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# AN IMPACT EVALUATION OF DIGITAL CASH TRANSFERS (DCT) SCHEME ON INCOME POVERTY IN NIGERIA

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### 1.0 INTRODUCTORY BACKGROUND AND PROBLEM STATEMENT

Indeed, conditional and unconditional cash transfer programs (CTP) are part of the poverty reduction strategies that can reduce multiple forms of vulnerability. Globally, it is estimated that over one billion individuals have benefited from such CTP intervention (which implies giving money in the form of cash to target groups) over the past three decades. Specifically, this type of assistance has become increasingly popular in Sub-Saharan Africa since the previous years (given their peculiar characteristics).

As a low-income country (with high dependence on oil revenue), Nigeria is socially and culturally diverse with over two hundred and fifty ethnic groups. Yet, after over thirty years of military rule, Nigeria reinstated a democratic regime in 1999 till date. Institutionally, Nigeria has a decentralized political system which consists of a three tier government (Federal, State and Local) made of 36 state governments, Federal capital territory and 774 local governments. Unfortunately, the majority of the Nigeria population lives in poverty despite the wealth in the country. Specifically, between 1980 and 2004, both rural and urban poverty move than doubled from 28.3% to 63.3% in rural areas as compared to the rise from 17.2% to 43.2% in urban areas. Again, the Nigeria's national poverty line stated that 54% of the total population lived in poverty during the said period (AFDB et al, 2009; NPC, 2010; UNDP, 2009). Clearly, this was a huge challenge in terms of development and poverty reduction. Notably, inequality in income and asset distribution; unequal access to basic infrastructure and services as well as social-cultural norms were key drivers of poverty,

vulnerability and inequality in the country. In fact, it is believed that Nigeria has one of the most unequal societies in the world.

Statistically, inequality increased between 1985 and 2004 (from 0.43 to 0.46). And when adjusted to reflect inequality, Nigeria's human development index value drops significantly from 0.423 to 0.246 (Ortiz and Cummins, 2011; UNDP; 2010).

Furthermore, while the country grew at an average rule of seven percent annually between 2004 – 2014; poverty rates declined by only one percent in the first half of that period.

Unfortunately, the limited access to gainful employment opportunities has exacerbated poverty and inequality (particularly) along Urban-Rural and gender lines (FGN, 2021). However, understanding the depth of poverty (through the poverty gap index and the squared poverty gap index) is vital for guiding future policy making. While the poverty head count rate provides a useful marker of the extent of poverty; it does not incorporate information on how far below the poverty line, households and individuals are. In other words, the poverty headcount rate is insensitive to transfers from those just below the poverty line to those a long way below the poverty line. Consequently, the poverty gap index measures the average difference between the consumption of the poor and the poverty line (which represents the average shortfall that would need to be addressed in order to eliminate poverty). On the other hand, the squared poverty gap considers inequality among the poor (which improves with transfers from those just below the poverty line to those a longway below the poverty line). Notably, World Bank (2022) revealed that the poverty gap index for Nigeria is 0.129.

Clearly, this implies that vast resources are required to eliminate poverty in the country (especially in rural areas). In fact, poverty is deeper and more widespread in rural areas than urban areas. Specially, the poverty gap index is 0.174 for rural areas and 0.045 for urban areas. In contrast, the squared poverty gap index is 0.078 for rural areas and 0.045. However, state-level poverty and inequality statistics are shown in table 1.1 (NBS, 2020, World Bank, 2022). Yet, as Nigeria launches its most extensive national measure of multidimensional poverty, NBS (2022) sampled over 56,000 households across the

# TABLE 1.1 POVERTY INEQUALITY STATISTICS:STATE LEVELSTATUS

S/N	STATE	POVERTY	POVERTY	SQUARED	GIM
		HEAD	INCOME	POVERTY	COEFFICIENT
		COUNT	GAP	INCOME	
		RATE		GAP	
		(PERCENT)			
1	ABIA	30.70	0.071	0.026	24.5
2	ADAMAWA	75.40	0.276	0.132	27.8
3	AKWA-IBOM	26.80	0.072	0.027	31.8
4	ANAMBRA	14.80	0.032	0.011	25.0
5	BAUCHI	61.50	0.205	0.091	26.5
6	BAYELSA	22.60	0.053	0.019	29.7
7	BENUE	32.90	0.084	0.031	29.4
8	BORNO	-	-	-	-
9	CROSS RIVER	36.30	0.097	0.036	30.7
10	DELTA	06.00	0.009	0.002	29.8

11	EBONYI	79.80	0.341	0.171	28.6
12	EDO	12.00	0.029	0.010	29.5
13	EKITI	28.00	0.062	0.020	29.7
14	ENUGU	58.10	0.160	0.063	25.0
15	GOMBE	62.30	0.200	0.090	31.5
16	IMO	28.90	0.069	0.024	27.2
17	JIGAWA	87.00	0.387	0.205	28.0
18	KADUNA	43.50	0.155	0.067	35.2
19	KANO	55.10	0.152	0.057	28.6
20	KATSINA	56.40	0.162	0.065	24.6
21	KEBBI	50.20	0.151	0.062	29.6
22	KOGI	28.50	0.062	0.020	24.4
23	KWARA	20.40	0.045	0.015	25.1
24	LAGOS	04.50	0.007	0.002	27.2
25	NASARAWA	57.30	0.169	0.066	25.6
26	NIGER	66.10	0.217	0.091	27.6
27	OGUN	09.30	0.016	0.004	27.1
28	ONDO	12.50	0.023	0.006	25.5
29	OSUN	08.50	0.014	0.004	25.1
30	OYO	09.80	0.018	0.005	31.1
31	PLATEAU	55.00	0.178	0.076	40.2
32	RIVERS	23.90	0.055	0.017	29.5
33	SOKOTO	87.70	0.388	0.203	28.0
34	TARABA	87.70	0.424	0.244	32.2
35	YOBE	72.30	0.265	0.128	27.3
36	ZAMFARA	74.00	0.250	0.104	23.5
37	FCT	38.70	0.098	0.038	32.3

nation and provided multidimensional poverty activities at senatorial district level. Statistically, the surveyed multidimensional poverty index (MPI) revealed that 63% of persons living within Nigeria (about 133 million people) are multidimensional poor specifically the National MPI is 0.257 whereas 65% of the poor (about 86 million people) live in the North and 35% (about 47 million people) live in the South. However, poverty levels across states vary significantly.

