The Impact Evaluation of Productive Social Safety Net in Tanzania Phase II:

Baseline Report
June 16, 2023

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Abbreviations and Acronyms

BCG	Bacillus Calmette–Guérin Anti-tuberculosis Vaccine
CBT	Community-Based Targeting
CCT	Conditional Cash Transfer
CPI	Consumer Price Index
DIME	Development Impact Evaluation
DPT	Vaccine against Diphtheria, Tetanus, Pertussis, Polio, Hepatitis B and Hemophilus Influenzae Type B
EL	Enhanced Livelihood
FCS	Food Consumption Score
FIES	Food Insecurity Experience Scale
GoT	Government of Tanzania
HH	Household
HDDS	Household Dietary Diversity Score
IPV	Intimate Partner Violence
IRB	Institutional Research Board
KCP	Knowledge for Change Umbrella Program
NBS	National Bureau of Statistics
NPS	Tanzania National Panel Survey
OCGS	Office of the Chief Government Statistician
PAA	Project Area Authority
PCV	Pneumococcal Conjugate Vaccine
PMT	Proxy Means Test
PPP	Purchasing Power Parity
PSSN	Productive Social Safety Net
PSSN II	Second Phase of Productive Social Safety Net
PW	Public Works
RCT	Randomized Controlled Trial
RSR-ADSP	Rapid Social Response Adaptive and Dynamic Social Protection
s.d.	Standard Deviation
TASAF	Tanzania Social Action Fund
TLU	Tropical Livestock Unit

Executive Summary

This report presents the findings of the baseline survey conducted for a randomized impact evaluation of the second phase of Productive Social Safety Net (PSSN II). The impact evaluation aims to measure the overall impact of the public works and enhanced livelihood packages and also disentangle the relative contribution of each package to the overall impact. The baseline data were collected between April and June 2022 from 11,086 households in 434 villages in the 36 poorest Project Area Authorities (PAAs) across 14 regions in Tanzania Mainland and 3 regions in Zanzibar. They provide information about PSSN II beneficiary households before the public works and livelihood packages were rolled out.

While we collected data for both beneficiaries and non-beneficiaries, we present the characteristics of beneficiary households throughout the report because they are the population of primary interest. The average PSSN II beneficiary household in our sample has 4.3 members, and 54 percent of them are headed by a female member. About 73 percent of them have at least one child, with an average of two children. The average age of the beneficiaries is 55. About 26 percent of the households report that they have a member with a disability,[1] and 18 percent have an adult member with either a hearing, vision, language, or mobility impairment or mental illnesses. Approximately three-quarters of the households have productive labor capacity, defined as having an adult member age 18–65, allowing them to further participate in public works and enhanced livelihood programs.

These beneficiary households are predominantly poor. The average adult-equivalent consumption per day is TZS 1,419 (US$0.6 using the exchange rate at the time of data collection[2]), which is below the Tanzania national poverty line of TZS 1,859 (US$0.80).[3] The consumption level can also be converted to US$1.36 using the 2017 purchasing power parity (PPP), which is below the international poverty line of US$2.15 per person per day (2017 PPP) set by the World Bank.

On a monthly basis, the total household consumption is on average TZS 152,621 (US$65.50), of which total food consumption is TZS 113,256 (US$48.6). Approximately 43

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[1] This number is based on self-reporting, and therefore, it may not be entirely consistent with information in the administrative data of Tanzania Social Action Fund (TASAF). The survey question asked for disability for any household member, including children. The types of disability include hearing impairment, difficulties seeing, language impairment, mental illness, mobility impairment, or any other disability not included in the previous categories.

[2] This is the exchange rate we use throughout the report, TZS 2,330 per US dollar.

[3] The poverty threshold is computed based on the national poverty line of 2018 (TZS 1,620), converted to 2022 prices using Consumer Price Index (CPI), giving a poverty line for 2022 of TZS 1,859 per adult-equivalent. The national poverty line for 2018 was retrieved from the Tanzania Mainland Poverty Assessment https://www.nbs.go.tz/nbs/takwimu/hbs/Tanzania_Mainland_Poverty_Assessment_Report.pdf.

percent of the food consumption is through food purchases and the rest from own production and gifts. The estimated monthly cash transfer amount from the PSSN II is TZS 21,498 and equivalent to approximately 14 percent of the total monthly household consumption value, or about 44 percent of the household budget for food purchases. The households live in poor housing conditions. About one-third of households reside in a dwelling with roofs and walls made of grass and mud. Only 10 percent of them have access to electricity.

One of the primary objectives of the PSSN II is to diversify sources of income for poor households, by promoting wage employment (through PW) and self-employment (through business training and a livelihood grant). At baseline, the majority of households generate income from crop harvest (56 percent), while only about 23 percent of them have income from wages, 9 percent from nonfarm businesses, and 7 percent from livestock and animal products. They do not have access to formal credit and savings mechanisms either. Only 4 percent of respondents ever visited a bank, and 9 percent have an account in a formal financial institution.

A majority of the households have children. About 58 percent of them have children who are of primary school-going age (6–13), and 41 percent secondary school-going age (14–19). The primary education enrollment rate is high, but it is not universal (86 percent of children currently attending). In comparison, only 29 percent of those ages 14–19 are attending a secondary school. The main reason is lack of financial resources. These findings suggest that there is a potentially important role of the conditional educational transfer of the PSSN II program, with particularly large potential margins for enrollment improvements in secondary school.

The beneficiary households suffer from frequent health shocks. About 65 percent of households had a member of their household who was sick in the past month. Despite this, they spend about US$3.5 per month on health and US$1.2 for children's health. When focusing on children less than 5 years, about 91 percent of them have been vaccinated.

Given that the PSSN II registers mostly women in the program, this report also shows key information related to gender issues, including women's time use, engagement in economic activities, intimate partner violence (IPV), well-being, and human development. The data suggest that female heads are working 3–10 times more hours on domestic work (for example, cooking, taking care of members, and collecting water) while male heads spend slightly more on other income-generating activities (for example, farming, paid work, and self-employed business). The respondents showed interest in participating in these economic activities, and social norms or safety were not their primary concern. The main barriers were the heavy burden of household chores and the physical intensity of manual work.

The prevalence of IPV is high at baseline among beneficiary households in the evaluation sample. At baseline, 61 percent of women experienced IPV. The most common forms are

controlling behavior (55 percent) and emotional violence (33 percent), but a physical nature of violence was also common (15 percent of physical violence, and 21 percent of sexual violence). The impact evaluation study will measure whether the program changes the IPV experienced by beneficiary women, either positively or negatively.

We also document a gender gap in education among adult members of the household—male heads are 19 percentage points more likely to be literate (69 percent compared to 50 percent for women) and are more likely to have attended school (74 percent compared to 55 percent) than female heads. This gap in schooling that existed a generation ago disappeared for their children. The primary school enrollment rate is 90 percent for girls versus 87 percent for boys who are currently 6–13 years old.

Similarly, we present all results for Zanzibar separately in Appendix B. Most of the outcomes suggest that beneficiaries in Zanzibar are less poor than those in Tanzania Mainland. For instance, the total consumption per capita per day is 87 percent higher in Zanzibar than in Tanzania Mainland (TZS 2,368 versus TZS 1,267). This consumption figure in Zanzibar is slightly above the Tanzania national poverty line of TZS 1,859. The beneficiaries in Zanzibar also have better food security. According to the classification of Food Consumption Score (FCS), 83 percent of households in Zanzibar have an acceptable food consumption level, compared to only 28 percent in Tanzania Mainland. However, this does not imply that there is no poverty in sample beneficiaries in Zanzibar. About one-third of the respondents reported that, in the past 12 months, there were times when they did not have anything to eat for a whole day, and 85 percent said they had run out of food at some point.

In Zanzibar, the distribution of income sources among beneficiaries is different from that of Tanzania Mainland. Around 45 percent of the beneficiaries in Zanzibar have farms, 32 percent have a business, and 28 percent work for a wage. On the other hand, in Tanzania Mainland, the majority of beneficiaries generate income from farming (57 percent), and a much smaller fraction earn income from businesses (5 percent).

Furthermore, the respondents in Zanzibar have, on average, 5.2 years of schooling, which is higher than the average of 2.7 years in Tanzania Mainland. Additionally, there is almost universal primary education for their children, with 96 percent enrollment, and secondary education enrollment is higher than in Tanzania Mainland, with 42 percent compared to 25 percent. Regarding gender-based violence, approximately 29 percent of women in Zanzibar experienced IPV in the past 12 months, which is much lower than the rate of 69 percent in Tanzania Mainland.

The report also discusses the performance of targeting mechanisms in identifying the PSSN II beneficiaries in our study villages. Overall, beneficiaries in the sample are much poorer than the national population. About 53 percent of the PSSN II beneficiaries are in the

bottom 10 percent of the national consumption distribution, and 93 percent below the median consumption. This is largely driven by the choice of districts in which to implement the EL interventions, which include some of the poorest PAAs.

The use of community-based targeting (CBT) followed by a proxy means test (PMT) was found to further help identify poorer households within villages, but only marginally. Indeed, the within-village targeting is imperfect. Using the consumption threshold implied by the fixed number of beneficiaries within village, about 61.4 percent of beneficiary households were selected even if their consumption was *higher* than the threshold (inclusion error) and about 18 percent of non-beneficiaries were excluded from the program even if their consumption was *lower* than the threshold (exclusion error). The inclusion errors suggest that the CBT and PMT are not able to pick up small differences in welfare among predominantly poor households, and the exclusion errors are partly driven by the program not having the resources to cover all poor households.

The combination of CBT and PMT mitigates the inclusion and exclusion errors slightly and helps further identify poorer households within a village. For example, those who passed the PMT have a consumption level 25 percent lower than those who did not pass the PMT. Additionally, those who did not pass the PMT have a similar poverty profile to those who were not nominated through the CBT. However, this comparison does not provide an answer to whether the use of PMT alone is more effective than CBT alone, or whether PMT is a necessary step for beneficiary identification.

CHAPTER ONE

Overview of the PSSN II

This document describes the results from the baseline survey conducted for the second phase of the Productive Social Safety Net (PSSN II) program in Tanzania.

The Productive Social Safety Net (PSSN) program is an economic inclusion anti-poverty program[4] that aims to improve access to income-earning opportunities and socioeconomic services for targeted poor households while enhancing and protecting their children's human capital. PSSN is based on integrated interventions targeted to the poorest households: conditional cash transfers (CCTs), a labor-intensive public works program, and a livelihood program that includes business training and a business grant.

1.1. Benefits of the PSSN packages

The Government of Tanzania (GoT), through the Tanzanian Social Action Fund (TASAF), and with the support of the World Bank and several development partners, has been implementing the PSSN program since 2012. PSSN's objective is to support the poorest households in the country meet their minimum consumption needs, promoting the human capital of their children by incentivizing the utilization of education, health, and nutrition services and promoting income-generating activities. The program is structured around three components: CCTs, labor-intensive public works (PW), and Productive Inclusion/Livelihoods intervention measures. The PSSN was significantly scaled up in 2015, reaching over 1 million extremely poor households in about 10,000 villages nation- wide. The program was further expanded to cover all villages in Tanzania in 2022, with 1.4 million households now benefiting from the program.

During this second phase of the program (PSSN II, between 2019 and 2025), the GoT committed to expanding two subcomponents of productive household support: public works and enhanced livelihood programs to enhance the impact of CCTs and sustainably lift households out of poverty.

First, the main motivation of the PW component is to offer temporary employment opportunities during the agricultural lean season to raise earnings and help them smooth

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[4] Economic inclusion programs are defined as a bundle of coordinated, multidimensional interventions that support households and communities in increasing their incomes and assets. Common interventions include a combination of cash or in-kind transfers, skills training or coaching, access to finance, and links to market support (Andrews, Colin, Aude de Montesquiou, Inés Arévalo Sánchez, Puja Vasudeva Dutta, Boban Varghese Paul, Sadna Samaranayake, Janet Heisey, Timothy Clay, and Sarang Chaudhary. 2021. The State of Economic Inclusion Report 2021: The Potential to Scale. Washington, DC: World Bank. doi:10.1596/978-1-4648-1598-0).

consumption. It gives households an entitlement of 60 working days per year, over six months during the off-season. The daily wage rate is TZS 3,000 (US$1.3), and participant households are eligible to earn up to TZS 180,000 (US$77) per year.

Second, households will be offered a 'livelihood' package. This package consists of two elements: basic livelihood support for all beneficiary households with labor capacity and an enhanced livelihoods support package for the poorest group of beneficiary households.

The basic livelihood support aims at promoting self-employment including farm and nonfarm income generation activities as well as wage employment opportunities through (a) awareness-raising sessions that encourage households to invest part of their transfers productively and inform them about all available livelihoods services in the locality, (b) support to household participation in savings groups, and (c) linking of households to available ward-level extension services by inviting extension agents to deliver community sessions. The intervention involves eight training sessions that last 15 hours.

The enhanced livelihood support provides a more comprehensive set of livelihood support activities through a carefully sequenced set of activities. First, participating households are encouraged to further increase and safeguard their savings and receive training on different savings options. Second, beneficiaries receive skills training sessions on the development of business plans and management of their productive assets (approximately 20 hours, split into eight sessions). Lastly, households that have participated regularly in training sessions with a viable business plan may then apply for a livelihood grant to finance their household enterprise or invest in specialized skill training and job search to access wage employment. A household is awarded a business grant of TZS 350,000 (US$152) in two transfers, followed by six months of mentoring and coaching.

Table 1.1: Types of cash transfers (in TZS)

Grant	Type	Value per month	Max. value per HH
Direct support/productive transfer[a]	Fixed	12,000	12,000
HH with children	Fixed	5,000	5,000
HH with members with disability	Fixed	5,000	5,000
HH with infants	Fixed	3,000	3,000
Child in primary school	Variable	3,000/child	12,000
Child in lower secondary school	Variable	6,000/child	16,000
Child in upper secondary school	Variable	8,000/child	

Note: HH = Household.

a. Households with no labor capacity receive direct transfers unconditionally, while for households with labor capacity, the productive transfer is time-limited and is discontinued when they enroll in public works.

In addition, all beneficiary households receive approximately US$20 in cash transfers every two months. The type of transfers and the maximum values are shown in Table 1.1. They consist of a basic unconditional direct cash transfer for households without labor capacity or time-limited productive transfers for households with labor capacity, which is discontinued once they enroll in public works. It also includes unconditional disability cash transfers and CCTs for health and education.

Finally, the PSSN II aims to adopt electronic transfers as the primary modality for all payments throughout the country. As of August 2022, about 24 percent of the PSSN II beneficiaries received benefits electronically. By 2025, the option to be paid electronically will be available to everyone, significantly strengthening the financial inclusion aspects of the program.

1.2. Selection of beneficiaries

The eligibility for the PSSN interventions is determined using a three-stage targeting system (as shown in Figure 1.1). First, the poorest Project Area Authorities (PAAs) and villages are pre-selected. Second, in those PAAs and villages, community-based targeting (CBT) is used: communities provide TASAF with a list of households they consider the poorest and most vulnerable. Finally, a proxy mean test (PMT) is applied to the pre-selected households. We use the terminologies that directly follow the definitions of types of households from TASAF—those who are not pre-selected by communities (Type 3), those who are pre-selected but do not pass the PMT (Type 2), and those who pass the PMT (Type 1). Only Type 1 households (highlighted in blue) are beneficiaries of the PSSN II.

Figure 1.1: Selection of beneficiaries
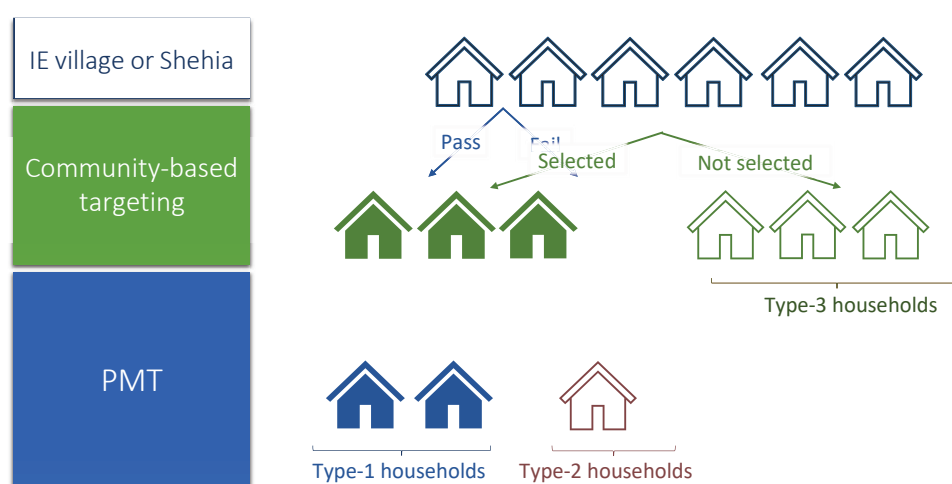
Appendix Figure A1 shows that about 58 percent pass the PMT, with a slightly lower passing rate in Zanzibar (52 percent). Appendix Figure A2 ranks the regions across Tanzania by the PMT pass rate. The figure does not necessarily suggest that the regions with a higher passing rate are the poorest because each region only includes a few select poorest districts and the data are not representative of the whole region.

CHAPTER TWO

Evaluation Design

2.1.   Objectives and research questions

The study has three main objectives. First, the study seeks to understand the relative impact and cost-effectiveness of the two types of interventions provided by the PSSN (that is, the public works and livelihood enhancement components) to improve poor households' economic opportunities. This can inform the optimal mix of interventions in future policy decisions. We conjecture that the combined impacts from receiving both self-employment support through the livelihood program and temporary wage employment support through the public works program may be bigger than the added impacts of two single components, by allowing the households to diversify their income sources and better smooth consumption and cope with shocks. One of the key assumptions behind integrated economic inclusion or graduation interventions is that they are effective because they simultaneously address multiple constraints; yet, there is still limited empirical evidence on the nature of these synergies in practice.

Second, the study speaks to the broader policy question of whether the impacts of a social protection program can be sustained when delivered at scale by government agencies. The PSSN is one of the largest economic inclusion programs delivered through a national social protection system around the world and offers a rare opportunity to address some of these unanswered questions. In particular, economic inclusion programs are more likely to have broader effects on the local economy and non-PSSN households when delivered at scale. Our design allows us to estimate these effects by comparing the ineligible households in the control and treatment villages.

Third, the study takes advantage of the fact that both treatment and control groups receive a continuous stream of conditional and unconditional cash transfers and randomize whether payments are made digitally versus manually. To assess the impact of a randomized digital e-payment intervention, the study considers outcomes such as savings and investment, transfers to other community members as well as gender-related outcomes (that is, women empowerment and intimate partner violence [IPV]).

2.2.   Multi-arm RCT design

This study uses a multi-arm cluster randomized controlled trial (RCT) to examine the relative and combined impacts of the PSSN packages. A total of 434 villages are randomly assigned into one of the four following groups that receive (a) self-employment support (that is, enhanced livelihood), (b) wage employment support (that is, public works), (c) both public works and enhanced livelihood, and (d) control group. The control group is not a pure control—the villages receive the basic livelihood support intervention as well as cash transfers.

Specifically, the public works component provides an opportunity to work for 60 days per year which is planned to be implemented over two cycles. The daily wage rate is TZS 3,000, and beneficiaries are expected to earn up to TZS 180,000 (US$78) per cycle. The enhanced livelihood component involves 20 hours of intensive business training sessions, along with two rounds of a business grant of TZS 175,000 (US$75) for each round, followed by mentoring and coaching support for additional six months.

Figure 2.1: Evaluation design
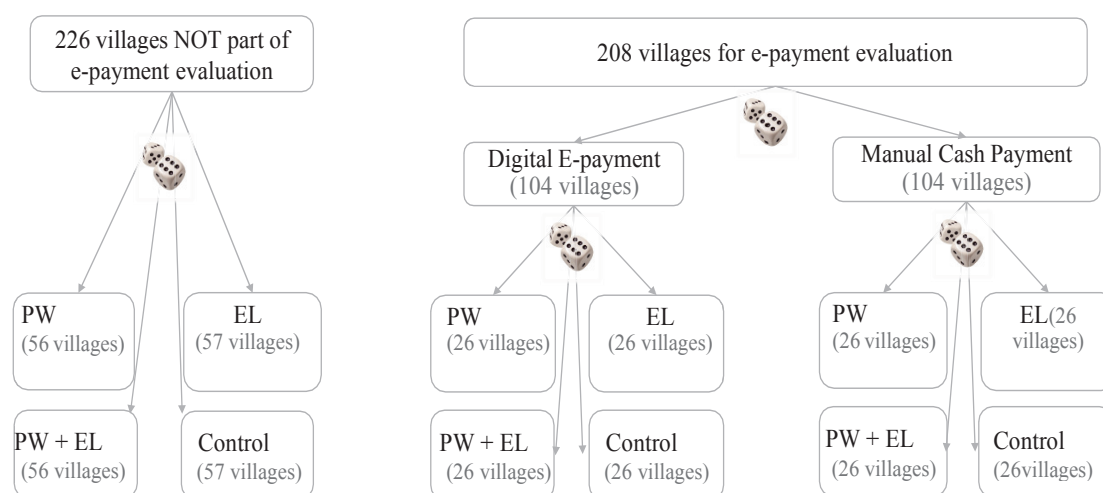
The study further cross-randomizes the mode of payment (digital versus manual) to understand the impact of digital e-payment and its interaction with the PSSN packages, with particular attention to gender outcomes. Villages assigned to the digital e-payment group will be encouraged to sign up for electronic transfers. Figure 2.1 illustrates the experimental design.

In addition to the main analysis of the impact of the PSSN programs on beneficiaries (Type-1 households), the study will also measure the spillover impact of the program on non-beneficiaries. For this purpose, we sample both beneficiaries and non-beneficiaries for our

baseline survey data collection from the PMT admin data as well as from a community listing exercise in a randomly selected segment of villages which will be discussed in detail in Section 2.3.

2.3.   Sampling

This paragraph presents the sampling process for PAAs and villages. From the administrative list of villages provided by TASAF, all PAAs that were not eligible to receive the enhanced livelihood component and all villages that previously received any benefits from TASAF were removed. From the remaining list, 32 PAAs were randomly selected, and one village per ward was randomly selected in those 32 PAAs, resulting in a sample of 495 villages.

However, during project implementation, additional villages were excluded because it was later discovered that many villages could not be part of the randomized evaluation study.[5] Furthermore, the mapping between villages and PAAs has been updated due to changes and splits in the administrative division in Tanzania. The final evaluation sample therefore comprises 36 PAAs and 434 villages. Figure 2.2 shows regions that are part of the evaluation sample and Appendix Table A2 shows the number of sampled villages in each PAA.

Figure 2.2: Regions included in the evaluation sample

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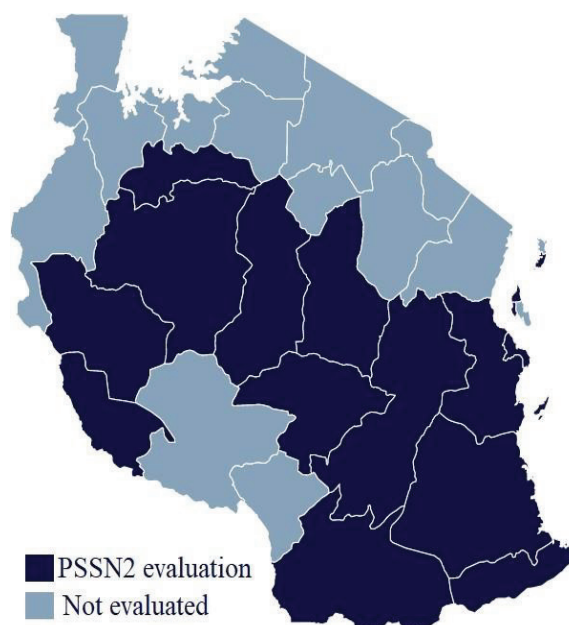
[5] Reasons include service as a control group in the phase 1 evaluation, villages mapped to incorrect PAAs, and lack of interest from community members to be part of the PSSN program.

2.4.   Sampling of households

The baseline households are sampled from two sources of sampling frames. The first is the data of the administrative PMT, which was conducted for all households nominated by the communities. A total of 13 Type-1 households and 4 Type-2 households were randomly sampled, and this sample is representative of all Type-1 and Type-2 households in the entire village.

