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Research Article

Targeting Efficiency of the Household Upliftment Programme in Southwestern Nigeria

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Abstract

This study examines the targeting efficiency of Nigeria's Household Upliftment Programme (HUP) in Osun and Oyo States, focusing on the extent and cost implications of inclusion and exclusion errors. Using household-level data ranked by multidimensional deprivation scores, the study applies a decile-based classification to assess targeting outcomes across regions and local government areas (LGAs). About 45.27% of beneficiary households were ineligible, indicating substantial inclusion errors that generated a monthly leakage of ₦550,030.50. In contrast, 64.05% of eligible households were excluded from the programme, resulting in a monthly under-coverage cost of ₦1,184,925.00. Exclusion errors were particularly pronounced in the least poor LGAs, where nearly four-fifths of poor and vulnerable households were omitted. The analysis highlights that the humanitarian and welfare costs of exclusion outweigh the fiscal benefits of inclusion, reaffirming earlier evidence from the global social protection literature. Although the HUP demonstrates success in reaching some poor households, improving the accuracy of proxy-means targeting and enhancing data validation mechanisms remain essential for reducing mistargeting and optimizing the social returns of cash transfer programmes in Nigeria. This study contributes to the social protection literature by empirically quantifying the magnitude and fiscal cost of inclusion and exclusion errors in Nigeria's Household Upliftment Programme using a multidimensional deprivation framework and subnational comparative analysis across poverty-ranked LGAs in Osun and Oyo States.

Keywords

Targeting Efficiency, Cash Transfer, Social Protection, Nigeria

1. Introduction

Globally, around 700 million people live on less than $2.15 a day, with South Asia and Sub-Saharan Africa (SSA) accounting for five out of every six of the world's poor [28, 31]. Within SSA, nearly half of the poor population is concentrated in just five countries: Tanzania, Ethiopia, Madagascar, the Democratic Republic of the Congo, and Nigeria [30]. Nigeria, in particular, stands out as having the largest population of people living in multidimensional poverty, with 133 million people (63%) classified as such, and 32.3% identified as severely multidimensionally poor [18, 26, 27]. This persistent poverty highlights the urgent need for targeted and effective social protection mechanisms.

In recent years, social protection has emerged as a prominent instrument that plays a crucial role in addressing poverty

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and vulnerability in low- and middle-income countries. The Household Upliftment has emerged as a cornerstone project among the array of social safety net programmes that have been established in Nigeria. The HUP's primary objective is to provide direct financial support to households that are severely poor and vulnerable. On the other hand, the efficiency of such programmes is highly dependent on the precision of their targeting mechanisms. This involves ensuring that cash transfers are distributed to people who are in the greatest need of them, while simultaneously minimising both inclusion and exclusion errors.

The Household Upliftment Programme (HUP), under the broader National Social Safety Nets Project (NASSP) supported by the World Bank [17]. As part of a suite of four national social investment programmes, the HUP aims to support poor and vulnerable households across Nigeria through targeted financial assistance. Beneficiaries are selected from the National Social Register (NSR), a database compiled using community-based and geographic targeting techniques, and enhanced by proxy means testing (PMT) to ensure the most vulnerable are reached. The HUP targets poor and vulnerable households identified through community-based and geographic targeting methods and refined by proxy means testing (PMT) using data from the National Social Register (NSR). It consists of three main components: a base cash transfer of ₦5,000 per month (paid bi-monthly) to enhance consumption and financial inclusion; a Top-up Transfer of an additional ₦5,000 for households that fulfil human capital and environmental co-responsibilities; and livelihood support, which includes a one-off grant of ₦150,000 along with life skills and business training to promote sustainable livelihoods [17]. The programme's overarching objective is to improve welfare, human capital, and economic resilience, encapsulated by its slogan *beta don come*.

However, despite numerous poverty alleviation initiatives, high poverty rates persist in Nigeria [29], prompting the need for a deeper investigation into the effectiveness and targeting efficiency of the HUP, particularly among the extremely poor, to inform more responsive and equitable social policies.

