



Research Paper

Knowledge, Attitude and Practices of Development Control In Mellennium Quarters Yelwa, Bauchi, Nigeria.

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ABSTRACT:- In recent years, Nigeria has experienced a high rate of urbanization which has caused many parts in town and cities, especially in peripheral areas, to develop without control even though these are areas where development controls ordinances are suppose to be practiced to the latter. This research work is set out to assess the knowledge, attitude and practice of development control by developers in millennium quarters Yelwa, one of the peripheral areas in Bauchi metropolis that is highly educated but poorly developed. Through questionnaire administration, interview and on-the-site assessment methods, the study identifies the nature and the level of contravention by the developers in the area and also the factors responsible for the contravention. The result of hypothesis shows that the calculated value of $r = 0.362$. This indicates that there is no significant correlation between the level of education and compliance with development control regulations. Over 75.5% of the household heads covered in the area have attained tertiary education, yet more than 90% of the developments in the area contravened one development control rule or the other. Finally the study suggests strict enforcement of development control regulations and concludes with some planning recommendations that would improve the quality of the living environment.

KEYWORDS:- Urbanization, Development control, awareness and compliance

I. INTRODUCTION

Millennium Quarters is a medium density residential area occupied by high income earners, most of them have attained tertiary education. It is a new residential neighbourhood that began to develop in the year 2000; it is located on the southern part of Bauchi metropolis along Dass road opposite Police Training School, Yelwa, Bauchi as shown in the map below (Fig.1). Though it is a new settlement that emerged in the year 2000, yet it is characterized by a lot of development control contraventions like; narrow roads of less than 3.5 meters, building of structures under high tension line, inadequate building set-backs, emergence of non-conforming land uses etc. this ugly development is a serious concern for those in building industry to find out the factors responsible for such development and proffer solutions.

Development control, as defined by various authors, refers generally to the use of legal instruments designed to safeguard, regulate, conserve and disburse land or part thereof in the interest of the community. It is also defined as the regulation of use of land within an area. Development control is meant to; create a healthy and decent



physical and socio- economic environment for living, working and leisure, achieve a balanced sustainable land - use pattern, create an easy accessibility to activity area for efficient circulation, provide an adequate and suitable location for various land –uses and ensure effective and efficient use of various resources. Land is allocated and private activities are coordinated with public facilities by means of zoning ordinances and subdivision regulations. A zoning ordinance governs how the land may be used and the size, type, and number of structures that may be built on the land. All land within a city is divided into districts, or zones. In these districts certain land uses are allowed by right, and general restrictions on building height, bulk, and use are specified. The zoning regulations carry out the land allocations recommended in the comprehensive plan. Specific locations are given for different types of residences, industries, and businesses. Specific numbers are given for allowable heights of buildings, coverage of a lot, and density. Allowable land uses are specified for each zone, including special conditions such as required off-street parking. Most regulations are termed “matter-of-right”; if the specified requirements are met a permit will be given. Other regulations provide general standards with considerable flexibility in the mixture of building uses or the building design. These require more extensive review before approval.

The conversion of raw land (construction on previously undeveloped land) is controlled by subdivision regulations and by site-plan review. These ordinances establish standards of land development by regulating such features as roadway width, drainage requirements, traffic circulation, and lot sizes. Subdivision regulations and site-plan review guide orderly development, protect prospective and current residents from poorly designed buildings or business districts, and ensure that most of the costs of land conversion are borne by those who will benefit from the development, that is, by the developer and the future residents.

Building and housing codes govern the quality and safety of construction of new buildings, as well as subsequent maintenance. In most instances, the codes specify the materials to be used, their minimum quality, and the building components necessary in a structure that is suitable for human occupancy.

