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Analysis Of Slums in The City of Taiz: A Case Study of The Kalabah And Osifra Areas

تحليل الأحياء العشوائية في مدينة تعز: دراسة حالة مناطق كلابة وعصيفرة

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Slum Improvement, Urban Redevelopment, Socio-Economic Conditions, Analysis of slums, Rehabilitation.

ABSTRACT

The informal settlements in Taiz, such as Kalabah and Osifra, present significant challenges to urban development in Yemen. This study examines the conditions of these neighbourhoods in terms of infrastructure, socio-economic factors, and urban planning while addressing the obstacles to their improvement. Utilizing field studies and data analysis, it seeks to understand the factors behind the emergence and persistence of these settlements. It evaluates the impact of government policies and local initiatives in tackling this issue. The study advocates for sustainable strategies to enhance the quality of life in these areas through improved urban planning, infrastructure development, and access to essential services. It concludes that effectively addressing informal settlements necessitates collaboration between government entities and local communities, as well as the adoption of integrated urban policies that take into account the economic, social, and cultural dimensions of residents' lives. Furthermore, the research recommends the establishment of a comprehensive framework aimed at promoting sustainable development in the informal areas of Taiz, with a focus on improving living conditions and achieving balanced urban growth.

الكلمات المفتاحية

تحسين الأحياء الفقيرة، إعادة التطوير الحضري، الظروف الاجتماعية والاقتصادية، تحليل الأحياء العشوائية، إعادة التأهيل.

الملخص

تشكل المناطق العشوائية في تعز، مثل كلابة وعصيفرة، تحديًا كبيرًا للتنمية الحضرية في اليمن. تحلل هذه الدراسة ظروف هذه الأحياء فيما يتعلق بالبنية التحتية والعوامل الاجتماعية والاقتصادية والتخطيط الحضري مع مراجعة التحديات التي تواجه تحسينها. ويعتمد على الدراسات الميدانية وتحليل البيانات لفهم العوامل الدافعة لظهور هذه المستوطنات واستمرارها ودراسة تأثير السياسات الحكومية والإجراءات المحلية في معالجة هذه القضية. وتقدم الدراسة استراتيجيات مستدامة لتحسين نوعية الحياة في هذه المناطق من خلال تحسين التخطيط الحضري، وتطوير البنية التحتية، وضمان الوصول إلى الخدمات الأساسية. ويخلص إلى أن معالجة العشوائيات تتطلب التعاون بين الجهات الحكومية والمجتمعات المحلية، إلى جانب تبني سياسات حضرية متكاملة تراعي الجوانب الاقتصادية والاجتماعية والثقافية للسكان. ويوصي البحث بإنشاء إطار شامل لتعزيز التنمية المستدامة في المناطق العشوائية في تعز، مع التركيز على تحسين الظروف المعيشية وتحقيق النمو الحضري المتوازن.

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1. Introduction:

Slums are crowded urban areas where people live in poor-quality housing, often constructed from makeshift materials. These areas lack basic services such as clean water, adequate sanitation, reliable electricity, and proper waste management. According to the United Nations Human Settlements Program (UN-Habitat), a slum household is defined as a group of individuals living together in a place that lacks one or more of the following: durable housing, sufficient living space, easy access to safe water, adequate sanitation, and security of tenure (UN-Habitat, 2013).

Slums are a significant issue worldwide, especially in developing countries. They are often linked to rapid urban growth, poverty, and inadequate housing. In Yemen, the situation is even more challenging due to ongoing conflict, which has led to increased displacement and expansion of slums in cities like Taiz (Transfeld & Werenfels, 2020). Residents in these areas face severe health risks, poor sanitation, and limited access to education and jobs (Al-Awlaqi & Alsabri, 2019).

Several factors contribute to the growth of slums. Rapid urbanization driven by people seeking better job opportunities has increased the demand for housing, often leading to the formation of informal settlements (UN-Habitat, 2003). Economic issues, such as poverty and lack of financial resources, also push families into slums, where housing is more affordable but often inadequate (Davis, 2006).

Political problems, like weak governance and poor urban planning, further exacerbate the issue. Inadequate policies can lead to unauthorized expansion of slums, making it hard for urban planners to provide essential services (UN-Habitat, 2013). Additionally, environmental factors, such as natural disasters and climate change, can force people to migrate to slums when no emergency housing is available (Hardoy & Satterthwaite, 2014).

The slums in Yemen are called 'Akhdam' or 'Muhamashyn' (meaning 'the servants') by organizations working to help them. These marginalized communities exist outside of the nation's already tumultuous social, economic and political life. Theirs have a darker complexion than the average — which, in a society, is defined along tribal and ethnic lines.

Yemen's urban Population grew from approximately 12 million in 1990 to 28.9 million in 2018, and the equivalent is evaluated to be multiplied in the following 20 years.

The ghettos numbered around 500,000 people in 2004. An association called "Yemen's Sawa'a Organization" gauges put their number at over 3.5 million occupants in 2013, which is 11% out of the complete populace of Yemen. With the development of the administration segment and a flood of the learning economy, the populace weight on urban communities will undoubtedly rise.

As a result, they live in lack of sanitization. Also, in Yemen, which is positioned 133 out of 169 nations in the worldwide Human Development Report 2010, that is a ruthless life in fact. These communities are isolated together into large slums where tremendous, more distant families have been set apart for ridiculous discipline and prohibition.

