



An Assessment of the Sustainability of Resettlers Livelihood Assets in the Apo Resettlement Scheme of Abuja, Nigeria

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Authors' contributions

This work was carried out in collaboration between all authors. Author SDM designed the study, wrote the protocol and the first draft of the manuscript. Authors NAI and PUA performed the statistical analysis, managed the analyses of the study and the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

The Apo resettlement scheme was meant to resettle 874 households away from Apo, Garki and Akpanjanya villages to Apo resettlement town with a view that no resettler should emerge worse off than he was before resettlement. This study assesses the sustainability of resettlers' livelihood assets in the scheme by assessing resettlers' lost and compensated livelihood assets as well as their adaptation strategies for a sustainable livelihood. Intensive literature review helped in the selection of five livelihood capitals which include Human, Natural, Financial, Physical and Social for the sustainability assessment. About 25% of the household heads were interviewed through questionnaires that were adequately supplemented by direct field assessments of the living conditions of the resettlers. Descriptive and inferential statistics were employed in analyzing the data which revealed that there is a significant difference between the lost and compensated livelihood assets of resettlers. The resettlers lost assets across the human, natural, financial, physical and social capitals: only two physical assets (i.e. plots and buildings) and a few social assets were restored to resettlers in the compensation scheme without any livelihood

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enhancement programme for resettlers. Lack of livelihood enhancement resulted in resettlers restructuring their buildings to hire tenants or selling off their buildings, petty trading and menial jobs among others as adaptation strategies. The study recommends a corrective measure for the Apo Resettlement scheme through immediate restoration of livelihoods and empowerment programs.

Keywords: Resettlers; resettlement; sustainable; livelihood assets and Abuja; Nigeria.

1. INTRODUCTION

In Nigeria, resettlement has been undertaken since the colonial era for a variety of situations and objectives [1]. It began with the construction of the Kainji dam in 1963 for hydroelectricity and its attendant resettlement scheme, several development projects emerged in the 1970s including River Basin Development Projects, creation of military installations, Land Clearing Schemes, large institutional projects and urban renewal programs that induced massive population displacements and resettlement. He further added that, from the 1980s, urban development and redevelopment projects such as provision of staff housing, the development of new administrative capital cities (for newly seated states and local governments) and particularly the movement of the Federal capital from Lagos to Abuja emerged as the major drivers of Development Induced Displacement and Resettlement in Nigeria. The Federal Government of Nigeria decided in 1976 to establish a Abuja as the new Federal Capital because of its centrality *“with easy accessibility from all parts of the country by road, rail and air which would facilitate the administration of the country,... serve as a symbol of our unity and greatness and from the view point of national security, be less vulnerable to external aggression as it would be practically immune to sea-borne attack...”* (Gen. Murtala Muhammed, Nigeria’s Head of State, 1976). The development of Nigeria’s new Federal Capital Territory (FCT) project at Abuja covering 8000 km² is the largest and most prominent development project in recent times that stimulated massive population displacement. Over the years, the Abuja resettlement scheme underwent policy changes due to several challenges that undermined the initially adopted policies.

The first major policy statement made by Government in 1976, when it decided to move the Federal Capital of Nigeria from Lagos (in the coastal area) to Abuja (in the central part of the country) was for complete relocation of the entire inhabitants (of about 150,000 – 300,000 people) outside the new Federal Capital Territory. This

was aimed at freeing the territory from any primordial claims, and to enable Government take direct control, plan and develop the new city without any hitch. [2] argued that resettling such a huge population was thought to be unwise and could have delayed the take off of the project. It was then decided to allow the inhabitants to remain, but could be resettled within the territory, should their places of abode be affected by city development project. This major shift in policy direction can be said to be the root cause of problems of squatters and Land Administration within the FCT. This began with the Total Evacuation Scheme of 1979 followed by the Kubwa Resettlement policy of 1980, then the Integration Policy of 1991 and currently the New Resettlement Policy of 2005. The new policy involved moving the original inhabitants outside the Federal Capital City and any other areas designated for development. In the implementation of this Policy, a total of 12 communities were earmarked for resettlement. In the first phase, four Resettlement Sites were identified, namely; Apo (460 hectares in Abuja Municipal Area Council) meant for Garki, Apo and Akpanjanya villages respectively; Galuwyi/Shere (900 hectares in Bwari Area Council); Wasa (700 hectares in Abuja Municipal Area Council) and Anagada (2,519 hectares in Gwagwalada Area Council). The implementation of the Abuja Master plan was designed in incremental stages where one sector is completed before the next is begun [3] and at every phase, the native settlers are to be resettled elsewhere for ease and completion of physical development. For over thirty four (34) years of commissioning of the physical development plan, there has not been complete resolution of the issues which has threatened the sustainability of the Abuja Resettlement project.

