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Community-led infrastructure provision in low-income urban communities in developing countries: A study on Ohafia, Nigeria

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ABSTRACT

The changing role of government in infrastructure provision and the need for community-based approach are widely gaining increasing recognition, but the extent to which local communities are involved in urban infrastructure provision in developing countries has not been given adequate attention in the literature. This study examines how community-based organizations are filling the gap created by partial withdrawal of the state from urban infrastructure provision in six low-income urban communities in Ohafia, Nigeria. Drawing on the role of social capital in community development, this paper reported how, and in what context situations the organizations are addressing the infrastructure challenge in their communities. Relying on the data from a survey, the study identified six organizations and three funding arrangements in urban infrastructure provision in the communities. Using this case-study, this study attempted to identify how the mobilization of resources in project initiation, design, implementation and funding influenced the type of infrastructure projects. The findings have conceptual and policy implications for understanding the socio-economic and political dynamics in harnessing local resources and integrating community-based approaches into urban development process in developing countries.

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Introduction

One of the most intricate problems facing cities in developing countries is the provision of adequate housing and infrastructure for the teeming urban population. As urban areas in developing countries continue to witness a rapidly growing population, there are indications that despite the vital role infrastructure plays in physical and socio-economic development of individuals and communities, and the frantic efforts made in addressing the situation, the problem is escalating. A majority of the citizens in countries in sub-Saharan Africa (Table 1) and parts of Asia and Latin America do not have access to basic amenities such as potable water, electricity, drainage, roads, sanitation, education, health care, recreation and waste disposal facilities (DFID, 2004; Ndulu et al., 2005; Ayogu, 2006; World Bank, 2006). As a result of this, many urban dwellers in these regions live in deteriorating conditions that constitute an affront to human dignity and which come with attendant health implications (UN-HABITAT, 1992; DFID, 2002; WHO, 2005; ADB, 2007; UNFPA, 2007).

A number of interrelated factors are responsible for the low level of infrastructure in developing countries, which, according to Fay (2003), accounts for about 13% of the global stock. The factors include insistent economic and political crises, rapid urbanization,

inefficient infrastructural delivery systems, low investment in the sector and bad governance (Cotton and Tayler, 1994; NISER, 2001; Onokerhoraye, 2002; World Bank, 2003; SIDA, 2006; Halpern and Mumssen, 2006). In Nigeria for instance, the situation has become more critical especially among the low-income groups who constitutes about 70% of the country's 140 million people (FRN, 1991; Nwaka, 2005). With an urban population of about 60 million and an urbanization rate of 5.5% (NEEDS, 2004; FRN, 2007), conservative estimates (Table 2) have indicated that only about 49.2% and 42% of the urban poor in Nigeria have access to safe water and electricity, respectively. Comparing Table 1 with Table 2, it is observed that the percentage of urban population having access to safe water in the country dropped from 81% in 2000 to 73.4% in the year 2006. Similarly, the proportion of the population with access to sanitation within the same period also declined from 85% to 77%.

Government efforts at addressing the infrastructure challenge in Nigeria have followed the adoption of a number of measures, such as the public sector allocation of funds to infrastructure provision (Table 3: Anyanwu et al., 1997; NISER, 2001; Hall, 2006) and the engagement of reform programmes (World Bank, 1995; African Development Bank, 1999). Rakodi (2001), Ogu (2001), SAPRI (2004) have however noted that the economic recession of the 1980s and attempts at restructuring their economies did not address the infrastructure problem in developing countries, including Nigeria. The failure of government and the market to meet the

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Table 1

Percentage of urban population with access to some basic infrastructure in selected countries in sub-Saharan Africa.

Countries	Sanitation		Safe water		Health
	1990	2000	1990	2000	1990–2000
Benin	46	46	NA	74	42
Burkina Faso	88	88	74	84	NA
Cameroun	99	99	76	82	NA
Comoros	98	98	97	98	NA
Cote d' Ivoire	78	NA	89	90	NA
Ghana	59	62	83	87	25
Guinea	94	94	72	72	25
Lesotho	NA	93	NA	98	NA
Madagascar	70	70	85	85	NA
Namibia	84	96	98	100	NA
Nigeria	77	85	78	81	67
Senegal	86	94	90	92	40
South Africa	NA	99	NA	92	NA
Togo	71	69	82	85	NA
Tanzania	97	98	80	80	93

Data source: World Bank (2003) African development indicators.
NA = not available.

