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Tanmia Wa E'emar (Development and Reconstruction) Scientific Journal

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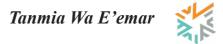
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Journal Objectives:

Tanmia Wa E'emar (Development and Reconstruction) is a research journal that deals with human and applied research and studies on development, reconstruction, community coexistence and peace, and aims to achieve the concept of scientific research in line with the development of knowledge and the scientific and technological revolution. This concept is to embody the partnership and cooperation between the academic and institutional efforts for the various local developmental areas, reaching as well the regional and international level through the following:

- Creating a documentary set (research, studies, papers) in the social and practical developmental sciences.
- Building a partnership through cooperation and partnership agreements with local and international bodies sharing the same interests.
- Publishing relevant experiences to keep pace with scientific and specialized developments in the various developmental fields and peace.
- Presenting studies that contribute to the advancement of the functions of institutions and bodies concerned with the areas of comprehensive development
- Publishing research and studies that meet the conditions of publication in the fields of studies and scientific research in various developmental fields and specializations in both Arabic and English languages.
- The journal publishes summaries of university research that have been discussed and approved in the field of reconstruction, development and peace, provided that the abstract is prepared by the researcher himself/herself.

Admission Conditions (Research, study, developmental Report, scientific paper):

1-The study must be characterized by the originality of the presentation, with the respect of the scientific research methodology recognized



in the fields of study, research, human sciences and administrative fields as well as the natural (developmental) sciences.

- 2- The research must be written in a proper language, taking into account the rules of control, and it must be free from linguistic, grammatical and typographical errors.
- 3- The research mustn't be published or submitted for publication in another journal.
- 4- The researcher must submit his/her research in a soft copy in a WORD file by e-mail.
- 5- The drawings, figures and graphs (if any) must be well presented, include titles and necessary explanatory data, and their dimensions and sizes should not exceed the page margins.
- 6- The number of the introduction words must not exceed 20 words.
- 7- The summary words in Arabic language must not exceed 200 words, and must not exceed 250 words in the English language.
- 8- The key words must vary between 2 to 5 words.
- 9- In the event that the researcher uses software or measurement tools such as tests, questionnaires, or other tools, he must provide a complete copy of the tools he/she used if it is not included in the body of the research or not attached to its appendices, and he/she must indicate the legal procedures that allow him/her to use them.
- 10- The number of pages of the research in its final form, including the abstract, references and appendices must not exceed forty pages with the following specifications:
 - The space between lines should be 1.5 cm.
 - The Arabic language writing size should be 14 written in (Simplified Arabic) and the titles in bold font style.
 - The size of the English writing should be 12 and the titles should be written in (Times New Roman) bold font style.
 - The page margins should be 2.5 cm on all sides and the page number should be at the bottom of the page in the middle.
- 11- The research must show all the sources and references in the reference list, so that Arab and foreign references, if any, be listed as follows:

An example of documenting a research published in a journal:

<u>In the list of references:</u> Kokaz, Faisal Saddam (2019): Peace, Community Coexistence and a Course in Comprehensive Development and Overcoming Crises, Issue number 7 p. 65 to 90.

In the text: (Kokaz: 2019)

Example of documenting a book:

Abu El-Nasr, Medhat (2017): Sustainable Development (Concept - Its Dimensions - Indicators), Arab Group for Training & Publishing, Cairo, Egypt.

• The sources and references in the research are documented according to the documentation methods recognized in the human and natural sciences. Documentation is done in the text by stating the last name and year of publication. The researcher should avoid writing the name of the reference in the margin, which, by following the APA system, is taking into account that the sources and references order is listed from the newest to oldest, followed by all links to the sites at the end of the list.

Publication Conditions in Tanmia Wa E'emar Journal:

- 1- The topics must be compatible with the goals of the Yemen Information Center (YIC) and relevant within the context of areas of development community coexistence and peace areas of reconstruction.
- 2-The topics must adhere to the basic criterion, which is the objectivity of the scientific presentation, and the researcher's impartiality in dealing with them.
- 3- The researcher must adhere to what was stated in the paragraph (Conditions of accepting the subject for publication: p. 3), and in the paragraph (Types of Research and Studies, p. 4).



- 4- A written consent is attached to the research by the researcher or researchers to transfer the copyright to the Yemen Information Center (YIC), and the researcher has no right to publish it anywhere else.
- 5- The researcher bears full legal responsibility of the content of the topic, and the journal disclaims its responsibility for any rights loaded with the content that may expose the researcher to legal accountability.

Note: In the event that the research or study fulfills the conditions of publication in the journal, publication will be made free of charge, and there is a material prize for the best research or study, in addition to the medal of excellence in the annual conference of the center.

The Researches and Topics Respect the Following Methods:

First: Field Research

- The researcher submits a summary that includes the general objective of the research or study in which he/she mentions the main themes that have been addressed, along with a brief review of the most important conclusions, recommendations and proposals that have been reached.
- Field research should contain an introduction in which the researcher clarifies the nature of the research and the justifications for carrying it out, indicating the nature of the problem and the extent of its impact on the developmental reality and peace, and briefly clarifying what previous research has shown about this problem. This is followed by a presentation of the study questions or hypotheses through which a solution to that problem can be reached, then the researcher presents the limits of the research in which the results of the study were generalized, and then he/she mentions the semantic definitions (the concepts and terms contained in the research). Then he/she reviews the most important and most recent studies related to the topic, analyzes and discusses them, clarifying his/her comments on them. This is followed by a presentation of the research procedures and methodology followed, then a description of the research



community, its sample, the type of tools used in collecting the data, and determining the extent of its validity and stability, then presenting the results of the research and discussing them and the recommendations and proposals it reached. The research concludes by listing the sources and references on which it relied.

Second: Theoretical and Interpretive Research

- The researcher gives a summary that includes the general objective of the research or study in which he mentions the main themes that have been addressed, along with a brief review of the most important conclusions, recommendations and proposals that have been reached.
- The researcher presents an introduction to the research in which he/she clarifies the nature of the problem or topic under study, with determining the importance of the research and its role in adding new to previous knowledge, followed by a presentation of the topics to be analyzed and discussed so that they are arranged in a logical manner with what precedes or follows it as topics that lead in its entirety to clarify the general idea that the researcher aims to reach, provided that it includes conclusions, recommendations and proposals to solve the problem or remove the ambiguity surrounding the topic under discussion. Finally, the researcher attaches a list of the sources and references he/she relied on.

Third: Scientific Paper and Developmental report Scientific Paper:

A brief summary must be presented in which the researcher explains the purpose of the scientific paper, the results, and the most important terms (key words), then an introduction is presented that shows the problem that is related to the developmental aspect and its role in addressing it for the topic under study and their importance, followed by a presentation of the terms of the paper in a sequential and interdependent manner. Discussing and analyzing them in a scientific and logical way in order to clarify the general goal that the researcher seeks to achieve, and the researcher can use various means such as photographs, maps or graphical figures to enrich the topic and clarify it in a better way, after that the researcher will present the results of the scientific paper, then it



is discussed, analyzed, and the relationship between the findings of the paper and the theories related to the topic under study is clarified. After that, the researcher concludes the paper with a conclusion in which he/she mentions his/her findings in a clear and summarized manner, and attaches it to the list of sources and references he/she relied on.

Developmental report:

An executive summary is presented in which the researcher briefly explains the purpose of the report and his/her findings, provided that the report includes an introduction explaining the importance of the topic, then the terms of the report are presented in a logical and clear manner, and it is concluded with a comprehensive explanation of the results and what he/she can add to the field studied, then a brief conclusion with an attached list of the sources and references that have been relied upon.

Editorial

Vice Head of the center & Strategic Affairs Adviser

Dr. Abdul Qawi Al Shamiri

Since its first issue, "Tanmia Wa E'emar "magazine has been moving forward in achieving the essential goals that it has taken upon itself to make scientific contribution to achieving the goals of the "Yemen" Information Center", which is not hidden from the observer of its steady growth; It started continuing this path with a clear momentum and remarkable growth; It puts in each issue real building blocks in building and reconstructing the Yemeni nation through the research, studies and reports that these issues addressed in order to identify the most important manifestations of development shortcomings, and to reveal the cracks in the social fabric that are deepened by the conflict between the conflicting parties, and to strive to address them. And presenting scientific visions to rebuild what has been destroyed humanly and materially. All of this represents a realistic translation of the lofty goals of the Center as much as it is an indication of the sober approach and confident conduct of the magazine with calmness and discretion focused on field work and scientific proposal that puts a hand on the wound and proposes solutions, rising above the media hype and provocative proposal because - as those in charge of it believe - they do not serve the work The real, serious one in a space of heated conflict, like the case of Yemen in this exceptional circumstance.

Here is the "Tanmia Wa E'emar" magazine, with its fifth issue, providing a qualitative addition to what it contains of scientific research directed at development and reconstruction. The magazine aims to provide solutions supported by scientific reading by focusing on three of the most pressing issues in Yemeni affairs, especially at this critical stage; The first central issue dealt with in the first research falls within the field of human development, represented in the attempt to reconstruct the legacy of violence against an important human component in the formation of Yemeni society, which is women. The research came



under the title "Violence against women and its impact on the family and society: Hadramout as a model - a social study", aiming to identify the features of the phenomenon of violence against women in Yemen and to clarify the causes and effects on women, the family and society, taking Hadramout as a model for application. After the analysis, the research concluded that there is a decrease in the level of awareness of the legal and legitimate rights of women among women due to their high illiteracy, and that moral violence is the most prevalent form of violence against women, as well as discrimination against women on the basis of gender, and that psychological violence is increasing among girls ranging from Their ages range from 12-14 years.

The other research titled "Developing Technical Education and Vocational Training in Yemen in the Light of Global Experiences - A Suggested Scenario" came in the field of physical reconstruction; It focused on professional development in Yemen and its role in the advancement of society. The research aimed to study the vocational training, which has been destroyed, the most important pillars of its infrastructure and modernization as a result of the conflict. The aim of the research was to build a proposed vision for the development of technical education and vocational training in Yemen in the light of contemporary global experiences, taking the experiences of China and Germany as a model for building a vision of advancement. After examining the concept of technical education, its importance and reality in Yemen, identifying the difficulties it faces, and ways to develop it, guided by the experiences of China and Germany, the research concluded that technical education in Yemen suffers since its inception from a weak connection with development and the labor market. Currently, technical education does not qualify its outputs in the manner required to join the labor market and contribute to the development process due to the low level of their skills, the weak infrastructure and educational programs, and the lack of partnership links between its institutions and the labor market.

N.K.

Tanmia Wa E'emar

As for the third topic, it is a research paper that looked at another dimension of development and reconstruction, which is the dimension of civilizational identity, under the title "Adaptation of the formation of architectural spaces for mud architecture with the climatic environment in Hadhramout Valley - Yemen" to shed light on what the Hadrami architecture represents of aesthetic, civilizational and material privacy within the framework of The Yemeni architecture on the one hand, and the Arab and Islamic architecture on the other hand, and the value of this privacy that the Hadramis gained from the privacy of the environment and culture that developed based on the accumulation of knowledge and culture, including the experiences it represents, that qualifies them to deal with the variables of time and place in the architectural building in general, and the formation of functional spaces suitable for the climate. After the paper dealt with the main ways of forming spaces in mud architecture and their suitability to climatic conditions, it moved on to exploring artistic, environmental and cultural methods in forming spaces. She concluded by discussing how to develop clay for optimal use in current and future architecture. The paper concluded that the Hadramis had developed an architectural style characterized by temperature and light comfort as well as psychological satisfaction from an aesthetic perspective; They were not only concerned with the interior spaces, but also with the exterior spaces, such as streets and neighborhoods, to achieve an integrated balance between climatic conditions and relative comfort, in addition to the effective role of clay in thermal insulation and temperature reduction, which leads to saving the energy required for heating and cooling.

In conclusion, we wish the honorable reader to find in the above research what narrates his passion and adds to his knowledge.





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Violence Against Women and its Impact on the Family and Community: Hadhramaut Model

Social Study

Prof. Dr. Fathia Mohammed Bahshawan

September 25th 2021

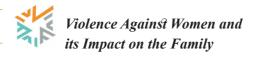
Research Summary

The research aims to identify the concepts, forms and theories of violence against women, in order to clarify the features of the phenomenon of violence against women in Yemen, and to investigate the extent of this phenomenon among women in an attempt to explain the practice of violence, and to identify its factors, causes and effects on women, family and society. In order to achieve these goals, the researcher adopted the descriptive survey approach to describe the reality of the phenomenon of violence against women in the Yemeni society, and she relied on the reality of violence against women in Hadhramaut as a model.

By analyzing indicators of violence stated in the statistics, reports and research, the extent of this phenomenon in our society and of women's awareness of their legal rights were identified. The research reached several results, the most important of which is the lack of societal awareness of the legal and legitimate rights of women, especially among women due to the spread of illiteracy among them.

In fact, moral violence is the most common form of violence that a woman is exposed to in her life, and there are discriminatory social beliefs and practices on the basis of gender, and there is violence as a result of customs and traditions that require the man to control the family, which forces him to use violence and force to lead it. The results also showed an increase in psychological violence among girls under the age of 18, especially those between 12-14 years old.

Key Words: Violence, violence against women, impact of violence on the family and community.



Chapter One

Introduction

The phenomenon of violence is one of the phenomena that women suffer from in all countries of the world, but it differs from one society to another according to the prevailing concepts and the degree of awareness of the local community and the fairness of social values. It is one of the strange phenomena that are rapidly spreading in the society, and it is considered one of the most dangerous negative phenomena that threaten the security and entity of the family and society alike.

Violence against women is closely related to the phenomenon of violence in general, which reflects the deviant aspect that threatens the stability of society. It leads to the creation of distorted forms of social relations, and turbulent patterns of behavior inside and outside the family.

The Human Rights Movement in many Arab countries and international organizations have deployed great efforts to curb the phenomenon of violence, which has become a prominent headline for violating women's rights at home, on the street and at work. It prompted the United Nations General Assembly in 1993 to issue its global declaration calling for the elimination of physical, psychological and sexual violence directed against women, and to eliminate injustice, practices and acts against women.

Nevertheless, the phenomenon has remained present in all societies, and its risks have not been reduced, on the contrary its effect has increased, and its negative impact on development efforts and on efforts to establish standards of social, economic and political justice has escalated, which requires further-awareness raising campaigns, highlighting this phenomenon and addressing it radically.

Accordingly; violence against women is not limited to physical or material violence only, but extends to include various words and actions practiced by individuals and institutions to reinforce the view of inferiority and discrimination against women in society. Tolerating violence against women results in an increase in the social violence,



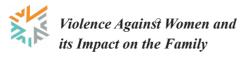
and when discussing or addressing this issue we must bear in mind that the problem of violence is a complex problem that we cannot trace back to one factor, but there is a set of social and psychological factors linked to this phenomenon that help its spread in society. Therefore, many organizations worked to help women reduce this problem and learn about their rights and duties by learning how to protect themselves by providing psychological, social and legal support.

Research Problem

The phenomenon of violence against women is one of the most serious current social scourges that are affecting most societies of the world in general, and the Yemeni society in particular. Perhaps one of the most important indicators that reflects the degree of seriousness of this phenomenon is its increase and widespread. Indeed, violence is an intentional behavior directed at an individual or a group of individuals, whether verbal, moral, material, physical, sexual, social or cultural, resulting in harm the target group. Violence is a widespread phenomenon in many societies as a result of lack of awareness and low culture, or because of economic and social problems such as poverty, unemployment and the lack of living requirements of various kinds.

Violence against women is one of the most controversial social issues and problems today that many societies around the world still suffer from, especially third world countries or developing countries, including Yemen. Given the physical, psychological and social damage that this phenomenon inflicts on the victim, it is no longer against women only, but has become a social phenomenon that threatens the security and stability of the family and society alike.

Recently, there have been numerous forms of violence and its manifestations have increased clearly in all aspects of life, and in the face of the aggravation and exacerbation of this dangerous social phenomenon, attention to it has become imperative, owing to its devastating effects on the individual and social levels. If violence is the exercise of force for the purpose of harming others, then the concept of violence against women in this research means harming women



through the use of physical force through beating or the practice of moral violence such as insult, humiliation or sexual harassment etc.

The problem of the research is to study the concept of violence against women and its prevalence in our society, and to know the reasons that motivate its occurrence, and the effects on women, family or society due to the violence, and this problem was further elaborated in a main question:

What is the extent of violence against women in the Yemeni society and in Hadhramaut in particular? What are its causes and effects on women, family and society?

A number of sub-questions emerge from this main question:

- What are the causes of violence? What are the implications for women, family and child and ways to address this phenomenon?
- What is the extent of the prevalence of violence of all kinds and its manifestations against women in Hadhramaut society?

Research Importance:

No one disagrees on the role that women play in building society, and therefore the importance of the research lies in addressing a social problem that women face while performing their social roles, as violence has become a feature of our current era in various aspects of life. In fact, many factors are behind the growth of this phenomenon, especially in our Yemeni society, which suffers from unusual conditions that have created many challenges and difficulties for the Yemeni women.

As a result, the current research will investigate the causes and factors that surround the phenomenon of violence in the Yemeni society and identify its effects, taking the city of Hadhramaut as a model. The phenomenon is no longer confined to its stereotypical form; rather, early socialization and violent behavior within the family, the presence of improper social and educational practices and the diversity of methods used by individuals in society, may lead to an increase in the magnitude of violence.



The research will represent a qualitative shift, a basic block and a proactive reference for many upcoming research on the phenomenon of violence and its related issues, as there are no reliable references to this phenomenon- according to the researcher's knowledge - due to the spread of the culture of shame.

Research Objectives:

The research aims to identify the manifestations of violence among women in an attempt to identify the factors, causes and effects of violence on women, the family and society. To achieve the main goal, the following objectives must be achieved:

- Clarifying the concepts, theories and forms of violence against women.
- Identifying the phenomenon of violence against women in Yemen.
- Identifying the extent of the phenomenon of violence against women in Hadhramaut as a model.

Research Terms:

Procedural Definition of Violence:

Violence: is the use of physical or moral force to cause harm or damage to others.

Violence against women: is the practices, words, or acts of individuals or groups towards women, whether verbal, moral, material, physical, sexual, social, or cultural, that cause harm to women.

Impact of violence on family and society: violence has effects and indicators of harm to women. Violence is considered a widespread phenomenon in many societies as a result of lack of awareness and culture, or because of economic and social problems such as poverty, the spread of conflicts, wars and unemployment, and the lack of living requirements of various kinds, and all this has negative effects on the family and society.

Research Limits:

The spatial, objective, and temporal limits of the research were defined as follows:

- Objectivity: violence against women and its causes and effects on women and family.
- Spatial: Republic of Yemen, Hadhramaut Governorate (as a model).
- Temporal: The research was conducted in 2021.

Research Methodology:

The current research relied on the descriptive survey approach to describe the reality of the phenomenon of violence against women in the Yemeni society, taking into account the reality of violence against women in Hadhramaut by analyzing indicators of violence from statistics, reports, and research issued by the Yemeni Women's Union, Mukalla Branch, from reports and research of the National Commission for Women, as well from the Security Center, etc., from studies related to violence against women, and from reports issued by international organizations in order to identify the extent of this phenomenon in our society and the extent of women's awareness of their legal rights.



Chapter Two Theoretical Framework and Previous Studies

First: Research Concepts

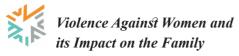
The current research focuses on the following concepts:

Violence Concept

"Al Mawrid" dictionary indicates that the word violence denotes several meanings and connotations. It means: "harm, rape, severity, cruelty" (1032:1982 (المورد،)) in the sense of aggressive behavior based on force and oppression directed at an individual or group of individuals, and in the English language (violence) comes from the Latin word (Violentia), which means illicit use of the physical force in various ways to harm people and damage property, and includes the meanings of punishment, rape and interference with the freedoms of others. It can be said that the linguistic significance of the word violence in the Arabic language is broader than its connotation in the English language, which is limited to the actual use of physical force (Tontous, 1966: p.982).