Development control in Nigeria started in colonial era with the promulgation of town improvement ordinances in 1917 (Ola 1977), though this ordinance was only effective in Lagos to control development and urban sanitation by Lagos City Council Department of Health (LCCDH). In 1924, Town Planning Committee was established for the northern and southern provinces mainly for first class towns. The preparation of the Ten-year development plan (1946-1956) was made, with the enactment of the Nigerian Town and Country Planning Ordinances No.4 of 1946, and in 1992, the urban and regional planning Decree No.28 was enacted to consolidate all the other legislation for a universal and comprehensive system of land use planning;

In Bauchi state, the town and country planning law cap130 of the law of northern Nigeria, the land use decree (act) of 1978, the Bauchi state of Nigeria edit no.4 of 1979, Bauchi state planning authority (protection) Edit no.19 of 1984, the town and country planning law (cap 130)/the declaration of planning areas order of 13 december,1988, the Bauchi state urban planning and development board edit of 1990, the Nigerian urban and regional planning laws decree (act) no. 88 of 1992 and Nigerian urban and regional planning (amendment) decree no.18 of 23th march, 1999 provided the legal basis for undertaking development control by the planning authorities.

The value of development controls, like any means to an end, lies in their appropriate implementation techniques for controlling goals. The point is only as good as the government to apply and enforce them such techniques as zoning, building bye-laws, land use plan or land subdivision guide etc. Zoning is the demarcation of a city by ordinances and the establishment of regulations to govern the use of the land. It is an attempt to organize and systematize the growth of urban areas by setting up categories, classes or districts of land in the community, prescribing the use to which land and buildings may be put and applying uniform restriction on the shape and placement of buildings (Obadare, 2010). The zoning regulations are set of rules and regulations which land within a given land use area is to be used (Waziri A.G, 2004). Normally, after drawing the zoning map of a given area, specific land use is prescribed to each zone e.g high density, medium density or low density residential zone. Zoning is probably the single most commonly used legal device available for implementing the land use plan of Bauchi town. It has been used essentially as a means of ensuring that the land use of the community are properly situated in relation to one another providing adequate space for each type development. Sub-division regulations are meant to control physical layout of new development by establishing standard such as plot size and layout, street improvement and other requirements in more details than zoning plans (Obadare, 2010). Sub-division regulations are locally adopted laws governing the process of converting raw land into building sites. In Bauchi, in particular and in general, this is accomplished through the plot approval procedures under which a developer at least in theory is not permitted to make improvements, develop or to divide and sell wholly or part of his land until the planning authority has approved the layout plan or map of the area proposed i.e. the proposed design of his/ her sub-division layout. The approval or otherwise by the relevant planning authority is based upon compliance or otherwise of the proposal with development standards set forth in the master plan, layout development plan, sub-division regulations or any general design standards available meant to guide whatever development is to come up in the area (Waziri A.G, 2004).

The study area has poor accessibility; some parts are not even accessible because of the large encroachment in to the right of way leaving not more than 3.5 meters instead of the 10.0 meters originally reserved for the road. Secondly, there is a serious potential hazard for all structures that are build on the high tension line of the power holding company of Nigeria (PHCN) a minimum of 50 meters from the center of the high tension line supposed to be reserved but structures are build almost directly under the high tension line as shown in the figure 2. Thirdly, heaps of solid waste are emerging in most parts of the open spaces and undeveloped lands in the area because of indiscriminate dumping of refuse and most of house in the area discharge the sewage and waste water directly in to the road, this has impaired the environmental quality of the area and is posing a health hazard to the inhabitants. This research is trying to find out why are these problems in the area and make possible recommendations to improve the quality of live in the area. The aim of this research is to determine the level of awareness of development control process among the developers in the

study area and to relate the awareness to their attitudes in terms of the pattern of physical development of the study area. This would establish the basis for identifying problems with a view to proffering planning solutions.

II. MATERIAS AND METHODS

The area occupies a total land area of 187 hectares with 318 housing units accommodating 2,217 people. The area is predominantly residential land use occupied by high income earners. The data gathered for this research include; Socio-economic data of the respondents, Knowledge of Development control by inhabitants, Compliance with Development control regulations, Type and magnitude of contraventions of Development control regulations and Factors responsible for the contraventions. Instruments used to collect the data were; well structured questionnaire and Oral interview were the principal instruments used to collect data. Physical observation and direct measurement on the site was also used, And other relevant instrument. Out of the total 318 houses in Millennium quarters, 50% Sample size was selected which is 159 units using the stratified random sampling technique to match the heterogeneous characteristics of the study area. The household heads who are the developers are the target respondents.