Table 2

Percentage population with access to basic infrastructure in Nigeria (2006).

Services	Urban population (%)	Urban poor (%)	Total population (%)
Secured housing tenure	73.5	56.9	61.2
Access to water	93.6	81.2	85.2
Access to safe water	73.4	53.4	51.4
Access to sanitation	77	49.2	57.6
Access to electricity	86.5	60.5	55.2
Access to primary school	86.7	68.4	75.9
Access to secondary school	69.3	42.1	47.3
Access to health facilities	70.9	45.9	55.1

Data source: National Bureau of Statistics (National Bureau of Statistics, 2006).

Table 3

Federal government budgetary allocation to basic infrastructure provision in Nigeria.

Services	2004 (%)	2005 (%)	2006 (%)	2007 (%)
Education	3.99	5.14	6.8	8.08
Health	4.89	2.7	3.5	5.3
Housing	0.53	0.03	0.27	NA
Power and steel	10.12	0.17	0.17	4.56
Transport	0.45	0.16	0.19	0.56
Water resources	6.95	0.15	0.23	4.13
Works	8.64	1.2	0.9	8.3

Data source: Appropriation Bills 2004–2007 (Budget Office, Abuja).

Note: Figures provided for the services are expressed as a percentage of the total budgetary expenditure.
NA = not available.

infrastructure need of the low-income groups, on account of resource constraints (Rondinelli, 1990; Lowry, 1990; Tipple, 1994; Julianle, 1991; Lall et al., 2002; World Bank, 2004a), has led to a partial withdrawal of government from public infrastructure provision. Consequently, attention has shifted from government as principal provider of infrastructure, to facilitator of the process as encapsulated in the enablement strategy (Tannerfeldt, 1995; Ogu, 2001; Rakodi, 2001; UNCHS, 2006).

In line with the above, Okafor (1987) and Ogu (2000) noted that the strategy of private sector and community participation

in development is increasingly gaining recognition as an important tool for mobilizing resources and organizing people to take collective action in providing for their welfare in Nigeria. Despite this shift of emphasis from state to community provision, UNCHS (2006) observed that very few studies have demonstrated the extent to which local communities are involved in infrastructure provision in developing countries. It is against this background that this study seeks to examine community-led public infrastructure provision in six urban communities in Ohafia, Nigeria. The study will attempt to unearth the peculiar contextual situations under which local communities are filling the gap created by partial withdrawal of the state from infrastructure provision, using Ohafia as a case study. It hopes to identify the principal actors, their sources of finance and the strategies adopted in the planning, execution and funding of infrastructure projects. This is with a view of suggesting ways of enhancing the performance of community-based initiatives in public infrastructure provision in Nigeria and in other developing countries.

Social capital and community development

Development has been viewed from diverse perspectives and defined in various ways. In this paper, development is viewed as the process of social, economic, political and physical change or transformation leading to quantitative improvement in the standard of living of people (Obasanjo and Mabogunje, 1991; Afigbo, 2000; Schech and Haggis, 2000). The development strategy in which government is the main provider of public infrastructure and services for the citizens has been described by Bertrend (1972) as development that rarely identifies the real needs of the people and provides sustainable solutions to them. As a response to this problem, development agencies have advocated for self-help approach to development especially in less developed nations of Africa, Asia and Latin America (Sergeldin et al., 2000; Lall et al., 2002; World Bank, 2004b).

“Self-help” in this context has two possible interpretations (Madu & Umehali, 1993: 146). First, it is a kind of reaction against the government by neglected citizens who organize to provide themselves the amenities and services government could or would not provide (Ogundipe, 2003). Second, it is a reflection of the level of awareness among the people of what government is, what its activities and programmes are, as well as their limitations (Bratton, 1990; Madu and Umehali, 1993). Based on this understanding, Afigbo (2000) noted that self-help effort represents a development strategy involving people's participation in promoting community development, based on self assessment of the people's capacity to bring positive changes into their environment.

