and educational services, providing access to better nutrition, and fostering early childhood development (health, nutrition, and education).

21 Merhav, et al. (1985).
22 Lim, Cranswick and South (2011).
23 United Nations Children's Fund (n.d.); Yount, DiGirolamo and Ramakrishnan (2011).
24 Groot et al. (2015:18).
25 Milligan and Stabile (2008).

2.3 Key Stakeholders

Chaired by the Prime Minister, the National Commission on the Promotion of Child and Youth Development is responsible for the overall coordination of the policies for children. The commission's National Early Childhood Development sub-committee leads the implementation of the CSG among national and sub-national partners. It leads the working group on the preparation of the CSG, which is responsible for the actual design and preparation of the policy, whereas the Department of Children and Youth is responsible for the implementation of the programme. Figure 3 illustrates the organogram of key stakeholders.

Figure 3: The Key Stakeholders Supporting Thailand's Child Support Grant



The National Early Childhood Development Sub-committee heads the external monitoring and evaluation working group that receives support from the United Nations Children's Fund (UNICEF) and the Thai Health Foundation. UNICEF, together with the Ministry of Social Development and Human Security (MSDHS), has planned to establish a tripartite national institutional partnership. MSDHS, which oversees the coordination, implementation, and monitoring of the CSG, is supported by the Ministry of Public Health (MOPH) for the impact evaluation. MOPH and the Department of Children and Youth within the MSDHS have commissioned a team of eight institutions to conduct a comprehensive impact evaluation of Thailand's CSG. This team comprises the Thailand Development Research Institute (TDRI) and a team of researchers from four regions of Thailand, under the leadership of the Centre for Research and Development in Community Health System established by the Faculty of Nursing at Khon Kaen University (KKU). MSDHS has requested UNICEF to support the design, institutional setup, roll-out and implementation, and capacity building of national partners for the first year of implementation of the grant. UNICEF commissioned the Economic Policy Research Institute (EPRI), a global research institute based in Cape Town, South Africa, to provide technical support to TDRI and its local partners. For the impact evaluation, TDRI has received technical and financial support from UNICEF. The Thai Health Promotion Foundation funds the national study team's researchers from the other seven institutions.

3 Evaluation Purpose, Objectives, and Scope

3.1 Purpose of the Evaluation

The purpose of the evaluation is to enable the Cabinet and UNICEF to better achieve a thorough assessment of the current implementation of the grant and to recommend policy improvements for its longer-term implementation.

3.2 Evaluation Objectives

Recognising the important opportunity presented by the implementation of the CSG to further strengthen the evidence base on the impact of social protection interventions, while also supporting programme operation, UNICEF and the Government of Thailand have commissioned a comprehensive evaluation of the CSG in Thailand.

With the overarching goal of providing actionable insights to improve programme design and implementation, the evaluation is designed to assess the impact of the CSG on children and their families, against the specified theory of change **(Section 2.2.2):**

The United Nations evaluation standards and the OECD/DAC criteria—relevance, effectiveness, efficiency, sustainability, and impact of the intervention—guide this impact evaluation of Thailand's CSG.

The standard OECD/DAC criteria have five dimensions – impact, effectiveness, efficiency, relevance, and sustainability. However, the study team has chosen to identify and analyse three of these five dimensions, in-depth – impact, effectiveness, and efficiency – while assessing the relevance and sustainability of the programme:

- **Impact —** assesses the primary and secondary short and long-term effects produced by the CSG
- **Effectiveness —** evaluates whether the CSG implementation processes inhibit or maximise programme impact
- **Efficiency —** measures the targeting efficiency, i.e., the extent and efficiency with which the CSG reaches the intended population/target group

This decision to place the primary focus on three of the five OECD/DAC criteria supported the credibility and robustness of the main findings, consistent with the main policy aims of the research and given the financial and time constraints. This approach has enabled the study team to allocate the necessary time and resources to evaluate the core policy questions (particularly those informed by the impact) and appropriately balance the full set of OECD/DAC criteria.

The initial evidence from this impact assessment has effectively influenced key policy decisions, contributing to the Government of Thailand's decision to increase the benefit value by 50 per cent (from THB 400 to THB 600 per month) and extend the age-eligibility of the grant by 200 per cent (from up to one year to up to three years of age). The robust evidence addressed the core policy questions that will further inform policy decisions to scale up and sustain the CSG programme.

The evaluation employs a triangulation process to draw relevant conclusions for the OECD/DAC criteria based on the primary assessment focused on impact, effectiveness, and efficiency, integrated with an analysis of other data, research, and evidence. The study also focuses on equity, gender, and human rights throughout the study from the design of the evaluation to the development of the instruments and the final analysis.

The study's team experience in designing, implementing and evaluating cash transfer programmes globally, their understanding of the situation of women and young children in Thailand, and their experience with the Thai CSG provide valuable insights into the relevance and sustainability of the intervention:

- **Relevance —** the extent to which the objectives of the CSG are consistent with beneficiaries' requirements, country needs, and national priorities laid out in the National Economic and Social Development Plan No. 12 that focuses on reducing poverty, promoting gender equality, and achieving the Sustainable Development Goals (SDGs)
- **Sustainability —** the extent to which the CSG generates political will for long-term sustainability, social acceptability, and long-term returns

3.3 The scope of the Evaluation

This comprehensive impact evaluation of the CSG is a mixed-methods quasi-experimental study designed to extend over two years, with the rolling baseline running from April 2016 to March 2017 and the endline following on immediately, from April 2017 to March 2018. The evaluation aims to assess the impact of the one year of grant receipt. The study employs a three-stage sampling strategy[26] and collects data in nine provinces: *Sa Kaeo, Nakhon Ratchasima, Sisaket, Ubon Ratchathani, Kalasin, Sakon Nakhon, Mae Hong Son, Tak, Pattani, and Narathiwat.* While the quantitative study draws on a sample from each of the nine provinces, the qualitative component draws conclusions from four provinces: *Sa Kaeo* (Central Thailand), *Mae Hong Son* (Northern Thailand), *Kalasin* (North Eastern Thailand), and *Narathiwat* (Southern Thailand). This report relies on three distinct analyses: impact assessment, targeting assessment, and a process review.

The **impact assessment** evaluates the programme's impact on beneficiary children between 0 and one years of age (at endline), their mother or caregivers, and their households. The goal of the impact assessment is to measure the differences in outcomes between the beneficiaries of the CSG and the group that represents a credible counterfactual, namely, a comparison group characterised by the outcomes of interest in the absence of the CSG.

The evaluation aims to quantify the impacts of the grant on a range of outcome indicators, including mother and child nutrition, caring and feeding practices (including ECD), health and health service utilization, household expenditure, physical development of children, women's empowerment and household dynamics in resource allocation, and caregivers' decision-making and time use. The quantitative instruments enable such analysis by identifying the outcomes that are directly attributable to the grant itself. The surveys also gather information on the receipt and usage of CSG, perception of the CSG administration and the enrollment processes.

The qualitative analysis adds context and depth to the quantitative survey findings and helps to explain the impact pathway. It aims to strengthen the quantitative analysis by improving the reliability and validity of findings, deepening the understanding of processes that help achieve programme outcomes, and explaining how the context affects these processes. It helps to explain the direction of causality, identify barriers to access (reinforcing results from the quantitative evaluations), provide information that is hard to quantify, and corroborate the findings.

26 Please see **Section 4.3** for more information on the sampling strategy.

The **targeting assessment** analyses the extent to and efficiency with which the CSG reaches the households that need support — exploring inclusion and exclusion errors in design and implementation. An effective and efficient targeting mechanism minimises both these errors through accurate identification and verification of eligibility. Data on both treatment and comparison group households collected through the quantitative-qualitative fieldwork demonstrate the extent as well as the correlates of exclusion. Also, a ratchet survey uses a snowballing approach to identify households that have been incorrectly excluded and gains a better insight into the programme's targeting efficiency, and guide stakeholders on improving the programme's reach to poor and vulnerable households.

A process review provides a deeper understanding of the effectiveness of programme implementation, beneficiary and stakeholder outlook on eligibility criteria, and enrollment processes. This review provides greater insights into the process-related barriers to programme uptake.

3.4 Objectives of the Endline Report

This integrated quantitative-qualitative endline report aims to answer the key evaluation questions, as outlined in the previous section. The endline study focuses on assessing the achievements of the CSG against expectations from the programme in the short-run (based on the Theory of Change). It also aims to identify areas for improvement in terms of programme design and implementation to enhance the programme's impact, efficiency, and effectiveness. The study relies on the quantitative and qualitative data collected through the baseline and endline data collection processes.

©UNICEF Thailand/2016/Metee

4 Evaluation Methodology

4.1 Quantitative Methods for Impact Assessment

The impact evaluation of Thailand's CSG adopts a **mixed-methods quasi-experimental design** as the rights-based approach to grant distribution, which precludes randomisation. The mixed methods research design combines quantitative and qualitative methods is used to deliver robust, relevant, and credible data. The study adopts a multi-phase integration approach through the sequential and concurrent implementation of quantitative and qualitative components to improve the validity of the results of the evaluation. This approach is suitable in programme evaluations where researchers use quantitative and qualitative instruments over time to allow for the development, modification, and evaluation of the programme.[27]

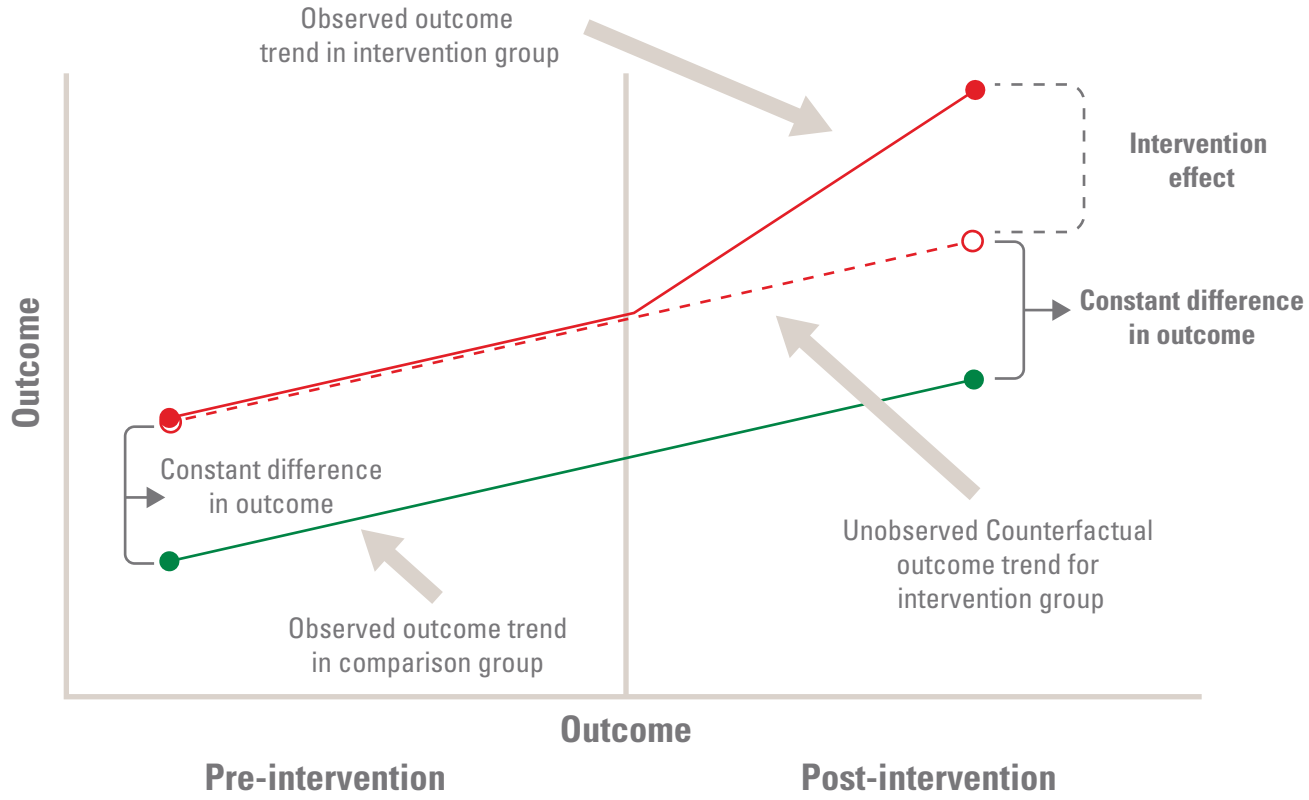
The study employs matching methods to establish an attribution strategy for assessing impacts on beneficiaries compared to comparable non-beneficiaries. The study categorises participants in to "treatment" (those receiving the grant) and "credible comparison" (those not receiving the grant but are as similar as possible to those who do) groups. The credible comparison group is constructed based on matched "propensity scores" calculated as a probability of grant receipt conditioned on observable characteristics that influence participation in the CSG programme.

Propensity score matching constructs a statistical comparison group by matching observations on beneficiaries to those on non-beneficiaries with similar propensity scores, defined as the likelihood of participating in the programme. The matched beneficiary and non-beneficiary households have similar social, economic, and demographic characteristics because the team calculates the propensity score from measured correlates of participation in the programme. Therefore, the differences between the matched beneficiaries and non-beneficiaries are expected to be attributable to the programme itself rather than to other factors. It is imperative for the matching to adjust for observed and unobserved characteristics that might affect both selections into and expected outcomes of the programme to obtain unbiased estimates of the impact of the grant.

The quantitative analysis at endline involves conducting a difference-in-difference analysis to assess the impact of the CSG on key indicators. **Difference-in-difference or double difference estimation** uses data from treatment and comparison groups to estimate the effect of a specific intervention or treatment (in this case, the CSG) by comparing the changes in outcomes over time between a population that is receiving benefits and a comparable group that is not receiving those benefits. Double differences rely on the premise that in the absence of the intervention (CSG), the unobserved differences between treatment and comparison groups will be constant over time. As the figure below illustrates, this method rationale allows the study to attribute impact to the intervention (CSG) by comparing the observed outcome trend in the comparison group with that of the treatment group. Any variation from the observed trend of the counterfactual on key indicators is attributable to the intervention (CSG) when the theory of change is credible.

27 (Creswell and Clark 2011). For more detail, please refer to Annex A2.

Figure 4: Difference-in-Difference estimation, a graphical depiction



Source: (Columbia University Maliman School of Public Health, n.d.)

It is essential to have both baseline and endline values for the relevant indicators for both treatment and comparison groups to conduct double difference estimations. However, in terms of the CSG, there are cases at baseline where the mothers are still pregnant. Therefore, all indicators related to the beneficiary child at endline do not have baseline values, making double difference estimations impossible for these indicators.

This study measures impacts as differences between the treatment group (households receiving the CSG) and a statistically matched comparison group (households not receiving the CSG). The study interprets the difference between the treatment group and the matched comparison group as the "improvement" or impact associated with the treatment (the CSG). In discussing the technical results, the study uses the language of "statistically significant differences." In elaborating the policy implications, the study interprets the differences as the impact (or "improvement") attributable to the CSG. The measured improvement is not dynamic—the measure represents how the CSG improves indicators relative to their state in the absence of the intervention.

4.2 Evaluation Framework

The original set of research questions have been re-positioned across the five dimensions to minimise duplication of analysis and ensure that the findings are concise and consolidated. The table below aligns this study's key evaluation questions to the respective OECD/DAC criteria and presents the original and final set of questions and justifications for rearrangement, where applicable.[28]

The evaluation of Thailand's CSG aims to assess the programme across three of the five OECD/DAC criteria: impact, effectiveness, and efficiency; with considerations of gender, equity, and human rights. A comprehensive evaluation also assesses the relevance and sustainability of the intervention.

By design, the proposed framework has a few limitations:

1. This study does not explore all five dimensions of the OECD/DAC framework; it is designed to explore the impact of the programme, effectiveness of programme implementation, and the efficiency of targeting to provide actionable policy insights to strengthen the CSG design and implementation.
2. A cost-efficiency analysis is beyond the scope of this study. However, such analysis could generate valuable insights to assess the implementation efficiency of the programme to provide a more comprehensive analysis of its implementation processes and long-term sustainability.
3. Since the baseline and endline data are collected within a year, the likelihood of observing the long- and medium-term outcomes in this report is low. Delayed follow-up studies – potentially in 2020, 2025, and 2030 – will be essential to evaluate the longer-term impact of the CSG on issues such as the developmental progress of children.

Based on the OECD/DAC criteria, the study team has developed an evaluation matrix that highlights the key questions as well as sample indicators that guide the analysis for each section.

Objective	Evaluation criteria and/ or indicators	Evaluation strategy (tools, data, and analysis)
Objective 1: IMPACT 1. Does the CSG improve child nutrition? (This also addresses gender objectives.) 2. Does the CSG improve access to social services, particularly post-partum care? (This also addresses gender objectives.) 3. Does the CSG strengthen the female caregiver's negotiating and decision-making power within the household? (This also addresses gender objectives.) 4. Does the CSG improve the caregiver's time allocation to benefit the infant's health and well-being? 5. Does the CSG improve the household environment for the benefit of the caregiver and child? (This also addresses gender objectives.) 6. Does the CSG generate spill-over benefits for other household members? 7. Is the CSG reaching children and their caregivers effectively? (gender and socio-economic groups) 8. Is the CSG achieving its objectives?	1. Anthropometric nutrition indicators: height-for-age z-scores, weight-for-height z-scores, weight-for-age z-scores 2. Feeding and caring practices – time spent with children, breastfeeding, complementary feeding etc. 3. Health service utilisation rates, particularly post-partum care utilisation rate 4. Decision-maker indicators 5. Women's Agency Factor – Likert-scale attitudinal measures 6. Time-use indicators 7. Spill-over benefits – impact on other children and household members.	1. Household survey data (using quantitative instruments to collect data on households, caregivers, and children and employing propensity score matching analysis) analysis 2. Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs)

28 Please refer to Annex B for the original evaluation questions and the changes to the evaluation questions.

Objective	Evaluation criteria and/ or indicators	Evaluation strategy (tools, data, and analysis)
Objective 2: EFFICIENCY 1. How effectively is the CSG targeted to poor households? (This also addresses social equity objectives.)?	1. Inclusion error 2. Exclusion error	1. Analysis of sample data – eligible vs receiving 2. Targeting assessment — Ratchet Method
Objective 3: EFFECTIVENESS 1. Is the CSG reaching children and their caregivers effectively? (gender and socio-economic groups) 2. Does the design overcome access barriers effectively? 3. Can the CSG be implemented more effectively? 4. Is the CSG benefit level high enough to be relevant and effective?	1. Access barriers reported by respondents and programme officials 2. Perceptions of the beneficiaries and programme officials of CSG benefit value, programme implementation processes, etc.	1 Targeting assessment 2 Process review 3 Household survey analysis 4 KIIs to assess the adequacy of benefit value 5 KIIs with programme officials/ workers 6 FGDs with the beneficiary and non-beneficiary caregivers
Objective 4: RELEVANCE 1. Is the Child Support Grant an appropriate instrument for the achievement of child-sensitive social protection objectives? 2. Do policy-makers support the CSG as an instrument to achieve national objectives? 3. Do beneficiaries view the CSG as a mechanism that supports household and infant well-being?	1. Policy influences achieved by the CSG 2. Contextual analysis of national interest in the CSG – communication and dialogue, references to the CSG in political and economic spheres	1. Benchmarking against international best practices 2. Conclusions from the findings of effectiveness and impact 3. Qualitative-quantitative integrated analysis of the impact 4. Practical experience, expertise, and knowledge
Objective 5: SUSTAINABILITY 1. Does the programme achieve its objectives in a manner that strengthens political will for scale-up and sustainability? Does the CSG, for example, strengthen developmental impacts with long-term economic benefits? 2. Does the programme performance generate effects that threaten its sustainability? 3. Do non-beneficiaries support the programme?	1. Expected long-term development based on current progress toward impact 2. Indicators of programme support from non-beneficiaries.	1. Consultations and evidence of political support 2. Conclusions from the impact assessment 3. Beneficiary and non-beneficiary perceptions

4.3 Sampling Strategy

The CSG impact assessment adopted a sampling strategy employing three stages: (1) a selection of provinces balanced between those with high poverty rates and all other provinces, (2) within provinces, a selection of *tambons* (sub-districts) that similarly focused on the poorest, and (3) within *tambons*, a random selection of all pregnant women utilizing the public health care system. In both the first and second stages, the methodology used a sampling technique named ***Probability Proportional to Size (PPS),*** a common approach that aims to ensure that every potential respondent has an equal likelihood of being selected into the sample by weighting geographic units (provinces and *tambons*) with their relevant populations.

The sampling strategy divides ("stratifies") all of Thailand's provinces into two groups: (i) provinces with high poverty rates, defined as those with more *tambons* with high poverty rates, and (ii) other provinces, defined as those with fewer *tambons* with high poverty rates. The selection of provinces in the first group comprised of two steps: first, all provinces with poverty rates equal to or higher than 40 per cent[29] in at least half the *tambons* were selected and then from the remaining provinces, those with at least 70 per cent of *tambons* with poverty rates equal to or higher than 20 per cent were selected. The next stage involved the selection of thirteen provinces as those with high poverty rates and the remaining provinces being grouped as others, i.e., provinces with fewer *tambons* with high poverty rates. The application of PPS (with replacement) to both groups using the poverty rate in provinces as probability weight led to the random selection of eight provinces from the thirteen provinces with high poverty rates, and two were selected from the other provinces. The choice of "with replacement" PPS[30] enabled Kalasin to be selected twice, resulting in a selection of nine provinces in total.

In the second stage, the selection of *tambons* within the nine provinces also followed similar stratification. After sorting the *tambons* from highest to lowest based on their poverty incidence using data from the 2010 poverty map, using estimated numbers of poor infants as the probability weight guided the application of PPS. The number of selected *tambons* in both the groups varied by province depending on (i) the total number of *tambons* in the province and (ii) the expected number of poor infants after selection to ensure that there were enough households with poor infants in each province.

The third stage of the sampling process adopted a circuit methodology to identify the required number of seven to eight month-pregnant women. The Ministry of Public Health (MOPH) provided a list of pregnant women from the Information and Communications Technology (ICT) centre, and the fieldworkers verified this data with the relevant tambon and community hospitals. Since no tambon was expected to include the required number of eligible respondents at any one time, the field teams conducted iterative visits and interviewed every relevant pregnant woman located in the tambon, up to the cumulative limit of fifteen set for the sampling methodology. The approach randomly sampled the group of relevant respondents if the available number exceeded that required to reach the limit.

The qualitative study adopted a purposive sampling approach to identify the most relevant group of participants based on a set of characteristics of interest in the research. The sampling approach selected four *tambons* in three rounds of participants for both the baseline and endline. The annexe reports the complete details of both the quantitative and qualitative sampling methodologies (Section D).

29 As per the information from the National Statistical Office's poverty map of 2010.

30 Each selected province was returned to the pool for potential re-selection. Sampling with replacement ensures that all sample values are independent. The covariance between any two sample values is zero. The alternative approach, sampling without replacement, does not ensure the independence of sample values. "In sampling without replacement, each sample unit of the population has only one chance to be selected in the sample. For example, if one draws a simple random sample such that no unit occurs more than one time in the sample, the sample is drawn without replacement. If a unit can occur one or more times in the sample, then the sample is drawn with replacement. The same concept applies to other types of sample designs. For example, in multi-stage sampling the first-stage sampling units (primary sampling units) can be drawn from strata without replacement or with replacement." http://methods.sagepub.com/reference/encyclopedia-of-survey-research-methods/n516.xml

4.4 Ethical Considerations

Household surveys typically raise several ethical questions, particularly those that pertain to the health of children and other household members and involve physical measurements, sensitive issues such as domestic violence, and private information related to household income and expenditure. The questions relate to individual rights to privacy, the need for informed consent, and ethical handling of sensitive information.

Ethical and moral principles in line with the United Nations Evaluation Group (UNEG) Norms and Standards for Evaluation, UNICEF's Procedure for Ethical Standards in Research, Evaluation, Data Collection and Analysis, and UNICEF's guidelines for conducting Ethical Research Involving Children guide the impact evaluation of Thailand's CSG. Three separate review boards — the Institutional Review Board (IRB) within the Economic Policy Research Institute (EPRI), the Ethical Review Board (ERB) set up by the Thai Development Research Institute (TDRI), and KKU's Ethical Review Board — have evaluated the study methodology. The same principles of ethical research determined by national and international standards guide these boards and seek to ensure that:

- **Risks to participants are minimised;** the protocol uses procedures that (1) are consistent with sound research design and (2) do not unnecessarily expose participants to any risks.
- **Risks to participants are reasonable** compared with any anticipated benefits to participants and the importance of any knowledge that is expected to result.
- **Selection of participants is equitable** such that the purposes of the research, the setting in which it is conducted, and its inclusion/exclusion criteria maximise the equitable distribution of burdens and benefits. In particular, the committees consider the special issues and additional safeguards posed by research involving participants such as children, pregnant women, physically or mentally compromised individuals, or economically or educationally disadvantaged persons who may be vulnerable to coercion or undue influence in the context of the research.
- **Informed consent/assent** is provisioned in all the instruments and training procedures are implemented to ensure that informed consent or assent is acquired from each participant or his or her legally authorised representative and is appropriately documented.
- **Privacy and confidentiality** are ensured through adequately implemented protocols for the protection of participants' privacy and the confidentiality of identifiable data.

After an assessment of the accuracy of the study methodology, a review of the evaluation protocols, training protocols, and the survey instruments, the IRB approved the study with minor adjustments. **Section E Ethical Review Process** presents a detailed review.

4.5 Data Collection

A rigorous mixed-methods design adopted for the evaluation of Thailand's CSG uses quantitative and qualitative instruments over time — baseline and endline surveys and other instruments — to assess the impact of the programme against expected outcomes and produce robust results.[31] The data also focuses on exploring challenges with programme implementation and barriers to access and identifying factors that affect the programme's ability to reach the intended target groups efficiently. A triangulation of the findings from the quantitative instruments with the results of the qualitative instruments, including key informant interviews, community surveys, and focus group discussions provide a deeper understanding of the quantitative study findings.

Table 1: Summary of Data Collection Tools Used and their Purpose

Quantitative – Household and Community Surveys	Surveys	Gather quantitative data across all dimensions of interest — household identifiers, income/expenditure data, indicators for health, nutrition, and education, access to credit, women's empowerment, child feeding and caring practices, knowledge of the CSG, access to the CSG, grant receipt and usage — for impact assessment and the analysis of inclusion and exclusion error based on the categorization of households as poor and non-poor and their status of grant receipt.
Qualitative	Key informant interviews	Support the impact assessment and the process review: a. Provide complementary information on the topics covered by the household survey, thereby (1) triangulating data to cross-check and compare results, (2) adding depth to the quantitative findings, and (3) enabling a greater understanding of impact pathways (factors or processes that explain why impacts do or do not occur); b. Explore levels of analysis that household-level surveys do not easily capture, such as (1) the intra-household level — relations between genders and generations, and (2) the community level — social relations within communities; c. Explore specific issues of interest that qualitative methods are more suitable for, such as women's empowerment, implementation challenges, barriers to access and uptake, adequacy of the grant, and perception of the CSG, rather than quantitative methods.
Qualitative	Focus group discussions	
Qualitative	Ratchet method	Targeting assessment — identification of households that might have been incorrectly excluded from the study using a snowballing approach.

31 Creswell and Clark (2011).

4.5.1 Quantitative Survey Instruments

Three household survey instruments (household, woman, and child) — administered at every selected household — enable the collection of quantitative data, which is evaluated by the team using multiple data analysis methods. At endline, households that were interviewed at baseline are interviewed again to gather the data necessary to assess the impact of the programme on indicators of interest.

The head or the household member who is best positioned to answer the questions asked in the household questionnaire. It captures data that help identify the household, such as address and contact details, demographic data, characteristics of the household, health and health service utilization, educational background of household members, WASH (water, sanitation and hygiene) indicators, employment indicators, comprehensive household expenditure information, access to financial services, household debt, access to social services, food security, and intra-household decision-making.

The mothers or primary caregivers of children under the age of five are best positioned to answer the questions in the caregivers' questionnaire. Where possible, the survey gathers information on antenatal care, postnatal care, nutrition knowledge, women's empowerment and agency factor, CSG enrolment, and receipt and usage of the funds from all respondents.[32]

The mother or the primary caregiver of each child under the age of five in the study households is best positioned to answer the questions in the child questionnaire. It captures information regarding child nutrition, feeding practices,[33] caring practices, early childhood development, and collects anthropometric data including weight and height to calculate weight-for-age, height-for-age, weight-for-height (as proxies for cognitive development and other long-term developmental outcomes). Fieldworkers also recorded anthropometric data, including the most recent weight and height measurements from children's "pink books" (mother and child health handbook).

The back-translated[34] versions of the quantitative survey instruments are available in **Section G**).

4.5.2 Qualitative Survey Instruments

Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) are the primary qualitative data collection instruments.

Local Administrative Organization (LAO) officers who are responsible for enrolment/registration at designated sub-districts (*tambons*), officials such as village headman/sub-district headman/community leaders who are responsible for certifying households as poor as part of the registration process, and the Village Health Volunteers are the main key informants for this study. KIIs provide insights into the perceptions of the operational staff regarding the programme implementation processes, including awareness generation, targeting, application procedure, qualification of participants, grant disbursement and project supervision, etc. KIIs are structured to identify bottlenecks to effective programme implementation and receive feedback regarding early programme outcomes from programme officials. This information is used to improve programme design and implementation to maximise benefits for children living in eligible households.

32 At baseline, the questionnaire was called the woman's questionnaire and administered to eligible pregnant women or mothers of children under the age of 5 in selected households.

33 Feeding practices indicators included whether the child is breastfed or has been breastfed, although measures of exclusive breast-feeding were not possible with the data collected.

34 The questionnaires were first designed in English, translated into Thai, and pre-tested. After this, the English questionnaires were revised to reflect the issues raised in the pre-testing, and the questionnaires were re-translated into Thai and back-translated into English to ensure consistency and confirm that no information was lost or misinterpreted in the translation process.

Groups of mothers of children living in poor households or households at risk of poverty are the target group for the focus group discussions, divided by a range of criteria, including whether they were participating in the CSG, had eligible children, etc. The FGDs aim to gather information for the process review of the CSG and understand how the CSG is perceived or understood and how households already receiving grant money spend it.

Qualitative questions underwent field tests through group discussions and in-depth interviews, which took place three times during January 2016 in Bangkok, Sa Kaeo, and Ubon Ratchathani. The questions were adjusted after each round to make them relevant and inclusive of all the important hypothetical questions.

Section J provides details on the characteristics of the FGD and KII participants as well as the data collection timeline.

Additionally, a ratchet survey, which adopts a snowballing approach, is employed to assess exclusion error. Each household interviewed at the endline is asked to identify other households that are as poor as or poorer than them and have a pregnant woman in the house. The list of new households is matched against the consolidated list of pregnant women identified through the four sources used for the impact evaluation:

1. ICT — a national consolidation collected from the health care centres
2. Data from a local health centre
3. Data from the local government
4. Data collected by local volunteers going from one house to another

Any new households were added to the consolidated list and interviewed to understand whether they were truly eligible and why they were not receiving the CSG.

4.6 Data Analysis

4.6.1 Quantitative Data Analysis

The study employs propensity score matching (PSM), a methodology that allows matching beneficiary (treatment group) households with non-beneficiary (comparison group) households that have similar characteristics. This methodology relies on the nearest neighbour approach — matching each treatment group observation to the nearest or closest match from the comparison group based on the estimated propensity score.

The estimation of propensity scores reduces the matching problem to a single dimension, with the value of the propensity score (or probability of participation in the CSG programme) providing the basis for comparing treatment and comparison groups. The study also included robustness measures that tested the outcomes using alternative selection equations and matching methods.[35]

In studies such as this in which there are a large number of relevant variables from the baseline phase available for use in matching, propensity score matching can produce fairly robust results, as it reduces the process of matching to a single dimension, i.e., a propensity score or the predicted probability that an individual is a grant recipient. In the first stage of the analysis, the propensity score is estimated using the combined sample of treatment and comparison groups, and the propensity score is subsequently used to match treatment and comparison group members so that the distribution of their characteristics is the same, or balanced, in the second-stage estimation of impacts.[36] A statistical test is then applied to verify that the propensity score balances characteristics between the treatment and comparison group members. The matching relies on the assumption that there are no unobservable variables that influence selection into the programme and programme outcomes; that is, conditional on observable characteristics, the expected outcome in the absence of treatment should not depend on one's treatment status.

At baseline, registration for the CSG is the best available proxy indicator for the receipt of the CSG since households have either not been registered or have not received their first payment yet. Since DSG receipt data is available at endline, the households are matched based on whether they are receiving the grant. The table below shows that 52.5 per cent of the households that received the grant at endline had registered for the CSG at baseline and 70.2 per cent of households that did not receive the grant at endline had not registered for the CSG at baseline.

	Not registered at baseline	Registered at baseline
Did not receive CSG at endline	70.2%	29.8%
Received CSG at endline	47.5%	52.5%

35 The robustness tests assessed alternative matching options in terms of calipers, common support, etc.

36 The main analysis employs Stata's psmatch2 command to estimate the impacts, which enables the use of Stata's pstest command for balancing tests. The annex reports corroborating results from Stata's teffects nnmatch command, which supports additional bias correction. The robustness tests corroborate the consistency of findings with complementary methodologies.

The impact analysis disaggregates the findings from the quantitative analysis across several income sub-groups to assess the impact of the grant on the extremely poor (income less than THB 1500 per person per month), poor (income less than THB 3000 per person per month), and poor and near-poor (income less than THB 6000 per person per month). This disaggregation serves two purposes: (i) analysis of the impact on sub-samples, particularly examining the extent of the grant on the poorest households, and (ii) validating the theory of change to demonstrate that the impact is the highest for the poorest households. The disaggregations are cumulative (extreme-poor; extreme-poor and poor; and extreme-poor, poor, and near-poor) as opposed to partitioned into three separate groups (extreme-poor, poor, and near-poor) because the sample is insufficient to detect small changes in key indicators for smaller sub-groups, where the expected effect size is smaller (such as households with income between THB 1500-3000 or THB 3000-6000).[37]

The theory of change postulates that the effect on key indicators is expected to be larger for extremely poor households compared to poor or near-poor households. As the effect size reduces, key indicators – such as anthropometric measurements – which are very sensitive to sample size require significantly larger samples to detect changes significantly. The study was not designed to detect impact for these smaller sub-groups; therefore, when disaggregated to exclusively assess the impact on extreme poor, poor, or near-poor, the study sample does not have enough power to detect these smaller changes significantly (see Power Analysis results in Section D1). However, recognising the value of this analysis, the study team adopted the next-best approach. The current disaggregation enables an understanding of whether the impact on key indicators weakens or disappears when including relatively higher income households into the core group of extremely poor households.

For each of these four income-group samples, the impacts are tested using three different selection equations/ specifications to ensure the robustness of results. After a careful analysis of the impacts obtained from these selection equations and of the bias associated with each of the covariates, four "primary" models (one for each sample) are selected and finalised as drivers for the entire impact analysis. Table 23 in Technical Annex I lists the baseline variables generated using the survey to include in the propensity score matching models. The table describes the covariates used in each of the four samples and highlights the ones used in the "primary" models that drive the results and the alternate ones used for robustness testing. The variables used for the models provide information on households' CSG registration status, their geographic information, their asset ownership, the condition of their dwelling, and the socio-economic status of the household head. Table 25 in Technical Annex II reports the probits models for selection into the treatment group for each of the primary models. The Technical Annex III then reports all the impact results obtained from both the primary and alternative sets of models in each sample and sub-sample. Technical Annex V reports the results estimated using a nearest-neighbour estimator employing Stata's *teffects* command. This approach takes into account the fact that propensity scores are estimated (rather than known) in calculating the standard errors. The results from this estimation demonstrate that the measured impacts do not vary considerably from those reported in the main body of this report (with results estimated using Stata's *psmatch2* command), and that the statistical significance of the impacts is also not affected by the new estimation method.

37 The four groups represent trade-offs in measuring the power of the study to identify the core impacts. For the poorest group, the benefit size represents a larger proportion of their income, with the expectation that the impact of the grant is likely to be more significant. However, the loss of sample size resulting from the focus on the poorest group reduces the power of the study. The other end of the spectrum—the entire sample—provides an alternative test—the sample size is larger, increasing the study's power, but the average ratio of benefit to household income is lower, reducing the likelihood of an effect. The other two groups provide intermediary cases of the trade-off. Comparing results across these four groups provides evidence of the robustness of the results.

The tables in Technical Annex IV present the list of covariates included in each model's selection equation and their corresponding bias; these balance tests show that the models achieve the balancing property and that potential selection bias reduces systematically for these models.[38] All primary propensity score models have been correctly specified, and the distributions of the covariates in the pools of treated and untreated observations are equal in these models. The density plots (using the wasting outcome) displayed in Technical Annex II also show that the distributions of the propensity scores for treatment and comparison group members not only have strong overlap, but they are also similarly shaped in terms of "thickness" over their ranges before matching. The post-matching distribution for each of these models also suggests that the estimator significantly improves the balance of the covariates.

The results of these tests for impact estimation strongly support the use of matching with the selected propensity score models. Although there are no definitive tests to determine whether the selection equations have excluded significant unobserved factors, the balancing tests suggest that it is unlikely that the modelled impacts are driven solely by selection effects.

For each eligible child, sibling, and caregiver outcome, after conditioning on the set of variables used in propensity score estimation, the means of the predictor variables for treatment and comparison group households are statistically equivalent. Additionally, the percentage reduction in bias is considerably high for most models yielding significant impacts, as reported in the Technical Annex.

4.6.2 Qualitative Data Analysis

Qualitative data include primary field data from KIIs and FGDs, data from desk reviews, and programme documents. The primary data is coded and analysed thematically. The data from the desk reviews and programme documents complement and strengthen the findings from the field. These data are used collectively to explain, support, or contradict the findings of the quantitative surveys.

Quotations by FGD participants, programme staff, and village heads/community are used to support the findings derived from the discussions and interviews. The research team recorded the interviews and later transcribed this verbatim. When local dialect appears, the translated text is in parentheses. Each quote has a source cited at the end of each quoted sentence. Places and times of data collection are represented in abbreviations as exemplified in the table below.

38 In experimental data, treatment groups must be assigned randomly, meaning characteristics across groups will be approximately equal. For quasi-experimental models that use statistical matching approaches to achieve experimental-like balanced data results, treatment-effects estimators must reweight the observational data. If the reweighting is successful, then the weighted distribution of each covariate should be the same across treatment and comparison groups. The idea behind balancing tests is to check if observations with the same propensity score have the same distribution of observable covariates independent of treatment status.

Table 2: Abbreviations for Qualitative Data Source

Abbreviations	Meanings
FG-1	Group 1: Pregnant women in poor households or households at risk of poverty who are eligible and have already enrolled in the programme.
FG-2	Group 2: Mothers or caregivers of children in poor households or households at risk of poverty who are eligible, have enrolled in the CSG and have received the grant.
FG-3	Group 3: Mothers or caregivers of children in poor households or households at risk of poverty who are eligible and have enrolled in the CSG but have not received the grant yet.
FG-4	Group 4: Pregnant women or mothers or caregivers of children in poor households or households at risk who are eligible for the programme but have NOT enrolled in the programme.
KI-LAO	Local Administrative Organization (LAO) includes Municipalities and Sub-district Administration Organization (SAO) officers
KI-VHV	Village Health Volunteers (VHV)
KI-VH	Community Leaders such as Village Heads (VH)
KI-SHPH	Sub-district Health Promoting Hospital (SHPH)

Examples of Citation:

(Sa Kaeo / Nov 2017 / FG-3): refers to information obtained in November 2017 in Sa Kaeo province from the group discussion with mothers or caregivers of children in poor households or households at risk of poverty who are eligible and have enrolled in the CSG but have not received the grant yet.

(Mae Hong Son/ March 2018/ KI-VH): refers to information from the Key Informant Interviews (KIIs), that is, from the Village Heads in Mae Hong Son Province in March 2018.

5 Endline Findings

This section presents the findings from the endline analysis of quantitative and qualitative data collected for Thailand's CSG. This chapter presents the findings per the three dimensions of the OECD/DAC evaluation framework that this study focuses on – impact, effectiveness, and efficiency. The findings integrate results from both quantitative and qualitative evaluations that include analysis of survey data; impact assessment of matched treatment and comparison group outcomes; KIIs at the national, provincial, and local level; and FGDs.

A preliminary analysis of the baseline characteristics of receiving and non-receiving households indicates that the former receiving households more disadvantaged than the non-receiving households. Table 24 in Technical Annex I shows the means of all variables included as covariates in the matching models for both recipients and non-recipients of the CSG. The reported t-tests for the differences in means between these groups notably suggest that compared to non-recipient households, beneficiary households are disadvantaged regarding ownership of assets. Recipients are statistically significantly less likely to own cars, agricultural land, credit cards, or refrigerators. The tests also find that CSG receiving households have more children under the age of five, as well as slightly higher dependency ratios than non-receiving ones. They are also more likely to be beneficiaries of other social protection programmes such as scholarships, school-feeding programmes, or pensions, and the heads of receiving households are more likely to have attained at least a secondary education level.

5.1 Impact

This section presents the result of the grant's impact on outcomes relating to eligible children, their siblings, and caregivers. Each impact is estimated using a series of different propensity scoring models. The study analyses each indivator for the entire sample as well as for three sub-samples of extreme-poor households (income per capita per month less than THB 1500); extreme-poor and poor households (income per capita per month less than THB 3000); and extreme, poor and near-poor households (income per capita per month less than THB 6000). All the results displayed in this section measure impact as the difference between the outcomes of treatment households, which receive the grant and comparable households henceforth referred to as "Matched Comparison Households," which do not receive the grant.

5.1.1 Increase in Household Expenditure

The quantitative impact assessment fails to find a statistically significant difference between the household expenditure of households receiving the grant and that of comparable households not receiving the grant. The analysis focused on the share of expenditure households spent on food. The quantitative models displayed in the table below do not show any statistically significant impact on the share of households' total expenditure allocated to food purchases.

Table 3: Impact on food share of total expenditure

	Mean values for:		Impact	Value of t-statistic	Interpretation
	Treatment Households	Matched Comparison Households			
All Households	0.48	0.49	-0.01	-0.46	Not statistically significant impact
By income level					
Households < THB 1 500	0.48	0.49	-0.01	-0.46	Not statistically significant impact
Households < THB 3 000	0.46	0.45	0.01	0.48	Not statistically significant impact
Households < THB 6 000	0.45	0.46	-0.01	-0.01	Not statistically significant impact

The high variability in expenditure across households and the relatively small grant value likely explain this result.

The qualitative data gathered through FGDs with primary caregivers and mothers, however, reveal that the recipients spend the CSG primarily on food for beneficiary children.

> *" I bought some food such as fish [and] Cerelac (60 baht per box) from Mae Malai market."*
>
> *"I bought congee for my baby. I want him to gain weight. A box of Cerelac lasted three weeks."*
>
> *"I bought Cerelac (infant cereal) for 90 baht, and it lasted only three days. My kid is picky about food. She wouldn't eat just boiled rice, so I had to buy Cerelac and congee from the market for her" (Kalasin/ Aug 2017/ FG-2).*

A mother explaining the positive effects of being able to buy additional food states that

> *"It's good; my child is almost 8 kilograms now [and] comparing to his brother at the same age, he is bigger" (Mae Hong Son/ Feb 2018/ FG-2).*

Mothers who reported purchasing formula include:[39]

i. Mothers who cannot breastfeed because they do not have enough milk

> *"I couldn't produce it myself after three months, so I needed to buy powder milk" (Narathiwat/ August 2017/ FG-2).*
>
> *"I spent it all on the child; it's not enough to spend it on myself. My child didn't allow me to breastfeed him, so I needed to buy powder milk. A THB 200 box of powder milk lasted for four days" (Kalasin/ Aug 2017/ FG-2).*

39 At endline, most children are around 11-12 months of age and are well past the recommended breastfeeding period.

ii. Mothers who buy formula for children over six months of age

"After six months, at 7th and 8th month, I would like to add extra food for my child. You know milk from breastfeeding loses its quality at [the] 7th or 8th month, so I was thinking of [a] food supplement" (Kalasin/ Aug 2017/ FG-3).

"I used it to buy diapers at first and after six months, powder milk" (Narathiwat /Nov 2017/ FG-4).

[I]"use the CSG to pay for treatments at hospitals,[to] buy diapers and powder milk. I know people who don't receive CSG. After the baby is no longer breastfeeding, they don't receive supplement food. [The babies] eat what the family has to offer, [and] then they start having milk again once they go to school" (Mae Hong Son/ Aug 2017/KI-VHV).

iii. A mother who was pregnant again while breastfeeding a baby and needed to switch to formula

"I got pregnant again when she was five months old so from then we just gave her powder milk" (Narathiwat / Aug 2017/FG-2).

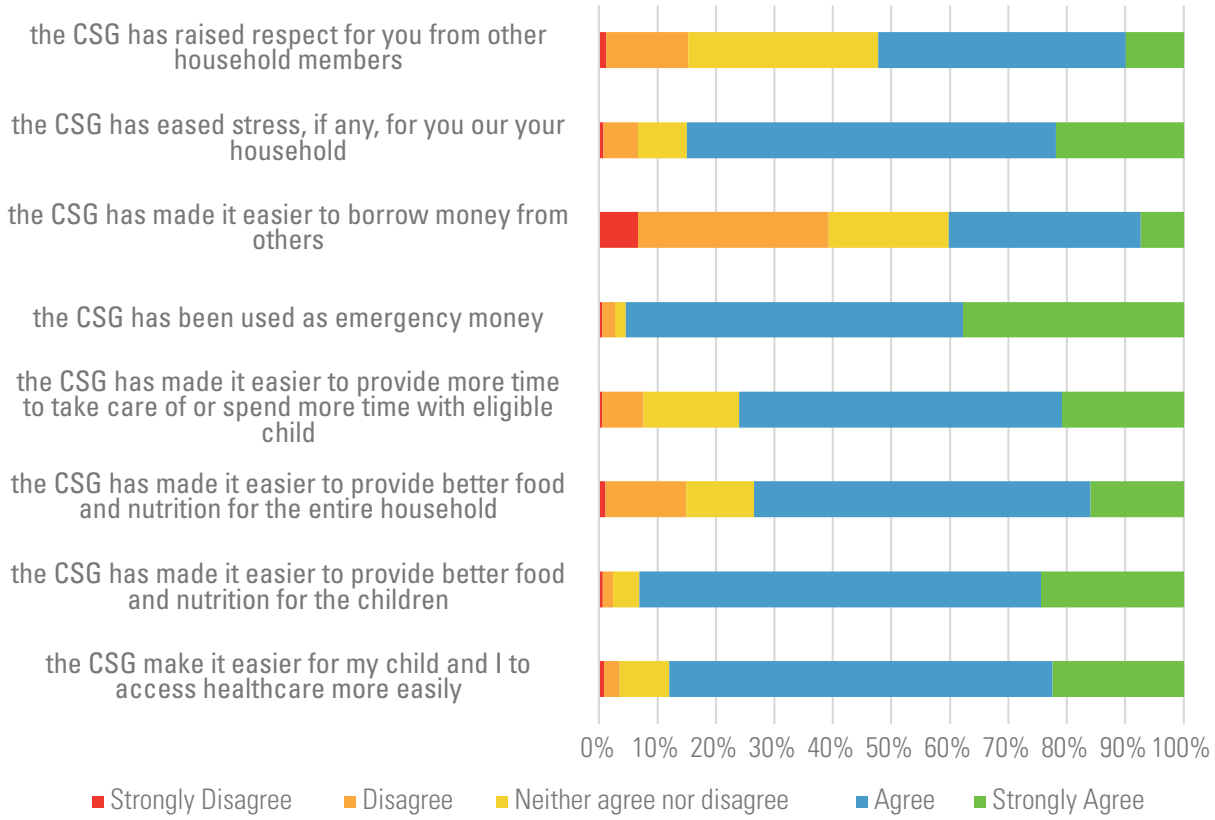
iv. Mothers who return to work and must leave babies with someone else

"We started feeding him powder milk as we started to wean him off breastfeeding. I left him with his grandmother" (Kalasin/ Nov 2017/ FG-3).

"Since she was born, I breastfed her but also gave her powder milk to train her to get used to it so that when I would go to work, she would not have any problem with it" (Narathiwat / Aug 2017/FG-2).

Moreover, the child survey prompts caregivers to share their opinions on the use of the CSG and its effects on their households through a series of statements. As illustrated in the figure below,

Figure 5: Use and effect of CSG on households



The data from the qualitative study show that many beneficiaries are inclined to save the CSG for future use. Some mothers think they will keep the grant as a fund to tap into on a rainy day or for the educational needs of their children. However, they remain uncertain about their ability to save.

> *"If I have enough, I will save it for when I struggle financially." (Kalasin/Nov2017/ FG-2).*

> *"I will use the CSG only when I don't have money. If I do, I will use it for education and medical expenses for my children. I think it is a very good project." (Sa-Kaew/Nov 2017/FG-2).*

5.1.2 Improved Dietary Diversity and Food Intake

The study did not quantitatively assess whether nutritional intake of respondents was more diverse or quantifiably higher, but it explored key feeding practices affecting young children such as breastfeeding practices and use of infant formula, and food security for the households. In addition, the survey explored respondents' perception of the impact of the CSG on food intake on a 5-point Likert scale.[40]

40 Likert (1932) developed the principle of measuring attitudes by asking people to respond to a series of statements about relevant topics. The responses directly measure the extent to which they agree with the statements, tapping into the cognitive and affective components of attitudes. In this study, the Likert scale is used to analyze the attitudes of beneficiary households to the receipt of the grant across a range of themes – ability to access health care, more and better food etc.