III. RESULTS AND DISSCUSSION

The research discovered that 36.6% of the respondents fall between 50-59years which is the highest and 2% is above 80 years, this suggests that the settlement is not an old settlement to have developed before the introduction of the modern development control regulations. The age-sex structure of the sampled household heads reveals that 90% are male and only 10% are female. The data collected shows that out of the 159 household heads under study 78.9% are married 10.7% are widows, 4.8% have separated from their partners, while the least 2.4% are Single house hold heads. The high percentage of married families indicates that there could be a number of family members that stay together. Most of the households (78.8%) are above the national average household size of 6. this may be a strong factor in the contravention of development rules when compared to the table where many complained of small plot size, because a large family would require a large house or plot size. Without proper and constant inspection by the development authorities, the developers would easily encroach in to the road or neighboring plot. From the data, those with tertiary school education accounts for up to 72.4% while no school is only 2.0% indicating that the area is an enlighten community that suppose to appreciate the importance of development control and comply with its regulations. Civil servants forms up to 79% of the occupation structure while applicants has the least with just 2.1% and the data also shows that more than half of the respondents receives more than N50,000 every month that is why they are able to build houses that are bigger than their plots thereby encroachment in to the right of way.

Table 1 showing level of awareness of development control

Level of awareness	Frequency	Percentage
Aware	156	98.0%
Not Aware	3	02.0%
Total	159	100.00

Sources: field survey, January 2010

The table above revealed that the respondents are fully aware of the procedures of development control, only 2% claimed ignorance of the development control procedure. This level of awareness should lead to an orderly development in the area.

Table 2 showing possession of planning documents

Documents	Yes	No
C of O	8	92
Site plans	90	10
Building plans	97	3

Sources: Field Survey, January 2010

From the table above it can be deduced that acquisition of C of O is difficult due to; the cumbersome process involve, the financial demand and delay in processing the C of O, as rightly observed by Dung-gwom (2001) where he said that delay is well entrenched in the grant of planning permission to private developers, both in the grant of statutory right of occupancy which gives legal title to land and in the building permit process which gives building plans approvals to developers. This can be seen as most of the Inhabitants have site and building plans