Community development is a demonstration of people's capacity and willingness to participate, on their own initiative, in the tasks of identifying and prioritizing community needs (e.g. socio-economic, political and environmental); planning and implementing programmes aimed at meeting the needs; and improving their living conditions – with or without external assistance (UN, 1963; Onibokun and Faniran, 1995; Peterman, 2000; Musa, 2005). Participation, according to Meyerson & Banfield (1955) is for the public interest and important in developing countries (Midgley, 1986). It may be in the form of consultation, contribution of resources, formation of groups, decision-making and self-mobilization (Rahnema, 1992). This has been variously described as participatory development, public participation, people's participation, community participation, citizen participation and popular participation (Korton, 1983; Bhatnagar and Williams, 1992; Musa, 2005). It “changes the fundamental position of people from being viewers and spectators to that of agents of development and progress” (Lucas, 1976, p. 142).

Studies (Okafor, 1987; Uduku, 1994; Onibokun and Faniran, 1995; Afigbo, 2000; Abegunde, 2004) have indicated that community development is an age-old tradition used in providing and maintaining social facilities and amenities in various communities in Nigeria, even before the colonial era. Nwabughuogu (1984), Madu and Umehali, 1993) and Osaghae (1998) identified the role of indigenous institutions (e.g. town unions, age grades, and women's social-cultural and religious organizations) in the process. They noted that before and during colonial rule in Nigeria, these organizations played vital roles in raising capital for major economic undertakings and also performed "shadow state functions" (e.g. social welfare, public safety, service provision) that are otherwise performed by the government. In principle, Fukuyama, 1999) stated that community organizations are formed and operated on trust, religion, tradition and shared historical experience. They have voluntary (Adejumobi, 1991) or compulsory (Holdcraft, 1982) memberships, and are forms of social capital (Woollock and Narayan, 2000; Okafor, 2002) used in meeting social and economic needs of individuals and communities (Wolch, 1990; Bratton, 1990; Joel et al., 1991; William and Windebak, 2001).

Theoretically, some development experts have criticized the adoption of community organizations and social capital in explaining development activities (Portes and Landolt, 1996; Fine, 2001; Hariss, 2002). Central to this criticism are the various meanings, interpretations, theoretical and conceptual debates associated with social capital (van Staveren, 2003; Lee et al., 2004; Jones and Woollock, 2007) as well as the perceived deleterious consequences of social capital and civil society organizations. This is particularly the case with reference to the idea that social capital and civil society organizations are means of promoting personal and sectional interests, inequality, social exclusion and marginalization in contemporary society (Bourdieu, 1985; Portes, 1998).

This criticism notwithstanding, followers of Robert Putnam, who made popular the use of social capital in development studies (De Filippis, 2001) argued that social capital can lead to increases in both individual and collective productivity (Putnam, 1998 cited in De Filippis (2001) and Lee et al. (2004)), and can also play vital roles in achieving development objectives in poverty reduction, sustainable human and economic development, social learning and investment (David and Li, 2008). Social capital as used here relates to norms, cultural practices, networks and connections in community groups. Its development promotes co-operative actions, and networking among people and their organizations in the pursuit of common objectives (Coleman, 1988; Kawachi et al., 1997; Putnam, 2001; Lee et al., 2004; Garcia, 2006). Social capital is a community asset when it is beneficial in communal activities related to capital formation and in establishing and maintaining networks and connections required in meeting socio-economic needs of individuals and communities (Fox, 1997; Jack and Jordan, 1999; Fox and Gershman, 2000; De Filippis, 2001). However, when it is used exclusively in satisfying personal needs, it becomes only an individual asset.

Methodology for the study

Ohafia is one of the urban areas in Abia State, South East Nigeria, located 15 km from the Cross River on Latitude 5°30', 5°45'N and Longitude 7°45', 7°55'E. It is a low-income agrarian community with a total land mass of 438.2327 km² (Nsugbe, 1974); and a population of about 245,144, a large proportion of which is engaged in the informal sector of the Nigerian economy (FRN, 2007).

The data presented in this paper were sourced from field-work enquiries and the author's involvement in community development activities in the last few years. The field work involved a survey conducted between the months of September and December

2006. The sampling frame consisted of the 26 communities in the town. Purposive sampling techniques were used in selecting six communities, Akanu, Asaga, Amuma, Ndi Orieki, Amuke and Ndi Ibe, for investigation. The selection of these was based on a number of factors, namely, geographical and autonomous community representations, absence of local government administrative presence, and the existence of at least two completed and two ongoing community-initiated developments projects, as well as five Community-Based Organizations (CBOs). A pilot survey was conducted earlier to identify communities that satisfied these conditions.