The Apo Resettlement Scheme was undertaken to give more space for physical development especially the development of houses in neighborhoods and access roads for the city workers. It came with resettlement packages for the affected communities in order to ensure sustainability of the scheme. A total of 874 households has been resettled and compensated

by the Federal Capital Development Authority (FCDA)-the authority in charge of the Resettlement Planning Framework to ensure successful resettlement of the affected communities. The Resettlement Task Force of the F.C.D.A. in 1990 recommended three resettlement options as follows namely **Comprehensive Resettlement** (development of a new settlement site within the capital territory with buildings and infrastructural facilities for the people being resettled with full compensation packages), **Partial Resettlement** (the case of Apo Resettlement where the people, compensated new lands, money and buildings are partially dislocated from their original homes and livelihood assets to give room for development) and **Integration option** which include the development of a settlement within the FCT to conform with the general development plan of the FCT without relocation of the people and their assets [1]. The main elements of the Resettlement & Community Support Program include: New Resettlement Township with Communal Facilities such as Community Centre, Schools, Place of worship, Boreholes, houses, tarred roads, electricity, movement allowance (₦110,000) etc. These elements are expected to turn the people around in terms of poverty alleviation, job creation and enhanced standard of living. The Resettlement Scheme was based on the United Nation's philosophy of resettlement which states that "no resettled person should emerge from the resettlement scheme worse off than he was before displacement". This connotes that sustainable livelihood and comfort for the Resettlers were the primary target of scheme. Also, the World Bank policy on involuntary resettlement outlines how to address situations where people will lose property, means of livelihood or experience a change in their standard of living as a result of the implementation of a Bank financed project. This policy provides the guidance for the mode and schedule for payment of all compensations, and recommends that due consultations be made with all stakeholders of the project before, during and after project implementation with special attention to disadvantaged groups (women, children and the disabled) within the population. Involuntary resettlement should be conceived as an opportunity for improving the livelihoods of the affected people and undertaken accordingly. All people affected by involuntary resettlement should be consulted and involved in resettlement planning to ensure that the mitigation of adverse

effects as well as the benefits of resettlement is appropriate and sustainable [4].

However, resettlements always come at a price and sacrifices by the resettlers who are always at the losing end with poorly conceived safeguards with common issues such as the abandoning the displaced persons, forced displacements, loss of livelihood assets, direct and indirect persecution [5]. The Ministerial Committee on Facts Finding and Way Forward on Apo Resettlement (MCFFWFAR, 2012) identified a number of sustainability challenges facing the scheme to include: the natives were not carried along in the design of the houses, the rooms are so small and unfit for human habitation; the resettlement site lack space for expansion; some persons entitled to houses were allocated plots; allocation of houses meant for resettlement to non-indigenes; outstanding compensation claims with respect to farmlands which were acquired in the implementation of the Resettlement Scheme are yet to be addressed and encroachment on the Apo Resettlement Site, particularly the neighbourhood centres, public facilities, and flood plains by the Land Department/Abuja Geographical Information Systems (AGIS) among others. A reconnaissance assessment of the resettlers and their resettled homes prior to this research reveals that some of the above mentioned problems are still being faced by the resettlers, leading to some of the resettlers selling off their properties and relocating elsewhere. One of the major problems that is often overlooked or neglected by the planners and decision makers is the livelihoods of the resettlers, which is a major factor in the success and sustainability of the scheme. This research therefore is to examine and assess the livelihood assets of the resettlers and their sustainability towards the success of the scheme and also to bring to limelight the fundamental challenges of resettlers in the Apo resettlement scheme. The following research questions are addressed in the course of this work in order to achieve the goals of this research work:

1. What are the livelihood assets lost by resettlers in the Apo resettlement scheme?
2. Which of the lost resettlers' livelihood assets were compensated in the scheme?
3. What are the adaptation strategies of resettlers over time? and
4. How can the livelihood assets of resettlers be improved to enhance sustainable livelihood?

2. LITERATURE REVIEW

The concept of resettlement has defied a universally accepted definition. Various authors have attempted to explain the concept. It is the movement of communities from one environment to the other, and changes or modifications of the physical and social environment in which resettles find themselves in and adapt to, he further explains the concept as a variety of migration types. This perhaps explains why some writers refer to the concept in other terms such as 'population resettlement,' 'population relocation,' 'forced migration,' 'population redistribution,' 'transplanted population,' 'displaced people,' 'evacuees,' and 'refugees', a process that seriously jeopardizes their existence and/or seriously affected the quality of their lives [6]. According to [7], large development projects often lead to human displacement. Such development-induced displacements are often permanent and that the devastating impacts of many mega projects and the increasing evidence that economic redistribution and adequate compensation seldom occur usually fuel the human rights and displacement debate. Majority of the development-induced displacement often fare badly long after such projects are launched. Development projects such as resettlement ultimately aim to improve people's well-being. Such projects displace people either voluntarily or involuntarily. When the original aim is achieved, it gives rise to positive effects on the resettled persons. However, such projects frequently result in direct negative impacts on some portions of the population. Frequently, such people become involuntarily displaced and have to resettle elsewhere. The United Nation High Commission for Refugees estimated that the number of people displaced due to development from 1980 to 2000 is within the range of 200 million and the increasing number continues to be in the neighbourhood of an additional 10 million annually [8]. Experts estimated that roughly 14 million people around the globe are displaced each year due to dam construction, urban development, transportation, and infrastructure programs. For those affected people, involuntary resettlement means a drastic disruption fraught with risks of impoverishment [9].

The terminology "impoverishment risks" used in this study is defined as a state that the affected people of post-displacement who are difficult to restore their socioeconomic patterns become poor due to gradual dismantling in community

aspects. These risks can however be managed to enhance development and improved wellbeing, when potent institutional frameworks are put in place to manage both positive and negative effects of the resettlement project. The theoretical framework of Impoverishment Risks (IR) model was proposed by Michael M. Cernea, a counteraction of the anticipated and predictable risk factors to work towards double sustainable development (for both the development projects themselves and the socio-economic aspects of the affected people); but effective assessments of the model require observation of the effect of space and environment on individual risk factors [9]. Social justice, a theory by John Rawls is about fairness involving the ideas of original position, the veil of ignorance and the derivation of two principles of justice (John Rawls, 1971). He emphasized on egalitarianism and distributive justice. These concepts have their relevance to the concepts of involuntary resettlement particularly when we argue for distributive justice, land for land and evaluation of pre and post development projects conditions under involuntary resettlement (Bala, 2006, cited in [10]). In summary, [11] mentioned eight risks affecting displaced people, pointing out, however, that this classification is not exhaustive, they include Landlessness, Joblessness, Homelessness, Marginalization, Food Insecurity, Increased Morbidity and Mortality, Loss of Access to Common Property and Services and Social Disarticulation. Although compensation of resettlers is largely related to the national legal and political contexts of a nation, there are numerous sensitive problems related to the calculation of compensation packages and to the elaboration of resettlement strategies. Most resettlement policies cannot provide sufficient safeguards against the complex social risks and losses involved in resettlement [12]. A resettlement project in which people do not experience impoverishment and social disarticulation has better chances of acceptance, both by affected communities and by society in general.