2. Review of Targeting Literature

Studies across various countries have revealed significant challenges in the targeting accuracy of Social Protection Programmes (SPPs), particularly errors of exclusion and inclusion. In Bangladesh, Razzaque *et al*. [21] found that 71% of poor households were excluded from social security programmes, while 46.5% of beneficiaries were ineligible, demonstrating a misallocation of resources. Similarly, in Ethiopia's Targeted Supplementary Feeding Programme (TSFP), [11] reported exclusion and inclusion errors of 40.3% and 16.5%, respectively, driven by insufficient coverage and measurement inaccuracies. Uganda's experience, as examined by Kidd, S. and Bailey-Athias [13], highlighted that more inclusive systems outperformed targeted ones in reaching the poorest. In North Macedonia, [2] showed that gender-targeted Conditional Cash Transfers (CCTs) improved nutritional expenditure, particularly when women received the transfers, thereby enhancing food security within poor households.

Further evidence from countries like Nigeria and Zimbabwe highlights the varying effectiveness of different targeting approaches. Sami [25] found disparities in targeting efficiency between Bauchi and Osun States, with Bauchi achieving nearly universal coverage while Osun lagged. Community-based targeting in Zimbabwe, as reported by Robertson *et al.* [22], was praised for enhancing transparency and local ownership, mitigating conflict and misidentification. However, studies such as those by [15] on Mexico's *Oportunidades* and [14] on Proxy Means Test (PMT) methodologies across several countries revealed persistent targeting flaws, with inclusion and exclusion errors reaching up to 71% when narrower segments were targeted. Devereux *et al.* [7] argue that the success of any targeting strategy is heavily context-dependent, stressing the importance of aligning mechanisms with programme goals and administrative capabilities.

These findings highlight the complexities and challenges in achieving effective targeting in social protection programmes, underscoring the need for continuous evaluation and refinement to ensure that assistance reaches those most in need.

3. Materials and Methods

Southwest Nigeria, which includes the states of Ekiti, Lagos, Ogun, Ondo, Osun, and Oyo, is the study area. The region, which makes up over 12% of Nigeria's entire landmass, stretches between latitude N 9 °4' 55.1964" and longitude E 8 ° 40' 30.9972" [10]. The zone houses over forty-five million Nigerians [16], representing 15.11% of Nigeria's total population of 220,445,984 [32].

The people of South Western Nigeria engage in diverse socio-economic activities that reflect both traditional and modern livelihoods. Agriculture, trading and commerce, manufacturing, small and medium enterprises, and artisan crafts are widespread in the region. Education is highly valued, contributing to a strong presence in teaching, public service, and professional careers. Additionally, the region is a hub for entertainment, particularly music, film, and cultural festivals.

Sampling

A four-stage sampling method was used to select the respondents. Osun and Oyo States were randomly selected, and three Local Government Areas (LGAs) corresponding to rural, semi-urban, and urban were selected in each state, using stratified random sampling. Sixty-one communities were randomly selected proportionate to size across the six LGAs. Lastly, 243 HUP Beneficiary Households (BH) and 373 HUP Non-Beneficiary Households (NBH) were randomly selected from the communities. Data were collected on household socioeconomic characteristics, indicators of Multidimensional Poverty (MP) and targeting errors. Data were analysed using descriptive statistics and the Alkire and Foster index.

Methods

a. To calculate the deprivation score, which was used to rank the households, the indicators in each of the three dimensions were equally weighted, and the three dimensions themselves were assigned equal weights ($\frac{1}{3}$). Specifically, the health and education dimensions were each weighted at $\frac{1}{6}$, while individual indicators within the living standards dimension were weighted at $\frac{1}{18}$. The equal-weighting approach has been employed in previous studies, including [1, 3, 9, 19, 24]. Table 1 presents the welfare dimensions, their indicators and attached weights.

The deprivation weight is a core element in constructing a Multidimensional Poverty Index or similar measures. It reflects the relative importance assigned to each indicator or dimension of deprivation in the overall index.