Breastfeeding

The following table illustrates the results obtained from modelling the impact of the grant on the proportion of eligible children breastfed for at least the first six months.[41] The theory of change postulates that the CSG can ease the burden of financial insecurity, which makes mothers more likely to pursue better caring practices and increase the time allocated for feeding practices such as breastfeeding.

Table 4: Impact on breastfeeding practices

	Mean values for eligible children residing in:		Impact	Absolute value of t- statistic	Interpretation
	Treatment Households	Matched Comparison Households			
All Households	0.79	0.73	0.06	2.23**	CSG receipt increases the prevalence of breastfeeding for the first six months of life by six percentage points
By income level					
Households < THB 1 500	0.85	0.73	0.12	2.68***	CSG receipt increases the prevalence of breastfeeding for the first six months of life by twelve percentage points
Households < THB 3 000	0.82	0.80	0.02	0.73	Not statistically significant impact
Households < THB 6 000	0.80	0.72	0.08	3.01***	CSG receipt increases the prevalence of breastfeeding for the first six months of life by eight percentage points

In extremely poor households, the model demonstrates[42] a higher prevalence of breastfeeding for the first six months of life in families receiving the child support grant – 85 per cent in the treatment group compared to 73 per cent in the matched comparison group. This higher prevalence is statistically significant at the 99.9 per cent level. Although the sample of poor households fails to yield any statistically significant results, the sample encompassing near-poor households demonstrates an eight-percentage-point difference in breastfeeding between the matched and treatment groups, significant at the 99.9 per cent level. Finally, the sample encompassing all households also shows a statistically significant (at the 95 per cent level) difference in the prevalence of breastfeeding, but this impact is weaker – from 73 per cent in the comparison group to 79 per cent in the treatment group – compared to the various sub-samples.

41 This indicator captures whether eligible children were breastfed for at least six months – given that the majority of eligible children are older than six months at endline, it is not possible, through the survey, to determine whether this breastfeeding is exclusive

42 This is based on a single difference analysis as there is no comparable indicator at baseline.

The data gathered through FGDs with primary caregivers and mothers also demonstrate that most mothers are aware of exclusive breastfeeding and its benefits for children. Majority of them, if able to breastfeed, state that they would continue breastfeeding at least for the first six months, if not longer.

> *"The doctor told me to keep breastfeeding for at least six months. I think I will do it [breastfeed] for seven months [since] I don't have a job now anyway." (Kalasin/Aug 2018/FG-4).*

Some women suggested that they will breastfeed because they do not plan on returning to work and would also choose to breastfeed because the cost of infant formula is extremely high.

> *"I breastfed as long as I could because I didn't go to work at all. I didn't breastfeed my firstborn at all because I had inverted nipples. I breastfed my second child for seven months before I started working again and left the baby with my mum. Now, the third child is coming, and I don't think my mum will be able to look after him/her because she is looking after my brother's child. I think I will have to raise this baby myself, so I plan to breastfeed for quite a long time. I don't think I can afford powdered milk; it is too expensive with my boyfriend being the only one who is working" (Kalasin/Aug 2018/FG-4).*

At endline, primary caregivers of children from extremely poor households are more aware of good early nutrition practices. The survey asks caregivers when they should start introducing food to complement breastmilk. Over 74.3 per cent of caregivers rightly identify the sixth month of the child's life as the time to begin complementary feeding. The impact analysis shows that in the sample of extremely poor households, 73.7 per cent of women in the treatment group correctly answered six months compared to 67.2 per cent in the matched comparison. Table 28 shows that this effect is statistically significant at the 95 per cent level while estimations for the remaining sub-samples fail to exhibit statistically significant impacts.

Qualitative data resonate the knowledge of feeding practices among mothers. A mother from *Kalasin* stated that

> *"I started to grind rice for the baby to eat when he/she turns six months old. Before that, I breastfed exclusively" Kalasin/Nov 2017/FG-3).*

Use of Infant Formula

The findings also demonstrate an improvement in other feeding practices such as a decreased reliance on infant formula in extremely poor households. The survey asks respondents whether the eligible child was given infant formula to drink on the day before the survey[43] and the number of times the child consumed it. Impact analysis shows statistically significant results in both the use and the frequency of use of formula in some of the income groups. As shown in Table 5, in the sample of extreme-poor households, the model indicates that the percentage of children drinking infant formula is 35 per cent in the matched comparison group compared to 25 per cent in the treatment group, this effect is significant at the 95 per cent level. The remaining models for higher income categories fail to register any statistically significant impact.

43 This question is asked to index children (infant beneficiaries), who are approximately one year old at the time of the survey; only a small percentage are 0-6 months old.

Table 5: Impact on use of infant formula

	Mean values for eligible children residing in:		Impact	Value of t-statistic	Interpretation
	Treatment Households	Matched Comparison Households			
All Households	0.37	0.38	-0.01	-0.37	Not statistically significant
By income level					
Households < THB 1 500	0.25	0.35	-0.10	-2.00	CSG receipt decreases the reliance on infant formula by 10 percentage points
Households < THB 3 000	0.32	0.35	-0.03	-1.09	Not statistically significant
Households < THB 6 000	0.36	0.39	-0.03	-0.89	Not statistically significant

The propensity score matching also points to statistically significant differences (at the 95 per cent level) in the frequency of use of infant formula for the sample of households with income below THB 6000. The analysis shows that the number of times the infant beneficiary drank infant formula on the day preceding the survey is 4.8 times in the matched comparison group compared to 4.5 times in the treatment group.

Minimum Meal Frequency

The impact analysis does not provide further evidence on other nutrition-related indicators. For instance, the study does not find any significant effect on the proportion of treatment group children older than six months of age, achieving the minimum meal frequency, regardless of their income level:

Table 6: Impact on the proportion of eligible children achieving minimum meal frequency

	Mean values for eligible children residing in:		Impact	Value of t-statistic	Interpretation
	Treatment Households	Matched Comparison Households			
All Households	0.68	0.71	-0.03	-1.04	Not statistically significant impact
By income level					
Households < THB 1 500	0.67	0.68	-0.01	-0.12	Not statistically significant impact
Households < THB 3 000	0.68	0.71	-0.03	-1.05	Not statistically significant impact
Households < THB 6 000	0.68	0.71	-0.03	-1.17	Not statistically significant impact

However, this finding does not suggest that the programme has no impact on these indicators. A quantitative assessment can fail to demonstrate impact for several reasons — it may be because the study does not have the statistical power to detect the effect that exists (see Power Analysis results in Section D1), or because the effect does not exist. This quantitative analysis draws no conclusion on the impact of the grant on minimum meal frequency.

Perception on the impact of CSG on food intake

Respondents largely agree that the CSG receipt made it easier for them to provide better food and nutrition for their children. Over 68.8 per cent of respondents agreed, and 24.4 per cent strongly agreed with the statement. Only 2.4 per cent of respondents either disagreed or strongly disagreed.

Respondents also agreed, albeit to a lesser extent, that the CSG made it easier to obtain better food and nutrition for the entire household. Although 57.5 per cent and 16 per cent of caregivers agreed and strongly agreed with this statement, respectively, 13.8 per cent disagreed with it.

5.1.3 Increased Take-up of Health Care Services

The theory of change suggests that cash transfers ease the economic barriers to accessing health care and encourage the use of health care services. The impact analysis[44] shows that the number of post-natal care visits received by these children is higher in the treatment groups, particularly in the sample of households with per capita monthly income less than THB 6000.

Table 7: Impact on eligible children's number of post-natal care visits

	Mean values for eligible children residing in:		Impact	Value of t-statistic	Interpretation
	Treatment Households	Matched Comparison Households			
All Households	1.36	1.29	0.06	1.66*	CSG receipt increases the average number of PNC visits
By income level					
Households < THB 1 500	1.36	1.24	0.12	1.79*	CSG receipt increases the average number of PNC visits
Households < THB 3 000	1.36	1.27	0.09	1.86*	CSG receipt increases the average number of PNC visits
Households < THB 6 000	1.35	1.26	0.09	2.16**	CSG receipt increases the average number of PNC visits

For extremely poor households, the primary model shows that the number of post-natal care visits is 1.24 for the comparison group compared to 1.36 for the treatment group, this difference of 0.12 is significant at the 90 per cent level. For poor households, there is a difference of 0.09 visits per month for CSG-receiving children, statistically significant at the 90 per cent level. The sample that encompasses near-poor households, however, shows the same 0.09 visit difference per month significant at a 95 per cent confidence level.[45]

The qualitative data provide evidence of an increase in access to overall health care services. Mothers indicate using the grant for vaccinations or medical treatment from private clinics if their children fell sick. A mother stated that

> *"I took my child to see the doctor at a clinic for the vaccination. It cost about THB 500 including the prescribed pills" (Kalasin/ Aug 2017/ FG-2).*

She further explained that

> *"I have received the grant for just two months so far. The first month, [I] spent [it] on milk and the second month, at this clinic" (Kalasin/ Aug 2017/ FG-2).*

44 This is a single difference analysis as there is no comparable indicator at baseline.
45 The expanded set of matching models displayed in Table 26 of Technical Annex II confirms the robustness of the impacts when tested against the various selection equations.

Some women explained that the CSG had enabled them to access better care at private health clinics. Despite the higher cost, women explained that they went to private clinics because they provided better-quality care, and their children got better faster when treated at private clinics.

> *"Now, with the CSG, we have more money for medical treatment for kids at good clinics. Before that, we always took them to a hospital, and it took them forever to get better. At the clinic, it's more expensive, but the medicines and treatment [are] much better - my kids recovered much sooner, but it's quite expensive - perhaps THB 700-800 for each time. We are okay with that because we want to see our kids get better soon" (Kalasin/ Aug 2017/ FG-2).*

Another mother also explained

> *"We went to the hospital a few times, but she didn't get better. They always prescribed the same medicines. So, we went to a clinic instead [and] I spent THB 2000 - it's rather expensive" (Narathiwat/ Aug 2017/ FG-2).*

When asked about the perception of private clinics vis-à-vis public health promoting hospitals, Sub-district Health Promoting Hospital personnel explained that the perception of "good quality care" was faulty as parents preferred antibiotics, which are generally over-prescribed at private clinics and give them the perception of better care.

> *"It is faulty logic. You know at Sub-district Health Promoting Hospitals, we try not to prescribe antibiotics unless necessary. We have a campaign in which we try not to prescribe antibiotics because using antibiotics create[s] resistance to some antibiotics, but if they go to clinics, then they will be prescribed antibiotics right away. So sometimes they come to us, and we explain to them that it will take about one week to recover from a cold. But they can't wait. So, they go to a clinic that they used to go to because they know that they will be prescribed antibiotics almost right away" (Kalasin/ Aug 2017/ KI-SHPH).*

As evident from the child questionnaire responses to a statement about whether the CSG had better-enabled uptake of health care, caregivers living in households receiving the grant suggest that the grant money made it easier for them and their children to access healthcare (Figure 5). On the Likert scale, over 22.4 per cent of women strongly agreed with that statement, and nearly two-thirds agreed with it. Overall, less than 3.5 per cent of respondents either disagreed or strongly disagreed that the grant improved their access to healthcare services.

5.1.4 Increased Time Allocated to Children

The study uses the Likert scale to evaluate whether the CSG enabled caregivers to spend more time with their newborns. Over 55.3 per cent of respondents agreed, and 20.8 per cent strongly agreed that "the CSG made it easier for them to take care of or spend more time with their infants." Fewer than one in ten respondents (only 7.6 per cent) either disagreed or strongly disagreed with this statement.

The qualitative component of the study demonstrated broad consensus that the grant was important to enable mothers to stay at home and look after their children for some time. The grant was able to support women who were unable to return to work because they had to care for the child and, in some cases, it enabled women to care for their child longer:

> *"I see it as a programme that enables moms who can't go right back to work to stay home and feed the babies" (Kalasin/ Feb 2018/ FG-1).*

> *"It is a good project that helps a lot of people [and] it is a relevant kind of help. Let's say a woman is pregnant in the village; she won't be able to go out and work; probably only her husband is working" (Sa-Kaew/Feb 2018/ KI-VH).*

The survey asks respondents about the types of developmental activities a child was exposed to with each parent in the three days before the survey. These activities include reading a book, going outside, telling stories, counting, and drawing. The analysis focuses on the total number of activities the child had with either parent before the survey. The findings suggest that children across all treatment groups had similar numbers of activities with their parents, with minute differences that are not statistically significant:

Table 8: Impact on the number of child development activities

	Mean values for eligible children residing in:		Impact	Value of t-statistic	Interpretation
	Treatment Households	Matched Comparison Households			
All Households	4.92	4.97	-0.05	-0.76	Not statistically significant impact
By income level					
Households < THB 1 500	4.94	5.12	-0.18	-1.38	Not statistically significant impact
Households < THB 3 000	4.95	4.94	0.01	0.03	Not statistically significant impact
Households < THB 6 000	4.92	4.98	-0.06	-0.82	Not statistically significant impact

The impact analysis also found similar availability of learning materials for children in the households receiving and not receiving the CSG (whether the surveyed household possesses at least three books for children). The qualitative data indicate that some parents do spend grant money on developmental essentials such as books and toys.

> *"Buying toys are necessary for their development such as car toys and inflatable football" (Narathiwat/Feb 2018/ FG-2).*

> *"I use it to buy stuff such as books so that I can read to my child before [he/she] sleeps" (Mae Hong Son/ Feb 2018/ FG-2).*

5.1.5 Improved Developmental Outcomes for Children

The theory of change postulates improved health, nutritional, cognitive and physical development outcomes for children in the long run. While the impact on cognitive and health-related developmental outcomes was beyond the scope of this study; this section presents the findings regarding the impact of the CSG on key nutritional outcomes through **anthropometric measures.**

One of the primary objectives of the CSG is to improve child nutrition outcomes. This study employs a single-difference analysis, compiling the anthropometric measures derived from children's birth records ("pink books") to construct the wasted growth, or low weight-for-height (wasting), outcome. These measures were not available at baseline because the infants had not yet been born, making a double-difference approach impossible. ***The models demonstrate a statistically significant impact in reducing the prevalence of wasting for all sub-groups (compared to the situation in the absence of the intervention).***[46] The impact is particularly strong and significant for extremely poor households as well as for households with income below THB 6000 per capita per month.[47] The table below reports these results.

Table 9: Impact on weight-for-height (wasting)

	Mean values for eligible children residing in:		Impact	Value of t-statistic	Interpretation
	Treatment Households	Matched Comparison Households			
All Households	0.10	0.14	-0.04	2.07**	CSG receipt reduces the prevalence of wasting by four percentage points
By income level					
Households < THB 1 500	0.09	0.26	-0.17	2.88***	CSG receipt reduces the prevalence of wasting by 17 percentage points
Households < THB 3 000	0.10	0.15	-0.05	1.91*	CSG receipt reduces the prevalence of wasting by five percentage points
Households < THB 6 000	0.09	0.16	-0.07	2.48**	CSG receipt reduces the prevalence of wasting by seven percentage points

46 Impacts are measured as differences between the treatment group (those households receiving the Child Support Grant) and a statistically matched comparison group not receiving the CSG. Interpreting the matched comparison group as the counterfactual, the study interprets the difference as the "improvement" or impact associated with the treatment (the Child Support Grant). In discussing the technical results, the study uses the language of "statistically significant differences." In elaborating the policy implications, the study interprets the differences as the impact (or "improvement") attributable to the CSG. This is not a dynamic improvement—the measure represents how the CSG improves indicators relative to their state in the absence of the intervention.

47 The p-values of all the estimated wasting models are significant at the 5 per cent significance level or lower.

For extremely poor households, there is a statistically significant (at the 99 per cent level) difference in wasting[48] – the incidence of wasting for the matched comparison group (the or the 'credible counterfactual') is 26 per cent compared to 9 per cent for the treatment group. For households with income below THB 6000 per person per month, the impact is smaller (16 per cent in the comparison group compared to 9 per cent in the treatment group) and statistically significant at the 95 per cent level. In the full sample of households, the difference is less pronounced with a five-percentage-point difference between the comparison and treatment groups, but the findings remain statistically significant. The matching on the sample of poor households also illustrates a difference in wasting, which is significant at the 90 per cent level.

Additionally, qualitative data demonstrate that the CSG money was used largely to buy supplies for the infant beneficiary including food, formula, diapers, or other baby essentials such as hygiene products as well as for food and other miscellaneous expenses for other children in the household. While formula was bought mainly for children above six months of age or by mothers who were unable to breastfeed for various reasons, food was an essential requirement for most households. Households also spent the money on developmental essentials such as toys and books or for educational and food expenses for the siblings (See page 54).

None of the officials believed that caregivers, their husbands, or other household members would misuse the grant.

> *"I think the parents will spend the money on their children. I don't think many parents spend this money on themselves, except in the case where they are in a really bad situation, [then] they might use it for salt or gas" (Mae Hong Son/Feb.2017/ KI-VHV).*

> *"I don't think anyone uses this money to do something other than for their children. Six hundred baht a month is 20 baht a day [and] that's only enough to buy things for the children. It is not enough for other stuff" (Narathiwat/Feb.2017/ KI-VH).*

Beneficiary caregivers agreed that the grant is primarily intended to benefit their children and that they would only lend the grant money to the husbands in case of an emergency.

> *"This belongs to the child. My husband can go [and] find money [for] himself. I don't even touch this money myself" (Narathiwat/Feb 2017/FGD-2)*

5.1.6 Spill-over effects

The qualitative data provide some indication that some benefits of the CSG spill-over to the other siblings and family members. Increased expenditure on milk or food for the baby can simultaneously spill-over to the siblings:

> *"I gave it to my oldest daughter to spend at school and used some of the money to buy baby powder" (Kalasin/ Aug 2017/ FG-2).*

> *"I spent it on his diapers - he needs one diaper per night. Other than that, I spent it on milk and food which could be shared with his 4-year-old sister as well" (Sa-Kaew/Feb 2018/FG-2).*

48 The null hypothesis is the default assumption that nothing happened or changed. (For example, this study asserts the null hypothesis that there is no reduction in wasting.) This study's statistical analysis rejects the null hypothesis if the estimated p-value is less than a predetermined significance level, α. The significance level is denoted α and is the probability of rejecting the null hypothesis given that it is true. (Evaluators call this "Type I error"). Evaluation science formally defines the significance level as the probability of the statistical analysis ("the test") rejecting the null hypothesis when it is really true. In mathematical terms, P (Type I error) = α. The relationship between the significance level and the confidence level is c=1−α, where c is the confidence level. For example, a significance level of 0.05 indicates a 5% risk of concluding that a difference exists when there is no actual difference. For example, a significance level of 0.05 indicates that there is a 5% chance that this study concludes that there is a significant difference in wasting between the treatment group (CSG recipients) and the comparison group, when in reality, there is no difference. The significance level for a given hypothesis test is a value for which a p-value less than or equal to that value is considered statistically significant. Typical values for are 0.1, 0.05, and 0.01. These values correspond to the probability of observing such an extreme value by chance.

5.1.7 Women's Empowerment

The Theory of Change suggests that the CSG may contribute to women's empowerment within households because women can contribute more to household economic resources, and they have an independent source of income through the grant. The survey captures the status of women's power in intra-household decision-making along several dimensions such as daily food expenses, non-food expenses, children's healthcare, large and unusual purchases, and the education of household members. The impact analysis shows that women are more likely to be the sole and primary decision-makers on these issues. The matching results indicate that caregivers gain power in making decisions regarding households' food expenses, their health care, and the use of their money. Table 9 shows that caregivers in the sample of extremely poor households gain more decision-making power regarding the day-to-day food expenses of the household. The effect is significant at the 90 per cent level but indicates that the proportion of women claiming to be primary decision-makers on food expenses is 57 per cent in the comparison group compared to 67 per cent in the treatment group. The other income group samples do not show any statistically significant improvements. Given that effects on food purchasing power rely on timely receipt of the grant, delays in distribution might explain the lack of measurable impacts for some the income group samples.

Table 10: Women's decision-making power on food expenses within the household

	Mean values for eligible children residing in:		Impact	Value of t-statistic	Interpretation
	Treatment Households	Matched Comparison Households			
All Households	0.63	0.61	0.02	0.6	Not statistically significant impact
By income level					
Households < THB 1 500	0.67	0.57	0.09	1.85*	Receipt of CSG increases the proportion of women with primary decision-making power on food expenses by nine percentage points
Households < THB 3 000	0.65	0.67	-0.02	-0.65	Not statistically significant impact
Households < THB 6 000	0.64	0.65	-0.01	-0.38	Not statistically significant impact

The propensity score matching also shows statistically significant differences in the proportion of women who are in charge of their health care. In the sample of poor households, caregivers from 47 per cent of treatment group households claim to be the main decision-makers on health care matters, compared to 39 per cent in the matched comparison group. This effect is statistically significant at the 99 per cent confidence level. In the sample encompassing near-poor or all households, the impact is lower in magnitude between treatment and comparison groups and is only significant at the 90 per cent level.

The analysis also demonstrates that women gain increased control over the use of their own money, and this impact is significant at the 90 per cent level for the sample of households with income below THB 3000. The model indicates that the proportion of women who consider themselves to be the sole and primary decision-makers regarding their own money is six percentage points higher in the treatment group. The remaining samples fail to exhibit any statistically significant impacts.

The study does not find any statistically significant impact on caregivers' decision-making power on issues relating to their children's health care. The findings displayed in the table below show that the proportion of women who are primarily responsible for children's health care decisions is higher in the treatment group in all but the poor sample. However, none of the results is statistically significant in any of these sub-samples. The results obtained from alternate model specifications also fail to yield any significant impacts. This study does not draw any conclusions about the impact of the CSG on the caregivers' decision-making regarding their children's health.

Table 11: Women's decision-making power on children's health care

	Mean values for eligible children residing in:		Impact	Value of t-statistic	Interpretation
	Treatment Households	Matched Comparison Households			
All Households	0.34	0.32	0.02	0.86	Not statistically significant impact
By income level					
Households < THB 1 500	0.31	0.25	0.06	1.22	Not statistically significant impact
Households < THB 3 000	0.32	0.34	-0.02	-0.62	Not statistically significant impact
Households < THB 6 000	0.33	0.32	0.01	0.53	Not statistically significant impact

The responses to the child questionnaires suggest that the grant appears to have been beneficial in reducing caregiver's personal and household stress. Over 63.1 per cent of caregivers strongly agreed that the grant receipt eased stress about their respect among other household members, while only 15.3 per cent either disagreed or strongly disagreed with the statement. About a third of the households neither agreed nor disagreed with the statement.

The qualitative data show that women already possessed some decision-making power on expenditure in the household regardless of the grant but not for expensive goods. There is, however, evidence that mothers who did not have the authority to make decisions on expenditure before the receipt of the grant could at least decide on the use of the grant itself. One respondent explained

> *"I'm just a daughter-in-law. If my husband earns any income, it will go to my mother-in-law first. If I have these 600 baht, they will directly go into my pocket and don't have to pass through the hands of my mother-in-law first" (Mae Hong Son/Feb.2017/ FG-2).*

5.2 Efficiency

A poverty targeting approach chooses to exclude the non-poor segment of the target demographic group explicitly. Efficiency requires that targeting reach the poor precisely. It is then inefficient to reach the non-poor, who do not need the benefit as much as the extremely poor. The efficiency criteria of the OECD/DAC framework guide us to assess the targeting performance of the CSG.

Globally, the main challenge to improving the efficiency of poverty-focused child benefits—including Thailand's CSG—is the inevitable problem of exclusion error associated with any poverty targeting approach. The section mainly focuses on assessing how well the programme minimises the **exclusion** of households that are eligible for the grant. The cost of erroneously, including households is far lower than the cost of excluding households that need the grant. A household that is already poor but does not receive the grant loses the immediate benefit of a higher income as well as the opportunity to invest in the lives of young children in ways that enhance their productivity and provide them with a better chance at breaking the intergenerational cycle of poverty in the long-term.

A targeting assessment, comprising qualitative and quantitative data, was conducted to evaluate the effectiveness of the targeting mechanism adopted by the CSG. The study explores the factors that automatically exclude households that are deserving and needy from the CSG. Until 2018 (fiscal year), the CSG excluded all households that receive any other support or benefits from government agencies or state enterprises (including the child allowance from the Social Security Fund and welfare from civil services or state enterprises) and children under the care of government agencies (such as public nursing homes for children and families or public housing).[49] Despite the revision of guidelines to include those under the Social Security Fund, the implementation of these changes is not universal.

The CSG design and implementation protocols include several steps to minimise the exclusion of potentially eligible households. First, the programme uses an income threshold as well as a means-test to identify poor households. The programme was announced to cover the poor and near-poor households. However, one of the eligibility criteria was that the per capita income threshold of households should not exceed THB 3000. This criterion excluded many near-poor households during design, but the government soon rectified it at implementation, where implementors loosely implemented the criteria.[50]

Consequently, households above but near this threshold were also allowed into the programme. In the sample of 5257 households included in this targeting assessment, 1227 households were near-poor with per capita incomes between THB 3000 and THB 6000, and 808 households had per capita income between THB 3600 and THB 6000. These figures represent substantial coverage of households that belong to the near-poor category defined as households living above the poverty line but below twice the poverty threshold.

The study recorded several challenges with the targeting criteria that further excluded households that are entitled to the CSG such as programme officials' poor understanding of the targeting criteria and verification requirements, conflict of interest, and a general lack of awareness and training among implementers. These factors have also significantly reduced the efficiency of programme implementation.

49 MSDHS provincial office at Bangkok verified all applicants against the Social Security Fund (SSF) beneficiary database using the ID number. A household receiving the SSF allowance was automatically considered ineligible for the CSG.

50 Although the income threshold was set at THB 3000 per capita, the criterion was applied loosely, allowing households with income marginally above this threshold to be included in the programme as well.

5.2.1 The complexity of targeting criteria

Officials reported several challenges with calculating the income of individuals who are not in formal employment and have an inconsistent income.

> *"It's hard to measure income. For example, someone who works in agriculture doesn't know how much they earn per year; they only knows that they can survive. But the criteria for this programme is fixed. Isn't it 36000 baht? But she doesn't know how much she earns. It's not like she has monthly wages where the money goes to the bank, and you can trace it. Agricultural work is seasonal as well, which adds to the difficulty" (Narathiwat/ Aug 2017/KI-LAO).*

> *"Sometimes they can't tell us how much income they make [because] they aren't quite certain about how much they make. Some may tap rubber tree for a living - some days they have a lot of rubber, some days very little" (Narathiwat/ Aug 2017/ KI- LAO).*

The programme uses a combination of means-testing and community verification for identifying eligible households. However, instead of using community verification as an alternative for means testing,[51] the programme design makes the verification mandatory for all eligible households. In focus group discussions, households indicate that the mandatory requirement of two poverty validations from authorised community personnel to get access to the CSG is cumbersome and a deterrent for many households.

> *"It is a bit difficult. We must find the village Headman and then the Village Health Volunteers. Not that I live far from them, but it is hard to find the right time to see them - they have work to do. I mostly get to see them when they hold a local meeting" (Kalasin/ Aug 2018/FG-4).*

The study also found that village headmen verify all villagers in the community in their attempts to gain political power within their communities:

> *"They told us that it's not a daily or monthly income. Farming and rice farming's income is yearly-based. For example, if they claimed that they made 100,000 baht a year, we would ask them how else they earned money. They would ambiguously say that sometimes they could make money and sometimes they couldn't. It's hard for them to calculate their income when I asked them how much they made; they struggled even to give an estimation. Village Headmen have no problems with this because they verify all their villagers. You have to remember that a Village Headman doesn't want to upset the villagers because that would mean a loss of voters' base. Village Headmen don't want to have a problem with the villagers [because] unlike cities; villages are small. Here, we run into each other all the time; if Village Headman upsets them, they might not be so cooperative anymore" (Kalasin/ Feb 2018/ KI-LAO).*

Some households reported trouble finding someone to verify their poverty status, and sometimes villager leaders (often those who were newly appointed) were still unsure about their role in the verification process.

5.2.2 Lack of training and information

In addition to complex targeting criteria, lack of adequate training also affected the programme officials' ability to identify eligible households correctly. One reason for challenges in the implementation of the targeting criteria was the **lack of clarity on poverty identification processes** among those authorised to verify households. A village headman explained that they had **insufficient information about the programme:**

> *"No information about the programme was shared with us. Maybe the officials told us about it once, but even if they did, we were not able to grasp the concept" (Narathiwat/Nov 2017/KI-VH).*

51 When households do not meet means-test criteria but are evidently vulnerable.

He went on to explain that they had little information about the eligibility criteria:

> *"There must be awareness raising on the eligibility, too. Right now, people only know that if they have newborns, then they have to enrol in the programme. The villagers do not know the criteria. I think most village headmen know who don't deserve the CSG, but we have to give them our signatures anyway" (Narathiwat/Nov 2017/KI-VH).*

Another village headman highlighted **the challenges with training** and went on to state that

> *"I still do not know what [the CSG programme] is. I heard about it on the TV, then someone approached me with a form for my signature, and that's when I knew about the form and the programme" (Sa-Kaew/ Aug 2018/KI-VH).*

Similarly, **the lack of systemised training** meant that a newly appointed village headman – who is required to verify if the households are poor – is more unlikely to be correctly informed about the programme or its eligibility criteria.

> *"I have just been in this position for a year but still have not understood the CSG programme. I haven't received enough information and do not know where the money comes from. I don't know what the requirements or criteria of eligible applicants are. I haven't received any information on these things. So, I verified all the pregnant women who came to me so that they could apply for the programme" (Sa-Kaew/Feb 2018/ KI-VH)*

Some interviews with village health workers (VHW) suggest that processes were being put in place to improve awareness and knowledge of the eligibility criteria and verification processes.

> *"Sub-district Administration Organization officials will approach us at a health centre or local clinic. We will give them the list of currently pregnant women. When the pregnant women came to us to get antenatal care, we told them about the CSG and hurried them to register at the SAO" (Narathiwat / Feb 2018/ KI-SHPH).*

> *"Few households might be excluded now because one Village Health Volunteer (VHV) takes care of 10 households. VHVs talk to them, mostly at Sub-district Health Promoting Hospitals. VHVs help us with eligibility screening [and] then they come to register with us (LAO) along with a VHV" (Mae Hong Son / Aug 2018 / KI-LAO).*

5.2.3 Unclear Division of Labour

A new regulation (2018) made sub-district officials (i.e. municipal clerks or chief administrators of the Sub-district Administration Organization (SAO)) responsible for verifying household status together with community leaders. However, LAO officials reported that the amendment to the process has resulted in new tensions between community leaders and district officials, stating that:

> *"The challenge here is to get verification by two people, so if someone does not meet the CSG criteria because of a higher income, but the Village Headman has signed the registration form, we (LAO) will have a hard time finding what has been verified down. If we don't sign, what should we tell them? They will blame us. There is pressure on us." (Sa-Kaew/Feb 2018/KI-LAO).*

5.2.4 Other Reasons

Many applicants stated that village leaders did not inquire about their household income or status to verify their eligibility for the CSG. Interviews with village leaders also revealed that a key reason for this omission is that they **felt uncomfortable** turning down someone from their community:

> *"I feel very uneasy with the screening process. They live in the village where I am the head. I need to be as much non-partial as possible [but] if they don't pass the criteria, shall I tell them 'sorry you are rich enough, you don't need this?'" (Kalasin/ Aug 2017/ KI-VH).*

Some informants suggested solutions to help with the poverty screening process. The first involves sending field staff to visit applicants' homes and assess their living conditions and determine their poverty status:

> *"There should be some staff who come to the village to observe the living conditions of applicants" (Kalasin/ Aug 2017/ KI-VH).*

> *"It would be good to help poor children or children who risk poverty. Back in our village, some households are so tragically poor that they barely have anything to eat. They can rarely afford any milk. For the screening process, it would be excellent to have the criteria that someone from outside come to the village to look at the area and make the household status assessment (over which households are really poor). I mean we (the Sub-district Health Promoting Hospital Officers) don't always know who is poor and who is not. So, staff from outside of the area should come and help assess the situation as well. At the moment, when we assessed poverty in the village, there would often be further problems. They would come here to argue over why we didn't verify them - such things happened. I would like us to work together. For example, we set up a team in a village to give information to another team from outside the village who would help access household poverty" (Mae Hong Son/ Aug 2017/KI-SPHP).*

Officials proposed universalising the grant, adopting a rights-based approach to delivering these programmes, which would simultaneously ease the household verification process and minimise tensions between village leaders and their communities emerging from the verification requirements:

> *"It is a social welfare grant - every child should get it. The government should give [the] CSG universally, just like the old age allowance" (Mae Hong Son/ Feb 2018/ KI-VH).*

> *"For equity, everyone should be entitled to the CSG. Right now, it is difficult for village headmen – do I sign for this person but not her cousins? I think it should be universal even if it means that the amount needs to be reduced" (Narathiwat/ Aug 2017/ KI-VH).*

> *"I would like every child to receive the CSG; it should be an equal right for every child. The way to do that is to link with all the hospitals. The hospitals can be the focal point to give out the forms and explain the process such as telling the parents to fill in the form and submit them at the Sub-district Administration Organization office" (Sa-Kaew/Nov 2017/ KI-SHPH).*

5.2.5 Quantitative targeting assessment

The quantitative targeting assessment using the data collected at endline explores the share of age-eligible children living in poor households that are excluded from the programme for the entire sample as well as for three poverty thresholds: THB 6000 per person per month, THB 3000 per person per month, and THB 1500 per person per month. For the targeting assessment, "age-eligible children born in poor households" are the unit of analysis.

The study finds that for the official income threshold of THB 3000, 29.9 per cent of poor households with age-eligible children is excluded from the programme using the income measure[52] of poverty and 29.8 per cent are excluded from the programme using the expenditure measure of poverty.[53] This exclusion error increases as the poverty threshold are increased from THB 3000 to THB 6000 per person per month, as Table 11 illustrates.

Table 12: Exclusion Error by Poverty Threshold

Poverty Threshold	Income Poor	Expenditure Poor
Extremely Poor, Poor, and Near-Poor (≤ THB 6000)	32.6	31.5
Extremely poor and Poor (≤ THB 3000)	29.9	29.8
Extremely poor (≤ THB 1500)	29.4	29.4

5.2.6 Ratchet Survey Findings

As part of the programme's evaluation design, a "ratchet survey" was also implemented. This ratchet survey not only helped evaluate the programme's targeting efficiency but provided an opportunity for eligible and excluded households to enrol in the programme. The survey identified a total of 174 "new" households and none of these qualified as poor according to the programme's eligibility criteria, reflecting the relative accuracy of the programme targeting approach against households that communities might perceive as poor.

5.2.7 Inclusion Error

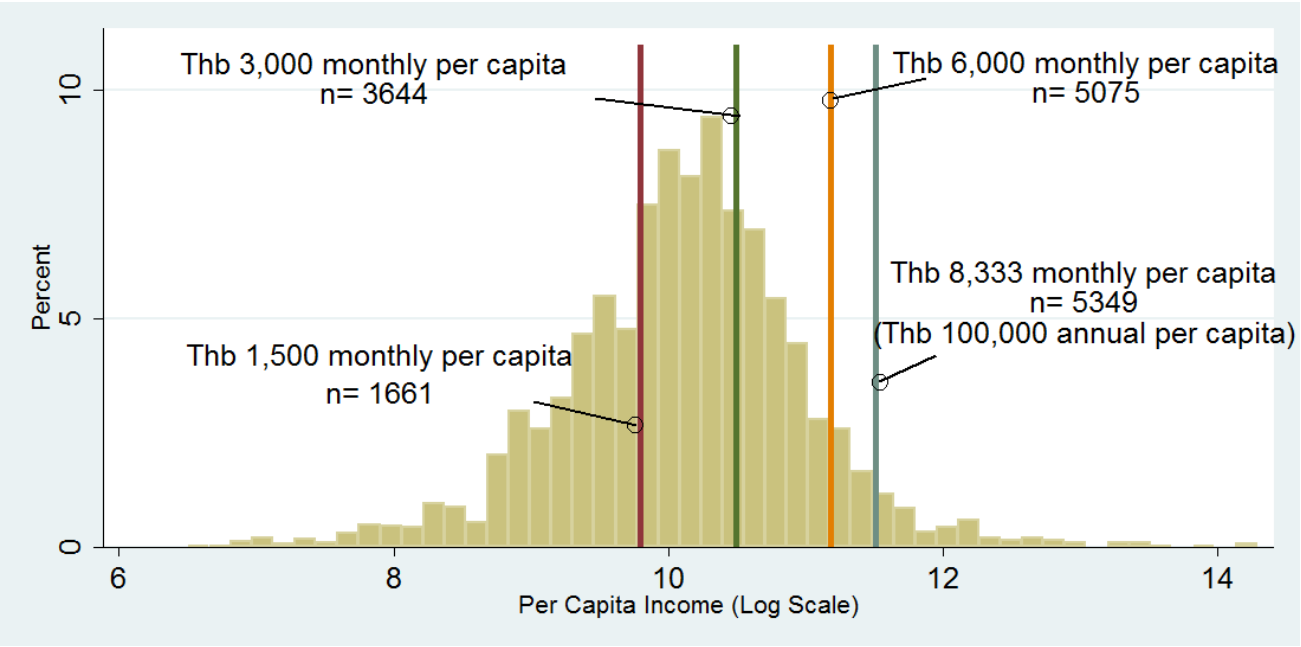
Modelling alternative eligibility criteria

Raising the income eligibility threshold is expected to reduce inclusion error significantly. The study sample demonstrates an inclusion error of nearly 36 per cent at a monthly per capita income threshold of THB 3000. Most of the inclusion error is clustered immediately above the targeting threshold, indicating that the ineligible households are nevertheless vulnerable. By providing resources to vulnerable households, the CSG may reduce the risk of households falling into poverty in the future.

52 The income measure is obtained by aggregating all the categories of monthly income received by the household and captured by the survey (this includes wages, farm & non-farm profit, remittances and other sources)

53 The expenditure measure is obtained by aggregating food and non-food (including rent, durable and non-durable goods) consumption. The survey's expenditure recall sections are used to derive the measure.

Figure 6: Inclusion Error at Difference Income Thresholds[54]



Thailand launched the "welfare card" – a card for the poor or a poor household identification mechanism in 2017. Anyone who meets the following five criteria is eligible for the welfare card: the person is a Thai citizen, is at least 18 years old, is unemployed or has an annual income below THB 100,000, holds no financial assets worth more than THB 100,000, and does not own real estate. Several national schemes in Thailand already use the welfare card to disburse benefits. Using this as a basis, the study team analysed the impact of increasing the income eligibility threshold to THB 100,000 per capita per year (approximately THB 8,333 per capita per month) on inclusion error. The analysis (figure above) found that nearly 95 per cent of households are included correctly in the programme at that threshold.

54 "The graph employs a log scale rather than an absolute scale. An increment on a log scale shows a relative rather than absolute increase in income and better illustrates the distribution of income. Due to the skewed income distribution, an absolute scale obscures variation for the vast majority of the sample, since the scale is dominated by the extreme high values of income.

5.3 Effectiveness

This section aims to explore the appropriateness of programme design and the effectiveness of implementation and how these factors affect the uptake of the programme and achievement of the intended programme objectives. The first part of this section focuses on the appropriateness of one key design indicator – the appropriateness of the benefit value.[55] The second part analyses a set of process-related variables to assess the effectiveness of programme delivery and answer two key questions:

1. Does the design overcome access barriers effectively?
2. Can the CSG be implemented more effectively?

5.3.1 Appropriateness of the Benefit Value

Three factors determine optimal benefit value: adequacy, affordability, and acceptance. The endline analysis aims to understand whether the benefit value is adequate and acceptable for beneficiaries.[56] The benefit value is adequate if it is large enough to drive intended change but small enough to prevent perverse incentives. The objective of this cash transfer is to enable households to invest in the development of young children through expenditure on nutrition, health care, and early childhood education while providing a safe environment and adequate attention from caregivers. A secondary objective of this programme is to empower women with more bargaining power within the household.

The evaluation gathered caregivers' perspectives on the benefit value and its utilisation. Majority of the households believe the grant to be important for the development of children as it part-finances the cost of essentials, but they deem it inadequate to bring about other significant changes. Grant recipients recognise the value of the benefit but argue that the amount was small compared to the cost of living in Thailand.

Some households report that the benefit value was as an important enabler in terms of meeting the children's needs:

> *"We have a bit more to spend on the kids. It would be a big struggle without the grant" (Kalasin/ Nov 2017/ FG-2).*

Most respondent women agreed that it was better than not having it at all:

> *"Better to have than not to have it. It helps me buy extra food and diapers. I have become less stressed because of the grant" (Mae Hong Son/ Feb 2018/ FG-2).*

A key difference the grant made was improving households' ability to save for health care as their monthly expense was now part-financed:

> *"Earlier, I would need to spend the monthly wage on the child, but now I can save that money to spend on something else such as medical treatment when someone is sick" (Narathiwat / Nov 2017/ FG-2).*

The increase in benefit value from THB 400 to THB 600, in particular, was received very well and beneficiaries who originally received THB 400 (or expected to receive THB 400) were happy with the increase in the benefit value and believed the investment in enrollment processes worthwhile given the extension in age-eligibility:

55 Another key design feature – the targeting mechanism – has already been analyzed in the preceding section and implementation methods will be evaluated as part of the implementation effectiveness assessment.
56 The analysis of whether the value is affordable for the government is beyond the scope of this study.

> *"This programme is good for [women] because they can use the grant to buy milk or food supplements for their kids. At first, I thought it was just for a single year, so I thought it was going to waste tax money because one year would not make much difference. But it turns out to be for three years, which can help a lot with child development" (Mae Hong Son / Aug 2018 / KI-LAO).*

There is enough evidence highlighting the role of the grant in enabling mothers to meet basic needs such as diapers and formula - the data show that the mothers who reported purchasing infant formula either had children older than six months of age or were not able to breastfeed. Similarly, the grant enables women who must return to work, with an opportunity to provide their children with healthy alternatives to breastmilk and complementary feeding to ensure adequate nutrition. The focus groups revealed that mothers spend the CSG on buying nutritious food for infants and their siblings, enabling the spill-over of CSG benefits to other children in the household as well.

The grant enables households to spend on essentials such as food, hygiene products, and toys while aspiring some to save for a rainy day. Since households cannot be certain of making those savings; the grant value appears enough to drive intended change without encouraging households to invest the funds into other activities, except when beneficiaries receive payments late and receive large lump sums amounting to nearly thrice the monthly benefit value together. A beneficiary stated that:

> *"The first time I received the grant was in September; I received 600 baht. In October, I received all the outstanding payments in the past, totaling 5,400 baht. Right now, I have about 3 000 THB left. I used the grant for paying people that we hired to harvest the rice in our field at the amount of 2,000 THB" (Kalasin/ Nov 2017/ FG-2).*

Despite these significant improvements in the capacity of many beneficiary households to meet the needs of their children, there was a clear indication in the focus groups that the grant value falls short of allowing households to adequately nourish their children – the cost of enough milk and food alone is higher than the benefit value.

5.3.2 Effectiveness of Implementation

This sub-section focuses on key implementation elements including preparedness of the policy planning and implementation team (the training they received), awareness and knowledge of the CSG's eligibility criteria, enrollment processes among beneficiaries and programme officials, and the effectiveness of payment processes. It also focuses on how these factors affect programme uptake and impact.

Preparedness of Programme Officials: Planning and Forecasting

Consultations with stakeholders at the national level and with development partners reveal that planning remains challenging as the government has limited capacity to forecast expenditures and budgets accurately. Several attempts to estimate the budgetary implication of the grant – estimating the number of beneficiaries and the total disbursement value – have yielded lower estimates, thereby causing payment delays. Much of this forecasting load and monitoring of programme implementation is being borne by the CSG Operation Centre (in the MSDHS), which UNICEF supported the establishment of for monitoring the implementation of the CSG.

In 2017, the CSG Operation Centre improved grant implementation with more precise budget-estimation for fiscal year 2019/2020 for provincial level planning, the inclusion of eligible applicants under the social security scheme into the grant, monthly and annual reporting of the scheme, and the introduction of the e-payment system for disbursement of benefits.[57]

57 UNICEF Annual Report 2017, Thailand.

Policy Coordination and Implementation Arrangements

Thailand's policy rollout process is relatively centralised with coordination across multiple relevant ministries. MSDHS is the lead agency and is fairly centralised as a coordinator. It implements the CSG with support from the Ministry of Interior (MOI), which has more evolved systems at the grassroots level. Consultations at the national level identified gaps that require regulation of inter-ministerial coordination and clarity on the division of labour, which posed significant challenges for effective implementation of the CSG.

The expedited design process in 2015 enabled an ambitious rollout schedule but did not allow sufficient assessment of capacity requirements. Globally, local capacity gaps drive many bottlenecks in social grant delivery. Thailand conducted training in all provinces simultaneously, and gaps in capacity building required substantial reliance on troubleshooting interventions by the CSG centre. Consultations at national, provincial, and local level have identified further capacity development and knowledge building as critical interventions required to overcome existing implementation challenges and improve the timeliness and the overall effectiveness of programme implementation.

The development and implementation of the CSG operation centre has been one of the key drivers of the CSG's implementation success. The CSG operation centre has been able to fulfil functions that other public bodies might not be ready to undertake such as troubleshooting the CSG, dealing with grievances, and taking some of the budgeting and forecasting load, as necessary. The institutionalisation of such a unit – first of its kind in Thailand – has emerged as one of the defining features of the programme. Despite its success, the CSG operation centre is plagued by frequent turnover of staff, preventing the necessary continuity in staff response to the overall monitoring of the implementation of the CSG.

Preparedness of Programme Officials: Training and Capacity

The government of Thailand has a fairly centralised policy-making structure and rollout arrangements. The centralised approach to policy rollout extends to the training arrangements as well, which has limited the ability of the government to build the capacity of personnel working at the grassroots levels to implement the CSG effectively. The training is broad-based but with little tailored support for mid-level officers such as those at the provincial level. Most importantly, the study found that the lack of an institutionalised training regime, which ensures that new staff receive comprehensive training and that all relevant stakeholders receive holistic and more role-targeted training, was a key barrier to effective programme implementation.

In August 2015, the Department of Child and Youth Affairs organised a preparatory meeting to clarify the CSG guidelines for 250 staff members from the MSDHS in Bangkok, as well as officials from the Office of Social Development and Human Security of the provinces (MSDHS provincial office), Local Administrative Organisation (LAO)[58] Offices, and Provincial Public Health Offices. Also, the Department of Children and Youth sent guidelines on the implementation of the CSG for the fiscal year 2016 to every province, along with posters and brochures for promotional use.

58 Local Administration Organization (LAO) is the sub-district local government office that includes Municipalities and Sub-district Administration Organization (SAO).

A website was also set up for people to download the guidelines, brochures, posters, and papers presented at meetings and discussions. The website continues to be a platform for the staff and officials to ask and receive answers to their questions. LAO's community developers launched a network called "Community Development Clubs" to help officials communicate via social media. The LAO staff responsible for the CSG registration stated that they had received information about the CSG through this channel conveniently and quickly.

> *"We received most of the information about this programme from the network of Community Development Clubs. We have a network for each area of work. We get the information faster from this channel. It is slower for us to receive the information from the central or from the MSDHS provincial office. Most of us check with our network and on the website, or we sometimes follow the news to receive the information" (Kalasin/ Feb 2018 /KI-LAO).*

Interviews with community development officers of LAOs reveal that the MSDHS provincial offices held a meeting at the beginning of the implementation period to clarify the roles and responsibilities of the staff and to prepare for the registration process of CSG participants. The LAO staff who attended this session acknowledged that they received information about the programme details, the roles and responsibilities of community development officers in the CSG programme including the PR process, the target search, the implementation of the registration process, and data collection in the CSG Management Information System (MIS). The LAO staff and the MSDHS provincial office agreed to work together, and the MDHS also assists with the tasks that the LAO could not perform.

> *"The first time happened after the MSDHS provincial office sent a letter to invite local officials to attend the meeting. After attending the meeting, we community developers will send some letters to Village Headmen to spread the information to the villagers. So, people can just come to the municipality and do not have to go to the MSDHS provincial office. Then, the MSDHS provincial office will make a poster to be put up at the municipality so that when people see it, they know about it and they show up to register" (Mae Hong Son/ Aug 2017/KI-LAO).*

For instance, when people registered at an LAO, the LAO was unable to store the applicants' data in the system owing to the unclear division of labour and poor capacity of the LAOs. Then, the MSDHS provincial office had to intervene with data processing and storage operations and re-enter all the data that had been incorrectly entered by the LAO.

> *"They told me that we need to do the registration and put the data into the system, but we could not because we had to work with persons with disabilities and HIV AIDS patients. We didn't have time to do it all, so MSDHS provincial office helped us out " (Sa Kaew / Aug 2017 / KI-LAO).*

The lack of an institutionalised capacity development plan and ineffective monitoring and quality assurance of the programme's implementation meant that the CSG preparatory meetings of the LAO staff did not take place in every province at the start of the programme and provinces did not always send staff to attend these meetings. In these cases, the MSDHS provincial offices sent CSG Operational Manual to the LAO staff of every tambon. These detailed guidelines include the roles and responsibilities of the local authorities' staff regarding the registration process as well as easy-to-follow staff procedures.