The span of these slums ranges from a few hundred occupants to over 10,000. The last evaluation done by a global NGO was seven years back, and the normal family incorporates eight individuals, and the populace development is 3%, one of the most elevated on the planet. So they take the employments that different Yemenis do not need — for the most part, road sweepers and junk jockeys. Such humble work procures simply over \$100 a month, working 7 days seven days, notwithstanding the primary Islamic occasions.

Taiz City suffers from the spread of slum areas resulting from the random control of some populations on government land without any organization or planning of the spaces, services or buildings. This is due to the limited space and land available for urban expansion in Taiz City, with the rapid increase in Population and rising demand for new housing projects. This requires thinking of interim solutions to prevent the creation of new slum areas and durable solutions for the existing ones.

The area of the province is about (10008) square kilometres distributed to twenty-three administrative districts, according to the administrative division for the year 2004.

The governorate is ranked first in terms of Population according to the results of the 2004 census, where the Population reached (2,393,425) and the Population grew by (2.47%) annually. Its population constitutes 12.16% of the total population of the Republic.

In 2014, UNICEF conducted a survey of more than 9,000 marginalized families in the city of Taiz, with 200,000 marginalized people, the largest Yemeni province in which this category is located.

This research focuses on the informal settlements in the Kalabah and Osifra areas of Taiz. These areas are highly populated and face significant challenges related to infrastructure, sanitation, and access to basic services. The primary goal of this study is to enhance the quality of life for residents by improving basic infrastructure and addressing key urban problems. By exploring the difficulties faced by those living in these informal settlements, this study aims to provide valuable insights for researchers, government agencies, and non-governmental organizations working to improve living conditions in similar contexts.

The objectives of this study are to understand and address the slum areas in Taiz City. It aims to determine the extent of slum proliferation within the city, improve and redevelop slum areas in urban zones, and analyze the socio-economic conditions, service levels, and urban relationships affecting these areas.

This study involves conducting household and public opinion surveys in slum areas of Taiz City. It is limited to urban zones, focusing on socio-economic household characteristics and housing conditions. The study also aims to produce plans such as land use maps, landscape plans, utility maps, and circulation plans. Additionally, it seeks to identify the challenges faced by slum dwellers in the city.