While the universal lists of Type-1 and Type-2 households were available, no similar admin data existed for those who were not pre-selected by the communities (that is, Type-3 households). A community listing was conducted in up to two sub-villages per village to create a sampling frame that includes Type-3 households. A sub-village with the highest number of Type-1 and Type-2 households was chosen as long as the number of households in the sub-village was less than 1,000. A second sub-village was chosen only when the number of either Type-1 or Type-2 households was less than four in the first sub-village. A total of four households were randomly selected for each of the three types using this community listing sampling frame. Table 2.1 shows the number of households interviewed for the village-level sample that came from the PMT data as well as the sub-village-level community listing sample.

Table 2.1: Number of households interviewed by type and sampling frame

	All households	Households from the PMT sample	Households from the listing sample
Type-1	7,024	5,297	1,727
Type-2	2,390	1,129	1,261
Type-3	1,672		1,672
Total	11,086	6,426	4,660

Figure 2.3 illustrates the two different levels of sampling: (a) the village-level sample that will be used to measure the impacts on beneficiaries and the spillover impact on Type-2 households and (b) the sub-village sample for targeting analysis which will allow us to compare all three types under a consistent sampling protocol.

Figure 2.3: Household sampling

Sample for impact evaluation, at the village level:

Village

Sub-village 1

Sub-village 2

Sub-village 3

Sample for targeting analysis, at the sub-village level:

Sub-village 1

Sub-village 2

Sub-village 3

Legend:
- Type-1 households
- Type-2 households
- Type-3 households
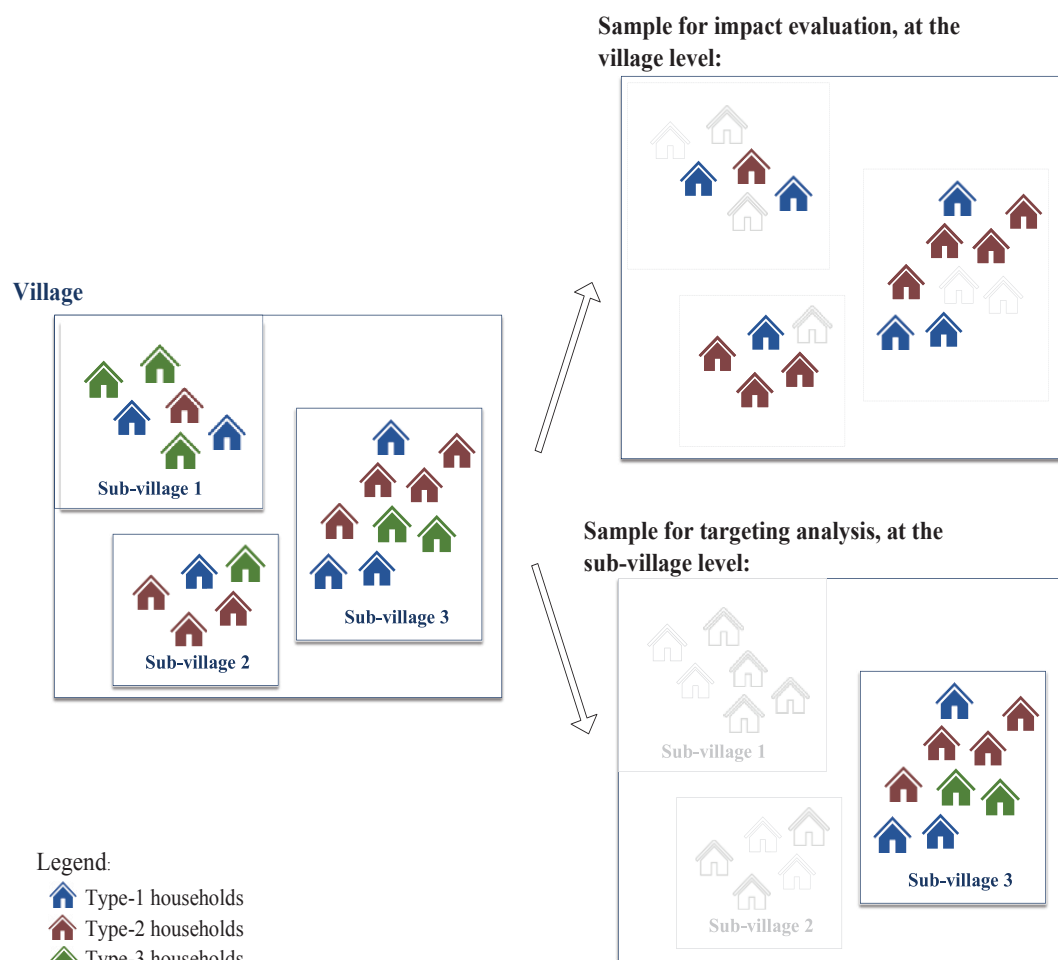
2.5.   Data collection process

The baseline data collection activities were conducted between April and June 2022 by Tanzania's National Bureau of Statistics (NBS) and the Office of the Chief Government Statistician (OCGS) in Zanzibar. These activities utilized electronic questionnaires programmed in SurveyCTO, with technical assistance and quality control provided by the impact evaluation team at the World Bank. To ensure a successful data collection process, several important steps were undertaken.

First, the preparation phase involved designing the questionnaires and developing comprehensive manual instructions. This ensured a standardized approach to data collection and minimized the likelihood of different interpretations or understandings of the questions among enumerators and supervisors. The questionnaires were carefully designed to facilitate

a smooth flow of questions and were available in both English and Swahili versions to accommodate respondents' language preferences.

The survey instruments underwent a rigorous testing process, including a pre-test and pilot phase, to identify and address any potential errors or issues that could arise during data collection. This comprehensive testing helped refine the questionnaire and improve the overall data collection system.

Recruiting and training qualified field staff was a crucial aspect of the data collection exercise. The NBS and OCGS selected experienced enumerators based on their performance in previous impact evaluations and surveys (including the PSSN phase 1 evaluation), ensuring the utilization of their expertise and qualifications. The enumerators underwent training to familiarize themselves with the survey instruments and to acquire the necessary skills to conduct interviews.

The questionnaire covered a wide range of topics, capturing comprehensive information related to demographic details of all household members, consumption and expenditure, food security, education, health, dwelling characteristics, assets, income, nonfarm enterprises, women empowerment, and IPV. By including these various aspects, the questionnaire aimed to gather a holistic view of the surveyed population.

Out of 11,152 selected households in 434 villages across 14 regions in Tanzania Mainland and 3 regions in Zanzibar, 11,086 households participated in the survey, yielding a response rate of 99.4 percent.

2.6.   Balance checks

Table 2.2 shows the baseline balance across all treatment arms using Type-1 beneficiary households from the village-level sample. The table reports p-values for the equality of means between the control group and the three treatment groups pooled together and the equality of mean for each arm. It suggests that the four arms are balanced across key beneficiary characteristics including demographics, consumption, food security, assets, and income-generating activities, among others, as suggested by p-values that are bigger than a conventional significance level of 0.1. The only exception is whether households owned any plot in the past 12 months (69 percent of the households in the control group versus 64–66 percent in the treatment arms), but the difference is small. We discuss the characteristics of beneficiaries in detail in the next chapter.

Additionally, Appendix Table A3 compares the balance for a spillover analysis sample. The characteristics of non-beneficiaries that were pre-selected by the communities (that is, Type-2 households) are balanced across groups. Similarly, Appendix Table A4 shows the results of a

balance test for the combined sample of non-beneficiaries (that is, both Type-2 and Type-3) at the sub-village level and confirms that the random assignment worked well.

Table 2.2: Balance table for Type-1 households, village-level sample

	(1) Control mean (s.d)	(2) Public works (PW) mean (s.d)	(3) Enhanced livelihood (EL) mean (s.d)	(4) PW + EL mean (s.d)	(5) *p*-value: pooled treatment = control	(6) p-value: equality over 4 arms
Household size	4.31 (2.47)	4.36 (2.59)	4.39 (2.59)	4.19 (2.45)	0.695	0.471
Currently pregnant	0.02 (0.14)	0.02 (0.14)	0.02 (0.13)	0.01 (0.11)	0.407	0.440
Health spendings for children, per month	2,552 (11,184)	2,472 (12,532)	2,629 (11,477)	3,816 (45,681)	0.626	0.583
At least 1 member with disability	0.25 (0.43)	0.26 (0.44)	0.26 (0.44)	0.27 (0.45)	0.487	0.701
Average years of education	3.24 (2.22)	3.12 (2.27)	3.16 (2.26)	3.19 (2.26)	0.184	0.934
Total consumption, per day and individual	1,386 (1,045)	1,438 (1,256)	1,416 (1,284)	1,435 (1,158)	0.237	0.948
Poor or borderline food consumption score (FCS)	0.64 (0.48)	0.64 (0.48)	0.63 (0.48)	0.65 (0.48)	0.854	0.959
Total expenditure, per day and individual	785 (780)	834 (904)	806 (806)	841 (872)	0.352	0.840
Received some payment for wage work	0.23 (0.42)	0.24 (0.43)	0.22 (0.41)	0.23 (0.42)	0.249	0.648
Has an account in a formal institution	0.09 (0.28)	0.08 (0.28)	0.10 (0.30)	0.09 0.29	0.844	0.717
HH owned any plot (last 12 months)	0.69 (0.46)	0.64 (0.48)	0.64 (0.48)	0.66 (0.47)	0.031	0.672
Owned animals, last 12 months	0.31 (0.46)	0.30 (0.46)	0.28 (0.45)	0.29 (0.46)	0.183	0.781
Number of livestock owned (tropical livestock unit [TLU] equivalent)	0.18 (1.04)	0.19 (1.14)	0.16 (1.22)	0.17 (1.11)	0.648	0.933
Experienced any type of IPV	0.61	0.61	0.59	0.64	0.852	0.476

	(1) Control mean (s.d)	(2) Public works (PW) mean (s.d)	(3) Enhanced livelihood (EL) mean (s.d)	(4) PW + EL mean (s.d)	(5) *p*-value: pooled treatment = control	(6) p-value: equality over 4 arms
	(0.49)	(0.49)	(0.49)	(0.48)		
Observations	1,332	1,312	1,361	1,292	5,297	5,297
Villages	107	107	109	106	429	429

Note: s.d = Standard deviation.
Standard errors are clustered at the village level. Fixed effects, using the combination of the PAA variable and the village-level intervention type, are included in all estimation regressions.
Sample: Type-1 households from the impact evaluation sample (village-level).
In (5), all the groups who receive some treatment (PW, EL, or PWL+EL) are pooled and tested against the control group.
In (6), the test is for equality over the four treatment and control groups.

This section discusses the characteristics of households identified as beneficiaries for the PSSN II program. We first examine the demographics of these households, including whether they have productive labor capacity, which is linked to participation in the public works and enhanced livelihood components of the program. We then present descriptive statistics on a wide range of topics, including education, health, consumption, food security, housing and assets, and income-generating activities.

3.1. Demographics and eligibility

Table 3.1 presents the demographics of the beneficiary households. The average household has 4.3 members. About 73 percent of households have at least one child age 0–17, with an average of two children. About 58 percent of households have children who are of primary school-going age (6–13), and 41 percent secondary school-going age (14–19) These households are eligible to receive a human capital transfer designed to promote children's education. About 14 percent of households are also eligible for a transfer for their infant (age 0–5), conditional on complying with regular health check-ups. Finally, 25.9 percent of the households reported that they have a member with a disability. Overall, the average household is expected to receive TZS 21,498 of monthly transfers based on the self-reported demographic characteristics. The sample consists of about 44 percent dual-headed households which are defined as having a male head of the household and his adult female partner, while 54 percent of the sample is headed by a female member. Given that the primary beneficiaries of the PSSN II program are women with a strong interest in gender-related outcomes such as IPV, we opted to interview households with a female member only, which replaced about 6.5 percent of single-male households during our baseline data collection.

Table 3.1: Household demographics

	Mean/s.d.	Count
Household characteristics		
Household size	4.314	5,297
	(2.526)	
Number of adult equivalents	3.538	5,297
	(2.083)	
HH has at least one child 0–17	0.733	5,297
	(0.443)	
Number of children (0–17)	2.065	5,297

	(1.922)	
HH has children ages 6–13 (primary school age)	0.579	5,297
	(0.494)	
HH has teenagers ages 14–19 (secondary school age)	0.411	5,297
	(0.492)	
HH has infant(s) (0–5)	0.140	5,297
	(0.347)	
At least 1 member with disability	0.259	5,297
	(0.438)	
HH is headed by a female member	0.541	5,297
	(0.498)	
HH is dual headed	0.438	5,297
	(0.496)	
Estimated monthly transfers from PSSN		
Estimated transfers based on HH composition (TZS)	21,498	5,297
	(6,550)	
Main respondent		
Age	55.1	5,297
	(18.5)	
Respondent was ever married or with partner	0.953	5,296
	(0.212)	
Currently married	0.462	5,297
	(0.499)	
Main respondent, if ever married (N = 5,047):		
Age at marriage, if known	19.4	4,210
	(4.8)	
Respondent is widowed, divorced, or separated	0.516	5,047
	(0.500)	
Recorded gender of main respondent		
Main respondent was female	0.997	5,297
	(0.053)	

Note: Sample of eligible households based on the PMT threshold (Type-1 households), among the households sampled at the village level for the impact evaluation. Expected monthly PSSN transfers are computed as the sum of fixed and variable transfers based on the available data. See Table 1.1 for details on the value of the different transfer components.

The average age of the respondent is 55 years. The vast majority of the respondents were once married or were with a partner (95 percent), but a large fraction of them are currently widowed, divorced, or separated (51.6 percent).[6]

Although all households identified as selected beneficiaries (Type-1 households), through community-based nomination followed by the PMT, are eligible to receive cash transfers, not all households may have the productive labor capacity required to participate in the livelihood and public works components of the PSSN II pro- gram. This is important when trying to evaluate the relative and/or the additional effect of different program components because not everyone in the evaluation sample will have benefited from the public works and enhanced livelihood components if they cannot participate. Intuitively, the more households in the evaluation sample participate in these components, the stronger the treatment effects will be.

Therefore, we first examine the types of eligibility rules and what percentage of households will be excluded from participating in the public works and livelihood components. The PSSN II program requires households to have at least one adult with labor capacity (that is, defined as being between 18 and 65 years old without a disability or not pregnant). Table 3.2 shows that about 75 percent of households satisfy the inclusion criteria. The table indicates that 20 percent of households are not eligible because they do not have an adult member between 18 and 65 years old. An additional 4 percent of households are removed because all members in their household have a disability. Finally, 0.3 percent of the sample is excluded because they do not have any adult who is not pregnant.

An expected take-up rate of 75 percent is sufficiently high for us to detect any discernible changes in outcomes as a result of the program. It is also noteworthy that an actual take-up of these programs may fall below the aforementioned threshold if certain households opt to decline participation voluntarily. However, we believe that voluntary refusal of the program will be quite unlikely.

When focusing on the households who do not have an adult age 18–65, Appendix 1 Table A5 shows that a majority of them are households with one female adult (64 percent). And conditional on being the only female, they are mostly widowed (83 percent) or divorced or separated (13 percent). While all adult members in these households are above 65, about 45 percent of these households still have household members who are less than 18 years old.

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[6] As a comparison, this figure is a bit higher for Type-2 households, with an average of 61 percent of respondents for both the village-level and the sub-village-level samples; however, this figure is much lower for Type-3 households from the sub-village level (20.79 percent).

Table 3.2: Eligibility for livelihood and public works components

	Mean/s.d	Count
Eligibility:		
HH eligible for public works and livelihood enhancement	0.753	5,297
	(0.431)	
Details for non-eligible households:		
No adult age 18–65	0.202	5,297
	(0.402)	
All adults ages 18–65 have disability	0.040	5,297
	(0.197)	
All adults ages 18–65 are currently pregnant	0.003	5,297
	(0.053)	

Note: Sub-sample of eligible households based on the PMT threshold (Type-1 households), among the households sampled for the impact evaluation at the village level.

3.2. Consumption and food security

3.2.1. Consumption

Appendix 1 Table A6 shows the average daily consumption per adult equivalent[7] for the beneficiary households (Type-1 households). The average per adult-equivalent consumption per day is TZS 1,419 (US$0.6), out of which TZS 1,053 is on food and TZS 366 is on nonfood items. This is slightly below the Tanzania national poverty line of US$0.80.[8] The consumption level can also be converted to US$1.36 using the 2017 purchasing power parity (PPP), which is below the international poverty line of US$2.15 per person per day (2017 PPP) set by the World Bank.

On a monthly basis, the total household consumption is on average TZS 152,621 (US$65.50), and the total food consumption is TZS 113,256 (US$48.6). Approximately 43 percent of the food consumption is through food purchases, and the rest is from own production and gifts. We can quantify that the average monthly cash transfer amount of TZS 21,498 that

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[7] Consumption was computed as an aggregate of different food and nonfood components. Food consumption includes food from own production, gifts, and purchases. The value for own production and gift is estimated using the reported consumer prices, to follow the methodology from the NPS. This allows consumption measures to be comparable between this study and other national surveys. Recall period for the food consumption is past seven days, and the value is converted to daily consumption to make it comparable to the value of nonfood components. Nonfood expenditures comprise all the HH expenditures that are not business or farm related. The original recall period for some components like education is for one year, while health expenditures are for the past four weeks, and public transport is per week. All expenditures are primarily converted to yearly expenditures to be able to aggregate them, and then converted to daily expenditures per adult equivalent. All expenses and consumption values are winsorized at the 5th and 95th percentile based on the distribution of Type-1 households' values. Since less than 5 percent of households have a positive value for rent, insurance, repairs, or taxes, the winsorized average for those consumption components equals zero.

[8] The poverty threshold is computed based on the national poverty line of 2018 (TZS 1,620), converted to 2022 prices using Consumer Price Index (CPI), giving a poverty line for 2022 of TZS 1,859 per individual.

PSSN II beneficiaries receive is approximately 14 percent of the total monthly household consumption value, or about 44 percent of the household budget for food purchases.

Appendix 1 Table A6 also shows the breakdown of consumption items. For food, about one-third of the total consumption is sourced from own production, while a little more than a half is directly purchased.[9]

For nonfood items, the biggest spending comes from purchases of clothing, followed by expenditures on health, household goods and utilities, goods, and education. On the other hand, these households spend nothing on rent, insurance, durable repairs, and taxes. Appendix 1 Figure A5 shows the share of consumption for each category.

3.2.2. Food security

The level of food security among the potential PSSN II beneficiaries is low. Appendix 1 Table A8 shows that the average Household Dietary Diversity Score (HDDS) is about 5.18. Figure 3.1 shows the diet diversity of households for the past seven days as a share of households consuming items in each food group. A majority of households consume cereals and grains, vegetables, and spices, but less than 10 percent of households report consuming meat, milk, and eggs in the past seven days, contributing to lower diet diversity.

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[9] Appendix 1 Table A7 shows that about 24 percent of households did not consume any food produced on their own in the past seven days, while 12 percent of households did not purchase any food. A large number of households also rely on gifts from others (45 percent).

Figure 3.1: Food consumption per category, past seven days

Share of HH (%) that consumed this food category over the past 7 days
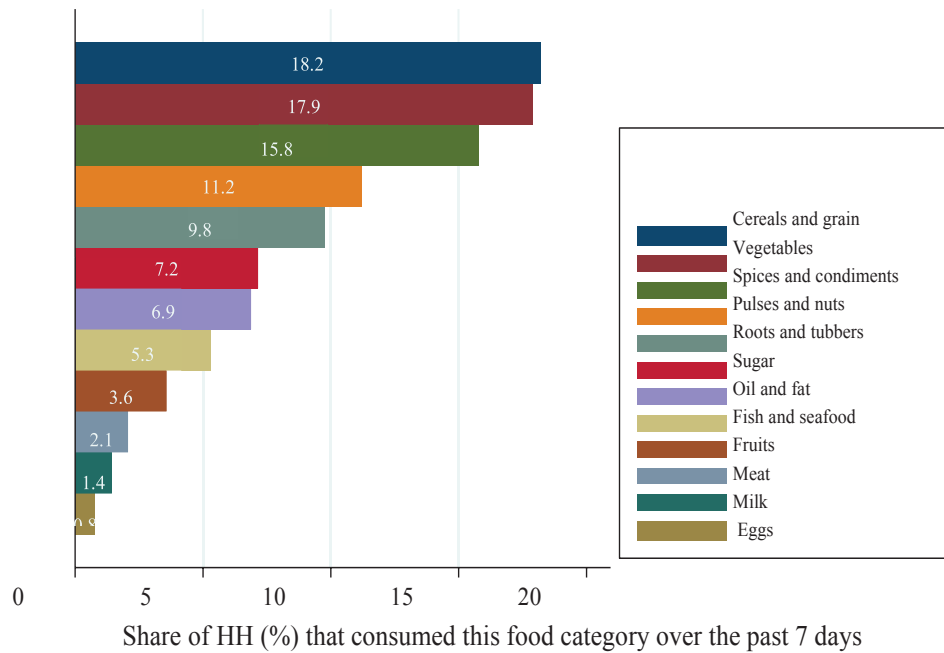
Similarly, the Food Insecurity Experience Scale (FIES) and FCS indicate that these households suffer from poor food security. Almost all households reported that they experienced events such as worrying about food, skipping a meal, eating less, and running out of food in the past 12 months. Moreover, FCS suggests that about 64 percent of households suffer from poor or borderline food consumption over the past seven days.[10]

3.3.   Housing and assets

Beyond consumption and food security, other common proxies for poverty include the type of housing conditions where individuals live in and their asset holdings. Appendix 1 Table A9 shows that about 37 percent of households reside in a dwelling with roof materials made from grass, mud, or leaves; 38 percent have walls constructed from poles, mud, or grass; and 78 percent have floors made of palm/bamboo, earth/sand, or dung. These households have on average two bedrooms and only 10 percent of them have access to electricity, 35 percent use an improved latrine, and 57 percent have access to improved water sources.

PSSN II beneficiaries have limited durable assets, as shown in Table A10. On average, they own only four types of assets. Most households have tools for cooking, a mosquito net, and beds. In terms of telecommunications, 48 percent of respondents have a mobile phone, and 10

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[10] Note that HDDS and FCS need to be interpreted carefully because they may vary by the timing of the interviews due to a shorter recall period. The baseline data collection took place in April and was completed in June 2023, right before the long rain harvest period.

percent have a radio. Regarding transportation, hardly anyone has a motor vehicle, less than 1 percent own a motorcycle, and 9.4 percent have a bicycle.

3.4.　Income and livelihoods

3.4.1.　Sources of income

One of the primary objectives of the PSSN II is to diversify sources of income for poor households, by promoting wage support (that is, public works) and self-employment support (that is, business training and grant) programs. Appendix 1 Table A11 shows that the majority of households generate income from crop harvest (56 percent), while only about 23 percent of them have income from wages, 9 percent from nonfarm businesses, and 7 percent from livestock and animal products.

When looking at the income generated from each economic activity, Appendix 1 Table A12 shows that households generate TZS 350,672 (US$150.5) annually. Of those, Figure 3.2 shows that a majority of income comes from crop production (81 percent), followed by wages from paid work (10 percent). Income from nonfarm businesses and livestock contributes very little to household income.

Given that the income from crop harvest is highly seasonal, the PSSN II can support smoothing income and consumption over time, creating opportunities through public works during the off-season, and also by promoting businesses that are not linked to agriculture. Next, we look into each economic activity in more detail, that is, paid labor, farming and livestock, and business activities.

Figure 3.2: Share of income from each economic activity
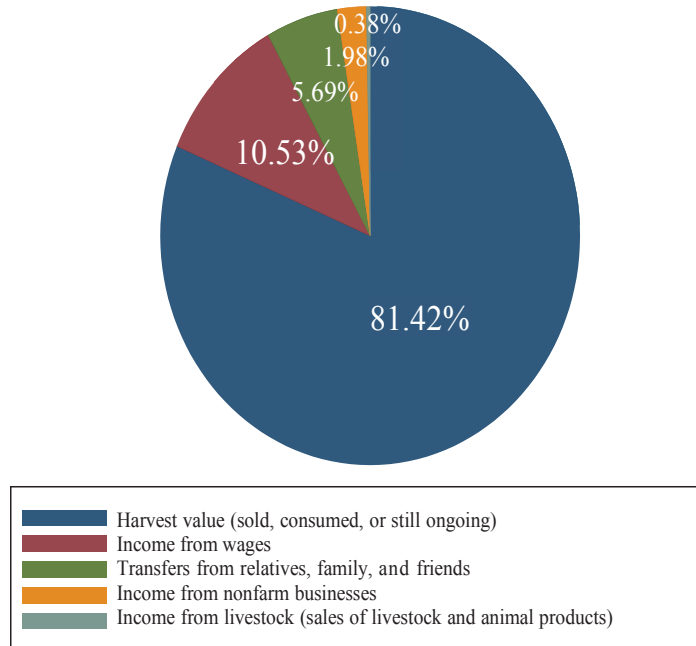
3.4.2. Labor

Appendix 1 Table A13 shows how the households spent their time in the past seven days. On household chores, they spend a large amount of time on cooking (15 hours), taking care of children and the elderly (14 hours), and collecting water (12 hours). On income-generating activities, 50 percent of households worked on family farm, 22 percent worked for a wage, and 15 percent work on self-employed business. Households spent 15 hours on farm, 7 hours for paid work, and 4.6 hours on self-employed business collectively.