Notably, over half of the population of Nigeria is multidimensional poor and cook with dung, wood or charcoal rather than cleaner energy. Similarly, multidimensional poverty is higher in rural areas (where 72% of people are poor) compared to 42% of people in urban areas of Nigeria. Numerically the numbers of people living in extreme poverty in Nigeria by gender are shown in table 1.2 (statista, 2023).

YEAR	MALE	FEMALE
2016	35,326,000	34,698,000
2017	36,164,000	35,510,000
2018	37,037,000	35,323,000
2019	39,353,000	38,547,000
2020	42,885,000	41,972,000
2021	43,814,000	42,861,000
2022	44,707,000	43,718,000

**TABLE 1.2 NIGERIA: EXTREME POVERTY CLASSIFICATIONS** 

As a policy response, the National Social Safety Net Coordinating Office (NASSCO) was established (in 2016) by the Federal Government of Nigeria and World Bank to strengthen the social safety nets and social protection system in the country. The project intention is to help end extreme poverty and promote shared prosperity.

Essentially, the goal of the Nigerian Social Investment Programme such as the conditional cash transfer is to ensure that cash gets to the hands of the poorest Nigerians in their various locations so that they can at least feed and buy drugs when needed.

Therefore, as part of the measures to simplify financial inclusion for the disadvantaged Nigerians, eNaira currency was launched in October, 2021 by the Federal Government. And since its launch, it may have proven to be a multi-dimensional digital currency that operates as a better alternative to the traditional currency. Consequently, the Nigerian Ministry of Humanitarian Affairs, Disaster Management and Social Development (HADMSD) has been taking advantage of the digital currency platform to simplify the process of reaching out to the poorest Nigerians with life-saving funds. Operationally, the ministry (in collaboration with central bank of Nigeria) has registered million beneficiaries on their social intervention schemes of the eNaira platform. Yet, prior to the adoption of the new platform, the ministry has deemphasized rolling out cash to the beneficiaries of their interventions while embracing internet banking. Comparatively, the digital payment platform is easier and cheaper to operate with no bank charges, bottlenecks and intermediaries as well as no chance of depositors losing their monies. Perhaps, the poorest Nigerians (who mostly reside in the rural areas where the necessary infrastructure for physical and internet banking may not be present) are the biggest beneficiaries of the eNaira payment platform.

Consequently, as at March, 2023, the Central Bank of Nigeria has created million wallets for social intervention payments. In fact, it is anticipated that the Bank can use a pre-programmed eNaira to pay intended beneficiaries on the social register that could be accepted only for a specific purpose as well as at specifically authorized location. Clearly, this use case will ensure the proper use of social funds; ensure high quality data can be collected on the performance of the programs as well as helping to prevent leakage or diversion of funds.

However, despite the growing adoption of electronic payment instruments, cash based payments remain a key element of most cash transfer programs in Africa (and Nigeria in particular).

Notably several programmes offer cash payments in some form while the cash-based nature of the local economy in most African countries (such as Nigeria) makes it unlikely that electronic payment will fully replace cash-based payments in the possible future. Again, even in programmes where electronic payments are offered, beneficiaries often use them as cash-out mechanisms rather than enabling instrument towards greater financial inclusion and payment digitization.

Therefore, this raises the fundamental question as to what extent payment digitization truly benefits the recipients of cash transfers who continue to queue for cash (via ATM, bank or mobile money agent)or at a central pay point. Using Randomized Control Trials (RCT) based models on selected states of Nigeria; this research project shall provide workable evidence for strategic decision making.

#### 2.0 OBJECTIVES AND RESEARCH HYPOTHESIS

Generally, the overall aim of this research project is to determine the effect of cash transfer programmes on welfare status of beneficiaries on the selected states of Nigeria. In other words, the purpose of the proposed impact evaluation is to better understand how the programme was implemented, impacts achieved as well as identifying lessons that can inform future implementation of cash transfer schemes in Nigeria.

Specifically, the research study will determine to what extent do digitally delivered cash based transfers effectively advance financial inclusion for the target groups of beneficiaries as well as meeting their needs or priorities.

Basically, the research hypotheses are to be tested as follows:

- H<sub>o1</sub>: There is no significant difference in the welfare status of beneficiaries and non-beneficiaries.
- H<sub>11</sub>: There is significant difference in the welfare status of beneficiaries and non-beneficiaries.
- H<sub>02</sub>: There is no significant difference between the adoption of digital cash transfer and traditional cash transfer systems.
- H<sub>12</sub>: There is significant difference between the adoption of digital cash transfer and traditional cash transfer systems.

#### **3.0 REVIEW OF LITERATURE**

Conceptually, social assistance or social safety not programmes are non-contributory transfers in cash or in kind which are usually targeted at the poor and vulnerable. They include the following:-

- I. Cash transfers (conditional and unconditional)
- II. In-kind transfers (school feeding and targeted food assistance).
- III. Near cash benefits (Fee waivers and food vouchers).

Indeed, social protection programmes in the form of cash transfers have been a key policy instrument in global efforts to tackle poverty and inequality in the world. Notably, the oldest cash transfer programmes were introduced in South Africa in the 1920's, followed by Namibia and Botswana (Bastagli et al 2016; Beegle, et al. 2018).

Empirically, UNDP (2019) found that all countries in Southern Africa as well as about ninety percent of West African Countries and eighty percent of East African Countries has at least one type of cash transfer programme in place. In contrast, the proportion was slightly lower in central Africa. As studied, the impact evidence for cash transfers have been positive and several studies have shown their desirable effects in relation to health, education, consumption, poverty reduction and inequality. Although most programmes initially relied on manual cash disbursements to beneficiaries, the last decade have seen a growing interest in digital (financially inclusive) payment technologies (Garcia and More, 2012).

However, existing studies on the cash transfer schemes have mainly focused on programme design, policy making processes, affordability and impact evaluations while paying little attention to the payment attention.

Subsequently, Gronbach (2020) addressed this gap by surveying the current state of cash transfer payment systems in Africa.

Table 3.1 presents the practicalities of the various payment instruments identified across Africa region.