"I received a notification letter announcing that the Sub-district Administration Organization (SAO) would open registration for applicants and asking to spread the information to the public. So, we made a PR release to reach out to the people. At first, some people came to register but not that many, but after the CSG increased to 600 baht, the number of registrations went up" (Kalasin/ Aug 2017/ KI-LAO).

"It is the document which we, SAO, received. So, we printed it out from the system. The document specifies information for mothers and staff. Staff can follow the instructions in the document" (Kalasin/ Aug 2017/ KI-LAO).

Concerning the effectiveness of the communication channels adopted by the CSG, the same staff also mentioned that

"The MSDHS provincial office sent a brochure to us. We photocopied it and then posted it on our announcement board. Other than that, we also sent letters to village headmen to enable them to spread the news about the programme. When the villagers received the news, they came to register" (Kalasin/ Aug 2017 /KI-LAO).

Interviews with LAO staff regarding their PR responsibilities and their role in spreading the news about the programme reveal that letters had been sent to community leaders to encourage them to announce and publicise the programme. Village headmen who possessed data and information on households in the area and officials who possessed information on mothers and babies such as Village Health Volunteers (VHV) or Sub-district Health Promoting Hospital (SHPH) were the recipients of these letters.

"I have received a letter from the Sub-district Administration Organization (SAO) urging us to spread the news about the programme, telling those who are pregnant to register and that they would receive the grant after delivering their babies. So, I did that, and my villagers became aware of the programme. In my village, several applicants have successfully applied and received the CSG" (Kalasin/Aug 2017/KI-VH).

"A letter is sent to the municipality, and it informs Sub-district Health Promoting Hospital (SHPH) accordingly. Once a pregnant woman comes to SHPH to receive antenatal care, a staff member from SHPH advises the mother to register for a grant at the municipality as well as acquire more information from community developers" (Kalasin/ Feb 2018/ KI-SHPH).

"They (Local Administration Organization staff) sent letters to headmen of every village, urging them to relay the news to the villagers. Most of the time, it is the pregnant women themselves who came to the village headmen to get the documents signed" (Sa-Kaew/ Aug 2017/ KI-VH).

"When someone is pregnant, Village Health Volunteers would know. The pregnant women receive antenatal care at the Public Health Centre, and we inform them about the CSG as well as giving them the documents" (Narathiwat/ Aug 2017/ KI-LAO).

"At the mosque, we often have prayers on Friday. Also, some announcement is made about things. There is an announcement board at the SAO, inside the village and the mosque. Most Village Health Volunteers are informed at Public Health Centre because, first things first, pregnant women come to receive antenatal care at the Public Health Centre. Then, the staff at the Public Health Centre tell them to register at the SAO" (Narathiwat/Feb 2018/ KI-LAO).

Due to an ad-hoc and centralised approach to information dissemination across the various levels of governance and fragmented communication channels, information was often not thoroughly relayed to all the relevant offices. Some agencies were not informed and therefore missed pieces of information that might have promoted the programme better and helped in identifying and locating the target groups.

> *"I heard about this project for the first time when the patient came to receive treatment and asked about the CSG. I did not know anything then, so I asked for information from the SAO. I only knew that this grant is for raising babies and that only people receiving Universal Health Care are eligible for the grant but not people who are insured under the Social Protection scheme. I also knew that applicants needed to register at the SAO, so I recommended my patients to go and get more information at the SAO"(Kalasin / Nov 2017 / KI-SHPH).*

> *"We need to know more than this. We need to be more involved. We don't have any documents with us; documents are only available at the SAO. The SAO must provide more information about the concerned details of the procedure and screening process of pregnant women who should be eligible for the grant. There might be some women who are not informed at all or who are so severely disadvantaged that they have completely missed the news about the CSG"(Narathiwat / Feb 2018 / KI-SPHP).*

Many staff whose roles are to verify the household status had never heard about the CSG. The first time they were made aware of the programme was when applicants came to them with a document for verification.

> *"I have never received any document. I have only received the documents from someone in my area to verify that she lives in the area" (Kalasin/ Aug 2017/ KI-VHV).*

> *"A pregnant woman came with a document for me to sign and verify. I haven't been to any meeting or workshop. I only had pregnant women visit me to sign and verify their documents" (Narathiwas/ Aug 2017/ KI-VH).*

> *"I knew it from the mother. Mothers came to me with documents to sign, and so I asked them questions. For example, they told me that SAO gave them documents to fill out before they came to see me to get the document signed" (Sa-Kaew/ November 2017/ KI-VH)*

> *"Since I became Village Headman, I have never told any villagers about the CSG. I haven't told anyone that there is a grant for those who have babies because I don't know whether it is required of me to do so under the CSG programme, nor do I know what requirements need to be met to be eligible for the grant" (Sa-Kaew/ Feb 2018/ KI-VH).*

A Village Headman also suggested that to improve processes

> *"First thing that needs to be improved is to make village leaders aware of the procedure. They need to know the criteria, requirements, and the benefits of the CSG toward their villagers. When a village headman like myself does not know about this programme, he/she cannot inform their villagers about it. I suggest that we should set up a stage - one stage per tambon. At the stage, there will be a panel discussion about the CSG – from the history of the programme to the eligibility criteria – and when is it ok to apply – during pregnancy or after delivering the babies." (Sa-Kaew/ Feb 2018/ VI- VH)*

Despite ad-hoc and weakly coordinated training and weak communication, the study found that only a small proportion of the sample reported trouble with their applications. However, a lack of knowledge about programme specifics, inadequate training, and poor communication were the primary drivers of the most frequently reported challenges. The following section explains the implications of these institutional limitations on the knowledge and awareness of both beneficiaries and programme officials, and thus, the overall effectiveness of programme implementation.

Awareness and Knowledge

The study found that the majority of the sample households were aware of the CSG at endline. The awareness about the programme increased from 88.1 per cent at baseline to 99.3 per cent at endline.

While the study itself could have been the source of information for many households, 33.8 per cent households at baseline and 37 per cent households at endline reported hearing about the grant from local social workers or village heads.

> *"I came to know about the project from Village Health Volunteers and the Village Headman. When we have monthly meetings, there are different important announcements [about] things we are supposed to know. A delegate from each household attends such meetings. We were told that if a child is born, we will receive 600 baht. Earlier, it was 400 baht. But now it is 600 baht. [We were told that] we will have to go and write our application at the SAO and bring documents such as the house registration certificate with us, but we will only receive the grant when we show them the child's birth certificate. (Mae Hong Son/ Feb 2018/ FG-2).*

About 29 per cent at baseline and 23.7 per cent households at endline reported friends and acquaintances as their source of information, and 13.7 per cent at baseline and 8.9 per cent at endline reported media as their source of information. At endline, nearly 5.8 per cent households reported "others" as a source, which included the households that considered the baseline study/fieldworkers who conducted the baseline study as the source of information (Table 12). Local social workers and village heads and hospitals, in particular, became a more important source of information at endline than at baseline.

Table 13: Source of Awareness about the CSG

	Baseline (%)	Endline (%)
Family members	8.8	8.5
Friends and acquaintances	29.0	23.7
Parents of other kids	1.5	1.3
Media (radio/TV/pamphlets)	13.7	8.9
Neighbors	7.5	7.4
Local social workers, village heads	33.8	37.0
Hospital/health centers	4.9	6.6
NGOs	0.0	0.2
Others	0.9	5.8
Don't know	0.0	0.5

Some respondents indicated hearing about the CSG through social media as well:

> *"So, there was this announcement on Facebook – 'Get ready to receive THB 600 for having a child' – [so] then I joined a Facebook group of the other pregnant women [and] they all said that they had received THB 600" (Kalasin/ Nov2017/ FG-3).*

Some of those who were unaware of the CSG included women who were not living in their hometown and had not heard about it till they moved back to their villages, where the government was disbursing the grant. A mother originally from Mae Hong Son claimed that she never heard about the grant when she worked and lived in Chiang Mai. She only heard about it when she got pregnant and moved back to her village.

> *"I didn't live in the village then; I was often in Chiang Mai or Mae Sariang" (Mae Hong Son/ Aug 2018/FG-4).*

Another mother who had just enrolled in the CSG when the child was already sixteen months old said that she had never heard about the grant when she was living in Bangkok. When she moved back to the village after getting pregnant, she still did not hear about it as she lived far from the town itself. She only heard about it when her cousin, who is a teacher in a school told her about it. She then went to the SAO to ask for more information.

Application and Enrolment

The government has achieved high CSG registration rates, increasing substantially from baseline to endline. An estimated 90.8 per cent of respondents who were primary caregivers to age-eligible children during the endline data collection period had applied for the grant compared to 50.1 per cent at baseline. The figure is even higher (93.5 per cent) for households that qualified as "poor" (households with income per capita less than or equal to THB 3000) and with age-eligible children, but lower (86.1 per cent) for non-poor households (Table 13). Of the households that did not apply for the CSG at endline, nearly one-fifth considered themselves ineligible for the grant – 18 per cent of poor households that did not apply believed so. Other non-applicant households reported complicated application or limited knowledge of the registration process as reasons for not applying. Only 1 per cent of non-applicant households reported stigma as a barrier to registration.

Table 14: Application and Eligibility Rates

	Baseline			Endline		
	All Respondents	Poor Respondents	Non-Poor Respondents	All respondents with age-eligible children	Respondents with age-eligible children in poor households	Respondents with age-eligible children in non-poor households
Applied for the CSG						
Yes	50.1	52.9	45.4	90.8	93.5	86.1
No	49.9	47.1	54.6	9.2	6.5	13.9
Of those who applied for CSG, those having trouble with the application						
Yes	1.9	1.9	1.9	3.0	2.7	3.6
No	90.1	98.1	98.1	96.0	96.2	95.5
Don't Know	0.0	0.0	0.0	1.0	1.1	0.9
Of those who applied for CSG, those who know they are eligible						
Yes	10.7	11.1	10.0	76.5	77.5	74.6
No	0.4	0.5	0.3	5.0	4.4	6.0
Was not informed of the eligibility	88.9	88.5	89.7	18.6	18.1	19.5

Despite the challenges with targeting and eligibility verification, 96.2 per cent of poor households and 95.5 per cent of non-poor households reported no trouble with their application processes. Among the poor households that faced issues with their applications, the majority lacked proper documentation or could not find endorsers to verify poverty status and others did not have bank accounts or found that they were not eligible for the grant

from programme officials.

Of the respondents that reported being aware of the CSG but did not apply for the grant (6.5 per cent of poor and 13.9 per cent of non-poor households at endline), approximately 18 per cent of the poor households and 22 per cent of non-poor households did not apply because they believed themselves to be ineligible for the grant. Unfortunately, approximately 46 per cent households that did not apply documented "others" as the reason for not applying at endline.

Table 15: Reasons for Not Applying (% of respondents who were aware of the CSG)

	Baseline			Endline		
	All respondents	Poor respondents	Non- Poor respondents	All respondents with age-eligible children	Poor respondents with age-eligible children	Non-Poor respondents with age-eligible children
Consider yourself ineligible	11	9	14	20	22	18
Do not want to be regarded as poor	0	0	0	1	1	0
The procedure is too complicated	3	3	4	6	7	4
Do not know the registration process	30	29	30	9	6	12
Cannot find/still finding endorsers	0	0	0	1	1	1
Do not have required documents yet	6	7	4	4	3	5
Thought registration period is over/did not register in time	6	7	5	9	8	11
Not living in this jurisdiction anymore	1	1	1	2	2	2
No time to register or finding required documents	14	16	12	1	1	1
Waiting until after delivery (baseline only) or other reasons	29	28	29	48	50	46

The uncertainty of grant eligibility

A pregnant woman in Narathiwat explained that:

> *"I haven't applied; I don't know if I would meet the requirements. Of course, I am poor, but I can still have something to eat and by which to live. My friends working at SAO told me to apply, claiming that even people who are in a better financial status than me apply" (Narathiwat / Aug 2018/FG-1).*

Poor programme communication

Other causes of confusion were related to poor communication of programme specifics for the public. For example, some pregnant women did not enrol because they were under the impression that to qualify for the grant, mothers must have delivered by 30th September.

> *"I saw a Facebook post which said that the deadline would be on 30th September 2017. I was expected to deliver in September or October, which would be after the date" (Narathiwat/ Aug 2017/FG-1).*

Nearly 12 per cent of the poor and 6 per cent of the non-poor households reported being ***unaware of the registration process,*** and a similar share of households thought that the registration period was over.

In response to these cases, when probed during interviews, village leaders stated that they made repeated announcements on the radio to reach people who might not be around the village that often, such as those working in the city. However, they also made it explicitly clear that ***women residing outside the village were unlikely to hear about the grant from them.***

> *"We made an announcement many times. There aren't many pregnant women in this village; it's a small village. Those who got pregnant in Bangkok wouldn't hear about the grant from us; if they had been here in the village, they would have been aware and would have come to register without a doubt" (Kalasin/ Feb 61/ KI-VH).*

> *"One problem lies with the fact that people moved somewhere else for work, so they didn't receive the information when we made an announcement" (Sa-Kaew/ Aug 2018/KI-VHV).*

Waiting until childbirth to apply

Approximately 23 per cent of the poor and 25 per cent of the non-poor households reported waiting until after delivery or delaying application for other reasons - partly because the birth registration number has to be recorded with the LAO for the payments to be processed. Waiting until birth and registering the birth before enrolling into the programme allowed women to complete the registration in one visit as opposed to going back to submit the birth certificate after the birth of the child:

> *"Here, people apply for the grant after giving birth because they need the 13-digit number for the new-born first" (Narathiwat /Nov 2017/ FG-4).*

> *"I had come to register earlier (in 2015) before I delivered this baby, but because of the paperwork, it looked like it's going to be a slow process, so I decided to deliver the baby first and compiled all the documents required" (Narathiwat / Aug 2018/ KI-LAO).*

Difficulty opening bank accounts

Some applicants had experienced trouble in opening bank accounts - both the cost of opening a bank account and the distance to the bank.

> *"I didn't have money to open a bank account, so I needed to borrow money from a friend" (Narathiwat / Aug 2017/FG-2).*

> *"I borrowed 800 baht from my cousin. I had to deposit at least 500 baht in the account, the rest I used for fuel to drive to the bank" (Narathiwat / Aug 2017/FG-2).*

Changes in eligibility and enrollment criteria

Due in part to the change in the assessment criteria in 2017 and insufficient communication mechanisms, some applicants reported ***difficulty in completing application forms.***

> *"It's a bit difficult - I need to answer about my income and job and then I need to find someone to certify my status. I don't know how to answer these. The place where I live and work on is not even mine, so how do I fill in the form?" (Kalasin/ Feb 2018/ FG-3).*

> *"The registration staff have to assist the applicants. If they let the applicants do it by themselves, the application won't be complete" (Kalasin/ Aug 2017/ KI-LAO).*

In addition, the study found that the process of verifying a household's status before application as difficult:

> *"It is a bit difficult. We must find the village Headman and then the Village Health Volunteers; not that I live far from them, but it is hard to find the right time to see them -they have work to do. I mostly get to see them when they hold a local meeting." (Kalasin/ Aug 2017/FG-4).*

In efforts to create a consolidated database, in 2017, Cabinet resolved that the MSDHS would link data from the low-income database as eligibility criteria for the CSG. ***According to the new regulations, individuals applying for the CSG must bring with them their Welfare Smart Card*** (if they possessed one). Also, those applicants who do not possess the card are required to fill in additional paperwork to receive the card, which ***created confusion amongst both officials and applicants*** and acted as a deterrent for signing up for the grant.

> *"Someone I knew from Moo 9 village, who went to ask the officials why the CSG hasn't been paid to the account since January, received the answer that it was because she didn't have the Welfare Smart Card. When I went to SAO to pay for her land tax and inquired about the CSG again, the officials told me that she was incorrectly informed. She didn't receive the CSG was because her forms were not filled and not because she didn't have the Welfare Smart Card" (Sa-Kaew/Feb 2018/FG-2).*

> *"I don't go to register (for Welfare Smart Card) not because I don't want it but because the queue is very long. Someone told me that you would still be queueing at 7 PM. That's my limitation. Also, my child is still very young" (Narathiwat/Feb 2018/ FG-2).*

> *"It is too far. I don't have time to go and apply (for Welfare Smart Card application at the bank). It's inconvenient. I want it to be close by or, better still, in the district itself" (Mae Hong Son/ Feb 2018/ FG-2).*

Payments

Beneficiaries reported a delay in payments from May to September 2017 without any notification, which caused confusion and worry among many mothers and caregivers.

The date of the first payment is often delayed and varies widely. Beneficiary caregivers stated that they were not aware when they would receive the first payment and in some cases were back-paid for previous months.

> *"In my case, I received the first remittance when my kid was eight months old. I received all the grant due to me before that" (Kalasin/ Nov 2017/ FG-2).*

Since caregivers were expecting to receive the grant, in the months that they did not receive it, some reported being forced to borrow money as a substitute for the grant.

> *"Yes, there were problems. We used to have THB 600 a month and spent it on buying things for the child. I didn't have work, and the stuff we bought for the children started to run out, which made me worry" (Kalasin/ Aug 2017/ FG-2).*

> *"It forced me to borrow money from someone. When my husband received his monthly wage, we paid it back" (Narathiwat/ Aug 2017/FG-2).*

The delay in payments also acted as a deterrent for the uptake of the grant, with respondents specifically stating that

> *"I was aware of the CSG when I was eight months pregnant. Before I went to apply in October, my neighbour told me that they stopped paying, so there was no need to apply for the programme. Afterwards, maybe in December or January, SAO staff told me that I should apply again" (Mae Hong Son/ Feb 2018/ FG-3).*

When delayed payments were paid together as a lump sum at a later date, households reported using the money for larger investments or expenditures such as agricultural equipment.

> *"First time that I received the grant was in September - I received 600 baht. In October I received all the outstanding payments of the past in the total of 5400 baht. Right now, I have about 3000 baht left. I used the grant for paying people that we hired to harvest the rice in our field at the amount of 2,000 baht" (Kalasin/ Nov 2017/ FG-2).*

Consultations revealed that poor communication of programme requirements and poor government capacity to budget accurately were key drivers of these delays.

Poor Communication of Requirements

Survey respondents cited several examples of poor communication of programme registration and enrollment requirements and confirmation of programme enrollment from officials. They were often unsure whether a child had been registered for the programme and incorrectly assumed that they would be receiving the grant. This created confusion among beneficiaries, who continued to wait for payments when their documents were still missing.

> *"When I first enrolled, the staff did not tell me about the requirement of the birth certificate. She told me not to open the bank account yet for in case I wouldn't be admitted to the programme, I don't have to pay for the account unnecessarily. The staff said that they would call me again when I delivered, but after I delivered, no one called me. Only when the staff came to the village to hand out cash to the older people that we had the chance to talk again and all of us in the village found out that we didn't know we had to submit the birth certificates" (SA-Kaew/ Aug 2017/ FG-2).*

Evolving Government Capacity to Implement a Complex Grant

LAO personnel explained that on the supply side, there was a lack of capacity in processing applications, especially in provinces with a high number of applicants.

> *"I called to ask the MSDHS provincial officer because it is their duty [to] record the data. Now the provincial officer is only recording the data up to March 2017 because there was a high target of newborns. The Kalasin province targeted around 300 children, but now it's over 5,000, which is a lot. Once the MSDHS provincial officer completed recording the data, the system will show that it is complete, and SAO will [only then] be able to proceed and know who the successful applicants are" (Kalasin/ Aug 2017/KI-LAO).*

The final reason reported by programme officials for the delay in initial payments is related to the closing down of bank accounts. Applicants often open bank accounts at the same time that they apply for the CSG. However, due to delays in the administrative process, missing documents, and other related issues, there is a significant time lag between the date of application and the date of the first payment received. If this period exceeds a certain amount of time, with no transactions made in the account, the bank automatically closes the account. It means that when the application is finally deemed successful, there is no bank account to transfer the money to, creating further delays in receipt of the grant.

> *"We followed the case because the province would send us all the details about who received or who did not receive the grant. There were 241 cases [in total and] in one case; the bank account had been closed, so we tracked down house no. 7 in Moo. 9 village to go to this person to get her to reopen the bank account" (Narathiwat/Nov 2017/ KI-LAO).*

Other Reasons

This unexplained delay or "pause" in payments also led to uncertainty among village leaders or registration officers who were not sure if the programme would last. As a result, they admitted that they did not create enough awareness about the programme or confidently pass on the programme specifics.

> *"We didn't know if this programme would continue, or when it would end. I meant at one poin; the programme seemed to pause - no one received the grant then, so we weren't sure" (Mae Hong Son/ Feb 2018/ KI-VHV).*

However, toward the end of the data collection period, after the change in programme eligibility and increase in the benefit values, there was a noted increase in confidence among programme personnel and beneficiaries alike, and the registration rate soared.

Planning and Monitoring

The government of Thailand set up an MIS for the CSG at very early stages of programme roll-out. Since the onset of the programme, it has been an important tool for the government to monitor the progress of implementation regularly and has allowed the government to closely and appropriately monitor and adapt the programme for vulnerable groups such as adolescent mothers. However, the MIS lacks a monitoring framework or guidelines to ensure dynamic monitoring and reporting of key indicators at the operational and policy-level in ways that can improve the programme's overall impact.


©UNICEF Thailand/2016/Metee

6 Conclusions

6.1 Impact

The endline evaluation of Thailand's CSG provides early evidence of the impact of cash transfers for young children on health and nutritional outcomes in the short-term and the potential for longer-term productivity gains. The programme has generated a positive impact in key areas such as wasting and breastfeeding; however, the impacts are not evident across all expected indicators at this stage. Several reasons may limit the observable impact in this study.

Most importantly, the study participants had only received the CSG for less than a year when the endline data was collected, which has several implications on the potential impact:

(i) Nutritional outcomes manifest over a longer time horizon. Improvements in indicators such as stunting, and in many cases, even wasting, are often difficult to observe in the short-term.

(ii) The study was designed to assess the short-term impacts as well as outcomes related to the Theory of Change, including changes in feeding and caring practices, and changes in behavior and expenditure patterns. Evidence on longer term impacts will require a further post-endline study.

(iii) As with most newly implemented programmes, the CSG documented multiple challenges with payments, including delays and variation in benefit values delivered. This variation can limit the impact that reliable and continuous transfers provide.

Despite these limitations, within one year of implementation, the programme has demonstrated significant improvements in key development indicators associated with health and nutrition of young children, combating the persistent malnutrition among young children in Thailand. This progress can enable Thailand to develop a more productive workforce for the future, mitigating risks of the middle-income trap that has affected other developing countries around the world.

The holistic impact of the programme within the first year of implementation demonstrates the key features of a social protection programme that has the potential to mitigate social and income inequalities in the long run. Together, the improvements in feeding and caring practices and access to essential services mark the ***first step toward strengthening the resilience of children and their households and minimising the risk of external shocks irreversibly affecting children's lifetime capabilities and opportunities.***

This evaluation of the CSG has also demonstrated that ***providing cash to women improves power dynamics at home,*** thereby empowering women to make important decisions regarding their own lives and their children's. Not only does this ***mitigate gender-based inequalities*** within households, but it also represents an important step toward ensuring that households expenditures align with the needs of young children, thereby providing children with a better chance to achieve their full potential in later life.

By enabling investments in health and nutrition and better caring practices during early childhood, ***the CSG facilitates newborns' basic rights to good-quality upbringing and contributes toward age-appropriate development for newborns and young children, providing a foundation for continuous improvement during subsequent life stages.***

6.1.1 Household Expenditure

The analysis of data on the perception of beneficiaries regarding the usefulness of the grant demonstrates that the overwhelming majority of beneficiary mothers believe that the grant helps them provide better food and nutrition to their children and, to some extent, also to the other members of the family. The results also show that most women either agree or strongly agree that the grant has eased their ability to access essential health care services and improved households' coping abilities by providing a buffer in case of unexpected expenses. The grant also has reportedly created a more enabling environment for children by easing the stress within households.

6.1.2 Nutrition and Access to Essential Services

The CSG provides critical evidence documenting the impact that cash transfers for young children generate on **early nutritional and health outcomes** through improvements in feeding practices and reductions in the incidence of wasting (the share of children who have low weight-for-height). Within one year of implementation, the programme demonstrates statistically beneficial impacts in terms of reduction in the incidence of wasting among children in treatment group households (compared to those in matched comparison group households) and a positive impact in terms of an increase in the prevalence of breastfeeding.[59] ***These impacts are particularly strong for children from extremely poor households, demonstrating the higher value-added of the grant in terms of improving nutritional outcomes for the poorest households.***

The study demonstrates no statistically significant impact for stunting or underweight, which tend to improve only in the longer term and are a function of a complex set of interventions. ***These improvements in nutritional and health outcomes are vital for addressing current and chronic malnutrition affecting Thailand's children. By tackling poor health and malnutrition among children aged 0-1 year, the CSG marks an important step toward securing the future productivity and long-term human capital accumulation.***

6.1.3 Time allocation for children

The CSG has also enabled a better home environment by allowing new mothers to stay at home longer, increased access to essential services such as good quality health care in the post-natal period and during illnesses and provided some households with the ability to invest in developmental essentials such as age-appropriate books and toys. Unlike improvements in health and nutrition-related outcomes, the findings suggest that the likelihood of children owning more books is higher when including poor and near-poor households in the sample compared to the sample of only extremely poor households. ***It is important to recognise that if the grant barely supports the cost of milk and food for extremely poor households, only a small share of households might have the ability to spend on such developmental essentials.***

6.1.4 Spill-over effects

This evaluation of the CSG demonstrates no statistically significant impact on spill-overs, such as access to early childhood education for siblings, potentially due to the small sample of households with other young children. However, the qualitative data provide evidence of how some of the benefits (such as expenditure on milk or food for the baby) spill-over to other young children and how the buffer created by the CSG helps parents support additional education-related expenditures for other young children in the household.

59 As documented in section 5 above, impacts are measured as differences between the treatment group (those households receiving the Child Support Grant) and a statistically matched comparison group not receiving the CSG. Interpreting the matched comparison group as the counterfactual, the study interprets the difference as the "improvement" or impact associated with the treatment (the Child Support Grant). In discussing the technical results, the study uses the language of "statistically significant differences." In elaborating the policy implications, the study interprets the differences as the impact (or "improvement") attributable to the CSG. This is not a dynamic improvement—the measure represents how the CSG improves indicators relative to their state in the absence of the intervention.

6.1.5 Women's Empowerment

The Government of Thailand pays the CSG benefit to the mother of the eligible child with the expectation that the CSG will not only improve outcomes for children but simultaneously empower women by improving their bargaining power within the household. In line with this expectation, analysis of data from the self-reported measures of empowerment in the study demonstrates that ***the CSG improved the household environment by reducing stress and improving power dynamics within the household*** and made it more likely for women to be able to borrow money, if necessary. The CSG impact analysis also demonstrates an ***improvement in the women's decision-making power*** related to food expenditure of the household, their health care, and use of their own money, particularly for women from extremely poor households.

6.2 Efficiency

The main challenge globally to improving the efficiency of poverty-focused child benefits—including Thailand's CSG—is the inevitable problem of exclusion error associated with any poverty targeting mechanism.

6.2.1 Targeting Efficiency

The findings of the targeting assessment using income measure to determine poverty demonstrate exclusion rates that are well below global benchmarks. These low exclusion rates – as seen in the quantitative assessment and verified by the ratchet survey – are a testament to how efficiently the government has implemented Thailand's CSG. These results are well-supported by the findings of the ratchet survey.

Although most sample households were able to register for the grant without much difficulty, the study identifies a few key drivers of inclusion and exclusion errors associated with the CSG based on the feedback of excluded households and perceptions of the government officials involved in the implementation. Inadequate training, complex targeting processes, and poor communication of programme rules drive most of these inefficiencies:[60]

i. Until recently, the programme excluded ***children who receive any other support or benefits from government agencies or state enterprises*** by design. While the programme design was amended to include these children, poor communication of policy roll-out across the various levels of governance has led to confusion among programme officials at the local level. Many implementers are still unaware of this change and continue to exclude households based on their access to other social grants or support.

ii. The ***means-test criteria and income threshold calculation are complex*** given the informal and/or seasonal nature of work, such as agriculture, undertaken by most families. Income from these livelihoods is difficult to measure and often leads to inaccurate or uncertain income calculation.

iii. The programme requires two people to verify the poverty status of households even after they have qualified as poor based on the means-test. ***The lack of understanding of the requirements of the verification process or their role in it*** among those responsible for verifying poverty means that either all households are verified as poor or deserving households are left out. In some cases, village heads deliberately verify all households that apply as poor to gather or maintain ***political favorability*** or because they feel 'uneasy' rejecting applications.

iv. The requirement of two verifications has also resulted in new ***tensions between community leaders and district officials. For example,*** when one official incorrectly approves an application, the other feels pressured to confirm it as well.

These challenges with poverty verification prevent the process from enhancing targeting accuracy. Instead, they reinforce the targeting errors.

60 To ensure comprehensive assessment, the targeting processes are evaluated in this section of the report.

6.3 Effectiveness

The appropriateness of programme design and effectiveness of implementation affect the uptake of the programme and achievement of the intended programme objectives. The effectiveness dimension explored the appropriateness of the benefit value and the process of registration, enrolment, and payment delivery to assess how these factors affect programme uptake and impact, particularly among the most deserving and needy.[61]

The study finds that a large part of the implementation challenges relates to targeting processes. Implementation effectiveness reduced due to inadequate training and challenges with communication between MOI and MSDHS regarding public relations communication, application, and verification processes.

The ***creation of the CSG operation centre*** significantly improved the roll-out of the CSG policy compared with other national policies and mitigated many of the communication issues. It provided programme officials with a platform to ask questions and troubleshoot errors and undertook key functions such as forecasting and budgeting when required to fill in for capacity gaps in other institutions.

Challenges with coordination between MOI and MSDHS, particularly about communication and division of labour still led to confusion among local officials and duplication of efforts. The vertical mandates of ministries require extensive additional effort and investment for finding the relevant modus operandi at the provincial level, especially given the fact the MSDHS does not have decentralised structures and relies on MOI's capacity at the grassroots levels.

6.3.1 Appropriateness of the Benefit Value

The study found that the benefit value of THB 600 was deemed valuable and in some cases, ***indispensable for meeting the needs of young children.*** The benefit value supports the programme in meeting its objectives in two ways:

(i) Enabling intended outcomes such as expenditure on food and other essentials (health care, hygiene products etc.) for children, as emergency cash, or as support for out-of-pocket expenditure on health care

(ii) Enabling women to take more time before returning to work post-delivery, thereby encouraging longer breastfeeding and ensuring more time allocation and better care for younger children

The majority of the households believe the grant to be important for the development of children as the grant partly finances the cost of essentials, but they deem it inadequate to bring about other significant changes such as investment in early childhood education. Several grant recipients recognise the value of the benefit but argue that the amount was small compared to the cost of living in Thailand. Nonetheless, there was broad consensus that the CSG generated substantial improvements in household well-being.

Households reported that the increase in benefit value from THB 400 to THB 600 significantly improved the impact of the programme. Beneficiary mothers who originally received THB 400 (or expected to receive THB 400) explained that the increase in the benefit value and the extension in age-eligibility together made their investment in enrollment process worthwhile.

Findings show that beneficiaries did not believe the grant could encourage women to bear more children or discourage breastfeeding as the cost of raising a child and that of infant formula was substantially higher than the grant itself.

61 This section excluded the assessment of targeting processes, as it covers targeting efficiency analysis.

6.3.2 Awareness and Knowledge

The endline analysis finds definitive improvement in the knowledge and awareness of the CSG among potential beneficiaries from baseline (88.1 per cent) to endline (99.3 per cent) despite the challenges of ensuring that women living away were aware of the CSG. Village health workers and village heads became a more important source of information from baseline to endline for potential beneficiaries.

However, the data illustrate mixed feedback regarding awareness among programme personnel, particularly village heads and local administration office (LAO) staff. While some displayed more confidence about the processes, others explicitly stated not being aware of either the programme or the requirements or their role in the process. Consultations with national stakeholders corroborated the geographic variability in the effective implementation of the programme. The two key drivers of these differences are (i) lack of institutionalised training that is standard across locations and systemized and (ii) poor communication and coordination across the various government entities involved in the implementation of the CSG (various spheres of governance as well as across ministries)

6.3.3 Application and Enrolment

The CSG requires a birth registration certificate for enrollment into the CSG, which is likely to ***promote birth registration*** of most eligible children. Although the scope of this study does not include the assessment of changes in birth registration data, the expected improvements are likely to facilitate children's access to a range of public services as they grow older.

The two primary challenges with application and enrollment were ***poor communication of programme rules and processes (across government levels and between government officials and potential beneficiaries) and, to some extent, operational difficulties with opening bank accounts.***

Of the households that had applied for the CSG, 96.2 per cent of poor households and 96 per cent of all households had no trouble with their applications. Of those that had trouble, the majority lacked proper documentation or could not find endorsers to verify their poverty status because they were either not aware of the requirements or unclear of the processes they needed to follow.

Of those who had not applied, many reported ***unclear communication about the eligibility criteria*** and did not believe themselves to be eligible for the grant. They also cited confusion with the application deadline or unclear guidance as key deterrents. Some (12 per cent of all poor households that had not applied) reported being unaware of the registration process, particularly if they lived outside the village. Several women reported difficulty with opening bank accounts (lack of funds, lack of documents etc.) or challenges with retaining their bank accounts in the event of delayed CSG payments.

The biggest challenges in applications and enrolment resulted from ***changes in regulations*** such as changes in the assessment criteria or the need for Welfare Smart Card, which had led to confusion amongst beneficiaries and programme personnel alike. ***Poor communication of programme rules and changes led to unintended exclusion and deterred potential beneficiaries from enrolling into the programme.***

6.3.4 Payments

The study found that poor communication of requirements to beneficiaries, low government capacity to process applications, and lack of the government's ability to accurately forecast and budget the CSG cause payment delays.

Beneficiaries reported receiving unclear information on the documents needed and claimed that local officials were themselves unclear on these processes. On the supply side, poor forecasting and budgeting led to shortages of funds and, in turn, delays in payments.

Lack of information about delayed payments led to a significant amount of confusion and frustration among mothers and caregivers who depend on the grant and plan their expenses accordingly. When the payment process fails to disburse the grant on time, households often must borrow money to bridge the shortfall. The delay in payments also leads beneficiaries, registration officials, and village heads to lose faith in the programme or its continuity and deters potential beneficiaries from applying for the grant.

Delayed payments also had consequences of undermining and changing the programme's impact – when the government redressed payment lags with multi-month ("bulk") payments, beneficiaries tended to utilize them to finance income-generation activities or undertake larger projects that do not directly contribute to the well-being of children, reducing the realization of the immediate aims of the programme.

6.4 Relevance

The full set of results from the impact assessment demonstrate that the CSG provides one of the most relevant and effective instruments social policy-makers globally have developed for delivering children's rights, tackling child poverty and vulnerability, and strengthening inclusive social development and equitable economic growth. These most relevantly support Thailand's long-term development strategy, the achievement of the Sustainable Development Goals, and the alignment of Thailand's future labour force to the requirements and conditions of economic growth and prosperity in the 21st Century.

In the words of Dr Kobsak Pootrakool, Minister Attached to the Prime Minister's Office, "Thailand cannot attain advanced country status if it cannot meet the challenges of innovation."[62] The CSG not only adopts one of the world's leading innovations in social protection today, but it also builds the cognitive capital in children required to drive innovation when these children grow into adults and enter the labour force over the next decades. The CSG represents one of Thailand's most relevant and important innovations supporting the nation's future prosperity.[63] The World Bank's most recent ***Thailand Economic Monitor*** recognises that "as Thailand seeks to attain high-income status as set out in the 20-year National Strategy, research and development for both technological catch-up and innovation will play important roles." The CSG's role in building cognitive capital makes this instrument one of the government's most relevant tools in achieving the goals outlined in the ***20-year National Strategy.***

On the demand side, the beneficiaries widely recognise the CSG as an important intervention. There is a broad consensus that the CSG is a useful instrument that enables new mothers to look after themselves and their newborns. Beneficiaries report the CSG as an enabler for breastfeeding and longer periods of care for the newborn, particularly as women do not feel the need to return to work immediately after delivery.

62 Brief of the report, World Bank (2018)
63 Samson, Fajth, and François (2016)

6.5 Sustainability

The CSG's sustainability is dependent on three factors: political will, perceptions of the beneficiaries and programme staff, and the fiscal sustainability of the programme. The findings show that increase in the benefit value and age-eligibility led to a marked improvement in the perception of programme staff and beneficiaries regarding the programme's ability to support poor families to meet the needs of young children in ways that enable the achievement of human potential in the long-term.

The early increase in benefit value, the expansion of age-eligibility during the first year of implementation, and an increasing interest in universalisation demonstrate the strong political appetite for the programme, which provides a critical impetus for fiscal sustainability. These factors reinforce the confidence of all stakeholders in the programme and strengthen the programme's success.

Evidence – globally and from the field in Thailand – provides the key drivers of political will for the CSG. The findings of the targeting study identified 30 per cent exclusion error (based on an income threshold of THB 3000), indicating that three of every ten poor babies remain excluded from the CSG programme.[64] This finding has motivated increased political will to examine the benefits of universal delivery to eliminate this exclusion error. More importantly, early evidence of the impact on health and nutritional outcomes has laid a solid foundation for longer-term investment in the cash transfer, representing an early and vital success of the programme.

64 In addition, the study estimated that approximately one in every three poor and near-poor (with per capita household income less that THB 6000 per month) babies is excluded from the CSG programme.

©UNICEF Thailand/2016/Metee

7 Recommendations

The government of Thailand implemented the CSG in October 2015, and, within six months of implementation, the Cabinet approved an age-extension to cover children up to the age of three years and increased the benefit amount by THB 200 to THB 600 per month, effective October 2016. In 2017 and 2018, the government began exploring the advantages of universal provision of the CSG. The study demonstrates the positive impact of the CSG on poor and vulnerable households. While the programme is making excellent progress toward achieving the intended outcomes, the study identifies several areas that could further strengthen the programme's ability to improve the coverage of intended target groups and generate the intended impact.

7.1 Efficiency

There is a need to revisit and revise the poverty verification mechanism, as it is likely to undermine the programme's current success in reaching poor households by worsening targeting efficiency in the future in the absence of a reforming intervention.

- The reports from programme officials at national, provincial, and local levels and from beneficiaries regarding the complexity of the targeting processes build a strong case for the universalisation of the CSG. ***The c that the Government of Thailand deliver the Child Support Grant universally to all age-eligible children to improve coverage, to ensure that it reaches the poorest and most vulnerable children, and to maximise the programme's developmental impact.***
- If the programme continues to target poor and near-poor households, c the government reform the ***community-verification process*** given the conflict of interest (for persons verifying poverty status) and the implications for targeting accuracy. A streamlined self-reporting means-testing process integrates efficiently with a higher income threshold for eligibility and can substantially lower targeting costs while reducing both inclusion and exclusion errors. South Africa's decade-long targeting reforms provide evidence that lighter targeting mechanisms not only improve targeting accuracy and lower costs but also contribute substantially to a dynamic deepening of the programme's developmental impacts, substantially increasing value for money.
- To ensure seamless implementation of the programme, it is important that programme officials understand the programme processes and their roles at each stage. The study strongly recommends that the Government of Thailand (through MSDHS) implement ***extensive sensitisation activities to ensure clarity, and that timely refresher courses follow.*** These activities should be complemented with ***easy to read implementation handbooks*** that are available at each level of governance and specify the rules of the programmed and role of each stakeholder involved.
- ***At initial stages of programme implementation, success depends critically on public awareness of the programme, but Thailand is entering a more advanced stage of the programme – attitudes of local officials will influence progress in delivery going forward.*** In the more ***immediate term, extensive training*** must be implemented for tambon-level programme officials to ensure clarity and understanding of their roles and responsibilities at each stage in line with the plan of MSDHS for scaling capacity.
- ***Over the long-term,*** MSDHS should focus on building a ***cadre of officials at the tambon*** level to support the implementation of the CSG.
- It is advised to use census-based targeting analysis at the national level to improve targeting, i.e., to integrate administrative data with census data to produce "maps of exclusion."

7.2 Effectiveness

- The increase in the benefit value from THB 400 to THB 600 per month provided a welcome expansion in the effectiveness of the programme. It served to significantly improve the confidence of programme me officials and beneficiaries and reinforce their faith in the programme's sustainability in addition to enhancing the potential of the grant to achieve its objectives. ***The study strongly recommends that the programme's benefit value be revised regularly in line with inflation, to ensure the programme's continued impact.***
- Delayed payments are the primary cause of frustration among beneficiaries who depend on the grant. Reliability and timely payments provide a key driver of change for cash transfers. Irregular transfers take away from the programme's ability to generate impact, and in some cases, cause beneficiary households to become indebted. The very first payments require a particularly diligent emphasis given the extraordinarily high costs of initial delays. ***It is important to simplify the registration process and to effectively manage the cash flow system to ensure that beneficiaries receive all their payments timeously. To do so, it is critical to institutionalise capacity development of programme staff at all levels of governance and improved coordination across various government bodies.***
- Thailand's Child Support Grant represents of the model of integrated delivery. Consultations at national, provincial, and local level have documented how the linkages to the larger public health care system have improved awareness and reduced exclusion errors in a nearly unprecedented manner globally, and the overall delivery process has facilitated developmental linkages that have contributed to improvements in access to social services. The Government of Thailand can build on this success to strengthen both intra-sectoral and inter-sectoral linkages and maximise effectiveness. Harmonising targeting mechanisms across social protection programmes will reinforce intra-sectoral coordination and improving coordination across Ministries will build inter-sectoral synergies and maximise developmental impact. It will involve moving from a system of vertical management of social protection schemes with separate targeting mechanisms to a more aligned model which involves joint implementation mechanisms. It will also require case management mechanisms and improved planning processes to ensure that cross-ministerial initiatives leverage the CSG as an entry point to a range of initiatives that build household capabilities and open the door to more sustaining livelihoods. For example, the CSG can provide the foundation for integrated interventions to improve nutritional outcomes and reinforce early childhood investments.
- More immediately, investments in the development of a strong, integrated framework for monitoring and reporting that clearly outlines the roles and responsibilities of all involved agencies and ensures appropriate reporting mechanisms is critical to enhancing the programme's implementation effectiveness. The government must simultaneously focus on improving the capacity of personnel involved in the monitoring of the programme across all levels of governance.

7.3 Models for Evidence Building

Agreement on a model for implementing a long-term evaluation framework allying the Government of Thailand (particularly MSDHS and DCY) with key development and technical partners will promote strong government ownership of the evidence required to secure the long-term success of the CSG. The optimal combination of policy stakeholders, resources, and expertise to implement the most efficient and effective impact assessment will best inform proactive policy development. This will ensure:

- Broad ownership of the impact assessment that in turn drives successful evidence-informed policy development
- An optimal mix of technical expertise and understanding of Thailand's social and policy context producing the best possible evidence

The implementation of this initial assessment of the CSG informs future evidence building activities. In particular, this study recommends that:

- ***A similar consortium of stake-holders complete follow-up assessments of the CSG at regular intervals.*** This initial assessment identified significant impacts that similar evaluations in other countries have failed to measure,[65] in part because robust tests often face challenges in demonstrating nutritional impacts at early ages. Studies that fail to find nutritional impacts at early ages may be more likely to demonstrate these results for older children. Follow-up studies will both map out the path of longer-term impacts and achieve greater statistical power in identifying impacts (such as reductions in stunting) that exist but are beyond the scope of this evaluation.
- ***The research partnership develops a more focused proposal for a study of Thailand's nutritional outcomes, beginning with pregnant women and very early children.*** This initial evaluation provides an evidence base that will support the design and implementation of a more in-depth assessment of nutrition behaviours and the impact of the CSG and related interventions.
- ***A more expansive assessment of targeting performance evaluates both targeting effectiveness (inclusion error and exclusion error) as well as the comprehensive set of targeting costs, including economic incentive costs, social and psycho-social costs, political costs as well as administrative and private costs.*** As the government relaxes the targeting mechanisms to reduce exclusion error and broaden programme coverage, targeting errors will likely fall, but the benefit-cost calculation may change in favour of more universal approaches. A targeting evaluation can test this hypothesis only after carefully calculating comprehensive targeting costs.

65 For example, see studies by the Transfer Project - Davis, Gaarder, Handa, & Yablonski (2012); Davis et al. (2016). The methodological and substantive challenges associated with identifying long-term nutritional impacts (e.g. stunting reductions) resulting from cash transfer programmes provide an important avenue for future research, which is currently being explored by the Economic Policy Research Institute.

8 Bibliography

Adato, M., Briere, B. d., Mindek, D., & Quisumbing, A. (2000). *Final report: the impact of PROGRESA* on women's status and intrahousehold relations. Report submitted to PROGRESA. Washington, D.C.: International Food Policy Research Institute.

Adato, M., Roopnaraine, T., Fabiola Alvarado, Á., Leticia Böttel, P., & Castrillo, G. M. (2004). *A social analysis of the Red de Protección Social (RPS) in Nicaragua.* Washington, D.C.: International Food Policy Research Institute (IFPRI).

Bailey, S., & Hedlund, K. (2012). *The impact of cash transfers on nutrition in emergency and transitional contexts: A review of evidence.* Humanitarian Policy Group (HPG).

Buranasing. (2015). *Abandoned child : Problems that society must heal.* Retrieved from Thailand Parliament : http://library2.parliament.go.th/ebook/content-issue/2558/hi2558-031.pdf

Columbia University Maliman School of Public Health. (n.d.). Difference-in-Difference Estimation. Retrieved from Population Health Methods: https://www.mailman.columbia.edu/research/population-health-methods/difference-difference-estimation

Creswell, J. W., & Clark, V. L. (2011). Chapter 3: Choosing a Mixed Methods Design. In J. W. Creswell, & V. L. Clark, *Designing And Conducting Mixed Methods Research Second Edition* (pp. 53-106). SAGE Publications.

Davis, B., & Handa, S. (2015). *How Much Do Programmes Pay? Transfer size in selected national cash transfer programmes in sub-Saharan Africa.* Innocenti Research Brief 2015-01. Florence: UNICEF Office of Research – Innocenti.

Davis, B., Gaarder, M., Handa, S., & Yablonski, J. (2012). *Evaluating the Impact of Cash Transfer Programmes in sub-Saharan Africa.* One Pager No. 46. UNDP-IPC. Retrieved from http://www.ipc-undp.org/pub/IPCOnePager146.pdf

Davis, B., Handa, S., Hypher, N., Rossi, N., Winters, P., & Yablonski, J. (2016). *Evidence to Action: The Story of Cash Tranfers and Impact Evaluation in Sub-Saharan Africa* (1st Edition ed.). Oxford: FAO and UNICEF. Retrieved from http://www.fao.org/3/a-i5157e.pdf

Devereux, S. et al. (2007). *An Evaluation of Concern Worldwide's Dowa Emergency Cash Transfer Project (DECT) in Malawi 2006/2007.* Concern Worldwide.

DFID. (2011). *Cash Transfers Evidence Paper.* Policy Division. London: Department for International Development (DFID).

DSD, SASSA and UNICEF. (2012). *The South African Child Support Grant Impact Assessment: Evidence from a survey of children, adolescents and their households.* Pretoria: UNICEF South Africa.

Fultz, E., & Francis, J. (2013). *Cash transfer programmes, poverty reduction and empowerment of women: A comparative analysis. Experiences from Brazil, Chile, India, Mexico and South Africa.* GED Working Paper 4. Geneva: International Labour Organization.

Groot, R. d., Palermo, T., Handa, S., Ragno, L. P., & Peterman, A. (2015). *Cash Transfers and Child Nutrition: What We Know and What We Need to Know.* Innocenti Working Paper WP-2015-07. Florence: UNICEF Office of Research.

Kabeer, N., Piza, C., & Taylor, L. (2012). *What are the economic impacts of conditional cash transfer programmes? A systematic review of the evidence. Technical Report.* London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Khumsuwan, K., & Chokthananukoon, B. (n.d.). *Single-mother: marginality and social injustice.*

Kosulwat, V. (n.d.). The nutrition and health transition in Thailand. *Public Health Nutrition,* 5(1A), 183–189.

Likert, R. (1932). A Technique for the Measurement of Attitudes. *Archives of Psychology,* 1-55.

Lim, A., Cranswick, N., & South, M. (2011). Adverse events associated with the use of complementary and alternative medicine in children. *Archives of Disease in Childhood,* 96(3), 297-300.

Merhav, H., Amitai, Y., Palti, H., & Godfrey, S. (1985). Tea drinking and microcytic anemia in infants. *The American Society for Clinical Nutrition,* 1210-1213.

Milligan, K., & Stabile, M. (2008). *Do Child Tax Benefits Affect the Wellbeing of Children? Evidence from Canadian Child Benefit Expansions.* NBER Working Paper No. 14624. NBER Programmes.

Molyneux, M. (2008). *Conditional Cash Transfers: A 'Pathway to Women's Empowerment'?* Working Paper 5. Brighton: Institute of Development Studies.

OECD. (2009). *Social Protection, Poverty Reduction and Pro-Poor Growth.* OECD.