As for violence, technically speaking, it is a phenomenon that threatens secured societies, robs them of their stability, and raises concerns in them, affecting their economic, social, educational and political environments, and others. Violence is the unlawful use of pressure or force (441:1978 (بدوي).

It is also any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats to commit such acts, coercion and arbitrary deprivation of liberty, whether this occurs in public or private life. (United Nations, 1993) Violence is also defined as a psychological disorder, or "the infliction of pain to achieve a goal against the society, in order to achieve a person's gain, or to obtain psychological satisfaction intended to hurt the victim" (Wurtz and Lomette, 1984: 224).



The concept of abuse is the most closely related to violence, which is any act committed by a person with the intention of causing harm to another person and is used in a large number of studies as a synonymous with that type of violent behavior that occurs on the part of parents to their children, or that abuse that occurs to the wife through violent behavior, as well as the abuse of parents and the elderly, and the abuse of the student by his or her teacher, or cruel treatment, reprimand, beating, or quarrel that sometimes leads to injuries. Abuse has many images that take the form of violence that culminates in murder (10:2005).

As for the concept of power, according to Jarver, it is one of the concepts associated with violence. In essence, power is a relationship of influence, power, or coercion that gives one of the actors the ability to make the other/others act in a way that they would not have done without the presence of the party in possession of the power. Violence is a behavior in which one party exercises power over the other. Power relations are naturally spread in all fields of life, but it can turn into a physical or moral violation, as it robs the person on whom violence is being addressed from his rights, especially the right to decide what his body does and what he does with it and the right to make his own decisions and deal with the consequences of his actions.

Hence, violence is every act by force used by an actor to violate another party in a material or moral way, and the actor in this definition may be an individual, a group, or an institution. Accordingly, the forms of violation committed by individuals such as assault, physical cruelty, reproach, rape, murder, threat, contempt or slander are all forms of violence along with riots, terrorism, wars, racism and slavery etc. (11:2005 (القصاص)

Through the foregoing, it is clear that violence is an undesirable thing, and it causes panic and fear because of the results it leads to. It threatens the human achievements over the past years, and worst of all when such violence extends to women with the human, societal and economic value they represent.



Violence against Women:

Violence against women is the mistreatment of women, embodied in aggressive behavior against them, often carried out by the husband, father, brother, or one of the relatives, and it can even be perpetrated by a stranger, causing physical harm to them (such as beating, wounding, burning and rape), or moral harm (such as insulting, cursing, insulting, humiliating), or both.

The United Nations defines violence against women as "any act of gender-based violence and that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life" (1993 (الأمم المتحدة). Gelles and Straus define violence as intentional or semi-intentional behavior that seeks physical harm against another person (455:2000).

Violence against women is gender-based violence, and some have defined it as every action, statement or practice of men, whether an individual or a group, against women that involves a form of discrimination based on traditional cultural references.

There are several types of violence, including legitimate violence and illegal acts of violence. For example, beating within the family is often considered culturally and normatively acceptable, but if a family member is beaten by a stranger, it is considered an illegal behavior.

Intimate partner violence refers to behaviors of an intimate partner or ex-partner that cause harm or suffering to women, whether in terms of physical, sexual, or psychological aspects, including physical abuse, sexual coercion, psychological abuse and control behaviors.

Violence takes many forms, including "physical" violence, with sexual harassment and moral violence, the most famous of which are ridicule, mockery, humiliation, degrading treatment, psychological torture, and depriving women of the rights that they are legally and legitimately obligated to.

Violence against women is one of the most controversial social issues and problems today, and many societies around the world still suffer from it, especially the third world countries or developing countries. This problem results from a number of factors and causes that lead to its emergence and encourage its exacerbation, and it mainly targets the feminist element around the world, and affects the life of women in all aspects, whether social, professional or academic, as well as robs them of their right to make decisions and determine their destiny, and drains their different rights.

There are a set of facts that the World Health Organization has published about violence against women, which are:

- Violence against women particularly intimate partner violence and sexual violence is a persistent and significant public health problem, and a violation of women's human rights.
- •Global estimates published by the World Health Organization (WHO) indicate that one in three women around the world experiences physical and/or sexual violence at the hands of an intimate partner or non-partner in her lifetime.
- Most of this violence is practiced by the intimate partner, and globally as a whole, approximately one third 27% of women between the ages of (15) and (19) who are in a sexual relationship, report that they are subjected to some form of physical and/or sexual violence at the hands of the partner, are associated.
- Violence can negatively affect women's physical, psychological, sexual and reproductive health, and increase the risk of HIV infection in some places.
- Violence against women can be prevented, and the health sector plays an important role in providing women exposed to violence with comprehensive health care, as an entry point for referring them to other support services that may be needed

(منظمة الصحة العالمية، مارس 2021)

The indicators of violence against women are among the most difficult indicators due to the difficulty of obtaining data on this phenomenon and extracting indicators about it. The reason for this is due to societal customs and traditions, especially in the conservative societies such as the Hadhramaut Governorate, in which there is no declaration of cases of violence against women, and therefore they are not reported, recorded and documented in the required form in the places of control or health and security centers.

The Family Violence Concept:

Family violence is defined as violence that occurs within the family and is practiced by one of its members (husband, wife or one of the children) against himself or against the rest of the family members. It is an antisocial behavior that contradicts the values of society, and threatens the entity of the family and society as a whole, in addition to many problems within the family, foremost of which is divorce (207:2009).

It is also defined as a behavior issued by a family member towards another individual, involving physical assault, slightly or severely, deliberately, manipulated by attitudes of anger, frustration, desire for revenge or self-defense, or to force him to do certain actions or prevent him from doing them. It may result in physical or psychological harm or both (24:2000 شوقى).

Violence against the Wife:

These are acts that involve harmful physical violence directed at women by their husbands and include sexual abuse and marital rape (27:1999).

Second: The Theoretical Aspect:

This part of the research deals with two axes:

- Forms of violence against women.
- Theories explaining the behavior of violence against women.

(1) Forms of violence against women:

Violence against women takes many forms and can include physical, sexual and psychological violence and economic abuse, and naming forms and manifestations of violence against women is an important step towards their recognition and treatment. A report issued by the United Nations in 2001 has shown that one out of three women in the world is beaten, forced into sex, or abused in one way or another, often by a person they know (6:2019 أبو غزالة).

The forms and manifestations of violence against women vary according to the social, economic, political and cultural context in a society or a country. Some forms of violence may increase in importance, while others decrease as societies undergo demographic changes, economic restructuring, as well as social and cultural transformations.

- Violence against Women within the Family:

Its forms extend across their life cycle, from violence before birth to violence against them as elderly women, including:

- A) Violence between partners in intimate relationships, or as it is referred to as domestic violence or spousal abuse. And it has been proven that it is the most widespread among all forms of violence against women, and it is represented in acts of sexual, psychological and physical coercion practiced by partners against adult or adolescent women without their consent, physical violence that includes the use of physical or material force or weapons with the intention of harming or wounding women. As for sexual violence, it includes sexual intercourse in a form of aggression without the consent of the woman whether married or single while psychological violence includes controlling, isolating, humiliating or embarrassing women and economic violence includes depriving women of access to and control over basic resources.
- B) Female infanticide, gender selection, early marriage, dowry-related violence, female genital mutilation, crimes committed in the name of honor, and mistreatment of widows are forms of violence against women, which are harmful traditional practices, and can involve the family and the community. There are other forms of traditional practices harmful to women that characterize some countries, such as restricting the right of the second daughter to marry, marriage of the widow to her brother-in-law, and forced marriage.

- Violence against Women in the Local Community:

Physical, sexual and psychological violence takes the form of a daily manifestation in women's neighborhoods, in transportation, in the



workplace, at schools, sports clubs, colleges, hospitals, and other social institutions.

Among the images in which it occurs:

- A) Killing females based on the gender, and the legacy of the internal armed conflict may also be a contributing factor, in its often-increasing growth.
- B) Sexual violence perpetrated by a person who is not a partner of the woman (relative, friend, man known to the woman, neighbor, coworker, stranger). It is difficult to determine the extent of this type of violence because sexual violence remains in many societies an issue that brings great shame to women and their families. Indeed, statistics from police records are unreliable due to the underreporting of these crimes (3-41:2009 باباخان).
- C) Sexual harassment, and this form of violence is the coercion of the aggressor whether male or female to intercourse, or to perform indecent sexual acts with the aggressor. Rape is the most dangerous form of sexual assault in the family which is often practiced under the threat of harming the victim if he/she does not comply with the aggressor's wishes (Ahmed, 2001: 352).

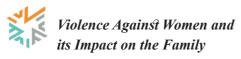
(2) Theories Explaining the Behavior of Violence against Women:

Referring to the theoretical reality, it was found that there are many theoretical contributions and approaches that contributed to the study of the problem of violence, including:

• Functional Constructivist Theory:

Those who hold this theory view society as a whole consisting of interconnected parts, each of which performs a function to serve the goals of the whole. Society is nothing but a system that includes a group of supportive elements that contribute to achieving its integration, but this integration does not take place in an ideal way. It is expected that some deviations in the format will prevent it from fully performing its functions.

Functionalism views violence as having a meaning within a social



context. It is either a product of a loss of connection with the social groups that regulate and direct behavior, or it is a product of anomie and a loss of direction and proper social control (24:1999 (إسماعيل).

The American sociologist Robert Merton and many scientists are among the proponents of this theory. They see that the social structure in the large society exerts certain pressures on some people that push them to unbalanced behavior, and that the deviant behavior is only the result of the contradiction between the culturally defined goals and the means approved by the social systems to achieve those goals. The American society - for example - sets success as a goal for each individual, and focuses rather on the goal and not on the legitimate means to achieve it, and therefore many people who are unable to achieve the goal of material success through legitimate means resort to any other means - including crime - to achieve those gains.

Merton believes that the more individuals achieve their own goals, the fewer opportunities society gives to individuals to achieve their goals (which are the prevailing social norms and goals for society as a whole), the greater the number of outlaws (social control) will be, and the number of outlaws (20-21:2011 (الحربي)). Merton also sees how violence is linked to the inability to achieve cultural goals through the means approved by the society. Violence in the light of contemporary functional analysis represents a form of permanent conflict within the system, where the system is a structure in a state of change and it always develops mechanisms counter to all violent forms, and may be able to stop them or reduce their effects, but if it fails, violence produces negative effects on the layout structure (53:2002 (زابد)).

• Conflict Theory:

The proponents of this theory see violence as a result of the oppression that people are subjected to; rather, victims of oppression often use the same weapons that were used against them, and are under the pressure of the turmoil and frustration they suffer from, and often protest against their friends, family and neighbors rather than the people who oppress them (51:2015 فارس).

In light of this theory, the family is a social organization that benefits



some people more than others, where both Marx and Engels see the family as a miniature class society in which one class of men oppresses another class, which is women. Marriage is the first form of class conflict in which the happiness of one group is based on the misery and oppression of the other class. Family violence is explained in the light of this theory within the concepts and terminology of control and domination; men are more powerful than women and hence they impose their control over women (36:2009 داياته).

On the other hand, conflict theorists see violence as a means of conflict between the two genders. Violence is an essential means of imposing men's control over women which distinguishes the latter over them, and violence has become a means to emphasize gender inequality and a tool for controlling women with the aim of returning to the family and home, and men have also used various methods of violence with the aim of diminishing the status and superiority of women, and from the point of view of those who hold this theory, the problem of violence can be solved by providing opportunities for equality among members of the society, not exploiting one group for another, and providing opportunities for equitable participation in wealth and power.

And if the conflict theory focuses on the conflict of roles, it also focuses on the personal feeling of deprivation between what people want and what they get, and between the low economic level with the availability of relative deprivation, which increases the tendency towards violence and aggression. Whatever the degree of deprivation, it creates a state of dissatisfaction among individuals, which pushes them to violent behavior as a result of a sense of social injustice, lack of social justice and control of material values (51:2015 (فارس)).

• Social Learning Theory:

Among the most famous of its theorists, Albert Bandura and Richard Dolitz, is that people who acquire violence learn in the same way that they learn other patterns of behavior, and that this learning process takes place within the family by virtue of external influences, whether they exist in the sub-cultural environment or in the broader cultural environment. Some parents, for example, encourage their children to

behave violently with others in some situations on the one hand, and demand not to be victims of violence in different situations on the other hand. Bandura believes that the nature of the response to aggression depends on the first social training, more specifically, it depends on reinforcing the actions that the person has experienced before and trying to model them in that aggressive form. Thus, according to social learning theory, one can easily make a very aggressive child once they identify successful aggressive models that reward the aggressor continuously for aggressive behavior (1777:2016 (الحياصات)). Bandura has demonstrated through experimentation the effect of watching aggressive models on increasing aggression in children.

This theory is based on education by observation, and rejects the idea that aggression is the result of frustration, and holds that aggression is no different from any response we learn. Aggression can be learned through observation, imitation and simulation, and most human behavior is learned behavior, and it is learned through example by observing the behavior of others, the individual can learn how to accomplish the new behavior. So, aggressive behavior is a learned social behavior like other behaviors, and this acquisition occurs in an unintended way as a result of the so-called modeling or vicarious learning, and the resulting behavior of reward or punishment.

Bandura proved, through multiple field and experimental studies, the possibility of children and adolescents imitating the aggressive behavioral patterns that they witness, and learning through observation, as it enables the individual to learn violence in the forefront of the media (106:2008 الخولي).

Bandura also presents the meaning of violence and aggression by social learning through simulation and observation. Thus, in his opinion, most individual behavior patterns are acquired by observing the behavior and consequences of others, and the more this response is reinforced, the more likely it will appear (66:1992).

Frustration and Aggression Theory

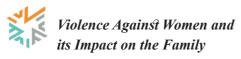
This theory is one of the first psychological theories in the study of aggression, and (Dollard & Miller) - the two authors of this theory



- believe that aggression results in frustration. When a person desires to achieve a specific goal and faces an obstacle that prevents him from achieving the goal, a number of responses are formed, including aggressive behavior, so (Dollard) suggested using Freud's theory of psychoanalysis as a basis for the theory (frustration-aggression), which sees that every frustration causes aggression. This leads to feelings of guilt, which in turn leads to greater frustration; that is why this theory was called the "Circularity Theory of Aggression". (Dollard) assumes that aggression is a behavioral result or a purposeful response in which harm is inflicted on the individual to whom the aggression is directed, and that aggression has a physiological component as well as a behavioral component to it (William, 1978: 167).

This theory explains that violence is a method to get rid of anxiety resulting from a frustrating situation, and it emerged from the idea of the general feeling that the frustrated person is often involved in an aggressive act. The frustrated person may relate to the source of frustration, or replace the frustration with something else, and the adolescent who is mocked by others may be affected and take revenge on them in an aggressive manner, and the unemployed husband who does not find work may beat his wife and children. So, frustration leads to the creation of a form of aggression towards others and society, and when people realize their inability to achieve their needs, they will become frustrated and explode their frustration in an aggressive form (15:2004 عوض).

The concepts and principles of this school are based on the rejection of the idea of the death instinct advocated by Freud, and aggression is always the result of frustration. These two theorists see that aggressive behavior in its various known forms results from a form of frustration, and the strength of incitement to aggression is directly proportional to the strength of the punishment expected as a result of the expression of that action. Then, they identify those factors that cause the discrepancy in the amount and magnitude of frustration, which are:



- (1) The force of incitement against the surrounding response.
- (2) The degree of disability that prevented the surrounding response.
- (3) The number of surrounding response chains (2016،1777، الحياصات).

The owners of this theory point out that the amount of aggression depends on the degree of frustration, the more frustration the individual feels, the greater the desire for aggression and the intensified aggressive behavior will be. But if the frustrated person is prevented from expressing his aggression, he feels a new frustration, because preventing aggression is a new frustration that increases excitement and tension, and develops the desire for violence (Bandura, 1973: 31).

Aggressive behavior - according to this theory - is a learned behavior if it is linked to reinforcement. If the older brother assaults his younger brother and gets what he wants, the possibility of repeating the aggressive behavior becomes more possible. Aggressive behavior does not happen by chance, but is subject to laws like other patterns of human behavior, meaning that the analysis of aggressive behavior requires us to discover the laws to which it is subject.

After presenting some theories, we see that many scholars agreed that violence is a behavior in which various illegal methods are adopted with the aim of causing harm and damage to others.

It is every behavior that occurs within the framework of the family relationship between a man and a woman, or between children and parents, or other members of society, and causes harm or physical, psychological, sexual or economic pain to the parties to that relationship, and this may happen as a result of pressures that fall on the individual or multiple factors and leads the individual to act without thinking about the consequences of that act.

Third: Previous studies:

There are many studies that dealt with the phenomenon of violence. Therefore, only the most important ones were presented, with clarification of the most important aspects that they focused on:



1- Yussef Study, 2020:

The study aimed to identify the causes of violence against women, its forms and the problems arising from violence, and show the role of social service in confronting the phenomenon. The study sample included (23) specialists at the Aman Center, and (52) abused women who attended the Aman Center. The study concluded that the most important causes of violence against women are the husband's low economic level, weak religious belief, and the inferior view towards women. The forms of violence that women were subjected to were physical, psychological and sexual violence. Violence causes social, psychological and health problems for women.

2- Dar Al Maaref for Research and Statistics in Mukalla Study, 2019:

The study aimed to determine patterns of domestic violence and their prevalence rates among women in the city of Mukalla, Hadhramaut governorate, Yemen, by surveying 300 samples of women in the city of Mukalla, and the results showed that 42% of women in Mukalla are exposed to at least some form of violence. The study showed that the most prevalent form of violence is the man's negative control. Examples of negative control include man's anger when a woman talks to another man, and insistence on knowing where the woman is always, followed by emotional abuse, most notably intimidation or threat. The study showed that 35% of the research sample has experienced at least one type of emotional abuse. As for physical violence, it is the least type of violence against women in Hadhramaut, according to the study, which reported that 18.7% of the research sample were subjected to physical violence, which is a high percentage in all cases compared to its magnitude and serious consequences for the society.

3- Mohammad study, 2019:

The aim of the research is to identify the prevailing forms of violence against working women practiced by the family and the factors that lead to violence between spouses. This study is a descriptive analytical study. Therefore, the social survey method and the questionnaire tool were used in this study to obtain the data. The most important findings of the study were that the age group ranging from (20-30) years is the

most vulnerable age group to domestic violence, and the most exposed educational groups are those who hold university degrees. And it was found that the working samples are more exposed to domestic violence, and that the majority of samples believe that the economic factor occupies the largest proportion of cases of violence against women, that is, the existence of economic abuse of women. There is also physical and moral violence; physical violence is represented by beating and is considered one of the most important forms of violence towards the wife, followed by moral violence represented by mockery, betrayal and abandonment.

4- Al-Hiyasat Study, 2016:

The study aimed to find out the causes and forms of violence against the wife in Jordanian society. The study sample consisted of battered women who filed a formal complaint against their husbands about being subjected to violence, and the researcher chose an intentional sample of (150), and the most prominent results of the study were represented in the following: the most prevalent percentage of those exposed to violence are from those with low income, and that most of the women who have been subjected to violence are married to people with low income, and the most prevalent form of violence is sexual violence, followed by physical and psychological violence. The most important reasons behind the problem of violence against the wife were the low level of family income, and then the husband's distraction with social media and the interference of the husband's family in marital life.

5-Shamoun study 2010:

The study aimed to identify the reality of domestic violence against women in the southern governorates of Gaza, and to know the magnitude of this reality, as the study sample consisted of 300 women from the governorates of Rafah and Khan Yunis in Gaza. In order to achieve the purposes of the study, it was relied on the personal interview in addition to collecting information from women's associations in Gaza. The research tools for the study varied, as the study mixed quantitative and qualitative tools. Initially, research papers, academic studies and working papers related to the issue of violence in all its forms were reviewed, in addition to a form for measuring quantitative information.



