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CONTENTS

SERVICEABILITY AND HEALTH IMPLICATIONS OF STUDENTS' HOUSING IN NIGERIAN TERTIARY INSTITUTIONS: A CASE STUDY OF THE FEDERAL POLYTECHNIC, BIDA.

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ABSTRACT

Housing problem is experienced across all socio-economic and age groups. This paper examines the condition of students housing in Nigerian tertiary institutions with particular reference to the Federal Polytechnic, Bida. It considers the quantitative and qualitative aspects of the facilities provided. The research findings show gross inadequacies in the existing hostel accommodation, a situation that resulted in poor housing condition. The poor condition is found to impact significantly on the health of residents. Measures to ameliorate the problem, such as facility expansion and necessary attitudinal change among the hostel users amongst others are recommended.

1. INTRODUCTION

For quite a long time now, the housing desire of the less privilege members of the society has remained unfulfilled despite series of public housing programs and private individual efforts. This is because, the needs of the dependent and vulnerable groups in the society have attracted little attention in most parts of the world.

In Nigeria, students across the country face serious housing problem as facilities put in place in most of the Nigerian tertiary institutions have become inadequate due to increases in student intake and stress arising from over use or misuse. At present, the existing capacities of some of the institutions have reached a bustling limit while the growing shortage of student accommodation is assuming a crisis proportion. The housing situation in many of the campuses is such that students overcrowd in rooming apartments with over shared facilities. Not only this, many of the non-living spaces have been converted into living rooms while the stress on the available ancillary facilities have resulted in the break down of utilities. Consequently, the sanitary condition in the students' hostels across the country has deteriorated over the years, a situation which exposes students to high risk of contacting disease. It is this ever worsening problem of student housing that this research addresses.

The paper considers both the quantitative and the qualitative aspects of student accommodation at the Federal Polytechnic, Bida. It examines the adequacy and the functionality of the facilities provided, the sanitary problems and its effect on students' health. The paper concludes

with summary and discussions on how to improve on students' housing in the school

2. RESEARCH SETTING

Bida, an ancient town in Niger state, Nigeria lies at 90 06' North and 60 01' East on a sandstone formation (Figure 1.). From its 734 hectares of built up area and an annual urban growth rate of 4.4% in 1980(Max Lock Group, 1980), the town is projected to cover about 1,461.9 hectares of land (9.03 sq. km) in 1996. It has a large concentration of indigenous population who live in compact traditional buildings found in the core area of the town. The National Population Commission, Minna, estimates the town's population at 117,814 in 1996. Today, bulk of the old traditional housing units are quite remote (about two kilometers) from the site of the Federal Polytechnic. As it were, the qualitative deficiency in the traditional stock and the problem of relative inaccessibility have combined to limit the access of students to descent and affordable accommodation outside the school's campus.

The Federal Polytechnic, Bida (Figure 2) was established on 1st of March 1977, first as Kano State College of Technology and later as Bida College of Technology by Decree number 33 of 1979 (now the Federal Polytechnic Act of 1990). From about 180 students in the 1977\78 session, the school's student population has grown to 1,658 in the 1990\91 session, 9910 in the 1995\96 session (Table 1.) and to over 11,000 in the 1 996\97 academic year.

As at the time of moving to its current permanent site in 1979, 10 hostel blocks (blocks A-J) were initially provided. Each of the blocks contains 26 living rooms, giving a total of 260 rooms. The initial hostel facility was extended in 1991 with the addition of four blocks (blocks K-N), containing a total of 150 living rooms. Currently, the school has a total of 14 blocks of student hostels (figure 3) with a total of 410 living rooms and 1,816 bed spaces (table 2). The first ten blocks serve the male students while the last four accommodate the female students.

Table 1: Student Enrolment and Graduation Figures 1990-1996.

Session	Student population	Graduation figure	Withdrawal per session	Net removal per session	Annual growth rate (%)
1990/91	1,658	647	190	837	2.4
1991/92	3,747	838	228	1,066	8.0
1992/93	5,095	484	266	750	12.9
1993/94	5,647	922	300	1,222	13.2
1994/95	7,570	1,757	362	2,119	22.5
1995/96	9,910	702	424	1,126	26.1
Total	33,627	5,320	1,770	7,120	85.1

**Mean annual growth rate =14.2%

Source: Adapted from Academic Affairs Office, 1997.