Panel C of Appendix 1 Table A13 shows that those individuals with a paid work spent 4 out of 7 days working, and about 5.6 hours daily.

3.4.3. Farming and livestock

Appendix 1 Table A14 shows that about two-thirds of households own and cultivate plots (57 percent cultivating in the long season and 14 percent in the short season). Focusing on the long rain season, which is the primary season, the average household cultivates 1.7 acres of land and harvests approximately 270 kg of crops, which translates to TZS 418,736 (US$180). A part of the reason why the productivity is so low is the limited adoption of improved seeds (19 percent), chemical fertilizer (7.8 percent), and pesticides (8.6 percent). Only 2 percent of households hire workers for their farming activity. Conditional on cultivating in the long season, one-quarter of households sell their crops. The same table describes the characteristics of

farming for the short season, which paints a similar picture, that is,, low input usage and low productivity.

Approximately 30 percent of households own livestock (Appendix 1 Table A15). Among those, households own 7 chicken, 0.9 sheep/goats, and 0.6 cattle per household. The total number of livestock owned by each household is 9, while the Tropical Livestock Unit (TLU)[11] is 0.58. About 24 percent of those who own animals sold animals or animal products in the past 12 months.

3.4.4. Enterprises

Appendix 1 Table A16 shows that 11 percent of households operated a business over the past 12 months. The average years of ownership is 6.3. These are very small businesses with an average asset value of TZS 140,003 (US$60) and an inventory value of TZS 48,947 (US$21). In comparison, the planned livelihood grant provided by the PSSN II is set to be TZS 350,000, which is about twice as large as the size of these businesses with assets and inventories combined. The businesses employ almost no one, suggesting that these are mostly family run. The average yearly revenue is TZS 172,753 (US$74) with a profit of TZS 57,392 (US$25).

3.4.5. Access to credit

Appendix 1 Table A17 shows that only 4 percent of respondents ever visited a bank or other formal financial institution for opening or closing an account, and 9 percent of households currently have an account in a formal financial institution including banks and microfinance organizations. At the time of survey, 4.5 percent of households currently have an outstanding loan, averaging around TZS 210,000.

3.5. Education

We report the education outcomes by three age groups: primary school age (6–13), secondary school age (14–19), and the main female respondent.

About 58 percent of households have children ages 6–13 (Table 3.1). Appendix 1 Table A18 shows that out of 5,516 children in this age group, approximately 89 percent ever attended a primary school, while 86 percent are currently attending a school at the time of survey interviews. Among those attending, almost everyone attends a public school. Despite the

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[11] Tropical Livestock Units are livestock numbers converted to a common unit. Tropical Livestock Unit (TLU) assigns the following weight to each type of livestock: cows and calves 0.70; bulls 0.5; sheep, goats, and mutton 0.10; pigs 0.20; chicken 0.01; Guinea fowl 0.03; and horses, mares, or donkeys 0.8.

relatively high percentage of enrollment, the rate of absence is high. Approximately 33 percent of students missed at least one school day over the past two weeks, with an average of 3.8 days.

One thing to note is that the enrollment rate we are reporting, the ratio of children of official school age who are enrolled in school to the population of the corresponding official school age, is still far from universal enrollment. The most frequently cited reasons why children are not in school include a lack of financial resources (30 percent), parents' perception that they are too young (24 percent), and schools being too far away (8.4 percent).

The situation with secondary school enrollment is less positive. About 41 percent of Type-1 households have children of secondary school age (Table 3.1). Conditional on this age group, Appendix 1 Table A19 shows about 91 percent ever attended a school. However, only 52 percent are attending a school, and 23 percent are in fact still attending a primary school despite being in the age group of 14–19, while the remaining 29 percent are attending a secondary school. Again, the main reason children are not attending school in this age group is financial reasons. Figure 3.3 documents the enrollment rate by age, and a large drop occurs around 14 and onward when students are making a decision to go to a secondary school.

According to the TASAF administrative database, almost all children of the previous PSSN beneficiaries met the conditionalities to receive education transfers. We will be able to measure the educational outcomes of the new beneficiary households in our sample in a follow-up data collection.

Figure 3.3: Education enrollment by age
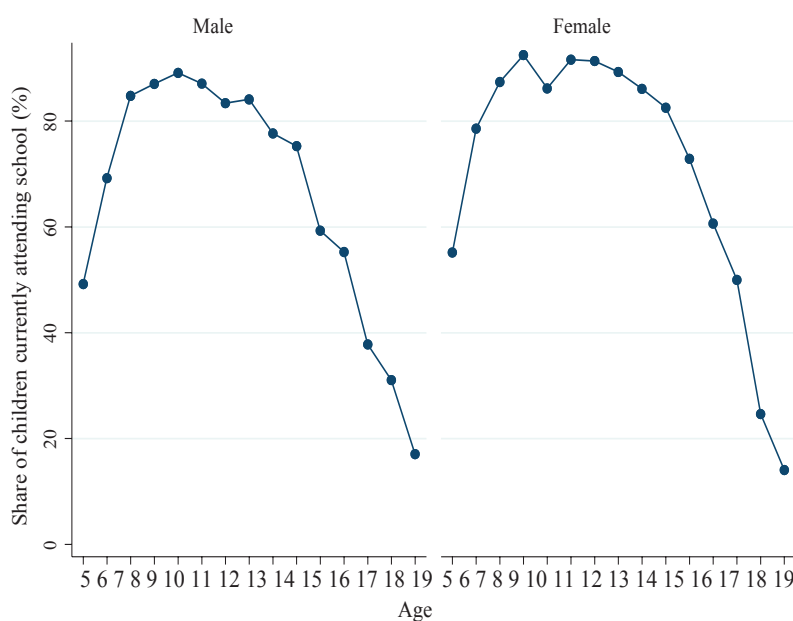
The responses for both primary and secondary-age children imply that the PSSN II's cash transfers, in particular when conditioned on school attendance, will relax financial constraints and are expected to increase enrollment and attendance.

Finally, we also examine the education outcomes of the main female respondent. Approximately 44 percent of households report that they can read and write a short sentence, mostly in Swahili. About 4 percent of households report that they can read and write in English. We further verify the claim by conducting a short reading test, which shows that 31 percent of households can read and write (13 percentage points lower than what the self-report suggested).

The average years of formal education is 3, with only 50 percent ever attending school. Of those who never attended school, 2 percent ever attended an adult literacy class.

Interestingly, the main reason why they did not attend was not due to financial resources, unlike what they reported for their children. The main reported reasons are parents' refusal (49 percent) and remoteness (21 percent).

3.6.   Health

These PSSN-eligible households suffer from frequent health shocks. In the past month, 65 percent of households reported that at least one member of their household was sick, and 41 percent of them visited a health care provider (Appendix 1 Table A21). Despite this, only 6 percent have health insurance. Currently, 3 percent of households have someone pregnant at home.

To deal with health shocks, households spent TZS 99,036 (US$43) in the past 12 months, which is approximately US$3.5 per month. Households spend about one-third of the cost on children's health, that is, US$1.23 per month.

When focusing on children ages 0–5 (Appendix 1 Table A22), households spend about TZS 21,267 (US$9.1) per year per kid. A large fraction of these kids do not have a birth certificate (30 percent). Approximately one-quarter of the children less than 5 were sick in the last four weeks, for an average of seven days.

About 91 percent of them have been vaccinated for at least one vaccine. The vaccination rates are 80–89% for most types of routine vaccines including Bacillus Calmette–Guérin anti-tuberculosis vaccine (BCG); polio; vaccine against diphtheria, tetanus, pertussis, polio, hepatitis B and Hemophilus influenzae type B (DPT), pneumococcal conjugate vaccine (PCV); rotavirus; and measles.

Among those ages 0–2, 80 percent were born in a health facility, and 98.4 percent were breastfed.

CHAPTER FOUR

Gender

By encouraging female households' members to be the primary recipient of cash transfers, public works, and livelihood components, PSSN aims, among others, to increase women's empowerment and well-being.. While having direct control over cash and generating income through public works can empower women, it may also overburden them because the livelihood component requires intensive training sessions and participation in physical labor activities. Additionally, one unintended consequence could also be an increased IPV if a male member sees the additional income generated by a female as an opportunity to extract resources from the partner. In this section, we dive into these topics and examine time use, labor market participation and potential barriers in engaging in economic activities, IPV, women's well-being, as well as education and health outcomes.

4.1.   Women's time use

Appendix 1 Table A23 shows the participation in domestic work and economic activities by gender, as well as the hours spent on each activity. It is evident that female heads of households participate in domestic work such as cooking, taking care of other household members, and collecting water significantly more than male heads. The gap is clearer when comparing the hours spent on each activity over the past week. For example, female heads spent 11 hours cooking compared to only 0.8 hours by male heads, 11 hours taking care of other members compared to only 2 hours by male heads, and 6.3 hours collecting water compared to only 1.8 hours by male heads.

On the other hand, male heads spent slightly more time on other income-generating activities. Male heads spent 8.8 hours on household farm (7.2 hours by female heads), 4.2 hours on paid work (1.8 hours by female heads), and 2.9 hours on business (1.7 hours for female heads).

4.2.   Engagement in economic activities

Appendix 1 Table A24 presents female heads' interests and difficulties in participating in the types of activities that are relevant for the public works and enhanced livelihood components of the PSSN II, such as working as a manual laborer or operating a nonfarm business. While 65 percent of female heads are working on household plots, only 29 percent have raised livestock, 27 percent work as a manual laborer, and 21 percent have experience operating a nonfarm business. However, the interests are high on these types of work. For example, about half the

women considered engaging in paid manual work and self-employed business, yet they report difficulties. To distinguish general barriers for female heads from individual-specific barriers, we asked whether they find it difficult for themselves to participate and for other women in general. The responses in columns 3 and 4 show that they find it twice as difficult for themselves to engage in these activities as they do for other women in general.

Appendix 1 Figure A4 shows why the respondents think it would be difficult for women to participate in these activities. Across the activities, one main reason is the heavy burden of household chores (30 percent of respondents). On the other hand, the main perceived reason for not working on farm is because they think women prefer working on other activities (33 percent), and the main perceived reason for not working as a paid manual laborer is the physical intensity (49 percent). Interestingly, lack of access to credit and savings, lack of knowledge, permission from husband, community norm, and the safety of travelling around were not frequently mentioned. The barriers faced by respondents themselves are different from what respondents report as possible barriers for women in general (Figure 4.1). The most cited difficulty is physical intensity across all activities, especially for working on farm and working as a manual laborer. This is in line with the idea that, although the PSSN II aims to enhance women's well-being, public works and business training that require time commitment and physical effort may unintentionally place burdens on women. Again, social norms, permission from husbands, and safety concerns were not the main barriers. On the other hand, lack of knowledge was the second most common reason why the respondent found it difficult to manage a business.

Figure 4.1: Barriers to the participation in economic activities

Working on HH plots
N = 555

Barrier	Value
Physically too demanding	62.69
Prefer to do other things	15.34
Household chores	9.85
Pregnant, childcare, elderly care	5.68
Unpredictable or unstable income	2.65
Cannot borrow money/no savings	2.27
Lack of knowledge	1.52

Taking care of livestock
N = 621

Barrier	Value
Physically too demanding	41.37
Household chores	16.73
Prefer to do other things	14.08
Lack of knowledge	10.39
Pregnant, childcare, elderly care	6.69
Unpredictable or unstable income	5.99
Cannot borrow money/no savings	4.75

Working as a paid manual laborer
N = 1,120

Barrier	Value
Physically too demanding	67.70
Household chores	14.26
Prefer to do other things	8.05
Pregnant, childcare, elderly care	5.72
Lack of knowledge	1.94
Unpredictable or unstable income	1.16
Cannot borrow money/no savings	1.16

Operating a nonfarm business
N=918

Barrier	Value
Physically too demanding	34.62
Lack of knowledge	18.19
Household chores	15.38
Cannot borrow money/no savings	9.62
Unpredictable or unstable income	8.22
Prefer to do other things	7.51
Pregnant, childcare, elderly care	6.46

4.3.   Women's IPV and well-being

Appendix 1 Table A25 shows the incidence of IPV. About half the respondents had a partner in the past 12 months, and among those, roughly 61 percent experienced any type of IPV, either controlling behavior or emotional, physical, or sexual violence. About 55 percent of respondents reported that they experienced controlling behavior from their partner, while 33 percent experienced emotional type of violence. The more severe form of IPV is not uncommon either. About 15 percent of them experienced a physical form of violence, while 21 percent experienced sexual violence. Given that the baseline prevalence of IPV is high, this needs to be carefully monitored how they are affected by the PSSN II.

Appendix 1 Table A26 further explores other proxies of women's well-being. According to the CESD-R10 depression scale, about 76 percent of the respondents are found to have some level of depression. On the MacArthur Scale of Subjective Social Status, respondents have a high score for the perception on whether they have a good social position in the community (7.5) but a low score on whether they consider themselves as a person with good qualities (4.5). Finally, the female respondents are the primary decision-maker about 37 percent of the time, while they were never consulted 40 percent of the time. It would be of interest to the impact evaluation study to see how these measures change after the intervention.

4.4.   Women's education

Appendix 1 Table A27 presents education by gender for all household members that are above 18. There is a clear education gap between male and female adults—69 percent of men are literate relative to 50 percent for females. It is partially explained by the gap in educational attainment. About 74 percent of men ever attended a school compared to 55 percent for women. As a result, men had 4.8 years for education, compared to 3.6 years for women. The breakdown of reasons clearly shows that women faced more pushback from their parents, with 47 percent of women reporting refusal compared to 34 percent of men.

Appendix 1 Table A28 shows the gender gap in education for the current generation of children for those in primary schools. Compared to their parents' generation, the gender gap narrowed significantly. The attendance rate is slightly higher for female children (90 percent versus 87 percent for male children). And there is no additional difference in the likelihood of missing schools either. Encouragingly, the parents are not more likely to refuse to send their daughters than sons (7.5 percent refusal for boys versus 5.2 percent for girls).

Appendix 1 Table A29 presents the findings for secondary school-age children (14–19), which echo the results for younger children (6–13). Again, there is no gender gap in enrollment in this age group. About 22–24 percent of them are still attending a primary school, with no difference by gender. In terms of secondary school attendance, female teenagers are more likely to attend than their male counterparts by 7 percentage points (34 percent for girls versus 27 percent for boys), which is a remarkable change compared to what their parents experienced a generation ago.

4.5. Women's health

Appendix 1 Table A30 shows that female respondents spent TZS 57,198 in the past 12 months, approximately TZS 4,766 (US$2) per month. About 40 of them were sick the last four weeks, and they were sick for 11 days on average. Despite the frequency of sickness, only 20 percent of them visited a health care provider in the past month. Almost no one has health insurance[12] (3.6 percent), and 11 percent of them have a disability. About 6 percent of them smoke and 12 percent drink alcohol.

Appendix 1 Table A31 shows that almost everyone was pregnant at least once. About half of them were pregnant when they were teenagers, and 26 percent of them experienced miscarriage, abortion, or still birth. On average, they delivered six children in their lifetime. A very small fraction of the female respondents were pregnant in the past two years (3 percent), and more than 90 percent received antenatal care and 76 percent received postnatal care.

Table 4.1 shows what the reproductive health looks like for those who are currently teenagers.

Table 4.1: Pregnancy of teenage female members ages 10–19

	Mean/s.d.	Count
Woman is a teenager (10–19)	0.227 (0.419)	12,748
If teenage woman:		
Currently pregnant	0.010 (0.100)	2,889
Ever pregnant	0.053 (0.223)	2,890
If teenage woman was ever pregnant:		
Ever had miscarriage, abortion, or still birth	0.112 (0.316)	152

Note: Sample of all teenage female household members ages 10–19 from all Type-1 households from the impact evaluation sample.

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[12] Including formal health insurance as well as community health insurances.

CHAPTER FIVE

Targeting Performance

This chapter discusses targeting performance by showing how the profile of beneficiaries compares to the general population in Tanzania, as well as to non-beneficiaries in the targeted villages. As mentioned, eligible beneficiaries in our evaluation sample were identified through a three-stage approach. First, PAAs and villages in which the livelihood interventions would be implemented were chosen. Second, in those PAAs and villages, CBT was used, whereby communities provided TASAF with a list of households they consider the poorest and most vulnerable. Finally, a PMT was applied to the pre-selected households. Eligible households are the ones with the lowest PMT score, meaning that they have the lowest expected per capita consumption based on their household characteristics such as demographics and assets. We analyze how each of these three steps contributes to targeting performance.

5.1. Beneficiary profiles and national population

This section discusses to what extent eligible beneficiaries in the evaluation sample are among the poorest households in the country. Importantly, we note that the sample is not representative of all PSSN II beneficiaries. As mentioned in section 2.3, the sample is drawn from the poorest 36 PAAs that receive full packages of the PSSN II including the EL component.[13] We take the Tanzania National Panel Survey (NPS) 2020–2021 (Wave 5) to construct the national consumption deciles and show how the Type-1 beneficiary households in our sample are distributed across those deciles. Figure 5.1 shows that a large share of sample beneficiaries are among the poorest households in the country. About 53.2 percent of the PSSN II beneficiary households in the sample are in the bottom decile of the national consumption distribution. Similarly, 70.8 percent are in the bottom two deciles of the distribution, or 81.1 percent in the bottom three deciles, 88.1 percent in the bottom four deciles, and 92.9 percent below the median of the national consumption distribution. This clearly shows that the choice of the areas eligible for the PSSN II enhanced livelihood interventions leads the program to select households that tend to be much poorer than the national population.

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[13] The selection of districts in which the study took place is based on the decisions made at the beginning of PSSN phase 1, when districts were ranked by poverty and the program started in the poorest ones. The enhanced livelihood component was also prioritized to start in these initially poorer areas where the program has been operating for the longest.

Figure 5.1: Share of beneficiary (Type-1) households by deciles of the national consumption distribution
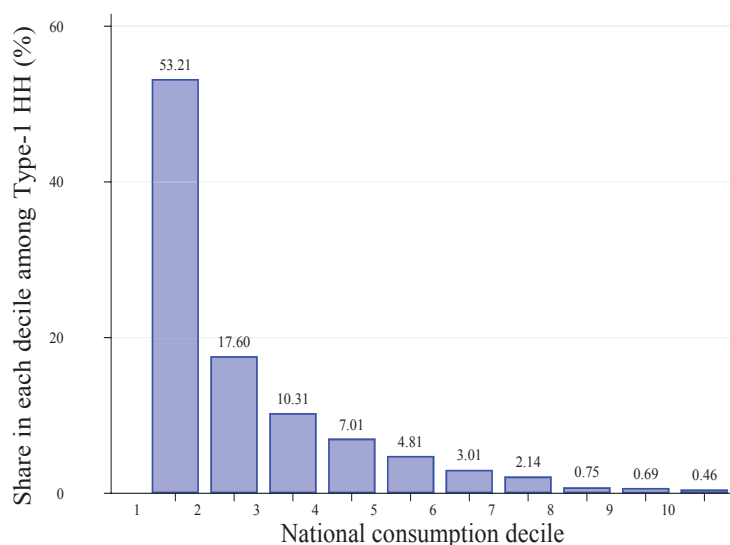
Note: National per capita consumption deciles are created using the NPS 2020–2021 Wave 5.

Importantly, however, the findings in Figure 5.1 are the result of the three targeting steps, that is, the choice of geographical areas eligible for the livelihood intervention, CBT, and PMT selection within villages. We now assess the role of each of these steps.

The selection of geographical areas eligible for the enhanced livelihood interventions plays a strong role in explaining why beneficiaries in the sample are very poor. This can be illustrated by showing that even the non-beneficiary households in the sampled villages are much poorer than the national population. Figure 5.2 presents the distribution of Type-2 and Type-3 non-beneficiary households along the same national consumption deciles. Approximately 39 percent of Type-2 non-beneficiary households (those nominated by the communities but not selected by the PMT) are in the bottom decile of the national consumption distribution, and 84.2 percent below the median. Similarly, 40.8 percent of Type-3 non-beneficiary households (those not pre-selected by the CBT) are in the bottom decile of the national consumption distribution, and 85.4 percent below the median.

Importantly, for the PSSN II program as a whole, geographical targeting no longer holds significance in the identification of beneficiaries as the program has been scaled up nationally across all villages. Consequently, the within-village targeting performance, and in particular the relative effectiveness of CBT and PMT in identifying the poor within a village, becomes much more relevant.

Figure 5.2: Share of non-beneficiary (Type-2 and Type-3) households by deciles of the national consumption distribution
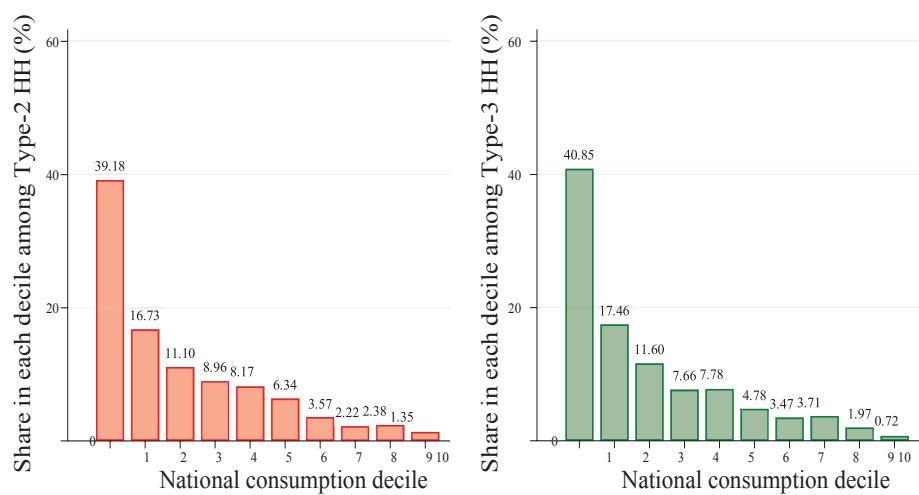
5.2.   Within-village targeting performance

This section provides information on the extent to which targeting within village (pre-selection through community targeting followed by an application of PMT) allows to identify the poorer households in a given village.

The contrast between Figure 5.1 and Figure 5.2 provides some insights into the joint performance of the PMT and CBT. It shows that beneficiaries are more likely than non-beneficiaries to be in the bottom decile of the national distribution, with 53.2 percent of beneficiaries in the bottom decile (in Figure 5.1) compared to 39.2 percent of non-beneficiary Type-2 households or 40.8 percent of non-beneficiary Type-3 households (in Figure 5.2). In other words, the additional targeting through the PMT and the CBT within village increases the percentage of households in the bottom decile of the national consumption distribution by about 13 percentage points. While these figures show that the PMT and CBT do help target households that are poorer, they also show that the improvements due to within-village targeting are limited: many households in the bottom deciles of the national distribution either have not been nominated by the community or have not been selected after application of the PMT. Relative to within-village targeting, geographical targeting plays a stronger role in the overall targeting performance.

5.2.1.   Consumption by type of households within villages

We now analyze more formally how beneficiary households compare to non-beneficiary households within village. Figure 5.3 shows the share of the beneficiary (Type-1) households by deciles of the consumption distribution within the targeted villages (instead of using the national benchmarks). Overall, the within-village targeting does lead to the selection of households that have lower consumption than non-beneficiaries, but the pattern is not very strong. For instance, 63.9 percent of beneficiary households are below the median of the village-level consumption distribution.