Sustainability is not only one of the principles of engagement in development planning process but also a challenge in most developing countries. In planning circles the notion of development is often equated to sustainable development, which is simply seen as development for the present without compromising that of the future generation (Bruntland, 1987 in [6]). This notion has guided the development of projects worldwide including

the Physical Development of the Federal Capital City (FCC) Abuja and the resettlement of its affected people. A critical component in resettlement planning is the issue of livelihood assets restoration. Psychologically, the resettlers are often times not satisfied because of their believe that the development-induced projects are not directly for their own benefits but for the benefits of privileged few especially the rich. Population displacement is considered acceptable if the development project brings significant economic benefits for the entire society and is thus justified in terms of public interest. In general, such interventions are considered morally acceptable if the public interest is evident and considered of utmost importance [12]. Many authors agreed that compensation alone is not sufficient for alleviating social risks and losses that are inherent in involuntary resettlements. [13] says that the idea that full compensation for losses would be adequate to restore the incomes and livelihood assets of the resettlers is most times unwarranted and unproven to be true. [14] further suggested that project-specific compensation should be supported by social safety nets designed to address the plight of those people likely to be affected by development projects. The Sustainability of resettlement has one underlying goal of reinstating affected inhabitants quickly into their old lives (cultural, economic and physical aspects), and if possible more improved and lasting situations. Achieving this goal comes with implicit and explicit challenges that arise because of land acquisition, compensation and integrating resettlers into their new home through community participation. In Nigeria, according to [15], Socio-economic Impact Assessment (SIA) of resettlement schemes are not usually carried out or effectively implemented if any. This often led to the many of the socio-economic problems faced by resettlers in their new environment. In the process, housing, community structures and systems, social networks, and social services can be disrupted [6] and such is the case with the Abuja Resettlement Scheme.

2.1 The Study Area

Abuja is Nigeria's Federal Capital Territory (FCT) located in the middle of the country with a land area of about 8,000 km² of which the actual city (i.e. Federal Capital City) occupies 250sq km Abuja is bounded on the north by Kaduna state,

on the west by Niger state on the east and south-east by plateau state, and on the south-west by Kogi state. It lies within latitude 9° 25'N and 9° 20'N of the equator and longitude 7° 45'E and 7° 39'E [16]. It was created in Abuja on 3rd Feb. 1976 through the promulgated Federal Capital Territory decree no. 6, 1976 mainly due to the growing unsuitability of Lagos as Nigeria's Federal Capital City as result of the problem of peripheral location, dual and conflicting role as both federal and state capital, acute shortage of land space for expansion, and inadequacies for infrastructural development among other reasons since the late 1960's [1,17,16].

The population of the city as at the 2006 census was 776,298 making it one of the ten most populous cities in Nigeria (<http://Wikipedia.org/wiki/abuja>). Unlike other States in the Federation that are being administered by governors and their cabinets, the FCT is headed by a minister. The city has five Area councils: Abuja Municipal Area Council (AMAC), Kuje Area Council, Gwagwalada Area Council, Abaji Area Council and Bwari Area Council. The Federal Capital City (FCC) which is the study area is located within the Abuja Municipal Area Council. Apo Resettlement is located in Abuja Municipal Area Council. It is along the Outer Southern Express Way (OSEX) around the Phase II of the FCC. It is bounded to the North by Guzape District and to the West by Dutse and Wumba Districts of the FCC. Apo is comprised of popular features such as shopping mall, Apo round about, Apo bridge, Apo main village, Federal Housing Authority (FHA), Apo resettlement town, LEA primary and secondary schools among others. The study area has an artificial lake called Jabi Lake located in the North-Western part of the study Area.

3. RESEARCH METHODS

The livelihood assets that are assessed in this work are grouped according to the Department for International Development (DFID)'s sustainable livelihood framework namely: Human Capital, Social Capital, Natural Capital, Physical Capital and Financial Capital. Data were obtained from direct field observations, interviews, questionnaires and gazettes on resettlements from the Urban and Regional Planning Department of FCDA, Abuja.