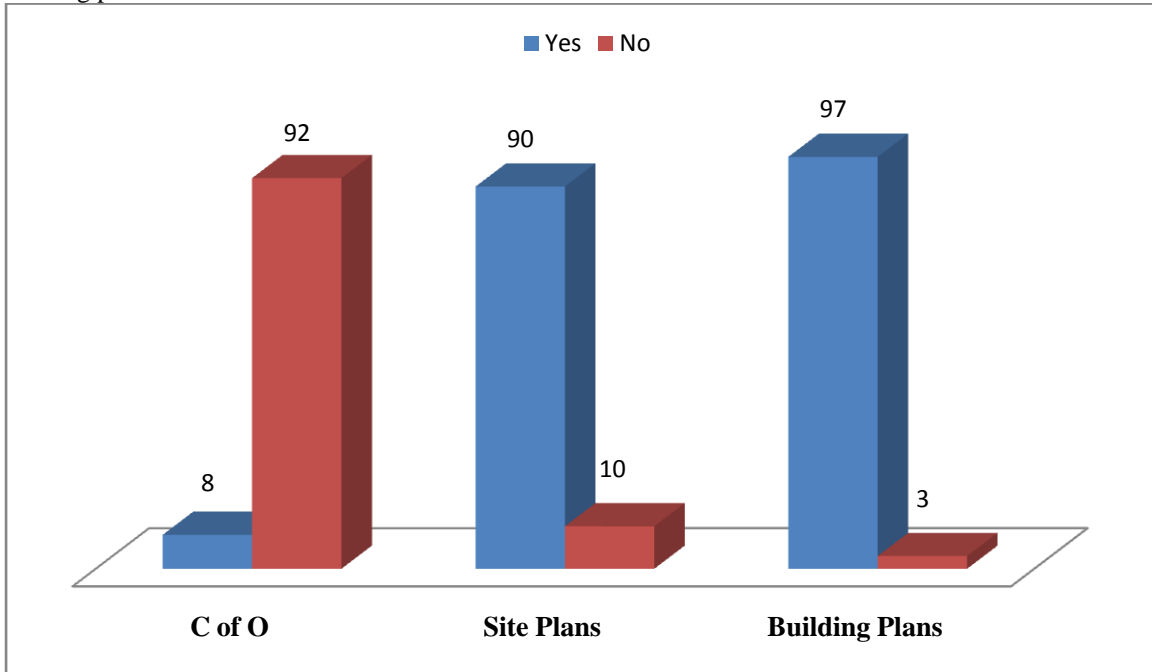


Figure 1 Possession of Development Control Documents

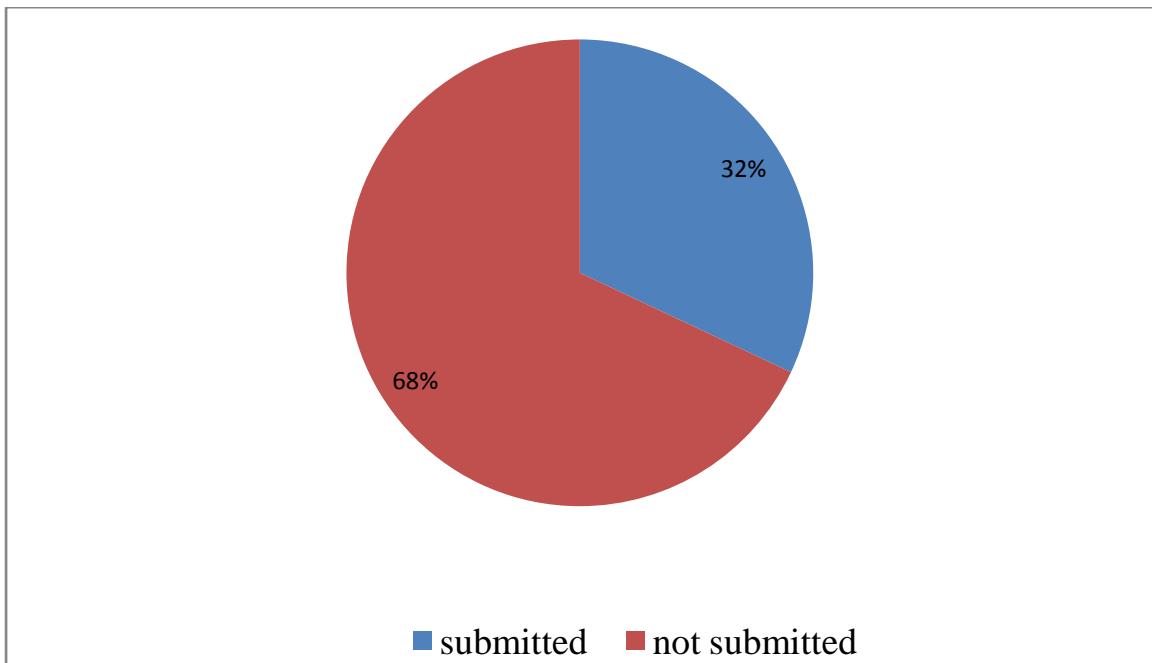


Figure 2 Submissions of Development Control Documents

Despite the fact that 98% of the respondents are aware of development control procedures, yet only 32.1% submitted their development plans for approvals, this is a serious problem in learned environment where the developers are fully aware of development control.