The deprivation score for each household *i* is computed as:

$$C_i = \sum_{j=1}^{n} w_j \, d_{ij}$$

Where:

C_i is the deprivation score for the household i

w_j is the weight assigned to the indicator j

d_{ij} is the deprivation status of the household i in the indicator j, where $d_{ij} = 1$ if the household is deprived, otherwise, 0

n is the total number of indicators (i.e., n =10)

$\sum_{j=1}^{n} w_j = 1$ (i.e., the weights = 1)

b. To assess targeting efficiency, [5] method for calculating targeting efficiency was adapted as shown in Table 2. This method has since been adopted by studies like [11, 12].

Table 1. *Selected Welfare Dimensions and Indicators.*

Dimension	Indicator	Description	SDG	Criteria for Deprivation cut-off	Weight
Health	Food insecurity	Food Insecurity Experience in the last 30 days	SDG 2	According to the Food Insecurity Experience Scale (FIES), the household is severely food insecure (deprived) if the response to at least 7 questions is affirmative (≥7 answers affirmatively)	$1/6$
	Child mortality	Death of under five-year-old child(ren) since 2017	SDG 3	If the household has experienced at least one natural or disease-related child death in the household, then D = 1, and 0 otherwise.	$1/6$
Education	Number of years of education	Years of formal education of the household head	SDG 4	If the head's highest class is not more than six years of formal education (≤ 6 years), then D = 1, and 0 otherwise.	$1/6$
	Reading and Writing	If the household head cannot read and write in any language	SDG 4	Deprived if the head cannot read and write in any language, then D = 1, and 0 otherwise	$1/6$
Living Standard	Cooking fuel	Household cooks with dung, agricultural crop, shrubs, wood, charcoal or coal etc.	SDG 7	Deprived if household is using any of these as cooking fuel: wood, charcoal, animal dung, agricultural crop residue, coal, straw as main fuels for cooking, as opposed to electricity, liquefied petroleum gas, natural gas, biogas, or kerosene, then D = 1, and 0 otherwise.	$\frac{1}{18}$
	Sanitation	A household is non-deprived when there is access to improved sanitation if there is a composting toilet, ventilated improved pit, flush toilet, or latrine, and they are not shared. Deprived if otherwise	SDG 11	Deprived if the household's sanitation facility is shared with others, then D = 1, and 0 otherwise.	$\frac{1}{18}$
	Drinking Water	Access to safe drinking water facility	SDG 6	Deprived if source of water is not piped, then D = 1, and 0 otherwise	$\frac{1}{18}$
	Electricity	If household lacks access to electricity.	SDG 7	Deprived if on-grid electric connection is absent, then D = 1, and 0 otherwise	$\frac{1}{18}$
	Housing	If the roof or walls are made of crude materials, or if the	SDG 11	Deprived if the floor is made of mud, clay, earth, sand, or dung; if the wall or roof of the dwelling is made of natural materials like sticks, cane,	$\frac{1}{18}$

Dimension	Indicator	Description	SDG	Criteria for Deprivation cut-off	Weight
		floor is made of natural materials, the housing is inadequate		palm/trunks, sod/mud, dirt, grass/reeds, thatch, bamboo, or rudimentary materials like cardboard, plastic/polythene sheeting, bamboo with mud or stone with mud, loosely packed stones, adobe that is not covered, raw or repurposed wood, plywood, cardboard, unburned brick, or canvas or tent, then D = 1, and 0 otherwise	
	Asset ownership	Not owning a car or truck, but having one of the following assets: a radio, TV, phone, computer, animal cart, bicycle, motorbike, or refrigerator.	SDG 1	Deprived if household does not own more than one of these assets: radio, TV, telephone, computer, animal cart, bicycle, motorbike, or refrigerator, and does not own a car or truck, then D = 1, and 0 otherwise	$\frac{1}{18}$

Source- Researcher's computation from [4, 18, 19, 23]