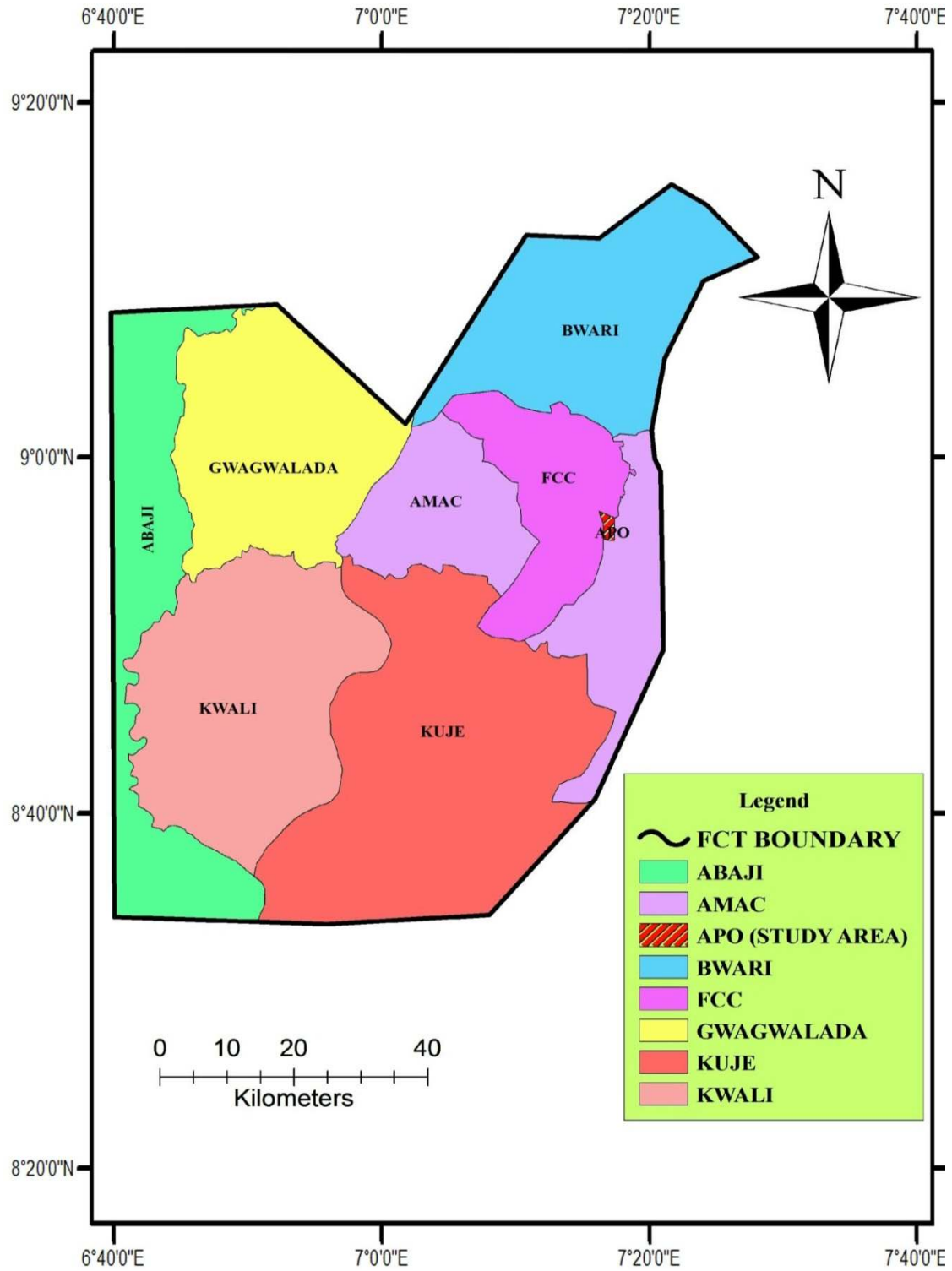


Fig. 1. FCT showing the study area and area councils
 Source: Urban and Regional Planning Department FCDA, Abuja (2016).