#### TABLE 3.1 AFRICAN REVIEWS: CASH TRANSFER SCHEMES AND PAYMENT METHODS

S/N	COUNTRY	PROGRAM	YEAR	TARGET	SURVEY	PAYMENT FREQUEN	PAYMENT SYSTEMS
		ТҮРЕ		SOURCE	COVERAGE	CY	
1	ANGOLA	Valor crianca	2018	Categorical	6/51	Quarterly	Cash payments via
		pilot		geography	Households		development pathways
2	BENIN	Project de	2013	Geographic	12, 933	Monthly	MTN mobile money
		services		community	Households		with cash out at MTN
		decentralizes					agents in Cotonou
		conduits par les					manual cash payments
		communautes					via caisse local credit
							mutel
3	BOTSWANA	Old age pension	1996	Categorical	105, 754	Monthly	Cash payments via
				community	Individuals		post offices or
							programme staff;
							reportedly also via
							community leaders smart cards and
							biometric identification

4	BOTSWANA	Benefits for	1999	Categorical	35076	Monthly	In-kind support
		orphans and vulnerable		community	Individuals		complemented by
		children					electronic food
							voucher
5	BURKINA FASO	Social safety net	2014	Geographic	69755	Quarterly	Mobile money
		project		community	Households		payments/cash payments electronic payments
6	BURUNDI	Merankabandi	2018	Community	50 090	Bi-	Eco-Net mobile money
		cash transfer programme pilot		geographic	Households	monthly	payments
7	CABO VERDE	Basic old age	2016	Means test	23000	Monthly	Cash payments via
		pension		categorical	Households		post office
8	CAMEROON	Social safety	2014	Geographic	42 999	Bi-	Mobile money
		nets project	(2016)	community	Households	monthly	payments smart cards usage
9	CONGO	Lisungi Safety	2014	Geographic	9985	Quarterly	Cash payments via
	REPUBLIC	Nets System	(2019)	community	Household		banks and mobile
		Project					money providers

10	COTE D'IVOIRE	Programme	2015	Geographic	750,000	Quarterly	Mobile money
		National Desfilets	(2019)	Community	Households		payments for
		Sociataux					Beneficiaries in Urban
		Products					Areas
11	ESWANTINI	Disability Grant	1985	Categorical	4,744	Quarterly	Cash disbursement via
			(2019)	Community	Individuals		post office and
							electronic payments
							via bank accounts.
12	ETHIOPIA	Productive	2005	Geographic	2,500,000	Monthly	Electronic payments
		Safety Net	(2019)	Community	Households		using mobile phones
		Programme					and biometric devices; food basket or voucher
							payments.
13	GAMBIA	Maternal and	2014	Categorical	11 402	Quarterly	Cash payments
		child nutrition	(2018)	Geographic	Individuals		through health
		and health					facilities
		results project					
14	GHANA	Social pension,	2008	Geographic	213,044	Bi-	Electronic payments
		disability grant	(2020)	Community	Households	monthly	via biometric e-zwich

		and vulnerable household grant		Categorical			smart card via bank accounts.
15	GUNEA BISSAU	Safety nets and basic services projects: Cash transfers for orphans, vulnerable children, disabled and elderly	2018 (2019)	Geographic Community Categorical	16,500 Households	Quarterly	Payments via different external contractors
16	KENYA	Hunger and safety net programme, Older persons cash transfer, Orphans and Vulnerable Children Cash Transfers, Persons with severe Disability cash transfer	2008 (2019)	Geographic Community Categorical	19619 Households	Bi- monthly	Electronic Payments via Agency Banking

17	LESOTHO	Public Assistance	2016	Categorical	12,000	Quarterly	Cash Payments via pay
			(2018)	Self-	Individuals		points
				Targeting			
18	LIBERIA	Liberia Social	2019	Geographic	3,250	Quarterly	Manual Payments
		Safety Nets		Community	Households		Delivery
		Project					
19	MALAWI	Malawi Social	2006	Community	287,157	Bi-	Bank accounts, Debit
		Cash Transfer	(2019)		Households	monthly	cards and E-payments
		Programme					by 2024.
20	MAURITANIA	Tekavoul Social	2015	Geographic	34067	Quarterly	Payments made via
		Cash Transfer	(2019)	Community	Households		smart cards with
							biometric verification
21	MAURITIUS	Basic Widow's	1950	Categorical	19282	Monthly	Payments via Personal
		Pension	(2019)		Individuals		Bank Account
22	MAURITIUS	Unemployment,	1983	Categorical	708	Monthly	Payments via Personal
		Hardship Relief	(2018)	Mean Test	Individuals		Bank Accounts

23	NAMIBIA	Disability Grants	1995	Categorical	41061	Monthly	Cash disbursement via
		Vulnerable child	(2019)		Individuals		Smart card/Biometric
		grant					verification/Electronic
							Transfers into
							Nampost
							Accounts/Cash
							Delivery via Mobile
							ATM (Rural Areas)
24	RWANDA	Demobilization	1997	Categorical	11,000		Cash
		and	(2018)		Individuals		Payments/Personal
		Reintegration					Bank Account
		Programme					Transfers
25	SENEGAL	Cash Transfer Pilot for Hunger Gap	2017 (2018)	Geographic	8175 Households	Monthly	Cash Payments via Post Offices
26	SEYCHELLES	Abandoned child's benefit for orphans	1987 (2019)	Categorical	573 Individuals	Monthly	Personal Bank Account Payments
27	SOUTH AFRICA	Old Age Pension	1927	Categorical	3.55m	Monthly	Personal Bank Account

			(2019)	Means Test	Individuals		Payments/Cash Withdrawal Via Smart Card at Retailers ATM/Pay Points
28	TANZANIA	Productive Social Safety Net/Tanzania Social Action Fund	2012 (2020)	Geographic Community	1 Million Households	Bi- monthly	Cash payments/E- Payments via Mobile Money
29	TOGO	Safety Nets and Basic Services Project	2017 (2020)	Geographic Community	61,000 Households	Quarterly	Cash Payments Via Post Offices/Electronic Payments
30	UGANDA	Senior Citizens Grant/Direct Income Support	2016 (2018)	Geographic Categorical	150,000 Individuals	Bi- Monthly	Cash and Electronic Payments Via Post Office, Cash Delivery and Biometric Verification in Rural Areas
31	ZAMBIA	Old Age Benefits	2003	Geographic	632,000	Bi-	Cash Payments Via

		Disability	(2019)	Categorical	Households	Monthly	Local Committees
		Benefits		Community			
32	ZIMBABWE	Harmonized	2011	Categorical	65,000	Bi-	Cash Payments Via
		Social Cash	(2019)	Community	Households	Monthly	Local Committees
		Transfer		Geographic			Mobile Money
							Payments Via Eco
							Cash
33	NIGERIA	Household	2016	Geographic	110,509	Bi-	Cash and Electronic
		Uplifting	(2019)	Categorical	Individuals	monthly	Payments Via Private
		Programme.		Community			Providers
		In Care of the	2007	Geographic	27,000	Monthly	Cash Payment Via
		Poor	(2015)	Categorical	Households		Local Government
				Community			Offices Electronic
							Payment Via Mobile
							Banking