Figure 5.3: Share of beneficiary (Type-1) households by deciles of the targeting sample (within village)
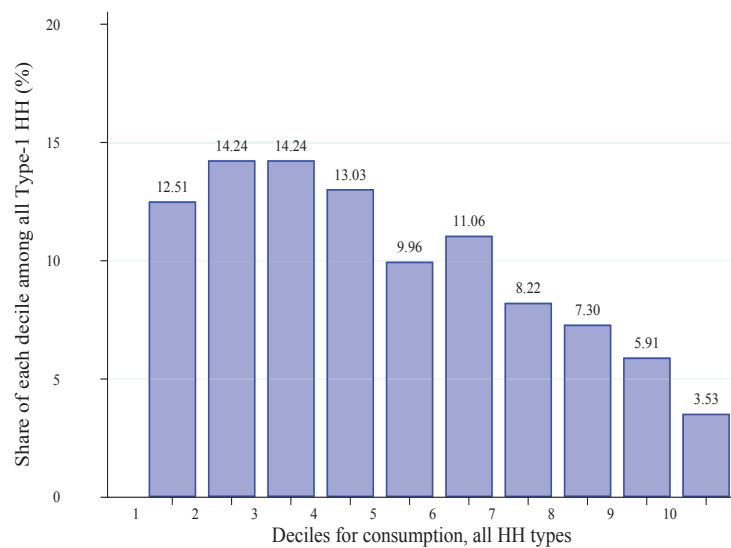
Note: The consumption deciles are created using the baseline data in sub-villages where community listing took place.

Figure 5.4 shows that, once the poor villages are geographically identified, the community nomination process is not very effective at filtering out households with higher consumption within the village. The left panel of the figure shows the distribution of households that were nominated by the community and the right panel shows those households that were not nominated. The poverty profile is almost identical—50.1 percent of Type-2 households (pre-selected by the communities but not selected by PMT) are below the median of the within-village consumption distribution, while 51.9 percent of Type-3 households (not pre-selected by communities) are below the median. Of course, the patterns may become different in less poor villages, where it is possible that within-village targeting might be more effective at identifying very poor households.

Figure 5.4: Share of non-beneficiary (Type-2 and Type-3) households by deciles of the targeting sample (within village)
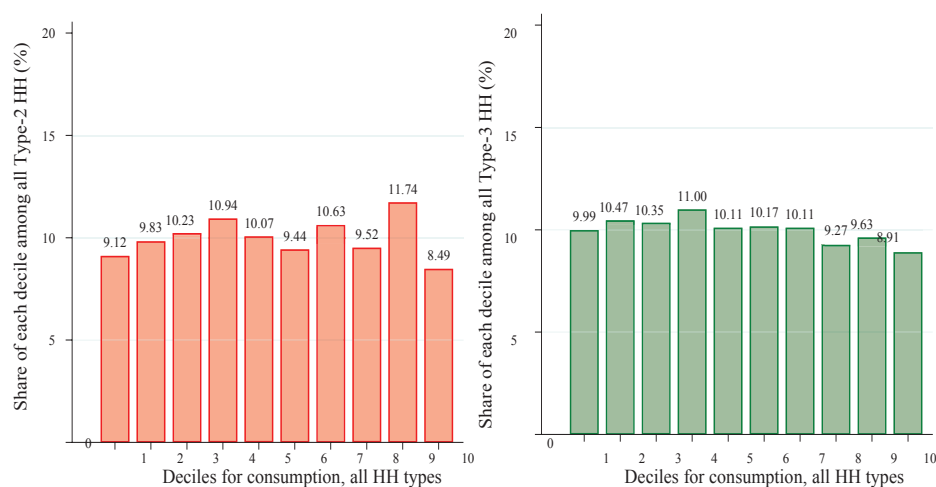
Note: The consumption deciles are created using the baseline data in sub-villages where community listing took place.

Figure 5.5 presents the percentage of households in equally sized bins based on consumption. The distributions of consumption among beneficiary (Type-1) and non-beneficiary (Type-2 and Type-3) households have a lot of overlap. On the one hand, this means that some slightly less poor households within villages are selected as beneficiaries (inclusion errors). On the other hand, it means that some slightly poorer households within villages are not selected as beneficiaries (exclusion errors). However, the percentage difference between Type-1 and Type-2 is bigger than the percentage difference between Type-2 and Type-3, as suggested by the jump in the lowest bin. This suggests that the combined use of the PMT and CBT assists in further refining the identification of impoverished individuals from the pool nominated by the communities. However, it does not necessarily indicate that PMT is inherently more effective than CBT in identifying the poor, as we lack a comparison between PMT alone and CBT alone. Indeed, the PMT step is only applied after the CBT step. Furthermore, it is important to note that the PMT primarily focuses on consumption as a proxy for poverty, while CBT may place greater emphasis on other dimensions of poverty. We discuss this topic in detail in section 5.2.3.

Figure 5.5: Daily consumption per adult-equivalent, by household type
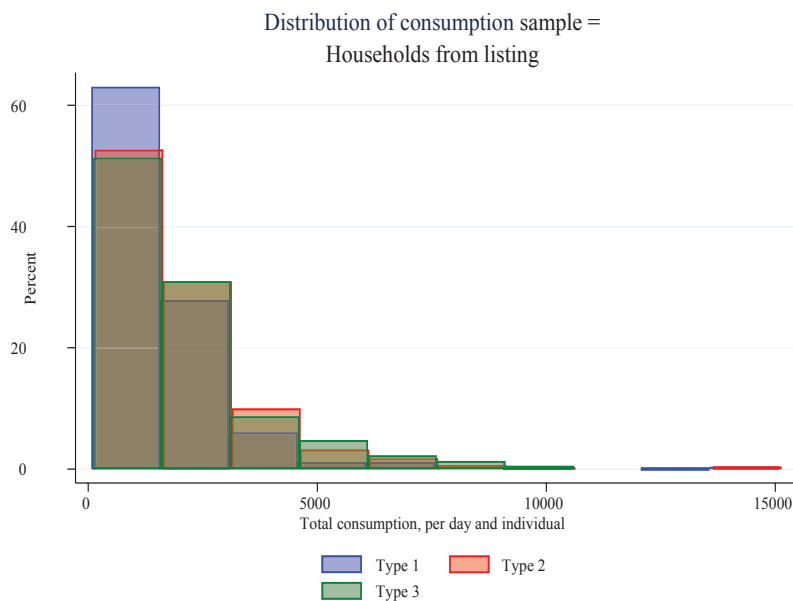
Note: The horizontal red line corresponds to the daily threshold for poverty (national poverty line, converted to 2022 prices).

5.2.2. Inclusion and exclusion errors

We can quantify the share of inclusion errors (that is, less poor households are selected as beneficiaries even though they should not be) and exclusion errors (that is, poorer households are not selected as beneficiaries even though they should be). Importantly, the inclusion and exclusion errors are relative measures that depend on the threshold used to calculate them.[14] We can use two alternative thresholds. The first threshold relies on the national poverty line, and the second relies on the program selection cutoff. Importantly, 69.69 percent of the sample households in the targeted village are under the national poverty line,[15] while 33 percent are covered by the program (that is, one-third of our sample are beneficiaries). Because the national poverty line is the higher threshold, the inclusion errors will be lower and the exclusion errors will be higher, compared to using the program selection cutoff.

Table 5.1 shows the percentage of each household type that would fall below or above the national poverty line. First, 87.7 percent of beneficiary households (Type-1) are below the national poverty line. In other terms, this means that the inclusion error based on the national poverty line is 12.3 percent. This echoes the results based on the national consumption distribution, which showed that the targeted households are almost all poor. At the same time, 77 percent of non-beneficiary Type-2 households and 74.6 percent of non-beneficiary Type-3 households are also below the national poverty line (exclusion errors). Again, this shows that the choice of areas eligible for enhanced livelihood interventions reached villages with a high prevalence of poverty. But it also shows that within-village targeting only reached a marginally poorer population, with many poor households remaining non-beneficiaries. This means that the program coverage is not high enough to reach all households below the poverty line.

Table 5.1: Targeting analysis based on poverty line threshold

	(1) Type 1 Mean	(2) Type 2 Mean	(3) Type 3 Mean
Below poverty line	0.877	0.770	0.746
Above poverty line	0.123	0.230	0.254

Note: Sample of all households (Type-1, Type-2, and Type- 3) from the targeting analysis sample. The poverty threshold is computed based on the national poverty line of 2018 (TZS 1,620), converted to 2022 prices using CPI, giving a poverty line for 2022 of TZS 1,859 per individual.

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[14] For the same reason, inclusion and exclusion errors are hard to compare between programs or contexts.
[15] This is calculated using all households (Type-1, Type-2, and Type-3) from the targeting analysis sample. The poverty threshold is computed based on the national poverty line of 2018 (TZS 1,620), converted to 2022 prices using CPI, giving a poverty line for 2022 of TZS 1,859 per individual. A household is considered poor if the total consumption value per adult equivalent per day is below this national poverty threshold.

Instead of the national poverty line threshold, we also look at the threshold implied by the program selection cutoff, given that the program is only able to enroll a fixed number of households. Because we sampled Type-1, Type-2, and Type-3 households proportionally in the villages where we conducted community listing, it implies that about one-third of our sampled households are beneficiaries. We then rank all households by their consumption level and calculate what proportion of Type-1, Type-2, and Type-3 households belong to the bottom one-third of the consumption distribution. Table 5.2 shows that only 38.6 percent of beneficiary households (Type-1) are in the bottom one-third of the baseline consumption distribution and the remaining 61.4 percent of Type-1 households are included by error according to this threshold (inclusion error of 61.4 percent). Similarly, 23.9 percent of Type-2 households and 11.3 percent of Type-3 households were in the bottom one-third of the consumption distribution but they were not selected (exclusion errors). This illustrates that the CBT and PMT steps help identify slightly poorer households, but again that inclusion errors are particularly common. However, it is important to interpret the seemingly large inclusion error of 61.4 percent with caution in this context. Since nearly everyone in these villages is impoverished, those who were mistakenly included as beneficiaries are still remarkably poor. The inclusion error just means that two-thirds of the beneficiaries are not necessarily the *poorest* segment within the village population. It is possible that inclusion errors might be lower in less poor areas where within-village targeting performs better, but this is not something we can test given the nature of the sample.

Table 5.2: Targeting analysis based on village-level consumption ranking

	(1) Type 1 Mean	(2) Type 2 Mean	(3) Type 3 Mean
Expected to be targeted	0.386	0.239	0.113
Not expected to be targeted	0.614	0.761	0.887

Note: Sample of all households (Type-1, Type-2, and Type-3) from the targeting analysis sample. For the second method, threshold for consumption distribution is computed on (from the listing exercise). In practice, as 33 percent of households from the sample are Type-1 according to the listing exercise, we expect that in the baseline data, the 33 percent of households with the lowest consumption should be Type-1 households. Households from the lowest consumption that are not Type-1 are considered part of the exclusion error, while Type-1 households that are not from the lowest consumption group are considered part of the inclusion error. The rate of 33 percent is the average in all 434 villages from the sample. The rate however slightly differs in each village, and the village-level rates were used in this analysis.

5.2.3. Comparisons across the types of households

Until now, we have focused on comparing the consumption of beneficiary and non-beneficiary households. Consumption is an important welfare metric as it is used to measure poverty, and hence a key benchmark to assess targeting efficiency. In this subsection, we show how beneficiary and non-beneficiary households compare along a broader set of characteristics including consumption and food security as well as demographics.

Appendix 1 Table A32 documents differences in consumption (panel A), food security (panel B), and income and livelihoods (panel C). Panel A shows that beneficiary (Type-1) households have lower consumption than non-beneficiary Type-2 and Type-3 households, consistent with the results in the previous subsection. This is observed for all consumption components (total, food, and non-food expenditures). Type 2 and Type-3 households have similar consumption levels, suggesting that the community targeting does not discriminate along this dimension.

Panel B shows that beneficiary households also have consistently worse food security outcomes than non-beneficiary households, with lower dietary diversity score and FCS and higher food insecurity experience score. Panel C documents that beneficiary households also have lower income, livestock, household durables, and access to formal savings.

Panel C presents a comparison of a broader range of characteristics that go beyond consumption and food security. The findings reveal that beneficiary households exhibit lower income levels and possess fewer durable assets and livestock. Beneficiary (Type-1) households are more prone to having a member with a disability compared to non-beneficiary households of both types. Additionally, beneficiary (Type-1) households are less likely to have an adult member with labor capacity.

The table presents intriguing evidence suggesting that the community's perception of poverty may diverge from the indications of the PMT method. Notably, Type-2 households tend to have smaller sizes and are more likely to be led by females who are often widowed, divorced, or separated. The contrast in household size is striking, with averages of 3.2 for Type-2 households and 4.4 for Type-1 households. To support this finding, we examine the PSSN beneficiaries nationwide using TASAF's administrative data. Table 5.3 displays the average household size, age of the household head, and the proportion of female-headed households for both poor and non-poor households from the 2018/19 household survey as well as households identified as poor by communities. The disparity in size between households identified as poor by communities (3.6) and those classified as poor using consumption per adult equivalent (6.1)

is particularly substantial, surpassing the difference between poor and non-poor households.[16] These disparities suggest that communities may perceive poverty to be more prevalent among smaller, older, and female-headed households, which differs from the official definition of poverty which is based on a consumption per capita measure.

The above could imply that the PSSN program is currently undercovering poor larger households that are not prioritized by the community but would be by the PMT. As the coverage of the PSSN was driven by budget availability, not all households defined as poor according to the official definition could be included in the program. This analysis suggests that the under-coverage may be the most marked among larger and younger families.

Table 5.3: Perception of poverty by PMT versus CBT

	HH size	Age of HH head	Female-headed HHs
Poor HH (consumption based)	6.1	48.1	27.7%
Non-poor HH (consumption based)	4.3	46.1	28.4%
Poor HHs (as identified by communities)	3.6	57.7	47.2%

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[16] Similar discrepancies arise when examining various subsets of TASAF's administrative database or different waves of data collected between 2015 and 2022.

CHAPTER SIX

Conclusion

The baseline report clearly documents the lives of the poorest population of Tanzania. A relatively low share of wage and off-farm business activities means a large scope for improvement through income diversification. The public works and the livelihood interventions of the PSSN II are well-positioned to address these constraints, and the impact evaluation will be able to document the impacts of the program on these margins.

It also suggests that female beneficiaries are experiencing the heady burden of domestic work and the participation in the intensive elements of the PSSN II such as the month-long livelihood training sessions or the manual labor activities which could exacerbate their workload. It also documents a high prevalence of IPV. Therefore, these outcomes will require additional attention during the monitoring stage of the implementation and will be part of the primary outcomes in the impact evaluation.

Finally, the targeting analysis shows that the PSSN II beneficiaries in areas eligible for the enhanced livelihood component are overwhelmingly poor. This is largely driven by the choice of eligible PAAs, where even non-beneficiary households are predominantly poor relative to the national population. The within-village targeting using community-based nominations and PMT contributes to selecting slightly poorer households, but only marginally so. Substantial exclusion errors remain because the program does not have the resources to cover all poor households. And substantial inclusion errors also arise, as the community targeting and PMT may not be able to identify small welfare differences between poor households in overwhelmingly deprived communities. While this raises a question on the effectiveness of the CBT and PMT in filtering the poor, this may become less of an issue in other geographical areas that are less poor and not included in the baseline survey. There is also some evidence that CBT and PMT identify the poor based on slightly different objectives, suggesting that communities perceive poverty as associated with factors beyond consumption per capita.

Appendix A

Table A1: Adult equivalency

Age (years)	Male	Female
0-2	0.40	0.40
3-4	0.48	0.48
5-6	0.56	0.56
7-8	0.64	0.64
9-10	0.76	0.76
11-12	0.80	0.88
13-14	1.00	1.00
15-18	1.20	1.00
19-59	1.00	0.88
60+	0.80	0.72

Figure A1: The PMT pass rate by Tanzania Mainland and Zanzibar
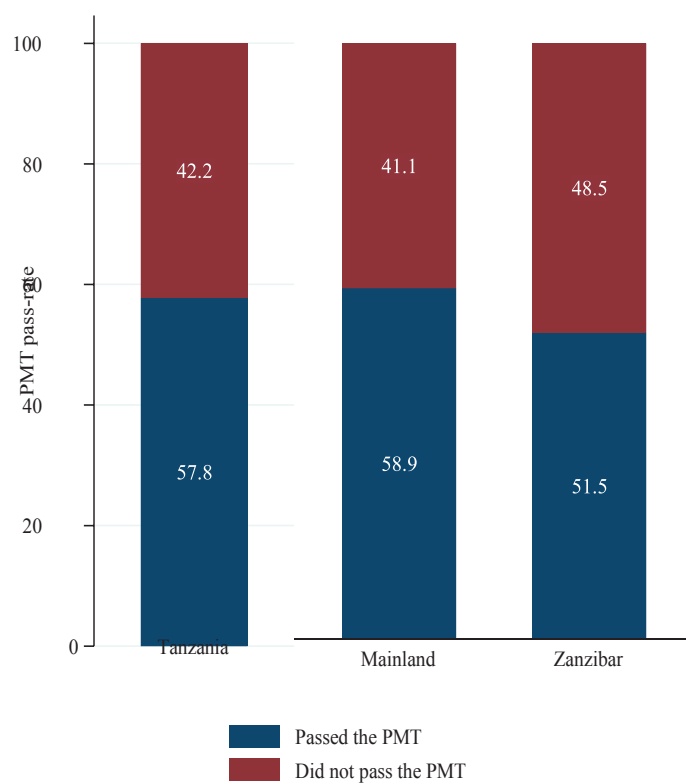
Figure A2: The PMT pass rate by region

Region	Passed the PMT	Did not pass the PMT
Tabo	66.0	34.0
Mtwara Ruk	65.9	34.1
Lindi Ruvu	64.6	35.4
Morogo	61.4	38.6
Pwani Kata	59.7	40.3
Singida Irin	56.4	43.6
Dodo	54.7	45.3
Kaskazini Ungu	54.5	45.5
Shinyanga Dar	54.3	45.7
Salaam Mj	53.9	46.1
Maghar	53.8	46.2
Mwanza Kus	52.7	47.3
Pem	52.5	47.5
	52.3	47.7
0	51.9	48.1
	50.0	50.0
	50.0	50.0

Figure A3: Timeline

	2022	2023	2024
	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J
Baseline	Baseline		
Intervention: PW		PW intervention	
Intervention: EL		EL intervention	
Intervention: PW+EL		PW intervention EL intervention	
Intervention: Control			
Endline			Endline
Analysis report			Analysis

Figure A4: Perceived difficulties for women to engage in activities

Working on hh plots
N=370

Prefer to do other things	30.50
Household chores	28.00
Physically too demanding	25.25
Pregnant, childcare, elderly car	12.50
Unpredictable or unstable income	3.75

0 10 20 30 40 50

Taking care of livestock
N=374

Household chores	35.84
Physically too demanding	26.07
Prefer to do other things	18.30
Pregnant, childcare, elderly car	11.28
Unpredictable or unstable income	8.52

0 10 20 30 40 50

Working as a paid manual laborer
N=605

Physically too demanding	44.10
Household chores	28.85
Prefer to do other things	13.90
Pregnant, childcare, elderly car	11.21
Unpredictable or unstable income	1.94

0 10 20 30 40 50

Operating a non-farm business
N=472

Household chores	35.36
Physically too demanding	21.85
Unpredictable or unstable income	17.57
Prefer to do other things	15.77
Pregnant, childcare, elderly car	9.46

0 10 20 30 40 50

Table A2: Number of villages surveyed per PAA

Domain	Region	PAA	Villages
Mainland	Dar Es Salaam	Ilala MC	6
Mainland	Dodoma	Bahi DC	13
Mainland	Dodoma	Chamwino DC	20
Mainland	Iringa	Mafinga TC	5
Mainland	Iringa	Mufindi DC	22
Mainland	Katavi	Mpanda MC	6
Mainland	Lindi	Kilwa DC	17
Mainland	Lindi	Lindi MC	16
Mainland	Lindi	Liwale DC	16
Mainland	Lindi	Nachingwea DC	14
Mainland	Morogoro	Kilosa DC	20
Mainland	Mtwara	Masasi DC	15
Mainland	Mtwara	Mtwara DC	11
Mainland	Mtwara	Mtwara MC	14
Mainland	Mtwara	Nanyamba TC	9
Mainland	Mtwara	Nanyumbu DC	12
Mainland	Mtwara	Newala DC	15
Mainland	Mtwara	Newala TC	6
Mainland	Mwanza	Misungwi DC	11
Mainland	Pwani	Bagamoyo DC	4
Mainland	Pwani	Chalinze DC	13
Mainland	Rukwa	Sumbawanga DC	13
Mainland	Ruvuma	Madaba DC	3
Mainland	Ruvuma	Songea DC	8
Mainland	Ruvuma	Tunduru DC	23
Mainland	Shinyanga	Kahama TC	11
Mainland	Singida	Iramba DC	9
Mainland	Singida	Singida DC	16
Mainland	Singida	Singida MC	10
Mainland	Tabora	Uyui DC	18
Zanzibar	Kaskazini Unguja	Kaskazini A	8
Zanzibar	Kaskazini Unguja	Kaskazini B	9
Zanzibar	Kusini Pemba	Chake Chake	10
Zanzibar	Kusini Pemba	Mkoani	11
Zanzibar	Mjini Magharibi	Magharibi A	9
Zanzibar	Mjini Magharibi	Magharibi B	11

	(1) Control mean (s.d)	(2) Public works (PW) mean (s.d)	(3) Enhanced livelihood (EL) mean (s.d)	(4) PW + EL mean (s.d)	(5) p-value: pooled treatment = control	(6) p-value: equality over 4 arms
Household size	3.05	3.23	3.14	3.30	0.598	0.796
	(2.24)	(2.14)	(2.28)	(2.18)		
Currently pregnant	0.01	0.01	0.02	0.01	0.814	0.527
	(0.10)	(0.09)	(0.13)	(0.09)		
Health spendings for children, per month	809	998	1768	736	0.283	0.272
	(3542)	(3757)	(12227)	(2541)		
At least 1 member with disability	0.25	0.23	0.18	0.25	0.346	0.149
	(0.43)	(0.42)	(0.38)	(0.43)		
Avg Years of education	3.46	3.56	3.62	4.12	0.176	0.119
	(2.79)	(2.65)	(2.65)	(2.84)		
Total cons, per day and indiv.	1925	2059	1830	2003	0.622	0.418
	(1437)	(1674)	(1729)	(1803)		
Poor or borderline food consumption score	0.55	0.58	0.61	0.60	0.076	0.766
	(0.50)	(0.50)	(0.49)	(0.49)		
Total expn, per day and indiv.	1155	1305	1165	1342	0.131	0.501
	(1140)	(1324)	(1476)	(1465)		
Received some payment for wage work	0.18	0.18	0.15	0.22	0.436	0.252
	(0.38)	(0.39)	(0.36)	(0.41)		
Has an account in a formal institution	0.09	0.12	0.13	0.12	0.278	0.914
	(0.29)	(0.33)	(0.34)	(0.32)		
Hh owned any plot (last 12 months)	0.63	0.58	0.50	0.57	0.007	0.303
	(0.48)	(0.50)	(0.50)	(0.50)		
Owned animals, last 12 months	0.29	0.35	0.26	0.30	0.807	0.104
	(0.45)	(0.48)	(0.44)	(0.46)		
Nb of livestock owned (TLU equivalent)	0.14	0.28	0.27	0.13	0.228	0.301
	(0.70)	(1.40)	(1.73)	(0.95)		
Experienced any type of IPV	0.66	0.57	0.60	0.56	0.004	0.877
	(0.48)	(0.50)	(0.49)	(0.50)		
Observations	300	271	297	261	1,129	1,129
Villages	87	81	87	80	335	335

Standard errors are clustered at village. Fixed effects, using the combination of the PAA variable and the village-level intervention type, are included in all estimation regressions.
Sample: Type-2 households from the impact evaluation sample (village-level).   In (5), all the groups who receive some treatment (PW, EL, or PWL+EL) are pooled and tested against the control group.   In (6), the test is for equality over the 4 treatment and control groups.