Pantoja, T. (2008). *Do conditional cash transfers improve the uptake of health interventions in low and middle income countries? A SUPPORT summary of a systematic review.*

Rojanaphruk, P. (2014, November 27). *Subtle signs of gender inequality.* Retrieved December 09, 2015, from The Nation: National Multimedia: http://www.nationmultimedia.com/national/Subtle-signs-of-gender-inequality-30248635.html

Samson et al. (2007). *The Social and economic Impact of Cash Transfers.* Cape Town: Economic Policy Research Institute.

Samson, M., Faijth, G., & Francois, D. (2016). *Cognitive capital, equity and child-sensitive social protection in Asia and the Pacific.* British Medical Journal Global Health.

SCUK. (2009). *How Cash Transfers Can Improve the Nutrition of the Poorest Children: Evaluation of a Pilot Safety Net Project in Southern Nige.* Save The Children, U.K.

Social Watch. (2012, March 15). *'Thailand's Gender Equality is Superior to its neighbours,' says watchdog organisation.* Retrieved December 9, 2015, from SOCIAL WATCH poverty eradication and gender justice: http://www.socialwatch.org/node/14579

United Nations Children's Fund. (n.d.). *Early Childhood Development: The key to a full and productive life.* United Nations Children's Fund.

World Bank. (2018, April 9). *Thailand Expected to Post 4.1% Growth in 2018 - Best Economic Performance Since 2012.* Retrieved from World Bank: http://www.worldbank.org/en/news/press-release/2018/04/09/thailand-expected-to-post-41-growth-in-2018-best-economic-performance-since-2012

Yount, K., DiGirolamo, A., & Ramakrishnan, U. (2011). Impacts of Domestic Violence on Child Growth and Nutrition: a Conceptual Review of the Pathways of Influence. *Soc Sci Med.*

Annexure

A. Means-Test/Eligibility Criteria for the CSG

1. Thai nationals born since 1 October 2015 who are not entitled to any welfare or other benefits from government agencies or state enterprises (including the child allowance from the Social Security Fund and welfare from civil services or from state enterprises) and children who are not under the care of government agencies (such as public nursing homes for children and families or public housing).
2. Children residing in poor households or households with incomes below THB 3000 per person per month (annualized, less than THB 36000 per person per year).
3. Following an assessment, households must meet one of the following (means tests):
    - The household has a dependency obligation: i.e. families with people with disabilities, older people or children under the age of 15, unemployed persons aged 15–65, or families with single parents.
    - Deteriorated housing conditions: poor and local construction materials for accommodation such as bamboo leaves or used materials; or rented accommodation.
    - The household has no personal car, pick-up truck, or small van.
    - Farm/agricultural families with less than one rai of land for agriculture.

Source: CSG Guideline for 2016 fiscal year (August 2015)

B. Original and Final Evaluation Questions

Table 16: Key Research Questions

THEME	ORIGINAL RESEARCH QUESTION	FINAL RESEARCH QUESTION		INDICATORS/AREA OF ANALYSIS
IMPACT	1. Does the CSG improve child nutrition? (This also addresses gender objectives.)	Does the CSG improve child nutrition? (This also addresses gender objectives.)	No Change	Nutrition indicators – breastfeeding, complementary feeding, anthropometric measures – disaggregated by gender and socio-economic groups
	2. Does the CSG improve access to social services, particularly post-partum care? (This also addresses gender objectives.)	Does the CSG improve access to social services, particularly post-partum care? (This also addresses gender objectives.)	No Change	Access to health care, ECD for siblings, Maternal health – ANC/PNC – disaggregated by socio-economic groups
	3. Does the CSG strengthen the female caregiver's negotiating and decision-making power within the household? (This also addresses gender objectives.)	Does the CSG strengthen the female caregiver's negotiating and decision-making power within the household? (This also addresses gender objectives.)	No Change	Agency factor, household decision-making indicators, women's perception – disaggregated by socio-economic groups
	4. Does the CSG improve the caregiver's time allocation to benefit the infant's health and well-being?	Does the CSG improve the caregiver's time allocation to benefit the infant's health and well-being?	No Change	Time spent on activities with children, time spent alone – disaggregated by boys and girls and socio-economic groups
	5. Does the CSG improve the household environment for the benefit of the caregiver and child? (This also addresses gender objectives.)	Does the CSG improve the household environment for the benefit of the caregiver and child? (This also addresses gender objectives.)	No Change	Stress, violence etc., (to the extent possible) – might need to be combined with Q3.
	6. Does the CSG generate spill-over benefits for other household members?	Does the CSG generate spill-over benefits for other household members?	No Change	Spill-over indicators – access to services for siblings (the sample might not be a relevant/ reasonable size.)
	7. N/A	Is the CSG achieving its objectives?	Moved from effectiveness to impact section	Concluding remarks on the programme's objectives against achievement thus far

THEME	ORIGINAL RESEARCH QUESTION	FINAL RESEARCH QUESTION		INDICATORS/AREA OF ANALYSIS
EFFICIENCY	1. How efficient is the CSG in reducing poverty? (This also addresses social equity objectives.)	Excluded from the analysis	The collection and analysis of budget/ expenditure data and household surveys were beyond the scope of this study. This question is excluded from this endline report.	
	2. Are implementation mechanisms cost-efficient?	Excluded from the analysis	The collection and analysis of budget/ expenditure data were beyond the scope of this study. This question is excluded from this endline report.	
	3. How effectively does the CSG target poor households? (This also addresses social equity objectives.)	How effectively is the CSG targeted to poor households? (This also addresses social equity objectives.)	No change	Targeting efficiency - exclusion/ inclusion errors analysis using household survey data and ratchet method
EFFECTIVENESS	1. Is the CSG reaching children and their caregivers effectively? (gender and socio-economic groups)	Is the CSG reaching children and their caregivers effectively? (gender and socio-economic groups)	No Change	
	2. Does the design overcome access barriers effectively?	Does the design overcome access barriers effectively?	No change	Barriers to registration and uptake, implementation innovation against the design of the CSG, improvements in processes after the roll-out
	3. Can the CSG be implemented more effectively?	Can the CSG be implemented more effectively?	No Change	Beneficiary and stakeholder perceptions on implementation issues
	4. Is the CSG achieving its objectives?	Not applicable	Answered in the impact section – see question 7	
	5. Is the CSG benefit level high enough to be relevant and effective?	Is the CSG benefit level high enough to be relevant and effective?	No Change	Adequacy of benefit - % of household income/expenditure, qualitative data

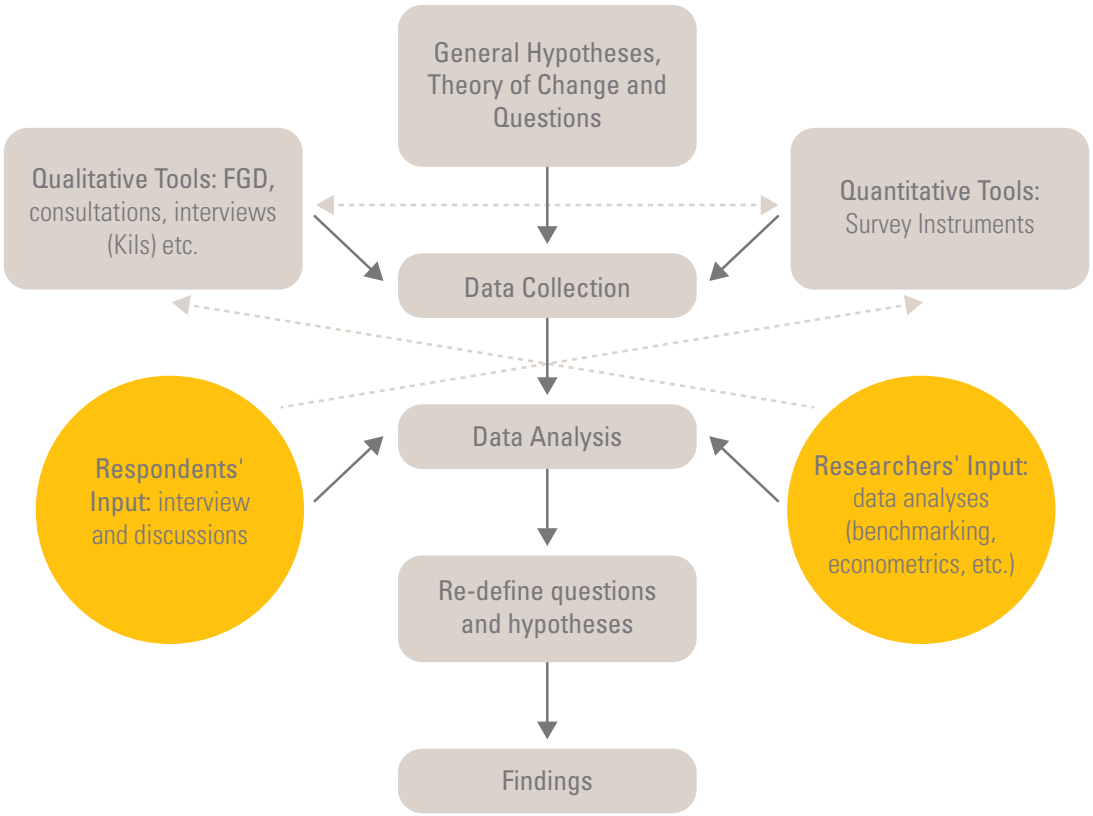
THEME	ORIGINAL RESEARCH QUESTION	FINAL RESEARCH QUESTION		INDICATORS/AREA OF ANALYSIS
RELEVANCE	1. Is the CSG an appropriate instrument for achieving child-sensitive social protection objectives?	Is the CSG an appropriate instrument for achieving child-sensitive social protection objectives?	Analyzed in the conclusions; not a standalone section	
	2. Do beneficiaries view the CSG as a mechanism that supports household and infant well-being?	Do beneficiaries view the CSG as a mechanism that supports household and infant well-being?	Analyzed in the conclusions; not a standalone section	
SUSTAINABILITY	1. Does the programme achieve its objectives in a manner that strengthens political will for scale-up and sustainability? Does the CSG, for example, strengthen developmental impacts with long-term economic benefits?	Does the programme achieve its objectives in a manner that strengthens political will for scale-up and sustainability? Does the CSG, for example, strengthen developmental impacts with long-term economic benefits?	Analyzed in the recommendations; not a standalone section	

C. Integration of qualitative and qualitative components

The multiple qualitative and quantitative instruments require input from the researchers and the respondents to create a holistic view of the impact of the grant and integrate them at four points of the interface – design of the instruments, data collection, data analysis, and interpretation. The integration strategy facilitates substantial interactions between the quantitative and qualitative strands of the evaluation.

At the design and data collection stage, the team designed draft questionnaires which, after expert review and feedback, were fine-tuned for the first round of field-testing. The team employed the final set of instruments simultaneously to gather quantitative and qualitative data. Different instruments addressed different kinds of questions and, on occasion, the same question in varied ways to explore and expand the breadth and scope of inquiry as well as to offset any shortcomings of one instrument by the strengths of another. The qualitative instruments were kept more fluid and were adjusted to explore early issues identified in the quantitative surveys.

Figure 7: Integration of Qualitative and Quantitative Methods



At the data analysis and interpretation stages, the team used the interaction of the qualitative and quantitative strands to:

- Consolidate and corroborate findings from the different methods via triangulation
- Enhance and elaborate on the findings of complementary methods
- Explore and explain unexpected findings from individual instruments
- Identify potential contradictions and new, context-specific perspectives of frameworks that have not been indicated by preceding studies and extensive literature by recasting the question or results from one method in those from another method
- Generate a "complete" picture of the impact of the grant on the households and communities

The team analyzes the results of both strands individually and together by substantiating, comparing, and interpreting the findings of both quantitative and qualitative instruments. During the interpretation and generation of conclusions and inferences, the team synthesized the qualitative and quantitative data and findings to reflect on the outcomes.

D. Sampling and Power Analysis – A Technical Note

D1 Power Analysis

Statistical power is the probability that a statistical test will detect a significant difference between the treatment and control groups when a difference exists. The power analysis reports a sample size sufficient to detect minimum effect sizes, or minimum detectable effects (MDEs), for a range of relevant indicators. MDEs are the smallest impact estimates expected to measure as statistically significant at the 95% confidence level with a statistical power of 0.8.

For the power analysis, the team first calculated the intra-class correlation coefficient (ICC) for each variable of interest, which quantifies the degree of relationship between individuals in clusters by comparing the variance within clusters with the variance between clusters.[66] The team then used Stata packages "clsampsi" and "clustersampsi" to determine the minimum sample size required and carried out a sensitivity analysis to confirm that the sample size was large enough to detect the minimum relevant level of impact, subject to resource constraints.

With a cluster size of 15, a power of 0.8 (80%) and a significance level of 0.05 (5%), the team calculated the baseline mean and standard deviation from all MICS infants who are in the bottom-two wealth index quintiles. The study used the Thailand MICS for the power analysis, which defines clusters at the census enumeration area (EA) rather than the tambon level. The power analysis calculates indicators using data collected from all children under five years, as opposed to infants 4 to 6 months old and 10 to 21-month-old from poor and near poor households which are most relevant to this study. Restricting the MICS data to this narrow range significantly reduces the number of observations in the data with less than 10 infants per cluster, which reduces the reliability of our estimation of ICC values.

To overcome these barriers, the study adopted a two-fold strategy:

(i) Fine-tuning the ICC calculation by breaking it down according to specific age and wealth index quintiles and selecting ICC values calculated for the bottom-two wealth index quintiles for all infants less than a year old as the baseline ICC.

(ii) Triangulating ICC values using data from a previous impact evaluation study for a similar regional study, particularly for the anthropometric data.

Once the disaggregation was completed, the team selected the ICC values calculated for the bottom-two income quintiles to run the second round of power calculations. Calculations based on data on WAZ and WHZ demonstrate that a sample of 4860 infants divided equally between treatment and the comparison group would likely provide sufficient statistical power.

The study aimed to interview approximately 5,200 households in each phase – the baseline and the end line data collection. The baseline succeeded in interviewing 5,666 households. This provides a comfortable margin for possible attrition at endline.

66 Killip, Mahfoud, & Pearce, 2004)

Performing power analysis involves several steps. First, the team calculates the intra-class correlation coefficient (ICC), for each variable of interest. The ICC is a descriptive statistic that quantifies the degree of relationship between individuals in clusters by comparing the variance within clusters with the variance between clusters.[67] The team calculates it using the analysis of variance (ANOVA) methods. For this study's power analysis, the team uses the Stata code "loneway" to calculate the ICC.

Once the ICCs are calculated, the minimum sample size required to reach a certain power level is calculated. The team uses Stata packages "clsampsi" and "clustersampsi" to determine the minimum sample size required. The team performs the power analysis on all variables of interest and sets the sample size equal to the power analysis result for a variable that has the largest minimum sample size. After the initial power analysis, the team can carry out a sensitivity analysis to confirm a sample size that is large enough to detect the minimum level of impact but small enough to remain operationally feasible. In general, the minimum sample size for a given power increases as the ICC increases and the minimum detectible effect size decreases. By adjusting the MDE and the minimum number of either clusters or observations per cluster sample size, the team can calibrate the required sample size to the desired level.

The tables below show the results of power calculations carried out in Stata using "clsampsi" and "clustersampsi" commands. The study has estimated the required number of clusters if the cluster size is at least 15. The team bases all calculations on a power of 0.8 and a significance level of 0.05. The team calculated the baseline mean and standard deviation from all MICS infants who are in the bottom-two wealth index quintiles.

The columns in the tables below are as follows:

1. Column 1 shows the size of the change in the mean anthropometric measure (HAZ, WAZ, WHZ) that the evaluation aims to detect.
2. Column 2 breaks down the results by three possible values for the intra-cluster correlation (ICC).
3. Column 3 reports the number of clusters needed to detect each mean change indicated given the ICC.
4. Column 4 shows the total sample of mothers with infants under 1-year old in all clusters in two treatment arms.

Meanwhile, considering the challenges estimating a cluster's true ICC (as this section later elaborates upon) the different rows per table reflect ICC sensitivity tests highlighting its effect on minimum sample size.

As per Table 16, to detect a mean change of 0.2SD for the height-for-age z-score at 15 beneficiaries per cluster, the team should sample between 114 and 324 clusters depending on the ICC.

Table 17: HAZ

Change in mean to be detected (fraction of SD)	ICC	Required number of clusters at end line	Minimum Number to sample at baseline
0.2	0.36665	324	324 x 15 = 4860
0.2	0.07917	114	114 x 15 = 1710
0.2	0.10000	128	128 x 15 = 1920

Table 17 shows that to detect a mean change of 0.2SD for the weight-for-age z-score at 15 beneficiaries per cluster, the team should sample between 128 and 244 depending on the ICC.

67 Mahfoud, & Pearce, 2004)

Table 18: WAZ

Change in mean to be detected (fraction of SD)	ICC	Required number of clusters at end line	Minimum Number to sample at baseline
0.2	0.25813	244	244 x 15 = 3660
0.2	0.21726	214	15 x 214 = 3210
0.2	0.10000	128	128 x 15 = 1920

To detect a mean change of 0.2SD for the weight-for-height z-score at 15 beneficiaries per cluster, Table 18 shows that the team should sample between 128 and 244 clusters depending on the ICC.

Table 19: WHZ

Change in mean to be detected (fraction of SD)	ICC	Required number of clusters at end line	Minimum Number to sample at baseline
0.2	0.16099	174	174 x 15= 2610
0.2	0.15931	172	172 x 15 = 2580
0.2	0.10000	128	128 x 15 = 1920

A concern with any cluster-based sample is that higher levels of correlation within clusters reduce the statistical power of a given sample. The difficulty arises as the team must estimate the true ICC has from the sampling frame. Thus, optimal power analysis requires data that accurately reflects the design and structure of the programme under evaluation. The Thailand MICS used for the study's power analysis defines clusters at the census enumeration area (EA) rather than the tambon level. Therefore, ICC calculated from the MICS data can only serve as a rough estimate of the true tambon level ICC. Furthermore, the MICS indicators are collected from all children under 5. However, for this evaluation, information collected on infants 4 to 6 months old and 10 to 21-month-old from poor and near poor households is most relevant. Restricting the MICS data to this narrow range significantly reduces the number of observations in the data with less than 10 infants per cluster, which reduces the reliability of our estimation of ICC values.

To account for the wide range of ICC estimates and its effects on minimum sample size needed, the team carried out a two-fold strategy. The first part of the strategy involved fine-tuning the ICC calculation by breaking it down according to specific age and wealth index quintiles. The team disaggregated ICCs from the MICS data into different age groups and income quintiles. The team chose ICC values calculated for the bottom-two wealth index quintiles for all infants less than a year old as the baseline ICC. Table 16, Table 17 and Table 18 report the baseline ICCs for HAZ, WAZ, and WHZ as 0.36665, 0.25813 and 0.16099 respectively. This baseline ICC is the highest out of the all the ICC values used for the power analysis and represents the worst-case scenario requiring the sampling of the highest number of beneficiaries.

The second part of the strategy was triangulating ICC values using data from a previous impact evaluation study for a similar regional study. To ensure that the anthropometric measures are comparable across MICS data and the similar study's data, the team used the WHO standards on human development to calculate the z-scores in the similar study's data.[68] The team validated the Stata macro used for the process by running it on the MICS dataset to generate anthropometric measures and comparing the user generated measures to the existing measures in the MICS. Once the z-scores were calculated and verified, the team calculated ICCs and disaggregated by age group and income quintiles. Mirroring the approach taken for the MICS data, the team disaggregated

68 The WHO standards were also used in constructing the HAZ, WAZ and HWZ scores in the Thailand MICS data

ICC values by age and income quintile. Once the disaggregation was completed, the team chose the ICC values calculated for the bottom-two income quintiles to run the second round of power calculations. Table 16, Table 17 and Table 18 report a similar study's ICCs for HAZ, WAZ, and WHZ as 0.07917, 0.21726, and 0.15931 respectively.

As shown in the tables above, the HAZ test requires the largest sample size. For the height-for-age Z-score (HAZ), the Thailand MICS data show that mean HAZ among infants (0-12 months) in the lowest two quintiles is -0.581 with a standard deviation of 1.72. To find a 0.344 change, assuming the worst-case intra-cluster correlation of 0.367, requires 2430 infants in treatment and the same number in the comparison group, and a total sample size of 4860 in 324 clusters with an average of 15 infants per cluster.

Calculations based on data on WAZ and WHZ all show that a sample of 4860 infants divided equally between treatment and the comparison group would provide sufficient statistical power to detect the indicated improvements, and in fact, can detect impacts that are more precise for WAZ and WHZ.

D2 Sampling Strategy

Quantitative

The CSG impact assessment employed a three-stage stratified sampling strategy with women selected randomly from each identified stratum. The resulting sample provides the required treatment (beneficiary) group (constructed at endline to include recipient households) and provides a sample from which the team will subsequently identify a credible comparison group of non-beneficiaries by matching the treatment sub-sample with comparable non-beneficiary women (determined at endline) based on observable characteristics at baseline that influence the likelihood of CSG receipt.

Selection of Provinces

In the first stage of the sampling process, the team generated a sample of provinces employing a probability-proportional-to-size (PPS) approach, where a province's probability of selection is proportional to the size of the eligible population (poor and near-poor households with infant children).

Selection of Tambons

The team divided the tambons from the selected provinces into two strata. The poorest 50 per cent of tambons from each province and tambons with poverty incidence greater than 30 per cent formed the first group. The remaining tambons formed the second group. The stratified sampling approach selected four tambons from the first sampling group for every tambon selected from the second sampling group. In both groups, the team based the sampling on PPS with replacement. Sampling with replacement ensured balance in the final sample as tambons with a greater number of eligible people had a proportionally greater likelihood of selection.

Selection of Pregnant Women

In the third stage of the sampling process, after the selection of the tambons from the sample of provinces, the team had to select 15 mothers who were seven to eight months pregnant from each tambon to ensure a total sample size that is large enough to meet the specified statistical power. If fieldworkers found more than 15 seven to eight months pregnant women in a tambon, they randomly selected the required number. Given the high probability of the selected tambons not having 15 seven to eight months pregnant women at the time of one visit, the team employed a circuit methodology in which the field workers revisited the site and interviewed more people if the required 15 mothers were not interviewed in the first visit. For this process, the team obtained a list of eligible women every month for each tambon from the antenatal care (ANC) data provided by the Information and Communications Technology (ICT) system of the Ministry of Public Health (MOPH). The fieldworkers verified the list/data received from the ICT system with tambon hospitals or the community hospital.

E. Ethical Review Process

The evaluation of the CSG underwent an ethical review from two boards – (i) the Institutional Review Board (IRB) set up by the directors at the Economic Policy Research Institute (EPRI) to provide oversight for all human subjects and (ii) the Ethical Review Board (ERB) set up by the Thai Development Research Institute (TDRI). This section presents a detailed description of the processes followed by EPRI's IRB and TRDI's ERB to ensure that prior to being approved, the study adheres to national and international ethical standards.

E1 EPRI Institutional Review Board

EPRI understands that appropriate oversight of human subjects' research is a legal as well as an ethical imperative. To address this obligation, EPRI's Board of Directors established an Institutional Review Board in 2015 to provide oversight for all human subjects' research.

The main purpose of the IRB is to protect the rights and welfare of human subjects who take part in research. The IRB reviews research by well-documented global best practices and refers projects for external IRB processes where appropriate. Regardless of whether a project requires an external review, EPRI's IRB reviews all research involving human subjects which is conducted by EPRI.

EPRI's IRB process focuses on two main questions: (1) whether the activity involves research that requires a full review, and (2) whether the research involves human subjects. Research is defined as "a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge" (45 CFR 46.102(d)). Human subjects are defined by the regulations as "living individual(s) about whom an investigator conducting research obtains (1) data through intervention or interaction with the individual, or (2) identifiable private information" (45 CFR 46.102(d)).

For the Thailand Child Support Grant Impact Assessment project, the EPRI's IRB evaluated each component of the submitted research protocol to assess the risks and benefits of the project, focusing on the methods used by the principal investigator and the research staff for protecting the rights of the research participants while allowing the research data to be collected for the benefit of Thailand and the global community that the research serves. In making this assessment, the EPRI's IRB examined the initial protocol application, which includes the project's Inception Report, quantitative research instruments, and the training manual. The specific criteria include:

- **Risks to participants are minimised:** The protocol uses procedures that (1) are consistent with sound research design and (2) do not unnecessarily expose participants to any risks.
- **Risks to participants are reasonable** in relation to any anticipated benefits to participants and to the importance of any knowledge that is expected to result:
- **Selection of participants is equitable:** The IRB considered the purposes of the research, the setting in which it will be conducted, and its inclusion/exclusion criteria, to mazimise the equitable distribution of burdens and benefits. Moreover, the IRB evaluated the recruitment practices and materials. The IRB particularly considered the special issues and additional safeguards posed by research involving participants such as children, pregnant women, physically or mentally compromised individuals, or economically or educationally disadvantaged persons who may be vulnerable to coercion or undue influence in the context of the research.
- **Informed consent/assent:** The IRB focused specifically on the instruments and training procedures ensuring that informed consent or assent be acquired from each participant or his or her legally authorized representative and is appropriately documented.
- **Privacy and confidentiality:** The IRB considered the extent to which the protocol provided adequately for the protection of participants' privacy and the confidentiality of identifiable data.

EPRI's IRB process builds on foundational principles, starting with respect for persons. All research processes must treat individuals as autonomous agents who afforded the right to make decisions for themselves. Those with diminished autonomy (e.g. minors, prisoners, persons who are mentally disabled) are entitled to additional protections. Application of this principle requires that human subjects are enrolled in research studies only under the conditions of effective informed consent. This involves a process in which participation in the research is acknowledged by the research subject (or by a legally authorized representative) as a voluntary act free from coercion or undue influence from the investigator or members of the research team. EPRI's IRB reviewed the research instruments and the training materials to ensure consistency with this core principle. The IRB concluded that sufficient procedures and safeguards are in place to ensure that human research subjects are adequately informed of the risks and benefits of research participation and the procedures that will be involved in the research, and to ensure that informed consent is obtained from each prospective human research subject or his/her legally authorized representative. In addition, the research procedures make adequate provisions for monitoring the data collected to ensure the safety of human research subjects, and there are adequate provisions to protect the privacy of human research subjects and to maintain the confidentiality of research data.

EPRI's second core principle is beneficence. The IRB reviewed the research protocol to ensure that the research study is designed and implemented to mazimise possible benefits and minimise possible harms. Application of this principle involves a risk/benefit analysis in which the risks to subjects must be reasonable compared to the potential for the benefit either to subjects directly or to society. Risk evaluation must include the consideration of both the probability and magnitude of harm, including psychological, physical, legal, social, and economic harm. The proposed study follows global best practices in respect to beneficence. The risks to human research subjects are reasonable concerning the anticipated benefits (if any) to the individual, and the importance of the knowledge that may be expected to result. EPRI's IRB defined "benefit" as a valued or desired outcome or an advantage – and considered the potential evidence the study would generate directly and immediately supporting pro-poor policy promoting inclusive social development and equitable economic growth, both for Thailand and globally.

EPRI's IRB defined "risk" as the probability of harm or injury (physical, psychological, social, or economic) occurring because of participation in the research study. EPRI's IRB assessed risk in the context if its experience and the global evidence base on risk from comparable studies. In evaluating risk, EPRI's IRB considered the conditions that make specific research activities dangerous. In evaluating risks and benefits, EPRI's IRB considered only those risks and benefits that may result from the research (i.e., as distinguished from risks and benefits of treatments or procedures that the patient would undergo if not participating in the research).

The IRB's third core principle is justice. The IRB reviewed the submitted documents to ensure that the possibility for benefits and the potential burdens of the research are equitably distributed among the potential research subjects. In applying this principle, the IRB closely scrutinized the sampling and enrollment processes to ensure that particular groups are not selected for their compromised position or convenience to the research investigator. In particular, the IRB found that the sampling strategy followed best global practices to ensure consistency with this principle.

After careful consideration of these principles and criteria, the EPRI's IRB approved the project and authorized the issuance of the approval letter.

E2 TDRI Ethical Review Board

As part of the overall national capacity development and realizing the importance of ensuring ethical research, TDRI established an internal Ethical Review Board (ERB) to ensure that all research conducted by the organization meets national ethical study guidelines. With the support of Mahidol University-Centre of Ethical Reinforcement for Human Research (MU-CERIF), TDRI ensured adequate training of ethics committee, board members, and other support staff; the development of the Standard Operating Procedure (SOP); and other relevant documents required for the smooth and effective functioning of the ERB.

The materials and documentation reviewed by TDRI's ERB include the research proposal for the evaluation of the Child Support Grant (CSG) in Thailand, the qualitative and quantitative survey instruments designed for the evaluation, resumes of the researchers involved in the project, and the equipment used to collect anthropometric data. The TDRI's ERB considered and reviewed the entire research methodology as well as the baseline and endline survey materials.

To approve the research, the ERB determines that all of the following requirements are satisfied:

- **Risks to subjects are minimised:**
  a. Does the study implement procedures that are consistent with sound research design and that do not unnecessarily expose subjects to risk?
  b. Risks to subjects are reasonable about anticipated benefits to subjects and the value of the knowledge that may reasonably be expected to result.
- **The research is context-appropriate:**
  a. Does the research fit into the context of the aim of the study?
  b. Is any part of the survey instrument irrelevant to the study in the opinion any board member? Can these parts of the survey be eliminated?
- **Informed consent:**
  a. Does the study seek informed consent from each prospective subject or the subject's legally authorized representative?
  b. Is the informed consent appropriately documented, as required by the ERB's policies?
  c. Respondent privacy: Does the research plan demonstrate appropriate methods and risk mitigation to ensure reliable results?
- **Selection of subjects is equitable:**
  a. Is the research appropriate for the setting in which the research will be conducted? Are the study methods cognizant of the special problems of research involving vulnerable populations, such as children, prisoners, pregnant women, mentally disabled persons, or economically or educationally disadvantaged persons?

The ERB approved the research methodology, the sampling approach, and power analysis without any changes. The ERB also approved the time length of the questionnaires and agreed that the training be put in place to ensure adequate safety of the participants. With special attention to anthropometric measurements involving young children, the ERB carefully reviewed the training protocol and approved the methodology as experts were conducting the training. The ERB recommended few minor adjustments to the study before approving the evaluation. These adjustments are presented below:

1. **Protecting Privacy:** The board was concerned that the data collected in the process might not be securely concealed. The research team then advised the board on the procedures implemented to secure the collected data, including the standard processes for collecting, digitizing, and using the data, while destroying any paper-based data recorded, if necessary. After reviewing the procedures, the ERB agreed that there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data and thus, approved the study.
2. **Suitability of questions in the Thai context:** The board expressed their concern over some of the questions as they might not apply to rural Thailand. For example, in the nutrition section of the child questionnaire, the food options include foods such as yoghurt or potatoes, which individuals residing in rural Thailand are less likely to consume. The study team's representative, Dr Somchai from TDRI, explained that eliminating these options from the questionnaire will compromise the comparability of the responses with existing national surveys such as the Thailand Socio-Economic Survey (SES) and the Multiple Indicator Cluster Survey (MICS). It is critically important to be able to compare as many results with these surveys to confirm the representativeness of the baseline data.
3. **Protecting participants' right to refuse:** The ERB made three critical recommendations to strengthen the study's methodology and ensure that all respondents had the option to deny responding to any question they wanted. In this regard, the ERB insisted on two vital changes: (i) including "do not want to answer," as a response to ALL questions in the three questionnaires; (ii) to follow the fieldwork guidelines and train fieldworkers to identify the body language of the participants, which is as important as the direct statement from the participants and determines their willingness to answer the questionnaires. Both of these recommendations were incorporated – fieldworkers were trained to understand the basics of body language that indicated disinterest or discomfort, and all questions were edited to allow participants to choose not to answer a question.

After these adjustments, the Impact evaluation of Thailand's CSG was deemed ethically sound and was approved by the ERB.

F. Quantitative Survey Instruments

This section presents the back-translated paper versions of the endline Household, Child, and Caregiver Questionnaires as implemented on the field using CSPro.

F1 Household Questionnaire

SCREENING QUESTIONS		SC
SC1. DOES THE HH INTERVIEWED IN THE BASELINE LIVE IN THE SAME ADDRESS AS IN BASELINE?	Yes ..... 1 No, whole HH has moved 2	1 ⇨ skip to SC6
SC2. WHERE DID THE HH MOVE TO?	This province ..... 1 Another province ..... 2 Bangkok ..... 3 Aboard ..... 4 Do not know 9	2 ⇨ skip to SC4 3,4 ⇨ HH9 record code 14, then end the interview 9 ⇨ HH9 record code 15, then end the interview
SC2A. DO YOU KNOW THE NEW ADDRESS OF THE HH	Yes..... 1 No..... 2 Do not know..... 9	2,9 ⇨ HH9 record code 14, then end the interview
SC3. RECORD HH'S NEW ADDRESS IN THIS PROVINCE	New address (house no., village no., tambon, district)	⇨ HH9 record code 16, then END THE INTERVIEW AT THIS ADDRESS, CREATE A NEW RECORD WITH A NEW ADDRESS USING SAME EA/HHID
SC4. NAME OF THE PROVINCE	Mae Hong Son ..... 58 Tak ..... 63 Ubon Ratchathani ..... 34 Kalasin ..... 46 Sisaket ..... 33 Nakhon Ratchasima ..... 30 Sa Kaeo ..... 27 Pattani ..... 94 Narathiwat ..... 96 Other Provinces 99	99 ⇨ HH9 record code 14 then end the interview
SC4A DO YOU KNOW THE NEW ADDRESS OF THE HH?	Yes ..... 1 No ..... 2 Do not answer 9	2,9 ⇨ HH9 record code 14 then end the interview
SC5. RECORD HH'S NEW ADDRESS IN OTHER 8 PROVINCES	New address (house no., vill no., tambon, district)	⇨ HH9 record code 16 then END THE INTERVIEW AT THIS ADDRESS, SEND ADDRESS INFO TO THE DESTINATION PROVINCIAL TEAM
SC6A. DOES THIS HH HAVE AN ELIGIBLE CHILD??	Yes ..... 1 No ..... 2 Do not know ..... 3 Do not answer 9	
SC6. DOES A TARGET CHILD LIVE IN THIS HOUSEHOLD?	Yes ..... 1 No, he/she was aborted ..... 2 No, he/she deceased ..... 3 No, he/she moved out 4	2 ⇨ HH9 record code 18 3 ⇨ HH9 record code 19 4 ⇨ skip to SC7

SCREENING QUESTIONS		SC
SC7. WHERE DOES A TARGET CHILD LIVE NOW?	This province ..... 1 Another province ..... 2 Bangkok ..... 3 Aboard ..... 4 Do not know 9	2 ⇨ skip to SC9 3,4. ⇨ HH9 record code 20 End interview
SC7A. DO YOU KNOW THE NEW ADDRESS OF THE TARGET CHILD?	Yes ..... 1 No ..... 2 Do not know 9	2,9 ⇨HH9 record code 14 End interview
SC8. RECORD CHILD'S NEW ADDRESS IN THIS PROVINCE	New address (house no., vill no., tambon, district)	⇨ HH9 record code 21 then eND INTERVIEW AT THIS ADDRESS, CREATE NEW RECORD WITH NEW ADDRESS USING SAME EA/HHID
SC9. NAME OF THE PROVINCE	Mae Hong Son ..... 58 Tak ..... 63 Ubon Ratchathani ..... 34 Kalasin ..... 46 Sisaket ..... 33 Nakhon Ratchasima ..... 30 Sa Kaeo ..... 27 Pattani ..... 94 Narathiwat ..... 96 Other Provinces 99	99 ⇨ HH9 record code 19 then end the interview
SC9A. DO YOU KNOW THE NEW ADDRESS OF THE TARGET CHILD?	Yes ..... 1 No ..... 2 Do not answer 9	2,9 ⇨ HH9 record code 14 then end the interview
SC10. RECORD INDEX CHILD'S NEW ADDRESS IN OTHER 8 PROVINCES	New address (house no., vill no., tambon, district)	⇨ HH9 record code 22 then END THE INTERVIEW AT THIS ADDRESS, SEND NEW ADDRESS INFO TO THE DESTINATION PROVINCIAL TEAM

HOUSEHOLD INFORMATION PANEL (HH1-HH7A ARE RETRIEVED FROM SYSTEM)	**HH**
HH1. EA/Tambon number:_____	**HH2.** Household number: ___ ___
HH3. Interviewer's name and surname Name-Surname_____	**HH3A.** Interviewer's number: Number_____
HH4. Supervisor's name and surname Name-Surname_____	**HH4A.** Supervisor's number:_____
HH5. Day / Month / Year of interview: ___ ___ /___ ___ / 2 0 __ __	**HH7.** REGION: CENTRAL……2 NORTH……3 NORTHEAST……4 SOUTH……5
HH6. ADMINISTRATIVE REGION: INSIDE MUNICIPAL AREA / OUTSIDE MUNICIPAL AREA	
HH7A. PROVINCE Province ID___ ___	Yes……1 No……..2

GREETING (READ THE FOLLOWING STATEMENT TO RESPONDENT, IF HAVE NOT READ IT YET)
WE REPRESENT THE DEPARTMENT OF CHILDREN AND YOUTH, THE MINISTRY OF SOCIAL DEVELOPMENT AND HUMAN SECURITY. WE ARE SURVEYING THE SITUATION OF FAMILIES AND HOUSEHOLDS, PREGNANT WOMEN, AND CHILDREN UNDER THE AGE OF 6. THE INFORMATION WILL BE USED FOR THE EVALUATION OF THE GOVERNMENT'S PROJECT ON CHILD SUPPORT GRANT. THE INTERVIEW WILL TAKE ABOUT 1 HOUR. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS. YOU CAN REQUEST TO END THE SURVEY ANYTIME. MAY I START NOW?
HH8. MAY I BEGIN?

- ❑ Yes, permission is given ⇨ Go to HH16 to record the time and then begin the interview.
- ❑ No, permission is not given ⇨ Circle 04 in HH9. Discuss this result with your supervisor.

HH9. Result of household interview:
1 Completed the interview
2 No household member or no competent respondent at home at the time of three visits
3 Entire household was absent for an extended time
4 Refused to participate in the interview
5 Dwelling is vacant / Address is not a dwelling
6 Dwelling is destroyed
7 Dwelling is not found
9 Already delivered
10 Moved outside this tambon
11 No woman of this name in this tambon
12 Eligible for Social Security System (SSS) child grant/government or state official
13 Clearly not poor and thus not eligible for the CSG
14 HH moved to non-study provinces/Bangok/aboard - do not follow the case
15 HH moved permanently and the new address cannot be located - do not follow the case
16 HH moved to other place in this province - follow the case
17 HH moved to one of the other eight provinces in this study - send the information to follow the case
18. The child was aborted/the mother had a miscarriage - end the interview
19 The child is deceased - end the interview
20 The child moved to a non-study province/BKK/aboard - do not follow the case
21 The child moved to an unknown area - do not follow the case
22 The child moved to other place in this province - follow the case
23 The child moved to one of the other eight provinces in this study - send the information to follow the case
96;Othe specify)

HH18. Record the time.

Hour __ __

Minutes __ __

LIST OF HOUSEHOLD MEMBERS — HL

FIRST, PLEASE TELL ME THE NAME OF EACH PERSON WHO USUALLY LIVES HERE, STARTING WITH THE MOTHER OF THE TARGET CHILD. IF THE MOTHER IS NOT IN THIS HOUSEHOLD, START WITH THE HEAD OF THE HOUSEHOLD.

List all household members starting with the head of the household (HL2), their relationship to the household head (HL3), and their sex (HL4)

Then ask: ARE THERE ANY OTHERS WHO LIVE HERE, EVEN IF THEY ARE NOT AT HOME NOW?

If yes, complete listing for questions HL2-HL4. Then, ask questions starting with HL5 for one person at a time.

Use an additional questionnaire if all rows in the List of Household Members have been used.

											For children age 0-6 years old	
HL1. Line no	**HL2.** Name	**HL3.** WHAT IS THE RELATIONSHIP OF (name) TO THE HEAD OF HOUSEHOLD?	**HL4.** IS (name) MALE OR FEMALE? 1 Male 2 Female		**HL4C.** IS (NAME) A PERSON WITH A DISABILITY?	**HL5.** WHAT IS (name)'S DATE OF BIRTH?		**HL6.** HOW OLD IS (name)? Record in completed years. If age is 95 or above, record '95'	**HL77.** IS (name) AN ELIGIBLE CHILD? Yes…..1 No…..2		**HL7B.** IS (NAME) 0-6 YEARS OLD?	
						98 DK	9998 DK					
Line	**Name**	**Relation***	**M**	**F**		**Month**	**Year**	**Age**	**YES**	**NO**	**YES**	**NO**
01		0 1	1	2		__ __	__ __ __ __	__ __	1	2	1	2
02		___ ___	1	2		__ __	__ __ __ __	__ __	1	2	1	2
03		___ ___	1	2		__ __	__ __ __ __	__ __	1	2	1	2
04		___ ___	1	2		__ __	__ __ __ __	__ __	1	2	1	2
05		___ ___	1	2		__ __	__ __ __ __	__ __	1	2	1	2
06		___ ___	1	2		__ __	__ __ __ __	__ __	1	2	1	2
07		___ ___	1	2		__ __	__ __ __ __	__ __	1	2	1	2
08		___ ___	1	2		__ __	__ __ __ __	__ __	1	2	1	2
09		___ ___	1	2		__ __	__ __ __ __	__ __	1	2	1	2
10		___ ___	1	2		__ __	__ __ __ __	__ __	1	2	1	2
Tick here if additional questionnaire used ❑												

INSERT NO. OF THE INTERVIEWEE OF THIS QUESTIONNAIRE __ __

**** Codes for HL3: Relationship to head of household:***

01 Head
02 Spouse/Partner
03 Son / Daughter
04 Son-in-law / Daughter-in-law
05 Grandchild
06 Parent
07 Parent-in-law
08 Brother / Sister
09 Brother-in-law / Sister-in-law
10 Uncle / Aunt
11 Niece /Nephew
12 Other relative
13 Adopted / Foster/ Stepchild
14 Servant (Live-in)
96 Other (Not related)
98 DK

COPY FROM ABOVE						For children 0-6 years old								
HL1. NO.	**HL2.** NAME	**HL3.** RELATIONSHIP	**HL4.** SEX		**HL6.** AGE	**HL12.** DOES THE NATURAL MOTHER OF [NAME] LIVE IN THE HOUSEHOLD? IF YES, REPORT NO. IF NO, REPORT 0.	**HL11.** WHY DOES NOT THE MOTHER LIVE IN THE HOUSEHOLD? DECEASED…(GO TO HL14…1 WORKS ELSEWHERE ……2 STUDIES ELSEWHERE ……3 LIVES ELSEWHERE, BUT NOT WORKING/ STUDYING……4 DIVORCED/SPLIT……5 OTHERS……6 DK……8 MISSING……9	**HL12A.** Where does the mother live? In another household, same province……1 In another household, different province ……2 Institution in this country……3 Abroad……4 DK……8	**HL14.** DOES THE NATURAL FATHER OF [NAME] LIVE IN THE HOUSEHOLD? IF YES, REPORT NO. IF NO, REPORT 0.	**HL13.** WHY DOES NOT THE FATHER LIVE IN THE HOUSEHOLD? DECREASED…(GO TO NEXT NO.)……1 WORKS ELSEWHERE ……2 STUDIES ELSEWHERE……3 LIVES ELSEWHERE, BUT NOT WORKING/ STUDYING……4 DIVORCED/ SPLIT……5 OTHERS……6 DK……8 MISSING……9	**HL14A.** Where does the father live? In another household, same province……1 In another household, different province ……2 Institution in this country…3 abroad……4 DK……8	**HL15.** Who is the primary caregiver of [name]? If the mother lives in the household, record mother's no.	**H15A.** Relationship of the caregiver to the child
No.	**NAME**	**RELATIONSHIP***	**M**	**F**	**AGE**									
01		___ ___	1	2	__ __									
02		___ ___	1	2	__ __									
03		___ ___	1	2	__ __									
04		___ ___	1	2	__ __									
05		___ ___	1	2	__ __									
06		___ ___	1	2	__ __									
07		___ ___	1	2	__ __									
08		___ ___	1	2	__ __									
09		___ ___	1	2	__ __									
10		___ ___	1	2	__ __									

EDUCATION — ED

			For household members age **5 and above**			For household members age **5-24 years**					
	ED2. Name and age Copy from HL2 and HL6		**ED3.** HAS (name) EVER ATTENDED SCHOOL OR PRE-SCHOOL? 1 Yes 2 NO ↘ Next Line	**ED4A.** WHAT IS THE HIGHEST LEVEL OF SCHOOL (name) HAS ATTENDED? Level: If level=00, skip to ED5	**ED4B.** WHAT IS THE HIGHEST GRADE (name) COMPLETED AT THIS LEVEL? Grade: 98 DK If the first grade at this level is not completed, enter "00."	**ED5.** DURING THE 2017-18 SCHOOL YEAR, DID (name) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME? 1 Yes 2 No ↘ ED7 9 missing ↘ ED7	**ED6.** DURING THIS/THAT SCHOOL YEAR, WHICH LEVEL AND GRADE IS/WAS (name) ATTENDING? Level: If level=00, skip to ED7	Grade: 98 DK	**ED7.** DURING THE PREVIOUS SCHOOL YEAR, THAT IS 2016-17, DID (name) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME? 1 Yes 2 No ↘ Next Line 8 DK ↘ Next Line	**ED8.** DURING THE PREVIOUS SCHOOL YEAR, THAT IS 2016-17, WHICH LEVEL AND GRADE DID (name) ATTEND? Level: See codes in next page If level=00, go to next line.	Grade: 98 DK
Line	**Name**	**Age**		**Level***	**Grade**		**Level***	**Grade**		**Level***	**Grade**
01		___ ___	1 2	___ ___	___ ___	1 2 9	___ ___	___ ___	1 2 8	___ ___	___ ___
02		___ ___	1 2	___ ___	___ ___	1 2 9	___ ___	___ ___	1 2 8	___ ___	___ ___
03		___ ___	1 2	___ ___	___ ___	1 2 9	___ ___	___ ___	1 2 8	___ ___	___ ___
04		___ ___	1 2	___ ___	___ ___	1 2 9	___ ___	___ ___	1 2 8	___ ___	___ ___
05		___ ___	1 2	___ ___	___ ___	1 2 9	___ ___	___ ___	1 2 8	___ ___	___ ___
06		___ ___	1 2	___ ___	___ ___	1 2 9	___ ___	___ ___	1 2 8	___ ___	___ ___
07		___ ___	1 2	___ ___	___ ___	1 2 9	___ ___	___ ___	1 2 8	___ ___	___ ___
08		___ ___	1 2	___ ___	___ ___	1 2 9	___ ___	___ ___	1 2 8	___ ___	___ ___
09		___ ___	1 2	___ ___	___ ___	1 2 9	___ ___	___ ___	1 2 8	___ ___	___ ___
10		___ ___	1 2	___ ___	___ ___	1 2 9	___ ___	___ ___	1 2 8	___ ___	___ ___

* Codes for **ED4A, ED6, ED8:** Level of education

00 Pre-school
01 Primary
02 Secondary
03 Associate / Commercial college degree
04 Diploma
05 Bachelor's degree
06 Master's degree
07 Doctoral degree
98 DK

EMPLOYMENT - ASK PERSONS 15 YEARS AND OVER									EP
EP1 LINE NO.	**EP2** **NAME** COPY FROM HL2 ONLY FOR HOUSEHOLD MEMBERS WHO ARE OLDER THAN 15 YEARS OLD	**EP3** DURING THE LAST 7 DAYS, DID (NAME) WORK FOR PAY OR WORK AS AN UNPAID WORKER? Yes.....1 ⇨NEXT MEMBER No.....2	**EP4** ALTHOUGH (NAME) DID NOT WORK DURING THE LAST 7 DAYS, DID (NAME) STILL RECEIVE WAGES, SALARIES, OR PROFITS FROM THEIR WORK OR BUSINESS? YES.....1 ⇨NEXT MEMBER No.....2	**EP5** DID (NAME) HAVE A JOB OR BUSINESS TO RETURN TO? Unpaid family worker is being treated like he/she did not have a job or business to return to, record code 2 YES.....1 No.....2 ⇨EP7	**EP6** HOW LONG AGO DID (NAME) STOP WORKING? Less than or equal to two months...1 More than two months.....2 ⇨NEXT MODULE	**EP7** DURING THE LAST 30 DAYS, DID (NAME) SEEK WORK, APPLY FOR A JOB, OR WAIT TO BE CALLED TO WORK? Yes.....1 No.....2	**EP8** DURING THE LAST 7 DAYS, WAS (NAME) AVAILABLE TO WORK? Yes.....1 ⇨EP10 NO.....2	**EP9** REASON THAT (NAME) WAS NOT AVAILABLE TO WORK? HOUSEHOLD, FAMILY DUTIES1 STUDENT.....2 SEASONAL WORKER.....3 TOO YOUNG, OLD AGE .....4 ILLNESS, DISABILITY .....5 RESTING..... 6 RETIRED.....7 OTHERS (SPECIFY) .....8 END OF EMPLOYMENT INTERVIEW	**EP10** HOW LONG DID (NAME) NOT SEEK WORK OR WAS NOT AVAILABLE TO WORK? 1. Less than one month 2. 1 month or more but less than 3 months 3. 3 months or more but less than 6 months 4. 6 months or more but less than 9 months 5. 9 months or more but less than 1 year 6. 1 year or more
LINE									
01		1 2	1 2	1 2	1 2	1 2	1 2	1 2 3 4 5 6 7 8	1 2 3 4 5 6
02		1 2	1 2	1 2	1 2	1 2	1 2	1 2 3 4 5 6 7 8	1 2 3 4 5 6
03		1 2	1 2	1 2	1 2	1 2	1 2	1 2 3 4 5 6 7 8	1 2 3 4 5 6
04		1 2	1 2	1 2	1 2	1 2	1 2	1 2 3 4 5 6 7 8	1 2 3 4 5 6
05		1 2	1 2	1 2	1 2	1 2	1 2	1 2 3 4 5 6 7 8	1 2 3 4 5 6
06		1 2	1 2	1 2	1 2	1 2	1 2	1 2 3 4 5 6 7 8	1 2 3 4 5 6
07		1 2	1 2	1 2	1 2	1 2	1 2	1 2 3 4 5 6 7 8	1 2 3 4 5 6
08		1 2	1 2	1 2	1 2	1 2	1 2	1 2 3 4 5 6 7 8	1 2 3 4 5 6
09		1 2	1 2	1 2	1 2	1 2	1 2	1 2 3 4 5 6 7 8	1 2 3 4 5 6
10		1 2	1 2	1 2	1 2	1 2	1 2	1 2 3 4 5 6 7 8	1 2 3 4 5 6