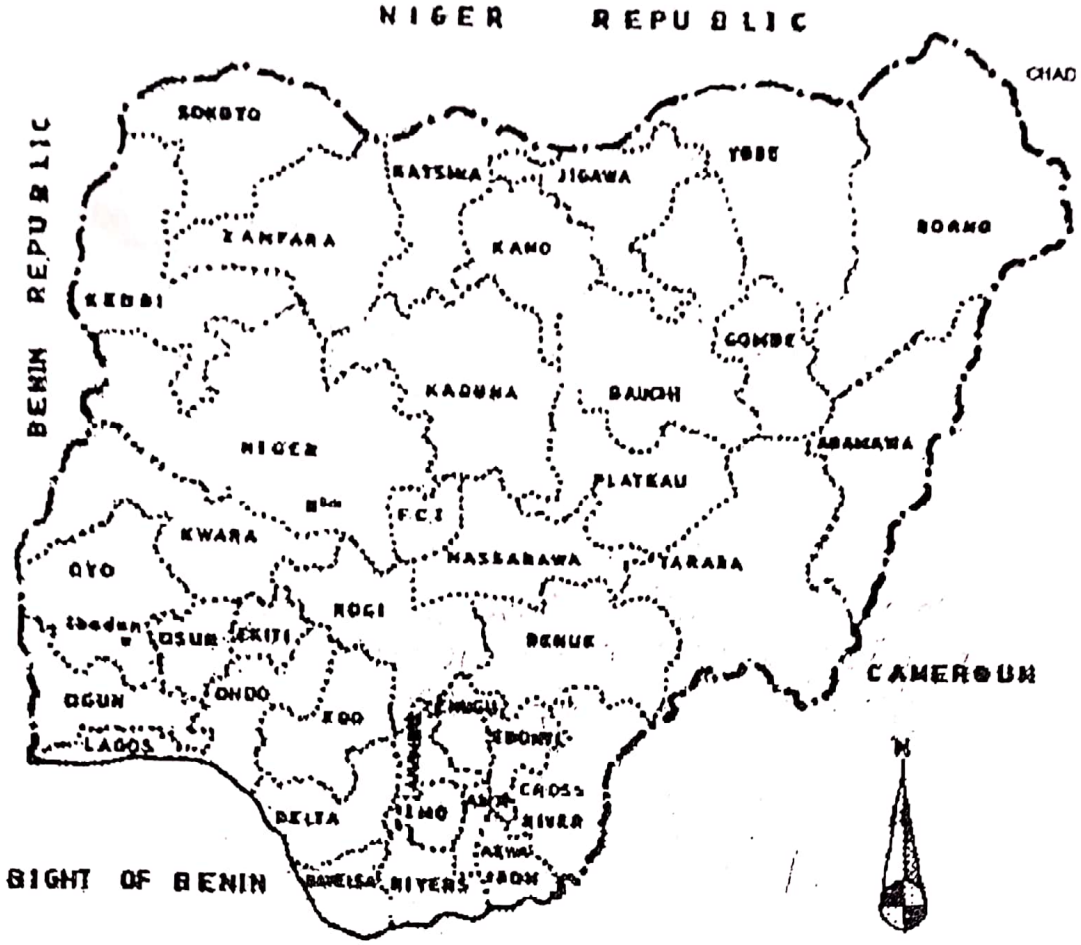

Fig. 1: Map of Nigeria showing Bida in Niger State.

Table II: Available Hostel Room and Bed Spaces in Federal Polytechnic, Bida

Hostel	Blocks	No. of rooms	No. of bed spaces
Male hostel	10	260	1,136
Female hostel	4	150	680
Total	14	410	1,816