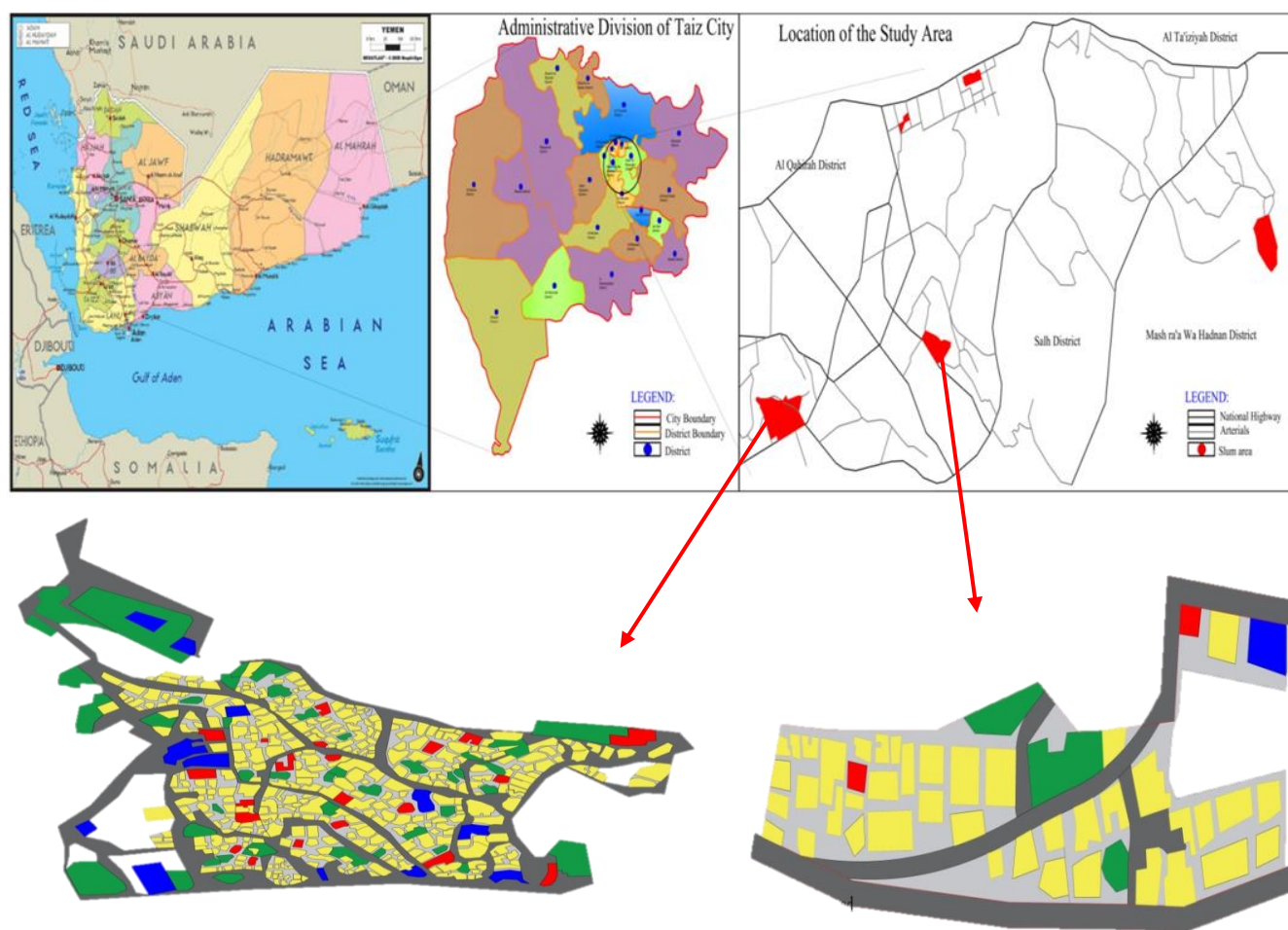


Figure 1. his maps illustrate the land use of the specified area, highlighting various categories such as residential, commercial, and public spaces. The map has been redrawn based on data sourced from Google Maps, providing a detailed overview of the region around the Revolution Hospital and Zyd Al Mushki School. It aims to assist in urban planning and development discussions, showcasing the layout and distribution of different land types within the vicinity. Source: The map was adapted from Google Maps data of Klabah and Osifra Area, Taiz City by AutoCAD (Google Maps).

The study addresses the need to assess past urban planning strategies that have contributed to slum growth. It highlights the importance of improving and redeveloping the appearance of informal areas, exploring further research into slum growth in Taiz, and analyzing data to assist in urban planning and slum control. Furthermore, it emphasizes the necessity of understanding the reasons behind slum emergence and formulating strategies to mitigate these issues. The study also considers the lack of basic services, overcrowding, poverty, and social challenges as critical factors.

The study is expected to provide reliable data about the characteristics of slum communities in urban Taiz. It aims to enhance the delivery of basic infrastructure services, including water supply, sanitation,

waste removal, and housing maintenance. Additionally, it seeks to support income-generating activities and create job opportunities to improve the quality of life for slum residents. The study is confined to the urban city level and focuses on analyzing and evaluating existing conditions through surveys and questionnaires.

The study area is located in the central urban part of Taiz City and includes three districts: Al-Mudhaffar, Al-Qahirah, and Salh. It is bordered by Altaizeh District to the north, Saber to the south, Altaizeh District to the east, and Mashra'a Wa Hadnan District to the west. The Population of the area is approximately 466,968, with an annual growth rate of 2.47%. The total area of the study region is about 352 km², with slum areas covering approximately 161,270 m² and housing 4,838 residents.

The slums in Taiz city, located on state land, were selected to explore the causes of slum formation, the nature of local slums, socio-economic and cultural characteristics, problems faced by residents, efforts by stakeholders to develop the area, and obstacles hindering the development process. A visual representation of the slum areas is provided in Figure (1).

2. Methodology:

Methodology is the step-by-step procedure for completing the work. It helps systematically without any confusion. The methodology, in detail, that the researcher employed to collect valid data. It also explains how data was analyzed to draw conclusions and recommendations. It shows the various stages covering the scope of the thesis. As shown in Table (1).

Table 1. Explains the methodology used in the study (Mitlin and Satterthwaite, 2004; Moser, 2009; Dovey, 2016; Choguill, 1996).

Step	Description
Introduction	<ul style="list-style-type: none"> • Introduction to Yemen • Introduction of Taiz • Introduction of Kalabah & Osifra
Theoretical Framework	<ul style="list-style-type: none"> • Definitions, types, reasons, and problems • The case study of Pantharapalya slum • Policies, Acts, and Strategic Rehabilitation and Integration of slums in urban areas Act 2002
Data Collection	Primary Data: <ul style="list-style-type: none"> • Questionnaire (People's Opinion), Interview (MCHUPT, MCT, and Residents of the area) • Observation of the study area • Evidence from the investigation of problems Secondary Data: <ul style="list-style-type: none"> • Land Use Act, Town & Country Planning Laws • Census and Population Statistics • Books, Articles, research papers, Internet sources, schemes, policies, and programs
Detailed Data Analysis	<ul style="list-style-type: none"> • Analyzing and evaluating slum areas • Confirmative, Normative, Compatibility Check • Abutting impact in relation to individuals • SWOT Analysis
Findings	<ul style="list-style-type: none"> • Characteristics, Challenges, Reasons, and Policy of Slums
Proposal and Recommendations	<ul style="list-style-type: none"> • Propose improvements and recommendation strategies for slum areas • Land use, transportation, and infrastructure

2.1. Data Collection and Analysis:

Data collection is the systematic way of obtaining information from a number of sources so as to get a detailed and authentic view of an area of concern. The process comprises different approaches such as surveys, interviews, observations and experiments depending on the research question and the study's reasons. The key objective during data collection is getting quality data that suits certain research questions and hypotheses (Bryman, 2016). In aggregation information for this study, the subsequent instruments were used: face-to-face interviews, victimization questionnaires, focus cluster discussions, field observations, and photography. The analysis also relied on researchers going to the research area, interviewing residents in that area, and then conducting a field survey of random buildings. These instruments and their connection

to the study are examined below. Additionally, explanations relating to how the collected information was analyzed are provided.

2.1.1. Questionnaires and Interviews:

Due to the dimensions of the Population of Kalabah and Osifra (3,031) and, therefore, the incontrovertible fact that additional full data were required from the organization, the employment of questionnaires and interviews to a representative crosswise of stakeholders was deemed acceptable. Whereas questionnaires will give proof of patterns amongst massive populations, qualitative interviews usually gather additional in-depth insights into participant attitudes, thoughts, and actions. Closed and open-ended queries were administered to slum dwellers and neighbouring residents of the study space.