HOUSEHOLD HEALTH				EA
Line	**HEA3** HOW MANY TIMES DID [NAME] SUFFER FROM ANY ILLNESS IN THE LAST 90 DAYS	**HEA6** How did [Name] treat the latest illness? Modern medicine……1 Traditional or herbal medicine……2 Visit local/ traditional carer...……3 **Go to the government health center** Health center/PCU……..4 Community hospital……5 General/regional hospital……...6 University hospital……..7 Other public hospital……...8 **Go to the private health center** Private hospital……9 Private clinic…… 10 Other (specify)……11	**HEA7** HOW MUCH, IF ANY, DID [NAME] PAY ON THEIR LAST VISIT TO THE HEALTH PROVIDER(INCLUDING FEES AND MEDICATION)? IF NONE, RECORD 0.	**HEA8** HOW MUCH, IF ANY, DID [NAME] SPEND ON TRANSPORTATION ON THEIR LAST VISIT TO THE HEALTH PROVIDER (INCLUDING GASOLINE) Record the amount spent on transportation
01	____ ____	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _,_ _ _,_ _ _
02	____ ____	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _,_ _ _,_ _ _
03	____ ____	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _,_ _ _,_ _ _
04	____ ____	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _,_ _ _,_ _ _
05	____ ____	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _,_ _ _,_ _ _
06	____ ____	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _,_ _ _,_ _ _
07	____ ____	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _,_ _ _,_ _ _
08	____ ____	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _,_ _ _,_ _ _
09	____ ____	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _,_ _ _,_ _ _
10	____ ____	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _,_ _ _,_ _ _

HOUSEHOLD HEALTH					EA
Line	**HEA3** HOW MANY TIMES DID [NAME] SUFFER FROM ANY ILLNESS IN THE LAST 90 DAYS	**HEA5** HOW MANY TIMES DID [NAME] SEEK HEALTH CARE IN THE LAST 90 DAYS? *Record the number of visits to doctors or healthcare professionals, or self-care*	**HEA6** How did [Name] treat the latest illness? Modern medicine……1 Traditional or herbal medicine……2 Visit local/ traditional carer..…… 3 **Go to the government health center** Health center/PCU……..4 _ _ _, _ _ _, _ _ _ Community hospital……5 General/regional hospital……..6 University hospital……..7 Other public hospital……...8 **Go to the private health center** Private hospital……9 Private clinic…… 10 Other (specify)……11	**HEA7** HOW MUCH, IF ANY, DID [NAME] PAY ON THEIR LAST VISIT TO THE HEALTH PROVIDER(INCLUDING FEES AND MEDICATION)? IF NONE, RECORD 0.	**HEA8** HOW MUCH, IF ANY, DID [NAME] SPEND ON TRANSPORTATION ON THEIR LAST VISIT TO THE HEALTH PROVIDER (INCLUDING GASOLINE) *Record the amount spent on transportation*
01	—— ——	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _, _ _ _, _ _ _	_ _ _, _ _ _, _ _ _
02	—— ——	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _, _ _ _, _ _ _	_ _ _, _ _ _, _ _ _
03	—— ——	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _, _ _ _, _ _ _	_ _ _, _ _ _, _ _ _
04	—— ——	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _, _ _ _, _ _ _	_ _ _, _ _ _, _ _ _
05	—— ——	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _, _ _ _, _ _ _	_ _ _, _ _ _, _ _ _
06	—— ——	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _, _ _ _, _ _ _	_ _ _, _ _ _, _ _ _
07	—— ——	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _, _ _ _, _ _ _	_ _ _, _ _ _, _ _ _
08	—— ——	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _, _ _ _, _ _ _	_ _ _, _ _ _, _ _ _
09	—— ——	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _, _ _ _, _ _ _	_ _ _, _ _ _, _ _ _
10	—— ——	____ ____	1 2 3 4 5 6 7 8 9 10	_ _ _, _ _ _, _ _ _	_ _ _, _ _ _, _ _ _

HEALTH COVERAGE AND WELFARE						
HW1. Line number	**HW2A** (copy from HL2)	**HW2B.** (copy from HL6)	**HW2C** (copy from HL2)	**HW2D** (copy from HL6)	**HW3** GOVERNMENT HEALTH PROGRAMMES	**HW4** NON-GOVERNMENT HEALTH PROGRAMMES
Line	**Name**	**Age**	Disabled? Yes.....1 No.....2	Attending Schools? Yes..... 1 No..... 2	Government/State enterprise official.....1 Universal Health Coverage.....2 Social Insurance Health.....3 Do not know.....4 Do not answer.....5 If the respondent answers "None of the above," ask "Are you in the 30 Baht health programme?"	Private Health Insurance.....1 Employer Health Welfare (only for employed).....2 Other.....3 Don't know.....8 Do not answer.....5
01			1 2	1 2	1 2 3 4 5	1 2 3 4 5
02			1 2	1 2	1 2 3 4 5	1 2 3 4 5
03			1 2	1 2	1 2 3 4 5	1 2 3 4 5
04			1 2	1 2	1 2 3 4 5	1 2 3 4 5
05			1 2	1 2	1 2 3 4 5	1 2 3 4 5
06			1 2	1 2	1 2 3 4 5	1 2 3 4 5
07			1 2	1 2	1 2 3 4 5	1 2 3 4 5
08			1 2	1 2	1 2 3 4 5	1 2 3 4 5
09			1 2	1 2	1 2 3 4 5	1 2 3 4 5
10			1 2	1 2	1 2 3 4 5	1 2 3 4 5

HEALTH COVERAGE AND WELFARE						HW
DURING THE PAST YEAR, DID [NAME] RECEIVE BENEFITS FROM THE FOLLOWING GOVERNMENT PROGRAMMES?						
HW1. Line number	**HW2** Name and Age copy from HL2 and HL6		**HW5** SOCIAL PENSION FOR THE ELDERLY (ASK ONLY THOSE ABOVE 60 YEARS OLD)	**HW6** SOCIAL PENSION FOR DISABILITY (ASK ONLY THOSE IDENTIFIED AS DISABLED)	**HW7** FREE SCHOOL LUNCH/ SUPPLEMENTARY FOOD PROGRAMME (ASK ONLY THOSE WHO ATTENDED SCHOOL LAST YEAR)	**HW8** GOVERNMENT SCHOLARSHIP PROGRAMME (ASK ONLY THOSE WHO ATTENDED SCHOOL LAST YEAR)
Line	**Name**	**Age**	Yes.....1 No.....2	Yes.....1 No.....2	Yes.....1 No.....2	Yes.....1 No.....2
01			1 2	1 2	1 2	1 2
02			1 2	1 2	1 2	1 2
03			1 2	1 2	1 2	1 2
04			1 2	1 2	1 2	1 2
05			1 2	1 2	1 2	1 2
06			1 2	1 2	1 2	1 2
07			1 2	1 2	1 2	1 2
08			1 2	1 2	1 2	1 2
09			1 2	1 2	1 2	1 2
10			1 2	1 2	1 2	1 2

HOUSEHOLD CHARACTERISTICS		HC
HC1A. WHAT IS THE RELIGION OF THE HEAD OF THIS HOUSEHOLD?	Buddhism ..... 1 Islam ..... 2 Christianity ..... 3 Other religion (specify) ..... 6 No religion 7	
HC1B. WHAT IS THE MOTHER LANGUAGE OF THE HEAD OF THE HOUSEHOLD?	1 Thai (includes local language) 2 Chinese 3 Mon/Burmese 4 Cambodian/ Souy 5 Malay/Yawi 6 Laotian 7 English 8 Other (Specify) 96	
HC2. HOW MANY ROOMS IN THIS HOUSEHOLD ARE USED FOR SLEEPING?	Number of rooms	
HC3. Main material of the dwelling floor. *Record observation.*	Natural floor Earth / Sand ..... 11 Rudimentary floor Wood planks ..... 21 Palm / Bamboo ..... 22 Finished floor Parquet or polished wood ..... 31 Vinyl or asphalt strips ..... 32 Ceramic tiles ..... 33 Cement ..... 34 Carpet ..... 35 Other (specify) 96	
HC4. Main material of the roof. *Record observation.*	Natural roofing Thatch / Palm leaf ..... 12 Rudimentary roofing Wood planks ..... 23 Finished roofing Metal / Tin / Alloy ..... 31 Ceramic tiles ..... 34 Cement ..... 35 Other (specify) 96	
HC5. Main material of the exterior walls. *Record observation.*	Natural walls Cane / Palm / Trunks ..... 12 Rudimentary walls Bamboo with mud ..... 21 Plywood ..... 24 Reused wood ..... 26 Finished walls Cement ..... 31 Stone with lime / cement ..... 32 Bricks ..... 33 Cement blocks ..... 34 Wood planks / shingles ..... 36 Other (specify) 96	
HC6. WHAT IS THE MAIN FUEL FOR COOKING IN YOUR HOUSEHOLD?	Electricity ..... 01 Liquefied Petroleum Gas (LPG) ..... 02 Charcoal ..... 07 Wood ..... 08 No food is cooked in household ..... 95 Other (specify) 96	

HOUSEHOLD CHARACTERISTICS		HC
HC7. IS THE COOKING USUALLY DONE IN THE HOUSE, IN A SEPARATE BUILDING, OR OUTDOORS? IF 'IN THE HOUSE,' PROBE: IS IT DONE IN A SEPARATE ROOM USED AS A KITCHEN?	In a separate room used as kitchen ..... 01 Elsewhere in the house ..... 02 In a separate building ..... 03 Outdoors ..... 04 Other ..... 06 DK ..... 08 No response 09	
HC8. DOES YOUR HOUSEHOLD HAVE:	**Yes No**	
[A] ELECTRICITY?	Electricity 1 2	
[B] A RADIO?	Radio 1 2	
[D] A NON-MOBILE TELEPHONE?	Non-mobile telephone 1 2	
[E] A REFRIGERATOR?	Refrigerator 1 2	
[F] AN ELECTRIC FAN?	Electric fan 1 2	
[G] A WASHING MACHINE?	Washing machine 1 2	
[H] AN OVEN/MICROWAVE OVEN?	Oven/Microwave oven 1 2	
[I] A COMPUTER?	Computer 1 2	
[J] A TABLET?	Tablet 1 2	
[K] A VCR/DVD PLAYER?	VCR/DVD player 1 2	
[L] A BLU-RAY PLAYER?	BLU-RAY player 1 2	
[M] AN AIR CONDITIONER?	Air conditioner 1 2	
[N] A TELEVISION (PLAIN MONITOR)?	Television (Plain) 1 2	
[O] A TELEVISION (LED/LED/PLASMA MONITOR)?	Television (LCD/LED/Plasma) 1 2	
[P] A CHARCOAL STOVE?	Charcoal stove 1 2	
[Q] A WATER COOLER?	Water cooler 1 2	
HC9. DOES ANY MEMBER OF YOUR HOUSEHOLD OWN:	**Yes No**	
[A] A WATCH?	Watch 1 2	
[B] A TUK-TUK?	Tuk-tuk 1 2	
[C] A BICYCLE?	Bicycle 1 2	
[D] A CAR OR TRUCK?	Car / Truck 1 2	
[E] A MOTORCYCLE OR SCOOTER?	Motorcycle / Scooter 1 2	
[F] A BOAT WITH A MOTOR?	Boat with motor 1 2	
[G] A TWO-WHEELED TRACTOR?	Two-wheeled tractor 1 2	
[H] A FOUR-WHEELED TRACTOR?	Four-wheeled tractor 1 2	
[I] A TRADITIONAL MOBILE PHONE?	Mobile phone 1 2	
[J] A SMARTPHONE?	Smartphone 1 2	
[K] A SPORTS MOTORCYCLE (BIG BIKE)?	Sports motorcycle 1 2	
HC10. DO YOU OR SOMEONE ELSE LIVING IN THIS HOUSEHOLD OWN THIS DWELLING? *If "No," then ask: DO YOU RENT THIS DWELLING FROM SOMEONE NOT LIVING IN THIS HOUSEHOLD?* *If "Rented from someone else," circle "2." For other responses, circle "6."*	Own ..... 1 Rent ..... 2 Other (specify) 6	

HOUSEHOLD CHARACTERISTICS		HC
HC11. DOES ANY MEMBER OF THIS HOUSEHOLD OWN ANY LAND THAT CAN BE USED FOR AGRICULTURE?	Yes ..... 1 No 2	2⇨HC13
HC12. HOW MANY RAIS OF AGRICULTURAL LAND IN TOTAL DO MEMBERS OF THIS HOUSEHOLD OWN? *If less than 800 square-meters, record "00."* *If more than 800 square-meters, record "01."* *If unknown, record "98."*	Rais ..... ___ ___	
HC13. DOES THIS HOUSEHOLD OWN ANY LIVESTOCK, HERDS, OTHER FARM ANIMALS, OR POULTRY?	Yes ..... 1 No 2	2⇨HC15
HC14. HOW MANY OF THE FOLLOWING ANIMALS DOES THIS HOUSEHOLD HAVE? [A] CATTLE, MILK COWS, OR BULLS? [B] HORSES, DONKEYS, OR MULES? [C] GOATS? [D] SHEEP? [E] CHICKENS? [F] PIGS? [G] DUCKS OR GEESE? *If none, record "00."* *If 95 or more, record "95."* *If unknown, record "98."*	Cattle, milk cows, or bulls ..... ___ ___ Horses, donkeys, or mules ..... ___ ___ Goats ..... ___ ___ Sheep ..... ___ ___ Chickens ..... ___ ___ Pigs ..... ___ ___ Ducks or geese ..... ___ ___	
HC15. DOES ANY MEMBER OF THIS HOUSEHOLD HAVE A BANK ACCOUNT?	Yes ..... 1 No 2	

WATER AND SANITATION		WS
WS1. WHAT IS THE MAIN SOURCE OF DRINKING WATER FOR THE MEMBERS OF YOUR HOUSEHOLD?	Piped water Piped into dwelling ..... 11 Piped into the compound, yard, or plot ..... 12 Piped to neighbor ..... 13 Public tap / standpipe ..... 14 Tube Well, Borehole ..... 21 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection ..... 51 Tanker truck ..... 61 Cart with small tank/drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel) ..... 81 Bottled water ..... 91 Other (specify) 96	 11⇨WS6 12⇨WS6 13⇨WS6 14⇨WS3 21⇨WS3 31⇨WS3 32⇨WS3 41⇨WS3 42⇨WS3 51⇨WS3 61⇨WS3 71⇨WS3 81⇨WS3 91⇨CONTINUE 96⇨WS3
WS2. WHAT IS THE MAIN SOURCE OF WATER USED BY YOUR HOUSEHOLD FOR OTHER PURPOSES SUCH AS COOKING AND HANDWASHING? (ASK ONLY THE RESPONDENT WHO ANSWERS 91 BOTTLE WATER)	Piped water Piped into dwelling ..... 11 Piped into the compound, yard, or plot ..... 12 Piped to neighbor ..... 13 Public tap / standpipe ..... 14 Tube Well, Borehole ..... 21 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection ..... 51 Tanker truck ..... 61 Cart with small tank/drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel) ..... 81 Other (specify) 96	 11⇨WS6 12⇨WS6 13⇨WS6
WS3. WHERE IS THAT WATER SOURCE LOCATED?	In own dwelling ..... 1 In own yard/plot ..... 2 Elsewhere 3	1⇨WS6 2⇨WS6
WS4. HOW LONG DOES IT TAKE TO GO THERE, GET WATER, AND COME BACK?	Number of minutes ..... __ __ __ DK 998	
WS5. WHO USUALLY GOES TO THIS SOURCE TO COLLECT THE WATER FOR YOUR HOUSEHOLD? *Probe:* IS THIS PERSON UNDER AGE 15? WHAT IS HIS SEX?	Adult woman (age 15+ years) ..... 1 Adult man (age 15+ years) ..... 2 Female child (under 15) ..... 3 Male child (under 15) ..... 4 DK 8	

WATER AND SANITATION		WS
WS6. DO YOU DO ANYTHING TO THE WATER TO MAKE IT SAFER TO DRINK?	Yes ..... 1 No ..... 2 DK 8	 2⇨WS8 8⇨WS8
WS7. WHAT DO YOU USUALLY DO TO MAKE THE WATER SAFER TO DRINK? *Probe:* ANYTHING ELSE? *Record all items mentioned.*	Boil ..... A Add bleach / chlorine ..... B Strain it through a cloth ..... C Use water filter (ceramic, sand, composite, etc.) ..... D Solar disinfection ..... E Let it stand and settle ..... F Other (specify) ..... X DK ..... Z	
WS8. WHAT KIND OF TOILET FACILITY DO MEMBERS OF YOUR HOUSEHOLD USUALLY USE? *If "flush" or "pour flush," probe:* *WHERE DOES IT FLUSH TO?* *If not possible to determine, ask permission to observe the facility.*	Flush / Pour flush Flush to piped sewer system ..... 11 Flush to septic tank ..... 12 Flush to pit (latrine) ..... 13 Flush to somewhere else ..... 14 Flush to unknown place / Not sure / DK where ..... 15 Pit latrine Ventilated Improved Pit (VIP) latrine ..... 21 Pit latrine with slab ..... 22 Pit latrine without slab / Open pit ..... 23 Composting toilet ..... 31 Bucket ..... 41 Hanging toilet, Hanging latrine ..... 51 No facility, Bush, Field ..... 95 Other (specify) 96	 95⇨Next Module
WS9. DO YOU SHARE THIS FACILITY WITH OTHERS WHO ARE NOT MEMBERS OF YOUR HOUSEHOLD?	Yes ..... 1 No 2	 2⇨Next Module
WS10. DO YOU SHARE THIS FACILITY ONLY WITH MEMBERS OF OTHER HOUSEHOLDS THAT YOU KNOW, OR IS THE FACILITY OPEN TO THE USE OF THE GENERAL PUBLIC?	Other households only (not public) ..... 1 Public facility 2	 2⇨Next Module
WS11. HOW MANY HOUSEHOLDS IN TOTAL USE THIS TOILET FACILITY, INCLUDING YOUR OWN HOUSEHOLD?	Number of households (if less than 10) ..... 0 __ Ten or more households ..... 10 DK 98	

CREDIT, BORROWING, AND FINANCIAL STRESS	CR
NOW, I WOULD LIKE TO ASK ABOUT CREDIT, BORROWING, AND FINANCIAL STRESS OF THE HH.	
CR1. DID ANY MEMBER OF YOUR HOUSEHOLD BORROW MONEY FROM formal sources?	Yes ..... 1 No 2
CR3. DID ANY MEMBER OF YOUR HOUSEHOLD BORROW MONEY FROM informal sources?	Yes ..... 1 No 2
CR4. DOES ANY MEMBER OF THIS HOUSEHOLD HAVE A CREDIT CARD?	Yes ..... 1 No 2
CR5. DO YOU HAVE DIFFICULTY PAYING ELECTRICITY OR WATER BILLS?	Yes ..... 1 No 2

DIET, NUTRITION, AND FOOD SECURITY		DF
NOW I WOULD LIKE TO ASK YOU ABOUT THE DIETARY HABITS OF YOUR HOUSEHOLD.		
DF1. DURING THE LAST 7 DAYS, HOW MANY DAYS DID ANY ADULT IN THIS HOUSEHOLD HAVE LESS THAN TWO MEALS IN A DAY? IF NEVER, RECORD 0. MAKE SURE HOUSEHOLD MEMBERS HAD FEW MEALS DUE TO A LACK OF FOOD, NOT DUE TO BEING ON A DIET OR A RELIGIOUS PURPOSE.	DD __ __	
DF2. DURING THE LAST 7 DAYS, HOW MANY DAYS DID ANY CHILD (HOUSEHOLD MEMBERS BELOW 18 YEARS OF AGE) IN THIS HOUSEHOLD HAVE LESS THAN TWO MEALS IN A DAY? IF NEVER, RECORD 0. MAKE SURE HOUSEHOLD MEMBERS HAD FEW MEALS DUE TO A LACK OF FOOD, NOT DUE TO BEING ON A DIET OR A RELIGIOUS PURPOSE.	DD __ __	

Record time: __ __: __ __

HOUSEHOLD EXPENDITURE			**EXP**
EXP2. WHAT WAS THE HOUSEHOLD EXPENDITURE LAST WEEK ON THE FOLLOWING FOOD ITEMS?			
FOOD AND DIET **IF IN KIND PAYMENT IS NOT ASKED SEPARATELY, INTERVIEWER MUST ASK IN KIND AND IN CASH PAYMENT AT THE SAME TIME**	**Frequency** Daily ..... 1 Weekly ..... 2 Monthly ..... 3 Yearly 4	**In cash** (baht)	**In kind** (Estimated baht)
GRAIN AND CEREAL PRODUCTS			
MEAT AND POULTRY			
SEAFOOD AND FISH			
MILK, CHEESE, AND EGGS			
POWDERED MILK, MILK FOR BABY			
OIL AND FATS			
FRUITS AND NUTS			
VEGETABLES			
SEMI-PREPARED NON-ALCOHOLIC BEVERAGES (AT HOME)			
PREPARED NON-ALCOHOLIC BEVERAGES (AT HOME)			
PREPARED FOODS (TAKEN HOME)			
ALCOHOLIC BEVERAGES, DRINK AT HOME			
ALCOHOLIC BEVERAGES, DRINK AWAY FROM HOME			
CIGARETTES, TOBACCO PRODUCTS			
EXP2. WHAT WAS THE HOUSEHOLD EXPENDITURE LAST MONTHS ON THE FOLLOWING FOOD ITEMS?			
SUGAR AND SWEETS			
SPICES AND CONDIMENTS			

EXP3. WHAT WAS THE HOUSEHOLD EXPENDITURE ON THE FOLLOWING NON-FOOD ITEMS IN THE LAST MONTH?			
Non-food expenditures during the (last month) **If in kind payment is not asked separately, interviewer must ask in kind and in cash payment at the same time**	**Frequency** Daily ..... 1 Weekly ..... 2 Monthly ..... 3 Yearly 4	**In cash** (baht)	**In kind** (Estimated baht)
House rent, house repair			
If you had to rent your own house, how much would you have to pay?			
Fuel & lighting (cooking and other gas, charcoal, kerosene)			
Electricity			
Water supply/underground water			
Cleaning supplies (detergent, softener, mob, broom)			
Clothes (all kinds, including sewing and hire)			
Shoes (all kinds, including sport shoes)			
Personal supplies/services (soap, tooth brush, shampoo, powder, etc.)			
Diapers			
Other personal expenses			
Medicine (modern & traditional vitamins)			
Medical services (outpatients)			
Grease & Lubricating oil			
School bus, taxi, tricycle, hired motorcycles			
Gasoline, Diesel, LPG, NGV (all kinds)			
Telephone, Internet expenses			
Textbooks, school equipment, other education expenses			
Gifts to temple and other religious expenses			
Remittance to persons outside households			
Making merits/ Helping others			
Other expenses			
Lottery tickets and other gambling parapherna-lia			

EXP3. WHAT WAS THE HOUSEHOLD EXPENDITURE ON THE FOLLOWING FOOD ITEMS IN THE LAST 12 MONTHS?			
Non-food expenditures during the last 12 months. **If in kind payment is not asked separately, interviewer must ask in kind and in cash payment at the same time**	**Frequency** Daily ..... 1 Weekly ..... 2 Monthly ..... 3 Yearly 4	**In cash** (baht)	**In kind** (Estimated baht)
Furniture, household electric appliances			
Medical services (inpatients)			
Automobile (all types)			
Motorcycle, bicycle, and others			
Visiting hometown/relatives, religious activities			
Tuition and school fee (public & private)			
Cremation fee, insurance premiums			
Interest payment			

HOUSEHOLD INCOME		**HHI**
NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE INCOME OF THE HOUSEHOLD.		
HHI1. What is the monthly household income from wage (excluding remittances)?	_____ THB	
HHI2. What is the monthly household income from farm profit (excluding remittances)?	_____ THB	
HHI3. What is the monthly household income from non-farm profit (excluding remittances)?	_____ THB	
HHI4. What is the monthly household income from remittances?	_____ THB	
HHI5. What is the monthly household income from other sources?	_____ THB	

HOUSEHOLD RISK EXPOSER	HR
HR1. Has this HH suffered from any bad events as listed below in the last 12 months? More than one list item can be chosen.	
Not enough rainfall	A
High expenses because of illness	B
Worked fewer days in current occupation	C
High input prices	D
High investment cost	E
Flood	F
Low crop yield low for some other reason	G
Low price for output	H
Pests destroyed crop	I
Bad year for household business	J
Death in family	K
Fire destroyed house and/or equipment	L
High educational expenses	M
Extra financial need for a ceremony	N
Lower income because of retirement	O
Divorce/living separately	P
Others (specify)	Q
No bad event	R
Do not know/Do not answer	?

INTRA HOUSEHOLD DECISION-MAKING IDM					
		ID1	ID2	ID3A	ID3B
ID1. WHO IS THE MAIN PERSON THAT MAKES DECISIONS ABOUT THE FOLLOWING ITEMS: **Main decision maker must be older than 12 years old.**		*Write the line num-ber of the main deci-sion maker/ Select the name of the main decision maker* *Write 00 if the main decision maker does not live in this HH*	Does anyone else participate decisions about this item 1. Yes, a member of this HH (⇨ID3A) 2, Yes, a person outside HH (⇨ID3B) 3. No (⇨next ID?) **If there is one member who is older than 12 years old, there is no joint decision maker.**	*Write the line number of the joint decision maker/ Se-lect the name of the joint deci-sion maker*	*Relationship of the joint decision maker to the respondent* *show relationship code*
A	DAY-TO-DAY FOOD EXPENDITURE				
B	DAY-TO-DAY NON-FOOD EXPENDI-TURE (E.G. GROCERIES)				
C	LARGE, UNUSUAL PURCHASES SUCH AS APPLIANCES, VEHICLES OR FURNI-TURE				
D	EDUCATION OF HH MEMBERS				
E	HEALTH OF HH MEMBERS				
F	TAKING A NEW LOAN				
G	WHO IS ALLOWED TO LIVE IN THE HOUSEHOLD AS PART OF THE HOUSEHOLD				

Telephone Number	
TE_consent May I ask for consent for your telephone number?	Permit ..... 1 Not Permit (go to OT consent) ..... 2 Does not use telephone (go to OT consent) 3
TE1. Record the first phone number	__ __ __ - __ __ __ - __ __ __ __
TE2. "Is there another number"? If yes, record the number	__ __ __ - __ __ __ - __ __ __ __
OT_Consent May I ask for telephone number of another household member?	Permit ..... 1 Not Permit (go to next part) ..... 2 Does not use telephone (go to next part) 3
REL What is the relationship between you and the phone owner?	Wife / Husband ..... 2 Son / Daughter ..... 3 Son-In-Law / Daughter-In-Law ..... 4 Grandchild ..... 5 Parent ..... 6 Parent-In-Law ..... 7 Brother / Sister ..... 8 Brother-In-Law / Sister-In-Law ..... 9 Uncle / Aunt ..... 10 Niece / Nephew ..... 11 Other relative ..... 12 Adopted / Foster / Stepchild ..... 13 Servant (Live-in) ..... 14 Other (Not related) ..... 96 Don't know 98
OTE1 Record the phone number	__ __ __ - __ __ __ - __ __ __ __

HH19. Record time __ __: __ __

HH20. Thank the respondent for his/her cooperation and check the List of Household Members:

- ❑ A separate QUESTIONNAIRE FOR WOMEN in the List of Household Members. (Check HL7)
- ❑ A separate QUESTIONNAIRE FOR CHILDREN has been issued for each child under 6 years of age in the List of Household Members. (Check HL7B)

Make arrangements for the administration of the remaining questionnaire(s) in this household.

Interviewer's Observations

Supervisor's Observations

F2 Caregiver Questionnaire

CAREGIVER QUESTIONNAIRE	**WM**
This questionnaire is to be administered to each target child's mother, who was interviewed in the baseline. If the mother is not living in the household but the target child is living in the household, then administer this questionnaire to the child's caregiver (household question HL7). If there are more than one eligible child, a separate questionnaire should be used for each target child's mother/caregiver.	
WM1. EA/ Tambon Number ___ ___ ___ ___	**WM2.** Household number ___ ___
WM3. Woman/Caregiver's name: Name _____	**WM4.** Woman/Caregiver's line number: ___ ___
WM5. Interviewer's number: ___ ___	**WM6.** Day / Month / Year of interview: ___ ___ /___ ___ / 2 0 ___ ___

Repeat this greeting, if it has not already been read to this woman: WE REPRESENT THE DEPARTMENT OF CHILDREN AND YOUTH, THE MINISTRY OF SOCIAL DEVELOPMENT AND HUMAN SECURITY. THE INFORMATION WILL BE USED FOR THE EVALUATION OF THE GOVERNMENT'S CHILD SUPPORT GRANT PROGRAMME. THE INTER-VIEW WILL TAKE ABOUT 15 MINUTES. ALL THE IN-FORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS.	*If the greeting at the beginning of the household question-naire has already been read to this woman, then read the following:* NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT YOUR HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 15 MINUTES. AGAIN, ALL THE IN-FORMATION WE OBTAIN WILL REMAIN STRICTLY CONFI-DENTIAL AND ANONYMOUS.
MAY I START NOW? ❑ *Yes, permission is given ⇨ Go to WM10 to record the time and then begin the interview.* ❑ *No, permission is not given ⇨ Circle "03" in WM7. Discuss this result with your supervisor.*	

WM7. Result of woman's interview	Completed ..... 01 Cannot find the respondent after 3 visits ..... 02 Refused ..... 03 Incapacitated (such as sick, disable etc.) ..... 05 Other (specify) 96
WM10. Record the time.	Hour and minutes __ __ : __ __ __

WOMAN/CAREGIVER'S BACKGROUND		WB
WB1. IN WHAT MONTH AND YEAR WERE YOU BORN?	Month ..... __ __ DK month ..... 98 Year ..... __ __ __ __ DK year 9998	
WB2. HOW OLD WERE YOU ON YOUR LAST BIRTHDAY? Compare and correct WB1 and/or WB2 if inconsistent.	Age (in completed years ..... __ __	
MA1. ARE YOU CURRENTLY MARRIED OR LIVING TOGETHER WITH A PARTNER IN A MARRIAGE-LIKE RELATIONSHIP?	Yes, currently married ..... 1 Yes, living with a partner ..... 2 No, not in union ..... 3 Do not know ..... 8 Do not answer 9	3,8,9⇨ MA5
MA1A. WHO IS YOUR PARTNER IN THIS HOUSEHOLD? IF NOT IN THIS HOUSEHOLD, WHERE IS HE/SHE?	In this HH (Line no.) ..... _ _ In the same province ..... 91 In another province ..... 92 In another country ..... 93 Do not know ..... 98 Do not answer 99	
MA5. HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH SOMEONE AS IF MARRIED?	Yes, formerly married ..... 1 Yes, formerly lived with someone ..... 2 No ..... 3 Do not know ..... 8 Do not answer 9	
WB8. ARE YOU A SINGLE PARENT (RAISING A CHILD/CHILDREN ALONE WITHOUT YOUR HUSBAND/PARTNER)?	Yes ..... 1 No ..... 2 Number of children you raise alone WB8A ..... _ _	
WB7. (ASK THIS QUESTION ONLY IF THE INTERVIEWEE'S EDU-CATION LEVEL IS SECONDARY SCHOOL AND LOWER) NOW I WOULD LIKE YOU TO READ ONE OF THESE SENTENCES TO ME. *Show the sentence on the card to the respondent.* *A. The school session begins next month.* *B. People ask the police to look after their houses during holidays.* *C. Farmers grow less rice this year.* *D. Mr. Mee rides the bus to work.* *If respondent cannot read whole sentence, probe:* CAN YOU READ PART OF THE SENTENCE TO ME?	Cannot read at all ..... 1 Able to read only parts of sentence ..... 2 Able to read whole sentence ..... 3 Cannot read in this language ..... 4 (specify language) Blind / visually impaired 5	

MATERNAL AND NEWBORN HEALTH		MN
NOW I WOULD LIKE TO TALK WITH YOU ABOUT ANOTHER SUBJECT – FAMILY PLANNING **CP00.** ARE YOU PREGNANT NOW?	Yes, currently pregnant ..... 1 No ..... 2 Unsure or Do not know 8	2,8=> MN4
MN0. HOW MANY WEEKS/ MONTHS PREGNANT ARE YOU? RECORD THE ANSWER AS STATED BY RESPONDENT.	Weeks ..... 1 __ __ Months ..... 2 0 __ Not sure 998	
MN1. DID YOU SEE ANYONE FOR ANTENATAL CARE DURING THIS PREGNANCY?	Yes ..... 1 No 2	1⇨MN2
MN1A. WHY DID YOU NOT SEE ANYONE FOR ANTENATAL CARE?	No money ..... 1 No time ..... 2 Inconvenient ..... 3 Unnecessary, body is healthy ..... 4 Did not know it was necessary ..... 5 Other (specify) 6	ALL RE-SPONS-ES⇨NEXT MOD-ULE
MN2. WHOM DID YOU SEE? *Probe:* ANYONE ELSE? *Probe for the type of person seen and circle all answers given.*	Health professional: Doctor ..... A Nurse / Midwife ..... B Health center staff/nurse's aide ..... C Other person: Community health worker ..... G Other (specify) X	
MN2A. HOW MANY WEEKS OR MONTHS PREGNANT WERE YOU WHEN YOU FIRST RECEIVED ANTENATAL CARE FOR THIS PREGNANCY? *Record the answer as stated by respondent.*	Weeks ..... 1 __ __ Months ..... 2 0 __ Do not know 998	
MN3. HOW MANY TIMES DID YOU RECEIVE ANTENATAL CARE DURING THIS PREGNANCY? *Probe to identify the number of times antenatal care was received. If a range is given, record the minimum number of times antenatal care was received.*	Number of times ..... __ __ Do not know 98	
MN3A. During your last antenatal care visit, did you spend money on medication, tests, doctor/nurse/ consultation fees, or other fees?	Yes ..... 1 No 2	2⇨MN3C
MN3B. During your last visit, how much money did you spend on medication, tests, doctor/nurse/ consultation fees, or other fees?	AMOUNT SPENT _____ (Baht) Free of charge ..... 888 Do not know 999	
MN3C. During your last antenatal care visit, did you spend money on transport?	Yes ..... 1 No 2	2⇨Next Module
MN3D. During your last antenatal care visit, how much money did you spend on transport?	AMOUNT SPENT _____ (Baht) Free of charge ..... 8888 Do not know 9999	
CP2. COUPLES USE VARIOUS WAYS OR METHODS TO PREVENT OR AVOID A PREGNANCY. ARE YOU OR YOUR HUSBAND CURRENTLY DOING SOMETHING OR USING ANY METHOD TO PREVENT OR AVOID GETTING PREGNANT?	Yes ..... 1 No 2	

NUTRITION KNOWLEDGE		NK
NK1. DID YOU ENROLL IN ANY CLASS/TRAINING ON HOW TO FEED BABIES/CHILDREN?	Yes ..... 1 No 2	
NK2. HOW LONG AFTER BIRTH SHOULD A BABY START BREASTFEEDING?	Immediately ..... 1 Less than one hour after birth ..... 2 After a few hours but less than 24 hours ..... 3 One day later ..... 4 More than one day later ..... 5 Do not think the baby should be breastfed ..... 6 Do not know 8	
NK3. HOW OFTEN SHOULD A BABY BE BREASTFED?	Whenever the baby wants ..... 1 When you see the baby is hungry ..... 2 When the baby cries ..... 3 Others (specify) ..... 4 DK 8	
NK4. AT WHAT AGE (MONTHS) SHOULD A BABY FIRST START TO RECEIVE FOODS IN ADDITION TO BREAST MILK?	Number of months ..... _ Do not know 8	

UNMET NEED		UN
ASK ONLY PREGNANT WOMEN **UN4.** NOW I WOULD LIKE TO ASK SOME QUESTIONS ABOUT THE FUTURE. AFTER THE YOU ARE CURRENTLY PREGNANT WITH, WOULD YOU LIKE TO HAVE ANOTHER CHILD, OR WOULD YOU PREFER NOT TO HAVE ANY MORE CHILDREN?	Have another child ..... 1 No more / None ..... 2 Undecided / Do not know 8	1⇨UN7 2⇨NEXT MODULE 8⇨NEXT MODULE
ASK ONLY NON-PREGNANT WOMEN **UN4A.** NOW I WOULD LIKE TO ASK SOME QUESTIONS ABOUT THE FUTURE. AFTER THE CHILD YOU RECENTLY DELIVERED, WOULD YOU LIKE TO HAVE ANOTHER CHILD, OR WOULD YOU PREFER NOT TO HAVE ANY MORE CHILDREN?	Have another child ..... 1 No more / None ..... 2 Undecided / Do not know 8	 2⇨NEXT MODULE 8⇨NEXT MODULE
UN7. HOW LONG WOULD YOU LIKE TO WAIT BEFORE THE BIRTH OF (ANOTHER) CHILD? *Record the answer as stated by respondent.*	Will wait for another () years ..... 1 Right after this pregnancy ..... 2 After marriage ..... 3 Want to but cannot have another pregnancy 4 Other ..... 5 DK ..... 8 Do not answer 9	
UN7A. RECORD THE NUMBER OF YEARS BEFORE THE BIRTH OF THE NEXT CHILD IF LESS THAN 1 YEAR, RECORD 1.	No. of years ..... _ _	

ROLE OF CAREGIVER AND THEIR PARTNERS		WE
WE1. WHO USUALLY DECIDES HOW THE MONEY YOU EARN WILL BE USED: YOU, YOUR SPOUSE, OR YOU AND YOUR SPOUSE JOINTLY?	Respondent ..... 1 Partner ..... 2 Joint Decision ..... 3 Other (specify) 6	
WE2. WHO USUALLY DECIDES HOW THE MONEY YOUR HUSBAND EARN WILL BE USED: YOU, YOUR SPOUSE, OR YOU AND YOUR SPOUSE JOINTLY?	Respondent ..... 1 Partner ..... 2 Joint Decision ..... 3 Other (specify) 6	
WE3. WHO USUALLY MAKES DECISION ABOUT YOUR OCCUPATION: YOU, YOUR SPOUSE, OR YOU AND YOUR SPOUSE JOINTLY?	Respondent ..... 1 Partner ..... 2 Joint Decision ..... 3 Other (specify) 6	
WE4. WHO USUALLY MAKES DECISIONS ABOUT YOUR HEALTHCARE: YOU, YOUR SPOUSE, OR YOU AND YOUR SPOUSE JOINTLY?	Respondent ..... 1 Partner ..... 2 Joint Decision ..... 3 Other (specify) 6	
WE4A. WHO USUALLY MAKES DECISIONS ABOUT [NAME]'S HEALTHCARE: YOU, YOUR SPOUSE, OR YOU AND YOUR SPOUSE JOINTLY?	Respondent ..... 1 Partner ..... 2 Joint Decision ..... 3 Other (specify) 6	
WE5. WHO USUALLY MAKES DECISIONS ABOUT MAKING MAJOR HOUSEHOLD PURCHASES: YOU, YOUR SPOUSE, OR YOU AND YOUR SPOUSE JOINTLY?	Respondent ..... 1 Partner ..... .2 Joint Decision ..... 3 Other (specify) 6	
WE6. WHO USUALLY MAKES DECISIONS ABOUT VIS-ITS TO YOUR FAMILY OR RELATIVES: YOU, YOUR SPOUSE, OR YOU AND YOUR SPOUSE JOINTLY?	Respondent ..... 1 Partner ..... 2 Joint Decision ..... 3 Other (specify) 6	

CAREGIVER'S AGENCY FACTOR		AG
AG1: WHAT DO YOU THINK ABOUT THIS STATEMENT: I CAN MOSTLY DETERMINE WHAT WILL HAPPEN IN MY LIFE? IF THE RESPONDENT AGREES/DISAGREES, ASK "HOW MUCH DO YOU AGREE/DISAGREE?"	Strongly agree ..... 1 Agree ..... 2 Neither agree nor disagree ..... 3 Disagree ..... 4 Strongly disagree ..... 5 DK 8	
AG2: WHAT DO YOU THINK ABOUT THIS STATEMENT: MY LIFE IS CONTROLLED BY CHANCE/LUCK/ACCIDENTAL HAPPENINGS? IF THE RESPONDENT AGREES/DISAGREES, ASK "HOW MUCH DO YOU AGREE/DISAGREE?"	Strongly agree ..... 1 Agree ..... 2 Neither agree nor disagree ..... 3 Disagree ..... 4 Strongly disagree ..... 5 DK 8	
AG3: WHAT DO YOU THINK ABOUT THIS STATEMENT: MY LIFE IS CHIEFLY CONTROLLED BY OTHER POWERFUL PEOPLE? IF THE RESPONDENT AGREES/DISAGREES, ASK "HOW MUCH DO YOU AGREE/DISAGREE?"	Strongly agree ..... 1 Agree ..... 2 Neither agree nor disagree ..... 3 Disagree ..... 4 Strongly disagree ..... 5 DK 8	

WM11. Record the time.	Hour and minutes ..... __ __ : __ __	

WM12. *Check List of Household Members:*
Is the respondent the mother or caregiver of 0-48 months old child living in this household?