Source: Student Affairs Office, 1997

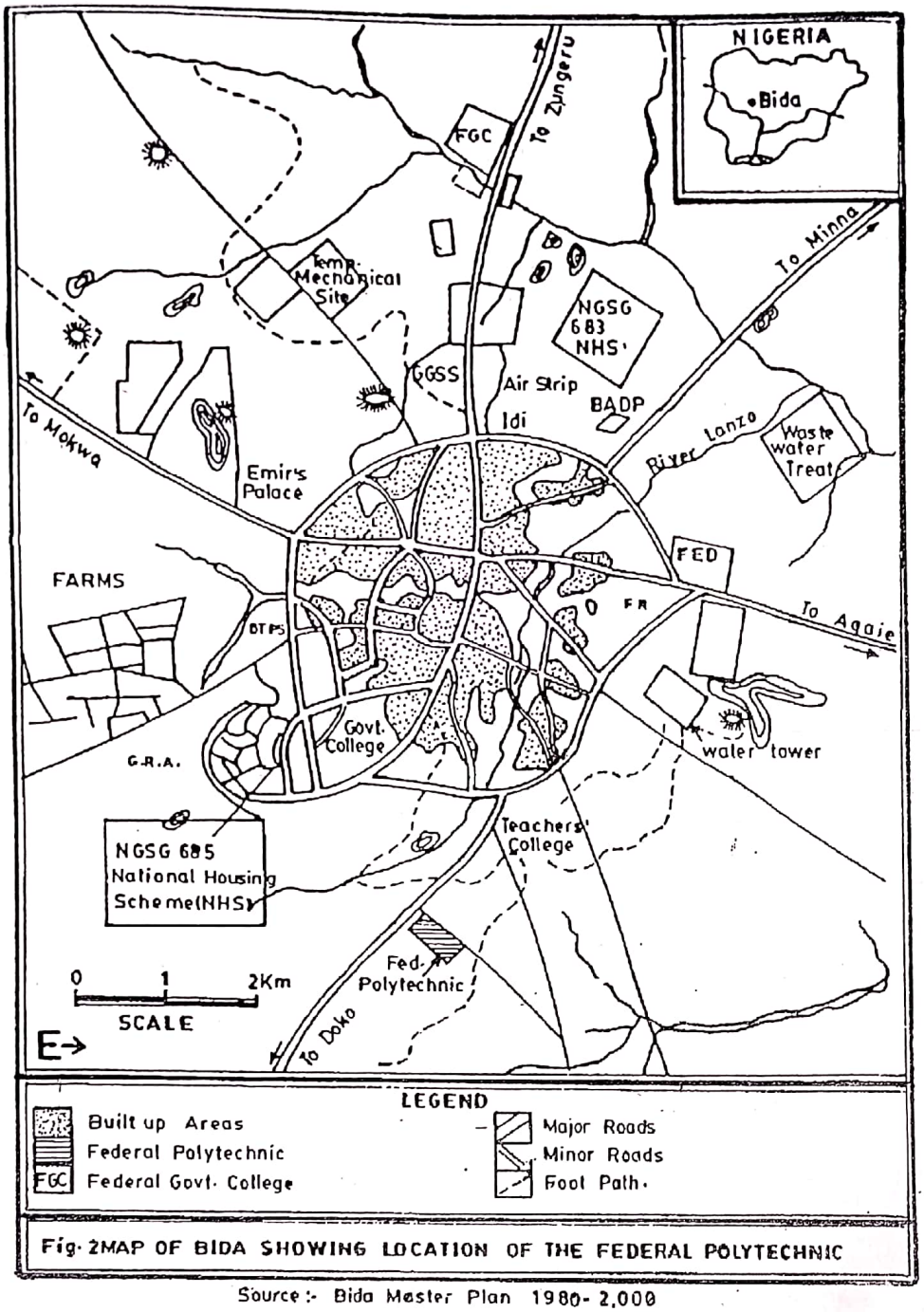

Fig. 2MAP OF BIDA SHOWING LOCATION OF THE FEDERAL POLYTECHNIC

Source :- Bida Master Plan 1980- 2,000

3. METHODOLOGY

This research benefited from a wide range of data sources which are mainly in the primary and secondary categories. Secondary data on housing problems, needs, serviceability, health implications and school enrolment figures were gathered from books, World Health Organization's (WHO) technical reports, records of the health center, academic and student affairs' officers, while the primary data were collected through the use of questionnaires, oral investigations and personal observations.

The primary data, were collected using three sets of questionnaires to collect information on the existing facilities, the number of students accommodated in the school, the types of diseases common amongst the students and their causes, the adequacy and functionality of hostel facilities, the sanitary situation and the effects of housing on students' health.

The questionnaire administration amongst the hostel residents followed a random-systematic sampling method. In each block, one of the first two rooms was picked at random to determine the starting point. Thereafter, the sampling proceeded in a systematic manner in which one out of every two rooms was visited. Hence 50% of the 410 living rooms were sampled for the study. The sample frame was determined using the total number of living rooms available. As a result, 130 questionnaires (13 per block of 26 rooms) were administered at the male hostels, which has a total of 268 living rooms, while 75 questionnaires (18 per block of 37 rooms) were administered in the female hostel with a total of 150 living rooms. In the aggregate, a total of 205 questionnaires were administered in the male and female hostels. In each of the rooms visited, only one of the students officially allocated to the room was interviewed based on first encounter.

4. HOUSING NEEDS AND SERVICEABILITY: A BRIEF CONCEPTUAL EXPLANATION.

Housing need has been traditionally defined as the short fall between the demand for and the actual supply of dwelling units in a given housing market. This definition has a numerical connotation in which the number of dwelling units available is often matched with the number of persons or households demanding shelter at a particular point in time. This quantitative view of housing need is however considered as inadequate as there is more into the quality of units than the numerical quantity of houses available. This is because experiences have shown that quite an appreciable number of people who have a roof over their heads still exhibit various degree of need in terms of supply of adequate facilities and qualitative environment. The problems of poor housing conditions, structural and infrastructural inadequacies in most of the existing dwelling units have thus introduced complexities into the conception of housing need.

Aside from the numerical definition, housing has been viewed as a normative concept which expresses a socially desirable balance between the number of household and the number of housing units on the one hand and the socially acceptable quality of housing condition on the other. In order to capture the totality of housing need, the Winslow's Committee on housing hygiene in America has, in 1946 identified four different aspects of housing need which define the adequacy or habitability of dwelling units. These include; physiological, psychological, facility and security needs. All these requirements define the qualitative aspect of housing and they are well elaborated on in the literature (see Oluwande, 1983; pp 173-175 and Onibokun 1985; pp. 79 - 82). Their presence or absence, to a large