2.1.2. Focus Group Discussion:

The views, thoughts, and experiences of opinion leaders (leaders of the assorted slum dwellers associations), in addition to leaders of the assorted ethnic teams in Kalabah and Osifra, were sought after through discussions. This was conducted by holding two focus cluster discussions every comprising of eight to 10 participants between Feb 2019

2.1.3. Field Observation:

Field observation is the systematic description of events, behaviours, and artefacts within the social setting chosen for the study. The explanation for choosing this method was to modify the research worker to get what is happening in the sector and create a comparative analysis between the final observations of the study space and responses from informants, therefore verifying consistency between the actual state of affairs per observation and responses from respondents. The first focus was on the gender and ethnic background of occupants, the present state of affairs and what is being done, environmental conditions, economic activities, and the physical.

2.1.4. Analysis:

The essential programming utilized in the information section and investigation was the Statistical Package for the Social Sciences (SPSS) Version 20.00 to aggregate information for a spellbinding examination of dichotomous and Likert scale questions. Moreover, the scientists sorted and incorporated open-finished reactions depending on the issues.

2.1.5. Photography.

So as to substantiate data obtained from the field study, photos of the investigation region were taken to help field perception with respect to the living states of slum occupants in Kalabah; what is more, Osifra takes note of that photographic records repeat the truth before the camera's focal point, yielding an unmediated and unprejudiced visual report. The sources and procedures for gathering information are displayed in the Table.

3. Results and Discussions:

This result covers the analysis of the data collected from the slum dwellers Kalabah and Osifra of the sample area based on the data obtained through the questionnaire. They looked for a large part of the data with respect to every surveyed household, the socio-economic attributes of every person of all households, and the structural and living conditions of every dwelling unit. The researcher identified five types of slum dwellers as inhabitants slum dwellers in the urban slum areas, and the information was collected accordingly from them. Let us look at the data analysis and discussions in detail. All data was analyzed using Excel and SPSS.

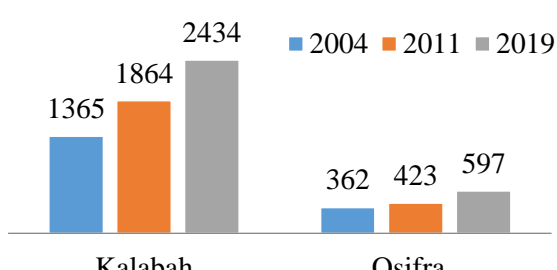
3.1. Population and Density:

Slum populations are often intentionally and sometimes massively undercounted. According to a census report in 2011, the number of slum inhabitants is increasing over time. For example, Informal, unplanned settlements shelter about 5 % of Taiz's population and cover 3 % of its land. It is the simplest type of measurement used in population studies. It simply means population in a given survey unit. Sometimes called population density, $\text{Population density} = \frac{\text{Population in an area}}{\text{total area of that area}}$,

i.e. the population divided by an area is equal to the total area of that area. Moreover, the population in the Kalabah is 2434 persons with a population density of 0.033 person sq.m, and in the Osifra, 597 persons and population density of 0.044 person sq.m, as shown in Table (2).

Table 2. This Table provides data on population growth in two areas of Taiz City (Kalabah and Osifra) over different periods (2004, 2011, 2019). Data were obtained from the Statistics and Information Center for the City of Taiz and analyzed using Excel and SPSS (The Statistics and Information Center for the City of Taiz, 2023).

Area	2004	2011	2019
Kalabah	1865	2164	2434
Osifra	432	528	597



The population of the Kalabah has increased by 12.47 % in the last 10 years. In the 2011 census, the total population here were about 2164. Now it is 2434. While Osifra has increased by 13.06 % in the last 10 years, in the 2004 census, the total population here were about 528. Now it is 597. The highest population growth rate occurred between 2004 and 2019 due to mass refugee migration.

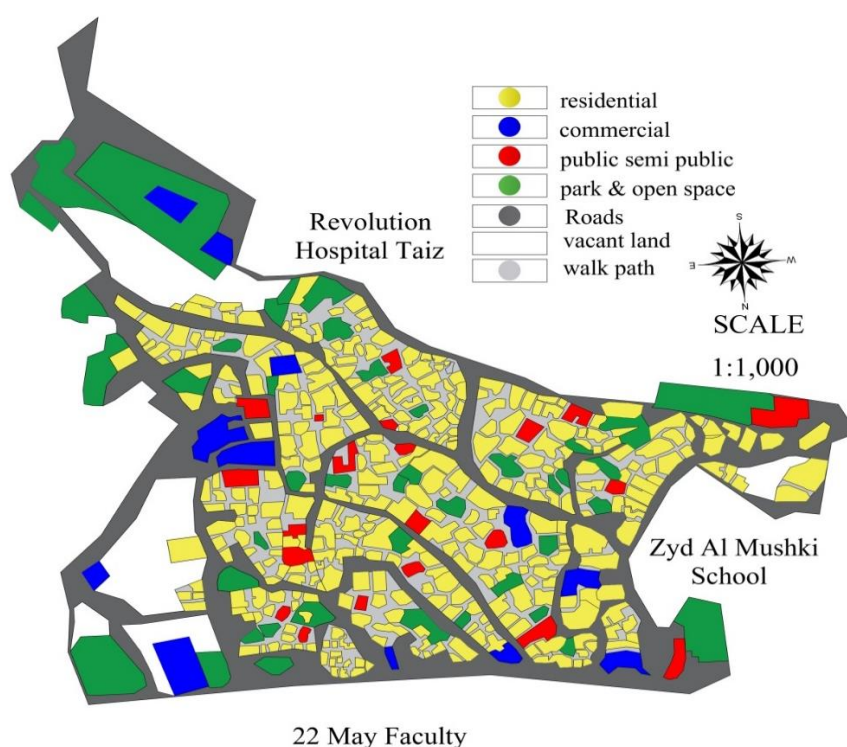


Figure 2. A plan showing the general layout of the slums in Kalabah and indicating the type of buildings therein. The map was adapted from Google Maps data of Klabah Area, Taiz City by AutoCAD (Google Maps).