The actual field work involved the identification of community-initiated infrastructure projects, the administration of well structured questionnaires, and oral interviews in each community. A random sampling technique was used in selecting members of the communities (and the Community Development Unions and CBOs) for the administration of questionnaires. The choice of this sampling method was based on the assumption that every adult indigene or resident of Ohafia is a member of at least one community-based organization. A total of 185 questionnaires were administered out of which 155 were retrieved. This was specifically meant to harvest the respondents' perception on community development projects, and provide information on how they contributed to realizing them.

The data were collected at specific periods of the year, September and December (months for the New Yam Festival and Christmas Holiday, respectively) when most of the indigenes of the town were in their respective home communities. Selected executive members of Community Development Unions (CDUs), the Age Grades, Youth and Women's Organizations were interviewed. Questions were structured to elicit responses on vital issues such as the number and structure of community-based organizations in the communities, their sources of funds, the process of initiation, execution and the duration of development projects. Others were on the cost of the projects and funding arrangements. Other relevant data were sourced from records on meetings, membership and financial transactions of the organizations. The data were analyzed using descriptive statistics and findings are presented in the subsequent section of the paper.

Findings

Principal actors in community infrastructure provision in the communities

A total of 144 community groups classified into six main categories of community organizations were identified to be involved in public infrastructure provision in the six communities surveyed (Table 5). The organizations included the Community Development Unions (CDUs), the Age grades, women and youth organizations; socio-cultural and faith-based organizations. The Community Development Unions (CDUs) are government-recognized umbrella organizations for all community-based organizations (CBOs: age grades, women and youth organizations, socio-cultural organizations) in each of the communities. Besides identifying areas of need, the CDUs such as Asaga Development Union and Ndi Orieki Development Union etc were responsible for drawing up proposals and they initiated the development projects. They also served as Non-Governmental Organizations (NGOs) by providing the link between the communities and external bodies such as the government and multilateral agencies and organizations.

The Age Grade was identified as the oldest indigenous institution in the communities surveyed. Every respondent, 30 years and above, cutting across all socio-economic status groups, identified one age grade or another to which he or she belonged (Table

Table 4
Socio-economic characteristics of respondents.

Characteristics of respondents	No. of respondents	Percentage
High income class	12	7.74
Middle (Upper) income class	24	14.49
Middle (Lower) income class	33	21.29
Low-income class	86	55.48
Male	120	77.42
Female	35	22.58
Membership of one CBOs	155	100
Membership of more than one CBOs	82	52.9

Data source: Field Survey, 2006.

Table 5
Community organizations involved in public infrastructure provision.

Type of Organization	Frequency	Percentage
Community Development Unions	6	4.17
Age grades	114	79.16
Women organizations	6	4.17
Youth associations	6	4.17
Socio-cultural organizations	10	6.94
Faith-based organizations	2	1.39
Total	144	100

Data source: Field Survey, 2006.

4). An average of nineteen (19) age grades with different names and varying membership numerical strengths were identified in each of the six communities. Some of the names identified to be associated with age grades in most of the communities were “Ike Mba”, “Ugo Mba”, “Ife Mba” and “Onyiri Mba” Age Grades.

Women Organizations have their memberships drawn from women married within and from outside the communities and their origins date back to pre-colonial eras. Whereas membership of the age grades and women organizations are compulsory, the Youth and socio-cultural organizations (e.g. Social Clubs) were the two organizations identified with voluntary membership in the communities. The youth organizations consisted of young men and women from 18 years and above. On the other hand, the socio-cultural organizations such as the “Club 25”, “Sincere Committee of Friends” and “Ekpe Society” were identified as groups of likeminded persons with common interests whose membership cuts across all age groups and professions.

Two outstanding faith-based organizations – the Presbyterian and the Catholic Churches – were identified to have made significant contributions in the provision of facilities in the area. These religious groups were found to have been involved in the provision of educational facilities since the colonial era. The study identified that the first sets of primary school buildings in each of the communities were constructed and equipped by the Presbyterian Church Missionaries during the colonial era.

Generally, the community-based organizations encountered in this study had elected non-salaried officials and held regular meetings (e.g. monthly, quarterly or yearly). They kept fairly good records of meetings and financial transactions as well as had constitutions and byelaws. A good number of them had evidence of registration with relevant local government departments, and operated bank accounts.

Sources of funds for community development projects

The principal sources of fund for financing community development projects came from levies, voluntary donations, fines, interest on loans to members and bank deposits (Table 6). A total of 144 organizations sourced 21.6% of their funds from levies on members, 136 organizations sourced about 40.8% of their funds from

Table 6
Sources of funds for community organizations.