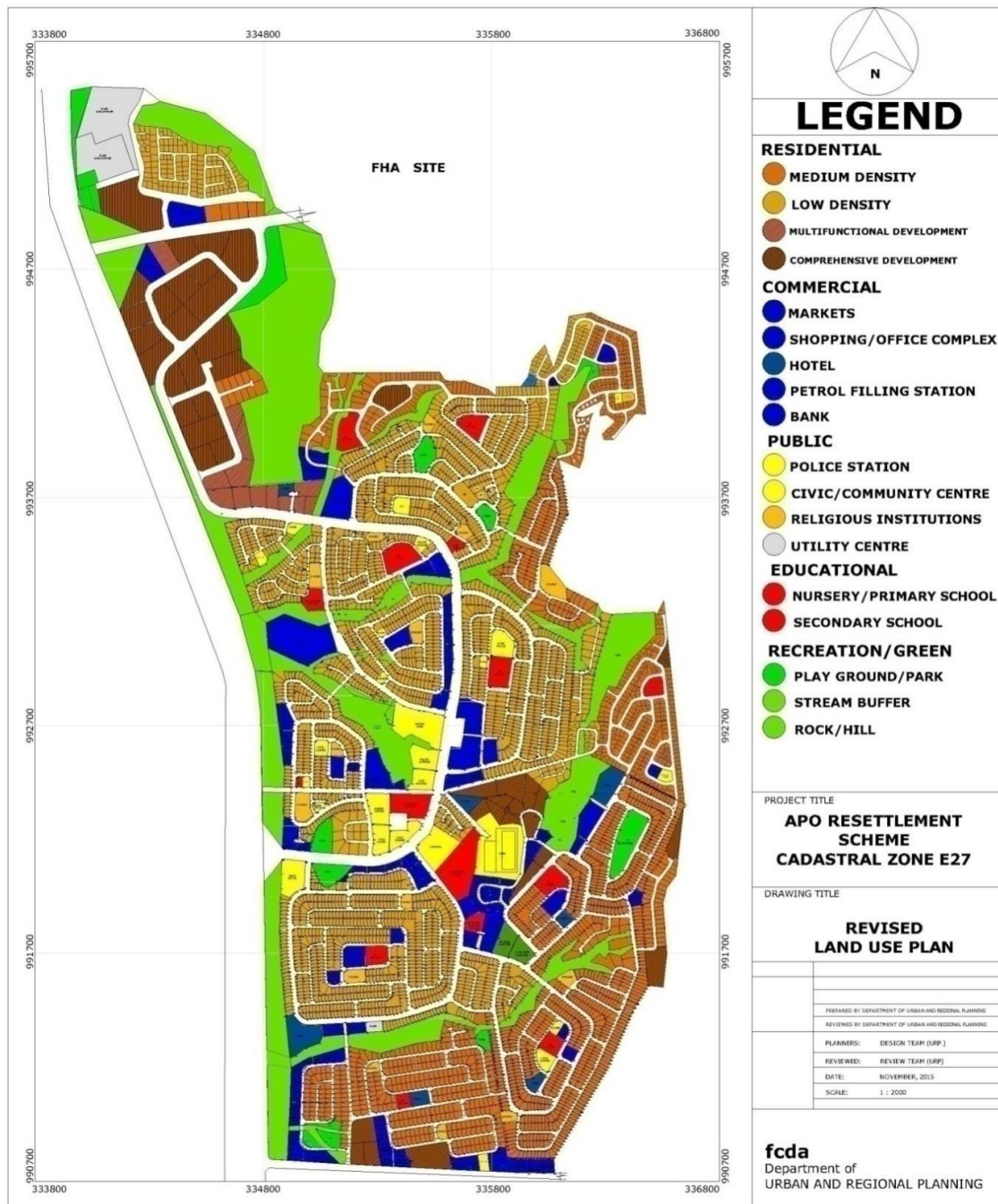


Fig. 2. The Landuse plan of Apo resettlement scheme
Source: Urban and Regional Planning Department FCDA, Abuja (2016).

3.1 Sample Frame and Sample Size

The sampling frame includes the population of all the households (874) within the villages of the natives to be resettled within the scheme. The villages include Apo village (with 34 houses),

Garki Hausawa village (256 houses), Garki Gbagyi Village (453 houses) and Akpajenya village (131 houses) (URP, FCDA Abuja, 2015). A sample of size of 217 households was computed using two related formulae. The first was Fischer's (1998) formula for calculating

sample proportions (equation 1) and its related formula for finite population correction for proportions (equation 2). This is done because a given sample size provides proportionately more information for a small population than for a large population.

First formula for sample proportion:

$$n_o = \frac{Z^2 pq}{e^2} \quad (1)$$

Second formula for finite population correction for sample proportions:

$$n = \frac{n_o}{1 + (n_o - 1)/N} \quad (2)$$

Where

n_o = sample size proportion;
 z = Z - score at 95% confidence level;
 p = expected percent accuracy;
 q = 1-p;
 e = error margin and
 N = population size

3.2 Determination of Sample Size

$$n_o = \frac{Z^2 pq}{e^2} \quad (1)$$

Where:

N = 874 (total number of houses to be resettled within the Apo Resettlement Scheme)

e = 0.05 (level of significance)

Z = 1.96, that is the value of Z corresponding to the 95% confidence level

p = 0.25 (25%)

q = 1-p (1-0.25=0.75)

$$n_o = \frac{(1.96)^2 \times 0.25 \times 0.75}{(0.05)^2} = \frac{0.7203}{0.0025} = 288.12$$

3.3 Finite Population Correction for Proportions

$$n = \frac{n_o}{1 + (n_o - 1)/N} \quad (2)$$

$$n = \frac{288.12}{1 + (288 - 1)/874} = \frac{288.12}{1.3284} = 217 \text{ approximately.}$$

Purposive sampling technique was used in administering questionnaires to the resettlers or their representative (wives and children) at various locations (former and resettled homes). Analysis of the data was done with the aid of SPSS. The research hypothesis which states that 'there is no significant difference between lost and compensated livelihood assets of resettlers' was tested using Wilcoxon Signed Ranks Test at (0.05) 5% level of significance.

4. ANALYSIS AND DISCUSSION OF FINDINGS

This section analyses and discusses the data obtained from the respondents and secondary sources. It discusses the socio- demographic characteristics of the respondents, their lost and restored livelihood assets, their adaptation and livelihood improvement strategies and the tested hypothesis. Out of the 217 administered questionnaires, only 200 questionnaires were suitable for analysis.

4.1 Socio- demographic Characteristics of Respondents

Information on Table 1 shows that majority (76.5%) of the respondents are male because of their roles as the household heads or representatives while 79.0% are within the youthful age range of 21-40. Majority of the respondents are educated which could be attributed to the plenty of educational centres in Abuja being a capital city. The occupation of the respondents before resettlement are mainly farming and trading, this supports the works of [1] and [17], which noted that most Abuja natives are predominantly farmers. But notably, there is a significant decline from farming activity after the resettlement because the loss of farmlands by most of the respondents, trading and menial jobs are now the major occupation of the resettlers. It is also noted that the resettlers have large family sizes which is the major factor that made their resettled homes neither adequate nor comfortable for them.

4.2 Lost and Restored Livelihood Assets

Table 2 highlights the completely lost livelihood assets, partially lost livelihood assets and compensated livelihood assets of the resettlers.