As Nigerian local evidence, Olayide, et. al. (2016) provided empirical outcome from a randomized evaluation of an unconditional and noncontributory pension scheme targeted at the elderly and implemented in Ekiti State. The thrust of the paper was to examine the extent to which such a scheme can serve as an instrument to improve the wellbeing of the beneficiaries in terms of improving their quality of life while reducing household vulnerability. Statistically, using data from 6,326 eligible beneficiaries and 18954 household members across 112 electoral wards; treated beneficiaries self-report better overall quality of life such as more stable mental health, higher perceptions of happiness and capabilities, improve in personal relationships as well as better community activities. Consequently, the research paper concluded that there is a scope for scaling-up to national level targeting poor households. Again, in collaboration with its development partners and the United Kingdom Department for International Development; UNICEF Nigeria (2017) reported the impact evaluation study that determines the effectiveness and impact of the cash transfer programme (CTP) in Niger and Sokoto States of Nigeria.

Essentially, the UNICEF Nigeria Girls' Education Project Phase 3 Cash transfer programme (GEP 3-CTP) was a two-year unconditional cash transfer programme (2014-2016) with primary objective of increasing girl's enrolment, retention and completion of basic education in selected schools in Niger and Sokoto States. Empirically, the impact evaluation was carried out in two stages (from October 2016 to March 2017). Notably, the first stage was the Evaluability Assessment of GEP 3 – GTP while the second stage was the Impact Assessment of GEP3-CTP. As key research finding, the study determined that the cash transfer

programme under the GEP 3 had a positive impact on reducing financial barriers to girls' enrolment and attendance at school as well as on household consumption and welfare in the two targeted states of Niger and Sokoto. Specifically, there was an average increase of 52 girls per targeted school in Niger State with a programme impact of 29.4 percent. In contrast, the programme had an average increase of 73 girls per targeted school in Sokoto State with a programme impact of 32.37 percent.

However, in a bid to correct some of the shortcomings recorded by previous CTPs, the Federal Government of Nigeria came up with an updated CTP called Household uplifting programme (HUP).

Basically, HUP is targeted at the poor and vulnerable households in rural areas across different states in Nigeria.

Consequently, Adeaga, et al (2022) research study was carried out to ascertain the effects of the HUP programme on the welfare status of beneficiaries in Oyo State. Statistically, a three stage sampling technique was used to select 160 respondents (inclusive of 68 beneficiaries and 92 non-beneficiaries) while propensity score matching was done to avoid bias between beneficiaries and non-beneficiaries of the HUP project.

Empirically, the research study found that most of the beneficiaries were favorably disposed to HUP. Here, these benefits range from increased income, enrollment of children in school, access to material and health services as well as ability to meet household needs. However, the study concluded that monthly income and educational qualification increased welfare of beneficiaries while large household and family sizes decreased the welfare status of beneficiaries.

#### 4.0 NIGERIA: CASH TRANSFER PROGRAM STRUCTURES

Since 1987, the entire six geo-political regions (South-East, South-West, South-South, North-East, North-West, and North-Central) have had one active intervention or the other. Notably, this started with National poverty eradication programme (NAPEP) in care of the people (COPE) conditional cash transfer which included the Maternal and Child Health conditional cash transfer (CCT).

Specifically, COPE started as a pilot in 2007 and its objective was to break the intergenerational transfer of poverty while reducing the vulnerability of the core poor in society to existing socio-economic risks as well as improving the capacity for human contribution to economic development (locally and nationally).

Between 2007 and 2008, the Federal Government of Nigeria commenced the implementation of COPE in the 12 of 36 States of the Nigerian federation (as a pilot).

Subsequently, COPE became compulsory across all states in the second phase. Basically, it was targeted at households with children of basic school age with the following characteristics:

- Headed by poor females,
- Aged,
- Physically challenged,
- Vesicovaginal fistula (VVF) patients,
- HIV and AIDs patients

Structurally, a community development committee (CDC) coordinates the identification of beneficiaries which includes a district head, social welfare officer, health assistant, primary school headmaster, women's leader, ward councilor, and religious leader. Operationally, COPE was designed at the national level by NAPEP, office of the senior Special Assistant to the President on the MDG, (OSSAP-MDGs) as well as state representatives with support from the World Bank.

Technically, the participating states were the implementing agencies. However, in 2010, under the third phase, OSSAP-MDGs announced that the State Governments would fully take control of the CCT Project through the conditional Grants Scheme (CGs) in order to improve sustainability (Holmes, et al, 2012).

Indeed, while the COPE CCT program was designed to impact different states across Nigeria; some state programs took different approach.

Notably, the Kano State government implemented a pilot CCT program (from 2010 to 2012) in order to increase female school attendance. Similarly, the Bauchi and Katsina States program were designed to reduce girl's dropout as a result of early marriage (during their transition period from primary to secondary school). Here, the pilots were running for three years (2011-2014) and the cash transfers were transferred to beneficiaries on regular basis.

Aside from the above CCTs, other related cash transfer programmes existed in Bayelsa and Jigawa States.

Much later in fulfillment of the electoral promise and as an expansion of the social safety net system in Nigeria; the Federal Government of

Nigeria established new CCT programme as part of the National social investment programme (in 2016). In facts the new CCT programme replaced COPE while operational in several states of Nigerian Federation. For proper identification, the new programme is called National Cash Transfer Programme or Household Uplifting Programme (HUP). As a social safety net programme, HUP was designed as part of the Nigerian government larger growth and social inclusion strategies aimed at considering key social concerns in the country. Again, as a component of the National Social Safety Nets Project (NASSP); it is supported by World Bank to provide financial support to targeted poor and vulnerable households in Nigeria. Essentially, the HUP project focuses on the extremely poor and vulnerable households as defined through a combination of geographic and community based targeting Mechanism (CBT) in Nigeria. Technically, the beneficiaries of the programme are being mined from the single register generated and produced by State Operation Coordinating Unit (SOCU) with supports of World Bank.