- ❑ Yes ⇨ *Record the interview results in WM7, and go to the next QUESTIONNAIRE FOR CHILDREN to be administered to the same respondent.*
- ❑ No ⇨ *End the interview with this respondent by thanking her/him for her/his cooperation, and record the interview results in WM7 at the cover.*

Interviewer's Observations

Supervisor's Observations

F3 Child Questionnaire

INFORMATION PANEL FOR CHILDREN UNDER SIX YEARS OF AGE	**UF**
This questionnaire is to be administered to all mothers or, in their absence, the primary caregivers (see List of Household Members, column HL2), who care for a child under 6 years of age (see List of Household Members, column HL7B). A separate questionnaire should be used for each eligible child.	
UF1. EA/ Tambon number: ___ ___ ___ ___	**UF2**. Household number: ___ ___
UF3. Child's name: Name _____	**UF4.** Child's line number: ___ ___
	UF6. Mother's/Caregiver's line number: ___ ___
UF7. Interviewer's number _____	**UF8.** Day / Month / Year of interview: ___ ___ /___ ___ / 2 0 ___ ___

Repeat greeting if not already read to this respondent: WE REPRESENT THE DEPARTMENT OF CHILDREN AND YOUTH, THE MINISTRY OF SOCIAL DEVELOPMENT AND HUMAN SECURITY. WE ARE CONDUCTING A SURVEY ABOUT THE SITUATION OF FAMILIES AND HOUSEHOLDS, PREGNANT WOMEN, AND CHILDREN UNDER THE AGE OF 6. THE INFORMATION WILL BE USED FOR THE EVALUATION OF THE GOVERNMENT'S NEWBORN SUBSIDY PROGRAMME. NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT (CHILD'S NAME FROM UF3)'S HEALTH AND OTHER TOPICS. THE INTERVIEW WILL TAKE ABOUT 20 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS.	*If the greeting at the beginning of the household questionnaire has already been read to this person, then read the following:* NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT (child's name from UF3)'S HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 20 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS.
MAY I START NOW? ❑ *Yes, permission is given ⇨ Go to UF10 to record the time and then begin the interview.* ❑ *No, permission is not given ⇨ Circle '03' in UF9. Discuss this result with your supervisor.*	
UF9. Result of interview for children under the age of 6 Codes refer to mother/caregiver.	Completed ..... 01 Not at home during 3 visits ..... 02 Refused ..... 03 Partly completed ..... 04 Incapacitated ..... 05 Other (specify) 96

UF10. Record the time.	Hour and minutes ..... __ __ : __ __	

CHILD'S AGE		AG
AG1. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT CHILD CARE AND DEVELOPMENT OF (name). ON WHAT DAY, MONTH, AND YEAR WAS (name) BORN? *Probe:* WHAT IS HIS / HER BIRTHDAY? If the mother does not know the birth date, record 98 as the day. However, month and year of birth must be recorded.	Date of birth Day ..... __ __ DK day ..... 98 Month ..... __ __ Year ..... 2 0 __ __	
AG2. How old is (name)? *Probe:* *How old was (name) at his / her last birthday?* *Record age in completed years.* *Record '0' if less than 1 year.* *Compare and correct AG1 and/or AG2 if inconsistent.*	Age (in completed years) ..... __	

DELIVERY (ASK EVERY CHILD WHO WAS BORN SINCE 1ST OCTOBER 2015: ELIGIBLE CHILD)		MN
The questions in this part will ask about the delivery of…(NAME)….who was born since 1st October 2015 (Eligible Child)		
Test if…(NAME)… was born since 1st October 2015 (Eligible Child) • If the respondent is a mother/a caregiver ⇨go to MN7. • Otherwise ⇨go to the next part (PN)		
MN6. WHERE DID YOU GIVE BIRTH TO (NAME)? (OR for non-mother caregiver) WHERE DID (NAME)'S MOTHER GIVE BIRTH TO (NAME)? *Probe to identify the type of source.* *If unable to determine whether public or private, write the name of the place.* …… (Name of place)	Home Respondent's home …… 11 Other home …… 12 Public sector Government hospital …… 21 Government clinic / health center …… 22 Other public (specify) …… 26 Private Medical Sector Private hospital …… 31 Private clinic …… 32 Other private medical (specify) …… 36 Other (specify) …… 96 Do not know …… 98 Do not answer …… 99	
MN7. WHO ASSISTED WITH THE DELIVERY OF (name)? *Probe:* ANYONE ELSE? *Probe for the type of person assisting and circle all answers given.* *If respondent says no one assisted, probe to determine whether any adults were present at the time of delivery.*	Health professional: Doctor …… A Nurse/Midwife …… B Health center staff/nurse's aide …… D Other person Community health worker …… G Relative / Friend …… H Other (specify) …… X No one …… Y	
MN8. WHEN (name) WAS BORN, WAS HE/SHE VERY LARGE, LARGER THAN AVERAGE, AVERAGE, SMALLER THAN AVERAGE, OR VERY SMALL?	Very large …… 1 Larger than average …… 2 Average …… 3 Smaller than average …… 4 Very small …… 5 Do not know …… 8 Do not answer …… 9	

POST-NATAL VISITS (ASK ONLY THE MOTHER OR THE CAREGIVER OF THE ELIGIBLE CHILD)		PN
Part 1 These questions will ask about post-natal visits of the older sibling of the eligible child.		
PN1 DID YOU (THE MOTHER) RECEIVE ANY POST-NATAL HEALTH CHECKS ON YOURSELF DURING THE FIRST YEAR AFTER DELIVERY OF (name)?	Yes ..... 1 No 2	2⇨PN2
PN1A. IF YES, HOW MANY TIMES?	Record numbers of time…….(2 digits)	
PN2 DID YOU RECEIVE ANY POST-NATAL HEALTH CHECKS ON (name) DURING THE FIRST YEAR AFTER DELIVERY OF (name)?	Yes ..... 1 No 2	2⇨NEXT MODULE
PN2A. IF YES, HOW MANY TIMES?	Record numbers of time…….(2 digits)	NEXT MODULE
Part 2 The questions in this part will ask about post-natal visits of only the eligible child.		
PN3. IN THE FIRST 6 WEEKS OR APPROXIMATELY ONE AND A HALF MONTH AFTER THE DELIVERY OF (name), DID (NAME) RECEIVE ANY HEALTH CHECKS?	Yes ..... 1 No ..... 2 DK ..... 8 DA 9	2⇨ PN3B 8,9⇨ PN4
PN3A. IN THE FIRST 6 WEEKS OR APPROXIMATELY ONE AND A HALF MONTH AFTER THE DELIVERY, HOW MANY TIMES DID (NAME) RECEIVE THESE CHECKS? *If 7 or more times, record '7'* *If do not know/could not remember, record '8'*	Number of times ..... _ DK ..... 8 DA 9	⇨PN4
PN3B. WHAT IS THE MAIN REASON THAT (NAME) DID NOT RECEIVE THE POST-NATAL CHECK? *can answer more than one reason*	Do not need the check-up ..... A Hospital/clinic too far ..... B Other things that obstruct the process ..... C Check-up fees too high ..... D Religious reasons ..... E First appointment after more than 6 weeks ..... F Others (specify ..... G D ..... H	
PN4. IN THE FIRST 6 WEEKS OR APPROXIMATELY ONE AND A HALF MONTH AFTER THE DELIVERY OF (NAME), DID THE MOTHER RECEIVE ANY HEALTH CHECKS? *(Or for non-mother caregiver)* IN THE FIRST 42 DAYS AFTER THE DELIVERY OF (NAME), DID THE MOTHER OF NAME RECEIVE ANY HEALTH CHECKS?	Yes ..... 1 No ..... 2 DK ..... 8 DA 9	2⇨PN4B 8,9⇨ end module
PN4A. IN THE FIRST 6 WEEKS OR APPROXIMATELY ONE AND A HALF MONTH AFTER THE DELIVERY, HOW MANY TIMES DID THE MOTHER RECEIVE THESE CHECKS? *If 7 or more times, record '7'* *If do not know/could not remember, record '8'*	Number of times ..... __ DK 8	⇨END MODULE
PN4B. WHAT IS THE MAIN REASON THAT THE MOTHER OF (NAME) DID NOT RECEIVE THE POST-NATAL HEALTH CHECKS? CAN ANSWER MORE THAN 1 REASON	Don't need to check ..... A Hospital/clinic too far ..... B Other things that obstruct the process ..... C Check-up fees too expensive ..... D Religious reasons ..... E First appointment longer than 6 weeks ..... F Others (specify) ..... G DK ..... H	

BREASTFEEDING AND DIETARY INTAKE		BD
Test if (name) is 0-3 years old. • *If the respondent is the mother or the caregiver of a child who is 0,1,2,3 years old⇨ go to BD2* • *If the respondent is the mother or the caregiver of a child who is more than 3 years old ⇨ go to the next part (EC)*		
BD2. HAS (name) EVER BEEN BREASTFED?	Yes ..... 1 No ..... 2 DK ..... 8 DA 9	2,8,9⇨BD4
ASK ONLY THE MOTHER AND THE ELIGIBLE CHILD **BD2A.** HOW LONG AFTER BIRTH DID YOU FIRST PUT (name) TO THE BREAST? *If less than 1 hour, record "00" hours.* *If less than 24 hours, record hours.* OTHERWISE, RECORD DAYS.	Immediately ..... 000 Hours ..... 1 __ __ Days ..... 2 __ __ DK / Don't remember ..... 998 DA 999	
ASK ONLY THE MOTHER AND THE ELIGIBLE CHILD **BD2B.** IN THE FIRST THREE DAYS AFTER DELIVERY, WAS (name) GIVEN ANYTHING TO DRINK OTHER THAN BREAST MILK?	Yes ..... 1 No ..... 2 DK ..... 8 DA 9	2,8,9⇨BD3
ASK ONLY THE MOTHER AND THE ELIGIBLE CHILD **BD2C.** WHAT WAS (name) GIVEN TO DRINK? *Probe:* ANYTHING ELSE?	Infant formula ..... A Milk (other than breast milk) ..... B Plain water ..... C Sugar or glucose water ..... D Gripe water ..... E Sugar-salt-water solution ..... F Fruit juice ..... G Tea / Infusions ..... H Honey ..... I Other (specify) X	
BD3. IS (name) STILL BEING BREASTFED?	Yes ..... 1 No ..... 2 DK ..... 8 DA 9	2,8,9⇨ BD3B
ASK ONLY THE MOTHER AND THE ELIGIBLE CHILD **BD3A.** HOW MANY TIMES WAS (name) BREASTFED YESTERDAY, DURING THE DAY OR NIGHT?	Number of times breastfed ..... __ __ DK ..... 98 DA 99	⇨ BD4
ASK ONLY THE ELIGIBLE CHILD **BD3B.** HOW MANY MONTHS WAS (name) BREASTFED FOR?	Months ..... __ __ DK ..... 98 DA 99	IF >=6 ⇨ BD3C
ASK ONLY THE ELIGIBLE CHILD **BD3C.** WHY WAS (name) BREASTFED FOR LESS THAN 6 MONTHS?	Did not have breast milk/ flat nipple/ not ready to breastfeed ..... A Had to go to work/ go to school ..... B Did not want to breastfeed ..... C Other (specify) ..... D DK ..... E DA ..... F	
BD4. YESTERDAY, DURING THE DAY OR NIGHT, DID (name) DRINK ANYTHING FROM A BOTTLE WITH A NIPPLE?	Yes ..... 1 No ..... 2 DK ..... 8 Do not answer 9	

BREASTFEEDING AND DIETARY INTAKE					BD
BD5. DID (name) DRINK ORS (ORAL REHYDRATION SOLUTION) YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK ..... 8 Do not answer 9				
BD6. DID (name) DRINK OR EAT VITAMIN OR MINERAL SUPPLEMENTS OR ANY MEDICINES OR IRON-SUPPLEMENT SYRUP YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK ..... 8 Do not answer 9				
BD7. NOW I WOULD LIKE TO ASK YOU ABOUT (OTHER) LIQUIDS THAT (NAME) MAY HAVE HAD YESTERDAY DURING THE DAY OR THE NIGHT. I AM INTERESTED TO KNOW WHETHER (NAME) HAD THE ITEM EVEN IF COMBINED WITH OTHER FOODS. PLEASE INCLUDE LIQUIDS CONSUMED OUTSIDE OF YOUR HOME. DID (NAME) DRINK (NAME OF ITEM) YESTERDAY DURING THE DAY OR NIGHT:					
		Yes	**No**	**DK**	
[A] PLAIN WATER? IF THE RESPONDENT SAYS "YES," THEN PROBE TO LEARN SPECIFICALLY THAT THE CHILD WAS GIVEN WATER ONLY FOR DRINKING AND NOT AS MOUTHWASH OR FOR CLEANING TO ASCERTAIN THE RESPONSE.	Plan Water	1	2	8	
[B] JUICE OR JUICE DRINKS?	Juice or juice drinks	1	2	8	
[C] NAM SOUP?	Nam soup	1	2	8	
[D] MILK SUCH AS FRESH MILK, TINNED, PACKED, BOXED, ULTRA-HIGH TEMPERATURE PROCESSING (UHT), PASTEURIZED, POWDERED, SOYA, OR CORN?	Milk	1	2	8	
IF YES: HOW MANY TIMES DID (NAME) DRINK MILK? *IF MORE THAN 7 TIMES, RECORD "7."* *IF DO NOT KNOW, RECORD "8."*	Number of times drank milk ..... __				
[E] INFANT FORMULA?	Infant formula	1	2	8	
IF YES: HOW MANY TIMES DID (NAME) DRINK INFANT FORMULA? *IF 7 OR MORE TIMES, RECORD "7."* *IF NOT KNOWN, RECORD "8."*	Number of times drank infant formula ..... __ __				
[F] ANY OTHER LIQUIDS? (SPECIFY)_____	Other liquids	1	2	8	

BREASTFEEDING AND DIETARY INTAKE					BD
BD8. NOW I WOULD LIKE TO ASK YOU ABOUT (OTHER) FOODS THAT (NAME) MAY HAVE HAD YESTERDAY DURING THE DAY OR NIGHT. AGAIN, I AM INTERESTED TO KNOW WHETHER (NAME) HAD THE ITEM EVEN IF COMBINED WITH OTHER FOODS. PLEASE INCLUDE FOODS CONSUMED OUTSIDE OF YOUR HOME. DID (NAME) EAT (NAME OF FOOD) YESTERDAY DURING THE DAY OR THE NIGHT:					
		Yes	**No**	**DK**	
[A] YOGURT?	Yogurt	1	2	8	
IF YES: HOW MANY TIMES DID (NAME) HAD YOGURT? *IF 7 OR MORE TIMES, RECORD "7."* *IF UNKNOWN, RECORD "8."*	Number of times had yogurt ..... __				
[B] ANY FORTIFIED BABY FOOD, E.G., CERELAC, NESTLE, PEDIASURE?	Fortified baby food, e.g. Cerelac	1	2	8	
IF YES: HOW MANY TIMES DID (NAME) HAD FORTIFIED BABY FOOD? *IF 7 OR MORE TIMES, RECORD "7."* *IF UNKNOWN, RECORD "8."*	Number of times had fortified food ..... __				
[C] BREAD, RICE, NOODLES, PORRIDGE, OR OTHER FOODS MADE FROM GRAINS?	Foods made from grains	1	2	8	
[D] PUMPKIN, CARROTS, SQUASH OR SWEET POTATOES OR VEGETABLES THAT ARE YELLOW OR ORANGE INSIDE?	Pumpkin, carrots, etc.	1	2	8	
[E] WHITE POTATOES, WHITE YAMS, MANIOC/ CASSAVA, OR ANY OTHER ROOT VEGETABLES?	White potatoes, white yams, manioc/cassava, etc.	1	2	8	
[F] ANY DARK GREEN, LEAFY VEGETABLES?	Dark green, leafy vegetables	1	2	8	
[G] RIPE MANGOES, PAPAYAS, THAI MELON, CANTALOUPE, AND MELON?	Ripe mangoes, papayas, Thai melon, etc.	1	2	8	
[H] ANY OTHER FRUITS OR VEGETABLES?	Other fruits or vegetables	1	2	8	
[I] LIVER, KIDNEY, OR OTHER ORGAN MEATS?	Liver, kidney, heart, or other organ meats	1	2	8	
[J] ANY MEAT, SUCH AS BEEF, PORK, CHICKEN, DUCK, LAMB, OR GOAT?	Meat, such as beef, pork, lamb, goat, etc.	1	2	8	
[K] EGGS?	Eggs	1	2	8	
[L] FRESH OR DRIED FISH OR DRIED SHELLFISH?	Fresh or dried fish	1	2	8	
[M] ANY FOODS MADE FROM BEANS, PEAS, LENTILS, OR NUTS?	Foods made from beans, peas, etc.	1	2	8	
[N] BUTTER OR ANY OTHER FOOD MADE FROM MILK?	Cheese or any other food made from milk	1	2	8	
[O] ANY OTHER SOLID, SEMI-SOLID, OR SOFT FOOD THAT I HAVE NOT MENTIONED? (SPECIFY)_____	Other solid, semi-solid, or soft food	1	2	8	

BREASTFEEDING AND DIETARY INTAKE		BD
BD9. Check BD8 (Categories "A" through "O"). ❑ *At least one "Yes" or all "DK" ⇨ Go to BD11.* ❑ *Else ⇨ Continue with BD10.*		
BD10. Probe to determine whether the child ate any solid, semi-solid, or soft food yesterday during the day or night. ❑ *The child did not eat or the respondent does not know ⇨ Go to Next Module.* ❑ *The child ate at least one solid, semi-solid, or soft food item mentioned by the respondent ⇨ Go back to BD8 and record food eaten yesterday [A to O]. When finished, continue with BD11.*		
BD11. HOW MANY TIMES DID (name) EAT ANY SOLID, SEMI-SOLID, OR SOFT FOOD YESTERDAY DURING THE DAY OR NIGHT? *If 7 or more times, record "7."*	Number of times ..... __ DK 8	

EARLY CHILDHOOD DEVELOPMENT						EC
EC1. HOW MANY CHILDREN'S BOOKS OR PICTURE BOOKS DO YOU HAVE FOR [NAME]? (INCLUDE ELECTRONIC BOOKS, DO NOT INCLUDE BOOKS FOR OLDER CHILDREN AND TEXTBOOKS.)	None ..... 00 Number ..... 0__ 10 or more 10					
ASK ONLY THE ELIGIBLE CHILD **EC2.** I AM INTERESTED IN LEARNING ABOUT THE THINGS THAT (name) PLAYS WITH WHEN HE/SHE IS AT HOME. DOES HE/SHE PLAY WITH:		**Y**	**N**	**DK**	**DA**	
[A] HOMEMADE TOYS (SUCH AS DOLLS, CARS, OR OTHER TOYS MADE AT HOME)?	Homemade toys	1	2	8	9	
[B] TOYS FROM A SHOP OR MANUFACTURED TOYS?	Toys from a shop	1	2	8	9	
[C] HOUSEHOLD OBJECTS (SUCH AS BOWLS OR POTS) OR OBJECTS FOUND OUTSIDE (SUCH AS STICKS, ROCKS, ANIMAL SHELLS, OR LEAVES)?	Household objects or outside objects	1	2	8	9	
IF THE RESPONDENT SAYS "YES" TO THE CATEGORIES ABOVE, THEN PROBE TO LEARN SPECIFICALLY WHAT THE CHILD PLAYS WITH TO ASCERTAIN THE RESPONSE.						

EARLY CHILDHOOD DEVELOPMENT		EC
EC3. SOMETIMES ADULTS TAKING CARE OF CHILDREN HAVE TO LEAVE THE HOUSE TO GO SHOPPING, WASH CLOTHES, OR FOR OTHER REASONS AND HAVE TO LEAVE YOUNG CHILDREN. ON HOW MANY DAYS IN THE PAST WEEK WAS (name): [A] LEFT ALONE FOR MORE THAN AN HOUR? [B] LEFT IN THE CARE OF ANOTHER CHILD, THAT IS, SOMEONE LESS THAN 10 YEARS OLD, FOR MORE THAN AN HOUR? IF " NONE," ENTER "0." IF "DON'T KNOW," ENTER "8. "	Number of days left alone for more than an hour ..... __ Number of days left alone with other child for more than an hour ..... __	
EC4. CHECK AG2: AGE OF CHILD.	❑ Child age 0, 1, or 2⇨ Go to Next Module. ❑ Child age 3 or above⇨ Continue with EC5.	
EC5. DOES (name) ATTEND ANY ORGANISED LEARNING OR EARLY CHILDHOOD EDUCATION PROGRAMME, SUCH AS A PRIVATE OR GOVERNMENT FACILITY, INCLUDING KINDERGARTEN OR COMMUNITY CHILD CARE?	Yes ..... 1 No ..... 2 DK ..... 8 DA 9	
EC7. IN THE PAST 3 DAYS, DID YOU OR ANY HOUSEHOLD MEMBER AGE 15 OR OVER ENGAGE IN ANY OF THE FOLLOWING ACTIVITIES WITH (NAME): *IF YES, ASK:* WHO ENGAGED IN THIS ACTIVITY WITH (NAME)? CIRCLE ALL THAT APPLY. [A] READ BOOKS TO OR LOOKED AT PICTURE BOOKS WITH (name)? [B] TOLD STORIES TO (name)? [C] SANG SONGS TO (name) OR WITH (name), INCLUDING LULLABIES? [D] TOOK (name) OUTSIDE THE HOME, COMPOUND, YARD, OR ENCLOSURE? [E] PLAYED WITH (name)? [F] NAMED, COUNTED, OR DREW THINGS TO OR WITH (name)?	Mother Father Other No One Read books A B X Y Told stories A B X Y Sang songs A B X Y Took outside A B X Y Played with A B X Y Named/counted A B X Y	

CHILD SUPPORT GRANT PERTINENT TO INDEX CHILD		GS
WE WOULD NOW LIKE TO ASK SOME QUESTIONS SPECIFICALLY ON THE CHILD SUPPORT GRANT PROGRAMME FOR…(NAME)…, WHO IS AN ELIGIBLE CHILD.		
CHECK: ❑ WHETHER…(NAME)…IS AN ELIGIBLE CHILD. (BORN SINCE 1ST OCTOBER 2015) ❑ THE RESPONDENT IS THE MOTHER OR THE CAREGIVER OF THE ELIGIBLE CHILD IF THESE 2 CONDITIONS APPLY, GO TO GS1.		
GS1. ARE YOU AWARE OF THE GOVERNMENT'S CHILD SUPPORT GRANT PROGRAMME (IF 'NO,' KEEP ASKING TO MAKE SURE THAT HE/SHE DOES NOT KNOW ABOUT THE PROGRAMME. (FOR EXAMPLE, EXPLAINING THAT THE PROGRAMME GIVES 600 BAHT TO A NEW BORN CHILD PER MONTH COULD HELP VERIFY THAT.)	Yes ..... 1 No 2	2⇨AN1
GS2. WHEN DID YOU/ANYONE IN THIS FAMILY FIRST HEAR ABOUT THE CHILD SUPPORT GRANT?	Prior to pregnancy ..... 1 Less than 3 months of pregnancy ..... 2 3-6 months of pregnancy ..... 3 7-9 months of pregnancy ..... 4 Last time the interviewer visited ..... 5 After the child is born ..... 6 Do not know 8	
GS2A. WHERE OR FROM WHOM DID ANYONE IN THIS FAMILY FIRST HEAR ABOUT THE CHILD SUPPORT GRANT?	Family members ..... 1 Friends/acquaintances ..... 2 Other parents ..... 3 Radio, television, pamphlets, and other media ..... 4 Neighbors ..... 5 Social workers ..... 6 Hospital/Health center ..... 7 NGOs ..... 8 Other (specify) ..... 96 Do not know 98	
GS3. HAS ANYONE APPLIED FOR THE CHILD SUPPORT GRANT?	Yes ..... 1 No 2	1⇨GR32
GS31. WHY HAS NO ONE APPLIED FOR THE CHILD SUPPORT GRANT? *(CAN CHOOSE MORE THAN 1.)*	A consider yourself not eligible B do not want to be considered as a poor C procedure too complicated E do not know registration process F cannot find/still finding endorsers G do not have required documents yet H thought registration period is over/cannot register in time I not living in this jurisdiction anymore J no time to register or for finding required documents K waiting until after delivery D other (specify)	⇨GO TO AN1
GS32. WHO MANAGED TO REGISTER [NAME] TO THE CHILD SUPPORT GRANT PROGRAMME?	If a household member, record the code from the household survey: _____ If a non-household member, use relationship code from code book_____ Do not know 98	
GS4. WHEN DID YOU OR ANYONE IN THIS HOUSEHOLD APPLY FOR THE CHILD SUPPORT GRANT FOR [NAME]?	Less than 3 months of pregnancy ..... 1 3-6 months of pregnancy ..... 2 7-9 months of pregnancy ..... 3 After the delivery ..... 4 Do not know 8	

CHILD SUPPORT GRANT PERTINENT TO INDEX CHILD		GS
GS5. WERE THERE ANY PROBLEMS WHILE APPLYING FOR THE CHILD SUPPORT GRANT PROGRAMME FOR [NAME]?	Yes ..... 1 No 2	2⇨GS6
GS51. WHAT PROBLEMS WERE THEY? *(CAN CHOOSE MORE THAN 1.)*	cannot find endorsers ..... A no money to open bank account ..... B no proper documents ..... C other (specify) ..... D	
GS52. HOW WERE THE PROBLEMS SOLVED? *(CAN CHOOSE MORE THAN 1.)*	asked a family member for help ..... A asked people outside HH for help ..... B other (specify) ..... C did not do anything ..... D	
GS6. IS [NAME] ELIGIBLE FOR THE CHILD SUPPORT GRANT PROGRAMME?	Yes ..... 1 No ..... 2 Do not know 3	1,3⇨GR2
GS61. WHY IS (NAME) NOT ELIGIBLE FOR THE CHILD SUPPORT GRANT PROGRAMME? *(CAN CHOOSE MORE THAN 1.)*	Got Social Security ..... A Had someone object ..... B Rejected by the local government or the Bangkok Metropolitan administration ..... C Other (specify) ..... D Do not know ..... E	GO TO AN1

RECEIVING THE CHILD SUPPORT GRANT (ASK ONLY THE ELIGIBLE CHILD WHO APPLIED FOR THE GRANT)		GR
GR2. DOES [NAME] CURRENTLY RECEIVE THE CHILD SUPPORT GRANT?	Yes ..... 1 No ..... 2 Do not know 8	2,8 ⇨ AN1
GR4. WHO IS ENTITLED TO RECEIVE THE CSG FOR (NAME)? (SPECIFY RELATIONSHIP)	If a household member, record the code from the household survey: _____ If a non-household member, use relationship code from code book_____ Do not know 9 8	
GR5. WHO IS THE PERSON WHO ACTUALLY COLLECTS/ RECEIVES THE CSG FOR [NAME]?	1. If a household member, record the code from the household survey:... _____ 2. If a non-household member, use relationship code from code book:..._____ Do not know 98	1,98 ⇨ skip to GR8
GR6. DID THE CSG RECIPIENT GIVE ANY OF THE LAST THREE MONTH'S GRANT MONEY TO THIS HOUSEHOLD?	Yes ..... 1 No ..... 2 DK 8	2, 8 ⇨ skip to AN1
GR7. (IF YES) HOW MUCH OF THE CSG FOR [NAME] DOES S/HE NORMALLY GIVE TO THIS HOUSEHOLD PER MONTH?	_____ Baht per month	
GR8. WHO IS THE PERSON THAT TAKES THE MAIN DECISIONS ABOUT HOW TO USE THE CSG MONEY OF [NAME]?	If a current household member, write line no. from the household survey: ..... _ _ If a non-household member, use relationship code from code book : ..... _ _ Do not know 98	
Probe: *1. If person identified in GR8 is member of this HH, ask her/him the remaining questions in this section.* *2. If person identified in GR8 is non-member of this HH but the person identified in GR5 is, ask the remaining questions to the person identified in GR5* *3. If persons identified in GR8 and GR5 are both non-members of this HH, ask the remaining questions to the caregiver of the target child*		
GR9. DOES ANY OTHER PERSON PARTICIPATE IN THESE DECISIONS?	Yes ..... 1 No ..... 2 Do not know ..... 8 Do not answer 9	2 ⇨ skip to GR3
GR10. IF YES, PLEASE INDICATE AT MOST THREE PEOPLE PARTICIPATING IN THESE DECISIONS.	If a current household member, write line no. from the household survey: _____. _____. _____. If a non-household member, use relationship code from code book _____. _____. _____. Do not know 98	
GR3. IN WHAT MONTH/YEAR WAS THE CSG FOR [NAME] FIRST RECEIVED?	Month/Year ..... _ _/ 20 _ _ Do not know ..... 9998 Do not answer 9999	

RECEIVING THE CHILD SUPPORT GRANT (ASK ONLY THE ELIGIBLE CHILD WHO APPLIED FOR THE GRANT)		GR
GR11A. IS THE CSG RECEIVED IN BANK ACCOUNT OR IN CASH?	Bank account ..... 1 Cash ..... 2 Do not know ..... 8 Do not answer 9	
GR11. HOW OFTEN DO YOU NORMALLY WITHDRAW OR RECEIVE CSG MONEY?	Every month ..... 1 When it is convenient ..... 2 When it is necessary ..... 3 Never withdraw or receive ..... 4 DK ..... 8 DA 9	
GR12. WHEN DID YOU LAST WITHDRAW OR RECEIVE YOUR CSG PAYMENT AND HOW MUCH WAS IT?	Day/Month/Year of Last Payment __ __/__ __/2 0 __ __ Receive_____Baht Do not know 999998	
GR12A. NORMALLY, ARE THERE ANY EXPENSES IN WITHDRAWING OR RECEIVING THE CSG MONEY? IF YES, HOW MUCH?	Yes ..... 1 No ..... 2 Do not know ..... 8 Do not answer ..... 9 (If yes) _____Baht	
GR13. HOW MUCH OF THE LAST CSG PAYMENT REMAINS UNSPENT?	Remaining_____Baht DK ..... 8 DA 9	
GR14. IS THE GRANT ALL SPENT ON [NAME]?	Yes ..... 1 No ..... 2 DK ..... 8 DA 9	If 1 ⇨ skip to GR16
GR15. WHOM IS THE CHILD SUPPORT GRANT FOR [NAME] MOSTLY SPENT ON?	The whole family ..... 1 [NAME] ..... 2 Other child/children in the family ..... 3 All children in the family ..... 4 The caregiver of [Name] ..... 5 The recipient (who is not caregiver) ..... 6 Other household members ..... 7 Someone outside the household ..... 8 Other (specify) ..... 9 Do not know 98	For all responses other than 3 ⇨ GR16
GR15A. WHICH OTHER CHILD IS THE CSG MONEY FOR [NAME] SPENT ON?	Record line no. of the child: _ _	
GR16. OUT OF THE CSG THAT WAS RECEIVED LAST MONTH FOR [NAME], HOW MUCH MONEY WAS SPENT ONLY ON [NAME]? *If the respondent doesn't know the amount, prompt using the expenditure categories in the code sheet.*	_____Baht DK 8	

RECEIVING THE CHILD SUPPORT GRANT (ASK ONLY THE ELIGIBLE CHILD WHO APPLIED FOR THE GRANT)		GR
GR17. WHAT DID THE EXTRA MONEY FROM THE CSG HELP YOU BUY MORE OF? CAN ANSWER UP TO 3 ITEMS ASK IF THEY ARE NEW ITEMS, SAME ITEMS WITH HIGHER QUANTITY, OR SAME ITEMS WITH HIGHER QUALITY. IF CANNOT GIVE 3 ITEMS AT FIRST, PROBE THE REMAINING ITEMS IN LISTS, BUT CAN CHOOSE UP TO THREE ITEMS FINALLY.	New item Quantity Quality First item_ 1 2 3 Second item_ 1 2 3 Third item_ 1 2 3 Disposable Diapers ..... 1 Powdered milk for children ..... 2 Dietary supplement for children such as Cerelac ..... 3 Children's wear ..... 4 Toys ..... 5 Saving/saving accounts ..... 6 Medication/vitamins ..... 7 Consumption/ expenditure ..... 8 Expenditure/ on debts ..... 9 School/education expense ..... 10 Health care ..... 11 Expenditure on trips to doctors ..... 12 Childcare or crèche ..... 13 Transportation ..... 14 Pocket money of the other non-eligible children in the household..... 15 Cosmetics ..... 16 Alcohol/cigarettes ..... 17 Lottery ..... 18 Transfers to family outside household ..... 19 Water, electricity, and other utilities expense ..... 20 Other (specify) ..... 21 Do not know 98	
GR18. THE CSG HAS MADE IT EASIER FOR MY CHILD WHO IS IN THE CSG PROGRAMME AND ME TO ACCESS HEALTHCARE MORE EASILY	Strongly disagree. ..... 1 Disagree ..... 2 Neutral ..... 3 Agree ..... 4 Strongly agree ..... 5 DK 8	
GR19. THE CSG HAS MADE IT EASIER TO PROVIDE BETTER FOOD AND NUTRITION FOR THE CHILDREN	Strongly disagree ..... 1 Disagree ..... 2 Neutral ..... 3 Agree ..... 4 Strongly agree ..... 5 DK 8	
GR20. THE CSG HAS MADE IT EASIER TO PROVIDE MORE AND BETTER FOOD AND NUTRITION FOR THE ENTIRE HOUSEHOLD	Strongly disagree ..... 1 Disagree ..... 2 Neutral ..... 3 Agree ..... 4 Strongly agree ..... 5 DK 8	
GR21. THE CSG HAS MADE IT EASIER TO PROVIDE MORE TIME TO TAKE CARE OF/SPEND MORE TIME WITH [NAME].	Strongly disagree ..... 1 Disagree ..... 2 Neutral ..... 3 Agree ..... 4 Strongly agree ..... 5 DK 8	

RECEIVING THE CHILD SUPPORT GRANT (ASK ONLY THE ELIGIBLE CHILD WHO APPLIED FOR THE GRANT)		GR
GR22. THE CSG CAN BE USED AS AN EMERGENCY FUND	Strongly disagree ..... 1 Disagree ..... 2 Neutral ..... 3 Agree ..... 4 Strongly agree ..... 5 DK 8	
GR23. THE CSG HAD MADE IT EASIER TO BORROW MONEY FROM OTHERS	Strongly disagree ..... 1 Disagree ..... 2 Neutral ..... 3 Agree ..... 4 Strongly agree ..... 5 DK 8	
GR24. THE CSG HAS EASED STRESS, IF ANY, FOR YOU OR YOUR HOUSEHOLD	Strongly disagree ..... 1 Disagree ..... 2 Neutral ..... 3 Agree ..... 4 Strongly agree ..... 5 DK 8	
GR25. THE CSG HAS RAISED RESPECT FOR YOU FROM OTHER HH MEMBERS?	Strongly disagree ..... 1 Disagree ..... 2 Neutral ..... 3 Agree ..... 4 Strongly agree ..... 5 DK 8	
GR26. HAS THE CSG CAUSED TENSIONS OR ARGUMENTS IN YOUR HOUSEHOLD AND/OR YOUR EXTENDED FAMILY OVER WHO DECIDES HOW TO USE THE GRANT?	Yes ..... 1 No ..... 2 DK 8	2,8 end ⇨ module
GR27. THE ARGUMENTS AND TENSIONS ARE BETWEEN THE RECIPIENT OF THE GRANT AND WHOM?	If a current household member, write line no. from the household survey:_____. If a non-household member, use relationship code from code book: _____. Conflict/tension between other people ..... 77 Do not know 98	

ANTHROPOMETRY		AN
ASK THE MOTHER OF THE ELIGIBLE CHILD **AN8.** DO YOU KNOW YOUR HEIGHT? (Or for non-mother caregiver) DO YOU KNOW THE HEIGHT OF [NAME]'S MOTHER?	Yes ..... 1 No ..... 2 Not sure 3	2,3⇨ AN1
AN8A. MAY I SEE YOUR ID CARD?	Yes ..... 1 No 2	2⇨ AN1
AN8B. CAN I HAVE YOUR ID NUMBER?	ID No._ _ _ _ _ _ _ _ _ _ _ _ _ _ No 99	
AN9. WHAT IS YOUR HEIGHT (Or for non-mother caregiver) WHAT IS THE HEIGHT OF [NAME]'S MOTHER'S? *if ID card is present, also check the height from id card*	Height (cm) ..... __ __ __	
LOOK AT THE INFORMATION OF WEIGHT AND HEIGHT OF THE CHILD FROM THE PINK BOOK AND RECORD WEIGHT AND HEIGHT OF THE CHILD IN THE QUESTIONS BELOW. (FOR EVERY CHILD)		
AN1. DOES THE MOTHER/CARE-TAKER HAVE THE PINK BOOK FOR THE CHILD?	Has the Pink Book ..... 1 Does not have the Pink Book ..... 2 Do not answer 9	2⇨AN6
AN2. CHILD'S WEIGHT AT BIRTH FROM THE PINK BOOK	Kilograms (kg) ..... __ __ . __ No record 99.9	
AN3. CHILD'S HEIGHT / LENGTH AT BIRTH FROM THE PINK BOOK	Length / Height (cm) ..... __ __ __ . __ No record 999.9	
AN4. THE LATEST RECORD OF CHILD'S WEIGHT FROM THE PINK BOOK	Measured date __/__/20__ Kilograms (kg) ..... __ __ . __ No record 99.9	
AN5. THE LATEST RECORD OF CHILD'S HEIGHT / LENGTH FROM THE PINK BOOK:	Measured date __/__/20__ Length / Height (cm) ..... __ __ . __ No record 999.9	
If this is an eligible child, measure the current weight/length		
AN6. MEASURE CHILD'S WEIGHT:	Measured date __/__/20__ Kilograms (kg, 2 decimal) ..... __ __ . __ No record 999.9	
AN7. MEASURE CHILD'S LENGTH:	Measured date __/__/20__ Length / Height (cm) ..... __ __ . __ No record 999.9	

UF11. Record the time.	Hour and minutes ..... __ __ : __ __	

UF12. *Checklist of Household Members:*
Is the respondent the mother or caregiver of another child under 5 years of age living in this household?

- ❑ *Yes ⇨ Go to the next QUESTIONNAIRE FOR CHILDREN to be administered to the same respondent.*
- ❑ *No ⇨ End the interview with this respondent by thanking her/him for her/his cooperation.*

Check to see if there are other woman or child questionnaires to be administered in this household.

Interviewer's Observations

Supervisor's Observations

G. Qualitative Survey Instruments

The qualitative instruments for endline

The instruments for Focus Group Discussions (FGDs) and Key Informant Interview (KIIs) for the target groups are as following:

1. The poor or near poor pregnant women who are eligible and joined the CSG
2. The mothers or caregivers of CSG recipients who got the grant
3. The mothers or caregivers of CSG applicants who have still not got the grant
4. The Local Tambon Officer Responsible for the Implementation of CSG
5. Village health volunteers
6. Village community leaders
7. Local hospital officers

Research objectives	FGD questions	KII questions
1. Pregnant women RESPONDENT: The poor or near-poor 6-8 months pregnant women who are eligible and joined the CSG		
1. The assessment of the perception andnunderstanding of the CSG 2. The process review of the CSG including public relations and enrolment 3. The assessment of barriers to joining the CSG 4. Recommendations for development and improving the CSG joining process	1. Who in the family is being cared for you during your pregnancy period? How did they help? 2. Did you get any help from the local hospital, village health volunteers, and village community leaders during your pregnancy period? How did they help? 3. How did you first learn about the CSG programme? From whom? Which channel? 4. When you first heard about it, what did you understand it was for? Who were eligible to receive it? 5. When you first heard about CSG, did you think yourself to be eligible to receive it? 6. Is there anyone in your community who can provide information on the CSG? Why information do they have about the CSG? 7. Have you ever asked or consulted for CSG programme with anyone? Why did you decide to consult with them? 8. After learning about the grant, did you apply for the grant straight away? If yes, why? 9. (Ask only who did not apply for the grant straight away) What were the reasons that you did not apply sooner? Did you have to discuss or consult with anyone? 10. Have you ever experienced difficulty in finding documents required to apply for the CSG? How did you eventually overcome these obstacles to applying? (register form/ certificate of poor or near-poor households/copy of ID card/ copy of mother and child health handbook)	1. How long have you stayed in this community? 2. How many children do you have including this pregnancy? How many months pregnant are you? 3. How do you take care of yourself during pregnancy? 4. Who in the family do you get help from during your pregnancy period? How does the family help? 5. Did you get any help from local hospital, village health volunteers and village community leaders during your pregnancy period? How did they help? 6. How did you first learn about the CSG programme? From whom? Which channel? 7. When you first heard about it, what did you understand it was for? Who were eligible to receive it? 8. When you first heard about CSG, did you think you were eligible to receive it? 9. Is there anyone in your community who can provide information on the CSG? How do they have the information about the CSG? 10. Have you ever asked or consulted about the CSG programme with anyone? Why did you decide to consult with them? 11. What did you ask or consult about? Could they provide clear information to you? 12. After learning about the grant, did you apply for the grant straight away? If yes, why? 13. (Ask only who did not apply for the grant straight away) What were the reasons that you did not apply sooner? Did you have to discuss or consult with anyone?

Research objectives	FGD questions	KII questions
	11. What is your opinion about this process? Was it difficult or did it create any challenges or problems? a. Getting the register form at the Local Tambon Office b. Finding people to sign a certificate of poor or near-poor household status c. Posting the name list of the applicants by the local authorities to the community for 15 days to see if there are any objections about the eligibility of the applicants 12. What are the proper channels for the target group of the CSG programme to get thorough and accurate information? 13. What do you think the CSG should be spent on? 14. Do you think the grant will create a better life or make a living for you? How?	14. Have you ever experienced difficulty finding the documents required in order to apply for the CSG? How did you eventually overcome these obstacles to applying? (register form/ certificate of poor or near-poor households/copy of ID card / copy of mother and child health handbook) 15. What is your opinion about this process? Was it difficult or did it create any challenges or problems? a. Getting the register form at the Local Tambon Office b. Finding people to sign certificate of poor or near-poor household status c. The local authorities must post the name list of the applicants to the community for 15 days, did you feel that this process made you feel ashamed of being poor? 16. What are the proper channels for the target group of CSG programme to get thorough and accurate information? 17. What do you think the CSG should be spent on? 18. Do you think the grant will create a better life or make a better living for you? How?
2. The mothers or caregivers of CSG recipients who got the grant RESPONDENT: The mothers or caregivers of CSG recipients who got the grant		
1. The assessment of the perception and understanding of the CSG 2. The process review of the CSG including public relations, targeting assessment, and related issues 3. The evaluation of the impacts of CSG 4. The assessment of barriers to joining the CSG 5. Recommendations for development and improving the CSG joining process	1. How is mother and child care in your village? 2. In your village, has anyone come to help mother and children? How do they help? 3. How did you first learn about the CSG programme? From whom? Which channel? 4. When you first heard about it, what did you understand it was for? Who were eligible to receive it? 5. Is there anyone in your community who can provide information on the CSG? How do they have the information about the CSG? 6. Have you ever asked or consulted about CSG programme with anyone? Why did you decide to consult with them? 7. Have you ever experienced difficulty in finding the documents required to apply CSG? How did you eventually overcome these obstacles to applying? (register form/ certificate of poor or near-poor households/copy of ID card / copy of mother and child health handbook) 8. What is your opinion about this process? Was it difficult or did it create any challenges or problems? a. Getting the register form at the Local Tambon Office b. Finding people to sign a certificate of poor or near-poor household status c. Posting the name list of the applicants by the local authorities to the community for 15 days to see if there are any objections about the eligibility of the applicants	1. When did you give birth? Where and how? 2. How old is your child? Do you have a daughter or a son? How many months would you breastfeed? How is the child health? Do you have anyone to help take care of your children or you have to do by yourself? 3. Who provides advice on how to take care of the children? How do you feel people in the community come to help? 4. How did you first learn about the CSG programme? From whom? Which channel? 5. How did you get the grant? (Let participant discuss this in length how they applied for CSG?, any problem?, how to solve problems or obstacles?) a. Getting the register form at the Local Tambon Office b. Finding people to sign certificate of poor or near poor households' status c. Prepare all required documents d. Submitted all documents to the officer e. Bring birth certificates to the Local Tambon office. (how many days after the child was born did you submit the birth certificate?) f. Notification of the results of the CSG application. (How did you know when and where to get the grant, and from which channel?) g. When you got the grant for the first time, how old was your child? How much amount did you get? Through what channels? Ease of payment?

Research objectives	FGD questions	KII questions
	d. Bring birth certificates to the Local Tambon office. (how many days after the child was born did you submit the birth certificate?) e. The consideration for the qualification of the applicant. f. Notification of the results of the CSG application. (How did you know when and where to get the grant, and from which channel) g. To have a bank account as the programme required h. When you got the grant for the first time, how old was your child? How much amount did you get? 9. What do you think about some people in the village/tambon getting the grant and some not getting it? 10. In your village, what is different between the mothers who get the CSG and mothers who are not subsidized? Any conflicts or problems? How? 11. How do you spend the CSG grant? 12. Do you think the grant will make a better life or living for you? How? 13. How are the CSG used? (spent on children or family members, investment in some kind of small business, used in emergencies, etc.) 14. How have families changed after receiving the CSG? (better care for the child, increased income, reduced stress, etc.) 15. What do you think about the CSG programme? (advantages and disadvantages, the appropriateness of amount and length of time, public relations process, registration process, etc.) 16. Should the CSG programme continue anyway? Why? 17. Do you have any suggestion on how the project should be improved?	6. Did you know anyone in the village/tambon who received or did not receive the CSG? What is your opinion about this? 7. In your village, what is different between the mothers who get the CSG and mothers who are not subsidized? Any conflicts or problems? How? 8. How do you spend the CSG grant? 9. How have your family and children changed after getting the grant? Please describe similarities or differences before and after getting the grant (better care for the child, increased income, reduced stress, etc.) 10. What do you think about the CSG programme? (advantages and disadvantages, the appropriateness of amount and length of time, public relations process, registration process, etc.) 11. Should the CSG programme continue anyway? Why? 12. Do you have any suggestion on how the project should be improved?
3. The mothers or caregivers of CSG applicants who have still not got the grant RESPONDENT: The mothers or caregivers of CSG applicants who have still not got the grant		
1. Application process 2. Eligibility to get the grant 3. Benefits received from joining the programme	1. How is mother and child care in your village? 2. In your village, has anyone come to help mother and children? How do they help? 3. How did you first learn about the CSG programme? From whom? Which channel? 4. When you first heard about it, what did you understand it was for? Who were eligible to receive it? 5. When you first heard about CSG, did you think you were eligible to receive it? 6. After your child was born, did you submit the birth certificate to the Local Tambon office? How many days after the child was born did you submit the birth certificate? 7. Have you contacted any agency or asked anybody to follow up on the CSG application and why did you not get the grant?	1. When did you give birth? Where and how? 2. How old is your child? Do you have a daughter or a son? How many months would you breastfeed? How is the child health? Do you have anyone to help take care of your children or you have to do by yourself? 3. Who provides advice on how to take care children? How do you feel people in the community come to help? 4. How did you first learn about the CSG programme? From whom? Which channel? 5. When you first heard about it, what did you understand it was for? Who were eligible to receive it? 6. When you first heard about the CSG, did you think you were eligible to receive it?

Research objectives	FGD questions	KII questions
	8. Did you receive an explanation for not receiving payment? From whom? 9. Do you want anyone or any agency to help you get the CSG grant? How? 10. What do you think about some people in the village/tambon getting the grant and some not getting it?	7. Can you tell us how you applied for the CSG programme? (Let participant discuss this in detail) 8. After your child was born, did you submit the birth certificate to the Local Tambon office? How many days after the child was born did you submit the birth certificate? 9. Have you contacted any agency or asked anybody to follow up on the CSG application and why did you not get the grant? 10. Did you receive an explanation for not receiving payment? From whom? 11. Do you want anyone or any agency to help you get the CSG grant? How?
4. The pregnant women and the mothers (or caregivers) in the poor households or the households at risk of poverty who are eligible but have not applied for the CSG. RESPONDENT: The pregnant women and the mothers (or caregivers) in the poor households, who are eligible but have not applied for the CSG.		
1. To evaluate the realization and understanding about the programme 2. To evaluate the public relation of the programme 3. To evaluate causes/ problems that prevent the eligible from applying for the CSG programme 4. To recommend solutions to develop and adjust the process of CSG participation	1. Do you know about the CSG programme? If yes, from whom, and from which channel? (If no, explain what the CSG programme is to the respondent) 2. When you heard about the programme for the first time, in your opinion, what was this programme about and for whom? 3. When you heard about the programme for the first time, in your opinion, were you eligible for it? How? 4. Do you think there is anyone in your village who knows about the programme? How do you think he/she knows about the programme? 5. Have you ever asked or consulted about the programme? With whom? And on what topic? Why did you decide to ask or consult him/her? 6. In your community/village, there are people who have applied for the programme, but why have you not applied for it? 7. In the future, do you think you could apply for the programme? Why or why not? 8. Do you think there are difficulties or problems with the document preparation for applying for the programme? How? And how do you manage to solve the problems? (registration form for applying, household status confirmation form, a copy of national identification card, a copy of antenatal care documents/ a record of the mother's and child's health) 9. What do you think about the following processes? Is there any problem or obstruction? How? a. Receiving the application registration form at the local administration office (Dor Ror 01 form) b. Signing to confirm the household status c. The local administration announcing the name list of the applicants and posting it in public for 15 days	1. How many have you lived in this village? 2. (Both the born child and the fetus) How old is you child? Boy or girl? How many month did you breastfeed you child? Is your child healthy? Does anyone help you raise your child? 3. Is there anyone who advises you on how to raise your child? How do you feel when someone from the community help look after your child? 4. How did you know about the programme? From whom? From which channel? 5. Do you know about the CSG programme? If yes, from whom, and from which channel? (If no, explain to the respondent what the programme is about) 6. When you heard about the programme for the first time, in your opinion, what is this programme about? And for whom? 7. When you heard about the programme for the first time, did you think you were eligible for it? How? 8. Do you think there is anyone in your village who knows about the programme? How do you think he/she knows about the programme? 9. Have you ever asked or consulted about the programme? With whom? Why did you decide to ask or consult him/her? 10. On which topic did you ask or consult? And was he/she able to provide clear information to you? How? 11. After knowing about the programme, did you immediately apply for it? Why did you not apply immediately? 12. In your community/village, there are people who applied for the programme. Why have you not applied for it? 13. In the future, do you think you will apply for the programme? Why?

Research objectives	FGD questions	KII questions
	10. Do you think there are other advertisements or channels that make everyone who is the target of the programme receive information about the programme? 11. If you receive the CSG, how do you spend it? 12. Do you think the CSG will make your living better? How?	14. Do you think there are difficulties, problems, or obstructions in the document preparation for applying for the programme? How? And how would you solve these problems? (registration form for applying, household status confirmation form, a copy of national identification card, a copy of antenatal care documents/ a record of the mother and the child's health) 15. What do you think about the following processes? Is there any problem or obstruction? How? a. Must receive the application registration form at the local administration office (Dor Ror 01 form) b. Signing to confirm the household status c. Announcing the name list of the applicants by the local administration and posting it in public for 15 days 16. Do you think there are other advertisements or channels that make anyone who is the target of the programme receive information about the programme? 17. If you receive the CSG, how would you spend it? 18. Do you think the CSG will make your life better? How?
5. The Local Tambon Officer Responsible for the Implementation of CSG RESPONDENT: the local tambon officer responsible for the implementation of CSG to understand CSG applications and the role of different factors in explaining grant knowledge, application and follow-up, and CSG participation.		
1. The assessment of the perception and understanding of the local tambon officer responsible for the implementation of CSG 2. The process review of the CSG including public relations and targeting assessment 3. The assessment of impact of the grant 4. Recommendations for development and improving the CSG	1) How many pregnant women and child aged 0-6 years are there in the tambon you are responsible for? 2) What is your organization's role in mother and child care in your village? 3) Who is responsible for taking care of mother and child in the area? And how? 4) How did your organization get information on the CSG? From any agency? Both at the provincial and district level, and any method such as clarification meeting, official letter, or otherwise. 5) What are the details of the CSG scheme you have identified? 6) After receiving information of the details of the project, what is your agency doing for operational planning? 7) Does your organization get any support documents, manuals, or media related to the programme? 8) Was there a manual or media that supported in creating an understanding among the staffs responsible for the CSG?	1. How many pregnant women and child aged 0-6 years are there in your responsible tambon? 2. How do you relate to mother and child care in the area? 3. How did you first learn about the CSG programme? From who? Which channel? How do you understand this project? 4. How do you perform these steps? Each step has a problem or a barrier to work? How to solve the problem? What are some suggestions? a. Public relations: How to promote? How to use the media such as posters, community radio, inform in the village meeting, internet, etc. b. Target Searching c. Qualification of eligible children for CSG d. Certify Family Status e. Application Procedures f. Announcement of applicant list g. Database systems. h. Coordination i. Notification of beneficiaries j. Sending and recording information, birth certificates, and additional documents after registration.

Research objectives	FGD questions	KII questions
	9) How does your organization perform these steps? Each step has a problem or a barrier to work? How to solve the problem? What are some suggestions? a. Public relations: How to promote? How to use the media such as posters, community radio, inform in the village meeting, internet, etc. b. Target Searching c. Qualification of eligible children for CSG d. Certify Family Status e. Application Procedures f. Announcement of applicant list g. Database systems h. Coordination i. Notification of beneficiaries j. Sending and recording information, birth certificates and additional documents after registration 10) In your tambon, how many pregnant women have registered for CSG? What per cent of all pregnant women who registered were given the grant? 11) From the total number of applicants in your responsible area, does the grant cover the poor or vulnerable to poor households? Why? 12) Does your organization track/follow up families who receive the grant? How? 13) From your experience, what do you think is the benefit of CSG to the family? 14) Has your agency received any complaints about the programme? 15) Has the CSG increased the workload of your organization and how do you allocate time? 16) Does the CSG programme make your agency more involved in maternal and child care in the area? 17) Does your organization have other ways to help poor children in the community? 18) What do you think about comparing this project with other welfare such as the elderly, disabled welfare allowance? What is the difference? 19) Should the CSG programme continue anyway? Why? 20) Do you have any suggestion on how the project should be improved?	5. What are the barriers on the working process of the CSG? And how to solve it? 6. Have your tracked/followed up families who receive the grant? 7. From your experience of working with the CSG recipients up until now, to what extent does the grant positively affect the recipients' family? 8. Has the CSG increased your workload and how do you allocate time? 9. Does the CSG programme make your agency more involved in maternal and child care in the area? 10. What do you think about comparing this project with other welfare such as the elderly, disabled welfare allowance? What is the difference? 11. Should the CSG programme continue anyway? Why? 12. Do you have any suggestion on how the project should be improved?

Research objectives	FGD questions	KII questions
6. Village health volunteers RESPONDENT: Village health volunteers who are involved in the CSG		
1. The assessment of the perception and understanding of Village health volunteers who are involved in the CSG 2. The process review of the CSG including public relations and targeting assessment 3. The assessment of impact of the grant 4. Recommendations for development and improving the CSG	1) What is the role of a village health volunteer in your community? 2) What kind of help does the mother and child in the community receive from a village health volunteer? 3) How did you get information on the CSG? From any agency? Both at the provincial and district level, and any method such as clarification meeting, official letter, or otherwise. 4) What details of the CSG scheme have you identified? 5) Did you get any support documents, manuals, or media related to the programme? 6) Was there a manual or media that supported in creating an understanding of the CSG? 7) What is the role of a village health volunteer in CSG programme? 8) How did you convince pregnant women to join the CSG programme? Do you focus on any particular group of women/children? 9) In your village, who have applied for the CSG programme? How did you help them? 10) In your village, are there any pregnant women or eligible children for the CSG who did not join the programme? Why did they not enroll? 11) If a pregnant woman or a child in your village has not applied for the CSG programme, what do you do? 12) Have you known anyone in your village who has applied for the CSG but did not receive it? Why did they not get the grant? 13) Have you ever helped a person in a village to get a grant? How? 14) What do you think has influenced the approval of pregnant women to receive the grant? Or what made the subsidy unapproved. 15) In your village, are there any conflicts or problems between the mother who received the grant and those who did not receive it? 16) How have you observed changes over time with respect to people's access to the grant? How have the outreach efforts changed over time in this area? 17) Did you know that pregnant women, children, and children in household you look after are being subsidized or receiving any kind of social welfare/benefits? If not, is there any way to get the information? 18) In order to make more targeting people access to more information about the CSG, what should be added or updated? 19) How do you see a grant being used in the recipient family?	1) How long have you been living in this village and how many years have you worked as a village health volunteer in the village? 2) How did you get information on the CSG? From any agency? 3) What is the role of a village health volunteer in CSG programme? 4) How did you convince pregnant women to join the CSG programme? Do you focus on any particular group of women/children? 5) In your village, who have applied for the CSG programme? How did you help them? 6) In your village, are there any pregnant women or eligible children for the CSG who did not join the programme? Why did they not enroll? 7) If a pregnant woman or a child in your village has not applied for the CSG programme, what do you do? 8) Have you known anyone in your village who has applied for the CSG but do not receive it? Why? 9) Have you ever helped a person in a village to get a grant? How? 10) Did you know that pregnant women, children, and children in household you look after are being subsidized or receiving any kind of social welfare/benefits? If not, is there any way to get the information? 11) How do you see a grant being used in the recipient family? 12) What changes do you see in the recipient family? 13) Does the subsidized family live a life different from those that are not subsidized? 14) Have you observed any change in the nutritional status of babies or overall well-being of the children as a result of the CSG programme? 15) In your village, are there any conflicts or problems between the mother who received the grant and those who did not receive it?