Table 3 showing Reasons for non submission of development plans

Reasons	Frequency	Percentage
Delay in approval	14	58.9
Financial constraints	22	32.0
Ignorance	7	09.1
Total	70	100.00

Sources: Field Survey, January 2010

The data shows delay in approval of development plans and the financial Implications are the major reasons that deter developers from submission of Plans, out of the 108 that submitted plans for approval, up to 78 (71.8%) were approved

Table 4 showing compliance with approved plans

Compliance	Frequency	Percentage
Not compiled	70	89.3
Complied	8	10.7
Total	78	100.0

Sources: Field Survey, January 2010

The table reveals that even those (71.8%) whose plans are approved 89.3% didn't developed their structure exactly according to the approval. The high number of non-compliance is certainly the reason for the disorderly development of the area.

Table 5 showing reasons for non compliance with the approved plans

Reasons	Frequency	Percentage
Plot size too small	14	58.9
Irregular shape of plot	22	32.0
Change in design	7	09.1
Total	70	100.00

Sources: Field Survey, January 2010

The data shows that too small plot size (58%) and irregular shape of plot (32%) are the major reasons why people don't follow the approved building plans and change of use is only 9%. This is probably because the layout was not designed by a professional planner or the planning standards for residential land uses are not followed.

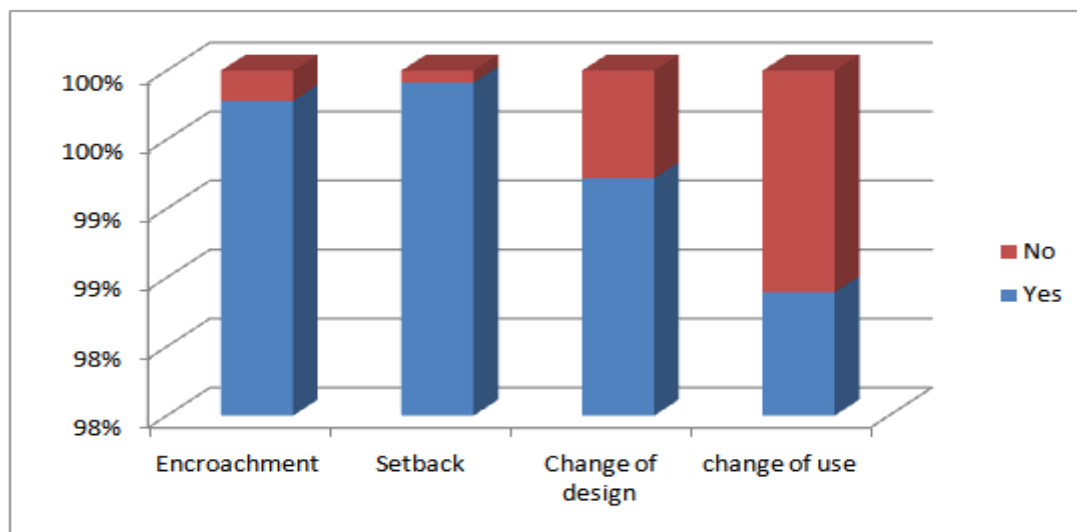


Figure 3 nature of contravention

Encroachment and setback account for 82% and 92% respectively of the nature of contravention while change of use is only 38%, that is why the roads in the area are so narrow and over 50% changed the original design of their building plans as shown in the figure *Table 6 showing nature of encroachment*

Nature of encroachments	Frequency	Percentage
Right of way	103	65.0.%
Adjacent plot	16	10.%
High tension grid	11	0.7%
No encroachment	29	18.3%
Total	159	100.0

Sources: Field Survey, January 2010

From the data above, encroachment into road right of way is common in the area, as up to 65% of the samples are involved as shown in the two figures belo *Plate 1 Encroachment In To Right Of Way*



Plate 2 Encroachment In To High Tension Grid Line

Table 7 showing setback

Set back	Frequency	Percentage
Inadequate set back	113	71
No set back	33	21
Adequate set back	13	8%
Total	159	100.00