However, the identified household's socio-economic data is subjected to Proxy Means Testing (PMT) for ranking the poor and vulnerable in the National Social Register (NSR). Operationally, the project is designed to deliver timely and accessible cash transfers to beneficiary household as well as supporting development objectives and priorities to achieve specific outcomes as follows:

- a) Improve household consumption
- b) Increase in utilization of health and nutrition service
- c) Improve school enrolment and attendance
- d) Improve Environmental Sanitation and Management
- e) Encourage Household Financial and asset acquisition as well as

f) Engaging beneficiaries in sustainable livelihood.

Essentially, the program has three component scheduled as follows: Base Cash Transfer, Top-up based on state selected conditions as well as livelihood support. While the National Cash Transfer Office (NCTO) mandate is to deliver the targeted cash transfer across the nation, the actual implementation happens at the state level via the State Cash Transfer Unit (SCTU). Clearly, SCTU manages and coordinates the targeted cash transfer and livelihood intervention while each local government area establishes cash transfer team to implement activities at the community levels.

Generally, the overall management responsibilities for National Cash Transfer Office are as follows:

- I) Providing technical support and stakeholder engagement.
- II) Facilitating beneficiaries' enrolment and issue programme card to beneficiaries.
- III) Supporting capacity building of states and LGAs to deliver training and sensitization by developing training materials as well as training of trainers.
- IV) Integrating the payment service providers (PSPs) into the systems developed under National Social Safety Projects.
- V) Providing effective coordination for the payment system.
- VI) Providing technical and financial support to state cash transfer units as well as LGA's to carry out their responsibilities.
- VII) Conducting performance assessment, review and reporting.
- VIII) Liaising with MDAs and civil society organizations to support delivery.

- IX) Providing framework for the co-responsibilities for state selection.
- X) Facilitating beneficiaries training, coaching and mentoring.
- XI) Monitoring the progress of activities at state levels to ensure conformity to plans and standards.
- XII) Providing the grievance redress hub and ensuring that grievances emerging from states are investigated and addressed.
- XIII) Establishing and implementing system to minimize fraud, error and corruption.
- XIV) Engaging and supervising payment service providers.
- XV) Disbursing cash transfers to beneficiaries.

In the more recent past, the Federal Government of Nigeria has proposed some billions of naira to be spent on improving the welfare of the poor and unemployed through the social investment programmes (SIP). Specifically the government budgeted several billions of naira for the SIPs project in furtherance of its inclusiveness agenda as well as social investment programme sustainability. Furthermore, the Federal Ministry of Finance, budget and National Planning recently clarified that the multi-million dollar facility gotten from the World Bank for postpetrol subsidy removal palliative was awaiting legislative approval for the federal government to commence disbursement.

Structurally, the facility would be deployed to provide succor to ten million households (whom are to get N5, 000 each for a period of six months). However, the initial duration of the palliatives meant to cushion the effects of the subsidy removal on vulnerable Nigerians would be reviewed upon extensive consultation with stakeholders. However, a key challenge with cash transfer (as opposed to other types of social protection instrument is that their value is very low compared with the need of households (especially in the context of increasing prices and variations in state-level provision of services).

Consequently, there are several issues to consider when developing a cash transfer and assessing whether it is an appropriate social protection response to poverty and vulnerability at the state level (given the Nigerian context).

#### 5.0 NIGERIA: DIGITAL MONEY AND IDENTITY PROJECTS

Structurally, the Nigerian financial market is made up of the money market, capital market and other non-bank financial institutions. However, the nation's banking landscape has undergone significant changes amidst regulations from the central bank of Nigeria as well as innovations from the financial stakeholders. Perhaps, these efforts may have assisted in achieving the bank's cashless policy, financial inclusion and digitization of financial services while leveraging fintechs and other financial agents. Yet, the country has significant percentage of its adult population financially excluded and the ultimate goal is to ensure that the gap is urgently closed (FGN, 2021). Thus, with the on-going integration of the Biometric verification number (BVN) system with the National Identification Number (NIN); it is anticipated that access to financial services will become better than before. Notably, Nigeria has effectively entered its digital phase of information and communication technology sector transformation with the crossing of the twenty-five percent broadband penetration mark. Clearly, this improvement came on the heels of an unprecedented Global System for mobile communication (GSM) digital mobile network explosion; characterized by an exponential growth in mobile data traffic as well as new digital markets. Technologically, data and content are growing with the proliferation and adoption of digital devices in creating an emerging economy. Currently the observed digital transformation is shaping the economy while traversing and recreating market boundaries across every sector of humanity. Despite numerous challenges, Nigeria has significant young (tech-savvy) resilient and entrepreneurial population which creates opportunities for the information and communication sector. Specifically,

financial services providers can be encouraged by government policies and incentives to expand mobile money services and digital payment solutions for seamless operations across borders. Consequently, the introduction of a stronger regulatory environment to protect and include more Nigerians in a digital economy is critical to eliminating bottlenecks while guaranteeing full integration of Nigerian populace.

Demographically estimated at over two hundred million people, Nigeria has a relatively high population growth rate of about 2.60 percent. This implies that her population size has increased the strain on the country's already-stretched social programs (particularly its healthcare system with high mortality rates for pregnant women and children under five). Consequently, without proper population management and economic development, the nation's unemployment and poverty challenges could worsen. Therefore, with the adoption of digital tools, there is an opportunity to expand current population management efforts while ensuring that programmes and interventions reach intended recipients as appropriate. Notably, the adoption of digital tools in linking the NIN and BVN networks with other feasible avenues provides an opportunity to ensure proper identity management in Nigeria.

However, within broader efforts to improve and expand digital financial inclusion; cash transfer payments (by United Nations agencies and national governments) have emerged as a potential opportunity to expand access to digital financial products and services among the poorest households. Consequently, the reliance on digital delivery channels requires implementing actors (such as government ministries, United Nations agencies, donors and civil society organizations) to work with established financial institutions (such as banks) and new types of

financial service providers (such as mobile network operators) to explore the possibility to funnel Government to person (G2P) payments directly on account accessible to beneficiaries by using either debit or smart card. Technically, some of these electronic channels are identified as follows:

- I. **E-VOUCHERS** are unique serialized vouchers recorded in a database which can be redeemed electronically in exchange for cash or goods by enrolled merchants; often using a combination of smart cards and mobile phones to process the transactions as well as verifying the validity of the vouchers.
- II. PAYMENT CARDS are prepared cards, reloadable, magnetic stripe debit cards that can be used to withdraw cash at an ATM as well as paying for goods services at retail outlets while using a point of sale or POS device. It can also be a microprocessor or memory chip that is personalized with the holder's biometric information such as a finger point or photo.
- III. **MOBILE MONEY** is E-money stored in a digital wallet.
- IV. **NO PHYSICAL PAYMENT INSTRUMENT** which implies that in some cases, a transaction such as fund withdrawal can be completed by entering biometric information on a POS service.
- V. Online bank accounts transactions.