The most prominent results indicated that the phenomenon of domestic violence against women is widespread in the governorates of southern Gaza at an average level, and that women in the southern governorates suffer from domestic violence at a percentage of 63.3%, and approximately 20.6% of the samples suffer from physical violence, and 18.1% suffer from psychological violence, while 59% of them left the marital home because they were subjected to violence by their husbands, and this indicates the severity of the violence practiced against them, which forced them to leave to their parents' homes.

In response to violence in front of children, 24% of the samples confirmed that violence is actually practiced against them in front of their children, which in turn is reflected in their upbringing, and 15% of them indicated that violence is practiced in front of children from time to time. As for the underlying reasons that drive husbands to engage in violence, from the point of view of women, 42% of them considered that economic reasons, such as poverty, debts and pressure in the workplace, come in the first place to increase violence directed against them, and 28% of them considered that social reasons represent social ideas that support violence, in general, and consider it acceptable, comes in the second place from the point of view of women. While 14% of the samples considered that personal reasons and factors, such as psychological causes and mental illness, come in the third place, and this explains the nature of the cycles of violence, and that the most important causes are due to the surrounding environment, such as economic and social causes.

6-Study of the Arab Women's Association, 2009:

It aimed to know the reasons for social tolerance of violence against women, and to reveal the extent of the phenomenon and the various forms of violence in order to reach a better understanding of this phenomenon, as well as to know the procedures and policies that have been established to confront it and to follow up on official efforts and to evaluate them, in addition to the civil society efforts to confront the root causes of violations that women are still subjected to despite the ratification of international treaties. The study sample consisted of 150 women who live in remote areas far from cities.

To achieve the objectives of the study, the method of personal

interviews in addition to reports and files on the phenomenon of violence against women of the Arab Women's Association were used. The most prominent results indicated the existence of the phenomenon of violence against women in all its forms: social violence, political violence, domestic violence, etc., and that the reasons for the increase of this phenomenon are due to the failure to address the roots and causes of violence against women in all areas of life, and the failure to reform discriminatory laws, in addition to the failure to raise all reservations about CEDAW, and to the existence of differences due to the housing variable.

7- Marah Study, 2009:

It aimed to study the manifestations of violence against women and the most prevalent in the Libyan society in light of the literature of the mass society, in addition to the most important reasons behind women's exposure to violence in the Libyan society, and the extent of its relationship to the societal backwardness, in addition to examining the current efforts on prevention and intervention to mitigate the negative effects of community violence. In order to achieve the objectives of the study, the researcher used several approaches due to the sensitivity and accuracy of the study topic. She used the accurate scientific descriptive method, and the historical method to follow the documented stories about the injustice and oppression of women in Libya.

The results showed that the most prevalent manifestations of violence against women in Libya is the societal violence, by deprivation of rights, oppression, verbal and physical abuse, and that the women who are most exposed to this type of societal violence are married. The results also indicated that one of the most negative effects resulting from societal violence against women are psychological diseases, family disintegration and the increase of conflict within the family and society, in addition to the lack of efforts made to mitigate the negative effects of the societal violence. The researcher attributed this to the nature of the Arab society, which always requires women's patience, confidentiality and renunciation.

8- Al-Allaf Study, 2009:

It aimed to identify the causes of domestic violence and investigate its



effects on the family members. The study sample consisted of a number of families that were taken from judicial files to identify the causes of domestic violence against women. For the purposes of the study, a number of curricula were used, including descriptors, where personal interviews were conducted on the ground. In addition, the inductive approach was used by extrapolating, classifying and categorizing many issues, as well as the qualitative approach.

The study found a high level of domestic violence which is due to social motives represented in customs and traditions, and to personal and economic motives. With regard to the effects of domestic violence against women, the study concluded that it has negative health, psychological and social effects on women, and the study attributed this to the increase in cases of women suffering from domestic violence.

9- Al-Awawdeh Study, 2004:

The study aimed to reveal the extent of the phenomenon of violence against working women in Jordan, and to identify the manifestations of violation of the rights of working women in the Jordanian labor law, in addition to identifying the manifestations of sexual harassment in the work environment. The study also aimed to examining the forms of gender discrimination at work, and on the forms of threats and domestic violence practiced against working women.

The results indicated that the reality of the phenomenon of violence against working women in Jordan was moderate, especially that the work of women was confined in its entirety to educational, social and administrative work. The researcher attributed this to society's stereotyping of women's work in specific professions that fit the prevailing social culture, and changing them is difficult. The study also indicated that Jordanian working women suffer from all forms of occupational violence, especially the widespread accusation of working women of raising the unemployment rate, and accusing women of absenteeism and sickness.

The researcher attributed this to the nature of the social structure of the Jordanian society, which entrusted the work outside the home to males rather than females, and granted the women who have children and who work inside the home a high position, in addition to the occurrence of

social change that was accompanied by many changes such as the high educational level of women and their desire for economic independence. In addition, the study indicated that there were statistically significant differences in the sample responses due to educational qualification, marital status and years of experience.

10- Sieger Study, 2004:

The study aimed to research the factors and determinants that contribute to the spread of the phenomenon of community violence and its impact on children and adolescents, and also aimed to encourage mental health workers to mobilize efforts to help children, adolescents and their families to deal with the effects of community violence. In order to achieve the objectives of the study, the researcher studied many variables in an attempt to determine the determinants of exposure to societal violence, its links and factors, and the researcher has developed a set of strategies looking at the relationship among these variables, in addition to the use of literature and previous references.

The results indicated that the rate of societal violence against women and adolescents is alarming, as it came at an average rate of 68%, and it is constantly increasing over time, in addition to that, children and women who are exposed to community violence face a wide range of psychological symptoms, ranging from suicide, depression and anxiety that later turns into anti-social behavior.

11- Al-Sharjabi Study, 2003:

The study aims to provide an informational background on Yemeni women's own understanding of the meaning of violence against women. To achieve the purposes of the study, the researcher relied on three main tools: a questionnaire that was applied to 2,300 cases, focus discussions in each governorate, in addition to a survey of opinion leaders in society. The results indicated a high level of violence against Yemeni women, and a low level of awareness among Yemeni women about the concept of violence against them, which is close to the understanding adopted by gender studies, bearing in mind that Yemeni women focus on the aspect of physical violence, in addition to the differentiation in treatment between the male and female child, especially in Amanat Al-Asimah, Aden and Taiz.



12- Guerra Study, 2003:

The study aimed to study the impact of societal violence on cognition and aggressive behavior, in addition to determining the effects on women. The results indicated an average reality of societal violence against women, and the study proved that the prevailing beliefs and standards about violence had the greatest impact on the spread of violence. The results also indicated that exposure to violence is expected from psychological diseases and aggressive behavior.

Review of the Previous Studies:

Previous studies have been used to shed light on the aspects that have been studied in the subject of violence against women and its relationship to other variables, and then helped to clarify the topic and objectives of the research. It is clear through the review of previous studies that they agree with the current research in the importance of paying attention to the issue of violence against women and revealing the extent and manifestations of the phenomenon and knowing the factors and determinants that contribute to the spread of the phenomenon of societal violence and identifying its causes, such as the study of (Sieger, 2004), (legelecia) and the study of (2009), which agreed with the current research in many goals.

The current research relies on the descriptive analytical approach by reviewing some statistical reports obtained through the bodies concerned with women's issues, during which the extent of the growth of this phenomenon was identified despite the attempts of the state and civil society institutions to address cases of violence. However, many cases go unreported as a result of customs and traditions and the position of the family and women in the society.

The current research agrees with the previous studies in the findings of the high level of violence against women, and the increase in cases of domestic violence that they suffer from, such as the study of (مرح) in the Libyan society, the study of (2010 شمعون) in the Gaza Strip and the study (2016 الحياصات) in Jordan.

Chapter Three Violence against Women in Yemen

First: Violence against women in Yemen:

Violence exists in societies in the past, but it has recently taken a new character and method that extended to include adults and children, and violence targets women, children and the elderly. This type of violence represents a flagrant violation of basic human rights. Therefore, we find that international principles and conventions seek to prevent it. Nearly a third of the world's countries have ratified the Convention on the Elimination of All Forms of Discrimination against Women, which was issued in May 1964 by the United Nations.

Hence, the phenomenon of violence against women in Yemen is one of the most important problems it faces because it threatens and affects society. Violence appears through some of the different behavioral patterns of the community members, and it causes many harms and bad effects on the women, family and society which are not limited to physical and psychological harm only, but rather stand in the way of development efforts in the community.

Domestic violence against women in Yemen is given various justifications under the acceptance of the family and society due to the nature of informal family relations around which individuals often resort to cultural and references frameworks and not to legal, thus rarely accept to talk about it or disclose it to strangers. Regardless that domestic violence directed against women represents the most common form of violence in Yemen. The results of Al-Sharjabi's study concluded that many women in all Yemeni governorates do not perceive moral or symbolic family violence as violence. As for physical domestic violence, although they consider it as violence, they view it as a private matter and are reticent to talk about it (18-23:2003 (الشرجبي)).



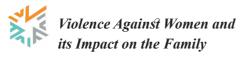
Domestic violence against women takes place within the home, and it is an unspoken or unauthorized aggressive behavior that covers the walls of the home and encloses the family fabric. Usually the woman is the victim, and perhaps she is the most concealed of the violence that takes place against her, in order to preserve the privacy of the family and the stereotyped of social relations.

Violence takes many forms, including physical (body) violence, including sexual harassment, and moral violence in all its forms, especially the most common: ridicule, mockery, humiliation, degrading treatment, psychological torture, and depriving women of the rights that they are legally and legitimately obligated to (2010 الإرياني).

And if physical violence is practiced by the more powerful in the physical sense of power, then the moral or symbolic violence is perpetrated by the more socially powerful against less powerful individuals or against those who are completely deprived of it. Family power is a manifestation of social power; therefore, male family members practice violence against female family members, and in general the culture that was formed in Yemen can be described as a patriarchal culture.

And, because violence against family members occurs behind closed doors in millions of homes around the world; therefore, the data were insufficient, and did not reveal the real rates of the phenomenon of child and wife abuse, especially beating. Recently, violence has extended to the elderly among parents, as well as mutual violence between brothers and sisters (2004 (حلمي)).

The results of the 2002 National Women's Committee study on violence against women in Yemen showed that Yemeni women are subjected to many forms of physical and psychological violence, such as husband beating his wife or relatives beating their female relatives, marriage without consent, mistreatment of the husband, and denial of decision-making within the family. Denial of education and health services, preference for males over females within the family and society, denial of inheritance and access to resources and wealth, harassment, annoyance of bosses at work, and denial of political participation (103:2004 وضع المرأة في اليمن).



Perhaps the most effective form of physical violence against girls is excision. As studies have shown that a large proportion of young girls in Yemen are subjected to excision, and that most of them are subjected to it at home without using any drug. In addition, young girls are more deprived of education and health services compared to male children.

After the girl reaches the age of youth, the forms of moral and symbolic violence that are practiced against her increase, which is represented in the multiplicity and widening of forms of discrimination in the family dealings between her and her male brothers, as she is subject to strict control imposed by the family and it interferes in the choice of her friends, and in the type of university education that she enrolls in if she agrees to continue her university education, as well as depriving her of the right to choose in marriage, and after her marriage, her participation in family decisions is limited, and in the event of the death of one or both of her parents, her male brothers circumvent her right to inherit (18-23:2004).

The recent period has witnessed governmental and non-governmental efforts to reduce violence against Yemeni women, the most important of which is the Anti-Violence Program, which was implemented in 2001 in cooperation between the National Commission for Women and civil society organizations. The program aimed to spread awareness of forms of violence against women and its effects on the family and society, raise awareness among those interested in protecting women from discrimination, support women's civil rights, work to include gender in development plans and programs, and raise awareness of the Convention on the Elimination of All Forms of Discrimination against Women, in addition to reviewing programs and policies in light of the concepts of women's rights (22:2009).

One of the parties interested in the issue of violence against women is the Yemeni Network for fighting violence against women, which is one of the organizations supported by Oxfam-Britain, and included in its membership (12) non-governmental organizations in addition to the National Commission for Women, which identified its most important goals to combat violence against women and provide legal protection. The most important of these organizations are Yemeni Women Union, Center for Human Rights Information and Rehabilitation, Sisters



Arab Forum for Human Rights and Women's Forum for Research and Training.

This network has undertaken many efforts to combat violence against women. It contributed to the preparation of the first Yemeni conference to combat violence against women, which was held in Sana'a from 4-7 March 2004. In 2005, the network, in cooperation with its partners, implemented a campaign to educate the community about the dangers of early marriage under the slogan "A lower age for marriage", and a field study on the most important psychological, social and health effects of young girls' marriage.

In the same context, the first national conference to combat violence against women was held in 2004 in recognition of the phenomenon of violence against women and the legitimate rights guaranteed by the Yemeni constitution. The conference recommended the necessity of criminalizing all forms of violence against women, quickly issuing laws and legislation, taking measures and procedures against violence, and working to strengthen the role of religious institutions in raising awareness about the dangers of violence. The conference also gave civil society organizations the right to follow up on the implementation of these recommendations, and to provide legal support for women prisoners.

On the other hand, official data contained in the evaluation report of the Poverty Alleviation Unit issued by the Ministry of Interior in 2005 indicate that women are exposed to physical crimes such as premeditated murder (14.4 percent), attempted murder (12.6%), and kidnapping (35.7%), and these crimes occur in the age group between (7-18) years and leave serious physical and psychological effects on women (11-20:2011).

The Second National Conference on Combatting Violence against Women was also held in 2010, urging the slogan "NO to violence against women", which recommended the embodiment of policies to combat violence against women in the state's public policy, and the translation of these policies into procedural plans, programs and executive projects, the provision of financial materials necessary to save them, and raising awareness about the legal status among women, providing a clear mechanism for adopting quotas in elected councils, educating society

about the importance of women's political participation, working to reduce girls' dropout from education, especially in the countryside, and the need to target women in programs, small businesses and social protection programs, in addition to activating the role of civil society organizations through their adoption of psychological awareness programs, training and rehabilitation, and financing projects that contribute to improving their economic and social conditions

(التقرير الوطني السادس، 2006: 51).

Forms of domestic violence against women in Yemen:

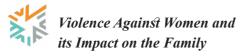
- 1- Domestic economic violence: Male relatives often deprive women of economic participation and work, even if they are qualified to do so. In some cases, if they are allowed to work, they may not be given complete freedom to dispose of the proceeds of their work.
- 2- Domestic political violence: Family relations contribute to the low level of women's political participation. Some male relatives prevent their female relatives from participating in politics, and some of them put pressure on them not to run in the general elections, and some husbands and fathers put pressure on their wives and daughters to vote for a particular candidate over another, which turns women's political participation into mere political mobilization and not real participation.
- 3- Family physical violence: If the levels of socio-economic development and their relationship to violence against women are taken into consideration, it can be said that traditional and conservative societies are almost limited to the practice of beating and physical abuse of women to family and relatives, because customs, traditions and mores criminalize beating and physically harming women by others, it considers it a shame and stigmatizes those who practice it, and although this does not completely prevent physical violence against women on the street and in official social institutions, thus it has greatly limited it.



- 4- Civil and Social Family Violence: Family pressures often exercised by male relatives often limit women from exercising some of their rights in the field of movement, choosing to marry, and joining parties and non-governmental organizations. Some families deprive women of making decisions related to having children and raising children. In fact, women's friendships are sometimes a reflection of the desires and orientations of male relatives, and in determining the nature of leisure activities and promotion for girls, and defining the sources and nature of knowledge and cultural materials for women (11-12:2004 الشرجبي). A number of reasons play into the high rates of violence in society, including:
 - Increasing rates of illiteracy and ignorance and the spread of wrong cultures in society.
 - Lack of respect for laws and legal legislation and implementation in society.
 - Difficult living situation, high cost of living, high unemployment and poverty rates in society.
 - Imbalances of equitable distribution among members of society.

Second: Causes of Violence against Women:

- 1- The woman herself is one of the main factors of certain types of violence and oppression because of her acceptance of it and the consideration of tolerance and submission or silence as a reaction to it, which allows the other to persist and to be more and more daring. This situation may become more evident when a woman loses someone to turn to, or someone who protects her.
- 2- Cultural reasons such as ignorance, lack of knowledge of how to deal with others and lack of respect for them, and their rights and duties. This ignorance may be on both sides (the woman and her abuser); A woman's ignorance of her rights and duties on the one hand, and the other's ignorance of these rights on the other hand, may lead to over expenditure and transgression of borders.



- 3- The low cultural level of families and individuals, and the great cultural difference between the spouses, especially if the wife is the highest culturally, which creates tension and imbalance in the husband, so he practices violence against her, and tries to compensate for this deficiency by looking for occasions that he can detract and belittle her by insulting, humiliating or even beating.
- 4- Educational reasons; It may be the foundations of the violent upbringing on which the individual grew up that generates violence in him, as it makes him a victim and a weak, lost and unconfident personality.
- 5- The psychological environmental causes that put pressure on the person, such as overcrowding, poor services, the problem of housing, the increase in population and others, in addition to what the environment causes from the frustration of the individual because it does not help him to achieve himself or succeed in it, such as providing suitable work for young people, driving them to violence and bursting them into the weakest of them (woman).
- 6- Economic reasons: The material imbalance faced by the individual or the family, and the economic inflation that is reflected in the standard of living of each individual or group, as it is difficult to earn a living. One of the economic problems is the alimony that is obligatory from a man to a woman, as he is the one who supports her, and then he has the right to abuse her by humiliating and belittling her in this respect. Women accept this violence because they cannot support themselves or their children. The economic factor accounts for 45% of cases of violence against women .(2009)
- 7- The patriarchal culture that dominates the course of society generates violence; therefore, it is necessary to work to correct the concepts of society and to abolish the idea that the patriarchal path is the basis for defending honor or preserving the status and stature of men, which produces harshness in dealing with members of the same family or among members of the same society.
- 8- Male violence, which is mainly due to the patriarchal system and male domination represented in the image of the father or brother as the head of the family with a wide influence and authority on



- the one hand, and work to subjugate the woman, the mother or the wife, while forcing the children sons and daughters to obey on the other.
- 9- Ignorance of proper parenting methods, such as dealing with harshness and ruggedness on the part of parents, there is also anger in its many forms, including instability in reactions to what he hears or sees, lack of emotional balance, excessive sensitivity towards the actions and behaviors of others in word and deed.
- 10- Moral or personality corruption, which is determined in the pattern of behavior, thinking and interaction with those around it. Corruption in the personality of the individual may be moral, intellectual, religious, as family violence is rarely free from this cause leading to violence and takes different forms, including: alcohol and drug abuse, psychological disorders, weak religious faith, bad companionship, sexual assaults on family members, marital infidelities from one of the two parties to the marriage (116-117:2011:2011).

Third: Effects of Violence on Women:

Violence has many effects, including on the woman herself, and then on her family and children, and thus on society as a whole, as violence contributes to impeding the movement of women and makes it difficult for them to perform their functions.

Despite some forms of domestic violence, it may have physical effects on women. In fact, the psychological and social effects of all forms of violence, whether physical or moral, are deeper and more severe than the physical effects, because inducing mutilation in a woman's body as a result of physical violence leads to psychological effects that outweigh the physical pain that the woman has suffered. In addition, the physical effects of violence are mostly temporary, while the psychological and social effects are extended and long-term, and the importance of psychological and social effects increases as they may not be limited to the battered woman as an individual, but extend to women in general as a gender and social group (15:2004 الشرجبي).

1- Social Effects:

When the family is afflicted with violence from some of its members, or its members revolve in a cycle of violence and counter-violence, psychological complexes, problems and internal divisions form between them in the course of relations that lead to estrangement, hatred, malice and the desire to take revenge on the victims of violence against the aggressors, and the language of communication between them becomes always based on tension and anxiety through action and reaction.