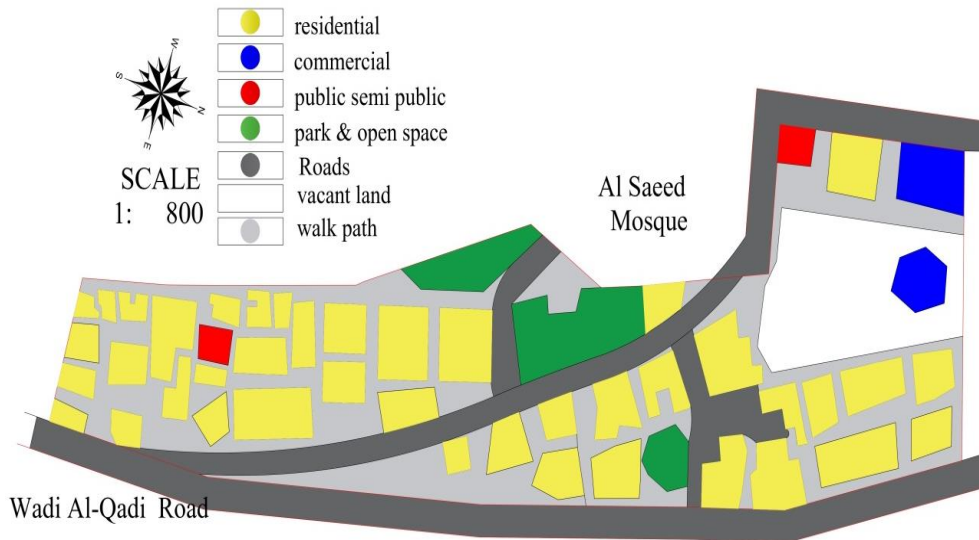


Figure 3. A plan showing the general layout of the slums in Osifra and indicating the type of buildings therein. The map was adapted from Google Maps data of Osifra Area, Taiz City by AutoCAD (Google Maps).

Table 3. This Table shows the distribution of land use in Kalabah's slum areas, including residential, commercial, public/semi-public, parks, and open spaces. Data were obtained from the Statistics and Information Center for the City of Taiz and analyzed using Excel and SPSS (The Statistics and Information Center for the City of Taiz, 2023).

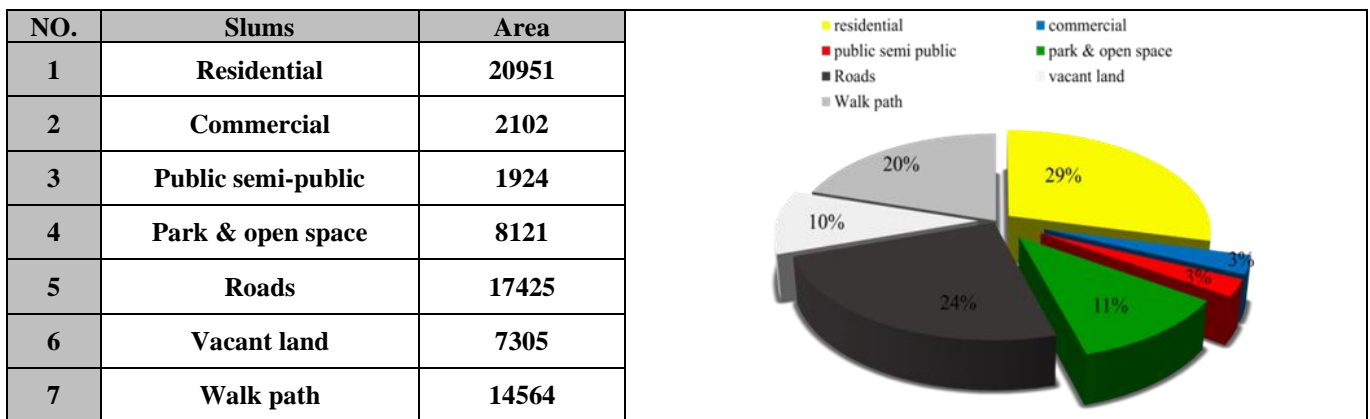
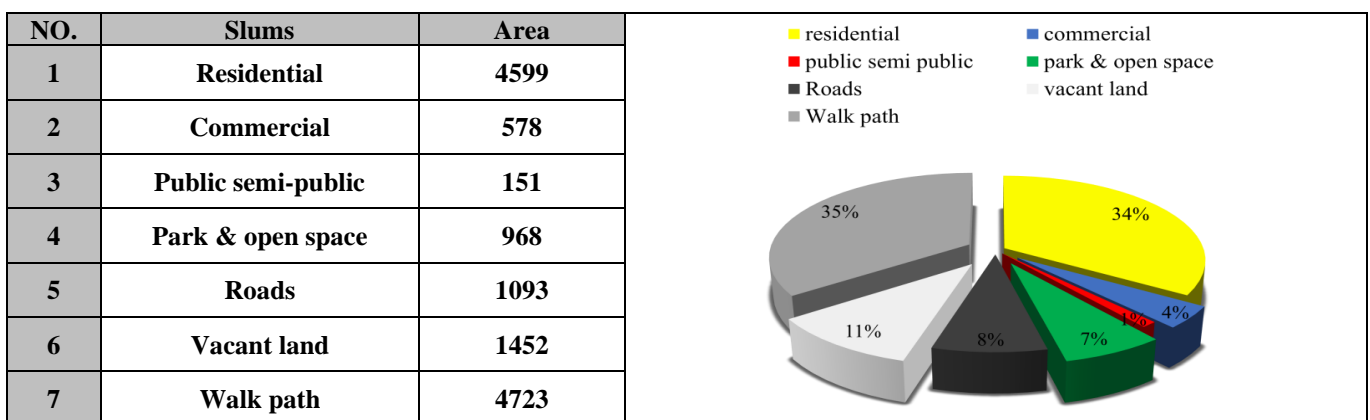