Table 2. *Indices of Targeting.*

	Indicators (%)	Indicators Description	Calculation
a.	Inclusion error	The proportion of HUP beneficiary households, despite being ineligible	The number of ineligible beneficiary households to the total number of HUP beneficiary households
b.	Exclusion error	The proportion of non-beneficiary households in the 1^{st} -6^{th} deciles	The number of eligible non-beneficiary households, to the total number of eligible households
c.	Successful targeting	The proportion of HUP beneficiary households in the 1^{st}-6^{th} deciles	The number of eligible HUP beneficiary households, as a percentage of the total number of eligible households
d.	Successful exclusion	The proportion of the non-beneficiary households in the 7^{th} -10^{th} deciles	The ratio of non-beneficiary households in the 7th-10th deciles to the total number of households in the 7th-10th deciles

Source: Adapted from [5]

4. Results and Discussion

The socio-economic characteristics and the extent of targeting are presented in this section. chapter. The reference data collection period was 2017 (baseline).

Socio-Economic Characteristics of Households

Table 3 presents the household socio-economic characteristics. The majority of the household heads were between 41 and 60 years, while the mean age of household heads was 42.00±19.14 years (with minimum and maximum ages as 19 and 84 years). Typical of Nigerian households, about six in ten (56.49%) of the households were male-headed. Although the mean age of caregivers was 37.11±15.03 years, most of the caregivers were within the 21-40 years age category. The HUP design is that the household caregiver or an alternate receives cash transfers, should the caregiver be absent. The majority (four in ten) of the caregivers/alternates in beneficiary households and mothers/women or primary caregivers in non-beneficiary households were within the ages of 21-40 years, which is in line with the design of the HUP, which recommends that caregivers be between 18-40 years at the time of enrollment into the programme.

As many as about eight in ten heads were either monogamously or polygamously married, while households whose head was either divorced or separated were the least. The majority of the households had sizes between five and eight. This is similar for beneficiary and non-beneficiary households. The average household size was 5.61±2.78, while the minimum and maximum were one and twenty (20) members, respectively.

With respect to the years of formal education of household heads, about three in ten of the heads had no formal education. However, when the mean years of formal education was 6.53±5.05 and the maximum number of years of formal education was sixteen (16), the majority (four in ten) of the heads completed at least seven years but not more than twelve years of formal education. In addition, only one in twenty of the

household heads had between thirteen and sixteen years of formal education.

The majority, about six in ten (56.82%) of the households had no farmland, while the average farm size was 0.76 ±1.07 plots. While the household's monthly average and maximum income were ₦15,093.83 ±14,644.74 and ₦90,000.00, respectively. About 7.95% of the households reported receiving no income, thus, the minimum monthly income at both periods was zero. In addition, the majority (59.42%) of the households received not more than ₦15,000.00 monthly. The majority of the households (64.29%) reported not receiving any monthly remittance. However, the average remittance was ₦866.18 ±1441.62 while the maximum remittance was ₦8,000.00.

Only 0.32% of the total households were involved in civil service, while 56.33% and 58.77%, respectively, were engaged in trading (farm produce, food items, provisions, basic household items, confectioneries, etc.). However, only about two in a hundred (1.78%) of the caregivers (of beneficiary households) reported not being engaged in any occupation. Some of these individuals were physically challenged (visually impaired, physically immobile without aid, victims of fire accidents, etc.), while some others were aged.

On the years of experience in primary occupation, the majority (four in ten, 43.51%) reported between one to ten years of experience in their primary occupation. The mean years of experience in primary occupation was 9.49 ±11.28 years.