The family atmosphere cluttered with violence and hatred and in which the spirit of revenge prevails, and each individual seeks to escape his situation that is full of insults and frustrations, because it is a pathological atmosphere. Each individual seeks his own life in order to get rid of his present life, so how many families have broken up to escape from homes where domestic violence prevails

. (عيساوي، 2011: 120)

As a result of this method of socialization in the long run, women adopt these values, standards and trends, view them as correct trends, and then practice and apply them in the upbringing and education of their female children and younger sisters, thus contributing to the reproduction of traditional gender relations, and even raising their male children in the same manner, and instilled in them the values of superiority and control over their female sisters (15:2004 الشرجبي).

Another effect that appears on a battered woman within her family is her reduced ability to raise her children and take care of them and the possibility of hitting them increases, and she may tend to hate them because they force her to continue in that marital relationship that she cannot tolerate (4-5:2000 شوقي).

One of the most dangerous effects is what affects children in their lives with the opposite sex in the future, as many of them - especially females - have a subconscious conviction that married life is a constant torment. Therefore, many girls refrain from marriage and refuse any young man who proposes to them because in their opinion he represents the image of an unjust and violent father, and that a single life - while seeking to find a job or a profession - is much more merciful than married



life (113:1997 شكور). And when the mother - who is a tender chest - is beaten in front of her children, they are in turn unable to defend her because whoever hits her is not a stranger, but is also someone dear to them, which makes the children vulnerable to a number of bad effects such as:

- Physical harm as a result of being in the same place.
- Sleep deprivation and loss of focus
- Nocturnal urination
- Eating disorder
- Fear, anger, lack of self-confidence, and anxiety
- Lack of self-esteem
- Childhood loss
- Psychological problems, depression, frustration
- Isolation, loss of friends and contact with family.
- Behavioral effects, such as seeing their father as an example and then becoming violent, accepting abuse at school or in the street, and thus having shaky personalities, school absenteeism, and deviation

(مركز الإعلاميات العربيات للدراسات والأبحاث والاستشارات، 2003).

2- Psychological Effects:

Family violence results in many psychological illnesses, especially when violence within the family reaches its peak of danger in practice and physical and moral abuse with harsh and painful words. Long-term satisfactory, with a high rate of expectation to reproduce violence for the victim, in the sense that he follows the course of violence as it happened to him or more, in addition to the danger of the future family presence and outside it, especially since the growth trends of the individual's personality are determined according to the experiences and practices that he acquires during his childhood and the various stages of his life (119:2011 عيساوي).

There are the psychological effects and what it involves as forms of violence, the potential for depression, PTSD and other anxiety disorders, sleep difficulties, disturbances in eating habits, suicide attempts, and health effects that may also include headaches and pain

syndromes (back and abdominal pain, chronic pelvic pain), stomach and intestinal disorders, limited movement and general ill health. And what sexual violence may lead to, especially during childhood, increases the likelihood of smoking, using addictive substances and alcohol, and engaging in risky sexual behaviors. Intimate partner and sexual violence have high social and economic costs that affect society as a whole. Women may suffer from isolation, inability to work, lost income, limited participation in activities regularly, and limited ability to take care of themselves and their children (2021 منظمة الصحة العالمية).

One of the most important psychological effects on women is the feeling of fear after being subjected to violence or during an assault. She may feel guilt even without having done something wrong. She may feel that she is responsible for this violence, she may feel failure and frustration as a woman or a wife, and she may feel that she has been lured into this marriage and that she has become helpless (123:2005)

The trends of an individual's personality growth are determined according to the experiences he acquires during his childhood, and since the Yemeni family raises its children on the values of discrimination between women and men; in the long run, the young girl integrates with these values and tendencies, so that she considers herself as having inferior abilities and status than her brother, and then she has a negative image of herself, so she develops a submissive, obedient and weak personality compared to the personality of the child, and she becomes unable to claim her rights. (14:2004 الشرجبي).



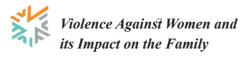
Chapter 4 The Extent of the Phenomenon of Violence against Women

(Hadhramaut as a model)

The recent increase in the rates of violence of all kinds, patterns and fields in Hadhramaut raises several questions about whether the institutions of society entrusted with the process of socialization (such as the family, school, religious institution and the media) have played their role effectively and successfully or not. The spread of aggressive behavior has increased in many governorates of the Republic, especially in the Hadhrami society, which was characterized by a kind of calm, stability and tranquility. Violence against women has become a social phenomenon, reflecting the deviant aspect that threatens the social structure of the family and society.

The cases of violence that were monitored, according to the Case Management Department of Mukalla Maternity and Childhood Hospital (MCH), amounted to about 214 women, according to the statistics of 2019 (2019 (تقرير مستشفى المكلا للأمومة والطفولة للعام). As for the East Mukalla First Instance and West Mukalla First Instance Courts, there are 10 cases of violence per month, all of which are related to personal status cases, while the cases of abused women in the case management project amounted to 570.

The indicators of violence against women are among the most difficult indicators, due to the difficulty of obtaining data on this phenomenon and extracting indicators about it due to societal customs and traditions, especially in conservative societies such as that of Hadhramaut governorate, which leads to the failure to announce cases of violence against women and thus not to be reported. It is recorded



and documented in the required form in the places of control or health and security centers, and sometimes it is reported and then the report is withdrawn due to the impact of customs, traditions, society's view of the family and the girl and the stigma that can be left on the woman.

The indicators of violence were divided into three sections in order to facilitate their collection, as they were distributed as follows:

- Indicators of violence against women in police and security settings.
- Indicators of violence against women in civil society institutions.
- Indicators of violence against women in prisons.

First: Indicators of violence against women in places of control and security:

Crimes against women in Hadhramaut are classified into different categories, including harassment, rape, attempted indecent assault, or coercion. It also includes the types of crimes committed against women not as a gender, but as a member of the community.

The statistical data in Hadhramaut governorate for the years 2008 and 2009 showed that the total crimes for both sexes amounted to 1,698 and 1,318, respectively.

According to the data of the Court of Appeal of G/ Sahel Hadhramaut, the number of women's criminal cases in courts amounted to 428 in 2008, and 406 in 2009. As for Wadi Hadhramaut, the crime rate against women, according to the data of Al-Wadi and Al-Sahra Hadhramaut reached 74%-71% for the two years 2008-2009, with an average annual rate of 28% of the number of women's cases registered in Al-Wadi and Al-Sahra Courts for the same two years, and from this we conclude that the violence that occurs against women is three times the amount of violence committed by women towards society

(اللجنة الوطنية للمرأة، 2010: 102-100).

The following tables show that:

Table (1): The Distribution of Crimes in the Case of Victims and Accused People for the Years 2008 and 2009 in Wadi Hadhramaut and its Desert.

Year	Status	Cumulative	Ratio			
	Victim	Ratio %	Accused	Ratio %		
2008 AD	24	74	8	26	32	100
2009 AD	17	71	7	29	24	100

Source: Courts of the Wadi and the Desert in Hadhramaut Governorate

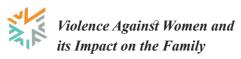


Table (2): Indicators of Violence against Women in Hadhramaut Governorate

	Thum amount Governorate									
Statement	2010 AD	2011 AD	2012 AD	Ratio of Increase or Decrease						
Number of reported cases of sexual assault and rape	10	2	3	50%						
Number of reported cases of sexual harassment	3	6	7	17%						
Number of victims in all reported crimes	Males	1040	979	886	-9%					
	Females	46	20	20	0%					
	Cumulative	1086	999	906	-9%					
Number of victims in reported crimes by crime type	Murder	Males	19	20	31	55%				
		Females	2	0	0	0%				
		Cumulative	21	20	31	55%				
	Crimes for money	Males	584	556	497	-11%				
		Females	14	6	7	17%				
		Cumulative	598	562	504	-10%				
	Scam	Males	32	32	19	-41%				
		Females	1	0	1	100%				

اللجنة الوطنية المرأة، تقييم خطة عام 2012



The statistical data in Hadhramaut governorate for the years 2010-2011-2012 showed that the number of reported cases of sexual assault and rape was (2) in 2011, compared to (3) cases in 2012, an increase of 50%. As for the number of reported cases of sexual harassment, (6) cases were recorded in 2011 compared to (7) cases in 2012, an increase of (17%). The number of female victims in all reported crimes reached (20) victims in 2011, compared to (20) victims in 2012. As for males, the number of victims reached (979) in 2011 compared to (886) victims in 2012, a decrease of (9%). The number of victims in the reported crimes may reach (zero) depending on the type of crime. There were no female victims in 2011 and 2012 in murders. As for males, the number of murder cases was (20) in 2011 compared to (31) in 2012, an increase of (55%). The number of female victims (crimes that occur because of money) was (6) cases in 2011 compared to (7) cases in 2012, an increase of (17%), and as for males, the cases amounted to (556) cases in the year 2011 and (497) cases in 2012, a decrease of (11%). There were no female victims of fraud in 2011, and there was one case in 2012, an increase of (100%). As for males, the number of cases reached (32) cases in 2011 compared to (19) cases in 2012, that is, a decrease of (41%).

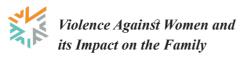


Table (3): Indicators of Violence against Women at the level of Al Sahel Directorates in Hadhramaut Governorate from the Years 2014 to 2019

Directorates in frauntamant Governorate from the rears 2017 to 2017									
Statement	2014	2017	Ratio of Increase and Decrease %	2018	2019	Ratio of Increase and Decrease %			
Number of reported cases of sexual assault and rape	15	1	-93%	5	9	80			
Number of reported cases of sexual harassment	0	13	13%	11	27	145			
Number of victims in all reported crimes	Males	602	121	-80%	511	813	29		
	Females	31	13	-58%	24	59	146		
	Cumulative	633	134	-79%	535	872	63		
Gap	56	18	-68%	5	7	0			
Number of females for every 100 males	1	1	100%	95	93				
Number of victims in reported crimes by crime type	Murder	Males	56	18	-68%	0	0	0	
		Females	1	1	100%	0	0	0	
		Cumulative	57	19	-67%	0	0	0	
	Gap				0	0	0		
	Number of females for every 100 males				0	0	0		
	Crimes for money	Males	325	275		19	25	32	
		Females	3	0		3	5	76	



		Cumulative	328	275		22	30	
	Gap				16	20	0	
	Number of females for every 100 males				84	80	0	
	Scam	Males	8	22		34	58	71
		Females	1	0		6	10	67
		Cumulative	9	22		40	68	70
	Gap				18	17	0	
	Number of females for every 100 males				82	83	0	
Number of victims of light physical abuse	3	0	-100%	15	28	87		

اللجنة الوطنية للمرأة (2017): التقرير التقييمي السنوي لعام 2017 و2019 لمحافظة حضرموت :Source مديريات الساحل من منظور النوع الاجتماعي

The previous table shows the following:

• Number of reported cases of sexual assault and rape:

In 2014, (15) cases were reported, while in 2019 the number of cases decreased to (1), with a decrease of (93%), and (5) cases of rape were reported in 2018 and (9) cases in 2019, that is, an increase of (80%). It is noted here that there is a discrepancy in the number of those reported, with the possibility that they may be more than that, and the reason for this is due to customs and traditions that require covering up the situation, and the most affected by this situation is the women who remain silent.

• Number of reported cases of sexual harassment:

No case was reported in 2014, while in 2017, (13) cases were reported, an increase of (13%) over previous years, and (11) cases of sexual harassment were recorded in 2018 compared to (27) cases in 2019, that is, an increase of (145%), which means that there has been

an increase in reporting cases from previous years, which may be due to community awareness or as a result of some organizations adopting women's awareness of the necessity of reporting and their legal rights.

• Number of victims in all reported crimes:

The number of female victims of all crimes in 2014 and 2017 was equal with (31) cases, while the number of female victims of all crimes was (24) victims in 2018 and (59) victims in 2019, that is, there is an increase in the number of female cases.

As for males, the number of victims in 2014 was (602) and (121) in 2017, and here we find a decrease in the number of crimes, i.e. by (-80%) compared to 2014, while we note that there were (511) victims in 2018 and (813) victims in 2019, that is, there is an increase of (59%) in male cases from 2017.

Number of Victims of Reported Crimes by Type of Crime:

(A) Murders:

In 2014 and 2017, only (1) female victim was found, and the number of cases among males was (56) and (18), respectively, which means that there is a decrease from 2014, while there were no female or male victims in 2018 and 2019.

(B) Crimes caused by money:

In 2014, there were (3) cases only, but in 2017, there was no report of crimes that occur because of money, while the number of female victims (crimes that occur because of money) were (3) cases in 2018 compared to (5) cases in 2019, an increase of (17%). As for males, the number of cases reached (19) cases in 2018, compared to (25) cases in 2019, an increase of (32%).

(C) Fraud crimes:

(1) Case was reported in 2014, while there were no cases in 2017. As for males, the number of cases in 2014 was (8) cases, and (22) cases in 2017, with an increase of (175%), while the number of female victims reached in 2018 were (6) cases, while the number of cases in 2019



reached (10) cases, an increase of (67%). As for males, the number of cases reached (34) cases in 2018, compared to (58) cases in 2019, an increase of (71%).

It is noted from the previous table that the cases of sexual assault have increased comparing to the cases that occurred in 2012, as well as the cases of sexual harassment, and there were (27) cases reported in the year 2019 if compared to the year 2012 in which (7) cases were reported, and there is also an increase in the number of victims in reported crimes compared to previous years. In 2013, the number of male victims was (886) and the number of female victims was (20), while in 2019 it reached (813) male cases and (59) female cases, which means that there is an increase in the number of crimes over previous years, and this is a bad indicator. It is well known that most crimes are committed by unconscious individuals, due to the low economic level of the family, and the persistence of the traditional view of women.

Second: Indicators of violence against women in civil society organizations:

Many government agencies and civil society organizations seek to combat violence against women in all its various forms by defending human rights or by raising the level of legal awareness in society to raise awareness of the danger of the spread of the phenomenon of violence, including:

- Yemen Women Union branch in Hadhramaut Governorate
- The National Committee for Women in Hadhramaut Governorate
- Al-Amal Women and Sociocultural Foundation
- Safe space and other institutions

Within the framework of the services provided by the Yemeni Women Union within the legal protection program, which aimed to expand the response to gender-based violence - especially domestic and family and physical violence - and to improve programs and protection systems, legal intervention, and provision of health and reproductive health services to prevent AIDS, where the program works to provide legal protection for poor women through the service of listening to battered women, providing legal advice and community awareness sessions about personal status law in the targeted centers, helping them

to overcome problems and difficulties facing them and their families, and providing the necessary legal services. Accordingly, violence was classified into physical, economic (alimony), sexual, and institutional violence. The following table shows the most important data and cases recorded from 2010 to the end of October 2012.

Table (4): Hearing Room Statements 2010 - 2012

Indicators	2010	2011	2012	Ratio of Increase and Decrease %
Physical Violence	2	7	4	-43%
Economic Violence	24	30	15	-50
Inheritance	-	1	1	0
Sexual Violence	1	3	2	-33
Institutional Violence	2	3	-	-100
Cumulative	29	44	22	-50

Source: Yemen Women Union / Al-Mukalla

Looking at the above table, we find that the total recorded cases of violence in 2010 amounted to (29), in 2011 (44) cases, and in 2012 (22) cases, with a decrease of (50%) compared to 2011. Cases of economic violence (alimony) recorded the highest indicators of violence in the hearing room of the Union. In 2011 and 2012, it amounted to (30) and (15) cases, respectively, with a decrease of (50%), while physical violence ranked second with (4) cases in 2012, registering a decrease of (43%). The number of cases in 2011 was (7) cases. Sexual violence ranked third, recording a decrease of (33%) in 2012, as the number of cases was (2) compared to (3) cases in 2011. Inheritance cases recorded only (1) case in 2011, which is the same number that was recorded in this type of cases in the auditorium in 2012. While no cases of institutional violence were recorded in 2012 compared to the registration of (3) cases in 2011. In 2013, no cases were recorded in the Yemeni Women Union due to the circumstances of the country, but some cases were recorded in 2014, which is shown in the following table:

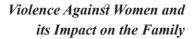




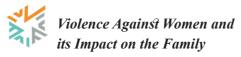
Table (5): Hearing Room Statements 2014 - 2019

Indicators	2014	2015	2016	2017	2018	2019	Ratio of Increase and Decrease %	Remarks
Physical Violence	0	10	20	2	7	8	14%	
Economic Violence	36	2	3	8	18	23	28%	
Sexual Violence	0	8	18	1	2	10	400%	
Institutional Violence	0	3	1	2	2	0%	-100	
Verbal Violence	0	10	8	6	6	3	-50%	
Psychological Violence	0		15	2	2	2	0%	Women and girls under the age of 18, between the age of 12 and 14
Deprivation of Education	0			2	5	0	-100%	
Rape	0				0	3	0%	
Early Marriage	0				2	0	-100%	
Cumulative	36	30	64	22	44	51	16%	

التقرير التقييمي السنوي لخطة 2017م، محافظة حضرموت مديريات (الساحل) :Source من منظور النوع الاجتماعي

The previous table shows that the highest rate of violence was in 2016 with the number of victims (64) cases, while in 2019 it reached (51) and (44) in 2018, and the lowest was in 2017, which amounted to (22) cases, while in 2014, only (36) cases of economic violence were reported.

In 2015, the number of cases of physical violence and verbal violence reached (10), and only (2) cases of economic violence. In 2016, the highest percentage of violence was about (18) cases of sexual violence, while psychological violence came in the second place with (15) cases, and most of those who were exposed to this violence were women and girls under the age of (18) years, aged between 12-14 years.



In 2017, the highest rate of violence was (8) cases of economic violence and (6) cases of verbal violence. In 2018, the percentage of economic violence was the highest with (18) cases, verbal violence came in the second place with (6), and in 2019 it amounted to (3) cases only, while economic violence reached (23) cases and (10) cases of sexual violence.

From the above, we note that the most prevalent type of violence is the economic violence practiced by men through lack of alimony for the wife and children, then verbal violence follows, then sexual violence.

It is also clear that there is more than one violence practiced against women, but they do not report these violations to the security authorities. And if it happens to report, they are forced to give up their right, and this is due to the customs and traditions that restrict women, or to the defamation that is practiced against them, especially in small communities where families are known to each other and this may cause the girls of those families not to find a share in marriage, or it happens that the society surrounding the family exercises some restrictions and deprivation of some of their rights.

Third: Indicators of violence against women in prisons:

The reality of women in prisons in Hadhramaut shows - according to some statistical data - that the number of female prisoners in the governorate for the years 2008 and 2009 reached (39) and (22), respectively, and the total number of prisoners in 2000 was (1,165), of whom (39) female prisoners, with a percentage of (22%), and in 2009 the total number of prisoners was (1,168), of whom (22) were female, at a rate of (2%).

In addition, the number of female prisoners sentenced to prison terms in 2008 reached (4), and no prison sentences were issued to any woman in 2009.