Sources of fund	No. of organizations	Funds derived from each source (%)
Levies	144	21.62
Dues	136	20.42
Fines	136	20.42
Interest on loans to members	124	18.62
Donations	30	4.5
Loans from banks	6	0.9
Interests on money deposited in the Banks	90	13.52
Total	666	100

Data source: Field Survey, 2006.

dues and fines, while 124 organizations sourced about 18.6% of their funds from interest on short term loans granted to members. External borrowing counted for about 0.90% of the source of funds for 6 organizations. The remaining percentage was from voluntary donations and interests on money deposited in commercial banks. A total of 65 projects was identified in the six communities (Table 7), and these were basically educational, health, power supply, sanitation, recreation and transport related facilities. Surprisingly, no water supply project was identified in any of the communities. Although it was very difficult obtaining the exact cost of each of the projects due to poor record keeping, available records indicated that each project cost was between 0.3 million and 30 million Naira.

Project initiation, planning and implementation strategies

The decision to initiate projects was usually a collective one among the CDUs, the age grades, youth and women organizations. Such decisions were taken at the annual general meetings where every section of the communities was represented. Project planning committees, consisting of selected members from the CDUs and CBOs, carried out feasibility studies, designed as well as worked out modalities for funding of the projects. Proposals for the execution of the projects prepared by the project planning committees were first discussed by executives of the CDUs, the Chief-in-Council (the Traditional Ruler Ezeogo and his cabinet) and representatives of all the age grades, women and youth organizations. At the annual general meetings, the proposals were presented, debated and approved with or without amendments, after which project implementation and monitoring committees, consisting of representatives of the Chief-in-Council, the CDUs and CBOs, were set up.

At the implementation stage, project implementation and monitoring committees selected contractors, engaged the services of specialist consultants (if required), monitored the progress and quality of works to ensure that they met project designs and specifications and were delivered on schedule. They also prepared progress reports, provided technical advice on the projects to the CDUs, Chief-in-Council and CBOs on a regularly basis.

Upon completion, the committees jointly prepared final reports and handed over the projects to the communities in elaborate commissioning ceremonies. The responsibilities of managing and maintaining the facilities rest on the shoulders of the communities through the CDUs.

The study observed that in most cases, indigenes of the communities offered free professional services in addition to their financial contributions toward the realization and operation of the projects.

In all the communities surveyed, it was found that the initiation, planning and execution of infrastructure projects suffered setbacks for a number of reasons. These included disagreement over

Table 7
Types of infrastructure projects identified.

Projects	Frequency	Percentage	Average unit cost (₦ million)	Total cost (₦ million)
Health care facilities	6	9.234	Above 3.5	Above 21
School buildings	14	21.54	2.5	35
Electricity	4	6.15	5	20
Bridges and earth roads	12	18.46	NA	NA
Public conveniences	1	1.54	0.5	0.5
Recreational facilities	12	18.46	0.3	3.6
Community bank	1	1.54	NA	NA
Markets	2	3.08	NA	NA
Drainage facilities	12	18.46	0.75	9
Civic centers	1	1.54	Above 5	Above 5
Total	65	100	Above 17.55	Above 94.1

Data source: Field Survey, 2006.

Note: As at the time of the Field work, 1 \$US = ₦128.

project cost sharing modalities among community groups, the election of executive officers of the CDUs, and the inability of the CDUs and CBOs to raise sufficient funds to finance infrastructure projects. All these accounted for the long gestation period observed in some of the projects.

Funding arrangements for infrastructure projects

The study identified three funding arrangements for infrastructure projects in all the communities investigated. These were, (i) funding by the Community Development Unions (CDUs), (ii) funding by the CBOs and (iii) funding through government-community partnership arrangements. The CDUs funded projects through internally and externally generated funds. The externally generated funds were from “project launch” (fund-raising rallies) which were held in the months of August (for the women’s organizations in particular), September and December for the entire communities. Voluntary financial and material donations were solicited from individuals, the local government authority, corporate organizations and socio-cultural organizations within and outside the communities in support of proposed or ongoing infrastructure projects. Loans were obtained from banks to augment the amount realized from the fund-raising rallies.