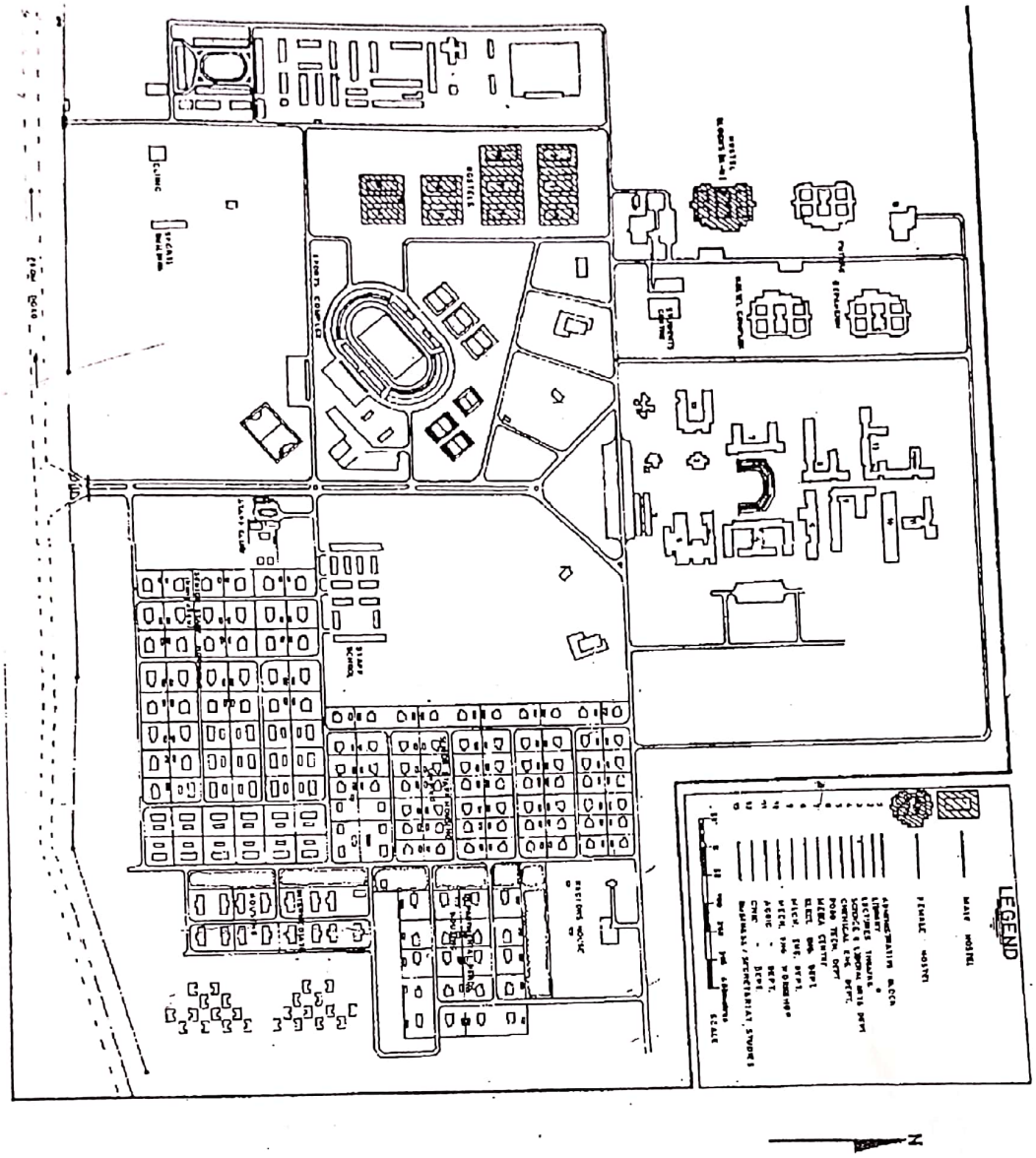

Fig. 3: Land Use Plan of the Federal Polytechnic Bida Niger State, showing the Existing Features

extent, determine the level of housing need in a given society.

The quality requirement in dwelling units addresses the question of housing serviceability in a particular housing market. The concept of serviceability measures the provision and the utility level of amenities. In his definition of serviceability, Mabogunje (1973) has partly observed that the problem of serviceability include the inability of cities to provide adequate amenities (water, electricity, health and sewage disposal facilities, etc.) for its resident population and those of their tributary areas. However, at the level of human housing provision, the problem of serviceability extends beyond mere supply of these amenities to include the degree of their utility as measured by their level of functionality. In essence, serviceability in human dwellings addresses the issue of the provision and the functioning of ancillary facilities in houses. It is this level of serviceability that determines the habitability of housing units and to a large extent, the overall level of housing needs in an economy.

5. SOME ESTABLISHED HEALTH IMPLICATIONS OF POOR HOUSING

Although the literature on the health implications of housing is still relatively scanty, established facts on the subject have, remained consistent over the years. For instance, many earlier writers including Mackintosh (1965), Sofoluwe (1969), Salvato (1958), Wilner *et al* (1962), Haddock (1961), etc., have demonstrated that certain ill health are related to specific poor condition of housing despite the fact that such factors as poverty, malnutrition, poor knowledge of preventive medicine and personal hygiene have introduced complexities into the determination of the health impact of housing on poor communities (Oluwande, 1983). Even though it is difficult to quantify the importance of environmental factors in relation to many other contributory factors (WHO, 1992), these and most other works on housing and health have established that there is a significant degree of association between the quality of housing and the state of peoples' health. The relationship between the two is such that, housing has a causal effect on peoples' health.