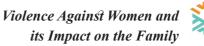




Table (6): Indicators of Violence against Women in Prisons from 2010 to 2012

Statement			2011 AD	2012 AD	Ratio of Increase and Decrease %
Number of female prisoners by marital status	Married	7	6	11	83
	Single	5	2	2	0
	Widowed	5	3	3	0
	Divorced	4	3	1	-66
Number of female prisoners by crime	Theft	5	5	9	80
	Murder	4	3	3	0
	Adultery	3	4	1	-75
	Alcohol and Drugs	7	-	1	100
	Kidnap	2	2	2	0
	Others	-	-	1	100
Number of female prisoners by educational status	Higher Studies	-	-	-	-
	University	-	-	-	-
	Diploma	-	-	-	-
	Secondary	1	2	1	-50
	Middle School	6	-	-	0
	Primary	6	4	3	-25
	Reads and Writes	-	-	8	100
	Illiterate	8	8	5	-38
Number of imprisoned women without trial	-	-	-	-	
Number of imprisoned women with their children inside the prison	3	2	3	50	

اللجنة الوطنية للمرأة، فرع محافظة حضرموت، Source: 2012

The number of female prisoners in the central prison in the city of Mukalla at the end of October 2012 reached (17), compared to (14) in 2011. The following table shows:

• Number of female prisoners by marital status:

The number of married female prisoners reached (11) cases in 2012 compared to (6) cases in 2011, an increase of (83%). While no increase or decrease was recorded for single female prisoners. The same number remained in only (2) cases in 2012. The percentage of widowed female prisoners remained the same in 2012 with (3) cases, as well as in 2011 without an increase or decrease. The number of divorced female prisoners was (1) case in 2012 compared to (3) female prisoners in 2011, a decrease of (66%).

• Number of female prisoners by crime:

The number of female prisoners in the crime of theft reached (5) cases in 2011, and (9) cases were recorded in 2012, with an increase of (80%). While there was no increase in murders and kidnappings, they remained the same (3) and (2), respectively. While (1) crime was recorded for alcohol and drugs in 2012, at a rate of (100%), an increase from 2011, and the same is true for the classification of the type of crime (others).

While the crimes of adultery recorded a decrease of (75%) from 2011; adultery crimes (act of illicit sexual intercourse between a man and woman) amounted to only four cases in 2011 compared to only one case in 2012.

• Number of female prisoners by educational status:

No cases of female prisoners with educational qualifications were recorded in "postgraduate studies", "university", "diploma" or "preparatory" in 2012, while cases were recorded in "high school", "primary", "read and write" and "illiteracy"; where it reached (1) case in the secondary education in 2012, and in 2011 it reached (2) cases, with a decrease of (50%). (4) cases were recorded in the primary education in 2011 compared to (3) cases in 2012, with a decrease of (25%) while (8) cases were recorded in 2012 with an increase of (100%) in cases of "read and write" from 2011, and a decrease of (38%) was recorded for "illiterate" women in 2012; where the number of cases was only (5) cases compared to (8) cases in 2011.



• Number of Women Detained in Prisons Without Trial:

In the three years, no cases were recorded of female prisoners being held in prison without trial.

• Number of female prisoners who have children inside the prison:

The number of female prisoners who had children inside prison in 2012 was (3), while there were (2) female prisoners who had children inside prison in 2011, with an increase of (50%).

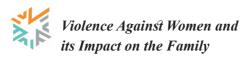


Table (7): Indication of Violence against Women in Prisons d between 2014 and 2017

Statement	2014 AD	2017 AD	Ratio of Increase and Decrease %	
Number of female prisoners by marital status	Married	1	2	100%
	Single	17	0	-100%
	Widowed	0	0	0%
	Divorced	1	4	300%
Number of female prisoners by crime	Theft	2	3	50%
	Murder	1	1	0%
	Adultery	0	0	0%
	Alcohol and Drugs	0	1	100%
	Kidnap	0	0	0%
	Others	16	1	-94%
Number of female prisoners by educa- tional status	Higher Studies	0	0	0%
	University	0	1	0%
	Diploma	0	0	0%
	Secondary	0	3	100%
	Middle School	0	0	0%
	Primary	17	2	-88%
	Reads and Writes	0	0	0%
	Illiterate	2	0	-100%
Number of impris- oned women without trial	7	2	-71%	
Number of imprisoned women with their children inside the prison	2	4	100%	

التقرير التقييمي السنوي لخطة 2017، محافظة حضرموت-مديريات (الساحل) :Source من منظور النوع الاجتماعي



It is evident from the previous table that:

• Number of female prisoners by marital status:

The number of married female prisoners reached (2) cases in 2017, compared to only (1) case in 2014, an increase of (100%). While no single female prisoners were recorded in 2017. In 2014, there were (17) female prisoners. As for divorced women, (1) case in 2014 compared to (4) female prisoners in 2017, a decrease of (300%).

• Number of female prisoners by crime:

The number of female prisoners in the crime of theft was only (2) cases in 2014, and (3) cases were recorded in 2017, an increase of (50%), while (1) murder was recorded in both years. And (1) crime was recorded in "liquors and drugs" in 2017, with an increase of (100%) over 2014. Also, in the classification of the type of crime "others" (16) cases were recorded in 2014, and (1) case in 2017, with an increase of (94%), in when no cases of adultery were recorded in these two years.

Number of female prisoners by educational status:

No cases were recorded among female prisoners who had educational qualifications in postgraduate studies, and (1) case of a university degree holder was recorded in 2017, and no case of women holding a diploma or a preparatory certificate was recorded in the two years, while (3) cases of those who had a high school certificate were recorded in the year 2017, with a decrease of (300%), and (17) cases were recorded in primary education in 2014 compared to (2) cases in 2017, with a decrease of (88%), and only (2) cases were recorded in "illiteracy" in 2014 with an increase of (100%), and no any case in the year 2017.

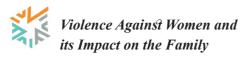
• Number of Women Detained in Prisons Without Trial:

In 2014, (7) cases were recorded and (2) in 2017 of female detainees inside the prison without trial, with a decrease of (71%).

• Number of female prisoners who have children inside the prison:

The number of female prisoners who had children inside prison in 2017 was (4), while there were only (2) female prisoners who had children inside prison in 2014, with an increase of (100%).

From the previous two tables, we find that:



- The highest percentage of female prisoners reached in 2014 as it reached (17) single female prisoners in the women's prison in Mukalla, and in 2017, there were no single female prisoners.
- The various crimes in 2014 amounted to (16) cases, compared to (1) case in 2017, which means a decrease in the number of female prisoners.
- Education plays its role in the awareness of women. We find that most of the female prisoners who received primary education, amounting to (17) cases, from the primary education campaign committed crimes, compared to the absence of any woman from the graduate or university education campaign who committed any crime other than (1) university in 2017, and this indicates the importance of education for women.
- The percentage of children accompanying their mothers inside prison increased because they are in their custody, and family problems may have prompted the mother to commit a crime, as well as the child's parents' unwillingness to take custody of him while the mother is serving the sentence in prison. The number of cases in 2017 was (4), compared to 2014, when there were only (2) cases.

Research results:

The current research reached the following results:

- 1-Ignorance and the weak awareness of women of their legal and legitimate rights and duties is widespread due to the high level of illiteracy among them.
- 2-Many girls are deprived of educational opportunities. Most of the female prisoners are at an elementary level.
- 3-Moral violence is the most common form of violence that women are subjected to.
- 4-There are many discriminatory social beliefs and practices on the basis of gender. There is a difference in upbringing between males and females, and this distinction includes the distribution of roles within the family, as the girl is subject to her brother, even if he is younger than her.



- 5-The girl is not given the opportunity to make decisions concerning her life. She may be forced to drop out of school and marry at a young age to a man she may not want.
- 6-There are variations and differences in the manifestations and severity of domestic violence against women. The most common types of violence are physical and economic violence (as reported by the Women Union auditorium).
- 7-There is economic abuse of women, as it was found that economic abuse plays an important role in perpetrating violence against women within the family (alimony for children, inheritance).
- 8- Violence is the result of customs and traditions that require the man to control the family, and thus he may use violence and force to lead it.
- 9-There is an increase in psychological violence among women and girls under the age of 18, ranging between 12 and 14 years old.
- 10-Violence is hidden. Women cannot report violence against them, due to customs and traditions that place their burden on women because the one who practices violence is the father, brother, or any relative of her.
- 11- A woman's fear of the stigma she may be stigmatized with if society knows that she has been subjected to sexual violence.

The results of the current research agreed with the previous studies that there is a clear increase in cases of domestic violence that women suffered from; all of these studies confirmed this result. In fact, the use of violence is due to the existence of economic abuse of women, and the current research agreed with the study of (2020 , which attributed the causes of violence against women to the low economic level of the husband, and with the study of (2019 محمد) which showed the presence of economic abuse of women, as well as with the study of (الحياصات) which showed the low level of the husband's income, while the study of (2004) attributed it to women's desire for economic independence.

Discriminatory pressures, beliefs, and social practices against women are based on gender, such as the distinction between males and females, which includes the distribution of roles within the family. It is one of the reasons for which the current research agrees with the previous studies, such as the study of (2009 (العلاق)), which attributes violence to social motives represented in customs and traditions, and with the study of (2004 (العواودة)), which attributes violence to society's stereotyping of women's work, and to the nature of the social structure of the Jordan society, and with a study of (2003 (الشرجبي)) which showed that there is discrimination in treatment between the male and the female child.

The results indicated the diversity of forms of violence that women are subjected to by the members of their family, such as discrimination between boys and girls in treatment, deprivation of education or early marriage, and the results showed that the perpetrator of this violence is the father, brother, and then the mother.

The current research agreed with the study of (2020 (يوسف) in the forms of violence that women are subjected to, such as physical, psychological and sexual violence, and with the study of (دار المعارف) in the exposure of women to some kind of emotional abuse, most notably intimidation or threat, while physical violence is the least type of violence widespread, and with the study of (2010 (شمعون), whose results were that there are practices of domestic violence in the Gaza Strip, including physical and psychological violence, which may lead to leaving the marital home, and with the study of (2003 (الشرجبي) in the presence of physical violence against Yemeni women.

As for the effects of violence against women on children, they are the victim of this violence and most are affected by it. Whether marriage continues or ends with separation, children may suffer severe sadness and persistent depression, loss of confidence in themselves, poor academic achievement and failure in school, and fear of others.

The current research agreed with previous studies - such as the study of (2020 (يوسف) that violence causes women social and psychological problems, and with the study of (2016 (الحياصات), which showed that the husband's family's interference in marital life causes violence to the



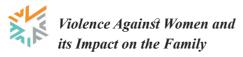
wife, and with the study of (2010 (شمعون) in the presence of psychological and mental illnesses, and with a study of (2009 (مرح)) that showed the presence of mental illnesses, family disintegration and the increase of conflict in the family and society, and with the study of (Sieger, 2004) that confirmed the presence of psychological symptoms, ranging from depression and anxiety to anti-social behaviors, and suicide among abused children and adolescents.

When looking at the extent to which the theories match the results, we find that the conflict theory agrees with the previous studies and current research. It considers that the individual transforms the external frustration into a force within his family, and this may take a form of violence that falls on the wife or children, and this is due to a need to exercise power and control over family members, or the individual may fall under the pressure of turmoil and frustration; personal feelings of deprivation and low economic status increase the tendency towards violence and aggression. Instead of responding to injustice to those who have wronged them, they often protest against their friends, family and neighbors.

Family violence is explained in the light of this theory within the concepts and terminology of control and domination. Men are more powerful than women, imposing their control over women, and thus violence becomes a sure indicator and a means to gender inequality.

Recommendations:

- 1. Raising awareness of civil, legal and political rights for women.
- 2. Working to make women aware of all their legal rights and to enable them to demand, promote and exercise them, strive to achieve equality in the protection of the law, and ensure that perpetrators of violence against women do not enjoy impunity.
- 3. Providing comprehensive statistical data on women's issues in courts and prisons to prepare in-depth studies on issues of violence against women and human rights.
- 4. Seeking to eliminate all forms of discrimination against women that limit their empowerment and inclusion in the development process,



as they are the most affected and disadvantaged groups in society.

- 5. Developing a special legislation that addresses the problem of violence against women in all its forms.
- 6. Eliminating illiteracy by increasing the capabilities and directed efforts.
- 7. Strengthening the legal protection of women especially women workers in the face of the following phenomena:
- A) Rape and harassment at work or public places, including hearing profanity that offends a woman's modesty.
- B) The flagrant violation of women's rights, such as denial of education and forced early marriage or the marriage of a woman without her consent
- 8. Finding appropriate mechanisms to protect women from violence in its various forms, for example facilitating the contact of women victims with official and voluntary protection centers.
- 9. To take all appropriate measures to change the social and cultural patterns of behavior of men and women with a view to achieving the elimination of prejudices, customary habits and all other practices based on the belief that either of the sexes is inferior or superior to the other.
- 10. Focusing on women's rights stipulated in the constitution, laws and legislation and activating them with the aim of removing them from the theoretical sphere to the practical sphere, especially those rights that enhance women's economic roles, education and work rights, and the field of maternity and childhood care.
- 11. Activating the role of civil society institutions that advocate women's issues.

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Developing Technical Education and Vocational

Training in Yemen in the light of Global Experiences

(Suggested Visualization)

Dr. Fathiya Al-Hamdani

Nov. 2021



Summary:

Education is the basis for the development process and the ultimate goal that Yemen aspires to now and in the future. Technical education and vocational training is one of the basics of education that develops societies in a healthy and active manner. Therefore, this research presents a proposal for the development of technical education and vocational training in Yemen in the light of global experiences. By identifying the concept of technical education, its importance and reality in Yemen, identifying the most important difficulties facing it, and identifying the experiences of some countries such as China and Germany in developing technical education and identifying the most important aspects through which it has been promoted.

The current research used the descriptive approach, and the comparative approach to take advantage of those experiences in the process of developing technical education and vocational training in Yemen.; Therefore, I found many negative points, including its weak link with development and the needs of the labor market, and its outputs are not qualified enough to join the labor market and achieve its role in the development process, as well as the fragility of infrastructure, the inability of current programs to keep pace with the requirements of the labor market, and the weak partnership links between educational institutions Technical, the labor market and the private sector. When looking at the experiences of regional and international countries, we find that the experiences of the People's Republic of China and the Federal Republic of Germany reflect a pioneering model of the existence of multiple and interrelated legal, administrative and academic orientations to develop technical education and training in their countries, by paying attention to the role of the economic community institutions such as companies, institutions and employers in managing the outputs of technical education and training Vocational follow-up and evaluation to keep pace with the needs of the labor market in light of the economic and technological changes that are plaguing the world, and in the light of these experiences, this research builds a proposal for the development of technical education and vocational training in Yemen that deletes

Keywords: development, technical education and vocational training, global experiences.

Introduction:

Global economic and technological changes imposed on all sectors of societies change and work to keep pace with the needs of those changes, which focused on the quality of human cadres qualified to meet the needs of the labor market, so the education sector was one of the most important sectors that took charge of the scientific preparation of cadres commensurate with economic and technological developments.

Technical education represents a basis for the contemporary educational movement, as societies can achieve through it their desired development goals that suit the various aspirations of society. Technical education has an essential role in preparing a skilled workforce capable of dealing with modern technologies and facing rapid changes and their repercussions on the labor market and its needs for professions. diversified in various economic fields (19:2012);

Education aims to prepare students with knowledge and skills to qualify them to be able to join the labor market and play their role in the development of their societies, thus contributing to raising the productive efficiency of individuals and providing them with skills and experience in dealing with the tools and means of modern tasks and jobs, and improving their performance in technical and functional aspects. Thus, technical education is one of the Important means of human resource development; Therefore, developed countries have developed this sector by monitoring budgets from their total national production, and worked to build programs and curricula that suit the needs of the labor market, and set standards, general frameworks, and main directives for technical education within the umbrella of the economic, social and cultural system of society (15:2012 (العبوف)

Developing and poor countries are one of the countries in the world that need high-quality outputs in skills and productive capacities capable of meeting global changes in the economic field, and Yemen is one of those countries that face many problems in technical education and vocational training, especially as it is one of the elements of the educational system in Yemen, which has not achieved its goals in community development as it should ,so the current research aims to benefit from the experiences of developed countries in developing technical education and vocational training in Yemen.

Research problem:

Yemen needs comprehensive and broad development in all sectors of society, which requires many qualified human cadres with highly skilled and distinguished capabilities. Since technical education and vocational training is the basis for developing human resource capabilities; The current research seeks to develop technical education and vocational training in Yemen in the light of the experiences and experiences of developed countries in this, which are experiences that have proven successful. The problem of the current research can be identified in the following main question:

How can technical education and vocational training be developed in Yemen in light of global experiences?

Other questions arise from this question:

- 1- What is the concept of technical education and vocational training and what are its objectives?
- 2- What is the reality of technical education in Yemen?
- 3- What are the difficulties facing technical education in Yemen?
- 4- What are the experiences of countries in developing technical education?
- 5- What is the proposed vision for developing technical education in Yemen in light of global experiences?

Objectives of the current research:

The current research aims to achieve the following objectives:

- 1. Understand the concept of technical education and vocational training.
- 2. Diagnosing the reality of technical education and vocational training in Yemen.
- 3. Determining the most important difficulties facing technical education and vocational training in the Republic of Yemen.
- 4. Getting to know the experiences of the Federal Republic of China

and Germany in technical education and benefiting from them to develop technical education and vocational training in Yemen.

5. Presenting a proposed vision for the development of technical education and vocational training in Yemen.

Research importance:

The importance of the current research is highlighted in the following:

- 1. Providing clear data and information on the reality of vocational education in Yemen.
- 2. Identifying the most important difficulties and negatives facing the educational process in technical and vocational institutes.
- 3. Opening the way for decision makers to learn about the experiences of China and Germany in the field of technical education and vocational training. The two countries were chosen for their excellence in this field; Because the level of development of technical education in them is very high.
- 4. Benefiting from international technical education development experiences to develop something similar in Yemen.
- 5. Presenting a proposed vision for the development of technical and vocational education in the Republic of Yemen, which helps to carry out the development process in a manner commensurate with the needs and requirements of the next phase of the reconstruction of Yemen.

Research terms:

The current research relied on many terms that the researcher knew procedurally, namely:

- 1. **Development:** It is a set of legislation and administrative directions aimed at improving the reality of technical and vocational education in Yemen.
- **2. Technical Education and Vocational Training:** It is the formal education that qualifies the graduate of basic or secondary education to

join the labor market with skills and abilities commensurate with his current and future requirements and needs.

3. Global experiences: In the research, it is meant the experiences of China and Germany in the field of technical education and vocational training.

Research limits:

Objective limit: Technical and vocational education in the Republic of Yemen, and global experiences for the development of vocational and technical education. The research was limited to the experiences of the Republic of China and the Federal Republic of Germany, and was satisfied with the legislative aspect, the administrative aspect, curricula and training, and the labor market.

Spatial boundary: Republic of Yemen.

Time limit: 2021 AD.

Research steps:

First step: the general framework of the research, in which the problem and its questions were identified, its objectives, its importance, and its limits.

Second step: the conceptual framework of technical education and vocational training, its objectives, and its importance.

Third step: analyzing technical education in Yemen in terms of its inception, legislation, management, and indicators during the years (2008-2014), and the difficulties it faces in reality.

Fourth Step: Reviewing previous studies that showed technical education and vocational training and how to develop it by benefiting from the experiences and expertise of developed countries.

Fifth step: Analyzing the experiences of the People's Republic of China and the Federal Republic of Germany in technical education and vocational training.

Sixth step: Building a proposed vision for the development of technical education in Yemen by benefiting from the experiences of China and Germany.

Chapter One Technical Education and Vocational Training and Its Importance

The current chapter deals with the concept of technical education and vocational training in terms of its definition, objectives and importance in meeting the needs of the labor market and achieving development in societies. This was presented as follows:

First: The concept of technical education:

Technical education is one of the components of the educational system in any country, and its mission is to provide the entrants with skills and abilities that are compatible with the needs of society and the requirements of the labor market. It is "a type of formal education that includes educational preparation and acquisition of skills and professional and technical knowledge. It is carried out by formal educational institutions in order to prepare skilled workers in various industrial, agricultural, health and commercial disciplines to have the ability to implement and produce so that it is a link between high technical frameworks (408:2012)

And UNESCO (defined it as :all practical and educational forms and levels that include - in addition to general knowledge - the study of technology and related sciences ,and the acquisition of practical skills, know-how ,attitudes and perceptions related to professional practices in the sectors of economic and social life .(46:2012 (السيوف)) It is also a type of pre-university education aimed at acquiring knowledge and skills specific to a profession or trade .They are linked to the needs of the labor market according to labor-based components.(55:2019)

According to Yemeni law ,technical education and vocational training are all forms and levels of the professional educational process that includes general knowledge of science and technology) technology (to acquire practical skills and attitudes related to practicing the profession in various areas of life. (2006 وزارة الشؤون القانونية)

The multiplicity of definitions of technical education confirms that it is an integral part of rehabilitation and general education that many countries seek to develop and improve its outputs as a means of engaging in various professional sectors through diversity in rehabilitation and lifelong training opportunities. Thus, vocational education finds a place in societies that aim to Achieving economic progress because it is a tool for progress in it through employing labor at various skill levels to advance the country and reduce unemployment and poverty (408:2012).

