

# SOUTHMOD

Policy note

# Simulating the impact of introducing an orphan child benefit in Tanzania

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## Findings

- Orphan children represent a significant share of the Tanzanian child population—around 7 per cent of children have lost one parent and 1 per cent have lost both parents
- To address the relatively high poverty rates among households with single-parent and orphan children, we simulate the effects of a hypothetical cash transfer programme that targets these groups
- Properly targeted and funded, such a benefit would lower the national poverty rate and reduce gender gaps in the living standards between female- and male-headed households

Among the 2 billion children in the world, 143–210 million are orphans. In Tanzania, over 1.3 million children are orphans, having lost either one or both parents. The main task of parents is to satisfy their child's physiological and psychosocial needs. Children under the care of their parents tend to be better-protected from war, natural disasters, poverty, or diseases. Orphan children are more vulnerable to lower standards of living and at risk of child labour at the cost of education, to cover their subsistence needs.

According to Tanzania's official statistics, nearly 30% of children in the country live in poor households. The poverty rate is relatively higher for orphaned children than non-orphan children. The headcount poverty rate is 30.37% for orphans, 28.19% for single-parent children, and 29.89% for non-orphan children. In addition, the poverty gap — which measures how far the average income of the poor falls below the poverty line — is much higher for children without both parents. The poverty gap is 6.88% for non-orphan children, but 8.83% for orphan children. Despite the higher severity of poverty for orphans, particularly children who lost both parents, a comprehensive orphan child-targeted benefit scheme is not yet available in Tanzania.

This policy note presents the poverty reduction effects of a hypothetical orphan child benefit program in Tanzania. The analysis is based on simulations using [TAZMOD, the tax-benefit microsimulation model for Tanzania](#). We employ TAZMOD version 2.8 to generate simulated poverty statistics for the 2022 policy system. The model version is based on 2017–2018 round of the Household Budget Survey. In this analysis, we employ a consumption-based poverty and inequality measure. In addition, we used the basic-needs poverty line to compile the headcount poverty rate and estimate poverty gaps.

## Orphans account for a notable share of the Tanzanian child population

A significant proportion of Tanzanian children are orphans. As demonstrated in Table 1, orphan children represent 7.93% of the child population and 3.95% of the national population. Thus, introducing an orphan child benefit has potential to enhance living standards as well as education and health coverage in the country.

**Table 1: Percentage of single and double orphans from total children and population in 2022**

Orphan types	Percentage of children	Percentage of Population
Single Parent orphan	6.97	3.47
Double parent orphan	0.96	0.48

Source: authors' construction based on TAZMOD v2.8 simulations

## A cash transfer to orphans as poverty reduction tool

This policy note demonstrates the poverty reduction role of the unconditional orphan child benefit, provided to the head of each household with orphan children. The poverty reduction effect of the benefit policy is evaluated based on three different targeting scenarios. The following three scenarios are considered, combining orphan types and benefit amounts:

- Only a double-parent orphan child receives TZS 10,000 per month (approximately one-third of the Tanzanian minimum wage). This benefit would cost TZS 30.3 billion (about USD 12 million) annually
- All orphaned children, whether a double-parent or single-parent orphan, receive TZS 10,000 per month. This scenario would cost TZS 249.8 billion (USD 100 million) annually
- Differentiated benefit package by types of orphans, a double-parent orphan child gets TZS 10,000 per month while a single-parent orphan receives TZS 5,000. Its implementation costs the government TZS 140.1 (USD 56 million) billion annually.

Table 2 presents the changes in distributional indices associated with the proposed orphan child benefit under each of the targeting scenarios. All reform scenarios result in a fall in the poverty rate, poverty gap, and Gini coefficient, which is a commonly used measure of income distribution. Scenario 2, for example, reduces the poverty rate by 0.66 percentage points.

**Table 2: Poverty and inequality figures with estimated change from baseline due to orphan child benefit in Tanzania (2022)**

Indicators		Baseline	Scenario 1	Scenario 2	Scenario 3
Poverty rate	Level	26.24	26.21	25.58	25.85
	change		-0.03	-0.66	-0.39
Poverty gaps	Level	5.95	5.92	5.72	5.81
	change		-0.03	-0.23	-0.14
Gini coefficient	Level	38.09	38.07	37.91	37.98
	change		-0.02	-0.18	-0.11

Source: authors' construction based on TAZMOD v2.8 simulations

Table 3 shows the effects of the orphan targeting policy on poverty by household categories. In all scenarios, female-headed households encounter a pronounced fall in the poverty rate. The result conforms with the reality in most lower-income countries where the father is regarded as the breadwinner; the household transits to dire conditions when he dies. The hypothetical benefit system, especially the second scenario, reduces the welfare gap between female-headed and male-headed households. In addition, the drop in the poverty rate attributable to the orphan child benefit is higher for households with children than for households with an elderly person.

**Table 3: Poverty rate and change from baseline due to orphan child benefit in Tanzania (2022), by household categories**

Household types		Baseline	Scenario 1	Scenario 2	Scenario 3
Male headed household	Level	25.89	25.88	25.63	25.67
	change		-0.01	-0.26	-0.22
Female-headed household	Level	27.34	27.26	25.41	26.43
	change		-0.08	-1.93	-0.91
Household with children	Level	27.86	27.83	27.14	27.44
	change		-0.03	-0.72	-0.42
Households with older persons	Level	30.31	30.27	29.73	30.00
	change		-0.04	-0.58	-0.31

Source: authors' construction based on TAZMOD v2.8 simulations

## An orphan child benefit policy alleviates the burden on the most vulnerable group of society, particularly for female-headed households

Poverty is more prevalent for orphan children than for their non-orphan counterparts. Based on the 2017–2018 round of the Household Budget Survey, the poverty rate is relatively higher for double-parent orphans (30.95%) than for single-parent orphans (30.30%). The second scenario results in a higher reduction in the poverty rate and poverty gap. The budgetary cost of introducing an orphan child benefit policy varies by scenario. The Tanzanian government would spend the least under the first scenario and the most under the second. Moreover, cost-effectiveness in terms of reducing poverty also differs by targeting categories. A noticeable 1 percentage point decrease in poverty could be realized by earmarking 359 billion Tanzanian shillings in the third scenario, 378 billion Tanzanian shillings in the second scenario, and 1010 billion Tanzanian shillings in the first scenario (about USD 143, 151, and 403 million, respectively).

## Policy recommendations

- An orphan child is poorer than a child living with both parents. A direct cash transfer scheme for orphaned children would allow households to attend to costs related to the basic needs of these children, such as food, shelter, education, and health
- A higher budget alternative results in a sizable reduction in the poverty rate and poverty gap. The poverty rate might significantly drop if a sufficiently funded benefit amount is realized
- Allocating TZS 10,000 per month for double-parent orphans and TZS 5,000 per month for single-parent orphans is a cost-efficient policy option to reduce poverty

This note was produced using [TAZMOD](#), the tax-benefit microsimulation model for Tanzania. The note was initiated at the [TAZMOD Retreat](#) in November 2022. The retreat was a capacity development initiative as a part of the activities of the [SOUTHMOD project](#).