Health hazards can be interpreted by properties of differential living conditions (types of houses, availability of basic amenities and quality of dwelling houses)rather than the natural foci of diseases(Iyun, 1993). This fact had earlier been alluded to by the 1992 report of the WHO which affirmed that, good housing and a suitable physical and social environment promote good mental and physical health. "Where they are absent, psychosocial disorders can become a major cause of morbidity and death among adolescents and youths".

Amongst all the common diseases found in association with poor and overcrowded housing, tuberculosis, streptococcal infection, rheumatic fever, rheumatic heart diseases, typhoid fever and diarrhoea, remain the most endemic. Pathogenic organisms and vectors such as flies often cause these diseases and rodents found in unhygienic human environments. In specific terms, different aspects of poor housing impact differently and at varying degrees on peoples' health. According to WHO (1987) lack of access to safe drinking water exposes people to high risks of contacting diarrhoea diseases (and to this we may add typhoid fever) while improper excreta disposal provides breeding ground for disease-carrying parasites and engenders the spread of pathogenic organisms through fecal-oral transmission.

The different summations on the effect of poor housing and environmental quality on

health have been backed up by studies that confirmed the causal relationship between the two. The account of Oluwande (1983) shows that, studies carried out in the United States of America, and which were quoted in the works of Salvato (1958), Schorr (1970), Britten(1942) and Fisher & Pierce (1967), have revealed that the rate at which communicable diseases spread is about 65% higher for slum dwellers than the national average.

Likewise, the WHO\GTZ(1993), in their investigation of environmental risk factors at the household level in peri-urban South Africa, have identified the risk factors for diarrhoea as including lack of inside tap or flush toilets, lack of refuse receptacles, not being connected with electric supply and having more than two people per room. In Bamako, Mali, the United Nation Population Fund (UNPFA, 1996) has also found that such risk factors as poor drainage, uncollected garbage, lack of potable water and sanitation facilities are among the conditions that have resulted in the proliferation of flies and mosquitoes and rampant malaria, diarrhoea and other illnesses noticeable in the raining season.

The foregoing literature survey demonstrates a strong association between housing and health. Generally, it is noted that housing design, construction techniques and the materials used determine its durability, safety and the amount of protection provided against harsh weather conditions. Its location regulates or determines the level of human exposure to noise, hazard from industrial and human wastes, flooding and other natural hazards. The levels of ancillary facilities provided, and the sanitary condition of its internal and external settings, determine the level of comfort and the general health status of its inhabitants.

6. RESEARCH RESULTS

The dimensions and peculiarities of students' housing problem differ across the campuses. The remaining sections of this paper presents the students' housing situation at the Federal Polytechnic, Bida, starting with the adequacy and serviceability of hostel facilities.

6.1 Adequacy and Functionality of Existing Facilities

Against the background of the level of facilities provided and the philosophy behind their provision, the study examined the adequacy of rooms and bed spaces provided as well as the functionality of hostel facilities in the school. Space adequacy is determined considering the proportion of students accommodated and the level of hostel congestion while the service level of the entire hostel facility is measured by the degree of functionality and utility derived by the hostel users.

As regards space adequacy, research findings reveal acute quantitative shortfall. All the 205 students interviewed were of the opinion that the number of accommodation provided by the school is grossly inadequate. In the 1995/96 academic session for instance, only about 1,816 of the 9,910 registered students were officially accommodated in the 410 living rooms, while the remaining 8,094 students were not accommodated. Hence the deficit in number of rooms required as at the 1995/96 session is put at 2,0684 (Table 3)

Table III: Housing Facility Provision, Deficit and Need 1990 - 1996 at Federal Polytechnic, Bida

Session	Student population	No. of room needed	No. of rooms available	Deficit	Persons per room
1990/91	1,658	415	260	155	4
1991/92	3,747	937	410	527	4
1992/93	5,095	1,274	410	864	4
1993/94	5,647	1,411	410	1,001	4
1994/95	7,579	1,993	410	1,483	4
1995/96	9,910	2,473	410	2,068	4

Source: Computed from the records, Academic Affairs Office, 1997

The conversion of laundries and other non-living spaces to living rooms as well as high degree of room congestion also indicate the problem of space inadequacy. First, the design capacity of the rooms had been exceeded through the allocation of four students to a room which was originally design for two. Further investigations revealed that between 5 and 20 students live in a room officially allocated to four students, giving an average of 13 persons per room. Hence, 197(96.1%) of the respondents agreed that their rooms or most rooms in the hostels are congested.

The existing problems of space and room congestion have implications for the functioning of hostel ancillary facilities provided. The functioning level of the facilities is found to be below average as 98% of the respondents opined that the existing facilities are not functioning well. In all the hostel blocks, it was found out that most of the available bathrooms and toilets lacked adequate drainage system while problems of inadequate water supply, poor lighting, broken water closet and soakaway pits existed. In hostels C, D, E, G, H, J and I for instance, some toilets were found to be temporarily out of use as at the time of the study.