Table 1. Socio- demographic characteristics of respondents

Variables	Frequency	Percent	Valid percent	Cumulative percent
Sex				
Male	153	76.5	76.5	76.5
Female	47	23.5	23.5	100.0
Total	200	100.0	100.0	
Age				
21-40	158	79.0	79.0	79.0
41-60	33	16.5	16.5	95.5
61 above	9	4.5	4.5	100.0
Total	200	100.0	100.0	
Religion				
Christian	74	37.0	37.0	37.0
Muslim	126	63.0	63.0	100.0
Total	200	100.0	100.0	
Educational status				
Uneducated	51	25.5	25.5	25.5
Primary	27	13.5	13.5	39.0
Secondary	78	39.0	39.0	78.0
Tertiary	44	22.0	22.0	100.0
Total	200	100.0	100.0	
Pre-resettlement occupation				
Farming	104	52.0	52.0	52.0
Trading	63	31.5	31.5	83.5
Wage Employment	6	3.0	3.0	86.5
Civil Servant	8	4.0	4.0	90.5
Unemployed	19	9.5	9.5	100.0
Total	200	100.0	100.0	
Post-resettlement occupation				
Farming	10	5.0	5.0	5.0
Trading	136	68.0	68.0	73.0
Wage Employment	13	6.5	6.5	79.5
Civil Servant	12	6.0	6.0	85.5
Unemployed	29	14.5	14.5	100.0
Total	200	100.0	100.0	
Household size				
0-4	42	21.0	21.0	21.0
5-8	54	27.0	27.0	48.0
9 & above	114	52.0	52.0	100.0
Total	200	100.0	100.0	

Source: Authors' field survey, 2016

4.3 Completely Lost Livelihood Assets

The following are percentages of assets respondents lost completely: Lands (100%), Plants (100%), Streams (100%), Buildings (100%), Schools (100%), Market (100%), Health Centers (100%), Roads (100%), Electricity (100%), Burial Ground (100%), Village square (100%), Rock stones (31.5%) and Job earning (11.5%). These assets were lost completely because the resettlers were expropriated from their original location and thus had to abandon these assets.

4.4 Partially Lost Livelihood Assets

The following are percentages of assets respondents lost partially: Health (100%), Skills(100%), Nourishment (100%), Savings (100%), Access to credits (100%), Strong link with family and friends (100%), Culture and tradition (100%), Strong association with age groups (100%), Business (47.37%), Job earnings (52%), Animals (49%) and Traditional or social status (12.5%). These assets were partially lost because they were tangible and intangible assets

that could be carried along by resettlers to their new location. Observations and interview with respondents reveal that the health of resettlers was mainly lost psychologically due to trauma of the resettlement news and relocation stress; skills was lost due to interrupted work and practice during relocation period; nourishment was lost due to shift from consumption of cheap fresh farm products from personal farms; savings was lost due to increased expenditure; culture and tradition was lost due to change of environment and problems of cultural adaptation in the new environment; strong ties with family and friends were severed. Many of these losses are also similar to the findings of [1] and [5] in their various studies on resettlements.

4.5 Compensated Livelihood Assets

The resettlement scheme was able to restore the following livelihood assets: Schools (100%); Roads (100%), Buildings (82%), Health Centers (48%), Access to credit (48%); links with family and friends (39.5%), Culture and tradition (39.5%), Electricity (38%), Burial Ground (22%), Market (22%), Land (18%). The low level of land compensation has also been reported by [15] in their study. Only lands and buildings were given to resettlers directly, of which 82% of the respondents were given buildings and 18% given only lands. Interviews and observations reveal that the respondents complained that their new buildings are too small with no space for expansion; the LEA primary and Secondary schools provided were too small with insufficient classrooms and facilities, thus resulting to increased travel distance and expenditure in sending children to nearby private schools; the roads were good but some are without drainages and speed bumps to reduce speed and accidents; only one primary health centre was provided which resettlers complained was insufficient; access to credits was only compensated by commercial banks which is inaccessible to most resettlers due to demands for collateral; strong link with family and friends was compensated by resettling resettlers according to neighborhoods of their former community; respondents complained electricity cost was too expensive in new location; the market has been taken over by other Nigerians; and that the new houses of the resettlers have no provisions for shops to enhance resettlers business. The inadequate compensation of the Apo resettlers collaborates the argument of [7], [13] and [14] that development-induced displaced people are often not adequately or sufficiently

compensated. It was also observed that the new town hall which was supposed to serve as the compensation for the village square was already taken over by other 'highly placed' Nigerians using it as a cyber café and venue for hosting events.

4.6 Resettlers Adaptation and Livelihood Improvement Strategies

Table 3 shows that none of the respondents were given grants to aid their adaptation to the new environment, neither was there any livelihood enhancement programme to boost their morale or create opportunity for them. Also, farming that was supposed to be their major economic activity has greatly reduced because of their loss of farmlands. Because of these, the resettlers engaged in the sales of given houses (42% of them) as also observed by [1], borrowing from friends and family 39.5%, renting out of their resettled houses (15%), loans from banks (3.5%) and petty trading for sustaining their livelihoods.

4.7 Test of Hypothesis

Hypothesis that there is no significant difference between lost and compensated livelihood assets of resettlers was tested at (0.05) 5% level of significance using the Wilcoxon Signed Ranks Test with the formula: $W = \sum [sgn(x_2, i - x_1, i) \cdot R_i]$. For analysis in SPSS, when the asymptotic significance (p-value) value is less than the chosen level of significance (alpha value) the Null Hypothesis is rejected and otherwise it is accepted. The probability of the Wilcoxon Signed Ranks Test statistic ($Z = -2.162$) was $p(0.031)$, less than the alpha level of significance of 0.05. The null hypothesis that "there is no significant difference between lost and compensated livelihood assets of resettlers" is therefore rejected. Hence the alternative research hypothesis that "there is a significant difference between lost and compensated livelihood assets of resettlers" is supported by this analysis and thus accepted. This finding corroborates earlier research results by Arun [7,13,14,1] who argued that resettlement often emphasize compensation of marginal assets (such as lands and buildings) with little or no consideration of risks of the loss of major livelihood assets to adversely affected people. The Ministerial Committee on Facts Finding and Way Forward on Apo Resettlement (2012) reported that prior to resettlement it was

observed, that most houses in Garki Village adopt the dual purpose (commercial and residential mix), therefore, the provision of residential houses without adequate and commensurate commercial buildings has significantly generated fear in the minds of the people with regards to their economic survival. The resettlement schemes emphasize improved

social facilities (such as good roads, electricity) while neglecting other livelihood capitals. This is also the case in the Apo resettlement scheme where the resettled persons were only compensated at individual level with prototype buildings and lands to build for those that were not given buildings; the remaining assets provides were mainly social amenities.