Research objectives	FGD questions	KII questions
	20) What changes do you see in the recipient family? 21) Does the subsidized family live a life different from those that are not subsidized? 22) Have you observed any change in the nutritional status of babies or overall well-being of the children as a result of the CSG programme? 23) Does the CSG in any way provide an access point for social welfare services to monitor families and reach people who need social welfare services? 24) Could social welfare services help to reach people in need of the CSG? How? 25) Do you think the mother and child should get any kind of help? Who should help them and how?	
7. Community Leaders RESPONDENT: Head of the village or the village committee who are involved in the CSG operation		
1) To evaluate the realization and understanding of the community leaders about the CSG progr mme 2) To evaluate the process of the CSG programme in public relations, targeting assessment, household status confirmation, etc., according to the authorities of the community leaders 3) To evaluate the impact of the CSG on the mothers, children, and families 4) To evaluate problems and obstruction in the operation of the CSG programme 5.) To suggest ways to develop and adjust the operation of the CSG programme	- no group discussion	1) How long have you lived in this village? Were you born in this community? 2) How many years have you worked as a head of the village or a village committee member? 3) What job do the majority of people in this village do? 4) What is the economic status of the majority of people in this village? Do they have savings? Debt? 5) Are there pregnant women in your village? At what age did most of them got pregnant? 6) What job do most pregnant women in the village do? 7) In your village, do the pregnant women, mothers, and children under the age of 6 have any problems such as health problems or economic problems? 8) In your village, is there any programme that helps the pregnant women, mothers, and children under the age of 6? How? 9) Do you know about the CSG programme? From which of the channels such as meetings, official government documents, etc. did you get to know about the CSG programme? 10) As a head of the village or the village committee member, how are you involved in the CSG programme? What is your authority regarding the programme? 11) How did you manage to persuade and support the pregnant women to participate in the CSG programme? 12) Regarding public relations and persuasion to apply for the programme, which group did you especially focus on? (such as women, pregnant women, women with children under the age of 6, etc.)

Research objectives	FGD questions	KII questions
		13) What are the characteristics of the people who are eligible for the programme? 14) In your village, is there anyone who has applied for the CSG programme? And did they apply during their pregnancy or after delivery? What are the causes that determine early or late application for the CSG? 15) Do family characteristics such as poor households, households with the head of the community, or health volunteer as a member, affect the decision to apply for the programme early or late? How? 16) Are public relation system, methods, steps of how to apply to the programme of the government agency involved in the decision to apply for the programme early or late? How? 17) In your village, are there any pregnant women or the mothers who are eligible for the programme, but have not applied for it? Why not? 18) In your village, is there anyone who has received the CSG? How did they manage to get it? Is there anyone who helps them? How? 19) In your village, is there anyone who applied for the programme, but has not received the grant? Why not? 20) In your village, what is the difference between the mothers who have received the grant and those who have not? Is there any conflict between them? How? 21) As a head of the village or a village committee member, have you ever helped people in your village to get the grant? How did you do it? 22) Since the start of the programme, have you seen any changes that are relevant to the programme? (For example, more people are interested in asking for the information about the programme, more people are applying for the programme. more pregnant women are asking you to confirm their household status, or the pregnant women are deciding to apply for the programme early). 23) If you want more people, especially the pregnant women, to access information about the programme, what supplementary adjustment must be made? How? 24) In your opinion, what should we do to make the CSG programme cover poor households or households at risk of poverty? 25) From your observation, how do the mothers spend the CSG? 26) What changes have you seen in the family of the mothers who receive the grant? What are the similarities and differences in their families between before and after receiving the grant?

Research objectives	FGD questions	KII questions
		27) How is the quality of life of the family with the grant different from the one without the grant? Is there any difference? 28) Do you think the CSG will affect quality of life of poor households or households at risk of poverty (such as being able to access healthcare service more, receiving foods that are appropriate for their age, or reducing food scarcity in the poor households)? 29) Do you think the pregnant women and the children born in poor households that applied for the programme, which is registered in the database of the government agency, will also receive other social welfare services such as sanitation of the mothers and children, child development, immunity, etc.? 30) In your opinion, in which aspect should the poor households and the households at the risk of poverty be helped by the government? How? 31) In your village, is there any other programme that helps poor mother and children? How? 32) In your opinion, what should be done in order to help the mothers and children? Who should do it and how?
8. Tambon health promoting hospitals RESPONDENT: The president of the hospitals or the officer who used to be involved in the CSG programme.		
1) To evaluate the realization and understanding of the community leaders about the CSG programme 2) To evaluate the process of the CSG programme in public relations, targeting assessment, household status confirmation, etc., according to the authorities of the community leaders 3) To evaluate the impact of the CSG on the mothers, children, and families 4) To evaluate the problems and obstruction in the operation of the CSG programme 5) To suggest ways to develop and adjust the operation of the CSG programme	1) In your community, how do they take care and help children? 2) In your area, is there any programme that supports or helps children? How? What organization supports the programme? 3) From which organization do you receive the information regarding the CSG programme both at the province and district level? And by which method (clarification meeting, official government letter, books, etc.)? 4) What details do you know about the CSG programme? How? 5) When you knew about the details of the programme, how did your agency respond to it (planning, operation, assignment, and public relation)? 6) Has your agency been supported by documents, manuals, or other media that are relevant to the programme? What support has your agency received? Which agencies support these? 7) Do you know how many pregnant women in your Tambon have applied for the programme and how many have actually received the grant? 8) Whom do you think the grant is beneficial for in the families? How? 9) Does the CSG programme make the Tambon health promoting hospitals participate in helping and supporting the mothers and children in the area more? How?	1) How did you know about the CSG programme? 2) In your opinion, how are the Tambon health promoting hospital officers involved in the CSG programme? 3) How do you support the pregnant women to apply for the programme? 4) What do you think about the people with the grant and the people without? 5) Have you had a chance to talk or ask the pregnant women with the grant and without the grant? In your opinion, what affects the grant approval? 6) Do you think the CSG will affect the quality of life of poor households or households at risk of poverty (such as being able to access healthcare service more, receiving foods that are appropriate for their age, or reducing food scarcity in the poor households)? 7) Does having the CSG programme help the Tambon health promoting hospitals participate more in helping and taking care of the mother and children in the area? 8) Comparing the operation of the CSG programme with other programmes such as social pension for the old and the disable, what is your opinion? Are there any similarities and differences between them? 9) Do you think the programme should be provided consistently? Why? What is the benefit of doing that?

Research objectives	FGD questions	KII questions
	10) Comparing the operation of the CSG programme with other programmes such as social pension for the old and the disable, what is your opinion? Any similarities and differences? 11) Do you think the programme should be provided consistently? Why? What is the benefit of doing that? 12) Should there any be additional development or adjustment in the programme? In which area of the programme? How?	10) Should there be any additional development or adjustment in the programme? In which area of the programme? How?

H. Quantitative Sample and Data Collection

This section presents the data collection timeline and summary for the endline data collection. The endline data collection began in April 2017 and ended in March 2018, covering 5,061 households in the nine target provinces – *Sa Kaeo*, *Nakhon Ratchasima, Sisaket, Ubon Ratchathani, Kalasin, Sakon Nakhon, Mao Hong Son, Tak, Pattani, and Narathiwat*. The data collection was spread across the nine provinces each month, with an average of 422 households surveyed each month.

Table 20: Endline data collection rollout

	Sa Kaeo	Nakhon Ratchasima	Sisaket	Ubon Ratchathani	Kalasin	Mae Hong Son	Tak	Pattani	Narathiwat	Total
April	38	38	35	43	91	38	19	46	47	395
May	47	46	40	39	86	38	50	53	47	446
June	42	43	27	52	92	34	49	49	55	443
July	25	48	65	39	81	56	47	53	65	479
August	46	38	42	43	102	46	20	56	62	455
September	45	45	50	41	95	42	16	31	39	404
October	52	46	47	37	91	59	49	47	68	496
November	41	24	49	36	92	48	85	45	40	460
December	42	45	24	41	97	31	20	40	38	378
January	20	44	52	38	99	67	33	45	68	466
February	29	37	29	29	73	21	46	49	44	357
March	30	19	18	14	52	47	22	41	39	282
Total	**457**	**473**	**478**	**452**	**1,051**	**527**	**456**	**555**	**612**	**5,061**

I. Qualitative Sample and Data Collection timeline

Table 21: Characteristics of FGD participants

Participants	Characteristics
Group 1: Pregnant women in poor households or households at risk who are eligible and who have already enrolled in the programme.	Pregnant women with gestational age of 6-8 months Have already enrolled in the programme. Do not hold community-related positions such as Sub-district Headman, Village Headman, Sub-district Administration Organization, and Village Health Volunteer, etc.
Group 2: Mothers or caregivers of children in poor households or households at risk of poverty who are eligible and enrolled in the CSG and received the grant.	Mothers and caregivers of children who have already enrolled in the CSG Have already received CSG. To find enough people with enough experience with the programme to answer a question on how they spend the grant Do not hold community-related positions such as Sub-district Headman Village Headman, Sub-district Administration Organization and Village Health Volunteer, etc.
Group 3: Mothers or caregivers of children in poor households or households at risk of poverty who are eligible and enrolled in the CSG but have not received the grant yet.	Mothers and caregivers of children who have already enrolled in the CSG Have not received CSG yet. Do not hold community-related positions such as Sub-district Headman Village Headman, Sub-district Administration Organization and Village Health Volunteer, etc.
Group 4: Pregnant women or mothers or caregivers of children in poor households or households at risk who are eligible for the programme but have NOT enrolled in the programme	Pregnant women with gestational age of 6-8 months Fit the criteria of a poor person according to the CSG's requirements, but have not enrolled in the programme. Do not hold community-related positions such as Sub-district Headman Village Headman, Sub-district Administration Organization and Village Health Volunteer, etc.

Table 22: Characteristics of KII participants

Samples	Contributors
Local Administrative Organization (LAO)	Executives, staff/officials from Local Administrative Officers who are assigned or involved with CSG 1-2 person(s)
Village health volunteers	Village Health Volunteers involved with CSG Have some experience in certifying the poor household status 1-2 person(s)
Community Leaders	Village Headman or Village Board of Committee involved with CSG Have some experience in certifying the poor household status 1-2 person(s)
Sub-district Health Promoting Hospital	Director or staff from Sub-district Health Promoting Hospital who involved with CSG Have some experience in certifying the poor household status 1 person

Table 23: Qualitative Data Collection Schedule for Endline

Province	Round 1 August 2017	Round 2 November 2017	Round 3 February 2018
Mae Hong Son	Mae Yuam Sub District In Mae Sariang District	Mae-Tho Sub District in Mae La Noi District	Pong Sa Sub District in Pai District
Sa-Kaew	Nong Nam Sai Sub District in Watthana Nakhon District	Thap Thai Sub Districtn in Ta Phraya District	Thung Mahajaroen Sub District in Wang Nam Yen District
Kalasin	Kok Krua Sub District In Nong Kung Sri District	Khlong Kham Sub District in Yang Talad District	Na Tan Sub District in Ta Kan To District
Narathiwat	Lu Bo Sa Wo District in Ba Jo District	Sa Loh Sub District in Rue So District	Manang Ta Yaw Sub District in Muang District

J. Technical Annex I

Table 24: Variables used in propensity score matching, by model and income group sample

<1500			<3000			<6000			All Households		
Primary Model	**Alternate Model 1**	**Alternate Model 2**	**Primary Model**	**Alternate Model 1**	**Alternate Model 2**	**Primary Model**	**Alternate Model 1**	**Alternate Model 2**	**Primary Model**	**Alternate Model 1**	**Alternate Model 2**
Household receiving scholarship or school food programme	Household receiving scholarship or school food programme	Household receiving scholarship or school food programme	Household receiving scholarship, school food programme, elderly pension, or disability pension	Household receiving scholarship, school food programme, elderly pension, or disability pension	Household receiving scholarship, school food programme, elderly pension, or disability pension	Household receiving scholarship, school food programme, elderly pension, or disability pension	Household receiving scholarship, school food programme, elderly pension, or disability pension	Household receiving scholarship or school food programme	Household receiving scholarship or school food programme	Household receiving scholarship or school food programme	Household receiving scholarship or school food programme
Number of 7-8 months pregnant women	The household head has at least secondary school education	Number of 7-8 months pregnant women	Household owns a computer	Household owns a tractor	Household owns a computer	Household owns a tractor	Household owns a motorcycle or scooter	Number of 7-8 months pregnant women	Number of 7-8 months pregnant women	Number of children under 5 years of age	Number of 7-8 months pregnant women
Number of employed members per household	Any household member has a credit card	The household head is employed	Household has electricity	Household owns a computer	Dependency ratio	Woman is household head	Main source of drinking water	Number of children under 5 years of age	Size of agricultural land	Number of employed members per household	Number of children under 5 years of age
Size of agricultural land	Number of 7-8 months pregnant women	Woman in household is employed	Household owns a water cooler	Household has electricity	Household owns a Blu-ray player	Age of household head	Any household member owns a smartphone	Number of employed members per household	The household head is employed	Household owns a tractor	Number of employed members per household
Woman in household is employed	Number of children under 5 years of age	Number of rooms used for sleeping	Number of 7-8 months pregnant women	Household owns a water cooler	Household has electricity	Any household member owns a smartphone	Household has air conditioning	Household owns a tractor	Woman in household is employed	Size of agricultural land	Household owns a tractor
Number of rooms used for sleeping	Number of employed members per household	Household owns the dwelling	Age of household head	Number of 7-8 months pregnant women	Household owns a water cooler	Any household member has a credit card	The household head has at least secondary school education	Size of agricultural land	Number of rooms used for sleeping	Woman in household is employed	Size of agricultural land

<1500			<3000			<6000			All Households		
Primary Model	**Alternate Model 1**	**Alternate Model 2**	**Primary Model**	**Alternate Model 1**	**Alternate Model 2**	**Primary Model**	**Alternate Model 1**	**Alternate Model 2**	**Primary Model**	**Alternate Model 1**	**Alternate Model 2**
Household owns the dwelling	Household owns a car	Any household member owns land that can be used for agriculture	Size of agricultural land	Age of household head	Number of 7-8 months pregnant women	Household owns a car	Any household member has a credit card	Woman in household is employed	Household owns the dwelling	Number of rooms used for sleeping	Woman in household is employed
Any household member owns a bank account	Household owns a tractor	Any household member owns a bank account	The household head is employed	Size of agricultural land	Age of household head	The household head has at least secondary school education	Number of 7-8 months pregnant women	Number of rooms used for sleeping	Any household member owns land that can be used for agriculture	Household has a landline	Number of rooms used for sleeping
Any household member owns land that can be used for agriculture	Size of agricultural land	Size of agricultural land	Woman in household is employed	The household head is employed	Size of agricultural land	Number of 7-8 months pregnant women	Number of men aged 15-49 years	Household has a landline	Any household member owns a bank account	Household has electricity	Household has a landline
Any household member owns a mobile phone	Woman in household is employed	Household has electricity	Any household member has a credit card	Woman in household is employed	The household head is employed	Size of agricultural land	Number of children under 5 years of age	Household has electricity	Any household member owns a smartphone	Household has air conditioning	Household has electricity
Household has a plain TV	Number of rooms used for sleeping	Any household member owns a mobile phone	Household owns a car	Any household member has a credit card	Woman in household is employed	The household head is employed	Number of employed members per household	Household has air conditioning	Household has an LCD TV	Any household member owns a bank account	Household has air conditioning
Religion of household head	Any household member owns a mobile phone	Religion of household head	The household head has at least secondary school education	Household owns a car	Any household member has a credit card	Number of employed members per household	Household owns a tractor	Any household member owns a bank account	household has air conditioning	Any household member owns land that can be used for agriculture	Any household member owns a bank account

<1500			<3000			<6000			All Households		
Primary Model	**Alternate Model 1**	**Alternate Model 2**	**Primary Model**	**Alternate Model 1**	**Alternate Model 2**	**Primary Model**	**Alternate Model 1**	**Alternate Model 2**	**Primary Model**	**Alternate Model 1**	**Alternate Model 2**
Interaction between registration (gs3) and province variable	Household has a landline	Interaction between registration (gs3) and province variable	Number of rooms used for sleeping	The household head has at least secondary school education	Household owns a car	Woman in household is employed	Household owns a car	Any household member owns land that can be used for agriculture	Interaction between registration (gs3) and province variable	Household has an LCD TV	Any household member owns land that can be used for agriculture
Interaction between urban/rural variable and province variable	Household has electricity	Interaction between urban/rural variable and province variable	Household owns the dwelling	Number of rooms used for sleeping	The household head has at least secondary school education	Number of rooms used for sleeping	Size of agricultural land	Household has an LCD TV	Interaction between urban/rural variable and province variable	Any household member owns a smartphone	Household has an LCD TV
Household owns a refrigerator	Household has air conditioning	Household uses an improved source of cooking fuel	Any household member owns land that can be used for agriculture	Household owns the dwelling	Number of rooms used for sleeping	Household owns the dwelling	Woman in household is employed	Any household member owns a smartphone	Household owns a refrigerator	Interaction between registration (gs3) and province variable	Any household member owns a smartphone
Household uses an improved source of cooking fuel	Any household member owns a bank account	Household owns a tractor	Any household member owns a bank account	Any household member owns land that can be used for agriculture	Household owns the dwelling	Any household member owns land that can be used for agriculture	Number of rooms used for sleeping	Interaction between registration (gs3) and province variable	Household uses an improved source of cooking fuel	Interaction between urban/rural variable and province variable	Interaction between registration (gs3) and province variable
Household owns a computer	Any household member owns land that can be used for agriculture	Household owns livestock	Any household member owns a smartphone	Any household member owns a bank account	Any household member owns land that can be used for agriculture	Household has an LCD TV	Main material of floor	Interaction between urban/rural variable and province variable	Household owns a Blu-ray player	Household owns a refrigerator	Interaction between urban/rural variable and province variable
Household owns livestock	Household has a plain TV	Household owns a computer	Household owns an LCD TV	Any household member owns a smartphone	Any household member owns bank account	Interaction between #chu5 variable and province variable	Main material of roof	Household owns a refrigerator	Household owns livestock	Household uses an improved source of cooking fuel	Household owns a refrigerator

<1500			<3000			<6000			All Households		
Primary Model	**Alternate Model 1**	**Alternate Model 2**	**Primary Model**	**Alternate Model 1**	**Alternate Model 2**	**Primary Model**	**Alternate Model 1**	**Alternate Model 2**	**Primary Model**	**Alternate Model 1**	**Alternate Model 2**
-	Interaction between registration (gs3) and province variable	-	Household has air conditioning	Any household member owns a mobile phone	Any household member owns a smartphone	Interaction between registration (gs3) and province variable	Main material of exterior wall	Household uses an improved source of cooking fuel	-	Household owns a computer	Household uses an improved source of cooking fuel
-	Interaction between urban/rural variable and province variable	-	Interaction between registration (gs3) and province variable	Household owns any type of television	Household owns any type of television	Interaction between urban/rural variable and province variable	Household has electricity	Household owns a computer	-	-	Household owns a computer
-	Household owns a refrigerator	-	Interaction between urban/rural variable and province variable	Household has air conditioning	Household has air conditioning	Household owns a refrigerator	Any household member owns bank account	Household owns livestock	-	-	-
-	Household uses an improved source of cooking fuel	-	Household owns a refrigerator	Interaction between registration (gs3) and province variable	Interaction between registration (gs3) and province variable	Household owns a computer	Any household member owns land that can be used for agriculture	-	-	-	-
-	Household owns a computer	-	Household uses an improved source of cooking fuel	Interaction between urban/rural variable and province variable	Interaction between urban/rural variable and province variable	Household uses an improved source of cooking fuel	Interaction between registration (gs3) and province variable	-	-	-	-
-	household owns livestock	-	Household owns livestock	Household owns a refrigerator	Household owns a refrigerator	Household owns livestock	Interaction between urban/rural variable and province variable	-	-	-	-

<1500			<3000			<6000			All Households		
Primary Model	Alternate Model 1	Alternate Model 2	Primary Model	Alternate Model 1	Alternate Model 2	Primary Model	Alternate Model 1	Alternate Model 2	Primary Model	Alternate Model 1	Alternate Model 2
-	-	-	-	Household uses an improved source of cooking fuel	Household uses an improved source of cooking fuel	-	Household owns a refrigerator	-	-	-	-
-	-	-	-	Household owns livestock	Household owns livestock	-	Household uses an improved source of cooking fuel	-	-	-	-
-	-	-	-	-	-	-	Household owns a computer	-	-	-	-
-	-	-	-	-	-	-	Household owns livestock	-	-	-	-

Table 25: Baseline characteristics by Child Support Grant Receipt

	Number of Observations - CSG Receipt	Mean - CSG Receipt	Number of Observations - No CSG Receipt	Mean - No CSG Receipt	t-stat	p-value
Household receiving scholarship or school food programme	4662	0.50	2157	0.45	(3.71)	0.00
Household receiving scholarship or school food programme or elderly pension or disability pension	4662	0.65	2157	0.61	(3.02)	0.00
The household head has at least secondary school education	4916	0.27	2229	0.23	(4.28)	0.00
Any household member has a credit card	4659	0.03	2157	0.07	6.98	0.00
Number of 7-8 months pregnant women	4662	1.00	2157	1.01	3.16	0.00
Number of children under 5 years of age	4662	0.65	2157	0.59	(3.11)	0.00
Number of employed members per household	4662	2.39	2157	2.34	(1.27)	0.20
Household owns a car	4649	0.33	2155	0.41	6.35	0.00
Household owns a tractor	4916	0.25	2229	0.32	6.61	0.00
Size of agricultural land	4503	6.61	2101	7.93	4.60	0.00
Woman in household is employed	4595	0.32	2109	0.31	(1.26)	0.21
Number of rooms used for sleeping	4660	2.19	2157	2.05	(3.73)	0.00
Any household member owns a mobile phone	4653	0.66	2154	0.65	(0.62)	0.54
Household has a landline	4916	0.01	2229	0.01	1.58	0.11
Household has electricity	4658	0.94	2157	0.94	0.94	0.35
Household has air conditioning	4655	0.02	2156	0.05	8.01	0.00
Any household member owns a bank account	4660	0.89	2157	0.89	(0.08)	0.93
Any household member owns land that can be used for agriculture	4650	0.61	2148	0.69	6.09	0.00
Household has a plain TV	4658	0.72	2157	0.74	1.65	0.10

	Number of Observations - CSG Receipt	Mean - CSG Receipt	Number of Observations - No CSG Receipt	Mean - No CSG Receipt	t-stat	p-value
Household owns a refrigerator	4660	0.75	2157	0.84	8.46	0.00
Household uses an improved source of cooking fuel	4916	0.47	2229	0.45	(1.36)	0.17
Household owns a computer	4658	0.09	2153	0.15	7.95	0.00
Household owns livestock	4916	0.15	2229	0.14	(0.46)	0.65
Household owns the dwelling	4660	1.15	2157	1.17	1.20	0.23
Religion of household head	4660	1.42	2157	1.22	(13.34)	0.00
The household head is employed	4662	0.79	2157	0.77	(1.38)	0.17
Household owns a water cooler	4660	0.90	2155	0.92	3.08	0.00
Age of household head	4662	48.57	2156	49.53	2.27	0.02
Any household member owns a smartphone	4656	0.74	2157	0.77	3.24	0.00
Household owns any type of television	4659	0.86	2157	0.91	6.38	0.00
Dependency ratio	4653	0.87	2139	0.82	(2.53)	0.01
Household owns a Blu-ray player	4654	0.01	2157	0.01	2.90	0.00
Household has an LCD TV	4650	0.17	2151	0.22	5.46	0.00
Household owns a motorcycle or scooter	4660	1.08	2157	1.08	0.04	0.97
Main source of drinking water	4659	47.89	2157	58.41	12.11	0.00
Main material of floor	4660	29.07	2157	30.31	5.16	0.00
Main material of roof	4660	34.09	2157	34.72	3.34	0.00
Main material of exterior wall	4660	33.75	2157	33.94	0.69	0.49
Woman is the household head	4662	0.22	2156	0.24	1.64	0.10

K. Technical Annex II

Table 26: Propensity Score Matching Probit Model Results

VARIABLES	<1500	<3000	<6000	All Households
Household receiving scholarship or school food programme or elderly pension or disability pension		0.0289	0.0412	
		(0.0442)	(0.0447)	
Household owns a tractor			0.0607	
			(0.0515)	
Woman head of household			-0.0128	
			(0.0524)	
Age of household head		0.000635	0.000743	
		(0.00150)	(0.00161)	
Any member owns a smartphone		-0.0205	-0.00807	-0.0307
		(0.0514)	(0.0515)	(0.0509)
Any household has a credit card		-0.156*	-0.169*	
		(0.0935)	(0.0936)	
Household owns a car		-0.0969**	-0.0990**	
		(0.0464)	(0.0466)	
Household head has at least secondary school education		-0.0302	-0.0307	
		(0.0565)	(0.0568)	
Number of 7-8 months pregnant women	-0.258	-0.253	-0.346	-0.264
	(0.313)	(0.313)	(0.317)	(0.312)
Size of agricultural land	0.00257	0.00323	0.00339	0.00211
	(0.00225)	(0.00228)	(0.00234)	(0.00223)
Household head is employed		0.0595	0.0403	0.0379
		(0.0529)	(0.0633)	(0.0501)

VARIABLES	<1500	<3000	<6000	All Households
number of employed members per household	0.00879		0.00283	
	(0.0164)		(0.0194)	
woman in household is employed	-0.00526	0.0154	0.0110	0.0104
	(0.0479)	(0.0459)	(0.0488)	(0.0455)
Number of rooms used for sleeping	0.0161	0.0275*	0.0248	0.0229
	(0.0161)	(0.0163)	(0.0168)	(0.0160)
Household owns the dwelling	-0.00435	-0.0113	-0.00953	-0.0105
	(0.0287)	(0.0292)	(0.0293)	(0.0291)
Any household member own land that can be used for agriculture	-0.0737	-0.0669	-0.0798	-0.0758
	(0.0530)	(0.0534)	(0.0540)	(0.0527)
Household has an LCD TV		-0.0715	-0.0844	-0.0942*
		(0.0535)	(0.0533)	(0.0529)
Household owns a refrigerator	-0.0754	-0.0777	-0.0284	-0.0521
	(0.0619)	(0.0651)	(0.0623)	(0.0618)
Household owns a computer	-0.246***	-0.193***	-0.196***	
	(0.0657)	(0.0678)	(0.0676)	
Household uses an improved source of cooking fuel	0.0132	0.0365	0.0447	0.00880
	(0.0495)	(0.0511)	(0.0512)	(0.0500)
Household owns livestock	0.0354	0.0445	0.0262	0.0426
	(0.0585)	(0.0587)	(0.0593)	(0.0585)
Household has electricity		0.254**		
		(0.110)		
Household owns a water cooler		0.0351		
		(0.0809)		

VARIABLES	<1500	<3000	<6000	All Households
Any household member own bank account	0.0869	0.0894		0.102
	(0.0704)	(0.0710)		(0.0703)
Household has air conditioning		-0.203		-0.288**
		(0.127)		(0.124)
Household receiving scholarship or school food programme	0.0804**			0.0781*
	(0.0409)			(0.0408)
Any member owns a mobile phone	0.0709			
	(0.0449)			
Household has a plain TV	0.0949*			
	(0.0493)			
Religion of household head	0.00917			
	(0.0525)			
Household owns a Blu-ray player				-0.0272
				(0.211)
Constant	-0.0844	-0.219	0.133	0.0419
	(0.344)	(0.363)	(0.354)	(0.340)
Observations	4,598	4,580	4,579	4,586
Pseudo R-squared	0.113	0.114	0.118	0.110
LR chi^2	650.8	657.3	677	634.2
Prob < chi^2	0	0	0	0

Figure 8: Density plots of propensity score - Primary <1500 model (wasting outcome)

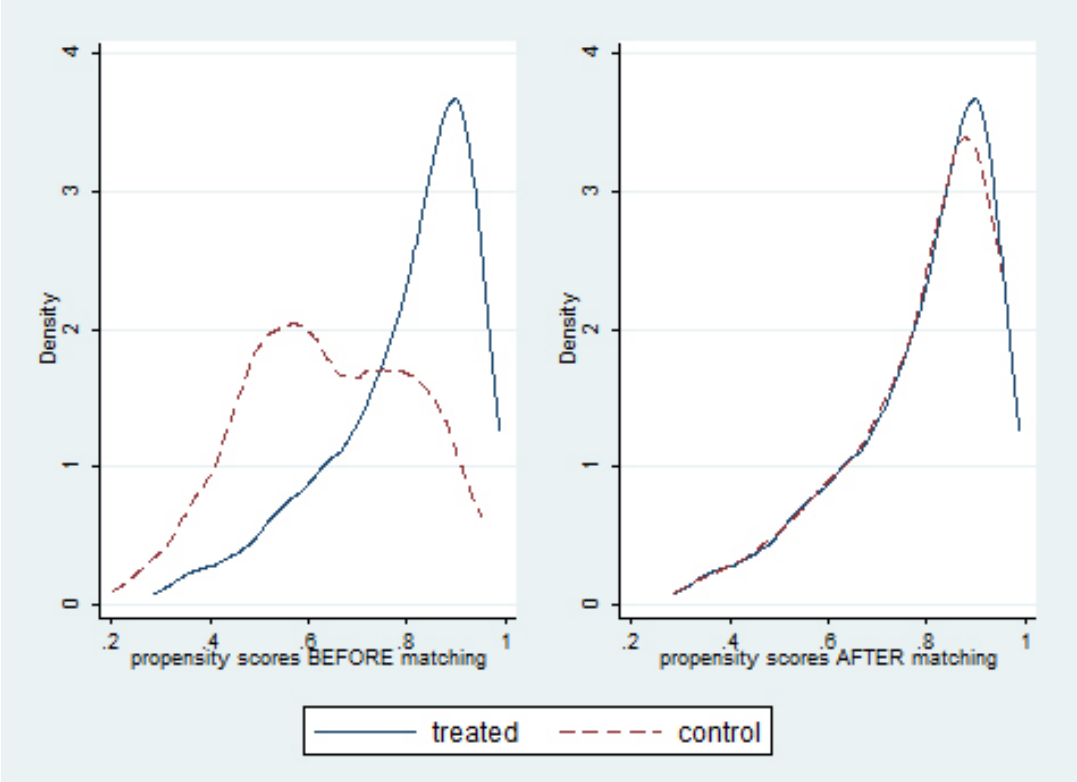


Figure 9: Density plots of propensity score - Primary <3000 model (wasting outcome)

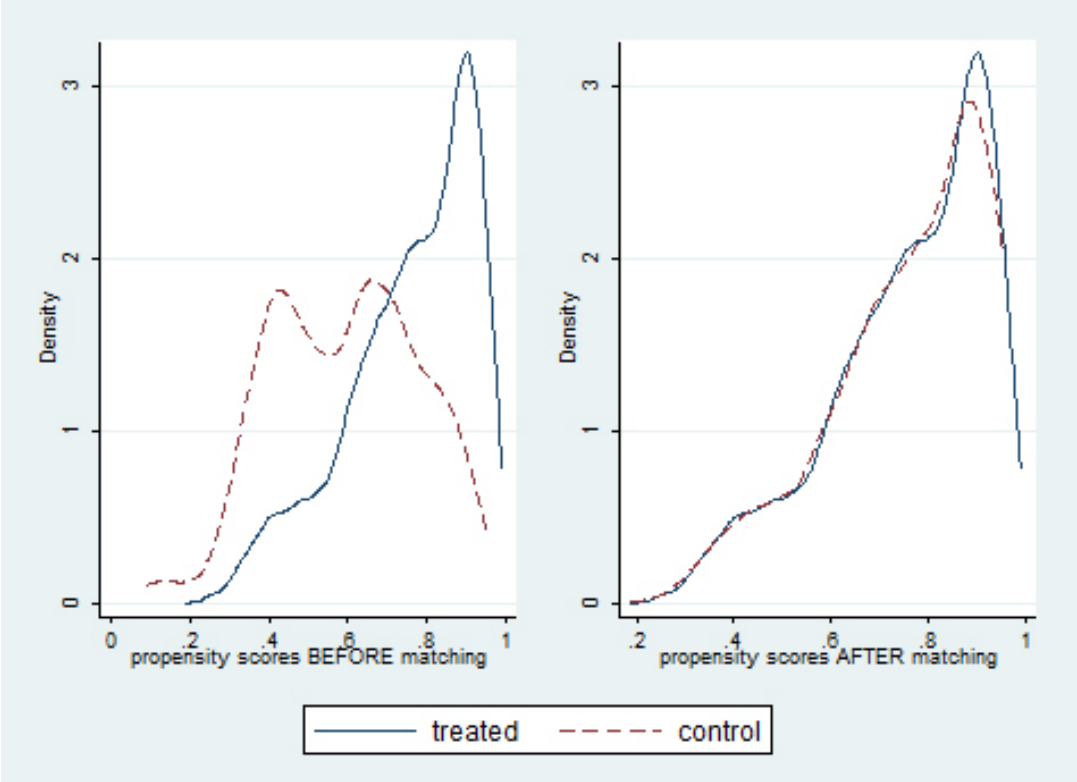


Figure 10: Density plots of propensity score - Primary <6000 model (wasting outcome)

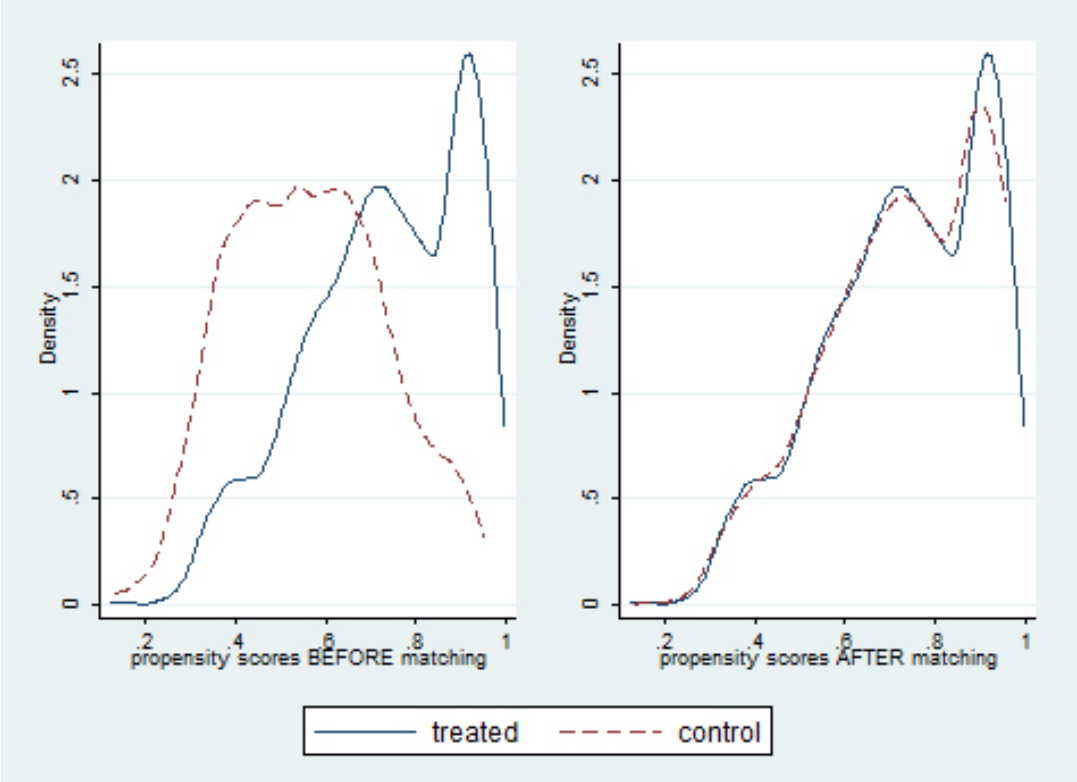
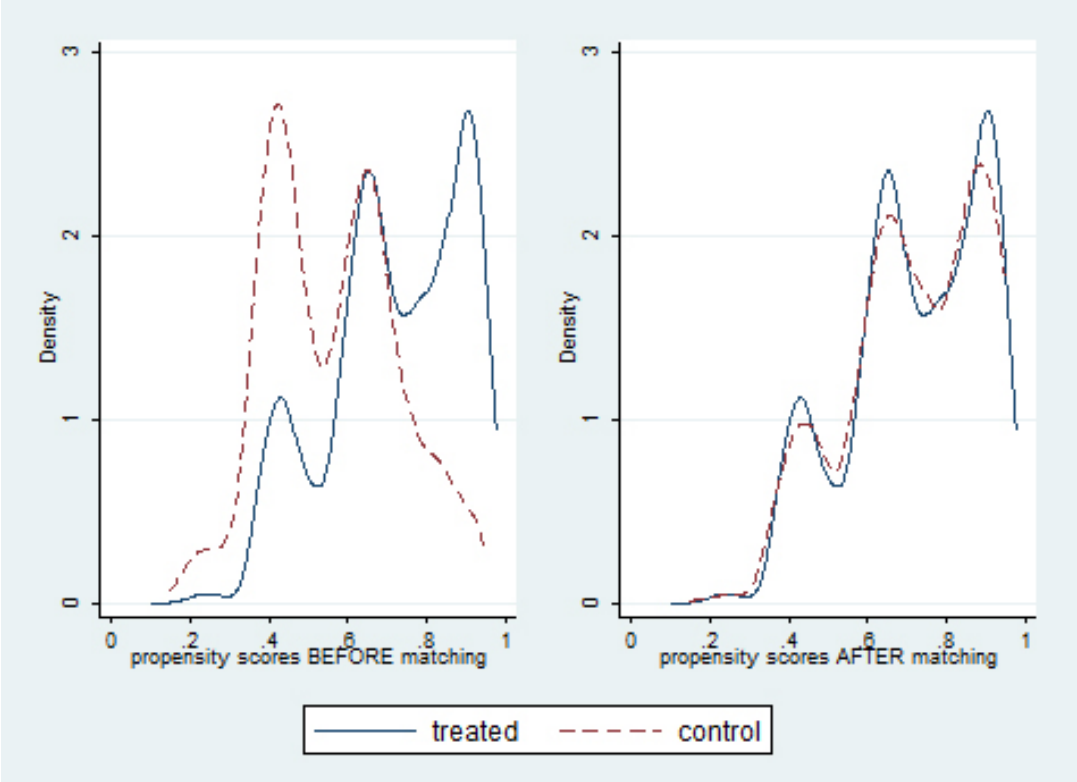


Figure 11: Density plots of propensity score - Primary All Households model (wasting outcome)



L. Technical Annex III

Table 27: Prevalence of wasting, expanded estimation results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Prevalence of wasting, low weight-for-height	Primary Model <1500	Prevalence of wasting in households with income below 1500 Baht per month	0.09	0.14	0.26	(0.17)	(2.88)
	Alternate Model 2 <1500		0.09	0.14	0.20	(0.10)	(2.08)
	Alternate Model 1 <1500		0.09	0.13	0.29	(0.19)	(3.02)
	Alternate Model 1 <3000	Prevalence of wasting in households with income below 3000 Baht per month	0.10	0.12	0.15	(0.06)	(2.16)
	Alternate Model 2 <3000		0.10	0.12	0.17	(0.07)	(2.55)
	Primary Model <3000		0.10	0.12	0.15	(0.05)	(1.91)
	Alternate Model 1 <6000	Prevalence of wasting in households with income below 6000 Baht per month	0.09	0.12	0.14	(0.05)	(1.84)
	Primary Model <6000		0.09	0.12	0.16	(0.07)	(2.48)
	Alternate Model 2 <6000		0.09	0.12	0.14	(0.04)	(1.91)
	Primary Model - All Households	Prevalence of wasting in all households	0.10	0.11	0.14	(0.04)	(2.07)
	Alternate Model 1 - All Households		0.10	0.11	0.15	(0.05)	(2.26)
	Alternate Model 2 - All Households		0.10	0.11	0.16	(0.07)	(2.86)

Table 28: Proportion of eligible children breastfed for at least six months, expanded estimation results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Eligible child breastfed for at least 6 months	Primary Model <1500	Proportion of eligible children breastfed for at least six months in households with income below 1500 Baht per month	0.85	0.81	0.73	0.12	2.68
	Alternate Model 2 <1500		0.85	0.81	0.75	0.10	2.49
	Alternate Model 1 <1500		0.85	0.81	0.76	0.09	2.03
	Alternate Model 1 <3000	Proportion of eligible children breastfed for at least six months in households with income below 3000 Baht per month	0.82	0.77	0.80	0.02	0.76
	Alternate Model 2 <3000		0.82	0.77	0.83	(0.01)	(0.40)
	Primary Model <3000		0.82	0.77	0.80	0.02	0.73
	Alternate Model 1 <6000	Proportion of eligible children breastfed for at least six months in households with income below 6000 Baht per month	0.80	0.73	0.75	0.05	1.91
	Primary Model <6000		0.80	0.73	0.72	0.08	3.01
	Alternate Model 2 <6000		0.79	0.73	0.75	0.05	1.90
	Primary Model - All Households	Proportion of eligible children breastfed for at least six months in all households	0.79	0.72	0.73	0.05	2.23
	Alternate Model 1 - All Households		0.79	0.72	0.73	0.05	2.31
	Alternate Model 2 - All Households		0.79	0.72	0.74	0.05	2.01

Table 29: Caregivers' knowledge of best feeding practices, estimation results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Caregivers knowledge of starting to introduce foods in addition to breastmilk during the sixth month of child's life	Primary Model <1500	Proportion of caregivers in households with income below 1500 Baht who know when to introduce foods to infants' diet	0.74	0.75	0.70	0.04	0.87
	Primary Model <3000	Proportion of caregivers in households with income below 3000 Baht who know when to introduce foods to infants' diet	0.74	0.75	0.67	0.06	2.22
	Primary Model <6000	Proportion of caregivers in households with income below 6000 Baht who know when to introduce foods to infants' diet	0.74	0.75	0.71	0.03	0.96
	Primary Model - All Households	Proportion of caregivers in all households who know when to introduce foods to infants' diet	0.74	0.76	0.73	0.01	0.28

Table 30: Use of infant formula, expanded estimation results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Child was given infant formula on the day preceding the survey	Primary Model <1500	Proportion of children living in households with income below 1500 Baht who were given infant formula on the day preceding the survey	0.25	0.34	0.35	(0.10)	(2.00)
	Primary Model <3000	Proportion of children living in households with income below 3000 Baht who were given infant formula on the day preceding the survey	0.32	0.38	0.35	(0.03)	(1.09)
	Primary Model <6000	Proportion of children living in households with income below 6000 Baht who were given infant formula on the day preceding the survey	0.36	0.42	0.39	(0.03)	(0.89)
	Primary Model - All Households	Proportion of children who were given infant formula on the day preceding the survey	0.37	0.43	0.38	(0.01)	(0.37)

Table 31: Frequency of use of infant formula, estimation results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Number of times child was given infant formula on the day preceding the survey	**Primary Model <1500**	Number of times children living in households with income below 1500 Baht were given infant formula on the day preceding the survey	4.20	4.45	4.47	(0.27)	(0.64)
	Primary Model <3000	Number of times children living in households with income below 3000 Baht were given infant formula on the day preceding the survey	4.41	4.72	4.60	(0.19)	(0.84)
	Primary Model <6000	Number of times children living in households with income below 6000 Baht were given infant formula on the day preceding the survey	4.50	4.86	4.84	(0.34)	(2.12)
	Primary Model - All Households	Number of times children were given infant formula on the day preceding the survey	4.55	4.86	4.81	(0.26)	(1.70)

Table 32: Impact of minimum meal frequency, expanded estimation results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Proportion of children receiving minimum meal frequency	Primary Model <1500	Proportion of eligible children in households with income below 1500 Baht per month receiving minimum meal frequency	0.67	0.61	0.68	(0.01)	(0.12)
	Alternate Model 2 <1500		0.67	0.61	0.68	(0.01)	(0.22)
	Alternate Model 1 <1500		0.67	0.61	0.68	(0.01)	(0.17)
	Alternate Model 1 3000	Proportion of eligible children in households with income below 3000 Baht per month receiving minimum meal frequency	0.68	0.62	0.67	0.01	0.36
	Alternate Model 2 <3000		0.68	0.62	0.70	(0.02)	(0.7)
	Primary Model <3000		0.68	0.62	0.71	(0.03)	(1.05)
	Alternate Model 1 <6000	Proportion of eligible children in households with income below 6000 Baht per month receiving minimum meal frequency	0.68	0.62	0.69	(0.01)	(0.18)
	Primary Model <6000		0.68	0.62	0.71	(0.03)	(1.17)
	Alternate Model 2 <6000		0.68	0.62	0.70	(0.02)	(0.59)
	Primary Model - All Households	Proportion of all eligible children receiving minimum meal frequency	0.68	0.62	0.69	(0.01)	(0.56)
	Alternate Model 1 - All Households		0.68	0.62	0.71	(0.03)	(1.20)
	Alternate Model 2 - All Households		0.68	0.62	0.71	(0.03)	(1.04)

Table 33: Impact on food share of total expenditure, expanded estimation results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Food share of total expenditure	Primary Model <1500	Food share of total expenditure in households with income below 1500 Baht per month	0.48	0.48	0.49	(0.01)	(0.46)
	Alternate Model 2 <1500		0.48	0.48	0.50	(0.02)	(0.83)
	Alternate Model 1 <1500		0.48	0.48	0.46	0.02	0.82
	Alternate Model 1 3000	Food share of total expenditure in households with income below 3000 Baht per month	0.46	0.47	0.47	(0.01)	(0.55)
	Alternate Model 2 <3000		0.46	0.47	0.47	(0.01)	(0.84)
	Primary Model <3000		0.46	0.47	0.45	0.01	0.48
	Alternate Model 1 <6000	Food share of total expenditure in households with income below 6000 Baht per month	0.45	0.45	0.45	(0.00)	(0.25)
	Primary Model <6000		0.45	0.45	0.46	(0.01)	(0.01)
	Alternate Model 2 <6000		0.45	0.45	0.46	(0.01)	(0.69)
	Primary Model - All Households	Food share of total expenditure in all households	0.44	0.44	0.44	(0.00)	(0.47)
	Alternate Model 1 - All Households		0.44	0.44	0.46	(0.02)	(1.55)
	Alternate Model 2 - All Households		0.44	0.44	0.45	(0.01)	(1.16)

Table 34: Number of post-natal care visits received by eligible children, expanded estimation results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Number of post-natal check-ups by eligible child	Primary Model <1500	Number of post-natal care visits received by eligible children living in households with income below 1500 Baht per month	1.36	1.27	1.24	0.12	1.79
	Alternate Model 2 <1500		1.36	1.27	1.24	0.13	1.80
	Alternate Model 1 <1500		1.36	1.27	1.21	0.15	2.12
	Alternate Model 1 <3000	Number of post-natal care visits received by eligible children living in households with income below 3000 Baht per month	1.36	1.27	1.24	0.12	2.64
	Alternate Model 2 <3000		1.36	1.27	1.25	0.11	2.38
	Primary Model <3000		1.36	1.27	1.27	0.09	1.86
	Alternate Model 1 <6000	Number of post-natal care visits received by eligible children living in households with income below 6000 Baht per month	1.35	1.25	1.25	0.10	2.52
	Primary Model <6000		1.35	1.25	1.26	0.09	2.16
	Alternate Model 2 <6000		1.35	1.25	1.29	0.07	1.59
	Primary Model - All Households	Number of post-natal care visits received by eligible children living in any household	1.36	1.26	1.29	0.06	1.66
	Alternate Model 1 - All Households		1.36	1.26	1.29	0.06	1.53
	Alternate Model 2 - All Households		1.36	1.26	1.28	0.08	2.07