The problem of water supply include shortage due to irregular supply, poor water quality, broken pipes, worn-out pump heads and the non-functioning of the hand-pump boreholes provided in the hostels. 121(59%) of the respondents complained of irregularity in supply. Our findings on the schedule of water supply as shown in Table 4 below reveals that water is mostly supplied to the hostels once in 2 - 3 days.

Other related problems of ancillary facilities in the rooms include, default in electric fittings, inadequate use of spaces, poor ventilation, damaged and non-functioning ceiling fans, inadequate wardrobes as well as shortages of writing tables and chairs. The quantitative and qualitative problems coupled with poor maintenance have therefore reduced the serviceability and the general utility derived from the student accommodation provided in the school.

Table IV: Frequency of Water Supply to Students Hostels at Federal Polytechnic, Bida

Frequency of supply	Number	%
Everyday	3	2.5
Once in 2 - 3 days	72	59.5
Once in 4 - 5 days	19	15.7
Once a week	24	19.8
Once in two weeks	3	2.5
Total	121	100

Source: Fieldwork, 1997.

6.2. Sanitary Problems and Students Living Condition in the School.

Hostel sanitary condition as a measure of housing quality determines the livability of students' hostels and gives much insight into its health implications. Investigation on the sanitary condition of the hostels revealed an appalling situation. Within the hostels, such problems as littering, untidy gutters and heavy stench originating from waterlogged bathrooms and unflushed toilets exist. Amongst these, the toilet situation is perhaps the most disturbing. In most cases, the toilets are slippery due to dirt, the basins overflown with human faeces while cases of maggots on toilet floors and even in students' living rooms were confirmed. Cases of refuse and human faeces littering the immediate hostel environment were also observed.

The sanitary condition within and in the immediate surroundings of students hostels was generally found to be unfit for human habitation. The situation is such that students live in unkempt and heavily polluted environment. In the rating of the sanitary condition of their hostels therefore, 85% of the respondents rated it as poor while 80.5% rated the general living condition in the hostels as poor (Tables 5 and 6).

The poor sanitary condition of students hostel and the subsequent poor condition of living were found to arise from managerial and attitudinal problems. The managerial problems include inadequate facility maintenance, irregular cleaning, shortage of refuse containers, grounded disposal vehicle and lack of disposal site. On the other hand, the attitudinal problem has to do with students' poor attitude to environmental hygiene and mishandling of hostel facilities, which contributed to the poor state of hostel accommodation in the school.

6.3 Health Implications of Poor Hostel Condition

Investigation on the health consequences of poor hostel environment was conducted. Research results on student awareness of the possible effects of poor sanitation revealed that 199(97%) of the residents were aware of some negative effect of poor hostel condition. They confirmed that drinking of impure or contaminated water often results into intestinal diseases while the poor toilet condition promotes some infectious diseases amongst the students.

There are quite a significant number of diseases afflicting students of the school, 32 of which were selected from the records of the

Table V: Students' Hostels Sanitary Condition at Federal Polytechnic, Bida

Serial No.	Rating	Frequency	%	Cum. %
1	Very dirty	62	30	30
2	Dirty	133	55	85
3	Fairly clean	24	12	97
4	Clean	6	3	100
	Total	205	100	-

Source: Fieldwork; 1997.

Table VI: General Living Condition in the Hostels at Federal Polytechnic, Bida

Serial No.	Rating	Frequency	%	Cum. %
1	Very poor	73	35.6	35.6
2	Poor	92	44.9	80.5
3	Fair	38	18.3	99.0
4	Good	2	1	100.0
	Total	205	100.0	-

Source: Fieldwork; 1997.

health center for reference in this study (Table 7). Amongst all these, the students have identified such housing and environmentally related diseases as typhoid and malaria fever, abdominal pains, dysentery, diarrhoea, cough and catarrh, skin diseases, chicken pox, etc. as the most common in the hostels. While the hospital sources confirmed that the most common diseases are caused by mosquito bites, excessive heat, inadequate rest, virus and bacterial infections due to poor personal hygiene and environment, students have generally linked the cause and spread of these diseases to room congestion, impure water consumption and dirty living environment (Table 8). An examination of the students sickness statistics shown in Table 7 further confirm the association between students housing condition and the rate of disease occurrence in the school. Analysis of the differences in sample means computed for the available figures in 1990 and 1992 gives a significant t value of 2.71 at 0.5% level of confidence (Appendix 1).

It is therefore generally observed that the 1990\91 academic session represents a threshold of high disease occurrence while the 1991\92 session show a period of low manifestations from where the rate of occurrence has picked up to culminate into the 1995 figures (See Figures 4 and 5).