Table A4: Balance table for sub-village level spillover analysis (Type-2 and Type-3 HHs)

	(1) Control mean (s.d)	(2) Public works (PW) mean (s.d)	(3) Enhanced livelihood (EL) mean (s.d)	(4) PW + EL mean (s.d)	(5) p-value: pooled treatment = control	(6) p-value: equality over 4 arms
Household size	4.14 (2.50)	4.00 (2.42)	4.02 (2.49)	4.06 (2.40)	0.226	0.935
Currently pregnant	0.03 (0.18)	0.02 (0.15)	0.02 (0.15)	0.03 (0.16)	0.253	0.937
Health spendings for children, per month	3478 (24265)	2683 (10784)	2891 (11815)	4626 (47243)	0.813	0.565
At least 1 member with disability	0.15 (0.36)	0.15 (0.36)	0.19 (0.40)	0.14 (0.35)	0.355	0.019
Avg Years of education	4.42 (2.63)	4.35 (2.64)	4.30 (2.64)	4.34 (2.61)	0.458	0.963
Total cons, per day and indiv.	1911 (1535)	1947 (1706)	1898 (1487)	1850 (1510)	0.826	0.754
Poor or borderline food consumption score	0.52 (0.50)	0.54 (0.50)	0.55 (0.50)	0.56 (0.50)	0.117	0.865
Total expn, per day and indiv.	1325 (1357)	1324 (1342)	1355 (1333)	1285 (1213)	0.810	0.786
Received some payment for wage work	0.20 (0.40)	0.27 (0.44)	0.27 (0.44)	0.24 (0.43)	0.007	0.524
Has an account in a formal institution	0.14 (0.34)	0.15 (0.36)	0.14 (0.35)	0.17 (0.37)	0.514	0.607
Hh owned any plot (last 12 months)	0.68 (0.47)	0.64 (0.48)	0.63 (0.48)	0.63 (0.48)	0.032	0.934
Owned animals, last 12 months	0.38 (0.49)	0.39 (0.49)	0.34 (0.47)	0.34 (0.48)	0.135	0.252
Nb of livestock owned (TLU equivalent)	0.68 (3.22)	0.42 (2.17)	0.26 (1.27)	0.27 (1.43)	0.015	0.438
Experienced any type of IPV	0.62 (0.49)	0.68 (0.47)	0.61 (0.49)	0.65 (0.48)	0.491	0.271
Observations	746	735	746	706	2,933	2,933
Villages	109	108	109	108	434	434

Standard errors are clustered at village. Fixed effects, using the combination of the PAA variable and the village-level intervention type, are included in all estimation regressions.
Sample: Type-2 and type-3 households from the targeting evaluation sample (sub-villagelevel).   In (5), all the groups who receive some treatment (PW, EL, or PWL+EL) are pooled and tested against the control group.   In (6), the test is for equality over the 4 treatment and control groups.

Table A5: Household composition for those outside the age range 18-65

	Mean/s.d	Count Hh
has one adult only	0.636	1306
	(0.481)	
Hh has children [0-17]	0.453	1306
	(0.498)	
Only one adult:		
Widowed	0.828	831
	(0.378)	
Divorced or separated	0.134	831
	(0.340)	
Never married	0.026	831
	(0.161)	
Married	0.012	831
	(0.109)	

All households composed of only one adult correspond to households with female adults older than 65; these households may include other members aged below 18.

Table A6: Consumption and expenditures by category, per day and adult-equivalent

	Mean	s.d	Count
Total cons	1419	(1190)	5297
Food consumption	1053	(998)	5297
from purchases	450	(568)	5297
from own prod.	347	(483)	5297
from gifts	154	(342)	5297
Non-food expenditures	366	(451)	5297
Clothing	146	(307)	5297
Health	93	(220)	5297
Hh goods (soap, personal items)	31	(39)	5297
Hh utilities (electricity, water, etc)	30	(58)	5297
Education	19	(30)	5297
Transport	15	(54)	5297
Other (tobacco, milling, church, etc)	12	(20)	5297
Festivities	8	(27)	5297
Communication	7	(13)	5297
Household items and maintenance	5	(25)	5297
Rent and mortgages	0.0	(0.0)	5297
Insurance	0.0	(0.0)	5297
Durable repairs	0.0	(0.0)	5297
Taxes	0.0	(0.0)	5297

Sample of Type-1 households from the impact-evaluation sample. All consump- tion types are shown per day and per adult-equivalent.

Hh commodities: wood, electricity, gas, water, cell, milling, personal hygiene, soap, bulbs, repair, fuel, donation Non-food: tobacco, matches, public trans- port. Hh related: hh items (carpets, towels, mattresses), hh repairs, theft loses, insurance, clothing, mortgage, rent, own-business equipment

Table A7: Sources of food consumption (past 7 days)

	Mean/s.d	Count Hh
consumed food from:		
purchases	0.880	5230
	(0.325)	
own production	0.760	5230
	(0.427)	
gifts	0.451	5230
	(0.498)	

Sample of all individuals from Type-1 households from the impact-evaluation sample. Consumption for any household member over the past 7 days.

Figure A5: Value of consumption, details for non-food consumption

Clothing exp.
Health exp.
Hh goods (soap, personal items) exp.
Hh utilities (electricity, water, etc) exp.
Education exp.
Other exp. (rent, communication, ins
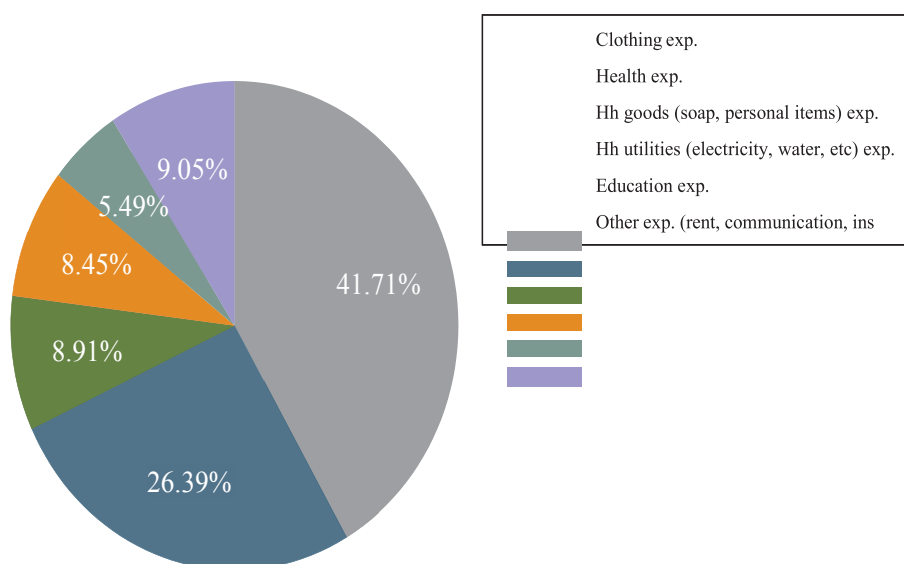
Table A8: Food security: HDDS, FIES, and FCS

Mean/s.d Count

Panel A: Household dietary diversity score (HDDS) [1]

	Mean/s.d	Count
Mean HDDS [0-12] Past 7 days	5.180	5297

	(2.183)	

Panel B: Food insecurity experience scale (FIES) [2]

Mean FIES [0-8] Past 12 months	6.980	5297
	(1.872)	

For any hh member in the past 12 months:

Ever worried for lack of food	0.940	5297
	(0.238)	
Ever unable to eat healthy food	0.948	5297
	(0.222)	
Ever ate few kinds of food	0.935	5297
	(0.247)	
Ever skipped a meal	0.907	5297
	(0.291)	
Ever ate less	0.908	5297
	(0.289)	
Ever ran out of food	0.882	5297
	(0.323)	
Ever hungry without eating	0.793	5297
	(0.405)	
Ever without eating for a whole day	0.668	5297
	(0.471)	

C: Food Consumption Score (FCS)

Mean FCS [0-112] Past 7 days	32.897	5297
	(15.747)	
Share of hh with poor food cons.	0.290	5297
	(0.454)	
Share of hh with borderline food cons.	0.352	5297
	(0.478)	
Share of hh with acceptable food cons.	0.358	5297
	(0.480)	

[1] Out of 12 food groups, HDDS sums the number of distinct food items consumed in the past 7 days. Ranges from 0 (less diverse) to 12 (more diverse). See **fao_guidelines_2013** for detail.
[2] Ranges from 0 (less insecure) to 8 (more insecure). See **cafiero_food_2018** for detail.
[3] FCS is a weighted sum of the number of days in the past week having consumed distinct food items. Ranges from 0 (worse) to 112 (better). See **wfp_food_2008** for detail.

Table A9: Housing characteristics

	Mean/s.d	Count
House material		
Roof made from grass, leaves and/or mud	0.373	5297
	(0.484)	
Wall made from poles, mud and/or grass	0.382	5297
	(0.486)	
Floor made of palm, bamboo, earth, sand or dung	0.777	5297
	(0.416)	
House characteristics		
Nb of rooms used for sleeping	2.086	5297
	(0.847)	

	Mean		Count
Hh has electricity	0.098 (0.298)		5297
Sanitation			
Hh has access to improved latrines	0.348 (0.476)		5297
Hh has flush-type toilet facilities	0.101 (0.301)		5297
Hh has no toilet facilities	0.136 (0.343)		5297
Drinking water			
Hh has access to improved water sources	0.574 (0.495)		5297
Hh has access to piped water inside dwelling	0.041 (0.199)		5297

Sample of all Type-1 households from the impact-evaluation sample. Improved latrines consist of flush/pour flush to piped sewer system, to septic tank, to covered pit or some- where else, ventilated improved pit (VIP) latrine, pit latrine with washable slab with or without lid, and pit latrine with not-washable/soil slab. Improved water sources consist of piped water into dwelling or to yard/plot, public tap/standpipe, tubewell/borehole, protected dugwell, protected spring, rainwater collection, bottled water, or neighbours tap/standpipe.

Table A10: Housing assets

	Mean	s.d.	Count
Nb of categories of assets that the hh has [0-27]	4.030	(2.360)	5297
Household has at least one:			
Cooking pots, Cups, other kitchen utencils	0.791	(0.407)	5297
Mosquito net	0.635	(0.482)	5297
Beds	0.633	(0.482)	5297
Telephone (mobile)	0.477	(0.500)	5297
Chairs	0.422	(0.494)	5297
Other stove	0.310	(0.462)	5297
Tables	0.205	(0.404)	5297
Radio and Radio Cassette	0.101	(0.301)	5297
Bicycle	0.094	(0.292)	5297
Cupboards, chest-of-drawers, boxes, wardrobes,bookcases	0.080	(0.271)	5297
Books (not school books)	0.066	(0.248)	5297
Sofas	0.035	(0.184)	5297
Lanterns	0.033	(0.178)	5297
Iron (Charcoal or electric)	0.030	(0.171)	5297
Television	0.028	(0.165)	5297
Sewing machine	0.016	(0.127)	5297
Video / DVD	0.013	(0.115)	5297
Watches	0.012	(0.109)	5297
Refridgerator or freezer	0.011	(0.105)	5297
Telephone (landline)	0.010	(0.099)	5297
Motorcycle	0.009	(0.096)	5297
Electric/gas stove	0.009	(0.096)	5297
Water-heater	0.006	(0.077)	5297
Complete music system 90	0.001	(0.034)	5297
Record/cassette player, tape recorder	0.001	(0.034)	5297
Computer/Laptop	0.001	(0.031)	5297
Motor Vehicles	0.001	(0.024)	5297

Sample of all Type-1 households from the impact-evaluation sample. Share of households having at least one unit of a given item.

Table A11: Sources of income over a year

	Mean/s.d	Count Hh
has some income from		
crop harvest	0.559	5297
	(0.497)	
wage work	0.229	5297
	(0.420)	
non-farm businesses	0.090	5297
	(0.287)	
livestock	0.071	5297
	(0.257)	
transfers from relatives	0.390	5297
	(0.488)	

Sample of all main respondents for Type-1 households from the impact-evaluation sample. Household-level.
Crop harvest includes sold harvest, own con- sumption (estimated value), and harvest that is still ongoing. Income from livestock includes live- stock sales and sales of animal products. Trans- fers from relatives include transfers/gifts from ex- ternal families, relatives, friends, and neighbors

Table A12: Annual household income by source

	Mean/s.d	Count
Total income	350672	5297
	(684388)	
Value of total harvest	269017	5297
	(665258)	
Income from wages	34786	5297
	(115060)	
Income from non-farm businesses	6544	5297
	(23462)	

	Mean/s.d	Count
Income from livestock	1262	5297
	(4697)	
Income from transfers from relatives	18816	5297
	(34204)	

Sample of all Type-1 households from the impact-evaluation sample. Per household. The reported averages are unconditional on receiving some income from a given source of income: null values are included in the computation for averages.

Total harvest value includes sold harvest, own consumption, and har- vest that is still ongoing; the value is estimated based on the price per kg that each household reported for each crop. Income from livestock includes livestock sales and sales of animal products. Transfers from rel- atives include transfers from external family, friends, and neighbours.

Table A13: Time use past 7 days

	Mean/s.d	Count
Panel A: At least one adult member in the hh spent some time in:		
collecting water	0.769	5297
	(0.421)	
milling and food processing	0.083	5297
	(0.276)	
cooking	0.912	5297
	(0.284)	
taking care of children, elderly or ill/sick hh mbrs	0.522	5297
	(0.500)	
working non-farm own bsn	0.153	5297
	(0.360)	
working for wage	0.217	5297
	(0.412)	
working on hh farm	0.505	5297
	(0.500)	
Panel B: Hours per week spent by household:		
collecting water	12.314	5297
	(17.848)	
milling and food processing	1.093	5297
	(11.880)	
cooking	15.260	5297
	(17.102)	
taking care of children, elderly or ill/sick hh mbrs	14.138	5297
	(30.217)	
working non-farm own bsn	4.584	5297
	(19.489)	
working for wage	7.005	5297
	(23.390)	
hh farm	14.971	5297
	(27.374)	
Panel C: For members with a paid activity (individual level)		
Share of hh with paid activity	0.349	5297
	(0.477)	

Days worked in main activity, per ind. with paid activity		4.139	4097
		(2.249)	
Avg hours per day for main activity, per ind. with paid activity		5.629	4097
		(3.721)	

Per individual. Sample of all Type-1 households from the impact-evaluation sample. Paid activity is defined as wage work, non-farm business, apprenticeship, or farming activities aimed at sales.

Table A14: Farming activities: overview

	Mean	s.d	Count
Panel A: Both seasons			
Hh owned any plot (last 12 months)	0.656	(0.475)	5297
Cultivated any plot in long rainy season	0.572	(0.495)	5297
Cultivated any plot in short rainy season	0.141	(0.348)	5297
Cultivated plots in any of short or long rainy season	0.673	(0.469)	5297
Panel B: Long rainy season (N=3029)			
Area of cultivated plots	1.668	(1.058)	3029
Qty harvested (kg)	268.729	(326.973)	3029
Value of total harvest (TZS)	418736	(811790)	3029
Bought seeds (incl. improved)	0.190	(0.392)	3029
Value of seeds (TZS)	3157	(14240)	2965
Bought organic fertilizers (manure, compost)	0.038	(0.191)	3029
Value of organic fertilizers (TZS)	561	(6462)	3029
Bought chemical fertilizers	0.078	(0.268)	3029
Value of chemical fertilizers (TZS)	6590	(34492)	3029
Bought pesticides	0.086	(0.281)	3029
Value of pesticides (TZS)	1601	(9523)	3029
Hired workers	0.023	(0.151)	3029
Wages spent on hired labor or casual workers	1616	(19416)	3029
Nb of days worked by non-hh members	3.07	(12.52)	3029
Sold crops	0.244	(0.429)	3029
Value of sold crops (TZS)	38627	(93096)	3029
Panel C: Short rainy season (N=747)			
Area of cultivated plots	1.044	(0.435)	747
Qty harvested (kg)	122.747	(166.713)	747
Value of total harvest (TZS)	209680	(337715)	747
Bought seeds (incl. improved)	0.139	(0.346)	747
Value of seeds (TZS)	2670	(23134)	722
Bought organic fertilizers (manure, compost)	0.032	(0.176)	747
Value of organic fertilizers (TZS)	555	(5561)	747
Bought chemical fertilizers	0.052	(0.223)	747
Value of chemical fertilizers (TZS)	2786	(15775)	747
Bought pesticides	0.131	(0.338)	747
Value of pesticides (TZS)	3170	(15301)	747
Hired workers	0.021	(0.145)	747
Wages spent on hired labor or casual workers	649	(7602)	747
Nb of days worked by non-hh members	3.08	(12.56)	747
Sold crops	0.212	(0.409)	747
Value of sold crops (TZS)	32087	(79337)	747

Per household. Sample of all Type-1 households from the impact-evaluation sample. Values of bought inputs (seeds, fertilizers, pesticides and labor) are reported without winsorization. Indeed, as only a limited share of households report having those expenditures, winsorization cannot be done at conventional level across households.

Table A15: Livestock over the past 12 months

	Mean/s.d	Count
Hh owned at least 1 animal	0.296	5297
	(0.457)	
For hh who owned some livestock:		
Nb of livestock owned	9.082	1570
	(11.235)	
Nb of livestock owned (TLU equivalent)	0.584	1570
	(2.006)	
Nb of Cattle indiv.	0.576	1570
	(2.547)	
Nb of Sheep and goats	0.875	1570
	(3.152)	
Nb of Pigs	0.050	1570
	(0.431)	
Nb of Poultry indiv.	7.186	1570
	(8.966)	
Sold livestock	0.241	1570
	(0.428)	
Sold animal products	0.049	1570
	(0.216)	

Sample of all Type-1 households from the impact-evaluation sample.
Livestock owned or sold over the past 12 months.
Tropical Livestock Unit (TLU) assigns the following weight to each type of livestock: Cows and calves 0.70 ; Bulls 0.5 ; Sheep, goats, and mutton 0.10 ; Pigs 0.20 ; Chicken 0.01 ; Guinea Fowl 0.03 ; Horses, mares, or donkeys 0.8.

Table A16: Businesses over the past 12 months

	Mean/s.d	Count
Owned an operating business	0.114	5297
	(0.318)	
For hh owning at least one business:		
Nb of businesses	1.548	604
	(1.113)	
Nb of years of activity	6.26	578
	(8.98)	
Current asset and capital value (TZS)	140003	604
	(558288)	
Current inventory value, per business (TZS)	48947	604
	(186259)	
Nb of permanent workers	0.02	604
	(0.19)	
Nb of temporary workers	0.03	604

	Mean/s.d	Count
	(0.26)	
Total revenues from sales of goods and services, past 12 months	172753	604
	(127108)	
Total profit after paying all expenses, past 12 months (TZS)	57392	604
	(43723)	

Sample of all Type-1 households from the impact-evaluation sample. All activities recorded over the past 12 months. When a household reported more than one business over the past 12 months, the average values are computed for the household.

Table A17: Access to credit

	Mean/s.d	Count
Main resp. ever visited a commercial bank	0.040	5297
	(0.196)	
Hh currently has an account	0.091	5297
	(0.287)	
Hh has one or more outstanding loan	0.045	5297
	(0.206)	
Total value of outstanding cash loans	210343	236
	(382426)	
Number of loans taken out over the past year	1.2	236
	(0.580)	

Sample of all Type-1 households from the impact-evaluation sample.

Table A18: Education for primary-aged children (6-13 years old)

	Mean/s.d	Count
Ever attended school	0.888	5516
	(0.316)	
Currently attending	0.855	5516
	(0.353)	
Attending public school	0.990	4733
	(0.101)	
If currently attending school:		
Ever absent over the past 2 weeks	0.334	4733
	(0.472)	
Days absent, if any	3.784	1582
	(2.648)	
If never attended school, main reasons:		
Financial constraints	0.296	584
	(0.457)	
Too young	0.241	584
	(0.428)	
School too far away	0.084	584
	(0.277)	

	Mean/s.d	Count
Refusal of parent / guardian	0.065	584
	(0.247)	

Sample of children aged 6-13, among Type-1 households from the impact-evaluation sample.

Table A19: Education for secondary-aged teenagers (14-19)

	Mean/s.d	Count
Ever attended school	0.906	3207
	(0.292)	
Currently attending	0.521	3207
	(0.500)	
Attending primary school	0.231	3207
	(0.422)	
Attending secondary school	0.290	3207
	(0.454)	
If currently attending school:		
Attending public school	0.991	1722
	(0.096)	
Ever absent over the past 2 weeks	0.331	1722
	(0.471)	
Days absent, if any	4.216	570
	(2.906)	
For those who never attended school:		
Ever attended vocational training	0.007	302
	(0.081)	
Ever attended adult literacy class	0.013	300
	(0.115)	
For those who never attended school, main reasons:		
Financial constraints	0.245	282
	(0.431)	
Refusal of parent / guardian	0.135	282
	(0.342)	
School too far away	0.060	282
	(0.238)	
Too young	0.011	282
	(0.103)	

Sample of children aged 14-19, among Type-1 households from the impact-evaluation sample.

Table A20: Education for the main respondent

	Mean/s.d	Count
Reported literacy:		
Can read and write a short sentence	0.442	5293
	(0.497)	

	Mean/s.d	Count
in Swahili	0.421 (0.494)	5293
in English	0.040 (0.197)	5293
Can read and write another language, but no Swahili or English	0.022 (0.146)	5293
Tested literacy for Swahili and English only:		
Can read and write a short sentence, at least partially (tested)	0.314 (0.464)	5275
in Swahili	0.314 (0.464)	5275
in English	0.031 (0.173)	5275
Years of education	3.065 (3.497)	5297
Ever attended school	0.497 (0.500)	5297
For those who never attended school, main reasons:		
Refusal of parent / guardian	0.488 (0.500)	2492
School too far away	0.209 (0.406)	2492
Financial constraints	0.138 (0.345)	2492
No need/not important/Satisfied	0.047 (0.212)	2492
For those who never attended school:		
Ever attended vocational training	0.000 (0.019)	2664
Ever attended adult literacy class	0.017 (0.127)	2663

Sample of main female respondent in each household, among Type-1 households from the impact- evaluation sample.

Table A21: Health at household level

	Mean/s.d	Count
At least one member of the hh		
was sick, past month	0.648 (0.478)	5297
visited a health care provider, past month	0.411 (0.492)	5297
has health insurance	0.059 (0.235)	5297
currently pregnant	0.031 (0.173)	5297

	Mean/s.d	Count
Health exp., hh aggregate, past year	99036	5297
	(183976)	
Health spendings for children, per year	16544	5297
	(40251)	

Sample of all individuals from Type-1 households from the impact-evaluation sample. Health spending in TZS.

Table A22: Health for kids 0-5

	Mean/s.d	Count
Average health spending (TZS) per kid, per year	21267	3079
	(128449)	
Possess birth certificate or is registered with civil authority	0.695	3034
	(0.460)	
Ever sick or injured, last 4 weeks	0.273	3079
	(0.445)	
If ever sick:		
Nb sick days, last 4 weeks	6.8	840
	(5.6)	
Illness/injury:		
Fever	0.435	840
	(0.496)	
Malaria	0.223	840
	(0.416)	
Airborne disease	0.112	840
	(0.315)	
Diarrhea	0.067	840
	(0.250)	
Other	0.270	840
	(0.444)	
Vaccination for children aged 0-5:		
Ever been immunized	0.906	2960
	(0.292)	
Received BCG vaccine	0.885	2960
	(0.319)	
Received polio vaccine	0.883	2960
	(0.321)	
Received DPT-HepB-Hib vaccine	0.881	2960
	(0.324)	
Received PCV (Pneumococcal) vaccine	0.875	2960
	(0.331)	
Received rotavirus vaccine	0.865	2960
	(0.342)	
Received measles vaccine	0.794	2960
	(0.405)	

For children aged 0-2:				
Born in health facility			0.797	1298
	86		(0.403)	
Child was/is breast-fed			0.984	1257
			(0.125)	

Sample of all individuals from Type-1 households from the impact-evaluation sample. Missing observations for vaccination variables and 'breast-feeding' correspond to cases where the respon- dent reported not knowing the information for the child. Other illnesses include skin condition, pneumonia, eye, worms, chronic illness, etc.

Table A23: Time use by female and male heads

	(1) Male head		(2) Female head Mean	
	Mean	Count	Mean	Count
Engaged in activity (past week)				
cooking	0.104	2269	0.867	2269
taking care of hh mbrs	0.172	2269	0.527	2269
collecting water	0.253	2269	0.682	2269
working on hh farm	0.415	2269	0.410	2269
working for wage	0.163	2269	0.100	2269
working on own business	0.104	2269	0.088	2269
Hours spent on (past week):				
cooking	0.827	2255	11.356	2267
taking care of hh mbr	2.024	2253	10.930	2262
collecting water	1.834	2255	6.302	2267
working on hh farm	8.790	2262	7.247	2261
working for wage	4.161	2257	1.783	2258
working on own business	2.869	2255	1.686	2258

Sample of all household heads for Type-1 households from the impact-evaluation sample.