Table 2. Lost and restored livelihood assets

Category	Assets	Partially lost	Completely lost	Compensated
Human capital	Health	200 (100%)	0 (0%)	0 (0%)
	Skills	200 (100%)	0 (0%)	0 (0%)
	Nourishment	200 (100%)	0 (0%)	0 (0%)
Natural capital	Land	0 (0%)	200 (100%)	36 (18%)
	Plants	0 (0%)	200 (100%)	0 (0%)
	Animals	98 (49%)	0 (0%)	0 (0%)
	Streams	0 (0%)	200 (100%)	0 (0%)
	Rock stones	0 (0%)	63 (31.5%)	0 (0%)
Financial capital	Job earning	104 (52%)	23 (11.5%)	0 (0%)
	Savings	200 (100%)	0 (0%)	0 (0%)
	Access to credit	200 (100%)	0 (0%)	96(48%)
Physical capital	Building	0 (0%)	200 (100%)	164 (0%)
	Schools	0 (0%)	200 (100%)	200 (100%)
	Market	0 (0%)	200 (100%)	44(22%)
	Health center	0 (0%)	200 (100%)	96(48%)
	Roads	0 (0%)	200 (100%)	200 (100%)
	Electricity	0 (0%)	200 (100%)	76(38%)
	Burial Ground	0 (0%)	200 (100%)	44(22%)
Social capital	Traditional or social status	25 (12.5%)	0 (0%)	0 (0%)
	Strong links with family and friends	200 (100%)	0 (0%)	79 (39.5%)
	Culture and tradition	200 (100%)	0 (0%)	79 (39.5%)
	Village square	0 (0%)	200 (100%)	0 (0%)
	Strong association with age groups	200 (100%)	0 (0%)	79 (39.5%)

Source: Authors' field survey, 2016

Table 3. Resettlers adaptation and livelihood improvement strategies

Adaptation/Livelihood Improvement strategies	Frequency	Percent	Valid percent	Cumulative percent
Government grant				
No	200	100.0	100.0	100.0
Yes	0	0.0	0.0	100.0
Total	200	100.0	100.0	
Livelihood enhancement programme				
No	200	100.0	100.0	100.0
Yes	0	0.0	0.0	100.0
Total	200	100.0	100.0	
Land for farming				
Yes	34	17.0	17.0	17.0
No	166	83.0	83.0	100.0
Total	200	100.0	100.0	

Adaptation/Livelihood Improvement strategies	Frequency	Percent	Valid percent	Cumulative percent
Alternative source of income				
Borrow from friends and family	79	39.5	39.5	39.5
Loan from Bank	7	3.5	3.5	43.0
House rent	30	15.0	15.0	58.0
Sales of property	84	42.0	42.0	100.0
Total	200	100.0	100.0	

Source: Authors' field survey, 2016

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

The overall aim of the study was to assess how sustainable are the livelihood assets of resettlers at the Apo Resettlement Scheme. To do this, four specific objectives were set which include: To find out lost resettlers livelihood assets; To assess restored resettlers' livelihood assets in the compensation scheme; To explore resettlers adaptation strategies to enhance their livelihood and To find out strategies through which resettlers' livelihood assets can be improved to achieve sustainable livelihood outcomes such as Lands (including farmlands), Plants, Streams, Buildings, Schools, Market, Health Centers, Roads, Electricity, Burial Ground, Village square, Rock stones, boreholes, shops, spacious houses and Job earnings among others. Only two personal assets and a few social assets were restored to resettlers by the government in the resettlement scheme which include buildings and lands to build which were not efficiently restored to resettlers and Schools, Roads, Health Centers, Electricity, Burial Ground, and Market. The restored social assets were confirmed to be better off than those before resettlement by most resettlers except for water facilities. The research further revealed that there was no livelihood enhancement programme in the resettlement scheme. The resettlers were not given grants or training to enhance their livelihood in order to build resilience, thus most of them resort to personal livelihood adaptation strategies which include: restructuring their buildings to hire tenants, sales of buildings and returning to their yet demolished settlements, change of occupation to petty trading and wage employment among others. These adaptation strategies have little or no capacity for sustainable livelihood.

5.2 Conclusion

A sustainable resettlement scheme is one that supports economic growth and social

development, and reduces poverty and inequalities [6]. Development Induced Resettlement and its social issues are important aspects of sustainable development. It is significant to note is that, the resettlers affected in the Abuja resettlement scheme are largely in the poverty bracket. An appraisal of some of the completed resettlement projects reveal that the resettlement so far has made the native resettlers worst off than they were before resettlement. It is important that any development intervention does not further impoverish them or make them worse off in future. This research would be significant in the effort to turn around impoverishment risks to ensure sustainability of any resettlement scheme especially the Abuja resettlement scheme. In addition, the assessment of the sustainability of the livelihood assets of resettlers is to inform policy makers and relevant authorities about development gaps that need to be filled and for future interventions or schemes. This research has established that the Apo resettlement scheme is seemingly aimed at just relocating the natives from their previous locations rather than ensuring developed outcomes. Since the livelihood assets of the resettles have been adversely affected, the sustainability of the Apo resettlement scheme is not feasible: there is need for resettlement schemes to take more account of livelihood outcomes and to be performed on sustainable basis. The failure of the Apo resettlement scheme is another opportunity for government to prove she can adhere to international standards and ensure sustainable livelihood of the affected people in subsequent resettlement schemes. Therefore, high-level policies on resettlement according to [6] should be revised towards sustainability and implementation should follow a strict but flexible procedure with full participation of relevant stakeholders and the affected people.