Table 3. *Socio-economic Characteristics of Households.*

Variable	2017 (%)
Age of Household head (Years)	
≤ 20	1.30
21 - 40	33.44
41 - 60	49.51
61 - 80	14.45
>80	1.30
Mean	42.00 ±19.14
Minimum	19.00
Maximum	84.00
Age of Household Caregiver/Alternate (Years)	
≤ 20	4.04
21 - 40	42.37
41 - 60	39.45
61 - 80	12.82
>80	1.30
Mean	37.11 ±15.03
Minimum	17.00
Maximum	73.00
Sex of Household Head	
Male	56.49
Female	43.51
Sex of Caregiver	
Male	12.34
Female	87.66
Marital Status of Household Head	
Single	1.14
Married Monogamy	57.14
Married Polygam-	20.94
Divorced/Separated	3.73
Widowed	17.05
Household size	
≤ 4	33.28
5-8	57.95
9-12	6.82
13-16	0.97
17-20	0.97
21-24	0.00
Mean	5.61 ±2.78
Minimum	2.00
Maximum	
Years of Formal Education	
None	28.73
1-6	30.19
7-12	37.34
13-16	3.73
>16.00	0.00
Mean	6.74 ±5.04
Minimum	0.00
Maximum	16.00
Farm Size (Plots)	
0.00	56.82
0.1 -1.00	16.07
1.1 - 2.00	18.99
2.1 - 3.00	4.71
>3.00	3.41

Variable	2017 (%)
Mean	0.76 ±1.07
Minimum	0.00
Maximum	4.00
Household Monthly Income (Naira)	
0.00	7.95
1.00-15,000.00	59.42
15,001 -30,000	22.40
30,001 -45,000	4.38
45,001-60,000	4.55
60,0001-75,000	0.65
75,001-90,000	0.65
>90,000.00	0.00
Mean	15,093.83 ±14,644.74
Minimum	0.00
Maximum	90,000.00
Monthly Remittance (Naira)	
0.00	64.29
1-2,000	21.27
2,001 -4,000	9.42
4,001 -6,000	4.71
>6,000.00	0.32
Mean	866.15 ± 1440.45
Primary Occupation of Household Head	
Farming	17.69
Trading	56.33
Crafts/ artisan	13.64
Civil Service	0.32
Private Employment & Others	4.87
None	7.14
Experience in Primary Occupation (years)	
<1.00	25.49
1-10	43.51
11-20	16.56
21-30	8.28
31-40	3.08
> 40	3.08
Mean	9.49 ±11.29
Minimum	0.00
Maximum	50.00

Extent of Targeting Efficiency in the HUP

Table 4 illustrates the extent of targeting efficiency in the HUP. Households in the social register were ranked based on a proxy means test, with households from the first to the sixth deciles being selected as beneficiary households. Households ranked above the sixth decile have not yet benefited from the HUP. However, for this study, households were ranked in descending order based on their multidimensional deprivation scores and grouped into deciles, with each of the deciles containing approximately 61 or 62 households. About 60.6% of the households were in the first six deciles (eligible households), while 39.94% were in the seventh to tenth deciles (ineligible households).

a. Inclusion Error: Nearly half of the HUP beneficiary households were ineligible, with approximately five in ten households outside the first six deciles being included as beneficiary households. If targeting had been more efficient, the number of eligible recipients could have nearly doubled without increasing the HUP budget. This also indicates that 45.27% of the beneficiary households in Osun and Oyo States were unintended recipients. Moreover, at a monthly stipend of ₦5,000.00, the overpayment or leakage to unintended households amounted to ₦550,030.50 per month, thus increasing the HUP cost by this sum each month. The inclusion error in Osun State (48.36%) led to a leakage of ₦294,996.00 per month, which was higher than the 42.15% inclusion error in Oyo State, amounting to ₦255,007.50 per month.

Furthermore, among the three LGA ranks, the inclusion error was highest (54.4%) in the least poor LGAs (Ife Central and Ibadan North) than 49.4% in moderately poor LGAs (Egbedore and Atiba) and 32.07% in the poorest LGAs (Ifedayo and Atisbo). This finding contrasts with that of [20], where the inclusion error was marginally larger in rural households than in urban ones. Moreover, [8] argue that inclusion errors, caused by spending money on ineligible individuals, increase programme costs. The inclusion errors amounted to ₦157,673.00/month, ₦169,971.00/month, and ₦195,011.50/month in the least poor, poorest, and moderately poor LGAs, respectively.