Table A24: Engagement in economic activities

	(1) Engaged in activity	(2) Considered engaging	(3) Difficult for women	(4) Difficult for themselves

	Mean	Mean	Mean	Mean
Working in own hh plots	0.653	0.779	0.070	0.105
Taking care of livestock	0.288	0.613	0.071	0.117
Working as a paid manual laborer	0.270	0.476	0.114	0.211
Operating a non-farm business	0.207	0.519	0.089	0.173

Number of observations: 5297.

Sample of all main respondents for Type-1 households from the impact-evaluation sample.

Table A25: IPV overview

	Mean/s.d	Count
Respondent's situation: (past 12 months)		
Ever had a partner	0.495	5282
	(0.500)	
IPV, if resp. had partner		
Experienced any type of IPV	0.609	2617
	(0.488)	
Types of IPV experienced, if resp. had partner		
Experienced any type of controlling behavior	0.545	2617
	(0.498)	
Experienced any type of emotional IPV	0.328	2617
	(0.470)	
Experienced any type of physical IPV	0.146	2617
	(0.354)	
Experienced any type of sexual IPV	0.211	2617
	(0.408)	

Sample of all main respondents for Type-1 households from the impact-evaluation sample. 5.16% of the respondents refused to answer on whether they ever experi- enced some type of IPV.

Table A26: Depression, subjective social status, and decision making

	Mean/s.d	Count
CESD depression scale:		
Hh is considered depressed, CESD-R10 measurement	0.760	5297
	(0.427)	
MacArthur scale of subjective social status [0-10]:		
Consider themselves as a person with good qualities	4.518	5297
	(2.605)	
Consider themselves as a respected person in the community	5.560	5297
	(2.547)	
Consider their opinion is being followed in the community	6.320	5297
	(2.429)	
Consider they have a good social position in the community	7.470	5297
	(2.314)	

Decision making:

	Mean/s.d	Count
Share of topics on which they were never consulted	0.400 (0.325)	5297
Share of topics on which they were sometimes consulted	0.090 (0.156)	5297
Share of topics on which they were always consulted	0.140 (0.230)	5297
Share of topics on which they are the primary decision maker	0.370 (0.376)	5297

Sample of all Type-1 households from the impact-evaluation sample.
CESD-R10 depression scale is calculated based on the frequency of a set of 10 questions. For each question, the respondent is asked how many days a given feeling occurred in the past week. For each of those questions, a score of 0 to 3 is assigned, depending on how frequent a feeling was. Then the score from all 10 questions is added to create an aggregated score between 0 to 30. Any hh member with a score of 10 or above is considered depressed.

Table A27: Education by gender, all household members aged 18+

	(1) Male		(2) Female	
	Mean/s.d	Count	Mean/s.d	Count
Reported literacy:				
Can read and write a short sentence	0.690 (0.463)	4530	0.499 (0.500)	7390
in Swahili	0.673 (0.469)	4530	0.476 (0.499)	7390
in English	0.127 (0.333)	4530	0.079 (0.270)	7390
Can read and write another language, but no Swahili or English	0.014 (0.119)	4530	0.021 (0.142)	7390
Years of education	4.839 (3.687)	4530	3.637 (3.815)	7390
Ever attended school	0.738 (0.440)	4530	0.548 (0.498)	7390
For those who never attended school, main reasons:				
Refusal of parent / guardian	0.336 (0.472)	1117	0.472 (0.499)	3125
School too far away	0.217 (0.412)	1117	0.205 (0.404)	3125
Financial constraints	0.165 (0.371)	1117	0.136 (0.343)	3125
No need/not important/Satisfied	0.069 (0.253)	1117	0.051 (0.220)	3125
For those who never attended school:				
Ever attended vocational training	0.003 (0.058)	1186	0.000 (0.017)	3342
Ever attended adult literacy class	0.039 (0.193)	1182	0.017 (0.128)	3341

Sample of all adult household members, among Type-1 households from the impact-evaluation sample.

Table A28: Education by gender, primary-school-aged children [6-13]

	Male		Female	
	Mean/s.d	Count	Mean/s.d	Count
Ever attended school	0.871	2753	0.904	2763
	(0.335)		(0.295)	
Currently attending	0.829	2753	0.880	2763
	(0.376)		(0.325)	
Attending public school	0.991	2295	0.988	2438
	(0.093)		(0.108)	
If currently attending school:				
Ever absent over the past 2 weeks	0.341	2295	0.328	2438
	(0.474)		(0.470)	
Days absent, if any	3.743	782	3.824	800
	(2.580)		(2.713)	
If never attended school, main reasons:				
Financial constraints	0.267	333	0.335	251
	(0.443)		(0.473)	
Too young	0.252	333	0.227	251
	(0.435)		(0.420)	
School too far away	0.069	333	0.104	251
	(0.254)		(0.305)	
Refusal of parent / guardian	0.075	333	0.052	251
	(0.264)		(0.222)	

Sample of all primary-aged children [6-13], among Type-1 households from the impact-evaluation sample.

Table A29: Education by gender, secondary-school-aged teenagers [14-19]

	(1) Male		(2) Female	
	Mean/s.d	Count	Mean/s.d	Count
Ever attended school	0.884	1733	0.931	1474
	(0.320)		(0.253)	
Currently attending	0.494	1733	0.554	1474
	(0.500)		(0.497)	
Attending primary school	0.241	1733	0.220	1474
	(0.428)		(0.414)	
Attending secondary school	0.253	1733	0.332	1474
	(0.435)		(0.471)	
If currently attending school:				
Attending public school	0.990	881	0.992	841
	(0.101)		(0.091)	
Ever absent over the past 2 weeks	0.359	881	0.302	841
	(0.480)		(0.459)	
Days absent, if any	4.278	316	4.138	254
	(2.950)		(2.855)	
For those who never attended school:				
Ever attended vocational training	0.005	201	0.010	101
	(0.071)		(0.100)	
Ever attended adult literacy class	0.015	200	0.010	100
	(0.122)		(0.100)	
For those who never attended school, main reasons:				
Financial constraints	0.287	188	0.160	94
	(0.454)		(0.368)	
Refusal of parent / guardian	0.101	188	0.202	94
	(0.302)		(0.404)	
School too far away	0.059	188	0.064	94
	(0.235)		(0.246)	
Too young	0.005	188	0.021	94
	(0.073)		(0.145)	

Sample of all secondary-school-aged teenagers [14-19], among Type-1 households from the impact-evaluation sample.

Table A30: Health for the main respondents

	Mean/s.d	Count
Health exp. for respondent (TZS) per year	57198	5297
	(314996)	
Ever sick or injured, last 4 weeks	0.397	5297
	(0.489)	
If ever sick:		
Nb sick days, last 4 weeks	10.9	2105
	(8.7)	
Visited health care provider over the past month	0.197	5297

	(0.398)	
Has health insurance	0.036	5208
	(0.185)	
Has a disability	0.113	5297
	(0.316)	
Smokes	0.057	5296
	(0.232)	
Drinks alcohol	0.120	5296
	(0.325)	

Sample of all individuals from Type-1 households from the impact-evaluation sam- ple. Missing observations correspond to respondents who refused to answer that par- ticular question.

Table A31: Pregnancy of the main respondents

	Mean/s.d	Count
Respondent's pregnancy		
Ever pregnant	0.948	5297
	(0.221)	
Respondent, if ever pregnant:		
Ever had teenage pregnancy [10-19]	0.506	5024
	(0.500)	
Ever had miscariage, abortion or still birth	0.256	5024
	(0.436)	
Nb of children ever delivered	5.992	5024
	(3.146)	
Was pregnant in the past 2 years	0.029	5024
	(0.167)	
Respondent, if last pregnancy in past 2 years		
Received antenatal care for pregnancy in the past 2 years	0.910	145
	(0.287)	
Received post-natal care for pregnancy in the past 2 years	0.759	145
	(0.429)	

Sample of main respondents from all Type-1 households from the impact-evaluation sample.

Table A32: Targeting analysis: consumption, food security and livelihoods

	(1) Type 1 mean (s.d)	(2) Type 2 mean (s.d)	(3) Type 3 mean (s.d)	(4) p-value: Pooled t2 and t3 = type 1	(5) p-value: equality over 3 types
Panel A. Consumption					
Total consumption	1505	1997	1901	0.000	0.000
	(1323)	(1752)	(1507)		
Food consumption	1096	1392	1202	0.001	0.001
	(1099)	(1357)	(933)		

from own prod.	341	366	342	0.198	0.003
	(480)	(576)	(410)		
from gifts	149	206	71	0.000	0.000
	(360)	(428)	(199)		
from purchases	494	693	713	0.000	0.000
	(614)	(836)	(787)		
Non-food expenditures	409	605	699	0.000	0.000
	(513)	(768)	(803)		
Hh reported having consumed food from own production	0.709	0.703	0.765	0.116	0.392
	(0.455)	(0.457)	(0.424)		
Hh reported having consumed food from gifts	0.435	0.469	0.313	0.000	0.000
	(0.496)	(0.499)	(0.464)		
Hh reported having consumed food from purchases	0.894	0.911	0.953	0.000	0.000
	(0.308)	(0.285)	(0.212)		
Panel B. Food security					
Household Dietary Diversity Score (HDDS) [0-12] Past 7 days	5.292	5.596	6.207	0.000	0.000
	(2.210)	(2.354)	(2.412)		
Food insecurity experience scale (FIES) [0-8] Past 12 months	6.987	6.596	5.778	0.000	0.000
	(1.845)	(2.264)	(2.864)		
Food consumption score (FCS) [0-112] Past 7 days	33.622	34.998	38.758	0.000	0.000
	(15.737)	(16.489)	(17.940)		
Panel C. Income and livelihood					
Total income, per indiv.	155993	200593	201535	0.014	0.434
	(474945)	(626050)	(489816)		
Count of hh durable assets [0-27]	4.152	4.776	6.099	0.000	0.000
	(2.372)	(2.766)	(3.519)		
Nb of livestock owned (TLU equivalent)	0.119	0.183	0.579	0.000	0.000
	(0.637)	(1.212)	(2.668)		
Has an account in a formal institution	0.087	0.109	0.179	0.000	0.000
	(0.283)	(0.311)	(0.384)		
Household size	4.353	3.166	4.725	0.180	0.000
	(2.500)	(2.240)	(2.396)		
Household is headed by a female member	0.574	0.669	0.247	0.000	0.000
	(0.495)	(0.471)	(0.431)		
Female lead is currently pregnant	0.013	0.013	0.038	0.000	0.000
	(0.112)	(0.112)	(0.192)		
Female lead is widowed, divorced or separated	0.550	0.647	0.208	0.000	0.000
	(0.498)	(0.478)	(0.406)		
Hh has at least one member with disability	0.261	0.234	0.103	0.000	0.000
	(0.439)	(0.424)	(0.304)		
Hh has at least one adult member aged 18-65	0.794	0.780	0.953	0.000	0.000
	(0.405)	(0.414)	(0.212)		
Observations	1,727	1,261	1,672	4,660	4,660

Sample of all households (Type-1, Type-2 and Type-3) from the targeting-analysis sample. Female lead refers to the woman that is most knowledgeable of the characteristics of the household members and their activities, or a proxy respondent if the female lead was not available for a long period.

Table A33: Inclusion and exclusion errors

	Poverty line	Consumption ranking
Inclusion error	.11827	.61387
Exclusion error	.74549	.12051

For the first column, inclusion error is defined as the share of beneficiaries (Type-1) who are actually above the poverty line. Exclusion error is defined as the share of non- beneficiaries (Type-2 and Type-3) who are actually below the poverty line.

For the second column, inclusion error is defined as the share of beneficiaries (Type-1) whose consumption is higher than what it would be expected to be if they were in the low- est part of the distribution of consumption in their village. Exclusion error is defined as the share of non-beneficiaries (Type-2 and Type-3) whose consumption is lower than what it would be expected to be if they were in the lowest part of the distribution of consumption in their village.

Appendix B

Table B1: Balance table for Type-1 households, village-level sample (Zanzibar)

	(1) Control mean (s.d)	(2) Public works (PW) mean (s.d)	(3) Enhanced livelihood (EL) mean (s.d)	(4) PW + EL mean (s.d)	(5) *p*-value: pooled treatment = control	(6) *p*-value: equality over 4 arms
Household size	6.15	6.21	6.47	5.81	0.719	0.141
	(2.47)	(2.61)	(2.69)	(2.41)		
Currently pregnant	0.06	0.07	0.05	0.05	0.572	0.887
	(0.24)	(0.25)	(0.23)	(0.22)		
Health spendings for children, per month	1970	1263	3378	10812	0.320	0.203
	(6475)	(4422)	(11353)	(118462)		
At least 1 member with disability	0.16	0.12	0.16	0.10	0.349	0.092
	(0.37)	(0.33)	(0.37)	(0.30)		
Avg Years of education	4.75	4.67	4.87	4.81	0.874	0.850
	(2.06)	(2.28)	(2.04)	(2.29)		
Total cons, per day and indiv.	2284	2310	2490	2389	0.235	0.656
	(1305)	(1223)	(1748)	(1301)		
Poor or borderline food consumption score	0.22	0.12	0.20	0.14	0.028	0.183
	(0.42)	(0.33)	(0.40)	(0.35)		
Total expn, per day and indiv.	1624	1717	1846	1813	0.095	0.446
	(945)	(960)	(962)	(1067)		
Received some payment for wage work	0.26	0.24	0.32	0.28	0.835	0.549
	(0.44)	(0.43)	(0.47)	(0.45)		
Has an account in a formal institution	0.26	0.31	0.35	0.32	0.279	0.879
	(0.44)	(0.47)	(0.48)	(0.47)		
Hh owned any plot (last 12 months)	0.34	0.41	0.27	0.31	0.928	0.191
	(0.48)	(0.49)	(0.44)	(0.46)		
Owned animals, last 12 months	0.45	0.46	0.44	0.45	0.859	0.946
	(0.50)	(0.50)	(0.50)	(0.50)		
Nb of livestock owned (TLU equivalent)	0.14	0.18	0.19	0.24	0.160	0.796
	(0.47)	(0.54)	(0.58)	(1.04)		
Experienced any type of IPV	0.30	0.26	0.32	0.30	0.763	0.657
	(0.46)	(0.44)	(0.47)	(0.46)		
Observations	186	182	186	176	730	730
Villages	15	14	15	14	58	58

Standard errors are clustered at village. Fixed effects, using the combination of the PAA variable and the village-level intervention type, are included in all estimation regressions.
Sample: Type-2 and type-3 households from the targeting evaluation sample (sub-village level).   In (5), all the groups who receive some treatment (PW, EL, or PWL+EL) are pooled and tested against the control group.   In (6), the test is for equality over the 4 treatment and control groups.

Table B2: Balance table for village-level spillover analysis (Type-2 HHs) (Zanzibar)

	(1) Control mean (s.d)	(2) Public works (PW) mean (s.d)	(3) Enhanced livelihood (EL) mean (s.d)	(4) PW + EL mean (s.d)	(5) p-value: pooled treatment = control	(6) p-value: equality over 4 arms
Household size	4.50	4.24	4.58	4.51	0.429	0.766
	(2.50)	(2.37)	(2.66)	(2.68)		
Currently pregnant	0.02	0.00	0.04	0.04	0.856	0.115
	(0.14)	(0.00)	(0.20)	(0.20)		
Health spendings for children, per month	1150	1635	4560	655	0.463	0.356
	(3220)	(6260)	(28263)	(1790)		
At least 1 member with disability	0.19	0.07	0.14	0.06	0.067	0.301
	(0.39)	(0.25)	(0.35)	(0.24)		
Avg Years of education	5.43	5.15	5.15	5.96	0.819	0.173
	(2.79)	(2.35)	(2.31)	(2.81)		
Total cons, per day and indiv.	3013	3477	3313	3071	0.154	0.646
	(1579)	(1936)	(2571)	(1835)		
Poor or borderline food consumption score	0.13	0.24	0.16	0.16	0.325	0.747
	(0.34)	(0.43)	(0.37)	(0.37)		
Total expn, per day and indiv.	2364	2652	2661	2477	0.253	0.830
	(1506)	(1401)	(2468)	(1569)		
Received some payment for wage work	0.28	0.33	0.30	0.37	0.806	0.824
	(0.45)	(0.47)	(0.46)	(0.49)		
Has an account in a formal institution	0.31	0.43	0.44	0.35	0.747	0.684
	(0.47)	(0.50)	(0.50)	(0.48)		
Hh owned any plot (last 12 months)	0.30	0.26	0.22	0.20	0.315	0.860
	(0.46)	(0.44)	(0.42)	(0.41)		
Owned animals, last 12 months	0.35	0.46	0.40	0.45	0.307	0.771
	(0.48)	(0.50)	(0.49)	(0.50)		
Nb of livestock owned (TLU equivalent)	0.14	0.12	0.16	0.08	0.709	0.749
	(0.65)	(0.34)	(0.44)	(0.33)		
Experienced any type of IPV	0.28	0.24	0.26	0.27	0.209	0.837
	(0.46)	(0.44)	(0.44)	(0.45)		
Observations	54	46	50	49	199	199
Villages	13	13	14	14	36	56

Standard errors are clustered at village. Fixed effects, using the combination of the PAA variable and the village-level intervention type, are included in all estimation regressions.
Sample: Type-2 and type-3 households from the targeting evaluation sample (sub-village level).   In (5), all the groups who receive some treatment (PW, EL, or PW+EL) are pooled and tested against the control group.   In (6), the test is for equality over the 4 treatment and control groups.

Table B3: Balance table for sub-village level spillover analysis (Type-2 and Type-3 HHs) (Zanzibar)

	(1) Control mean (s.d)	(2) Public works (PW) mean (s.d)	(3) Enhanced livelihood (EL) mean (s.d)	(4) PW + EL mean (s.d)	(5) *p*-value: pooled treatment = control	(6) *p*-value: equality over 4 arms
Household size	4.95	4.82	4.88	4.96	0.649	0.905
	(2.80)	(2.67)	(2.65)	(2.52)		
Currently pregnant	0.04	0.07	0.06	0.05	0.556	0.773
	(0.20)	(0.25)	(0.24)	(0.21)		
Health spendings for children, per month	2049	2063	1046	2775	0.892	0.025
	(6379)	(6024)	(3740)	(8055)		
At least 1 member with disability	0.11	0.07	0.13	0.11	0.865	0.126
	(0.31)	(0.25)	(0.34)	(0.32)		
Avg Years of education	5.48	5.23	5.80	5.96	0.581	0.350
	(2.59)	(2.81)	(2.82)	(2.72)		
Total cons, per day and indiv.	3161	3757	3436	3346	0.020	0.300
	(1697)	(2342)	(2032)	(2059)		
Poor or borderline food consumption score	0.17	0.13	0.05	0.18	0.157	0.007
	(0.38)	(0.34)	(0.22)	(0.39)		
Total expn, per day and indiv.	2569	2875	2783	2552	0.235	0.198
	(1462)	(1959)	(1792)	(1409)		
Received some payment for wage work	0.30	0.40	0.36	0.31	0.483	0.679
	(0.46)	(0.49)	(0.48)	(0.47)		
Has an account in a formal institution	0.39	0.34	0.40	0.48	0.894	0.225
	(0.49)	(0.47)	(0.49)	(0.50)		
Hh owned any plot (last 12 months)	0.31	0.43	0.23	0.22	0.646	0.024
	(0.46)	(0.50)	(0.42)	(0.41)		
Owned animals, last 12 months	0.34	0.48	0.42	0.39	0.090	0.616
	(0.48)	(0.50)	(0.50)	(0.49)		
Nb of livestock owned (TLU equivalent)	0.16	0.20	0.15	0.16	0.905	0.821
	(0.62)	(0.71)	(0.56)	(0.53)		
Experienced any type of IPV	0.21	0.26	0.26	0.20	0.599	0.519
	(0.41)	(0.44)	(0.44)	(0.40)		
Observations	119	107	114	106	446	446
Villages	15	14	15	14	58	58

Standard errors are clustered at village. Fixed effects, using the combination of the PAA variable and the village-level intervention type, are included in all estimation regressions. Sample: Type-2 and type-3 households from the targeting evaluation sample (sub-village level). In (5), all the groups who receive some treatment (PW, EL or PWL+EL) are pooled and tested against the control group. In (6), the test is for equality over the 4 treatment and control groups.

Table B4: Household demographics (zanzibar)

	Mean/s.d	Count
Household characteristics		
Household size	6.163	730
	(2.556)	
Nb of adult equivalents	5.073	730
	(2.219)	
Hh has at least one children 0-17	0.914	730
	(0.281)	
Number of children [0-17]	3.251	730
	(2.010)	
Hh has children aged 6 to 13 (primary-school age)	0.767	730
	(0.423)	
Hh has teenagers aged 14 to 19 (secondary-school age)	0.553	730
	(0.497)	
Hh has infant(s) [0-5]	0.247	730
	(0.431)	
At least 1 member with disability	0.136	730
	(0.343)	
Hh is headed by a female member	0.314	730
	(0.464)	
Hh is dual headed	0.716	730
	(0.451)	
Estimated monthly transfers from PSSN		
Estim. transfers based on hh composition (TZS)	25584	730
	(6547)	
Main respondent		
Age	44.6	730
	(14.5)	
Resp. was ever married or with partner	0.963	729
	(0.189)	
Currently married	0.684	730
	(0.465)	
Main respondent, if ever married (N=702):		
Age at mariage, if known	19.0	646
	(4.1)	
Resp. is widowed, divorced or separated	0.289	702
	(0.454)	
Recorded gender of main respondent		
Main respondent was female	0.993	730
	(0.083)	

Sample of eligible households based on the PMT threshold (Type-1 households), among the households sampled at the village-level for the impact evaluation. Expected monthly PSSN transfers are computed as the sum of fixed and variable transfers based on the available data.
C.f. table 1.1 for details on the value of the different transfer components.

Table B5: Eligibility for livelihood and PW components (Zanzibar)

	Mean/s.d	Count
Eligibility:		
Hh eligible for public works and livelihood enhancement	0.956	730
	(0.205)	
Details for non-eligible households:		
No adult aged 18-65	0.037	730

	(0.189)	
All adults aged 18-65 have disability	0.007	730
	(0.083)	
All adults aged 18-65 are currently pregnant	0.000	730
	(0.000)	

Sub-sample of eligible households based on the PMT threshold (Type-1 households), among the households sampled for the impact evaluation at the village-level.

Table B6: Household composition for those outside the age range 18-65 (Zanzibar)

	Mean/s.d	Count Hh
has one adult only	0.781	32
	(0.420)	
Hh has children [0-17]	0.563	32
	(0.504)	
Only one adult:		
Widowed	0.680	25
	(0.476)	
Divorced or separated	0.160	25
	(0.374)	
Never married	0.120	25
	(0.332)	
Married	0.040	25
	(0.200)	

All households composed of only one adult correspond to households with female adults older than 65; these households may include other members aged below 18.