Table 4. This Table shows the distribution of land use in Osifra's slum areas, including residential, commercial, public/semi-public, parks, and open spaces. Data were obtained from the Statistics and Information Center for the City of Taiz and analyzed using Excel and SPSS (The Statistics and Information Center for the City of Taiz, 2023).



The rapid increase in the slum areas of the city indicates the impact of slum areas on the growth of the city. Urbanization of Land use depicted a decrease in Park open space from 11 % to 7% and increased the area of roads and walk paths up to 44 % of the total area despite the expansion of urban area boundaries reflecting a growth of the city. However, according to the existing conditions, new commercial and mixed-use activities have taken place amongst the other residential developments. One of the major observations

is that of the one-densest area in the city – Kalabah, which has been proposed as a medium-density residential zone but already exists as a highly dense old residential area development.

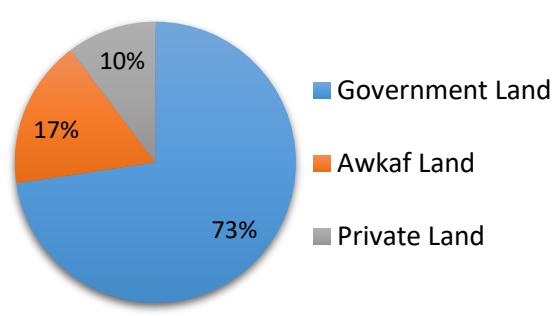
The proximity of slum colonies to the primary and secondary schools govt It was observed were having primary schools in the proximity of less than $\frac{1}{2}$ km., to 1 km, 2% in the range of 1-2 km of the slum colonies were having secondary schools in a distance of 2-5 km which is very comfortable by any standard also was having the hospital in a distance of 3-6 km which is very comfortable by any standard.

3.2. Type of Land:

Land ownership is very important for the individuals who settle in other lands. So most people prefer to involve government land as they could increase a few advantages from governments; abandoned land means the private land owned by the owners of its owners, but because of the problems, Leave it or leave the country or Waqf Land which is turned into Waqf and They are used to benefit transfer to for owners of the waqf. We have some of these types in Taiz as follows.

Table 5. This Table details the types of land used by slum residents in Taiz, including government land, Awqaf land, and private land, and it was analyzed using Excel and SPSS (Source: Authors).

NO.	Type of Land	Percentage
1	Government Land	72.6%
2	Awkaf Land	17.1%
3	Private Land	10.3%



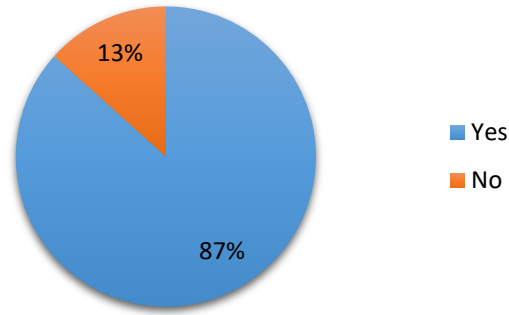
A pie chart illustrating the distribution of land types used by slum residents in Taiz. The chart is divided into three segments: a large blue segment representing Government Land at 73%, an orange segment representing Awkaf Land at 17%, and a small grey segment representing Private Land at 10%. A legend to the right of the chart identifies the colors: blue for Government Land, orange for Awkaf Land, and grey for Private Land.

Table (5) shows that government land has the biggest percentage, 72.6%. Then comes the Awkaf lands 17.1% and then the private 10.3% land, which complicates planning and implementing vital infrastructure and services projects such as hospitals, Schools, and parks.

3.3. Family Size:

Table 6. This Table presents the distribution of family size among slum residents in the study areas (Source: Authors).

NO.	Number	Frequency
1	Up to 2	6
2	4 to 6	27
3	7 to 9	36
4	10 & Above	21
5		90



A pie chart illustrating the distribution of family size among slum residents. The chart is divided into two segments: a large blue segment representing 'Yes' at 87%, and a smaller orange segment representing 'No' at 13%. A legend to the right of the chart identifies the colors: blue for Yes and orange for No.

Table (6) demonstrates the total number of family members of the slum dweller. 7% of the all-out respondents, or for example, six respondents, have a family of up to 2 members; 27 respondents, adding up to 30 % of the all-out respondents, have a family of 4 to 6 members; 36 respondents adding up to 40 % of the all-out respondents have a family of 7 to 9 members and 21 respondents adding up to 23 % have a family of 10 and above members. From the analysis, it can be interpreted that most of the respondents, for example, 63 % per cent, have a family of more than seven and above members. This could likewise imply that a significant number of families are joint families. Also, families live together in the slum so that they can share the cost and limit the expenditure.