Sources: Field Survey, January 2010

Up to 92% of the developments violated the set back standards at different degree especially on the side of the plot facing the road because the road is considered as no man’s land and only 8% complied with the set back standard

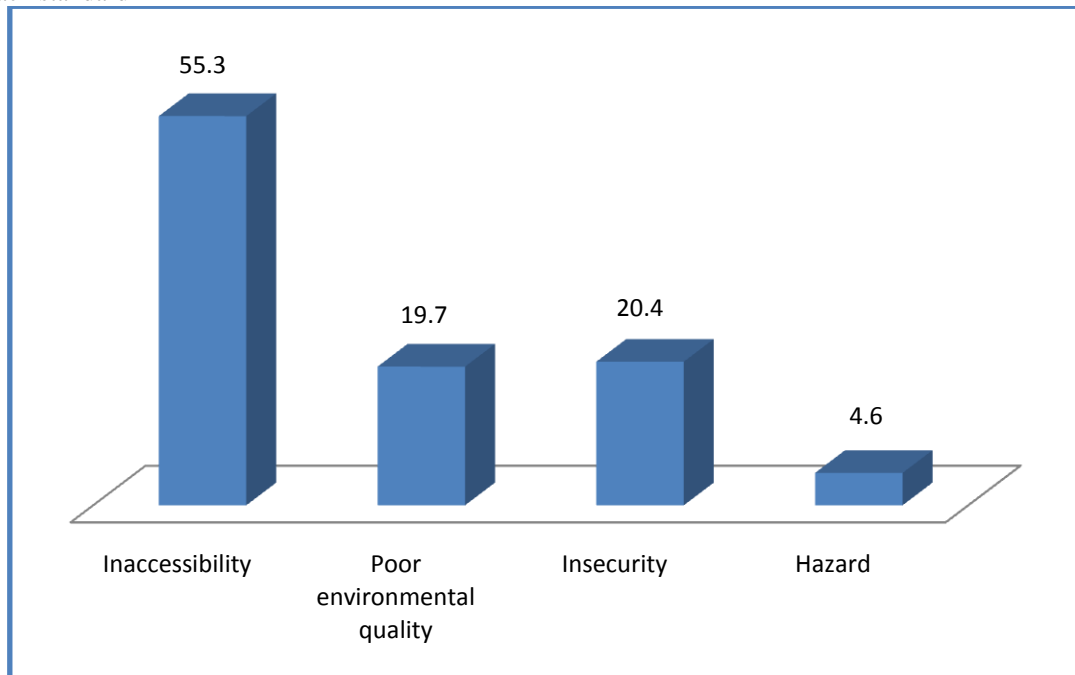


Figure 4 General Complaints of the Respondents

The data shows that 19.7% of the respondents are not comfortable with the environmental condition of the area, more than half the inhabitants, up to 55% complaints of vehicular inaccessibility while only 4.6% see hazard as problem.

Table 8 showing willingness to comply with development control rules

Willingness	Frequency	Percentage
Willing	151	96.3
Not willing	8	4.7
Total	159	100.0

Sources: Field Survey, January 2010

Up to 95.3% of the respondents are ready to comply with development control rules, only 4.9% want the present situation to remain. The willingness of the people is an opportunity for the authority responsible to enforce development control standards in the area.

HYPOTHESIS

The rank correlation (r) model is used to test the strength of the relationship between education level and compliance with development regulations as follows:

$$r = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{[(N\sum X^2) - (\sum X)^2] [(N\sum Y^2) - (\sum Y)^2]}}$$

Table 4.20 Calculation of Rank Correlation

Samples	X Education level	Y Compliance level	X ²	Y ²	XY
A	2	1	4	1	2
B	3	3	9	9	9
C	3	0	9	0	0
D	3	1	9	1	3
E	3	2	9	4	6
F	1	1	1	1	1
G	3	1	9	1	3
H	3	4	9	16	12
I	3	2	9	4	6
J	3	5	9	25	15
K	2	0	4	0	0
L	3	1	9	1	3
TOTAL	32	39	90	136	108