Table VII: Students'Sickness Statistics for 1990, 1992 and 1995 at Federal Polytechnic, Bida

	TYPES OF DISEASES	1990	1992	1995
1.	**Acute Abdominal pain	NA	19	239
2.	Allergic reactions	239	27	35
3.	Asthma	16	32	31
4.	**Boils & Abscesses	195	78	181
5.	Bronchitis	15	65	1
6.	**Chicken pox	4	22	50
7.	**Constipation	146	19	60
8.	Dental Problem	79	62	35
9.	Diarrhoea	201	51	39
10	Dysmenorrhoea	166	51	10
11	**Dysentry	195	72	225
12	Ear problem	93	66	29
13	Eye problem	356	72	170
14	Fungi Infection	161	60	56
15	Generalize pain	996	90	193
16	Insomnia	75	52	16
17	**Malaria	1435	277	999
18	Mouth infectionlstomatitis	100	75	25
19	Orchitis	19	28	NA
20	Pharyngitis	227	32	NA
21	**Respiratory track infection	1221	45	353
22	RoadAccident	11	17	16
23	Skin infection	311	75	68
24	Snake Bite	5	NA	NA
25	Scabies	26	68	10
26	Tetanus	3	NA	NA
27	Urinary infection	131	56	58
28	Sexually transmitted diseases	151	18	15
29	Worm infection	101	26	6
30	Wounds&Sores	125	81	136
31	Miscellaneous	234	135	465
32	**Typhoid Fever	NA	5	18

* * Housing Related Diseases. NA = Figure not available

Source: The Health Center, Federal Polytechnic, Bida. 1997

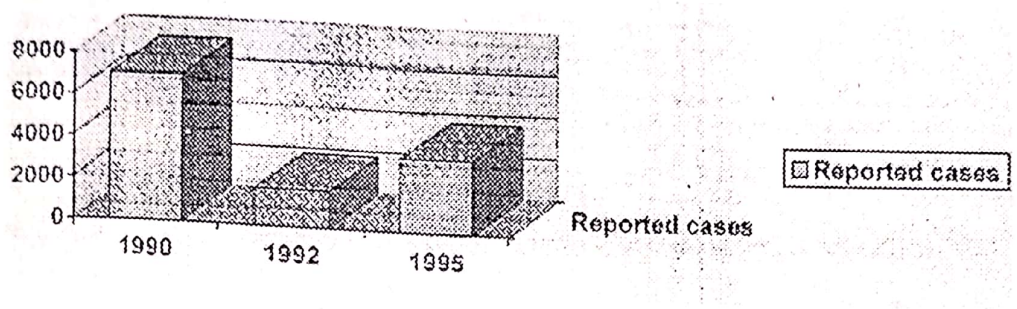

Fig. 4: A Bar chart showing the trend of diseases (1990 - 1995) at Federal Polytechnic, Bida

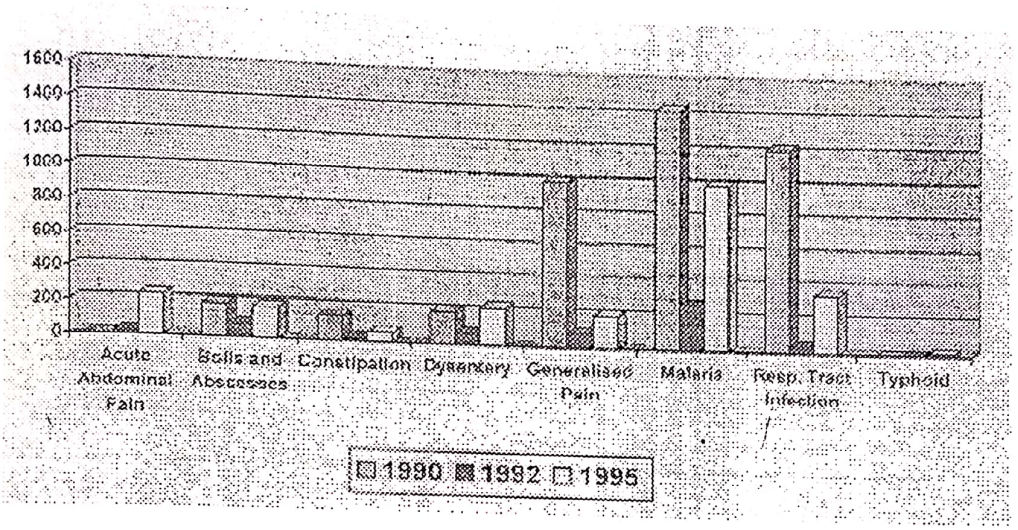

Fig. 5: Showing trends in the Occurrence of Housing Related Diseases (1990 - 1995) at Federal Polytechnic, Bida

The fall in the rate of disease occurrence in 1992 is partly explained by improvements in student accommodation through the addition of about 150 rooms and 680 bed spaces to the existing stock in 1991. It is therefore noted that even though the school enrolment figure rose from 1,658 in the 1990\91 session through 3,747 in 1991/92 and to 5,095 in the 1992/93 session (Table 1), the number of cases recorded for most diseases in 1992 was lower than the 1990 figures. However, as the school enrolment figure rose from 5,095 in the 1992/93 session through 5,647 in 1993/94 and to 9,910 in the 1995/96 session, the rate of disease occurrence has generally picked up and is on the rise.