Indeed, the incentives to shift to digital deliveries of cash emerge from considerations of both programme implementers and recipients:

A) On the supply side (where digital and payment infrastructure are available), the management and administration of physical cash disbursement is expensive, risky and time consuming.

- B) Again, the physical transfer of cash does not allow providers to accurately track the transfer until it has reached the intended recipient.
- C) For the end users, physical disbursement can be both timeconsuming (needing to travel to where cash is deposited) and costly (both in terms of transport costs as well as in transaction costs such as bribes in certain cases.

Consequently, the ongoing national digital switchover programme (DSU) should be accelerated to support the process of the Analogue switch off (ASO). Essentially, the DSO programme will reduce the cost of internet services and increase broadband penetration in Nigeria.

Structurally, there are three key criteria that should guide the design and implementation of social cash transfer payment systems:

- 1. **ROBUSTNESS** refers to the importance of reliable, regular, safe and well-coordinated payments to the correct recipient.
- ACCESSIBILITY addresses the overall beneficiaries experience including cost and ease of access, payment modalities, communication and dignity.
- 3. **INTEGRATION** considers the use of existing structures and technologies; links with other social protection programmes as well as broader considerations of financial inclusion, economies of scale and shared systems.

Therefore, a central Bank Digital Currency (CBDC) is an innovative digital form of national money issued by a central bank that individuals and businesses can use to trade and make payments. As distinct from a reserve, bank deposit and physical cash; CBDCs are new form of central

bank-issued and universally accepted electronic currency. Basically, they can provide increased payment system security; financial stability and regulation; trade efficiencies and financial inclusion for underserved citizens. Technically, they come in various forms (including retail or wholesale versus account-based or token-based) and feature a digital ledger that can use technology like a blockchain.

Specifically, as at October 25, 2021, eNAIRA became digital form of the fiat currency (Naira) issued by the Central Bank of Nigeria (CBN) As a direct liability of the CBN, it is a legal tender and forms part of the currency-in-circulation. Operationally, the eNaira complements cash as a less costly, more efficient, generally acceptable, safe and trusted means of payment as well as store of value. Again, it is anticipated to improve monetary policy effectiveness enhance government's capacity to deploy targeted social interventions; provide alternative less costly channel for collection of government revenue as well as boost remittances through formal channels (CBN, 2021). Practically, the eNaira shall be administered by the CBN through the Digital Currency Management System (DCMS) to mint and issue eNaira. Here, financial institutions shall maintain a treasury eNaira wallet for holding and managing eNaira on DCMS. Clearly, the eNaira platform shall host eNaira wallets for different stakeholders while the eNaira stock wallet belongs solely to the CBN, which warehouses all minted eNaira. Similarly, financial institutions shall maintain one treasury eNaira wallet to warehouse eNaira received from the CBN eNaira stock wallet. On the other hand, eNaira merchant speed wallets shall be used solely for receiving and making eNaira payments for goods and services while enaira speed wallets shall be available for end users to transact on the eNaira platform.

Structurally, the financial institutions are intermediaries between the CBN and customers while their rules within the eNaira ecosystem shall include integrating the eNaira speed wallet feature into their electronic banking channels. Similarly, the merchant's roles include providing customers with alternative channels for making transactions using eNaira. In contrast, the ministries, Departments and Agencies (MDAs) are expected to receive revenue in eNaira and make payments in eNaira. However, the consumers are the end users of the eNaira with the following roles:

- I. Creating eNaira speed wallets and funding it.
- II. Utilizing eNaira as an alternative payment option for legitimate transactions.
- III. Protecting their eNaira speed wallet access credentials as well as
- IV. Notifying financial institutions in the event of fraud, complaints and disputes.

Initially, the following services shall be available to individual consumers on the eNaira platform:

- 1. PERSON TO PERSON (P2P)
- 2. PERSON TO BUSINESS (P2B) OR BUSINESS TO PERSON (B2P)
- 3. PERSON TO GOVERNMENT (P2G) OR GOVERNMENT TO PERSON (G2P)
- 4. CASH OR BANK ACCOUNT TO ENAIRA-SPEED WALLET
- 5. eNAIRA SPEED WALLET TO CASH OR BANK ACCOUNT.

And upon on boarding by the CBN, the following services shall be available to ministries, Departments and Agencies on the eNaira platform:

- I) MDAs TO PERSON OR PERSON TO MDAs
- II) MDAs TO MDAs
- III) MDAs TO FINANCIAL INSTITUTIONS (VICE VERSE)
- IV) MDAs TO BUSINESSES (VICE VERSA)
- V) MDAs TO CBN (VICE VERSA)

Statutorily, the charges for transactions that originate from the eNaira platform shall be free for the initial ninety days after commencement and then revert to applicable charges as officially issued. Yet, as operational challenge, the technology underpinning most digital currency designs is less established than current payment systems. This can therefore introduce the risk of myriad types of cyber-attack by bad actors wishing to gain control of the system or assets stored on transacted with the ledger. Again, in a token-based (retail) CBDC, merchants and citizens may use credentials in the form of a private key to make a transaction. Unfortunately, this creates a risk that keys could be cost or stolen (through phishing or other attacks) while assets and data are compromised. Therefore, threshold signature or multi-sig technology (in a public blockchain) could mitigate some of the identified risks. Here transactions can be secured by allowing only authorized users to spend their CBDC tokens and a key if one is lost (such as stolen user's mobile phone containing digital wallet). Technically, tools also exist to freeze to recover digital assets in such cases (if occurs).

#### 6.0 METHODLOGICAL FRAMEWORK

Fundamentally, social protection includes all public and private initiatives that provide income or consumption transfers to the poor, protect the vulnerable against livelihood risks and enhance the social status and rights of the marginalized. Essentially the aim is to reduce the economic and social vulnerability of the poor and marginalized groups as well as supporting the poor to overcome the demand-side barriers which prevent them from accessing basic economic and social services. Operationally, such interventions may be carried out by the state congovernmental actors or the private sector or the informal individuals or community initiatives. As described in table (6.1), Devereux and Sabetes-Wheeler (2004) transformative social protection framework offers the most practical approach while its analytical view goes beyond safety nets and encompasses several social protection measures. As sub-component of social protection, cash transfers can include a wide variety of aims and objectives which affect their design, target group and implementation mechanisms. Clearly table (6.2) shows the variety of types of cash transfers such as conditional transfers (CIT) and unconditional transfers, cash for work, child grants pensions and disability allowances.