Second: Objectives of Technical and Vocational EducationSeveral studies have determined that technical and vocational education aims to provide highly qualified graduates who are able to integrate into the labor market and meet its needs for various jobs, especially those of a technical nature. These goals have been defined as follows:

- Providing the society's needs of qualified and trained human cadres or the so-called skilled labour.
- Developing positive attitudes among the trainees, as it is an important value that the community benefits from in development and development.
- Providing trainees with specialized knowledge according to the needs of the labor market.
- Providing graduates with various skills through technical training in specific professional fields that fit the requirements of the labor market on an ongoing basis.

Sitanshkumar explains that technical education aims to help individuals acquire diverse skills, enhance their individual source of income, and develop their abilities to use supportive information technologies to effectively provide the required professions. It also aims to promote sustainable development, entrepreneurship, and strengthen economic growth through The qualified human resources are diverse and specialized, thus helping to achieve economic development

(Sitanshkumar, 2017: 28).

Third: The importance of technical education and vocational training:

The relationship between development and education is reciprocal and both are products of the other; Education institutions play multi-dimensional roles in terms of preparing qualified human resources to meet current challenges only, and extend their capabilities to anticipating the future and predicting challenges, and working to develop appropriate plans to address those challenges by reconsidering the quality of programs offered in educational institutions related to the development of students' capabilities their skills; Therefore, technical education and vocational training is the heart of development because its qualified and trained outputs are the ones that carry out development and alleviate the community's economic suffering, poverty and unemployment.

The global experiences of many countries - including Germany after its exit from World War II - have proven this. Where vocational education represented one of the factors of the German renaissance, and in Britain it became clear that one of the reasons for the deterioration of the economy in a period of time was the decline in its interest in technical education; Therefore, it sought once again to issue legislation to enhance the role of technical education in the development and investment process. (72 71-:2016)

Technical education is based on a fundamental development in the labor market, especially in developing countries that seek to keep pace with these changes in the labor market in the field of new products and services that are based on knowledge and innovation, as the knowledge revolution focuses on technological progress and investment in human resources through education and training to gain Enrollees have a variety of life skills that include basic competencies in technological and social requirements that meet the needs of the current era; Therefore, technical education constitutes a dimension of development to establish a society capable of competition in light of the global system governed by market mechanisms and economies.

Technical education contributes to adapting to the requirements of the current era and the labor market through the programs it offers.

Thus, technical education contributes to a high degree in the development of human capabilities, which alleviates poverty and the spread of unemployment, contributes to achieving leadership in the development of human resources that enhances the economic prosperity of countries, and helps. In developing the capabilities and specialized skills of students, which gives them a wide scope to determine the type of profession in which they will specialize and give them a better future in line with the economy of their countries, which need many industries and diverse professions that keep pace with the aspirations of the current era (Tyowuah & others, 2019:37).

The role of vocational education in the process of development and economic progress can be clarified through the following:

- Develop students' various skills and administrative abilities appropriate to economic and social progress in various fields.
- Developing innovative capacity with a multiplier effect on economic progress.
- Raising a person's ability to choose his work or profession that adapts to his abilities and achieves job stability.
- Contribute to the development of individuals' capabilities to adapt to the changes facing the labor market.

Thus, technical education contributes to alleviating unemployment in societies, achieving balance with the labor market, and achieving justice and social equality for all rural and urban areas of countries by providing new educational opportunities(49:2004).

It can be said that technical education aims to build and develop the capabilities of the people of societies in order to provide them with multiple knowledge and professional skills in various industrial, agricultural, health, administrative, commercial and tourism fields, with the aim of keeping pace with the development needs of their societies. Therefore, many countries - developed, developing and middle-income - are making a lot of efforts to manage and develop technical education in order to achieve its role in those societies.

Chapter Two Technical Education and Vocational Training in Yemen and its Obstacles

This chapter includes a study of the reality of technical education and vocational training in Yemen in terms of its inception, legislation, objectives, and management, and identifying its reality in terms of students, faculty members, material capabilities, programs, training, and financing, in order to determine the quality of the difficulties facing technical education and vocational training. This was done on two axes:

The first axis: the reality of technical education according to the following:

- The emergence of technical education and vocational training (management and legislation).
- The reality of the technical education and vocational training system in Yemen in terms of administration, students, programs and specializations, faculty members, buildings, and funding.

The second axis: Obstacles to technical education and vocational training in Yemen.

The first axis: the reality of technical education in Yemen

Yemen is one of the countries of the Asian continent, located in the south of the Arabian Peninsula in the southwest of the continent of Asia, bordered by the Red Sea to the west, to the south by the Gulf of Aden, the Arabian Sea and the Indian Ocean, to the north by Saudi Arabia, and to the east by the Sultanate of Oman. It requires them to pay attention to the development process of technical education and vocational training, and among those factors is the diversity of economic resources that require qualified and diverse human resources. This is offset by increased population growth; As Yemen enjoys high fertility rates, the population is expected to rise to 47 million in 2040, which means an increase in the number of young people and children, which represents a challenge for education in light



of low economic growth, high rates of poverty and widespread unemployment among young people (2010 البنك الدولي؛ الجمهورية اليمنية، العمورية).

Economic resources also constitute a strength that can be benefited from by focusing on the planning process to determine the quality of quality education to cover the target age group in light of what is available, especially in technical education and vocational training, which is characterized by the limited enrollment of its various professional levels. The current situation that Yemen is going through dictates the need to work on future planning to advance Yemen's development in various fields of development.

First: The emergence of technical education and vocational training in Yemen, its legislation and management:

It includes a presentation of the historical establishment of technical education, its objectives, and the legal legislation for the management of technical education, as well as a presentation of the levels of technical education and vocational training as follows:

1- The emergence of technical education and vocational training in Yemen:

The beginning of vocational education in Yemen goes back to the year 1895, when the first industrial school was established in Sana'a. It was based in the current Military Museum building in Sana'a. It was called the "Sanayeh" school, and it included many disciplines (decoration - carpentry - turning). In 1927, the Aden Commercial Institute was established in Aden due to the commercial expansion of various commercial businesses and agencies there. The role of the Institute in the form of an educational institution did not emerge until 1954; Where the institute began by providing regular study for the professional level for a period of (3) years after middle school, and in 1936 the first agricultural school was established in Sana'a, followed by the opening of the Industrial School for the Textile Industry in 1937. In 1949 a school for girls' embroidery and sewing was established, and in 1957 the opening of the school for the textile industry A health institute in Sana'a to give some health courses.

The Technical Institute in Mualla is the strongest step in technical

education, which was called the "Technical College", and it included specializations such as (carpentry and installation, general mechanics, car mechanics, general electricity and extensions), where training courses were provided until 1961 and work began at the level of technical diploma. To qualify specialized cadres. With the development of the political situation in Yemen and the outbreak of the revolution, technical and vocational education witnessed a development in technical and vocational education institutes and centers to reach (47) institutes and centers.(2021 المركز الوطنى للمعلومات)

The nineties of the twentieth century represented a strong start for technical education, as several ministerial legislations were issued to regulate its role through the establishment of:

- The General Authority for Vocational Training in 1992, which was merged with the Ministry of Labor and Vocational Training, and the Ministry of Insurance and Social Affairs.
- The Vocational and Technical Training Fund associated with the reform of the financing system in 1995, and in the same year the National Council for Vocational and Technical Training was formed to include in its composition the production parties and the beneficiaries of the outputs of technical education.
- The Ministry of Labor and Training in 1997, and the vocational training sector was restructured to take charge of planning for vocational education and training, while the General Authority for Vocational and Technical Training is responsible for implementing plans and programs(55:2004 الأغيري).
- In ,2001 Republican Decree No (46) .was issued to establish the Ministry of Technical Education and Vocational Training ,and then many legislations regulating the Ministry (s tasks followed.

2- Technical Education and Training Legislation in Yemen:

- Technical Education and Vocational Training Law No. 23 of 2006 and its executive regulations were issued, and the objectives of technical education were defined as follows:
 - Preparing technical cadres that meet the requirements of comprehensive development and the needs of the labor market of national manpower.



- Raising the technical and professional competence of Yemeni labor in dealing with modern technologies with the aim of increasing the production and service capabilities of establishments especially small and smaller ones and contributing to the advancement of the national economy.
- Consolidating the principle of participation of the economic sectors and civils ociety in planning, financing, managing, developing and implementing technical education and vocational training programmes.
- Expanding the network of technical education and vocational training institutions at the national level and diversifying the fields and types of technical education and vocational training in a way that raises the efficiency of the Yemeni workforce, enhances employment opportunities and reduces unemployment and poverty.
- Establishing work values, awareness, and commitment to the rules of occupational health and safety, and the preservation of the environment in educational and training institutions and work and production sites. For more information, you can refer to the laws of the Ministry of Legal Affairs.
- Strengthening the relationship between educational and training institutions and work and production sites in a manner that serves to prepare the outputs of technical education and vocational training for working life and enhances employment opportunities.
- Developing technical education and vocational training in various professional fields and consolidating awareness of the principle of lifelong learning among the various segments of the workforce.
- Activating the role of the private and civil sector in the field of technical education and vocational training.
- Providing vocational training opportunities for women that are commensurate with their capabilities and contribute to the development of their skills (2006 (قوانين وزارة الشؤون القانونية).
- Issuance of the regulations for the executive body of the Supreme Council of Community Colleges issued by the Council of Ministers in 2009.
- Issuance of the regulation of public community colleges in 2013.
- Issuance of the regulations for scholarships, scholarships and postgraduate studies.



- Issuing the regulations for the criteria for appointing faculty members and their assistants.
- Issuing the bylaw for the promotion of faculty members in community colleges in 2013.
- Preparing the national strategy for technical education 2004-2005.

Despite these legislations, the reality of technical education institutions faces many difficulties in the administrative aspect, including:

- The need to amend some laws, such as the Community Colleges Law issued 15 years ago, where there is a difference in the affiliation of colleges to any ministry (civil service, health, technical education and vocational training).
- The weak role of the executive body of the Supreme Council in some technical education institutes and colleges; Some of them were established before the establishment of the Executive Council.
- Weakness of the prepared strategy; Because it did not include community colleges, and the second phase of the strategy, which was within the time period 2009-2012, was not implemented (40:2014 المجلس الأعلى للتخطيط، 2014)
- and it aimed to expand the technical and vocational education system to meet the needs of the economy sector in terms of skills, competencies and training required. In the outputs of technical and vocational education institutes and faculties in a way that helps to perform tasks and functions in various companies and institutions effectively (14:2004 (الاستراتيجية الوطنية للتعليم الفني والتدريب المهني).

3- Technical Education and Vocational Training Department:

The Technical Education and Vocational Training Department in Yemen relies on centralization through an administrative system represented in:

- The Ministry of Technical Education and Vocational Training, which includes the Ministry's general office, the Ministry's offices in the capital's secretariat and the governorates, and educational and training institutions.
- Advisory Councils for Technical Education and Vocational Training:
- The General Advisory Council for Technical Education and Vocational Training.



- Technical Education and Vocational Training Councils in the Amanat Al-Asimah and the Yemeni Governorates

In addition to these councils, there are many supervisory bodies for technical education institutes and colleges represented in the Ministry of Civil Service and the Ministry of Health.

The multiplicity of supervisory bodies created a set of administrative difficulties that were reflected in the quality of the outputs. It is very difficult to build a unified strategy from three ministries to one side and control all activities to achieve the desired goals and meet the needs of the labor market, in addition to the emergence of duplication in the administration of institutes, and this resulted in difficulty in setting unified plans and policies for technical education, which limited its ability to participate in the development of the country. There was also an overlap in the responsibilities and tasks between the departments affiliated with each party, and it was difficult to define the criteria for the evaluation process in the institutes, which contributed to the weak institutional performance, and all this negatively affected the role of those institutes and colleges in the development process and meeting the needs and requirements of the labor market (40:41:2014)

4- Technical Education and Vocational Training Levels:

- The Ministry of Technical and Vocational Education has provided many fields for various economic and social sectors, including: industrial and engineering, building and construction, commercial and informational, agricultural and veterinary, hotel and tourism, maritime, craftsmanship for women, and the medical field. Technical education levels are divided into the following:

A - Professional level: It has two systems:

- Professional level (two years after basic), in which the student is trained in industrial fields to graduate with a professional diploma in various specializations.
- A vocational level (three years after high school), and it is called a vocational high school, as many programs have been provided in different fields (industrial-agricultural-veterinary-commercial) (38:2013 المجلس الأعلى التخطيط، 2013).

Bylaws and regulations in technical education allow students who have obtained more than (70%) to enroll in the third year within the same previous specialization in any other training institution if it is not available in the same training institution from which they graduated (49:2012).

B- Technical level, divided into two systems:

- Technical Diploma: It has two levels. The first is that institutes and technical centers provide education for a period of (two academic years) after secondary school or after high school, and the second is that community colleges provide education for a period of (3) years after high school or its equivalent, which is a secondary level below the university (38:2013 المجلس الأعلى التخطيط،).
- Applied Bachelor's degree: carried out by technical colleges. Higher technical education is provided for a period of (4) years with the support of the Dutch project. It is available in two institutions: the Community College in Sana'a, and the Industrial Technical Institute in Al-Mualla. At the Community College in Aden, the study is continued for an additional year, after which the student obtains a bachelor's degree in a technical teacher (49:2012).

There is also a medical and administrative technical diploma, which is supervised by other ministries, and this is explained in the following:

- The technical (medical) diploma level: for health institutes, which is supervised by the Ministry of Health, for a period of three years after high school, so that the graduate obtains a medical diploma, and it includes the medical health professions program.
- Administrative technical diploma level: It is studied at the National Institute of Administrative Sciences for a period of two years, and its programs include (computer, accounting, human resource management, marketing, office management); So that students graduate with an intermediate technical diploma, and it is supervised by the Ministry of Civil Service (42:2014 المجلس الأعلى للتخطيط،).

Second: Indicators of the Technical Education and Vocationa Training System in Yemen:

1. Students:

Admission system:

Students apply to enroll in technical education according to specific health, age and educational conditions, whereby they must obtain a certificate of basic education (preparatory) in technical education, and a secondary school certificate for vocational education, and that they are not more than (18) years old, and that they are medically fit for the professions of their choice(15:2004 (وزارة التعليم الفني والتدريب المهني), and thus "age restrictions and health tests set by the Ministry of Technical Education prevent students who are over (25) years old or second-chance students - such as those who have enrolled in alphabetical programs - from benefiting from benefiting from the average age of the willing Including completing their studies from 15-30 years old, students with disabilities or professionals who have completed half their career path in improving their skills (2010).

• Enrollment and Graduation:

The enrollment and graduation indicators for the years 2008-2014 show an increase in enrollment and graduation rates, as the total number of enrolled students reached (36,262) male and female students, including (29,492) male students, at a rate of (81.3%), and the number of female students (6,770) with a rate of (18.7%). In 2008/2009, the number of students graduating was (24,803), of whom were males (21,519) with a rate of (86.8%), and the number of females (3,284) with a rate of (13.2%). In contrast to the increasing numbers of students enrolled and graduates, there is a leakage among graduates, where the number of students enrolled in 2008 was (45,409), while the number of graduates was (12,801), and in 2014 the number.

Table (1): Quantitative development of enrolled and graduated students during the years 2008-2014

Gra	duating stu	idents	Enr	Year		
Total	Female	Male	Total	Female	Male	icai
12801	2106	10695	45409	8186	37223	2009 2008-
14370	2898	11472	48031	9566	38465	2010 2009-
14822	3177	11645	53942	10652	43290	2011 2010-
15600	3426	12174	53965	11554	42411	2011-2012
18904	4332	14572	61139	14705	46434	2013 2012-
19084	4592	14492	66605	16607	49398	2013-2014

مؤشرات التعليم 2015: Source: 43

It is evident from the previous table that:

The ratios of enrolled and graduate students from 2008/2009 to 2013/2014indicate a tangible improvement, but this improvement does not rise to the level of ambitions that the development process aspires to as desired by society, and this is due to many reasons, the most important of which are:

- The proximity of the educational institution or its distance from the population areas ,whether at the level of rural or urban areas.
- Low level of educational quality in these institutions.
- The impact of the cultural factors of society and the families 'lack of awareness of the importance of female enrollment in vocational education in the appropriate specializations for them ,in addition to the lack of suitable specializations for females that limit their ability to enroll in technical and technical education institutes.
- The low standard of living of Yemeni families ,which limits the ability of these families to enroll their children in these educational institutions (45: 2015).
- In addition, the quantitative development of students has not been



- matched by the updating of academic programs and academic courses at the same time. The enrollment ratios showed that there are many imbalances, which means that the process takes place without guidance, and this is evident through:
- There is an imbalance between the enrollment and graduation rates for students from vocational institutes in the two-year system; Some disciplines achieved an increase in the number of students, such as) electrical installation, (while there was a decrease in the number of students enrolled in other disciplines, such as :structural steelwork, agricultural mechanics, electrical home appliances, cosmetics, and construction. There was also an increase in the number of students enrolled in vocational institutes with a three-year system in engineering programs, agricultural programs, and commercial programs.
- Variation in the number of enrollees and graduates in different disciplines; We find that the technical level in the two-year system has achieved in the disciplines) general electricity surveying and roads -computer programming computer office management (more demand than other disciplines, and this in turn led to the presence of many unemployed people in the labor market who did not absorb them.
- There is a decrease in the number of students enrolled and graduating from the Applied Bachelor's degree ,despite the labor market's needs for this type of specialization and its role in the development process of society. The opportunity for all students to enroll.

Table (2): The quantitative development of the number of enrolled students and graduates for the years 2008-2014 by technical and vocational colleges and institutes

Graduation					Enrollment					NS
Technical		Professional		Technical			professional			
Applied Bachelor's	community colleges (years 3)	After high school ((two years	Professional (years 3)	Professional (Two years)	Applied Bachelor's	community colleges (years 3)	After high school ((two years	Professional (years 3)	Professional (Two years)	years
-	683	3575	1022	1525	_	5044	9980	3352	6427	2008- 2009
155	1482	5708	1865	2615	778	9518	15086	3685	7973	2013- 2014

المجلس الأعلى للتخطيط، 2009: Source: 2015

It is evident from Table No (2) That:

- The numbers of students enrolled and graduated from technical education institutes and colleges do not correspond to the needs and requirements of the labor market, and this does not serve the requirements of development. This is due to the absence of a clear strategy for the admissions policy that aims to achieve alignment between the available specializations and the needs of the local and regional market in terms of manpower, which calls for The necessity of reconsidering the admission policy according to the needs of the labor market (41:2009).
- The absence of a national policy for admission and the distribution of specializations for the optimal use of the available human and material resources in an effective manner, in addition to the introduction of some specializations that did not meet the needs of the labor market locally and regionally (35:2011 المجلس الأعلى).







2- Programs and courses:

The academic programs varied according to the fields made available by the ministry, including many fields, such as: the industrial field, the building and construction field, the commercial and information field, the agricultural and veterinary field, the hotel and tourism field, the maritime field, the craft field (for women) (5:2004).