Figure B1: Food consumption per category, past 7 days (Zanzibar)

Cereals and grain
Vegetables
Spices and condiment
Pulses and nuts
Roots and tubbers
Sugar
Oil and Fat
Fish and seafood
Fruits
Meat
Milk
Eggs
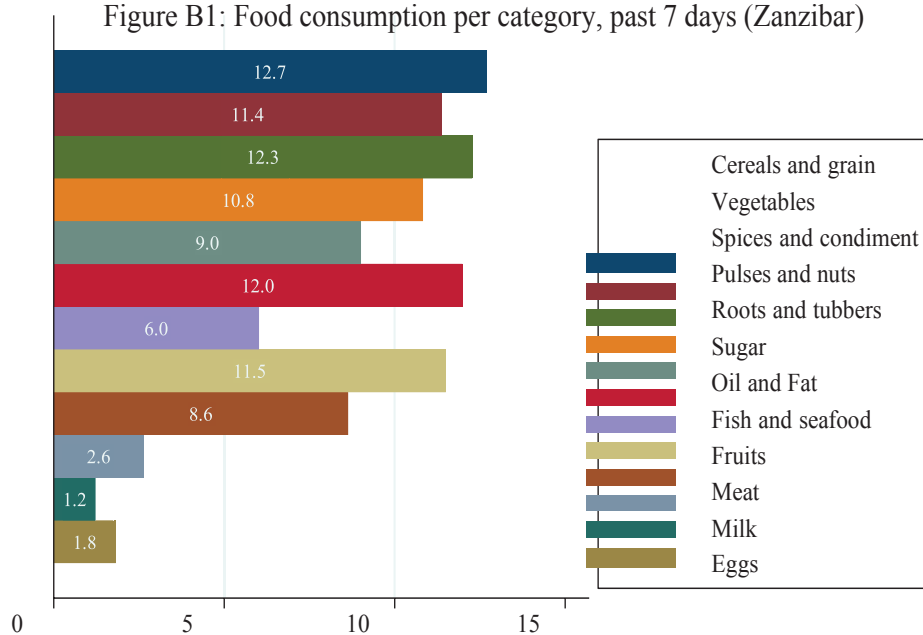
Share of hh (%) that consumed this food
category over the past 7 days

Table B7: Consumption and expenditures by category, per day and adult-equivalent (Zanzibar)

	Mean	s.d	Count
Total cons	2368	(1411)	730
Food consumption	1606	(1123)	730
from purchases	988	(592)	730
from own prod.	204	(467)	730
from gifts	194	(295)	730
Non-food expenditures	762	(596)	730
Clothing	483	(486)	730
Health	52	(104)	730
Hh goods (soap, personal items)	30	(28)	730
Hh utilities (electricity, water, etc)	67	(60)	730
Education	26	(30)	730
Transport	53	(64)	730
Other (tobacco, milling, church, etc)	6	(10)	730
Festivities	21	(42)	730
Communication	18	(17)	730
Household items and maintenance	6	(20)	730
Rent and mortgages	0.0	(0.)	730
Insurance	0.0	(0.)	730
Durable repairs	0.0	(0.)	730
Taxes	0.0	(0.)	730

Sample of Type-1 households from the impact-evaluation sample. All consump- tion types are shown per day and per adult-equivalent.

Hh commodities: wood, electricity, gas, water, cell, milling, personal hygiene, soap, bulbs, repair, fuel, donation Non-food: tobacco, matches, public trans- port. Hh related: hh items (carpets, towels, mattresses), hh repairs, theft loses, insurance, clothing, mortgage, rent, own-business equipment

Table B8: Sources of food consumption (past 7 days) (Zanzibar)

	Mean/s.d	Count Hh
consumed food from:		
purchases	0.977	726
	(0.151)	
own production	0.610	726
	(0.488)	
gifts	0.712	726
	(0.453)	

Sample of all individuals from Type-1 households from the impact-evaluation sample. Consumption for any household member over the past 7 days.

Figure B2: Value of consumption, details for non-food consumption (Zanzibar)
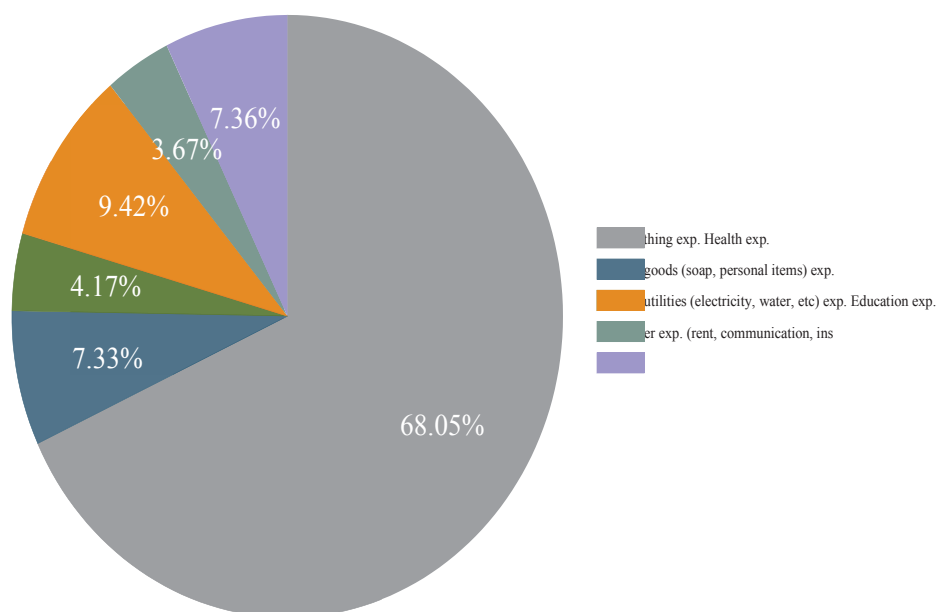
Table B9: Food security: HDDS, FIES, and FCS (Zanzibar)

	Mean/s.d	Count
Panel A: Household dietary diversity score (HDDS) [3]		
Mean HDDS [0-12] Past 7 days	7.600	730
	(2.110)	
Panel B: Food insecurity experience scale (FIES) [4]		
Mean FIES [0-8] Past 12 months	6.407	730
	(1.731)	
For any hh member in the past 12 months:		
Ever worried for lack of food	0.936	730
	(0.246)	
Ever unable to eat healthy food	0.955	730
	(0.208)	
Ever ate few kinds of food	0.948	730
	(0.222)	
Ever skipped a meal	0.927	730
	(0.260)	
Ever ate less	0.914	730
	(0.281)	
Ever ran out of food	0.851	730
	(0.357)	
Ever hungry without eating	0.552	730

	(0.498)	
Ever without eating for a whole day	0.325	730
	(0.469)	

C: Food Consumption Score (FCS)

Mean FCS [0-112] Past 7 days	52.575	730
	(19.499)	
Share of hh with poor food cons.	0.056	730
	(0.230)	
Share of hh with borderline food cons.	0.116	730
	(0.321)	
Share of hh with acceptable food cons.	0.827	730
	(0.378)	

[1] Out of 12 food groups, HDDS sums the number of distinct food items consumed in the past 7 days. Ranges from 0 (less diverse) to 12 (more diverse). See **fao_guidelines_2013** for detail.
[2] Ranges from 0 (less insecure) to 8 (more insecure). See **cafiero_food_2018** for detail.
[3] FCS is a weighted sum of the number of days in the past week having consumed distinct food items. Ranges from 0 (worse) to 112 (better). See **wfp_food_2008** for detail.

Table B10: Housing characteristics (Zanzibar)

	Mean/s.d	Count
House material		
Roof made from grass, leaves and/or mud	0.084	730
	(0.277)	
Wall made from poles, mud and/or grass	0.284	730
	(0.451)	
Floor made of palm, bamboo, earth, sand or dung	0.304	730
	(0.460)	
House characteristics		
Nb of rooms used for sleeping	2.297	730
	(0.886)	
Hh has electricity	0.371	730
	(0.483)	
Sanitation		
Hh has access to improved latrines	0.800	730
	(0.400)	
Hh has flush-type toilet facilities	0.471	730
	(0.500)	
Hh has no toilet facilities	0.175	730
	(0.381)	
Drinking water		
Hh has access to improved water sources	0.952	730
	(0.214)	
Hh has access to piped water inside dwelling	0.237	730
	(0.426)	

Sample of all Type-1 households from the impact-evaluation sample. Improved latrines consist of flush/pour flush to piped sewer system, to septic tank, to covered pit or some- where

else, ventilated improved pit (VIP) latrine, pit latrine with washable slab with or without lid, and pit latrine with not-washable/soil slab. Improved water sources consist of piped water into dwelling or to yard/plot, public tap/standpipe, tubewell/borehole, protected dugwell, protected spring, rainwater collection, bottled water, or neighbours tap/standpipe.

Table B11: Housing assets (Zanzibar)

	Mean	s.d.	Count
Nb of categories of assets that the hh has [0-27]	6.273	(2.616)	730
Household has at least one:			
Cooking pots, Cups, other kitchen utencils	0.938	(0.241)	730
Mosquito net	0.927	(0.260)	730
Beds	0.874	(0.332)	730
Telephone (mobile)	0.893	(0.309)	730
Chairs	0.221	(0.415)	730
Other stove	0.362	(0.481)	730
Tables	0.188	(0.391)	730
Radio and Radio Cassette	0.230	(0.421)	730
Bicycle	0.175	(0.381)	730
Cupboards, chest-of-drawers, boxes, wardrobes,bookcases	0.378	(0.485)	730
Books (not school books)	0.353	(0.478)	730
Sofas	0.025	(0.155)	730
Lanterns	0.056	(0.230)	730
Iron (Charcoal or electric)	0.107	(0.309)	730
Television	0.138	(0.346)	730
Sewing machine	0.089	(0.285)	730
Video / DVD	0.078	(0.268)	730
Watches	0.041	(0.199)	730
Refridgerator or freezer	0.067	(0.250)	730
Telephone (landline)	0.010	(0.098)	730
Motorcycle	0.036	(0.185)	730
Electric/gas stove	0.049	(0.217)	730
Water-heater	0.029	(0.167)	730
Complete music system	0.001	(0.037)	730
Record/cassette player, tape recorder	0.003	(0.052)	730
Computer/Laptop	0.003	(0.052)	730
Motor Vehicles	0.001	(0.037)	730

Sample of all Type-1 households from the impact-evaluation sample. Share of households having at least one unit of a given item.

Figure B3: Share of income from each economic activity (Zanzibar)

Harvest value (sold, consumed or still ongoing) Income
from wages
Transfers from relatives, family, friends Income
from non-farm businesses
Income from livestock (sales of livestock and animal products)
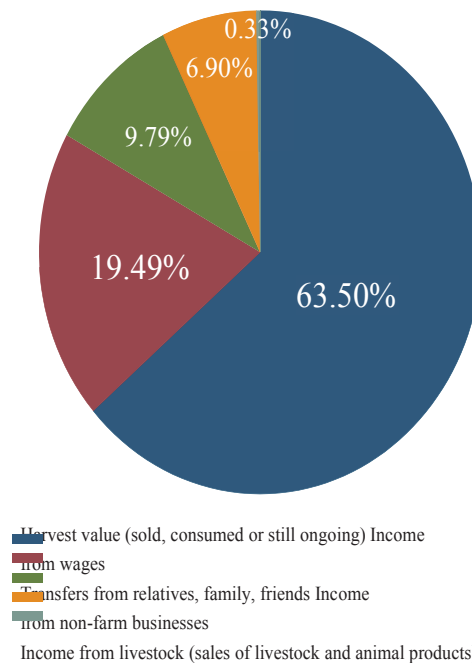
Table B12: Sources of income over a year (Zanzibar)

	Mean/s.d	Count Hh
has some income from		
crop harvest	0.448	730
	(0.498)	
wage work	0.275	730
	(0.447)	
non-farm businesses	0.318	730
	(0.466)	
livestock	0.068	730
	(0.253)	
transfers from relatives	0.544	730
	(0.498)	

Sample of all main respondents for Type-1 households from the impact-evaluation sample. Household-level.
Crop harvest includes sold harvest, own con- sumption (estimated value), and harvest that is still ongoing. Income from livestock includes live- stock sales and sales of animal products. Trans- fers from relatives include transfers/gifts from ex- ternal families, relatives, friends, and neighbors

Table B13: Annual household income by source (Zanzibar)

	Mean/s.d	Count
Total income	423517	730
	(592705)	
Value of total harvest	244545	730
	(554403)	
Income from wages	75067	730
	(176508)	
Income from non-farm businesses	26557	730
	(42090)	
Income from livestock	1262	730
	(4769)	
Income from transfers from relatives	37690	730
	(46973)	

Sample of all Type-1 households from the impact-evaluation sample. Per household. The reported averages are unconditional on receiving some income from a given source of income: null values are included in the computation for averages.

Total harvest value includes sold harvest, own consumption, and har- vest that is still ongoing; the value is estimated based on the price per kg that each household reported for each crop. Income from livestock includes livestock sales and sales of animal products. Transfers from rel- atives include transfers from external family, friends, and neighbours.

Table B14: Time use past 7 days (Zanzibar)

	Mean/s.d	Count
Panel A: At least one adult member in the hh spent some time in:		
collecting water	0.693	730
	(0.462)	
milling and food processing	0.100	730
	(0.300)	
cooking	0.966	730
	(0.182)	
taking care of children, elderly or ill/sick hh mbrs	0.681	730
	(0.466)	
working non-farm own bsn	0.373	730
	(0.484)	
working for wage	0.295	730
	(0.456)	
working on hh farm	0.516	730
	(0.500)	
Panel B: Hours per week spent by household:		
collecting water	14.985	730
	(22.089)	
milling and food processing	1.829	730
	(11.638)	

	Mean		Count
cooking	24.700		730
	(21.305)		
taking care of children, elderly or ill/sick hh mbrs	23.845		730
	(39.909)		
working non-farm own bsn	15.319		730
	(32.129)		
working for wage	14.525		730
	(34.106)		
hh farm	18.112		730
	(27.519)		

Panel C: For members with a paid activity (individual level)

	Mean	Count
Share of hh with paid activity	0.656	730
	(0.475)	
Days worked in main activity, per ind. with paid activity	4.715	1156
	(2.227)	
Avg hours per day for main activity, per ind. with paid activity	6.080	1156
	(3.601)	

Per individual. Sample of all Type-1 households from the impact-evaluation sample. Paid activity is defined as wage work, non-farm business, apprenticeship, or farming activities aimed at sales.

Table B15: Farming activities: overview (Zanzibar)

	Mean	s.d	Count
Panel A: Both seasons			
Hh owned any plot (last 12 months)	0.333	(0.472)	730
Cultivated any plot in long rainy season	0.322	(0.468)	730
Cultivated any plot in short rainy season	0.267	(0.443)	730
Cultivated plots in any of short or long rainy season	0.527	(0.500)	730
Panel B: Long rainy season (N=235)			
Area of cultivated plots	1.155	(0.754)	235
Qty harvested (kg)	209.579	(287.753)	235
Value of total harvest (TZS)	494171	(786738)	235
Bought seeds (incl. improved)	0.136	(0.344)	235
Value of seeds (TZS)	1901	(6840)	233
Bought organic fertilizers (manure, compost)	0.068	(0.252)	235
Value of organic fertilizers (TZS)	830	(5264)	235
Bought chemical fertilizers	0.077	(0.267)	235
Value of chemical fertilizers (TZS)	772	(3103)	235
Bought pesticides	0.098	(0.298)	235
Value of pesticides (TZS)	2214	(9998)	235
Hired workers	0.047	(0.212)	235
Wages spent on hired labor or casual workers	2009	(10254)	235
Nb of days worked by non-hh members	2.18	(8.27)	235
Sold crops	0.068	(0.252)	235
Value of sold crops (TZS)	10185	(50658)	235
Panel C: Short rainy season (N=195)			
Area of cultivated plots	0.769	(0.478)	195
Qty harvested (kg)	178.672	(180.619)	195
Value of total harvest (TZS)	319936	(349098)	195
Bought seeds (incl. improved)	0.108	(0.311)	195
Value of seeds (TZS)	5272	(43726)	193
Bought organic fertilizers (manure, compost)	0.031	(0.173)	195
Value of organic fertilizers (TZS)	508	(5132)	195
Bought chemical fertilizers	0.046	(0.210)	195
Value of chemical fertilizers (TZS)	497	(3910)	195

	Mean	s.d	Count
Bought pesticides	0.056	(0.231)	195
Value of pesticides (TZS)	887	(4877)	195
Hired workers	0.036	(0.187)	195
Wages spent on hired labor or casual workers	1923	(13585)	195
Nb of days worked by non-hh members	2.57	(10.25)	195
Sold crops	0.123	(0.329)	195
Value of sold crops (TZS)	18382	(60609)	195

Per household. Sample of all Type-1 households from the impact-evaluation sample. Values of bought inputs (seeds, fertilizers, pesticides and labor) are reported without winsorization. Indeed, as only a limited share of households report having those expenditures, winsorization cannot be done at conventional level across households.

Table B16: Livestock over the past 12 months (Zanzibar)

	Mean/s.d	Count
Hh owned at least 1 animal	0.451	730
	(0.498)	
For hh who owned some livestock:		
Nb of livestock owned	9.988	329
	(10.834)	
Nb of livestock owned (TLU equivalent)	0.407	329
	(0.982)	
Nb of Cattle indiv.	0.404	329
	(1.280)	
Nb of Sheep and goats	0.271	329
	(1.159)	
Nb of Pigs	0.000	329
	(0.000)	
Nb of Poultry indiv.	9.076	329
	(10.136)	
Sold livestock	0.152	329
	(0.360)	
Sold animal products	0.049	329
	(0.215)	

Sample of all Type-1 households from the impact-evaluation sample. Livestock owned or sold over the past 12 months.
Tropical Livestock Unit (TLU) assigns the following weight to each type of livestock: Cows and calves 0.70 ; Bulls 0.5 ; Sheep, goats, and mutton 0.10 ; Pigs 0.20 ; Chicken 0.01 ; Guinea Fowl 0.03 ; Horses, mares, or donkeys 0.8.

Table B17: Businesses over the past 12 months (Zanzibar)

	Mean/s.d	Count
Owned an operating business	0.399	730
	(0.490)	
For hh owning at least one business:		
Nb of businesses	1.663	291

	(0.772)	
Nb of years of activity	6.89	279
	(8.08)	
Current asset and capital value (TZS)	184612	291
	(626020)	
Current inventory value, per business (TZS)	68027	291
	(256288)	
Nb of permanent workers	0.04	291
	(0.25)	
Nb of temporary workers	0.03	291
	(0.23)	
Total revenues from sales of goods and services, past 12 months	193180	291
	(124743)	
Total profit after paying all expenses, past 12 months (TZS)	66620	291
	(42131)	

Sample of all Type-1 households from the impact-evaluation sample. All activities recorded over the past 12 months. When a household reported more than one business over the past 12 months, the average values are computed for the household.

Table B18: Access to credit (Zanzibar)

	Mean/s.d	Count Main
resp. ever visited a commercial bank	0.042	730
	(0.202)	
Hh currently has an account	0.312	730
	(0.464)	
Hh has one or more outstanding loan	0.178	730
	(0.383)	
Total value of outstanding cash loans	244942	130
	(457163)	
Number of loans taken out over the past year	1.2	130
	(0.557)	

Sample of all Type-1 households from the impact-evaluation sample.

Figure B4: Education enrollment by age (Zanzibar)
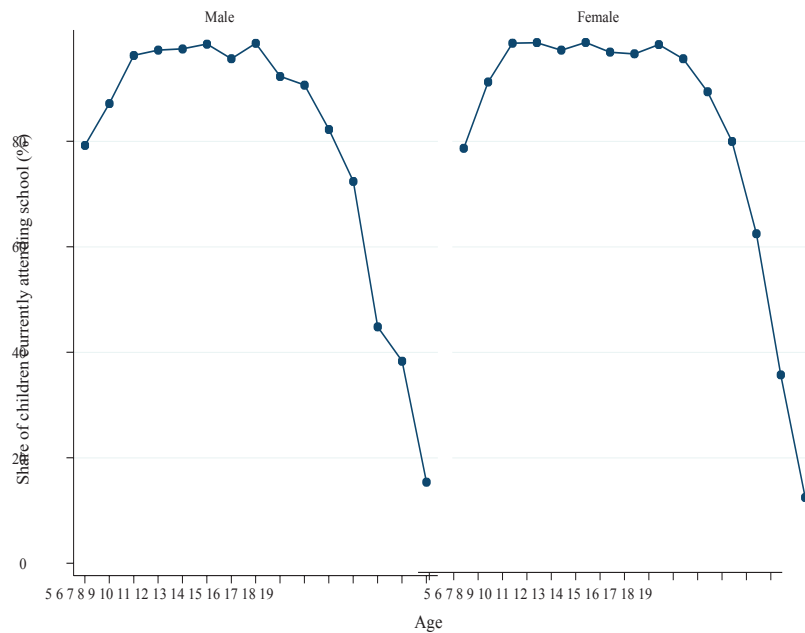
Table B19: Education for primary-aged children (6-13 years old) (Zanzibar)

	Mean/s.d	Count
Ever attended school	0.975	1183
	(0.157)	
Currently attending	0.962	1183
	(0.191)	
Attending public school	0.965	1144
	(0.184)	
If currently attending school:		
Ever absent over the past 2 weeks	0.334	1144
	(0.472)	
Days absent, if any	6.369	382
	(2.832)	
If never attended school, main reasons:		
Financial constraints	0.250	28
	(0.441)	
Too young	0.393	28
	(0.497)	
School too far away	0.071	28
	(0.262)	
Refusal of parent / guardian	0.036	28
	(0.189)	

Sample of children aged 6-13, among Type-1 households from the impact-evaluation sample.

Table B20: Education for secondary-aged teenagers (14-19) (Zanzibar)

	Mean/s.d	Count
Ever attended school	0.986	715
	(0.118)	
Currently attending	0.627	715
	(0.484)	
Attending primary school	0.206	715
	(0.404)	
Attending secondary school	0.418	715
	(0.494)	
If currently attending school:		
Attending public school	0.987	463
	(0.113)	
Ever absent over the past 2 weeks	0.382	463
	(0.486)	
Days absent, if any	6.644	177
	(2.776)	
For those who never attended school:		
Ever attended vocational training	0.000	10
	(0.000)	
Ever attended adult literacy class	0.000	10
	(0.000)	
For those who never attended school, main reasons:		
Financial constraints	0.100	10
	(0.316)	
Refusal of parent / guardian	0.100	10
	(0.316)	
School too far away	0.000	10
	(0.000)	
Too young	0.000	10
	(0.000)	

Sample of children aged 14-19, among Type-1 households from the impact-evaluation sample.

Table B21: Education for the main respondent (Zanzibar)

	Mean/s.d	Count
Reported literacy:		
Can read and write a short sentence	0.653	729
	(0.476)	
in Swahili	0.650	729
	(0.477)	
in English	0.228	729
	(0.420)	
Can read and write another language, but no Swahili or English	0.003	729
	(0.052)	

Tested literacy for Swahili and English only:

Can read and write a short sentence, at least partially (tested)	0.537 (0.499)	726
in Swahili	0.537 (0.499)	726
in English	0.190 (0.393)	726
Years of education	5.245 (4.195)	730
Ever attended school	0.677 (0.468)	730

For those who never attended school, main reasons:

Refusal of parent / guardian	0.777 (0.417)	233
School too far away	0.047 (0.213)	233
Financial constraints	0.060 (0.238)	233
No need/not important/Satisfied	0.021 (0.145)	233

For those who never attended school:

Ever attended vocational training	0.000 (0.000)	236
Ever attended adult literacy class	0.008 (0.092)	236

Sample of main female respondent in each household, among Type-1 households from the impact- evaluation sample.

Table B22: Health at household level (Zanzibar)

	Mean/s.d	Count
At least one member of the hh		
was sick, past month	0.663 (0.473)	730
visited a health care provider, past month	0.481 (0.500)	730
has health insurance	0.015 (0.122)	730
currently pregnant	0.074 (0.262)	730
Health exp., hh aggregate, past year	85657 (160209)	730
Health spendings for children, per year	16653 (40096)	730

Sample of all individuals from Type-1 households from the impact-evaluation sample. Health spending in TZS.

Table B23: Health for kids 0-5 (Zanzibar)

	Mean/s.d	Count
Average health spending (TZS) per kid, per year	13752 (57466)	697
Possess birth certificate or is registered with civil authority	0.970 (0.172)	691
Ever sick or injured, last 4 weeks	0.230 (0.421)	697
If ever sick:		
Nb sick days, last 4 weeks	6.4 (4.7)	160
Illness/injury:		
Fever	0.544 (0.500)	160
Malaria	0.019 (0.136)	160
Airborne disease	0.063 (0.243)	160
Diarrhea	0.081 (0.274)	160
Other	0.400 (0.491)	160
Vaccination for children aged 0-5:		
Ever been immunized	0.976 (0.153)	665
Received BCG vaccine	0.973 (0.162)	665
Received polio vaccine	0.937 (0.243)	665
Received DPT-HepB-Hib vaccine	0.950 (0.217)	665
Received PCV (Pneumococcal) vaccine	0.941 (0.235)	665
Received rotavirus vaccine	0.923 (0.266)	665
Received measles vaccine	0.780 (0.414)	665
For children aged 0-2:		
Born in health facility	0.835 (0.372)	285

121

Child was/is breast-fed	0.989	282
	(0.103)	

Sample of all individuals from Type-1 households from the impact-evaluation sample. Missing observations for vaccination variables and 'breast-feeding' correspond to cases where the respon- dent reported not knowing the information for the child. Other illnesses include skin condition, pneumonia, eye, worms, chronic illness, etc.