$\sum X = 32$
 $\sum Y = 21$
 $\sum X^2 = 90$
 $\sum Y^2 = 63$
 $\sum XY = 60$
 $N = 12$

$$\begin{aligned}
 r &= \frac{720 - 672}{\sqrt{[1080 - 1024] \times [756 - 441]}} \\
 &= \frac{48}{\sqrt{17640}} \\
 &= \frac{48}{132.81} \\
 r &= \underline{0.362}
 \end{aligned}$$

The result of the hypothesis shows that the calculated value of r is 0.362. This indicates that there is no significant correlation between the two variables, therefore. The null hypothesis (H_0) that says there is no significant relationship between education level and compliance with development regulations is accepted, thus rejecting the alternative hypothesis (H_1) that says there is significant relationship between education level and compliance with development regulations

From the age-sex structure, the respondents are of matured age and mainly men; this would make it easy for the development control agencies to enforce the regulations. More than 75% are married and have more than 6 people per household that will require a large house; this would lead to encroachment where development agencies are weak. The community is highly enlighten and should be aware of development regulations in urban areas, which is a potential for the enforcement of development control regulations. The high level of employed respondents in addition to the high income shows that the area would desire a low density zone. In terms of knowledge, the respondents have full knowledge about development control procedures of development control that is why up to 90% and 97% have site plans and building plans respectively. The failure of up to 67% to submit their development plans for approval is a serious problem, though over 90% claimed that it is because of over delay by the authority in the approval of plans and financial constraints, this would certainly lead to wrong or uncontrolled development. It is a surprise that even the 71.8% whose plans were approved did not develop in accordance with the approval. Up to 90% attributed their contravention to irregular shape of plots and too small size of plots. This happened probably because of the weakness of the development control agencies or greed on the site of the developers. Majority (87.9%) of the respondents are not happy with the nature of uncontrolled development in the area, that is why more than half (55.3%) complained of inaccessibility, 20% of insecurity and just 4.6% foresee the hazard of building under the high tension line. Fortunately, almost all the respondents indicated their willingness to comply with development control agencies to improve their environment

IV. RECOMMENDATIONS

- Since it has been discovered that personal knowledge of development control did not create orderly development, the rules should be enforced to the fullest,
- A community physical development inspection team should be constituted in the neighborhood to closely monitor and stop encroachment especially in to the right of way, as this would complement the effort of the development control agency.
- Regular monitoring of physical development: Field survey indicates that most developers' in the study area build contrary to the approved building plans. Therefore it becomes necessary for the development control department of the board to regular site inspection when constructions are being carried out. This is to enable planning officials to detect incidents of development contravention and apply appropriate measures on time. This will go a long way in minimizing cases of illegal constructions.
- To avoid the menace of substandard and irregular plots, all layouts whether private or public must be designed or supervised by a qualified Town Planner and must be approved by the urban development board before implementation.
- The Power Holding Company of Nigeria should carry out site inspection along the right of way of its transmission lines especially the one that pass through urban centres at least once in every five years to check encroachment
- Removal of delay in obtaining building plan approval: Questionnaire survey carried in the study area reveals that most developers tend to build without obtaining building plan approval. This attribute to the delay and high cost in processing plans for approval in the planning department of the board. For instance, the NURPL decree no.88 of 1992 provides that developers should granted permission or rejection after 90 days of submission of building plan. This time period appears too long, therefore to ensure strict compliance by developers, there is need for shorter period for processing building plan. This call for a review of this law and also the cost of processing building permit should be reduce so that developers can easily pay approval fees. Building plan approval could now be process between 21-28 days.

V. CONCLUSION

The importance and necessity of development control in physical development cannot be over emphasized especially in new emerging urban community like millennium quarters Bauchi. Since development control creates a decent and healthy physical and socio-economic environment for living, working and leisure, it is necessary to enforce the regulations to the fullest through partnership between the enforcement agency and the community

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