- Professional level programs for the two-year system, which includes (18) specializations within (3) programs: engineering, applied arts, and crafts.
- Professional level programs for a 3-year system, and contains (24) specializations for (6) programs: engineering, administrative and commercial, information technology, agricultural, applied arts, and craft professions.
- Technical level programs (two years) after high school, which include (45) specializations for (8) programs, which are:

Engineering, administrative and commercial program, information technology, agricultural, hotel, medical professions, applied arts, craft professions.

- Technical level programs (3 years) after high school, which include (24) specializations for (7) programs:

Design and Computer, Management and Commerce, Electronics, Mechanics, Hotel, Crafts, Engineering.

 The Applied Bachelor Program, which includes two systems, the Applied Bachelor's System and the Technical Instructor System.
 The program included many specializations: electro-mechanics, communications, network engineering, information systems, computer engineering, graphic design, and accounting

(المجلس الأعلى للتخطيط، 2015: 53-49)

These programs and courses are dominated by repetition and dupli-

cation of specializations. They are also characterized by the predominance of the theoretical side over the practical. Traditional courses are taught in which faculty members rely on traditional methods in the teaching process. The reality of technical education also lacks a modern description of these courses. Therefore, it is not related to the needs of the labor market (105:2004 (الأغيرى). The 2010 World Bank assessment indicated that the Ministry of Technical Education in Yemen adopted a competency-based approach with regard to developing programs and curricula to ensure a specific level of flexibility and adaptation of outputs to the needs of the labor market. However, the effective application of this approach and the possibility of reviewing it does not match the needs of the labor market. The work requires developing the capabilities of faculty members and developing the institutional capacity of the technical education and training sector, and this has not been implemented according to the World Bank's assessment of technical education, and most of the degree-granting training courses are overburdened with theoretical materials. In addition, there is a lack of employers participation in the design and implementation of these programs, and this did not provide opportunities for training; Therefore, the current curricula do not meet the aspirations and needs of the labor market .The World Bank report indicated that economic institutions in Yemen are not satisfied with the skills of technical education graduates, as the main feature of technical education in Yemen is driven by the strength of supply, and the links between the labor market and its requirements and technical education institutions. It is weak, and its outputs do not meet the market's needs and aspirations (2010 ، البنك الدولي؛ والجمهورية اليمنية).

3- Training system:

Applied training for technical education takes place in the workshops and training centers that follow the institutes and colleges of the Ministry of Vocational Education and Training and are distributed over twenty Yemeni governorates. According to 2013 statistics, there are (75) institutions, distributed according to educational level as follows:

- (9) Community colleges offer three-year technical diplomas.
- (46) technical institutes offering a technical diploma.
- (10) Industrial, agricultural and commercial technical institutes.



– (10)VocationalTrainingInstitutes(6:2013). And given that the establishment of training institutions was mostly within external funding and with foreign aid from countries (China, Algeria, Germany, Russia); Its equipment and supplies have mostly worn out as a result of repeated use and total dependence on it for years, and what remains of it is insufficient and its readiness rate has become low, in addition to the old technological devices that no longer fit the current training needs, and the quantitative expansion of institutes and training centers has not kept pace with the development of In equipment and training equipment due to non-exploitation of budgets to equip these institutes in 2008-2009. In 2011, no funds were allocated to provide equipment for the same year (62:2012).

The Skills Development Fund was established to be one of the administrative structures that the Ministry of Technical Education relies on to confirm partnership and mutual benefit with the labor market and various economic institutions. Equipment in training centers and workshops, and remained until 2009 with the same name, when it was modified to the Skills Development Fund, and its support for technical education and vocational training institutions was reduced to only 7% of its revenues. According to 2010 fund data, no support has been provided to the institutes since their establishment (63:2012)

The Fund has implemented many short courses for specific programs of institutes and colleges, while facing many problems, including:

- Failure to activate the executive regulations of the law establishing the fund and using its resources to rehabilitate human resources and improve and maintain the training and educational environment resources.
- The need to restructure the fund based on recent developments, and to create new mechanisms to encourage the economic sectors operating in the education and vocational training sector to expand and diversify their activities according to the needs of the labor market (64:2014).







4- Academic staff:

There is a noticeable increase in the number of teaching and training staff in the sector from (3,731) members in 2008 to (4,996) members in 2014, with an increase of (59.5%), of whom (3,734) are males and (822) are females. The percentage of female participation is low despite the increase in the number of women enrolled in teaching in these institutes. Many faculty members suffer from poor qualifications in various disciplines; Most of them hold a vocational high school or less. In fact, most teachers hold a technical diploma, numbering (1,458), while the number of bachelor holders has reached (2,177). The ratio of faculty members in technical and vocational institutes to the ratio of students varies (8: 1), while the ratio of students in the Institute of Administrative Sciences to the ratio of faculty members is (50:1) (56:2015).

The academic staff in technical and vocational education faces many difficulties ,which are:

- The lack of a clear philosophy of rehabilitation and training, which led to the low level of educational and academic qualification, offset by a clear shortcoming in practical training.
- Weakness of training equipment in rehabilitation institutes, and limited means of training and rehabilitation.
- The lack of incentives to attract qualified people to join the profession, and the weak social status of workers in this type of education .(56:2014).

5- Physical buildings:

It was noted that there was a noticeable development in the number of buildings for vocational and technical education; Its number increased in 2008 from (78) centers and institutes affiliated to the Ministry of Technical Education and Vocational Training to (99) in 2014, distributed according to the technical level to (14) community colleges, (51) technical institutes, and (22) institutes that provide education by system. Vocational secondary school (3 years after basic), and (34) institutes that offer a vocational diploma system (two years after basic).

Table (3): The quantitative development of institutes during the years 2008-2014 AD

Year	2008-	2009-	2010-	2011-	2012-	2013-
	2009	2010	2011	2012	2013	2014
Number	78	83	89	90	95	99
of gov-						
ernment						
institutes						

المجلس الأعلى للتخطيط، 2015: Source:43*

However, the quantitative development of the infrastructure suffers from many challenges, the most important of which are:

- The presence of some buildings that do not meet the standards of educational institutions, in addition to the lack of laboratories and libraries in some of them.
- Some of the buildings are old and their student capacity is weak.
- Distributive justice was not taken into account in the planning process for all governorates of the Republic. Most of the institutes are concentrated in urban areas rather than rural areas, which limits the ability of females to enroll in this type of education.
- These institutes are characterized by their slow assimilation of technical and informational developments, which in turn affects the quality of outputs ,(44:2015 للتخطيط، 2015), and the reality of the workshops and laboratories shows that the equipment there is weak and limited ,which affects the demand of students to enroll in technical and vocational education.(45:2010)

6- Financial Resources:

Technical and vocational education institutions depend on government funding, but the observer of these resources notes that they are not commensurate with the needs and requirements of this type of education, with fluctuations in those resources. Financial indicators show a decline in the actual percentage of domestic spending and public spending during the years 2008-2013; The GDP decreased from (0.24%) to (0.19%) with a decrease rate of (0.05) points, and the share of technical education in the state's public spending decreased (0.64%) $\frac{1}{1000}$ in 2013 with a decrease (0.14%). The spending on the sector also decreased from (4.90%) in 2008 to (3.38%) in 2013 by a difference of (1.52) points, while the sector's budget rate in 2014 increased by (478) billion rivals, of which allocations for technical education amounted to (27.5) billion Yemeni riyals, and it constituted (5.8%) of the total allocations for the technical and vocational education sector. (0.96%) of the total state budget, and (0.34%) of the gross domestic ,(مؤشرات التعليم 2014: 58) product

Despite all these financial resources, the sector suffers from a scarcity of available resources that hinder its development and improvement. The sector is also facing a decrease in the available materials to spend on programs and projects, and to complete the infrastructure of applied laboratories (58:2012 المجلس الأعلى التخطيط).

From the above ,it can be said that the reality of technical and vocational education in Yemen is characterized by the following:

- The lack of links between the outputs of technical education and the aspirations and needs of the labor market and the private sector from various companies and economic institutions ;As the current programs and specializations no longer keep pace with contemporary technological changes.
- The weak role of some current laws in developing the technical education and vocational training sector in institutes and colleges.
- The technical education and training available in Yemen does not adequately qualify its outputs to join the labor market and achieve its role in the development process in the required manner due to the weakness of its skills and their inadequacy with the needs of the labor market.



- The education and vocational training sector suffers from weak infrastructure, which in turn does not amount to the investment required for Yemeni society in the future.
- The low level of practical and applied training for the outputs of technical education and vocational training.
- The low number of highly qualified faculty members ,the number of specialists in modern programs ,in addition to the low level of training of many of them ,which negatively affected their students' output.
- Lack of academic guidance for students during the admission process.
- Scarcity of financial allocations that do not fit the needs of technical and vocational education.

Third: The Difficulties of Technical and Vocational Education in Yemen:

The reality of technical education and vocational training in community colleges and institutes goes through many difficulties that affect the role of its outputs in the labor market and community development. The most important of these difficulties are as follows:

- The absence of strategic planning that takes into account the labor market's needs of qualified cadres, taking into account the balance in distributing students to the specializations required by current and future development plans.
- low level of enrollment in vocational institutes; It was (2%) of the total enrollment in secondary education in 2014. There was a decrease in the number of students enrolled in technical institutes by (11%) of the total enrollment in university education; This is not commensurate with the aspirations of society and its needs for technical education outputs.
- The absence of coordination between technical education and vocational training institutions and the private sector in the labor market to determine the quality of the desired specializations, and the standards in light of which the training process is carried out in accordance with the aspirations of their commercial institutions (52:2013 المجلس الأعلى التخطيط).

- Existence of a quantitative and qualitative gap in technical education outcomes; There is a repetition of some programs and specializations that are not in line with the needs of the labor market, in addition to the weak link between the theoretical side and the training side in the labor market (2010، البنك الدولى؛ والجمهورية اليمنية،).
- The low level of education as a result of the absence of the role of technology along with the weak educational efficiency, all of which led to the poor meeting the needs of the labor market.
- Weak communication and information systems between technical education institutions and decision makers (58:2015)
- The lack of national standards for technical education and vocational training(5 :1999 (قویدر).

It can be said that technical education and vocational training in Yemen faces many overlapping difficulties, namely:

Legal difficulties:

- The weakness of the effectiveness of some of the current laws, which requires updating these laws to reflect the general direction and principal of technical education.
- Administrative difficulties: They are:
- 1- The field of strategic planning:
- The reality of technical education and vocational training lacks a strategic direction for the quality of outputs that Yemeni society needs to meet its development aspirations.
- Weak joint planning between the Ministry of Technical Education and Vocational Training and the private sector for the quality of programs and curricula needed by the labor market.

2- Student field:

- Weak academic counseling for students after basic or secondary education to guide them to the type of specializations that suit their abilities, inclinations, and the needs of the labor market.
- The low level of practical skills acquired by graduates from technical education institutes and colleges.
- 3- Field of programs and training:
- Poor suitability of current programs and courses to the needs of the

Yemeni labor market.

- Weakness of communication channels with private sector economic institutions to determine the quality of academic programs and the type of training needed to qualify human outputs according to their needs.
- The absence of a real partnership between government agencies, the private sector and the Ministry of Technical Education to contribute to the realization of the role of vocational training in various companies and economic and social institutions.
- Lack of professional development opportunities for members of institutes and colleges, whether for academics or administrators.
- The fragility of the infrastructure of buildings, workshops and laboratories for training.
- The shortcomings of the role of technology in the administrative aspect of the Ministry of Technical Education, and the training aspect of academic members, students and administrators.
- The absence of an authority to ensure the quality of technical education and vocational training institutes and their colleges.

4- Financial difficulties:

- The lack of financial allocations available for technical education.
- Total dependence on government funding.

Chapter Three Previous studies

The current research relied on many Arab and foreign studies that aimed to develop technical education by examining the experiences of countries distinguished by the quality of technical education and vocational training, including Germany and China. These studies are arranged from newest to oldest and presented as follows:

- 1- Sharara's study; et al. (2020): Sustainable Vocational Education and Training for Industrial Technical Secondary School Graduates:
 - It aimed to develop proposed mechanisms for the development of sustainable vocational education and training for graduates of secondary schools in Egypt. The study reached many results, including some of the proposed mechanisms, the most important of which are:
- Employing electronic and technological means to provide educational and training programs for graduates of technical secondary schools.
- Inculcating the concept of "professionalization" in various programs with the aim of developing students' professional tendencies.
- Employing virtual reality systems to provide education and sustainable professional learning opportunities for secondary school graduates.
- Developing open education systems and employing information and communication technology in providing training educational programs.
- Establishing a body that aims to study the market and its changes at the local and global levels.
- 2- Attia's study (2019): A proposed vision for the development of technical education institutions in Egypt in light of contemporary global trends:

The study aimed to develop a proposed scenario for the development of technical education institutions in Egypt in the light of global trends by analyzing the cultural, economic and social conditions and the factors that affected the quantitative and qualitative



development of technical education institutions in Germany, China and Australia. The study concluded by building the proposed vision for the development of technical education institutions in Egypt by benefiting from the experience of those countries.

3- Abdo's study (2019): A proposed conception of mechanisms to maximize benefit from international initiatives:

The study aimed to know how to improve the use of some international initiatives to support and develop technical education by identifying the reality of international initiatives that have supported and developed industrial education in Egypt, and to know the most important problems that impede benefiting from these international initiatives. The results of the study showed that one of the most important mechanisms through which to benefit from international initiatives to develop technical education is:

- Developing human resources by preparing trained technical cadres in various professions and industries.
- To work on accepting students according to criteria commensurate with their tendencies and trends, linking the needs of the labor market, and guiding students to choose the specializations that suit them.
- Linking the curricula to the needs of the labor market.
- Activating the role of the Quality Assurance Authority: by linking technical education institutions with the Quality Assurance Authority to set standards and performance indicators in line with international standards in accepting students, preparing curricula, and developing faculty members.
- 4- Salah's study (2018): The development of Egyptian technical secondary education in light of some contemporary global trends:

The study aimed to develop Egyptian technical secondary education in the light of modern global trends, if the reality of technical secondary education in Egypt was studied and to identify its most important obstacles, and the most important contemporary global trends for the development of technical education. The study reached many results, the most important of which is the development of a proposed vision for the development of Egyptian technical secondary education.

5- **Abdullah study (2017):** A proposed scenario for developing technical and vocational education in Libya:

The study aimed to develop a proposed vision for the development of technical and vocational education in Libya by identifying the reality of technical and vocational education in Libya and the most important difficulties it faces. It also presented many experiences to benefit from them in developing technical and technical education in Libya. The study concluded with the development of a vision that includes the objectives and pillars necessary to build a proposed vision for the development of technical and vocational education in Libya.

- 6- Al-Abadla Study (2017): A suggested scenario for developing vocational and technical education in technical colleges in Gaza governorates: The study was conducted in the State of Palestine, and aimed at developing vocational and technical education by developing a scenario with specific steps for the development process; The reality of vocational education in Gaza governorate was identified, and the most important obstacles facing it. The study concluded with many results, the most important of which is the development of a proposed vision for the development of vocational and technical education in technical colleges in Gaza governorate.
- 7- The Ant Study (2017): The reality of secondary vocational education in the governorates of Gaza and ways to develop it in the light of some experiences: The study aimed to identify the reality of secondary vocational education in Gaza Governorate and ways to develop it in the light of some international experiences, and to identify the statistical differences between the responses of the study sample according to the variables of gender, educational qualification, experience, and occupational branch.

The study concluded several results, the most important of which are:

- The total score for measuring the reality of vocational education in Gaza Governorate was average.
- There are no statistically significant differences at the level of significance (a≤0.05) between the mean scores of the sample members' estimation of the degree of reality of vocational education in the governorates of Gaza due to the gender variable.



8- Sisi Study (2016): Secondary Education Reform in the Light of UN-ESCO's Technical and Vocational Education and Training Strategy:

It aimed to monitor the philosophical framework and objectives of UNESCO's strategy for technical and vocational education and training at the secondary level, identify the most prominent global trends, and identify the most important skills needed for secondary education graduates. The study concluded a set of results, which are:

- The UNESCO Technical and Vocational Education and Training Strategy aims to prepare students for scientific life.
- Providing support for productive professions.
- Acquiring knowledge and skills that qualify graduates to practice a number of professional jobs.
- 9- Abdel Rasoul's study (2015): Systems for linking industrial secondary education to the labor market; A comparison in Germany, the People's Republic of China and the United States of America, and the possibility of benefiting from them:

It aimed to build a proposed vision for linking industrial technical secondary education to the labor market in Egypt by benefiting from the experience of China, Germany and the United States of America, by identifying the role of technical education in meeting the requirements of the labor market, and studying the reality of technical education in Egypt and determining the factors and forces. The cultural factors affecting it, and benefiting from the experiences of these countries and their expertise in technical education and the cultural factors affecting them. One of the most important results of the study was the presentation of a proposed vision for linking technical education in Egypt with the labor market.

10 - Yi & others (2018): Assessing the Quality of Upper Secondary Vocational Education and Training: Evidence from China:

The study aimed to identify the role of technical and vocational education in building students' skills and abilities, and to identify the factors that help develop their abilities and skills in schools and technical and technical institutes. The study concluded the following results:

 The skills and abilities that students acquire in these institutes do not achieve the gains they aspire to.



- The internal training in these institutes does not meet the minimum safety requirements for students, which has led to the support of students' satisfaction with technical and technical education.
- The development of skills is not affected by the qualifications of the labs, the size of the schools, and the financial expenditures of students.

11- Hao, Y (2010): China Vocational Education and Training:

The study aims to clarify that technical education and vocational training in China is an essential component of the educational ladder. This is due to its effective role in the development of societies; Technical education contributes to enhancing job opportunities and addressing the shortage of skilled manpower facing the labor market. It also contributes to alleviating unemployment because its outputs find ample room for joining various jobs. Hence, achieving its role in the development of society requires the development of many policies and measures. Which works to increase the total number of students enrolled in technical education and vocational training institutions, while working to improve the quality of education there.

Commenting on previous studies:

Previous studies indicated the importance of benefiting from the experiences of countries in developing technical education and vocational training, and the necessity of taking those experiences as a practical application guide to develop this type of education in the studied countries. Among those studies that confirmed this: The Ant Study 2017, Al-Abadla Study 2017, Abdullah Study 2017.

The current research has benefited from those studies in building the theoretical framework, in identifying global experiences in the development of technical education, and on the most important methods that have been adopted for the development process. It has also been used in determining the axes and the quality of the curriculum that fits with the current research, such as the Sharara study (2020).), the study of Abd al-Rasoul (2015), and the study of al-Sayyid (2019).

The current research differs from previous studies in targeting the development of technical education and vocational training in Yemen, taking from the experiences of the People's State of China and the



Federal State of Germany as a guide for developing the reality of technical education in Yemen, which faces multiple difficulties that limit its ability to achieve its role in community development.

Chapter Four The experiences of countries in developing technical education and vocational training

The current chapter reviews the experiences of the Federal State of Germany and the People's State of China in technical education and vocational training, then the comparison is made with the reality of technical education in Yemen based on two axis , the first: the experiences of the People's Republic of China and the Federal Republic of Germany, and the second: the analytical comparison between the two experiences and technical education in Yemen.

The first axis: the experiences of the People's Republic of China and the Federal Republic of Germany:

The two experiences were chosen for their effective contribution to achieving economic development in the development of their countries. The research attempted to combine the experiences of China and Germany in developing technical education and achieving development for their societies, and benefiting from them, especially since China is similar to Yemen in increasing population growth rates, possessing enormous human resources and diversifying economic resources. The research benefited from the experience of the German Renaissance after World War II, which made it one of the world's economically advanced countries. The technical education and vocational training system in China and Germany was studied as follows:

First: Technical Education in China:

China is one of the countries in East Asia and the second largest in the world, with an area of (9.6) million km2. Its borders extend from Soviet Russia and North Korea to the northeast, Russia and the Mongolian People's Republic to the north, India to the southwest, Myanmar, Laos and Vietnam to the south. Thus, China enjoys a huge ecological diversity of mountains, plains, rivers, plateaus and deserts, and there is a diversity of different mineral resources.

trong.