Figure B5: Barriers to the participation in economic activities (Zanz- ibar)

Working on hh plots
N=555

Physically too demanding	62.69
Prefer to do other things	15.34
Household chores	9.85
Pregnant, childcare, elderly car	5.68
Unpredictable or unstable income	2.63
Cannot borrow money / no savings	2.27
Lack of knowledge	1.52

0 20 40 60

Taking care of livestock
N=621

Physically too demanding	41.37
Household chores	16.73
Prefer to do other things	14.08
Lack of knowledge	10.39
Pregnant, childcare, elderly car	6.69
Unpredictable or unstable income	5.99
Cannot borrow money / no savings	4.75

0 20 40 60

Working as a paid manual laborer
N=1120

Physically too demanding	67.70
Household chores	14.26
Prefer to do other things	8.05
Pregnant, childcare, elderly car	5.72
Lack of knowledge	1.94
Unpredictable or unstable income	1.16
Cannot borrow money / no savings	1.16

0 20 40 60

Operating a non-farm business
N=918

Physically too demanding	34.62
Lack of knowledge	18.19
Household chores	15.38
Cannot borrow money / no savings	9.62
Unpredictable or unstable income	8.22
Prefer to do other things	7.51
Pregnant, childcare, elderly car	6.46

0 20 40 60

Table B24: Time use by female and male heads (Zanzibar)

	(1) Male head		(2) Female head Mean	
	Mean	Count	Mean	Count
Engaged in activity (past week)				
cooking	0.072	511	0.912	511
taking care of hh mbrs	0.278	511	0.671	511
collecting water	0.339	511	0.607	511
working on hh farm	0.474	511	0.276	511
working for wage	0.211	511	0.055	511
working on own business	0.223	511	0.202	511
Hours spent on (past week):				
cooking	0.488	510	16.272	511
taking care of hh mbr	2.980	509	15.719	509
collecting water	2.908	510	6.392	510
working on hh farm	12.378	510	5.914	510
working for wage	7.809	509	1.614	508
working on own business	7.705	511	4.593	509

Sample of all household heads for Type-1 households from the impact-evaluation sample.

Table B25: Engagement in economic activities (Zanzibar)

	(1) Engaged in activity	(2) Considered engaging	(3) Difficult for women	(4) Difficult for themselves

	Mean	Mean	Mean	Mean
Working in own hh plots	0.441	0.686	0.103	0.101
Taking care of livestock	0.370	0.696	0.056	0.067
Working as a paid manual laborer	0.160	0.549	0.115	0.126
Operating a non-farm business	0.386	0.727	0.060	0.073

Number of observations: 730.

Sample of all main respondents for Type-1 households from the impact-evaluation sample.

Table B26: Depression, subjective social status, and decision making (Zanzibar)

	Mean/s.d	Count
CESD depression scale:		
Hh is considered depressed, CESD-R10 measurement	0.693 (0.462)	730
MacArthur scale of subjective social status [0-10]:		
Consider themselves as a person with good qualities	3.578 (2.345)	730
Consider themselves as a respected person in the community	5.196 (2.395)	730
Consider their opinion is being followed in the community	6.068 (2.288)	730
Consider they have a good social position in the community	7.205 (2.399)	730
Decision making:		
Share of topics on which they were never consulted	0.323 (0.261)	730
Share of topics on which they were sometimes consulted	0.082 (0.155)	730
Share of topics on which they were always consulted	0.245 (0.296)	730
Share of topics on which they are the primary decision maker	0.350 (0.346)	730

Sample of all Type-1 households from the impact-evaluation sample.

CESD-R10 depression scale is calculated based on the frequency of a set of 10 questions. For each question, the respondent is asked how many days a given feeling occurred in the past week. For each of those questions, a score of 0 to 3 is assigned, depending on how frequent a feeling was. Then the score from all 10 questions is added to create an aggregated score between 0 to 30. Any hh member with a score of 10 or above is considered depressed.

Table B27: Pregnancy of teenage female members aged 10-19 (Zanzibar)

	Mean/s.d	Count
Woman is a teenager [10-19]	0.282 (0.450)	2291
If teenage woman:		
Currently pregnant	0.003 (0.056)	645

Ever pregnant	0.011	645
	(0.104)	
If teenage woman was ever pregnant:		
Ever had miscarriage, abortion or still birth	0.143	7
	(0.378)	

Sample of all teenage female household members aged 10-19 from all Type-1 households from the impact-evaluation sample.

Figure B6: Perceived difficulties for women to engage in activities (Zanz- ibar)

Working on hh plots
N=75

Household chores Phys	35.63
too demanding Pregnant, childcare, elder|	33.33
Prefer to do other things Unpredictab|	18.39
unstable in|	12.64
	0.00

Taking care of livestock
N=41

Household chores	53.85
Physically too demanding	20.51
Prefer to do other things	15.38
Pregnant, childcare, elderly car|	10.26
Unpredictable or unstable income	0.00

Working as a paid manual laborer
N=84

Household chores Phys...	40.66
too demanding Prefer to do other t...	31.87
Pregnant, childcare, elder...	16.48
Unpredictable or unstable income	10.99
	0.00

Operating a non-farm business
N=44

Household chores Prefer	48.89
other things Physically too dema...	24.44
Pregnant, childcare, elderly car Unpredic...	15.56
or unstable in...	6.67
	4.44

Table B28: IPV overview (Zanzibar)

	Mean/s.d	Count
Respondent's situation: (past 12 months)		
Ever had a partner	0.711 (0.454)	727
IPV, if resp. had partner		
Experienced any type of IPV	0.294 (0.456)	517
Types of IPV experienced, if resp. had partner		
Experienced any type of controlling behavior	0.251 (0.434)	517
Experienced any type of emotional IPV	0.155 (0.362)	517
Experienced any type of physical IPV	0.033 (0.179)	517
Experienced any type of sexual IPV	0.056 (0.230)	517

Sample of all main respondents for Type-1 households from the impact-evaluation sample.

Table B29: Education by gender, all household members aged 18+ (Zanzibar)

	(1) Male		(2) Female	
	Mean/s.d	Count	Mean/s.d	Count
Reported literacy:				
Can read and write a short sentence	0.844	1005	0.728	1116

	Male		Female	
		(0.363)		(0.445)
in Swahili	0.842	1005	0.720	1116
	(0.365)		(0.449)	
in English	0.321	1005	0.309	1116
	(0.467)		(0.462)	
Can read and write another language, but no Swahili or English	0.000	1005	0.004	1116
	(0.000)		(0.060)	
Years of education	6.752	1005	6.295	1116
	(3.644)		(4.283)	
Ever attended school	0.874	1005	0.747	1116
	(0.332)		(0.435)	
For those who never attended school, main reasons:				
Refusal of parent / guardian	0.656	125	0.759	278
	(0.477)		(0.428)	
School too far away	0.072	125	0.050	278
	(0.260)		(0.219)	
Financial constraints	0.064	125	0.065	278
	(0.246)		(0.247)	
No need/not important/Satisfied	0.032	125	0.018	278
	(0.177)		(0.133)	
For those who never attended school:				
Ever attended vocational training	0.000	127	0.000	282
	(0.000)		(0.000)	
Ever attended adult literacy class	0.039	127	0.011	282
	(0.195)		(0.103)	

Sample of all adult household members, among Type-1 households from the impact-evaluation sample.

Table B30: Education by gender, primary-school-aged children [6-13] (Zanzibar)

	Male		Female	
	Mean/s.d	Count	Mean/s.d	Count
Ever attended school	0.969	583	0.980	600
	(0.173)		(0.140)	
Currently attending	0.954	583	0.970	600
	(0.210)		(0.171)	
Attending public school	0.971	558	0.959	586
	(0.167)		(0.198)	
If currently attending school:				
Ever absent over the past 2 weeks	0.355	558	0.314	586
	(0.479)		(0.465)	
Days absent, if any	6.116	198	6.641	184
	(2.778)		(2.871)	
If never attended school, main reasons:				
Financial constraints	0.118	17	0.455	11
	(0.332)		(0.522)	
Too young	0.529	17	0.182	11
	(0.514)		(0.405)	
School too far away	0.118	17	0.000	11
	(0.332)		(0.000)	
Refusal of parent / guardian	0.059	17	0.000	11
	(0.243)		(0.000)	

Sample of all primary-aged children [6-13], among Type-1 households from the impact-evaluation sample.

Table B31: Education by gender, secondary-school-aged teenagers [14-19] (Zanzibar)

	(1) Male		(2) Female	
	Mean/s.d	Count	Mean/s.d	Count
Ever attended school	0.981	365	0.991	350
	(0.137)		(0.092)	
Currently attending	0.597	365	0.657	350
	(0.491)		(0.475)	
Attending primary school	0.255	365	0.154	350
	(0.436)		(0.362)	
Attending secondary school	0.342	365	0.497	350
	(0.475)		(0.501)	
If currently attending school:				
Attending public school	0.987	224	0.987	239
	(0.115)		(0.112)	
Ever absent over the past 2 weeks	0.429	224	0.339	239
	(0.496)		(0.474)	
Days absent, if any	6.990	96	6.235	81
	(2.701)		(2.825)	
For those who never attended school:				
Ever attended vocational training	0.000	7	0.000	3
	(0.000)		(0.000)	
Ever attended adult literacy class	0.000	7	0.000	3
	(0.000)		(0.000)	
For those who never attended school, main reasons:				
Financial constraints	0.143	7	0.000	3
	(0.378)		(0.000)	
Refusal of parent / guardian	0.143	7	0.000	3
	(0.378)		(0.000)	
School too far away	0.000	7	0.000	3
	(0.000)		(0.000)	
Too young	0.000	7	0.000	3
	(0.000)		(0.000)	

Sample of all secondary-school-aged teenagers [14-19], among Type-1 households from the impact-evaluation sample.

Table B32: Health for the main respondents (Zanzibar)

	Mean/s.d	Count
Health exp. for respondent (TZS) per year	41438	730
	(187187)	
Ever sick or injured, last 4 weeks	0.319	730

| | (0.466) | |
If ever sick:		
Nb sick days, last 4 weeks	8.9	233
	(7.6)	
Visited health care provider over the past month	0.227	730
	(0.419)	
Has health insurance	0.005	730
	(0.074)	
Has a disability	0.036	730
	(0.185)	
Smokes	0.003	729
	(0.052)	
Drinks alcohol	0.001	729
	(0.037)	

Sample of all individuals from Type-1 households from the impact-evaluation sam- ple. Missing observations correspond to respondents who refused to answer that par- ticular question.

Table B33: Pregnancy of the main respondents (Zanzibar)

|	Mean/s.d	Count
Respondent's pregnancy		
Ever pregnant	0.944	730
	(0.230)	
Respondent, if ever pregnant:		
Ever had teenage pregnancy [10-19]	0.428	689
	(0.495)	
Ever had miscariage, abortion or still birth	0.434	689
	(0.496)	
Nb of children ever delivered	6.583	689
	(3.204)	
Was pregnant in the past 2 years	0.090	689
	(0.286)	
Respondent, if last pregnancy in past 2 years		
Received antenatal care for pregnancy in the past 2 years	0.919	62
	(0.275)	
Received post-natal care for pregnancy in the past 2 years	0.790	62
	(0.410)	

Sample of main respondents from all Type-1 households from the impact-evaluation sample.

Figure B7: Share of beneficiary (Type-1) households by deciles of the national consumption distribution (Zanzibar)
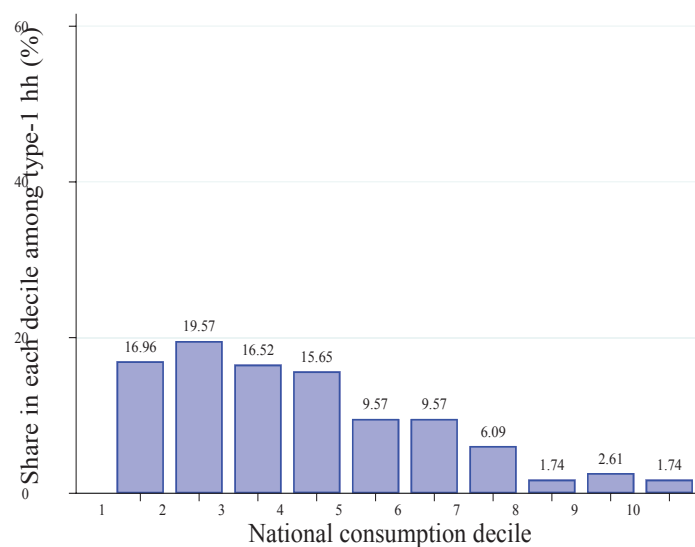

Note: National per capita consumption deciles are created using the NPS 2020-2021 Wave 5.

Figure B8: Share of non-beneficiary (Type-2 and Type-3) households by deciles of the national consumption distribution (Zanzibar)
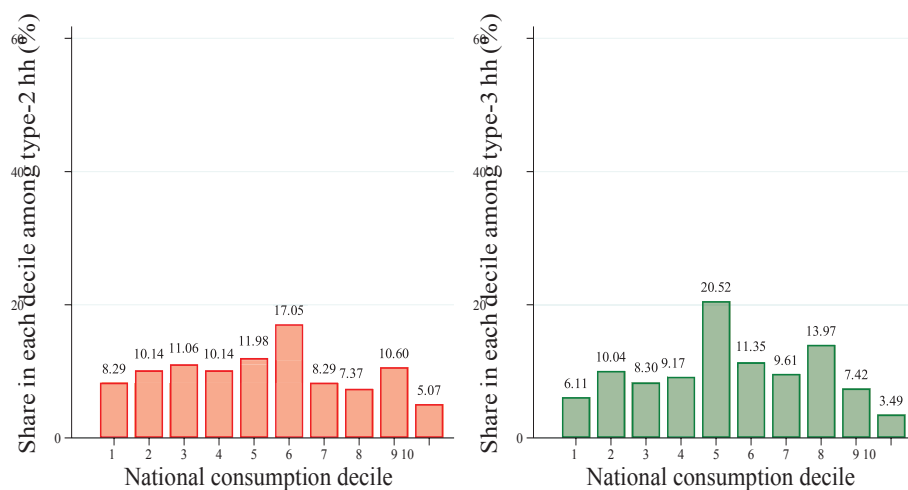
Note: The national per capita consumption deciles are created using the NPS 2020- 2021 Wave 5.

Figure B9: Share of Beneficiary (Type-1) households by deciles of the targeting sample (within village) (Zanzibar)
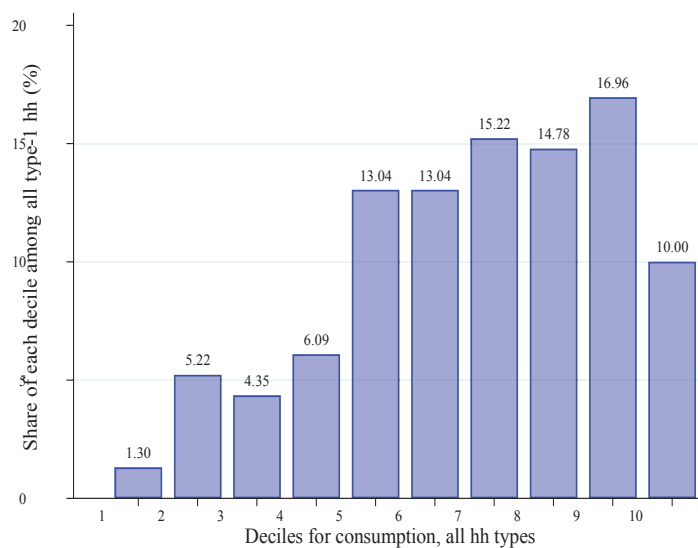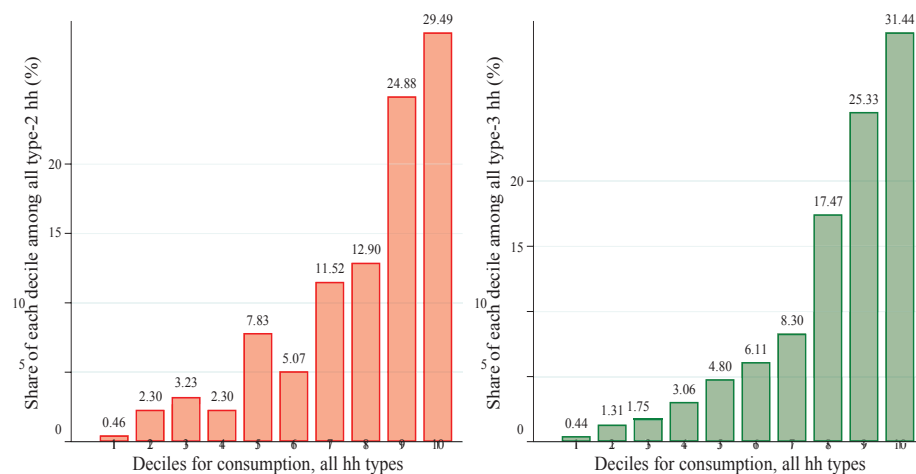

Note: The consumption deciles are created using the baseline data in sub-villages where community listing took place.

Table B34: Targeting analysis: consumption, food security and livelihoods (Zanz- ibar)

|	(1) Type 1 mean (s.d)	(2) Type 2 mean (s.d)	(3) Type 3 mean (s.d)	(4) p-value: Pooled t2 and t3 = type 1	(5) p-value: equality over 3 types
Panel A. Consumption					
Total consumption	2449	3557	3516	0.000	0.000
	(1830)	(2328)	(1941)		
Food consumption	1592	2266	2060	0.000	0.003
	(1580)	(1716)	(1222)		
from own prod.	179	187	206	0.661	0.202
	(378)	(355)	(380)		
from gifts	178	318	179	0.355	0.002
	(389)	(473)	(283)		
from purchases	973	1442	1428	0.000	0.000
	(854)	(1108)	(827)		
Non-food expenditures	857	1291	1456	0.000	0.000
	(734)	(1181)	(1044)		
Hh reported having consumed food from own production	0.518	0.528	0.568	0.720	0.081
	(0.501)	(0.500)	(0.496)		
Hh reported having consumed food from gifts	0.645	0.731	0.616	0.542	0.002
	(0.480)	(0.444)	(0.487)		
Hh reported having consumed food from purchases	0.974	0.991	1.000	0.031	0.022
	(0.160)	(0.096)	(0.000)		
Panel B. Food security					
Household Dietary Diversity Score (HDDS) [0-12] Past 7 days	7.348	7.687	8.266	0.000	0.014
	(2.069)	(2.193)	(2.116)		
Food insecurity experience scale (FIES) [0-8] Past 12 months	6.274	5.756	4.515	0.000	0.000
	(1.869)	(2.273)	(2.891)		
Food consumption score (FCS) [0-112] Past 7 days	51.896	52.482	58.869	0.001	0.024
	(19.307)	(18.986)	(19.837)		
Panel C. Income and livelihood					
Total income, per indiv.	108236	173778	177758	0.000	0.001
	(142008)	(227152)	(323906)		
Count of hh durable assets [0-27]	6.148	7.129	8.882	0.000	0.000
	(2.584)	(3.176)	(4.515)		
Nb of livestock owned (TLU equivalent)	0.199	0.104	0.223	0.698	0.537
	(0.688)	(0.445)	(0.722)		
Has an account in a formal institution	0.287	0.341	0.459	0.000	0.000
	(0.453)	(0.475)	(0.499)		
Household size	6.483	4.226	5.546	0.000	0.000
	(2.739)	(2.619)	(2.531)		
Household is headed by a female member	0.322	0.507	0.188	0.026	0.000
	(0.468)	(0.501)	(0.391)		
Female lead is currently pregnant	0.052	0.014	0.092	0.008	0.013
	(0.223)	(0.117)	(0.289)		
Female lead is widowed, divorced or separated	0.291	0.445	0.166	0.020	0.003
	(0.455)	(0.498)	(0.373)		
Hh has at least one member with disability	0.152	0.138	0.074	0.004	0.010
	(0.360)	(0.346)	(0.263)		
Hh has at least one adult member aged 18-65	0.943	0.931	0.983	0.033	0.007
	(0.231)	(0.254)	(0.131)		
Observations	230	217	229	676	676

Sample of all households (Type-1, Type-2 and Type-3) from the targeting-analysis sample.   Female lead refers to the woman that is most knowledgeable of the characteristics of the household members and their activities, or a proxy respondent if the female lead was not available for a long period.

Figure B10: Share of non-beneficiary (Type-2 and Type-3) households by deciles of the targeting sample (within village) (Zanzibar)

Note: The consumption deciles are created using the baseline data in sub-villages where community listing took place.

Figure B11: Daily consumption per adult equivalent, by household type (Zanzibar)
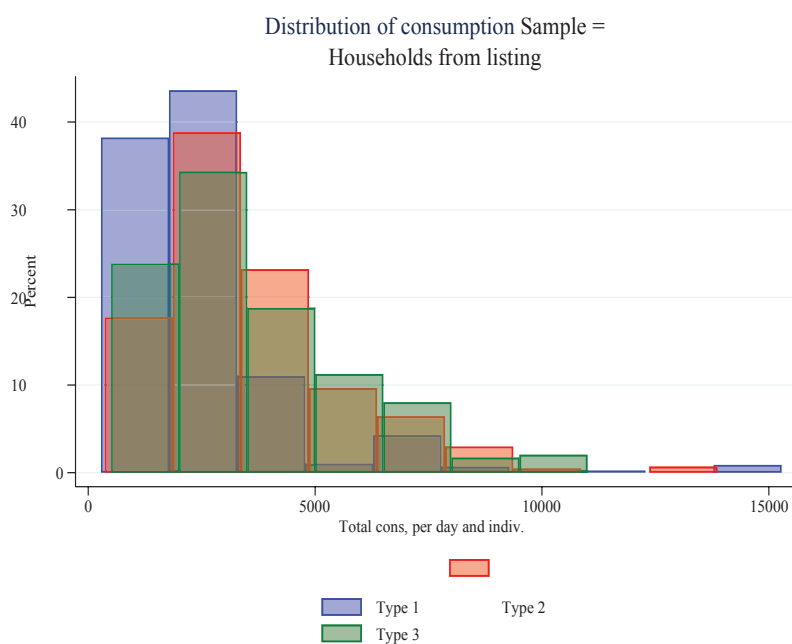
Distribution of consumption Sample =
Households from listing

The horizontal red line corresponds to the daily threshold for poverty (national poverty line, converted to 2022 prices).

Table B35: Targeting analysis based on poverty line threshold (Zanzibar)

	(1) Type 1 Mean.	(2) Type 2 Mean.	(3) Type 3 Mean.
Below poverty line	0.683	0.424	0.358
Above poverty line	0.317	0.576	0.642

Note: Sample of all households (Type-1, Type-2 and Type- 3) from the targeting-analysis sample. The poverty thresh- old is computed based on the National poverty line of 2018 (TZS 1783.5), converted to 2022 prices using CPI, giving a poverty line for 2022 of TZS 2045.66 per individual.

Table B36: Targeting analysis based on village-level consumption ranking (Zanzibar)

	(1) Type 1 Mean.	(2) Type 2 Mean.	(3) Type 3 Mean.
Expected to be targeted	0.386	0.239	0.113
Not expected to be targeted	0.614	0.761	0.887

Sample of all households (Type-1, Type-2 and Type-3) from the targeting-analysis sample. For the second method, threshold for con- sumption distribution is computed on (from the listing exercise). In practise, as 33 percent of households from the sample are Type-1 hh according to the listing exercise, we expect that in the baseline data the 33 percent of hh with lowest consumption should be Type-1 house- holds. Households from the lowest consumption that are not Type-1 hh are considered part of the exclusion error, while Type-1 households that are not from the lowest consumption group are considered part of the inclusion error. The rate of 33 percent is the average in all 434 villages from the sample. The rate however slightly differ in each vil- lage, and the village-level rates were used in this analysis.

Table B37: Inclusion and exclusion errors (Zanzibar)

	Poverty line	Consumption ranking
Inclusion error	.11827	.61387
Exclusion error	.74549	.12051

For the first column, inclusion error is defined as the share of beneficiaries (Type-1) who are actually above the poverty line. Exclusion error is defined as the share of non- beneficiaries (Type-2 and Type-3) who are actually below the poverty line.
For the second column, inclusion error is defined as the share of beneficiaries (Type-1) whose consumption is higher than what it would be expected to be if they were in the low- est part of the

distribution of consumption in their village. Exclusion error is defined as the share of non-beneficiaries (Type-2 and Type-3) whose consumption is lower than what it would be expected to be if they were in the lowest part of the distribution of consumption in their village.