## TABLE 6.1: SOCIAL PROTECTION FRAMEWORK: TRANSFORMATIVE APPROACH

S/N	ТҮРЕ	POVERTY-FOCUSED SOCIAL	INSTRUMENT TYPES		
		PROTECTION			
		INTERVENTION			
Ι	PROTECTIVE	SOCIAL ASSISTANCE	CASH TRANSFERS, FUND TRANSFERS, FEE		
			WAIVERS FOR SOCIAL SERVICES, SCHOOL		
			SUBSIDIES, SCHOOL FEEDING		
II	PREVENTIVE	SOCIAL INSURANCE	HEALTH INSURANCE, PREMIUM WAIVERS		
			SUBSIDISED RISK-POOLING MECHANISMS		
III	PROMOTIVE	PRODUCTIVE TRANSFERS	AGRICULTURAL INPUTS TRANSFERS,		
		SUBSIDIES AND WORK	FERTILIZER SUBSIDIES ASSET TRANSFERS,		
			PUBLIC WORKS PROGRAMMES		
IV	TRANSFORMATIVE	SOCIAL EQUITY MEASURES	EQUAL RIGHTS/SOCIAL JUSTICE LEGISLATION,		
			AFFIRMATIVE ACTION POLICIES, ASSET		
			PROTECTION		

## TABLE 6.2 CASH TRANSFERS: TYPOLOGICAL APPROACHES

S/N	CASH	PROGRAMME DETAILS	MAIN OBJECTIVES	TARGET
	TRANSFER			BENEFICIARIES
	TYPES			
1	CONDITIONAL	REGULAR INCOME	IMPROVE HEALTH,	CHILDREN IN POOR
	CASH	TRANSFERS TIED TO	NUTRITIONAL AND	HOUSEHOLDS
	TRANSFERS	BEHAVIOURAL	EDUCATIONAL OUTCOMES	
		CONDITIONS		
2	CASH FOR WORK	CASH PAYMENT OF	REDUCE SEASONAL	ABLE-BODIED ADULTS IN
		WAGES FOR PUBLIC	VULNERABILITY AND	POOR HOUSEHOLDS
		WORKS PROJECTS	INCREASE HOUSEHOLD	
			INCOME	
3	UNCONDITIONAL	REGULAR INCOME	INCREASE HOUSEHOLD	POOR HOUSEHOLDS
	CASH	TRANSFERS TO POOR	INCOME TO MEET BASIC	WITH NO AVAILABLE
	TRANSFERS	HOUSEHOLDS WITHOUT	NEEDS	LABOUR
		ANY CONDITIONS		

4	SOCIAL	REGULAR INCOME	PROVIDE BASIC MEANS OF	ELDERLY
	PENSIONS	TRANSFERS TO THE	SUBSISTENCE TO THE	
		ELDERLY	ELDERLY	
5	CHILD GRANTS	INCOME SUPPORT FOR	SUPPORT TO MEET BASIC	CHILDREN
		PEOPLE WITH DISABILITY	NEEDS OF CHILDREN	
6	DISABILITY	INCOME SUPPORT FOR	SUPPORT DISABLED	DISABLED THAT CAN NOT
	GRANTS	PEOPLE WITH DISABILITY	PEOPLE'S ACCESS TO	WORK
			SERVICES AND BASIC	
			NEEDS.	

Therefore, in order to define a quantitative methodology for showing attribution (cause-effect); an empirical framework for impact evaluation will be adopted for the impact assessment of Household uplifting programme (HUP) in Nigeria. Basically, this impact evaluation will focus on the net impact of HUP on households located in HUP targeted communities represented by the six states in the six geo-political regions that have benefitted from the programme. As designed, this impact evaluation uses counterfactual analysis involving comparism between what actually occurred and what would have happened in the absence of the intervention. This will be the rationale for the inclusion of households with no HUP benefits and non-targeted communities as control groups so as to provide a sense of the variation in participation and hence a sense of the counterfactual. Clearly, the impact evaluation proposal involves the assessment of HUP-CTP outcomes by addressing the basic impact evaluation problem as well as disentangling HUP-CTP effects from intervening factors.

As specification of the empirical model for the impact evaluation, we follow the studies of Asfaw, et al (2012); UNICEF, 2017; and Aker, et al (2020). Assure the following denotations:

- Di = Dummy variable equal to I if a community has a household benefiting from HUP-CTP.
- Di = Dummy variable equal to 0 if a community has a household not benefiting from HUP-CTP.
- Yi = Outcome of interest such that potential outcomes are defined as Yi (Di) for every community.

Surely, one of these potential outcomes would be defined as effectiveness of the cash transfer programme (CTP). Therefore, the treatment effect of the HUP-CTP for community i ( $\tau_i$ ) is the change in the outcome measure facilitated by the CTP as defined below:

$$\tau_{i} = Y_{i}(1) - Y_{i}(0)$$
 (6.1)

Clearly, equation (6.1) states that only one outcome is observable, that is, either a community has households benefitting from HUP – CTP or it does not and thus leaving the counterfactual component in (6.1) unknown. Clearly, this implies that the effective analysis of the impact evaluation of the HUP-CTP is conditional on the ability to identify a suitable counterfactual sample. However, it is only possible to have Average Treatment Effect (ATEs) incorporating information from the counterfactual. Thus, assuming a Randomized Control Trial (RCT) in the research design, the ATE of the CTP can be identified as the mean difference in outcomes between the two groups:

$$E(\tau) = ATE = E[Y(1)] - E[Y(0)]$$
 (6.2)

Again, the Average Treatment Effect on the Treated (ATT) which measures the average impact of the HUP-CTP on communities can be determined as follows:

ATT = E 
$$[\tau/D = 1]$$
 = E  $[(Y(1) / D = 1] - E [Y(0)/D=1]$  (6.3)

In order to address the problem of selection on unobservable characteristics, the Propensity Score Matching (PSM) and Difference –in-Difference (DD) estimator shall be statistically applied. Here, the propensity score is defined as the conditional probability of receiving a

treatment given pre-treatment characteristics and by using binary logit regression models, the propensity scores can be computed as follows:

$$P(x) = Pr [D=1/x] = E [D/x]$$
 (6.4)

Where P = Probability

- D = [0, 1] is the indicator of exposure to treatment characteristics (dependent variable).
- D = 1 If exposed to treatment/CTP beneficiary
- D = 0 If not exposed to treatment/CTP non-beneficiary
- X = Multidimensional rector of observed characteristics.