Internally generated funds were basically from project levies on indigenes and residents of the communities. Such levies were collected on individual bases or through the age grades the individuals belonged to. Funding by the CDUs was found to have been suitable for medium size projects such as electricity, health centers and civic buildings that were executed in phases over a period of time.

The CBOs (age grades, women organizations and the youth associations) funded projects mainly through project levies, fines, dues and voluntary donations. Male members of the age grades and youth organizations made more financial contributions than their female counterparts. Similarly, “abroad members” (those living outside the communities) also made more financial contributions than those referred to as “home branch members”. In both cases, female and home branch members contributed labour during the project execution stage. The study observed that funding by the CBOs was viable in relatively small scale projects such as class room blocks, concrete drains, culverts and small bridges. However, a number of group age grades were found to have jointly financed electricity and the junior secondary school projects in Akanu and Ndi Orieki, respectively, both of which took more than 3 years to complete.

The government-community partnership funding arrangement involved the World Bank, Abia State government and the communities. This arrangement was adopted in the execution of the of

electricity project in Ndi Orieki, a health centre in Asaga and a bridge in Amuke. The projects were conceived by the communities but executed under the auspices of Abia State Community Based Poverty Reduction Project (ABCPRP). Each of the benefiting communities contributed 10% of the total estimated cost of the projects while the balance of 90% came from Abia state government and the World Bank. This funding option delivered projects much faster than the two previously discussed arrangements. This is probably because the projects were partly sponsored and directly monitored and supervised by external bodies, a multilateral organization and government agency.

Discussion

Findings from this study indicated that community-led infrastructure provision in Ohafia are handled by a number of community groups such as community development unions, age grades, women organizations and others which are independent from the framework of the local government authority. These organizations relied on internally generated funds (membership registration fees, dues, fines, levies and voluntary donations, etc.) to finance infrastructure projects. Their fund raising ability is determined by a number of factors, namely: their membership numerical strength, the mechanisms and machinery for collecting fines, dues and levies from members as well as and their leadership structure.

The capacity of the community organizations to ensure absolute control over planning, design, implementation, maintenance and upgrading of the facilities suggests that informal organizations are capable of developing viable frameworks for handling urban infrastructure development projects. From the findings are indications that the communities have the capacity to internally generate substantial amounts of resources to fund basic infrastructure projects (Tables 6 and 7).

In the six communities surveyed, about 53.8% of the projects identified were funded by the CBOs, 41.5% by the CDUs, while only about 4.6% of the projects were funded through partnership arrangement involving the World Bank, Abia State government and the communities. Over 90% of project costs identified were from the indigenes and residents of the communities. The low percentage recorded by the partnership funding arrangement could be attributed to the fact that the approach was relatively new in the poverty reduction programme of the government.

Whereas funding by the CBOs appeared viable for relatively small scale projects e.g.(class room blocks, concrete drains, culverts, small bridges), funding by the CDUs was found to be suitable for medium scale projects such as electricity supply, health centers and civic buildings. The government-community partnership

funding option delivered infrastructure projects much faster than the other two arrangements. This suggests that partnership between government and community-based organizations has great potential in addressing the poor state of public infrastructure in low-income communities in Nigeria in particular and developing countries in general.

In spite of the diverse sources of funds and funding arrangements in the six communities, one outstanding feature is that the communities neither depended on the government nor looked to the international donor agencies for financial support. Where it is felt that project levies would place unnecessary pressure on the poorer members of the communities, campaigns, and fund-raising rallies are carried out to encourage voluntary donations among the well-to-do in the communities. Evidence shows that these have attracted substantial funds to the communities. The active involvement of the people in all stages of the projects removes elements of misconception and misunderstanding or any form of hostile reaction against the projects. This is because every member of the community by virtue of his/her membership of one or two of the CBOs is a stakeholder and part of the decision making process in community development activities. It also confers on the people ownership status of the facilities, thus ensuring that their management and maintenance are more certain.

The use of project committees, a labour intensive approach and simple technology in the planning, execution and monitoring of the quality and progress of work in strict compliance with project design and specifications ensure that projects meet users' needs and are completed in record time, subject only to the availability of funds. This has a way of checking arbitrary hikes in the costs of project delivery, wastage, and "abandoned project syndrome". It also enhances easy and quick decision making and eliminates or reduces significantly the bureaucratic bottlenecks in project planning and execution.