TableVIII: Factors Responsible for Health Problems in Students' Hostels at Federal Polytechnic, Bida

S/N	Factors	F	%
1	Dirty environment condition	78	38
2	Water contamination	11	5.4
3	Room congestion	35	17.1
4	Dirty environment and impure water	37	18.0
5	Dirty environment and congestion	32	15.6
6	Impure water and congestion	12	5.9
	Total	205	100

Source: Field work; 1997.

A comparison of the sample means for the figures in 1990 and 1995 yields an insignificant t value of 1.44 at 0.5% level of confidence to show that the situation in 1990 is not significantly different from that of the 1995 (Appendix 2). The rise in morbidity could be adduced to the fact that the effect of the additional stock have been reduced to an insignificant level with the increase in student population and the corresponding high rate of room congestion, utility breakdown as well as environmental degradation.

Another deduction which proves the negative effect of poor housing condition on students' health is that, amongst all the diseases considered in Table 7, those related to poor housing and environment are generally of higher frequency. Thus, high incidence of such diseases as acute abdominal pain, dysentery, generalized pain, malaria, pharyngitis/skin infection, respiratory tract infection as well as wound and sore are generally recorded. The total number of cases recorded in these relatively few diseases is more than double of all other diseases put together in the year 1990 and 1995 respectively. The high incidence of these diseases also correlates poor housing condition and the rate of disease occurrence in the school.

7. DISCUSSIONS

The above research results present the picture of the student housing situation at the Federal Polytechnic, Bida and reveal the areas of great concern. The totality of the facility and sanitary problems have therefore been found to impact significantly on students' health in the school. Consequently, the housing facility in the school is found to fall short of the four basic physiological, psychological, health and security needs required of adequate or habitable housing as discussed in the conceptual background to this study. This situation therefore calls for urgent attention.

Addressing the housing needs of students in high institutions of learning in Nigeria requires a high level of official commitment. At the Federal Polytechnic Bida, this commitment will involve a high level of official concern, meaningful practical actions and attitudinal change. In quantitative terms, there is the urgent need to expand the existing facilities. Given the mean growth rate of 14.2% (Table 1) the population of the school is expected to rise to 11,317 in the 1996/97 session, 12,924 in 1997/98 academic year and to 16,855 in the 1999/2000 school calendar. Accordingly, the number of living

Table IX: Students Population Projection and Housing Need, 1995-2000 at Federal Polytechnic, Bida

Sessions	Population projection	No. of rooms needed (at 4 persons/ room)
1995/96	9,910	2,183
1996/97	11,317	2,829
1997/98	12,924	3,231
1998/99	14,760	3,690
1999/2000	16,855	4,214

Source: Author, 1997.

rooms needed is expected to increase from 2,829 to 4,214 in the period under review (Table 9). There is therefore the need for adequate rehabilitation of the existing stock while commensurate number of hostel blocks should be built to accommodate the current and the prospective students of the school.

The existing quantitative/qualitative shortages and the expected increase in student population are important indications of great needs. The level of efforts to be put into the rehabilitation and expansion of facilities require a befitting environmental sanitation program. In line with the expected increases in student population and the corresponding increases in waste generation, there is the need to increase the present number of hostel cleaners, provide more refuse containers, resuscitate the grounded refuse van and to provide a central disposal site (Landfill) for effective waste management.

While a lot of commitments and practical actions are required at the management level, a commensurate degree of attitudinal change among the hostel users is important to ensure cleanliness and sustainable use of hostel facilities. This is perhaps a difficult feat to~att~in. Here, the problems to be addressed include: how to control student population, enforce sanitation rules, prevent wrong electrical connections and the use of un-authorized electrical appliances etc. The school should enforce sanitary rules and incorporate environmental education program into the school's curricular as well.

In the aggregate, it is clear that any meaningful improvement on student housing in the school requires actions at several fronts. However, whatever effort made may not yield good results if adequate attention is not paid to health needs, convenience and operational efficiency of the facilities provided. Hence adequate attention should be paid to minimum standards, health and safety as well as technological simplicity in whatever facilities that may be provided in the future.

POSTSCRIPT

Against the background of the poor housing facilities and environmental services observed in the study area, the Petroleum Trust Fund's (PTF) infrastructure rehabilitation program was extended to students' hostels at the Federal Polytechnic, Bida in May, 1998. The rehabilitation works carried out in both the male and the female hostels brought the housing condition to a fairly acceptable standard. However, the PTF's project excluded four of the boys' hostels and did not involve facility expansion, which is the most critical issue desiring attention in the

school. As it were, the Polytechnic still maintained its high profile of student intake while the number of graduating students in the 1996\97 fell from the previous years. This implies that the problem of acute housing shortage with its associated problems of congestion, stress on existing facilities and incessant break down are still critical issues to be resolved. In fact, most hostel toilets renovated have gone bad within three months of use and the problem of environmental pollution arising from the use of nearby bushes as toilets has re-surfaced. Unless the current level of the existing facility is expanded and other measures recommended in the text are considered, the hostel condition will, in a short time, return to the bad old days with its associated health problems.

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