Table 35: Impact on number of child development activities, expanded results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Number of development activities with either parent	Primary Model <1500	Number of development activities child had with either parent -households with income below 1500 Baht per month	4.94	5.10	5.12	(0.18)	(1.38)
	Alternate Model 2 <1500		4.94	5.1	5.01	(0.07)	(0.51)
	Alternate Model 1 <1500		4.94	5.10	4.96	(0.02)	(0.14)
	Alternate Model 1 <3000	Number of development activities child had with either parent -households with income below 3000 Baht per month	4.94	4.99	4.96	(0.02)	(0.18)
	Alternate Model 2 <3000		4.94	5.00	4.97	(0.03)	(0.34)
	Primary Model <3000		4.95	4.99	4.94	0.01	0.03
	Alternate Model 1 <6000	Number of development activities child had with either parent -households with income below 6000 Baht per month	4.92	4.93	4.96	(0.04)	(0.60)
	Primary Model <6000		4.92	4.93	4.98	(0.06)	(0.82)
	Alternate Model 2 <6000		4.92	4.93	4.96	(0.04)	(0.57)
	Primary Model - All Households	Number of development activities child had with either parent – all households	4.92	4.92	4.97	(0.05)	(0.76)
	Alternate Model 1 - All Households		4.92	4.92	4.91	(0.01)	0.21
	Alternate Model 2 - All Households		4.92	4.92	4.93	(0.01)	(0.17)

Table 36: Impact on share of children owning at least three books, expanded estimation results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Sharing of at least three books among children	Primary Model <1500	Sharing of at least three books among children in households with income below 1500 Baht per month	0.08	0.09	0.11	(0.03)	(0.96)
	Alternate Model 2 <1500		0.08	0.09	0.14	(0.06)	(1.77)
	Alternate Model 1 <1500		0.08	0.09	0.07	0.02	0.56
	Alternate Model 1 <3000	Sharing of at least three books among children in households with income below 3000 Baht per month	0.09	0.12	0.13	(0.04)	(1.92)
	Alternate Model 2 <3000		0.09	0.12	0.11	(0.02)	(1.14)
	Primary Model <3000		0.09	0.12	0.13	(0.04)	(1.64)
	Alternate Model 1 <6000	Sharing of at least three books among children in households with income below 6000 Baht per month	0.10	0.12	0.13	(0.03)	(1.32)
	Primary Model <6000		0.10	0.12	0.12	(0.02)	(1.05)
	Alternate Model 2 <6000		0.10	0.12	0.12	(0.02)	(0.99)
	Primary Model - All Households	Sharing of at least three books among children in all households	0.11	0.13	0.12	(0.01)	(0.49)
	Alternate Model 1 - All Households		0.11	0.13	0.13	(0.02)	(1.11)
	Alternate Model 2 - All Households		0.11	0.13	0.13	(0.02)	(1.07)

Table 37: Caregivers' decision-making on food expenses, expanded estimation results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Caregiver is the primary decision-maker on day-to-day food expenses	Primary Model <1500	Proportion of caregivers living in households with income below 1500 Baht who are primary decision-makers on daily food expenses	0.67	0.60	0.57	0.09	1.85
	Alternate Model 2 <1500		0.67	0.60	0.56	0.10	2.06
	Alternate Model 1 <1500		0.67	0.60	0.56	0.11	2.09
	Alternate Model 1 <3000	Proportion of caregivers living in households with income below 3000 Baht who are primary decision-makers on daily food expenses	0.65	0.60	0.61	0.03	1.03
	Alternate Model 2 <3000		0.65	0.60	0.67	(0.02)	(0.62)
	Primary Model <3000		0.65	0.60	0.67	(0.02)	(0.65)
	Alternate Model 1 <6000	Proportion of caregivers living in households with income below 6000 Baht who are primary decision-makers on daily food expenses	0.64	0.60	0.63	0.01	0.18
	Primary Model <6000		0.64	0.60	0.65	(0.01)	(0.38)
	Alternate Model 2 <6000		0.64	0.60	0.61	0.03	1.05
	All Households 1	Proportion of caregivers living in any household who are primary decision-makers on daily food expenses	0.63	0.60	0.61	0.02	0.60
	Alternate Model 1 - All Households		0.63	0.60	0.63	0.00	0.03
	Alternate Model 2 - All Households		0.63	0.60	0.65	(0.02)	(0.70)

Table 38: Caregivers' decision-making on own health care, estimation results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Caregiver is the primary decision-maker on health care decisions	Primary Model <1500	Proportion of caregivers living in households with income below 1500 Baht who are primary decision-makers on personal health care	0.45	0.44	0.40	0.05	0.96
	Primary Model <3000	Proportion of caregivers living in households with income below 3000 Baht who are primary decision-makers on personal health care	0.47	0.47	0.39	0.08	2.32
	Primary Model <6000	Proportion of caregivers living in households with income below 6000 Baht who are primary decision-makers on personal health care	0.48	0.51	0.46	0.02	0.48
	Primary Model - All Households	Proportion of caregivers living in any household who are primary decision-makers on personal health care	0.49	0.52	0.44	0.05	1.82

Table 39: Caregivers' decision-making on the use of his/her own money, estimation results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Caregiver is the primary decision-maker on the use of his/her own money	Primary Model <1500	Proportion of caregivers living in households with income below 1500 Baht who are primary decision-makers on the use of their own money	0.50	0.50	0.47	0.03	0.66
	Primary Model <3000	Proportion of caregivers living in households with income below 3000 Baht who are primary decision-makers on the use of their own money	0.55	0.55	0.49	0.06	1.92
	Primary Model <6000	Proportion of caregivers living in households with income below 6000 Baht who are primary decision-makers on the use of their own money	0.57	0.57	0.54	0.02	0.68
	Primary Model - All Households	Proportion of caregivers living in any household who are primary decision-makers on the use of their own money	0.57	0.59	0.54	0.03	1.33

Table 40: Caregivers' decision-making on children's health care, expanded estimation results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Caregiver is the primary decision-maker on children's health care	Primary Model <1500	Proportion of eligible children with low birthweight in households with income below 1500 Baht per month	0.31	0.32	0.25	0.06	1.22
	Alternate Model 2 <1500		0.31	0.32	0.24	0.07	1.48
	Alternate Model 1 <1500		0.31	0.32	0.27	0.04	0.84
	Alternate Model 1 <3000	Proportion of eligible children with low birthweight in households with income below 3000 Baht per month	0.32	0.36	0.31	0.01	0.38
	Alternate Model 2 <3000		0.32	0.36	0.32	0.00	0.17
	Primary Model <3000		0.32	0.36	0.34	(0.02)	(0.62)
	Alternate Model 1 <6000	Proportion of eligible children with low birthweight in households with income below 6000 Baht per month	0.33	0.38	0.33	0.00	0.05
	Primary Model <6000		0.33	0.38	0.32	0.01	0.53
	Alternate Model 2 <6000		0.33	0.38	0.33	0.00	0.18
	Primary Model - All Households	Proportion of eligible children with low birthweight in all households	0.34	0.40	0.32	0.02	0.86
	Alternate Model 1 - All Households		0.34	0.40	0.36	(0.02)	(0.74)
	Alternate Model 2 - All Households		0.34	0.40	0.34	0.00	0.05

Table 41: Siblings' exclusion from early childhood education, expanded estimation results

Impact	Model	Description	treatment mean	unmatched comparison	matched comparison	matched difference	matched t
Siblings' exclusion from early childhood education programme	Alternate Model 1 <6000	Proportion of siblings excluded from early childhood education in households with income below 6000 Baht per month	0.08	0.06	0.05	0.03	1.23
	Alternate Model 2 <6000		0.08	0.06	0.07	0.01	0.38
	Primary Model <6000		0.08	0.06	0.07	0.01	0.29
	Primary Model - All Households	Proportion of siblings excluded from early childhood education in all households	0.08	0.06	0.04	0.04	1.37
	Alternate Model 1 - All Households		0.08	0.06	0.07	0.01	0.61
	Alternate Model 2 - All Households		0.08	0.06	0.06	0.02	0.903

M. Technical Annex IV

Table 42: Primary model balance test - Prevalence of wasting in households with income below THB 1500

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model <THB 1500	Household receiving scholarship or school food programme	0.06	0.51	0.61	12.80	8.80	31.80			
	Number of 7-8 months pregnant women	-								
	Number of employed members per household	0.02	0.51	0.61	(0.10)	(3.30)	(4,444.10)			
	Size of agricultural land	0.01	0.81	0.42	(11.70)	4.00	65.90			
	Woman in household is employed	0.15	1.14	0.26	22.60	(1.50)	93.50			
	Number of rooms used for sleeping	(0.11)	(1.78)	0.08	(6.50)	(1.20)	81.40			
	Household owns the dwelling	0.08	0.95	0.34	7.30	13.10	(78.70)			
	Any household member owns a bank account	0.12	0.75	0.45	(0.50)	0.50	7.90			
	Any household member owns land that can be used for agriculture	(0.11)	(0.79)	0.43	(20.20)	(3.50)	82.70			
	Any household member owns a mobile phone	0.07	0.58	0.56	(7.20)	(0.40)	95.00			
	Household has a plain TV	(0.03)	(0.20)	0.84	(19.10)	11.60	39.50			
	Religion of household head	(0.15)	(1.08)	0.28	35.80	10.60	70.50			
	Interaction between registration and province variable	0.50	1.50	0.28	14.30	9.90	30.77	13.20	9.30	(25.10)
	Interaction between urban/rural variable and province variable	0.49	1.40	0.28	19.70	8.50	56.85	22.90	9.40	(18.10)
	Household owns a refrigerator	(0.22)	(1.53)	0.13	(28.50)	(15.10)	47.10			
	Household uses an improved source of cooking fuel	0.16	1.14	0.26	26.00	11.50	55.70			
	Household owns a computer	(0.27)	(1.23)	0.22	(15.50)	3.40	77.80			
	Household owns livestock	0.16	1.12	0.26	3.00	(18.40)	(514.10)			

Table 43: Primary model balance test - Prevalence of wasting in households with income below THB 3000

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model <THB 3000	Household receiving scholarship or school food programme	0.06	0.56	0.57	12.80	23.20	(81.10)			
	Number of 7-8 months pregnant women	-								
	The household head is employed	0.10	0.80	0.42	11.80	(9.90)	16.00			
	Woman in household is employed	0.16	1.33	0.19	22.60	12.50	44.60			
	Number of rooms used for sleeping	(0.10)	(1.82)	0.07	(6.50)	7.90	(22.20)			
	Household owns the dwelling	0.08	0.92	0.36	7.30	6.30	14.00			
	Any household member owns land that can be used for agriculture	(0.12)	(0.92)	0.36	(20.20)	3.80	81.00			
	Any household member owns a bank account	0.10	0.58	0.56	(0.50)	3.40	(544.90)			
	Size of agricultural land	0.01	0.85	0.40	(11.70)	0.70	94.00			
	Household has electricity	0.02	0.07	0.94	(4.60)	8.00	(74.90)			
	Any household member owns a mobile phone	0.06	0.50	0.62	(7.20)	(8.30)	(15.00)			
	Religion of household head	(0.15)	(1.12)	0.26	35.80	(1.20)	96.60			
	Interaction between registration and province variable	0.50	1.50	0.27	14.30	6.60	53.85	13.20	5.50	(15.50)
	Interaction between urban/rural variable and province variable	0.53	1.50	0.26	19.70	4.10	79.19	22.90	4.20	(7.90)
	Household uses an improved source of cooking fuel	0.12	0.89	0.37	26.00	0.40	98.60			
	Household owns a tractor	(0.03)	(0.25)	0.80	(25.60)	2.60	89.90			
	Household owns livestock	0.17	1.13	0.26	3.00	(11.40)	(280.20)			
	Household owns a computer	(0.30)	(1.36)	0.17	(15.50)	(10.30)	33.50			

Table 44: Primary model balance test - Prevalence of wasting in households with income below THB 6000

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model <THB 6000	Household receiving scholarship, school food programme, elderly pension, or disability pension	0.05	0.95	0.34	5.20	4.80	8.20			
	Household owns a tractor	0.09	1.43	0.15	(19.90)	7.80	60.90			
	Woman is the household head	(0.04)	(0.65)	0.52	(7.00)	7.50	(6.60)			
	Age of household head	(0.00)	(0.13)	0.90	(9.10)	(3.10)	65.60			
	Any household member owns a smartphone	0.09	1.36	0.17	0.20	5.30	(3,226.90)			
	Any household member has a credit card	(0.13)	(1.09)	0.28	(12.50)	7.30	41.90			
	Household owns a car	(0.13)	(2.35)	0.02	(14.00)	(7.90)	44.00			
	The household head has at least secondary school education	0.06	0.79	0.43	15.40	(11.00)	29.10			
	Number of 7-8 months pregnant women	(0.80)	(2.40)	0.02	(12.20)	1.10	91.10			
	Size of agricultural land	0.00	0.91	0.36	(11.20)	9.70	13.50			
	The household head is employed	0.06	0.75	0.45	8.50	(10.80)	(27.30)			
	Number of employed members per household	(0.01)	(0.35)	0.73	1.80	(3.60)	(95.70)			
	Woman in household is employed	0.14	2.30	0.02	12.90	5.10	60.80			
	Number of rooms used for sleeping	0.01	0.43	0.67	6.00	1.20	79.50			
	Household owns the dwelling	(0.01)	(0.18)	0.86	(1.30)	2.30	(78.30)			
	Any household member owns land that can be used for agriculture	(0.15)	(2.23)	0.03	(21.80)	4.40	79.80			
	Household owns an LCD TV	(0.07)	(0.95)	0.34	(8.10)	2.60	67.50			
	Interaction between number of children under five years of age variable and province variable	0.02	0.22	0.39	7.40	3.70	50.00	5.20	3.60	9.80
	Interaction between registration and province variable	0.56	3.34	0.08	15.80	4.10	74.05	12.50	2.40	16.10
	Interaction between urban/rural variable and province variable	0.46	2.32	0.19	19.40	4.10	78.87	18.70	3.30	(10.00)
	Household owns a refrigerator	(0.09)	(1.08)	0.28	(20.30)	19.90	2.30			
	Household owns a computer	(0.16)	(1.91)	0.06	(15.50)	0.80	95.00			
	Household uses an improved source of cooking fuel	0.03	0.53	0.59	16.40	5.20	68.50			
	Household owns livestock	(0.00)	(0.06)	0.95	1.80	(4.80)	(161.70)			

Table 45: Primary model balance test - Prevalence of wasting in all households

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model – All Households	Household receiving scholarship or school food programme	0.03	0.60	0.55	7.40	9.70	(31.00)			
	Number of 7-8 months pregnant women	(0.73)	(2.31)	0.02	(10.50)	(1.60)	85.00			
	Size of agricultural land	0.00	0.55	0.58	(10.90)	10.50	3.60			
	The household head is employed	0.06	1.09	0.28	7.20	(9.30)	(29.10)			
	Woman in household is employed	0.07	1.33	0.18	7.50	(0.40)	94.90			
	Number of rooms used for sleeping	0.02	0.93	0.35	6.50	3.80	41.80			
	Household owns the dwelling	(0.01)	(0.43)	0.67	(2.80)	8.10	(192.80)			
	Any household member owns land that can be used for agriculture	(0.14)	(2.35)	0.02	(20.80)	(4.20)	79.80			
	Any household member owns bank account	(0.03)	(0.31)	0.76	(5.20)	8.20	(59.70)			
	Any household member owns a smartphone	0.01	0.11	0.91	(3.40)	(4.30)	(25.80)			
	Household owns an LCD TV	(0.02)	(0.34)	0.74	(9.10)	1.80	79.80			
	Household has air conditioning	(0.48)	(3.45)	0.00	(21.40)	1.90	91.30			
	Interaction between registration and province variable	0.52	3.37	0.13	15.60	3.00	80.77	12.40	2.50	6.50
	Interaction between urban/rural variable and province variable	0.37	2.47	0.10	19.60	3.90	80.10	18.80	2.60	(10.80)
	Household owns a refrigerator	(0.07)	(0.87)	0.39	(20.60)	13.20	35.90			
	Household uses an improved source of cooking fuel	(0.03)	(0.57)	0.57	10.10	(3.00)	70.80			
	Household owns a Blu-ray player	(0.03)	(0.13)	0.89	(5.60)	(1.40)	75.00			
	Household owns livestock	0.06	0.80	0.42	4.30	6.20	(44.70)			

Table 46: Primary model balance test - Proportion of eligible children breastfed for six months in households with income below THB 1500

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model <THB 1500	Household receiving scholarship, school food programme, elderly pension, or disability pension	0.07	1.22	0.22	7.30	7.80	(6.10)			
	Household owns a computer	(0.19)	(1.79)	0.07	(11.00)	(0.20)	98.40			
	Household has electricity	0.35	2.86	0.00	1.50	(4.80)	(227.30)			
	Household owns a water cooler	0.04	0.43	0.67	(5.40)	(7.60)	(41.90)			
	Number of 7-8 months pregnant women	(0.66)	(1.70)	0.09	(9.30)	2.40	73.90			
	Age of household head	(0.00)	(0.69)	0.49	(6.60)	(2.10)	68.50			
	Size of agricultural land	0.01	2.83	0.01	(4.40)	(8.50)	(93.00)			
	The household head is employed	0.10	1.49	0.14	7.90	(2.00)	75.10			
	Woman in household is employed	0.11	1.91	0.06	12.90	2.10	83.60			
	Any household member has a credit card	0.22	1.40	0.16	(1.00)	4.40	(352.50)			
	Household owns a car	(0.04)	(0.71)	0.48	(2.50)	(13.00)	(417.60)			
	The household head has at least secondary school education	0.04	0.57	0.57	12.90	0.60	95.60			
	Number of rooms used for sleeping	0.03	1.38	0.17	11.80	4.90	58.50			
	Household owns the dwelling	(0.01)	(0.30)	0.76	(5.10)	2.10	59.30			
	Any household member owns land that can be used for agriculture	(0.14)	(2.10)	0.04	(13.60)	(4.40)	67.80			
	Any household member owns a bank account	0.10	1.18	0.24	4.00	1.00	75.60			
	Any household member owns a smartphone	0.06	1.06	0.29	1.60	(7.40)	(369.20)			
	Household owns an LCD TV	(0.03)	(0.45)	0.65	(3.90)	(4.20)	(7.50)			
	Household has air conditioning	(0.40)	(1.58)	0.11	(10.70)	(0.40)	96.00			
	Interaction between registration and province variable	0.48	2.82	0.09	14.10	4.70	66.67	11.10	3.00	(14.70)
	Interaction between urban/rural variable and province variable	0.50	3.15	0.22	17.90	4.20	76.54	18.30	2.90	(11.30)
	Household owns a refrigerator	(0.15)	(2.00)	0.05	(18.20)	(1.70)	90.50			
	Household uses an improved source of cooking fuel	(0.02)	(0.36)	0.72	15.50	3.60	76.90			
	Household owns livestock	0.03	0.35	0.73	0.70	(9.70)	(1,316.70)			

Table 47: Primary model balance test - Proportion of eligible children breastfed for six months in households with income below THB 3000

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model <THB 3000	Household receiving scholarship, school food programme, elderly pension, or disability pension	0.07	1.30	0.20	7.50	1.10	85.30			
	Household owns a tractor	0.05	0.80	0.42	(17.40)	1.30	92.40			
	Household owns a computer	(0.19)	(1.79)	0.07	(10.90)	(0.40)	96.70			
	Household has electricity	0.34	2.66	0.01	1.20	0.40	70.00			
	Household owns a water cooler	0.04	0.42	0.67	(5.30)	(6.00)	(12.70)			
	Number of 7-8 months pregnant women	(0.65)	(1.66)	0.10	(9.20)	2.40	73.80			
	Age of household head	(0.00)	(0.82)	0.41	(6.50)	(3.70)	42.30			
	Size of agricultural land	0.01	2.42	0.02	(4.80)	(2.20)	54.00			
	The household head is employed	0.10	1.49	0.14	8.00	(0.10)	98.60			
	Woman in household is employed	0.11	1.86	0.06	12.70	4.80	61.80			
	Any household member has a credit card	0.22	1.39	0.17	(0.90)	(0.80)	12.20			
	Household owns a car	(0.05)	(0.83)	0.41	(2.70)	(9.50)	(252.30)			
	The household head has at least secondary school education	0.04	0.62	0.53	12.90	(1.50)	88.70			
	Number of rooms used for sleeping	0.03	1.28	0.20	11.60	3.30	71.70			
	Household owns the dwelling	(0.01)	(0.40)	0.69	(5.80)	1.40	76.40			
	Any household member owns land that can be used for agriculture	(0.14)	(2.15)	0.03	(13.60)	(7.10)	47.30			
	Any household member owns a bank account	0.09	1.10	0.27	4.30	(1.20)	71.10			
	Any household member owns a smartphone	0.10	1.52	0.13	1.40	(3.40)	(151.20)			
	Any household member owns a mobile phone	0.10	1.58	0.12	(1.40)	2.20	(53.40)			
	Household owns any type of television	(0.03)	(0.28)	0.78	(10.30)	5.10	49.90			
	Household has air conditioning	(0.42)	(1.64)	0.10	(10.70)	0.90	92.00			
	Interaction between registration and province variable	0.48	2.86	0.09	14.10	3.80	73.05	11.10	1.70	(15.90)
	Interaction between urban/rural variable and province variable	0.51	3.19	0.21	17.80	3.90	78.09	18.00	3.00	(12.80)
	Household owns a refrigerator	(0.16)	(2.05)	0.04	(18.30)	1.90	89.40			
	Household uses an improved source of cooking fuel	(0.02)	(0.33)	0.74	15.20	2.90	80.80			
	Household owns livestock	0.01	0.14	0.89	0.50	(4.50)	(894.80)			

Table 48: Primary model balance test - Proportion of eligible children breastfed for six months in households with income below THB 6000

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model <THB 6000	Household receiving scholarship, school food programme, elderly pension, or disability pension	0.07	1.54	0.12	7.10	5.20	27.10			
	Household owns a tractor	0.07	1.25	0.21	(17.40)	(1.60)	90.60			
	Woman is the household head	0.00	0.08	0.94	(4.80)	(9.20)	(93.20)			
	Age of the household head	(0.00)	(0.23)	0.82	(5.40)	(2.40)	54.90			
	Any household member owns a smartphone	0.03	0.59	0.56	(4.00)	2.60	35.10			
	Any household member has a credit card	(0.06)	(0.59)	0.56	(10.10)	(2.00)	80.10			
	Household owns a car	(0.09)	(1.85)	0.06	(10.90)	1.00	90.70			
	The household head has at least secondary school education	0.02	0.37	0.71	12.20	4.80	60.20			
	Number of 7-8 months pregnant women	(0.31)	(1.15)	0.25	(7.70)	-	100.00			
	Size of agricultural land	0.00	1.41	0.16	(10.30)	(3.90)	62.50			
	The household head is employed	0.02	0.32	0.75	6.00	3.70	38.90			
	Number of employed members per household	0.00	0.17	0.86	2.10	(0.30)	85.60			
	Woman in household is employed	0.08	1.65	0.10	9.00	3.30	63.00			
	Number of rooms used for sleeping	0.03	1.59	0.11	7.80	(2.00)	74.40			
	Household owns the dwelling	(0.01)	(0.27)	0.79	(3.80)	6.30	(67.00)			
	Any household member owns land that can be used for agriculture	(0.09)	(1.67)	0.09	(16.00)	(8.40)	47.40			
	Household has an LCD TV	(0.08)	(1.47)	0.14	(9.80)	(2.00)	79.80			
	Interaction between number of children under five years of age variable and province variable	0.01	0.11	0.49	5.90	3.30	44.07	4.60	2.30	10.00
	Interaction between registration and province variable	0.53	3.75	0.04	14.60	4.10	71.92	12.80	2.50	(13.10)
	Interaction between urban/rural variable and province variable	0.50	3.35	0.13	17.90	3.60	79.89	15.40	3.10	9.70
	Household owns a refrigerator	(0.07)	(1.10)	0.27	(18.80)	(5.00)	73.30			
	Household owns a computer	(0.22)	(2.91)	0.00	(16.90)	(1.30)	92.60			
	Household uses an improved source of cooking fuel	0.04	0.77	0.44	12.30	2.90	76.20			
	Household owns livestock	0.02	0.28	0.78	3.10	0.40	87.70			

Table 49: Primary model balance test - Proportion of eligible children breastfed for six months in all households

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model – All Households	Household receiving scholarship or school food programme	0.07	1.86	0.06	10.10	9.90	2.10			
	Number of 7-8 months pregnant women	(0.24)	(0.94)	0.35	(6.40)	2.70	58.30			
	Size of agricultural land	0.00	1.04	0.30	(10.10)	(1.00)	90.20			
	The household head is employed	0.02	0.42	0.67	5.00	(3.30)	33.90			
	Woman in household is employed	0.03	0.59	0.56	5.10	1.80	64.60			
	Number of rooms used for sleeping	0.04	2.08	0.04	8.40	(2.70)	67.30			
	Household owns the dwelling	(0.01)	(0.51)	0.61	(5.00)	3.40	32.90			
	Any household member owns land that can be used for agriculture	(0.09)	(1.74)	0.08	(15.40)	(4.00)	73.80			
	Any household member owns a bank account	0.11	1.59	0.11	0.80	5.10	(509.20)			
	Any household member owns a smartphone	(0.02)	(0.42)	0.67	(6.90)	0.90	86.30			
	Household owns an LCD TV	(0.09)	(1.65)	0.10	(12.00)	1.10	90.90			
	Household has air conditioning	(0.32)	(2.64)	0.01	(17.40)	0.70	96.00			
	Interaction between registration and province variable	0.53	3.95	0.05	15.05	1.95	87.04	13.50	1.90	(3.70)
	Interaction between urban/rural variable and province variable	0.40	3.38	0.13	18.55	1.59	91.43	16.00	1.30	3.20
	Household owns a refrigerator	(0.08)	(1.27)	0.21	(19.70)	(2.90)	85.10			
	Household uses an improved source of cooking fuel	0.01	0.25	0.80	8.50	0.80	90.50			
	Household owns a Blu-ray player	(0.04)	(0.19)	0.85	(4.20)	(2.50)	39.90			
	Household owns livestock	0.05	0.80	0.42	4.10	(2.20)	47.40			

Table 50: Primary model balance test - Number of post-natal care visits received by eligible children in households with income below THB 1500

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model <THB 1500	Household receiving scholarship or school food programme	0.06	0.66	0.51	7.90	1.40	81.90			
	Number of 7-8 months pregnant women	-								
	Number of employed members per household	0.01	0.44	0.66	3.80	7.20	(90.40)			
	Size of agricultural land	0.00	0.14	0.89	(12.30)	6.80	44.50			
	Woman in household is employed	0.09	0.89	0.38	12.90	6.90	46.60			
	Number of rooms used for sleeping	0.00	0.01	0.99	4.80	1.80	62.00			
	Household owns the dwelling	0.00	0.05	0.96	(2.00)	1.60	16.80			
	Any household member owns a bank account	0.14	1.13	0.26	8.10	(4.50)	44.20			
	Any household member owns land that can be used for agriculture	(0.03)	(0.29)	0.77	(9.30)	3.00	67.30			
	Any household member owns a mobile phone	0.17	1.82	0.07	5.20	18.70	(259.60)			
	Household has a plain TV	(0.00)	(0.03)	0.98	(8.60)	16.20	(89.70)			
	Religion of household head	(0.08)	(0.90)	0.37	18.60	(1.60)	91.60			
	Interaction between registration and province variable	0.54	1.88	0.21	13.60	4.50	66.91	12.10	2.30	(12.20)
	Interaction between urban/rural variable and province variable	0.63	2.15	0.21	15.20	3.00	80.26	13.60	2.60	6.50
	Household owns a refrigerator	(0.05)	(0.39)	0.70	(17.10)	(0.50)	97.10			
	Household uses an improved source of cooking fuel	0.14	1.20	0.23	14.50	10.00	30.50			
	Household owns a computer	(0.35)	(1.80)	0.07	(13.70)	1.10	92.20			
	Household owns livestock	(0.03)	(0.27)	0.78	(2.80)	(6.20)	(119.70)			

Table 51: Primary model balance test - Number of post-natal care visits received by eligible children in households with income below THB 3000

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model <THB 3000	Household receiving scholarship, school food programme, elderly pension, or disability pension	0.08	1.31	0.19	7.80	7.00	11.00			
	Household owns a computer	(0.24)	(2.10)	0.04	(13.70)	4.80	65.00			
	Household has electricity	0.37	2.80	0.01	0.60	2.00	(251.60)			
	Household owns a water cooler	(0.06)	(0.59)	0.56	(8.40)	5.90	28.90			
	Number of 7-8 months pregnant women	(1.04)	(2.16)	0.03	(10.80)	1.40	86.60			
	Age of household head	(0.00)	(0.66)	0.51	(7.50)	(0.20)	97.50			
	Size of agricultural land	0.01	2.36	0.02	(5.80)	(1.80)	68.90			
	The household head is employed	0.07	0.95	0.34	6.30	(7.40)	(17.30)			
	Woman in household is employed	0.12	1.86	0.06	12.80	(0.50)	96.30			
	Any household member has a credit card	0.19	1.19	0.24	(1.20)	(5.30)	(325.30)			
	Household owns a car	(0.05)	(0.81)	0.42	(3.40)	1.90	43.20			
	The household head has at least secondary school education	0.01	0.11	0.91	12.20	(0.50)	95.70			
	Number of rooms used for sleeping	0.03	1.12	0.26	10.40	1.70	84.00			
	Household owns the dwelling	(0.04)	(0.89)	0.37	(5.50)	(0.20)	95.70			
	Any household member owns land that can be used for agriculture	(0.13)	(1.81)	0.07	(14.20)	(8.40)	41.00			
	Any household member owns a bank account	0.05	0.52	0.60	1.10	7.70	(610.00)			
	Any household member owns a smartphone	0.06	0.97	0.33	1.50	(2.70)	(84.10)			
	Household owns an LCD TV	(0.05)	(0.67)	0.50	(5.30)	1.80	65.40			
	Household has air conditioning	(0.23)	(0.81)	0.42	(8.50)	2.60	69.20			
	Interaction between registration and province variable	0.49	2.62	0.09	14.70	3.90	73.47	11.10	3.50	5.70
	Interaction between urban/rural variable and province variable	0.48	2.78	0.21	18.60	3.30	82.26	18.00	3.40	(5.70)
	Household owns a refrigerator	(0.17)	(2.01)	0.04	(19.70)	2.60	87.00			
	Household uses an improved source of cooking fuel	(0.02)	(0.28)	0.78	15.70	6.90	55.90			
	Household owns livestock	0.01	0.16	0.88	(0.60)	(4.60)	(661.50)			

Table 52: Primary model balance test - Number of post-natal care visits received by eligible children in households with income below THB 6000

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model <THB 6000	Household receiving scholarship or school food programme or elderly pension or disability pension	0.05	1.04	0.30	6.30	1.60	74.20			
	Household owns a tractor	0.06	1.11	0.27	(18.10)	1.30	92.80			
	Woman is the household head	0.04	0.67	0.50	(3.20)	1.10	64.30			
	Age of household head	(0.00)	(0.47)	0.64	(6.80)	(0.30)	96.30			
	Any household member owns a smartphone	0.02	0.39	0.70	(4.20)	(0.90)	77.80			
	Any household member has a credit card	(0.09)	(0.76)	0.45	(10.90)	4.40	59.50			
	Household owns a car	(0.10)	(1.84)	0.07	(11.20)	2.70	75.70			
	The household head has at least secondary school education	(0.01)	(0.20)	0.84	11.10	(8.50)	23.50			
	Number of 7-8 months pregnant women	(0.37)	(1.31)	0.19	(8.60)	1.80	78.90			
	Size of agricultural land	0.00	1.14	0.25	(11.10)	0.90	92.10			
	The household head is employed	(0.01)	(0.20)	0.84	6.10	(4.90)	19.40			
	Number of employed members per household	0.03	1.16	0.25	4.20	(5.30)	(26.70)			
	Woman in household is employed	0.07	1.31	0.19	9.00	(4.70)	47.40			
	Number of rooms used for sleeping	0.02	0.87	0.38	5.70	(1.60)	72.70			
	Household owns the dwelling	(0.02)	(0.45)	0.65	(3.60)	(0.90)	75.50			
	Any household member owns land that can be used for agriculture	(0.08)	(1.33)	0.18	(15.70)	(7.20)	54.50			
	Household owns an LCD TV	(0.10)	(1.65)	0.10	(11.40)	(0.50)	95.40			
	Interaction between number of children under five years of age variable and province variable	(0.02)	0.01	0.46	6.20	2.30	62.90	4.90	1.90	6.60
	Interaction between registration and province variable	0.54	3.48	0.05	15.20	6.00	60.53	13.00	4.60	16.50
	Interaction between urban/rural variable and province variable	0.45	2.82	0.11	18.30	4.40	75.96	14.00	3.70	12.20
	Household owns a refrigerator	(0.08)	(1.10)	0.27	(19.60)	11.40	41.80			
	Household owns a computer	(0.28)	(3.45)	0.00	(20.20)	0.40	98.00			
	Household uses an improved source of cooking fuel	0.06	0.97	0.33	12.30	12.20	0.70			
	Household owns livestock	(0.00)	(0.07)	0.94	2.00	(7.00)	(243.60)			

Table 53: Primary model balance test - Number of post-natal care visits received by eligible children in all households

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model – All Households	Household receiving scholarship or school food programme	0.07	1.65	0.10	10.10	5.20	48.30			
	Number of 7-8 months pregnant women	(0.32)	(1.19)	0.24	(7.30)	3.00	58.60			
	Size of agricultural land	0.00	0.67	0.50	(10.80)	1.00	90.70			
	The household head is employed	0.00	0.07	0.95	4.70	2.10	53.90			
	Woman in household is employed	0.03	0.59	0.55	4.70	(2.80)	40.10			
	Number of rooms used for sleeping	0.03	1.52	0.13	6.60	(1.60)	75.80			
	Household owns the dwelling	(0.02)	(0.62)	0.54	(4.30)	2.50	43.30			
	Any household member owns land that can be used for agriculture	(0.07)	(1.27)	0.21	(14.90)	(3.80)	74.20			
	Any household member owns a bank account	0.07	0.87	0.38	(0.90)	2.90	(224.80)			
	Any household member owns a smartphone	(0.02)	(0.45)	0.65	(6.80)	5.00	26.90			
	Household owns an LCD TV	(0.11)	(2.00)	0.05	(13.80)	(2.50)	81.70			
	Household has air conditioning	(0.25)	(1.90)	0.06	(15.80)	(1.40)	91.00			
	Interaction between registration and province variable	0.54	3.70	0.05	15.50	2.60	83.23	13.70	2.20	(8.10)
	Interaction between urban/rural variable and province variable	0.36	2.90	0.11	18.90	2.40	87.30	14.30	1.60	(7.70)
	Household owns a refrigerator	(0.07)	(1.02)	0.31	(19.80)	0.50	97.70			
	Household uses an improved source of cooking fuel	0.02	0.35	0.73	8.00	1.20	84.60			
	Household owns a Blu-ray player	0.01	0.05	0.96	(3.30)	2.90	12.90			
	Household owns livestock	0.03	0.48	0.63	3.40	(1.80)	47.30			

Table 54: Primary model balance test - Caregivers' decision-making on food expenses in households with income below THB 1500

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model <THB 1500	Household receiving scholarship or school food programme	0.06	0.86	0.39	9.50	1.60	83.70			
	Number of 7-8 months pregnant women	-								
	Number of employed members per household	0.02	0.84	0.40	6.70	(8.10)	(21.60)			
	Size of agricultural land	0.00	0.85	0.39	(9.40)	8.70	7.50			
	Woman in household is employed	0.11	1.40	0.16	14.70	4.70	68.00			
	Number of rooms used for sleeping	0.03	0.85	0.40	11.50	2.30	80.30			
	Household owns the dwelling	0.09	1.90	0.06	3.10	8.50	(176.20)			
	Any household member owns a bank account	0.25	2.73	0.01	15.30	(3.70)	75.60			
	Any household member owns land that can be used for agriculture	(0.03)	(0.36)	0.72	(10.90)	(2.00)	81.20			
	Any household member owns a mobile phone	0.24	3.28	0.00	12.00	4.50	62.30			
	Household has a plain TV	(0.03)	(0.37)	0.71	(7.10)	4.20	40.70			
	Religion of the household head	(0.05)	(0.82)	0.41	24.00	(1.00)	95.90			
	Interaction between registration and province variable	0.55	2.31	0.16	13.60	4.00	70.59	11.30	1.80	(15.50)
	Interaction between urban/rural variable and province variable	0.54	2.43	0.15	14.90	3.50	76.51	14.10	3.40	(9.00)
	Household owns a refrigerator	(0.16)	(1.81)	0.07	(16.70)	(5.00)	70.30			
	Household uses an improved source of cooking fuel	0.07	0.72	0.47	18.10	7.60	58.10			
	Household owns a computer	(0.31)	(2.03)	0.04	(13.30)	(5.80)	56.30			
	Household owns livestock	0.05	0.56	0.57	3.30	(15.20)	(365.90)			

Table 55: Primary model balance test - Caregivers' decision-making on food expenses in households with income below THB 3000

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model <THB 3000	Household receiving scholarship, school food programme, elderly pension, or disability pension	0.08	1.54	0.12	9.10	-	100.00			
	Household owns a computer	(0.19)	(2.15)	0.03	(11.40)	(2.10)	81.90			
	Household has electricity	0.34	3.36	0.00	2.20	6.00	(179.00)			
	Household owns a water cooler	0.00	0.04	0.97	(6.20)	(4.60)	25.10			
	Number of 7-8 months pregnant women	(0.69)	(2.09)	0.04	(8.70)	3.00	65.90			
	Age of the household head	(0.00)	(1.38)	0.17	(7.30)	(1.90)	74.50			
	Size of agricultural land	0.01	3.43	0.00	(6.20)	0.30	95.00			
	The household head is employed	0.08	1.40	0.16	7.00	0.60	91.00			
	Woman in household is employed	0.11	2.14	0.03	12.60	(2.40)	80.70			
	Any household member has a credit card	0.21	1.57	0.12	(2.10)	(0.60)	71.90			
	Household owns a car	(0.04)	(0.73)	0.47	(2.60)	(6.80)	(164.90)			
	The household head has at least secondary school education	0.02	0.40	0.69	11.50	(4.80)	58.10			
	Number of rooms used for sleeping	0.07	2.96	0.00	16.50	4.50	72.60			
	Household owns the dwelling	0.01	0.39	0.70	(2.90)	3.00	(5.10)			
	Any household member owns land that can be used for agriculture	(0.15)	(2.61)	0.01	(16.00)	(1.40)	91.60			
	Any household member owns a bank account	0.10	1.51	0.13	3.80	(6.20)	(64.60)			
	Any household member owns a smartphone	0.05	0.90	0.37	1.50	(1.80)	(26.50)			
	Household owns an LCD TV	(0.03)	(0.54)	0.59	(5.20)	(1.60)	69.40			
	Household has air conditioning	(0.42)	(1.88)	0.06	(10.80)	(5.60)	48.30			
	Interaction between registration and province variable	0.50	3.50	0.08	14.00	2.60	81.43	11.60	1.90	(6.70)
	Interaction between urban/rural variable and province variable	0.44	3.23	0.14	17.40	3.50	79.89	16.60	3.50	(6.30)
	Household owns a refrigerator	(0.21)	(3.18)	0.00	(20.00)	(1.10)	94.30			
	Household uses an improved source of cooking fuel	(0.05)	(0.94)	0.35	16.40	2.40	85.30			
	Household owns livestock	0.04	0.66	0.51	0.50	(6.50)	(1,247.00)			

Table 56: Primary model balance test - Caregivers' decision-making on food expenses in households with income below THB 6000

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model <THB 6000	Household receiving scholarship, school food programme, elderly pension, or disability pension	0.06	1.42	0.16	6.90	1.00	85.00			
	Household owns a tractor	0.11	2.24	0.03	(16.60)	(2.10)	87.10			
	Woman is the household head	0.01	0.15	0.88	(3.80)	(0.20)	95.30			
	Age of the household head	(0.00)	(0.36)	0.72	(5.60)	(4.10)	27.90			
	Any household member owns a smartphone	0.02	0.40	0.69	(4.80)	2.80	42.80			
	Any household member has a credit card	(0.11)	(1.22)	0.22	(11.80)	1.80	84.40			
	Household owns a car	(0.09)	(2.16)	0.03	(12.40)	5.00	59.40			
	The household head has at least secondary school education	(0.01)	(0.27)	0.78	9.70	7.50	21.90			
	Number of 7-8 months pregnant women	(0.42)	(1.78)	0.08	(8.20)	(0.60)	92.80			
	Size of agricultural land	0.00	1.35	0.18	(12.60)	2.60	79.00			
	The household head is employed	0.00	0.04	0.97	5.40	7.10	(31.50)			
	Number of employed members per household	0.01	0.57	0.57	2.40	5.40	(122.70)			
	Woman in household is employed	0.06	1.40	0.16	7.90	0.80	89.80			
	Number of rooms used for sleeping	0.04	2.50	0.01	9.40	0.30	96.50			
	Household owns the dwelling	0.00	0.01	1.00	(2.20)	(1.30)	40.90			
	Any household member owns land that can be used for agriculture	(0.12)	(2.59)	0.01	(18.70)	(3.80)	79.40			
	Household owns an LCD TV	(0.10)	(1.92)	0.06	(11.70)	(1.40)	88.30			
	Interaction between number of children under five years of age variable and province variable	0.02	0.18	0.46	6.70	5.10	23.88	5.60	3.80	16.90
	Interaction between registration and province variable	0.55	4.54	0.04	14.50	5.90	59.31	12.80	5.20	(12.20)
	Interaction between urban/rural variable and province variable	0.45	3.23	0.12	17.00	5.40	68.24	13.40	5.00	13.50
	Household owns a refrigerator	(0.10)	(1.78)	0.07	(20.20)	(6.60)	67.30			
	Household owns a computer	(0.25)	(3.90)	-	(18.10)	3.60	79.90			
	Household uses an improved source of cooking fuel	(0.00)	(0.06)	0.95	10.90	7.40	32.30			
	Household owns livestock	0.02	0.32	0.75	2.20	(9.10)	(311.60)			

Table 57: Primary model balance test - Caregivers' decision-making on food expenses in all households

Model	Variable	Coefficient	z-score	p-value	Pre-Match Bias	Post-Match Bias	Bias Reduction	Median Bias Pre-Match	Median Bias Post-Match	Highest Bias of Dummies
Primary Model – All Households	Household receiving scholarship or school food programme	0.06	1.61	0.11	9.60	10.60	(10.10)			
	Number of 7-8 months pregnant women	(0.40)	(1.76)	0.08	(7.10)	(5.70)	19.90			
	Size of agricultural land	0.00	1.21	0.23	(11.70)	(1.60)	86.70			
	The household head is employed	0.02	0.41	0.69	4.40	(1.70)	60.00			
	Woman in household is employed	0.01	0.28	0.78	3.90	2.30	40.50			
	Number of rooms used for sleeping	0.04	3.03	0.00	9.70	1.60	83.50			
	Household owns the dwelling	(0.00)	(0.04)	0.97	(3.20)	6.30	(97.40)			
	Any household member owns land that can be used for agriculture	(0.11)	(2.58)	0.01	(17.50)	(2.00)	88.60			
	Any household member owns a bank account	0.12	2.07	0.04	0.10	(5.30)	(3,935.50)			
	Any household member owns a smartphone	(0.05)	(1.15)	0.25	(8.10)	0.30	96.10			
	Household has an LCD TV	(0.08)	(1.74)	0.08	(13.20)	(6.50)	50.30			
	Household has air conditioning	(0.35)	(3.33)	0.00	(18.30)	0.60	96.50			
	Interaction between registration and province variable	0.53	4.67	0.05	14.70	2.80	80.95	13.40	2.40	(7.20)
	Interaction between urban/rural variable and province variable	0.36	3.60	0.10	17.50	3.00	82.86	14.20	3.00	6.40
	Household owns a refrigerator	(0.10)	(1.87)	0.06	(20.70)	(4.90)	76.40			
	Household uses an improved source of cooking fuel	(0.03)	(0.74)	0.46	7.40	(0.90)	88.30			
	Household owns a Blu-ray player	(0.20)	(1.07)	0.28	(6.80)	3.30	51.80			
	Household owns livestock	0.05	0.98	0.33	2.80	(0.90)	68.60			

N. Technical Annex V[69]

Table 58: Impact of food share of total expenditure, nearest-neighbour estimator

	Impact	z-statistic	p-value
All Households	-0.01	-0.53	0.59
By income level			
Household < THB 1500	0.00	0.03	0.98
Households < THB 3000	0.00	-0.22	0.83
Households < THB 6000	-0.02	-1.20	0.23

Table 59: Impact on weight-for-height (wasting), nearest-neighbour estimator

	Impact	z-statistic	p-value
All Households	-0.05	-2.09	0.04
By income level			
Household < THB 1500	-0.08	-2.13	0.03
Households < THB 3000	-0.04	-1.59	0.11
Households < THB 6000	-0.04	-2.02	0.04

Table 60: Impact on breastfeeding practices, nearest-neighbour estimator

	Impact	z-statistic	p-value
All Households	0.07	3.34	0.00
By income level			
Household < THB 1500	0.10	2.53	0.01
Households < THB 3000	0.01	0.49	0.62
Households < THB 6000	0.01	0.55	0.58

69 The full set of results from the teffects analysis are available from the corresponding author upon request.

Table 61: Impact of caregivers' knowledge of best feeding practices, nearest-neighbour estimator

	Impact	z-statistic	p-value
All Households	-0.01	-0.30	0.77
By income level			
Household < THB 1500	-0.03	-0.85	0.39
Households < THB 3000	0.02	0.62	0.54
Households < THB 6000	-0.03	-1.14	0.26

Table 62: Impact on eligible child's number of postnatal care visits, nearest-neighbour estimator

	Impact	z-statistic	p-value
All Households	0.07	2.43	0.02
By income level			
Household < THB 1500	0.14	2.69	0.01
Households < THB 3000	0.10	2.80	0.01
Households < THB 6000	0.13	3.93	0.00

Table 63: Impact on use of infant of formula, nearest-neighbour estimator

	Impact	z-statistic	p-value
All Households	-0.06	-3.14	0.00
By income level			
Household < THB 1500	-0.10	-2.41	0.02
Households < THB 3000	-0.06	-2.25	0.02
Households < THB 6000	-0.07	-2.91	0.00

Table 64: Impact on frequency of use of infant formula, nearest-neighbour estimator

	Impact	z-statistic	p-value
All Households	-0.17	-1.25	0.21
By income level			
Household < THB 1500	-0.25	-0.79	0.43
Households < THB 3000	-0.32	-1.68	0.09
Households < THB 6000	-0.28	-1.70	0.09

Table 65: Impact on minimum meal frequency, nearest-neighbour estimator

	Impact	z-statistic	p-value
All Households	0.05	2.22	0.03
By income level			
Household < THB 1500	0.00	0.11	0.92
Households < THB 3000	0.00	-0.11	0.91
Households < THB 6000	0.00	-0.20	0.84

Table 66: Impact on number of child development activities, nearest-neighbour estimator

	Impact	z-statistic	p-value
All Households	0.05	1.09	0.28
By income level			
Household < THB 1500	-0.04	-0.54	0.59
Households < THB 3000	-0.09	-1.73	0.08
Households < THB 6000	0.00	0.04	0.97

Table 67: Impact on share of children owning at least three books, nearest-neighbour estimator

	Impact	z-statistic	p-value
All Households	0.01	0.85	0.39
By income level			
Household < THB 1500	0.02	0.91	0.36
Households < THB 3000	-0.02	-1.10	0.27
Households < THB 6000	0.02	1.51	0.13

Table 68: Impact on women's decision-making on food expenses, nearest-neighbour estimator

	Impact	z-statistic	p-value
All Households	0.01	0.67	0.50
By income level			
Household < THB 1500	0.05	1.37	0.17
Households < THB 3000	-0.05	-1.88	0.06
Households < THB 6000	0.00	-0.24	0.81

Table 69: Impact on women's decision-making power on children's health care, nearest-neighbour estimator

	Impact	z-statistic	p-value
All Households	-0.05	-2.53	0.01
By income level			
Household < THB 1500	-0.01	-0.35	0.72
Households < THB 3000	-0.07	-2.66	0.01
Households < THB 6000	-0.04	-1.75	0.08

Table 70: Impact on women's decision-making power on own health care, nearest-neighbour estimator

	Impact	z-statistic	p-value
All Households	0.01	0.52	0.60
By income level			
Household < THB 1500	0.11	3.00	0.00
Households < THB 3000	0.08	2.89	0.00
Households < THB 6000	0.07	3.28	0.00

Table 71: Impact on women's decision-making power on the use of own money, nearest-neighbour estimator

	Impact	z-statistic	p-value
All Households	0.01	0.41	0.68
By income level			
Household < THB 1500	0.07	1.82	0.07
Households < THB 3000	-0.01	-0.17	0.86
Households < THB 6000	0.06	2.13	0.03

unicef

for every child

CONTACT US

UNICEF Thailand
19 Phra Atit Road
Pranakorn, Bangkok 10200
Thailand

Telephone: +66 2 356 9499
Fax: +66 2 281 6032
Email: thailandao@unicef.org

Facebook: facebook.com/unicefthailand
Twitter: twitter.com/unicef_thailand
IG: @UNICEF_Thailand
LINE: UNICEF Thailand
Youtube: youtube.com/unicefthailand
Website: www.unicef.or.th

To donate
Phone: +66 2 356 9299
Fax: +66 2 356 9229
Email: psfrbangkok@unicef.org