Through proper articulation of the needs of the people by the CDUs and CBOs, a community-based approach is genuinely responsive to users' need and ensures good prospects for cost recovery. In addition to meeting the infrastructure needs of the people, the approach also contributes to poverty reduction and employment generation in the communities. A good number of unskilled and semi-skilled workers (carpenters, builders, masons and labourers) and small scale materials suppliers and contractors from the communities were found to have been engaged in the planning and execution of the projects.

However, the problems of community-led infrastructure provision in Ohafia are varied. First, rivalry among executives of community organizations, conflicts and disagreement between the CDUs and CBOs in cost sharing modalities delay project realization. Secondly, the success of this approach depends largely on a strong leadership framework provided by the CDUs and also on the ability of the CBOs to raise sufficient funds. For this reason, the CDUs and CBOs were found to have often engaged in less-democratic practices to raise funds from members and residents of the communities. Part of the provisions of their constitutions stipulates that members who could not meet with their financial obligations to the organizations risk the confiscation of their personal and family property, denial of right to farm lands and other entitlements, as well as exclusion from community activities. Third, there is potential set back in achieving good quality work and reducing wastage of resources in using project committees comprising people who do not have the requisite skills to monitor and ensure quality control in project design and construction. Furthermore, one striking finding of this study is that in spite of the acute shortage of potable water supply in the six communities investigated as identified by the respondents and confirmed by observation during the field work, not a single water supply project was identified in any of the communities. This and other evidence (e.g. execution of small

and medium scale projects) suggest that community infrastructure provision approaches may not be viable for certain categories and scale of infrastructural projects, such as large scale or capital intensive projects. Last, the findings of this study suggest that project delivery through this approach often suffers from scarcity of funds, and thus projects have a long gestation.

Conclusion and recommendations

This case study of community-led infrastructure provision in six communities in Ohafia, Nigeria has demonstrated the high esteem to which the participation of local people in community development is held. The study findings suggested that the citizens of Ohafia, through various organizations, are enthusiastic about getting involved in initiating and executing infrastructure development projects for which they are the ultimate beneficiaries. Involvement in community development projects to the people means consultations, resources contributions, ownership of the projects, meeting community needs and social cohesion. Based on the findings from the study, it appears the communities investigated have put to positive use the rich social capital generated in the CDUs and CBOs in efforts to address the public infrastructure supply deficit in the area. By adopting three funding arrangements, a good number of basic amenities and services have been provided and maintained in the communities.

The problems associated with the community-led infrastructure provision approach, which seem to reduce its effectiveness, however require appropriate solutions. The paper therefore recommends the following:

- First, increase recognition of the CDUs and CBOs through appropriate legislation; a stress-free and compulsory registration process will enhance the development of a level of trust between the local government authority and the community organizations. This will engender proper monitoring of the activities of community organizations by the government and ensures more fruitful partnership between the communities and government agencies in basic service provision.
- Second, government should provide the platform for training workshops, short courses and conferences for the operators of community development programmes. This is vital for achieving capacity building in the areas of administrative and leadership skills, record and book keeping as well as the modernization of the record keeping methods of the CDUs and CBOs. It will also help to inculcate into the operators the principles of effective project planning and management, cost sharing and conflict resolution mechanisms among the stakeholders in community development projects. These are important in checking project delays arising from disagreements and conflicts.
- Third, micro-finance banks should be mandated to give interest-free loans to CDUs and CBOs for infrastructure provision projects. Government may have to stand in as guarantor for community organizations seeking funds from commercial banks to embark on large scale infrastructure projects. Similarly, the moribund urban Development Bank of Nigeria (UDBN) should be resuscitated to provide infrastructure development loans to local communities and organizations, while the Infrastructure Development Funds (IDF) should be made accessible to community organizations to strengthen their financial base in undertaking large scale infrastructure provision projects. These are necessary to reduce the long gestation period of infrastructure projects on account of inadequate funding.
- Fourth, cognizance should be taken of the various socio-cultural ties and networks in urban communities, and efforts made to sustain and preserve them. To achieve this, there is need to establish a ministry that will be charged with the responsibility

of overseeing the affairs of community-based organizations. This will facilitate the entrenchment of proper democratic principles into the operation of the organizations, proper integration of their programmes into urban development processes and government policy formulation agendas. It will also eliminate all forms of political, legal and institutional barriers inhibiting their formation, growth and sustenance as well as enhance the performance of community organizations in public infrastructure provision in Nigeria and other developing countries.

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