3.4. Monthly Family Income:

Table 7. This Table displays the monthly family income of slum residents, showing that the majority of families earn between 20,000 and 40,000 Yemeni Riyals per month (Source: Authors).

No.	Income	Frequency	Percentage
1	Up to 10000	7	8 %
2	10000 to 20000	16	18 %
3	20000 to 30000	22	24 %
4	30000 to 40000	32	36 %
5	40000 to 50000	10	11 %
6	Above 50000	3	3 %
7		90	100%

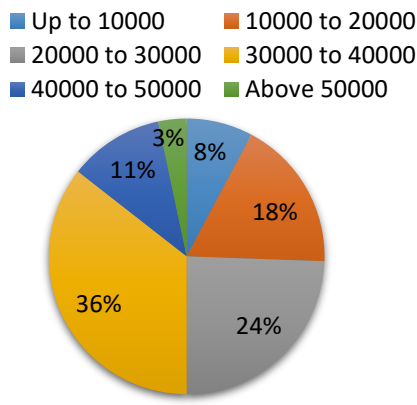


Table 7 showcases the monthly family income of the slum inhabitants. It may be seen that around seven respondents, adding up to 8 % of the total respondents, earn up to YER. 10,000/- per month. Eighteen respondents, adding up to 16 % of the total respondents, earn between YER.10000/- to YER. 20000/- per month. Around 22 respondents, adding up to 24 % of the total respondents, earn between YER.20000/- to YER. 30000/- per month. Thirty-two respondents, adding up to 36 % of the total respondents, earn between YER.30000/- to YER. 40000/- and 10 respondents, amounting to 11 % of the total respondents, earn between YER.40000/- to YER. 50000/- while three respondents, adding up to 3 % of the total respondents, earn above YER. 50000/- per month. From the analysis, it very well may be interpreted that the greater part of the respondents, for example, 60 % earn between YER.20000/- to YER. 40000/- per month. With the family structure and the number of family members of the slum dwellers and with the way that, in most of the cases, the slum inhabitant is the only breadwinning individual of the family, this sum is not at all adequate to give even the fundamental necessities legitimately. Also, the lack of education indicates the issue since the slum inhabitants cannot get decent and well-winning jobs because of that.

3.5. Education of The Slum Dweller:

Table 8. This Table illustrates the education levels of slum dwellers. The data shows that most of the residents have not completed secondary education (Source: Authors).

No.	Education	Frequency	Percentage
1	Below 6th Standard	19	21 %
2	6th to 9th Standard	28	31 %
3	10th to 12th Standard	13	15 %
4	Graduate	7	8 %
5	Diploma	3	3 %
6	Post Graduate	2	2 %
7	No Education	18	20 %
8		90	100%

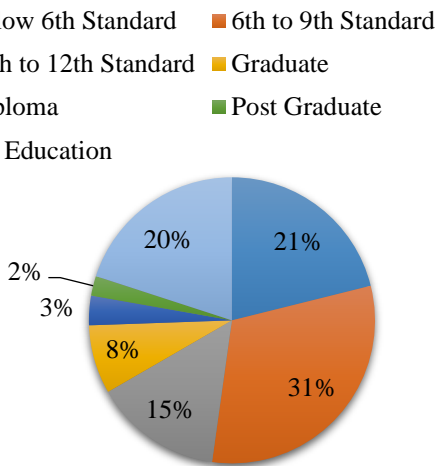


Table (8) shows the education of the slum dweller. Nineteen respondents, adding up to 21 % of the complete respondents, were taught up to below sixth standard just, and 28 respondents, adding up to 31 % of the all-out respondents, were instructed from sixth to ninth standard.

Thirteen respondents, adding up to 15 % of the all-out respondents, were instructed from tenth to twelfth standard and seven respondents, adding up to 8 % of the all-out respondents, were taught from Graduate. Three respondents adding up to 3 % of the complete respondents, were Diploma, and two respondents, adding up to 2 % of the all-out respondents, were Post Graduate. Also, 18 respondents, up to 20 % of the all-out respondents, were not educated.

From the analysis, it can be interpreted that 76% of the respondents were instructed below the 12th standard. Due to less education, the slum dwellers do not find jobs that would help them earn enough cash to give a decent way of life to their relatives. Also, in most families, the slum dweller was the only person who worked, and hence, he/she needed to earn enough to support more than six people, and there was a burden on the slum dweller.

3.6. Area of The Dwelling:

Table 9. This Table presents the dwellings in slum areas, where most families live in homes ranging from 30 to 45 square meters (Source: Authors).

No.	Area (in sq.m)	Frequency	Percentage
1	20 to 30	22	24 %
2	30 to 45	37	41 %
3	45 to 60	12	13 %
4	60 to 80	14	16 %
5	80 to 100	5	6 %
6		90	100%

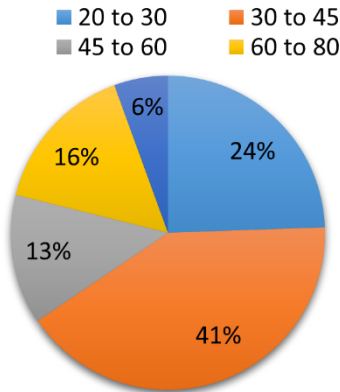


Table (9) gives data in regard to the area of the dwelling in which the slum dweller resides with his family. Twenty-two respondents, adding up to 24 % of the complete respondents, live in a house of 20 to 30 Sq. M. and 37 respondents, adding up to 41 % of the all-out respondents, live in a house of 30 to 45 sq. M. 12 respondents, adding up to 13 % of the all-out respondents, live in a dwelling of 45 to 60 sq. m. and 14 respondents, adding up to 16 % of the all-out respondents, live in a dwelling of size more than 60 to 80 sq. m. whereas 5 respondents amounting to 6 % of the total respondents live in a dwelling of 80 to 100 sq. m. From the analysis, it can be interpreted that 61.7 per cent of the complete respondents live in a dwelling of 30 to 45 sq. m. The most elevated proportions were spaces in which they cooked and lived with a family of multiple individuals.