Statistically, for the household analysis, the observed characteristics to be used include the following variables:

$$X_1$$
 = Household (caregiver) age

- $X_2$  = Household (caregiver) marital status
- $X_3$  = Household (caregiver) education
- $X_4$  = Household (caregiver) occupation

 $X_5$  = Household size

In order to avoid the problem of selection on unobservable, the Difference in Difference or Double Difference (DD) estimator will be used to compliment the propensity score matching (PSM). Technically, the DD estimator compares changes in outcome measures (changes from before and after the programme) between programme participants and non-participants. Essentially the DD estimator nets out the effect on

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outcome indicator. Econometrically, an explicit exploration of Difference in Difference estimator is presented as follows:

DD estimator = E  $(Y_{P1} Y_{P0}) (Y_{np1} Y_{np0})$  (6.5)

WhereE=Expected value $Y_{P1}$ =Outcome of beneficiary after project $Y_{P0}$ =Outcome of beneficiary before project $Y_{nP1}$ =Outcome of non-beneficiary after project $Y_{nP0}$ =Outcome of non-beneficiary before project

And after obtaining a good quality match, the matched sample will be used to compute the Average Treatment Effect for the Treated (ATT) to determine the project impact as follows:

 $E Y' Y'_{D} | E Y'_{D} | E Y'_{D} | (6.6)$ 

Where  $E Y'_{D} = Observed outcome of the treated while$ 

participating in the programme.

 $E Y^{0}/_{D} | = Counterfactual outcome$ 

- = expected outcome that would have received if they had not participated in the programme.
- Outcome of the non-beneficiaries since they have similar characteristics with beneficiaries.

Methodologically, the evaluations questions will centre on the following factors:

impact effectiveness, process, relevance and sustainability. However, to estimate the impact of different cash transfer delivery mechanisms on a variety reduced-form regression specification of the following form:

$$Y_{iv} = \beta_0 + \beta_1 ZaP_v + \beta_2 mob_v + X_{iv0} \tau + seed v + \theta c + \epsilon_{iv} (6.7)$$

- Where  $Y_{iv}$  = The outcome of interest (costs, uses of cash transfer, food security and assets) of individual or household i in community v after the transfer.
  - $Zap_v =$  An indicator variable for whether the community was assigned to the digital transfer program.
  - $Mob_v =$  An indicator variable for whether the community was assigned to the mobile group.

- $X_{iv0}$  = Vector of covariates that differed at baseline, such as age.
- $\epsilon_{iv}$  = Error term that captures unobserved individual or household characteristics or idiosyncratic shocks.
- $\beta_1$  and  $\beta_2$  = Coefficients of interest which represent the intent-to-

treat effect of the different transfer mechanisms (as compared with basic cash intervention) on the outcome of interest under the assumption that they are conditionally orthogonal to  $\in_{it}$ .

Econometrically, equation (6.7) is our preferred specification for most outcomes. However, we shall also apply Analysis of Covariance (ANOVA) specification which controls for baseline value of the outcome variable.

## 7.0 DATA COLLECTION PLAN

Empirically, as a quality assurance measure, the design of the data collection instrument will be structured to the scope of the HUP-CTP impact evaluation while taking into account of the specific objectives of the cash transfer programme.

Basically, this will inform the variables to be stated in the data collection instruments. Furthermore, the design of the data collection instruments such as survey questionnaires and in-depth interview protocol will focus on achieving adequate data collection from different sources in a complementary format. Clearly, this approach will ensure the internal validity and reliability of the instruments that will help to improve data quality. Again, some check questions will be included to ensure that inconsistencies on the part of respondents and enumerators are detected in the fieldwork. Similarly, the survey questionnaires will be pre-tested so as to make the final corrections to the questionnaires as appropriate.

Specifically, key informant interviews will be carried out with stakeholders at the national level as well as in selected states and local government areas. This will also include relevant government, donor, international and national non-governmental organization, civil society and academic actors.

Notably, the Federal Government of Nigeria has prioritized the implementation of social protection interventions as an instrument for the reduction of poverty and socio-economic vulnerabilities in the population through the establishment of the National Social Safety Nets Projects (NASSP). Critically, one of the NASSP objectives is to strengthen

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and consolidate the building blocks of a safety net system at the national and state level that can deliver targeted support to poor households across Nigeria. Therefore, under this objective and to ensure sufficient data availability for safety nets targeting and monitoring; NASSP is supporting the National Living Standard Survey (NLSS) which is a household survey representative at the national and state levels used by the National Bureau of statistics (NBS) to monitor poverty in Nigeria.

In fact, a deliberate design of the NLSS is to over sample households so as to capture existing beneficiaries of the NASSP cash transfer while allowing it to be used as a baseline for future evaluation. Statistically, the NLSS oversample will be derived in two stages:

- (I) The wards serving as the Primary Sampling Unit and
- (II) The Households as Secondary or Ultimate Sampling Unit.

Consequently, with guidance from the NASSP coordinating office (NASSCO), the oversample will be selected from the National Beneficiaries Register of Poor and Vulnerable Households (PVHHs) across the selected states from the six geo-political zones of Nigeria.

As engagement process, the state cash transfer unit has local staff that will facilitate the contacts of beneficiaries to be interviewed.

Essentially, they are referred to as the Cash Transfer Facilitator (CTF). Operationally, the CTFs are appointed for each political ward from a pool of local government staff so as to support the roll-out of the cash transfer in communities within the affected local government.

Practically, the CTF will be contacted through the state cash transfer unit in order to trace the required Households.

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Finally, experienced and competent people will be recruited as enumerators and supervisors. Here, efforts will be made to ensure that the recruited persons have participated in households surveys in the past so as to enhance appropriate interpretation of questions as well as guarantying adequate communications between respondents and interviewers. Again, given the high number of participants that will be involved in the impact evaluation study and to avoid respondents' bias; no payments or compensations will be given to the participants. However, participants and local authorities will be informed about the potential benefits of the impact evaluation including potential sustainability and programme-scale-up.

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