5.3 Recommendations

In the light of the finding of this work and weaknesses identified in the design and

implementation of the FCDA resettlement policies within the FCT with particular reference to Apo resettlement scheme, it is recommended that the following could be adopted as corrective measures for Apo Scheme and subsequent resettlements in the FCT:

1. Sites for relocation of settlements should be relatively far away from the Federal Capital City in order to minimize extraneous influences on land to lessen the degree of financial enticement and pressure from the people who took the advantage by buying resettlement houses and plots because of proximity to the main city. Also, sites closer to the city often pose tougher challenges for resettles to build resilience and restore livelihoods as the life style around and within the city are mainly competitive and too expensive for average resettles to adapt.
2. In the future, Areas like Kuje, Bwari, and Gwagwalada could be considered for resettlement schemes because the availability of much space for expansion and farmlands and proximity of most resettles to similar socio-economic groups.
3. The planning and implementation of resettlement schemes and compensation should adequately involve the people to be resettled for greater success of the schemes, failure to do this can lead to the people rejecting the compensation packages [5]. Also, the implementation should be well organized and not delayed to avoid uncertainties.
4. Adequate and timely compensation should be based on the results of proper surveys on the socio-economic conditions of the people with more focus on the livelihood assets.
5. As a corrective measure for Apo Resettlement scheme, an intervention plan should be developed and implemented to address the prevailing needs of the resettles such as affordable and accessible market, water supply, bigger schools, drainages, farmlands, secondary healthcare facility and special livelihood enhancement programmes (including grants) to enhance improved skills, health, and productivity.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Dare, BB. Assessment of the integration scheme in Abuja: A case study of Garki. A Published M.Sc. Thesis, submitted to the Post Graduate School, Ahmadu Bello University, Zaria, Nigeria; 2004.
2. Ibrahim UJ. Resettlement issues, squatter settlements and problems of land administration in Abuja, Nigeria's Capital. TS18.1 Paper Presented at the 5th FIG Regional Conference on Promoting Land Administration and Good Governance at Accra, Ghana, March 8-11; 2006.
3. Suleiman ID. The general use plan of phase V (Lot 1) FCC Abuja. A Publication of Edres Consultants, Abuja; 2014.
4. World Bank. The World Bank Operational Manual. Operational Policies 4.12. Involuntary Resettlement; 2001.
5. Stein M. The three gorges: The unexamined toll of development-induced displacement. *Forced Migration Review*. 1998;1:7-9.
6. Miine LK. Sustainability of bui resettlement in Ghana. College of Architecture and Planning Department, Kwame Nkrumah University of Science and Technology; 2014.
7. Arun A, Kent R. Conservation and displacement: An overview. *Conservation and Society*. 2009;7(1):1-10.
8. UNHCR. Global refugee trends; 2005. Available:http://www.unhcr.org/statistics/S_TATISTICS/4486ceb12.pdf
9. Rinbo E, Yasuhiro H. Impoverishment risks analysis of population displacement using structural equation modelling; 2008. Available:Rinbo.wordpress.com.
10. Ackuayi ED, Godsway K, Dzeto GK. Resettlement programme implementation: The effect on livelihoods of people in mining communities in the Tarkwa-Nsuaem Municipality, Ghana. *Journal of Economics and Sustainable Development*. 2014;5(23):124-134.
11. Cernea MM. Risks, safeguards and reconstruction: A model for population displacement and resettlement. In risks and reconstruction: Experiences of resettlers and refugees (eds. Cernea, MM, McDowell, C). Washington DC, USA: The World Bank; 2003.
12. Vesalon L, Cretan R. Development-induced displacement in Romania: The case of Rosia Montana project. *Journal of*

- Urban and Regional Analysis. 2012;4(1): 63-75.
13. Cernea MM. For a new economic of resettlement: A sociological critique of the compensation principle. International Social Science Journal. 2003;55(175):37-45.
14. Kanbur R. Development economics and the compensation principle. International Social Science Journal. 2003;55(175):27-35.
15. Oruonye ED. The socio-economic impact of the Lake Chad resettlement scheme, Nigeria. African Journal of Environmental Science and Technology. 2011;5(3):238-245.
16. Ade MA, Afolabi YD. Monitoring urban sprawl in the Federal Capital Territory of Nigeria using remote sensing and GIS techniques. Ethiopian Journal of Environmental Studies and Management. 2013;6(1):82-95.
17. Obateru IO. The genesis and future of Abuja. Penhouse publications Nigeria; 2004.

APPENDIX 1

Resettlers Adaptation Strategies at Apo Resettlement Scheme



Petty Traders and Artisans Back in Their Former Settlement in GarkiHausawafor Business due to Lack of Shops in New Resettlement Town



Modified Resettlers Buildings with Private Borehole to Accommodate other Tenants



Sold and Modified Building of Resettlers at the Apo Resettlement Town



Prototype Building for Resettlers at the Apo Resettlement Scheme

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