3.7. Material Used To Build The Dwelling:

Table 10. This Table shows the materials used in the construction of homes in slums. The data indicates that most homes are made from iron sheets and plastic sheets (Source: Authors).

No.	Material	Frequency	Percentage
1	Cement & Bricks	13	14 %
2	Iron Sheets	24	27 %
3	Plastic Sheets	42	47 %
4	Others	11	12 %
5		90	100%

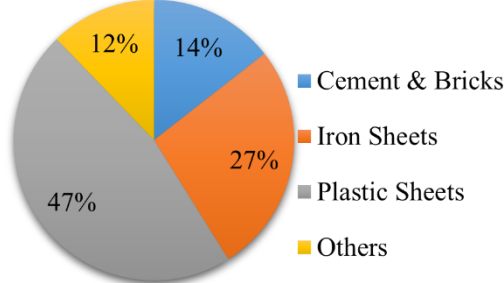


Table (10) presents the data regarding the material used to build the residence. Around 13 respondents, adding up to 14 % of the complete respondents, live in a dwelling made of cement and bricks, while 24 respondents, adding up to 27 % of the total respondents, live in dwellings made of iron sheets, though 42 respondents adding up to 47 % of the total respondents were found to be live in homes made of plastic sheets and 11 respondent adding up to 12 % of the total respondents were found to be live in homes other materials separately. From the analysis, it can be interpreted that the greater part of the slum dwellers, i.e. 66 %, live in residences made utilizing iron sheets and plastic sheets.

4. Conclusion:

Based on the results from the analysis of informal settlements in Taiz and the study of one case, we conclude the significant impact of these settlements on urban planning in the city. A large proportion of informal areas are inhabited by people experiencing poverty, who live in makeshift housing made from iron sheets and plastic panels. This situation poses risks to the residents' safety and plays a crucial role in the city's poor urban planning. It is essential to conduct more scientific studies that provide solutions and facilitate the government's efforts to reduce the spread of informal settlements.

The spread of informal areas in Taiz threatens the urban landscape, necessitating improvements in infrastructure and government intervention to relocate these settlements from the city centre while implementing solutions to limit their expansion. Conducting scientific studies in this field is vital, especially social and economic case studies of the residents in these areas, as well as studies of the infrastructure. Urban plans should address the needs of residents and prevent the excessive spread of informal settlements.

We also conclude that one of the reasons for the growth of informal settlements in the city is the poor economic and living conditions of the residents, coupled with the government's failure to provide adequate housing. This situation drives residents to seek poorly constructed, unhealthy buildings that do not fit the urban style, which further contributes to the growth of informal areas. Additionally, the lack of government oversight and the absence of comprehensive studies on the economic situation, infrastructure, sewage systems, and availability of government services in these areas exacerbate the issue. Government neglect in this regard leads to the accumulation of more informal settlements in the city.

Taiz is home to many informal areas, and Kalabah and Osifra are just examples of the numerous informal settlements in Taiz and other Yemeni cities. The existence of urban plans and studies is an urgent necessity, as they facilitate the government's efforts to keep up with urban development, identify informal settlements, and propose solutions to address them.

5. Recommendations:

- The Ministry of Construction, Housing and Urban Planning in Taiz Governorate is committed to implementing service projects, public utilities, electricity, water, and sewage networks in locations that have been identified as slums.
- The inside streets in the slums in Taiz are very narrow because of the illegal acquisition of land and areas by the slum dwellers, and the streets have progressed toward becoming smaller. Because of this, if there are accidents or emergencies, it becomes impossible for the fire company or the ambulance to reach the spot and give help to the slum dwellers. To address this issue, the interior streets of the slums should be broadened, and the illegal acquisition of land and areas in the slums should be removed.
- Establishment of City, Urban Area Slum Redevelopment and Improvement Committee: The government will, by notice, set up with the end goal of this Act a City/Urban Area Slum Redevelopment Committee for every city or urban zone.
- Every one of the partners, for example, the lawmakers, police officers, NGO's social labourers, and the overall population, should be firm in their choice not to allow the people to put up dwellings and increase the slums at any expense.
- The administration should restore the existing slum dwellers at the most punctual, either deliberately or compellingly, so that Taiz can be cleared of slums.
- Improvement of towns ought to be finished by giving legitimate offices, courtesies, and business openings in the town so the migration of people from towns to urban areas can be controlled.

- The estimated cost study must be accurate, as it often underestimates actual expenses, and there should be flexibility in the diversification of sources of funding, including government funds, Loans of all kinds, Contributions of bodies and individuals (business people), and non-governmental organizations.
- The development of informal settlements should not be separated between the financial and urban aspects and between the social and economic aspects of the population So that the development process is comprehensive in all aspects.
- It must be for the owners of settlements' technical departments to encourage displaced people to build their homes after they have the land to prepare housing designs and start the construction and disbursement of loans from the relevant parties.

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