b. Exclusion Error: About six in ten (64.05%) households in the first to sixth decile were erroneously excluded, meaning that these needy households failed to be reached, resulting in a coverage inefficiency amounting to ₦1,184,925.00 monthly. Exclusion errors were higher in Osun (65.39%, amounting to ₦595,049.00 monthly) than in Oyo State (62.76%, i.e., ₦589,944.00 monthly). The proportion of needy households excluded from the HUP in the least poor LGAs was particularly high, at a staggering 79.61%, meaning almost four-fifths of the PVHHs in these areas were outside of the HUP coverage. The exclusion proportion (79.61%) was highest in the

least poor LGAs than in the poorest LGAs (62.30%) and moderately poor LGAs (50.24%). Furthermore, the exclusion amounted to ₦594,965.00, ₦409,991.50, and ₦190,912.00 monthly in underpayment in the poorest, least poor, and moderately poor LGAs.

The high proportions of exclusion observed in Osun and Oyo States, as well as in the least poor and poorest LGAs, suggest that resources that poor, eligible households would have needed to escape poverty, avoid starvation, or even survive were withheld from them [8]. These exclusion errors far outweigh the inclusion errors, supporting [6] argument that the humanitarian costs of not helping those in need are greater than the financial costs of *allocating* some resources to those who are not in need. Thus, exclusion errors should typically outnumber inclusion errors.

c. Successful targeting (coverage) refers to the proportion of eligible households that received cash transfers from the HUP, specifically the beneficiary households in the first six deciles. Approximately 35.95% of the households were successfully targeted. The proportion of successful targeting was higher in Oyo State (37.23%) compared to Osun State (34.62%). This contrasts with the finding of [25], where the coverage of PVHHs in the first to sixth deciles of the National Social Register was 56.18% in Osun State. Successful targeting was highest in moderately poor LGAs (52.63%), followed by the poorest LGAs, with the least poor LGAs having the lowest coverage at 20.39%.

d. For successful exclusion, 55.28% of the total households were effectively excluded from the Programme and classified as non-beneficiary households. In Osun State, the Programme achieved a 61.18% successful exclusion rate, while in Oyo State, it was 49.38%. This finding aligns with [25], who reported that the successful exclusion of non-eligible households from the register in the fourth to sixth deciles ranged between 50.0% and 59.57% in Osun State. Among the three LGA ranks, successful exclusion was highest in the least poor LGAs at 57.95%, followed by the poorest LGAs at 55.26%, and the moderately poor LGAs at 52.44%.

Table 4. *Key Indicators for Evaluating the HUP Targeting Efficiency.*

Indicator		Regional (%)	State		LGA Rank		
			Osun (%)	Oyo (%)	Poorest (%)	Moderately Poor (%)	Least Poor (%)
a.	Inclusion Error	45.27	48.36	42.15	32.07	49.37	54.37
b.	Exclusion Error	64.05	65.39	62.76	62.30	50.24	79.61
c.	Successful Targeting	35.95	34.62	37.23	37.69	52.63	20.39
d.	Successful Exclusion	55.28	61.18	49.38	55.26	52.44	57.95

5. Conclusion

Location-specific social protection policies are essential for improving the effectiveness of interventions such as the Household Upliftment Programme (HUP). Evidence shows that approximately eight in ten of eligible households in the least poor LGAs were excluded from the HUP, underscoring the limitations of a uniform targeting approach. This exclusion suggests that a significant number of households may be overlooked due to geographic generalisations in the HUP design. Given the diverse social, cultural, and economic contexts across regions, a one-size-fits-all policy framework is unlikely to yield equitable or efficient outcomes. Instead, tailored, location-sensitive policies based on detailed local-level data and needs assessments are more likely to ensure effective targeting, maximise HUP impact, and foster inclusive development. Such differentiated approaches would also allow for better coordination of complementary interventions suited to the specific characteristics of each area.

Abbreviations

HUP Household Upliftment Programme

Author Contributions

Ayoola Abosede Adewale is the sole author. The author read and approved the final manuscript.

Conflicts of Interest

The author declares no conflicts of interest.

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