China includes one fifth of the world's population, and it has transformed all human forces into a diverse productive capacity through the general education reform processes that China began in 1949. Since the founding of the People's Republic of China, development has become its most important direction (Abdul Rasoul, 2015: 39), and it has taken development from During her interest in education and the provision of a trained workforce that meets the development needs of the Chinese society, she was concerned with the role of technology at various levels of education (324:2008 عبد العالى).

1- The emergence of technical education and vocational training in China and its legislation:

The emergence of technical education in China dates back to 1866 through the establishment of the first industrial school in Fujin Province, and many legislations were issued to establish industrial schools since 1920, so that technical education in China developed under the influence of the Soviet model and linked it to the labor market. After the Chinese revolution, work was done to restructure the industrial schools. and legal legislations were issued for the participation of industrial enterprises in the establishment of industrial schools. In 1950, specialized industrial schools and skilled labor schools were established to meet the development needs of Chinese society. The period between 1996-2004 was a distinguished stage for carrying out various reforms in technical education; China relied on some policies and legislations related to technical education, including the issuance of the Vocational Education Law in 1996 to develop the skills of technical education graduates with high quality by innovating various educational and training formulas to go beyond the limits of preparing a specialized technician to preparing a professional technician. The National Qualifications Framework (Awarded Certificates) was designed in 1993. It is a comprehensive system for vocational qualification that aims to provide professional specifications and professional qualification certificates, and activate the role of vocational education and training in upgrading the skills of graduates of technical schools. The framework is designed according to specific professional standards so that the program ends with a final evaluation scale to measure qualifications and other legislation

شرارة) هشرارة & others,2020:2028.

It is possible to identify the reform steps to achieve development through technical education through:

- Issuing legislation providing for the industrial sector's involvement in providing industrial professions and training, and coexisting between industrial establishments and schools.
- Restructuring and strengthening industrial schools.
- Transforming public secondary schools into technical industrial secondary schools.
- Encouraging various professions and active fields to build schools and training classes for these professions.
- Establishment of technical training classes in some secondary schools(39:2015 عبد الرسول، 2015).

2- Levels of vocational technical education in China:

The process of educational reform in China focused on providing vocational education concerned with the needs of society and providing the required numbers of workers and experts; Therefore, secondary vocational education in China includes many levels that play a pivotal role in training the labor force necessary for economic and technological development by providing them with dynamic skills, and these levels are:

- Technical secondary education and vocational training.
- Technical Vocational Higher Education.

Secondary schools are divided into vocational schools and graduate schools as follows:

- Vocational High Schools: The duration of study is 3 years, allowing them to enter the labor market directly or continue higher education.
- Specialized High Schools: The duration of the study is 3 years, and it is concerned with providing specialized courses in the academic and professional aspects, so that at the end of the study program the graduate obtains a certificate that qualifies him to work. The vocational (technical) secondary schools include a number of specializations (industrial / technical, Commercial/Economy, Agriculture, Fishing) (Yi and other, 2017: 8).

These schools aim to prepare a graduate characterized by a direct relationship to work, as China is keen to classify its workers according to the skill level scale, and is closely related to professional crafts and accurately performance skill, as intensive training is relied upon to reach graduates to a high level of performance for professional competencies & others,2020:28).

3- Training and programs for technical education in China:

Vocational training ranges from career preparation, on-the-job training and retraining. Various bodies participate in providing training, including: training centers, companies, unions, employment offices, vocational schools, in addition to the presence of various programs offered by many ministries such as the Ministry of Industry and Trade, the Ministry of Labor, and the Ministry of Defense. These programs aim to prepare graduates from technical and industrial secondary schools who meet the requirements for entering a specific job or starting a new job. Individuals are rehabilitated according to professional specifications that help them move from one profession to another.

It also found many guides for the internal guidance for the management of internships in vocational secondary schools in 2007, and was renewed in 2016. These guides included the management of vocational schools, employers, and students, so that many steps necessary for the success of training for students were clarified.

It was also emphasized the existence of a training department within vocational secondary schools, defining departments and facilitating training in each department, with its mandatory as part of the curriculum. The type of training was clarified, including partial, which refers to the activities in which the student participates in part under the supervision of professional trainers, including the internship that the students undertake independently in training jobs. Employers are also obligated to ensure the safety of the trainees during their training period, with health insurance and financial compensation for any damages that occur, and to be careful to stay away from training that is fraught with dangers. Also, employers should provide paid courses and other things that regulate training. The report emphasized the Chinese gov-

ernment's keenness on the necessity of partnership between employers and technical education institutions in training and supervision processes, in designing courses, and in assessment processes within specific standards (Wisconsin Center for Education Research, 2020). Technical education institutions have also benefited from the partnership held by the Chinese government with the Australian government through joint programs, most notably the Chinese-Australian Vocational Training and Education Project with the aim of reforming and expanding technical education institutions in China and improving the level of training, provided that this is done in two stages:

The first stage: It is implemented in Chinese technical institutions.

The second stage: training courses conducted in Australia in a number of professional fields (61:2019).

The courses are characterized by diversity and integration, and combine the theoretical and applied framework. The vocational education institutions in China also absorb the modern and sequential technological changes; Therefore, there are many levels of technical education as it is being expanded greatly to meet the increasing demand for labor in all its specializations, while transferring professional experiences to students and providing them with the needs of the labor market. The plans for the development of educational institutions in China are characterized by diversity, as plans are drawn up according to the needs and quality of regions; For example, we find that technical schools in rural areas are concerned with agricultural professions and techniques and animal production, while in cities the focus is on industrial professions such as the manufacture of engines, cars and computers, and professions concerned with the production of equipment, and in return the employment of graduates was linked to the region in which they studied .(السيد، 2019: 61)

4-Administration and Finance: China has relied on a balanced approach of funding and decentralization in educational administration, and the responsibility, cost and funding are shared across government levels and authorities, based on strategies that reflect a clear and specific commitment by the central level, and a sharing of responsibilities for the lower administrative levels(424:2015).

5-Systems linking technical education and the labor market:

The Central Institute of Technical Education assesses the professional competencies of graduates of technical and industrial secondary schools so that the difficulties facing technical education are identified, professional transformations and industrial developments are monitored, and the required professional standards and specifications are determined. China has been keen to support the links between technical and industrial education schools and the labor market, and many models have been applied for these links, including:

- enterprise is looking for a school partner among the specialized industrial technical schools that provide technical training related to the specialties of the institution, including the "Wex Sangad Julian" energy company within a group of companies specialized in the mobile phone industry, and this institution provides funding for the school through which Providing equipment and facilities for manufacturing workshops, while working on an administrative system with defined tasks in terms of marketing, production and technology, and ensuring the selection of qualified teachers and students for the purpose of training them professionally. Experience has demonstrated the ability of teachers and students after training to produce mobile phones(41:2015).
- International cooperation model: The school aims to improve the quality of the educational process through cooperation with another industrially advanced country to benefit from its industrial expertise (شرارة others,2020:29)., and among these agreements is the agreement of the Technical School of Transport and Communications in Beijing in 1994 with the Japanese Toyota Company. For the automotive industry, this has led to the development of technical skills, curriculum development, equipment and teaching materials(42:2015).
- Commissioned training model: in which the school administration chooses to cooperate with it through industrial institutions and companies, and this is done by signing an agreement to provide training resources for students and work to provide industrial institutions, financing companies and equipment necessary for the practice of work, and the school provides specialized teachers and develops

training programs for students and develops curricula to achieve Project goals.

• The school-factory combination model: in which the school employs its expertise and resources in cooperative work with various factories in order to benefit from its expertise in supporting China's economy (شرارة others,2020:29).

Second: Technical Education and Vocational Training in Federal Germany:

Germany is one of the most populous European countries, as well as one of the most powerful and influential countries in the European Union. Germany is located in Central Europe, bordered on the north by the North Sea, Denmark and the Baltic Sea, on the west by Austria and Switzerland, on the east by Poland and the Czech Republic, and on the south by France, Luxembourg, Belgium and the Netherlands. It covers an area of 357,021 km2, and is characterized by a variety of terrain, between forested heights, water rivers and glaciers, and the natural mineral resources vary.

1- The genesis of technical education in the Federal Republic of Germany:

The beginnings of the history of technical education and vocational training in Germany go back to the eighteenth century, when some schools specialized in teaching craft professions such as construction and handicrafts. As a result of the industrial revolution and technical progress, theoretical knowledge became separate from the quality of knowledge and skills in technical crafts. Therefore, the nineteenth century witnessed the establishment of many institutes and technical schools specialized in training workers on modern technologies that are commensurate with the requirements of the current era. Some schools have also developed and expanded their specialized fields.

The Technical University of Karlsruhe is one of the oldest of those institutions that focused on the natural sciences and engineering. Technical education witnessed during that period many developments, including the issuance of many laws and regulations regulating these institutes, the introduction of a system of vocational training workshops in state railway companies, and the establishment of the German In-



stitute for Vocational Work Training (DINTA). Since 1972, the dual system has been expanded and intensive training courses in all disciplines have been introduced to meet the needs of the German economy (2021 غرفة التجارة والصناعة العربية الألمانية). After Germany's exit from World War II, it tried to work on building what the war had destroyed by paying attention to education in general in all its stages to build a new generation; Education became compulsory and free at all levels of study, and the German system of education relied on the integration of school and vocational education, consisting of three levels:

- Primary education.
- Secondary education is divided into two parts: academic and vocational.
- University education.

2- Technical education levels in Germany:

The second level includes two tracks, the academic track and the professional track. This level is divided into vocational schools, namely:

- Higher Vocational Schools (Fachoberschule): Their curricula combine theoretical and applied sciences, the duration of study is two years, and graduates are given a vocational high school diploma that qualifies them to continue higher studies or enter the labor market.
- Part-time vocational schools (Beurfsschule): The duration of study is 3 years, and it includes curricula that prepare students for work in a specific profession, as well as providing a base of general information for them.
- Vocational schools attended by students who have completed vocational training at the secondary level or who have obtained an initial professional qualification for the purpose of acquiring a higher professional qualification in the specialty (380:1997 المنظمة العربية التربية والثقافة، Vocational education is linked to the local economic environment of Germany, that is, the nature of work and training sites in a particular region determines the quality of specializations in those vocational schools, including the following: industrial-technical vocational, administrative-commercial vocational, nursing professional, agricultural vocational, vocational curricula. Technical education occupies

(75%) of the total education in Germany (59:2019), and this is due to the interest in this type of education. It teaches those who are enrolled in various trades and professions, while working on practical training, so that students' talents and abilities are refined in various companies and institutions. Thus, the development of technical education is linked to the economy of Germany and this is called the dual system.

3-The dual system in Germany:

Germany relies on the dual system in technical education, which is one of the patterns in which the private sector participates with the concerned government in implementing the study plan for students of technical and vocational education. These institutions and companies, together with academics in educational institutions, bear the design of curricula, academic supervision and evaluation of students. This system aims to find an academic alternative for high school graduate students to traditional university studies (52:2018 (علات)), and it consists of two types:

A. Dual System: in which education is mixed in technical secondary schools and work in companies and work institutions for some time. The admission requirements for this type depend on the student's ability to join work by signing a work contract with an institution or company that extends for three years. to three and a half years. The student can join the institution for 3 days a week while studying the rest of the days in the vocational school, and thus the students market themselves. During this period, they receive a financial return from those institutions and companies, and thus the private sector contributes to financing vocational education in which students are trained in more than (380) professions :2018

.(52)This system aims to enable the learner to walk in two parallel tracks :academic study and vocational training in professional institutions with temporary contracts ,through which he acquires the experience and skills that qualify him to perform work in the field with fixed contracts for future work by virtue of the experience he has gained from temporary contracts(51:2019 (أبو زيد)



B. Full-time: Students who were unable to join the previous pattern and did not find a job before, and then join industrial education schools full-time with the course system for a period of two to three years. For employers to participate in the educational process (52:2018 (صلاح)).

Dual education in Germany depends on many administrative, academic and legislative steps that work to make it successful and achieve its goals in Germany's economic activity, as follows:

- Training Legislation:

The beginnings were represented in the establishment of an association called "The Work Interest-Based Committee", which aimed to provide a suitable environment for training processes that last from two to three years, during which students' abilities are developed to apply knowledge and diverse artistic talents. The committee brought together representatives from the federal and state government, federal employees, and the dealers' association to approve a technical education-related decision, with significant funding provided by these institutions. In 1994, a law was issued that allows graduates of the technical school the opportunity to obtain a certificate equivalent to the dual system, in which the applicant for exams is given a full-time opportunity to obtain a "skilled worker" certificate, and the applicant has practical experience and a certificate from his employer, with his ability to pass the exams subject studying. In 2005, the law of 1969 was amended, which provides opportunities to increase the number of students enrolled in training in the dual system, and to improve the transitional period between the sub-systems of the technical education and training system and the dual system(34:2015 مبد الرسول، 2015). In light of the continued increase in the number of students in order to increase industry revenues and implement agreements with industrial companies during training and after graduation, companies are working to hire trainees after graduation to be trained during study according to a pre-prepared plan that suits the type of skills and needs they require, and the registered training organization was chosen to develop a training plan. It is developed by registered employers and students in agreement with it (60:2019).

- Study plans and curricula:

Study plans and curricula for the dual education system are determined according to the requirements of the professions that the graduate

will practice after graduation. These plans are characterized by the presence of general subjects, optional requirements, and vocational subjects, in addition to practical training that constitutes (65%) of the total hours of study. In order to ensure that disciplines do not overlap, the Minister Local education is responsible for the plans and curricula. As for education in factories and production workshops, it is the responsibility of unions and chambers of commerce; Because she is responsible for the final exams during the three school years(35:2015).

The curricula in the vocational education system in Germany are based on many pillars, namely:

- The adoption of the philosophy of the curricula of technical education institutions on the close link between educational institutions and the labor market, where production and service institutions contribute to planning and training.
- There are two-year full-time graduate schools, and part-time (3) years.
- Relying on the dual system that is characterized by flexibility and ability to adapt to the requirements of the labor market.
- Diversity of training sites to include different work sites and special educational workshops in schools.
- Adopting the competency method in building curricula to include most of the basic skills that any graduate needs(95:2017 (النمل).
- One of the most important reform steps for the system of curricula and practical courses is to focus on education in the classroom, and on academic and professional skills in accordance with labor market standards. Guidance programs are also prepared for students in professions that suit their preferences, and in Germany there is a federal authority that issues a guide to classify professions that includes (470)professions, prepared by a group of highly qualified faculty members in partnership with the labor market to determine the specifications of those professions in the light of which programs are built educational and training. Also, a conference is held in Germany at the level of education ministers in all German states, in which frameworks and classifications are discussed and specific programs are approved in order to issue laws binding on other states to imple-



ment them .The acquired skill is measured by a committee of companies and educational institutions to perform the tests ,where the student takes his tests in the actual work site under the supervision of the entity he will join to work after graduating(47:2018 (-).

- Technical Education Department in Germany:

It is a participatory management divided between the federal and state level and the structure of social partners, employers and trade unions in parallel and integration away from centralization. It is supervised by a specialist in the educational process who makes a field visit during their implementation of the practical application according to the specific academic conditions, while there is a specialized technical supervisor who submits periodic reports to the educational institution on the level of students (35:2015 عبد الرسول).

From the above it is clear that the two previous experiences depended on linking technical education with community development, and providing vocational education students with the knowledge and skills required by the labor market through the following:

- Develop appropriate and regulating legal legislation to link the labor market and technical education institutions.
- Updating academic programs according to the requirements of technological change and the needs of the labor market.
- Program preparation, training, supervision and follow-up is a participatory process between technical education institutions and private sector companies and institutions. Therefore, the capabilities of the trainees are developed according to the needs and objectives of those institutions that support them during training and upon graduation, and they are employed, and then the members of the community are encouraged to join vocational education institutions.
- Diversity of training sites for those enrolled in technical education, as the private sector pays great attention to providing a modern technical environment of equipment and training equipment so that they acquire skills that fit the requirements of the labor market.

The second axis: the analytical comparison between the technical education system in the Republic of Yemen, the Federal Republic of Germany and the People's Republic of China:

According to what was previously discussed about the reality of technical education in Yemen, and the experience of both Germany and China in developing the role of technical education in meeting the labor market, and according to the axes of the Sharara study 2020, Al-Sayed's study 2019, Abdel Rasoul's study 2015, and Salah's study 2017; The axes of comparison have been identified as follows:

1. The field of historical origin:

Similarities: Yemen is similar to the research sample in the emergence of technical education from a relatively long time. Technical education appeared in Yemen, China and Germany more than a hundred years ago, and these countries practiced many professions, crafts and industries to serve their societies, and many institutes and schools of industrial and technical multi-activities were established.

Differences: Yemen differs from Germany and China in terms of linking technical education to development needs and labor market requirements; The view in Yemen of the outputs of this type of education was below the social level, while China and Germany worked on developing their societies by reforming the reality of technical education and working on the basic pillar of the development process and building their economy in various fields.

2. The field of legal legislation:

Similarities: Yemen is similar to Germany and China to some extent in the process of issuing legal legislation regulating the management of technical education and achieving its objectives.

Differences: Yemen differs from Germany and China in terms of the weakness and rigidity of some legal legislation; The Yemeni Consultative Council, which is a supreme body in the administration of technical education, does not exercise its role in community colleges as it should, and the admission system for students in technical education is not characterized by flexibility to facilitate the enrollment of those who could not complete their studies at an advanced age. Legislation related to linking technical education to the labor market still suffers from a weakness in practical application, including the objectives of the Skills

Development Fund, which did not effectively contribute to real and effective communication with companies and various economic institutions to achieve the role of technical education in the development and development of society.

3. Management field:

Differences: The difference in Yemen is in the administrative aspect through the centralization of management carried out by the Ministry of Technical Education. As for the supervision process, it is shared with other government ministries such as the Ministry of Health, the Ministry of Civil Service and the Ministry of Culture. While the management system in Germany is a participatory management between government technical education institutions and between employers and various economic institutions, while in China there is a kind of decentralization in the management of technical education between different levels, and the experience of China and Germany focuses on academic guidance for students during their selection for a major Studying to keep pace with the needs of the labor market after graduation, and this is what Yemen lacks, which leaves students the freedom to enroll in any specialization, making many vulnerable to unemployment.

4. Field of programs and training:

Similarities in Programs: Yemen is similar to Germany and China in the diversity of academic programs and the various disciplines that are taught at various educational and training levels of technical education. The design of programs in Yemen relied on competence, but the application and training were not at the required level for the training environment, equipment, and devices.

Differences in the programs: Yemen differs from China and Germany in the stagnation of the current programs and the lack of updating them in a way that keeps pace with the needs and development of society, while Germany and China seek to keep pace with the needs of the labor market and development by constantly updating academic and training programs in order to cover the needs of the labor market and keep pace with global changes in The economy, while the programs of educational institutions in Yemen suffer from a lack of keeping pace with the aspirations of the labor market; Therefore, there is no update

of the programs and specializations available at all educational levels of technical education.

Differences in training: The training process in Yemen takes place in the centers and internal workshops of technical education institutes and colleges, which are characterized by their old equipment and equipment, in addition to the weak capabilities of trainers who do not find opportunities to renew their technical and professional capabilities, and this is done under the supervision of the Ministry of Technical Education with the shortcomings of the role of employers and economic institutions in the training process; There is no clear and continuous coordination with those economic institutions that need highly qualified human resources to play their role in the development process.

While Germany and China depend on actual partnership with institutions, companies and employers from various economic directions to play their role in the process of training and supervising students throughout the study period, so that students gain more realistic experience and in a technically and technologically renewed environment that keeps pace with the needs of the current era of diverse skills and qualified trainers in specializations all. Many partnership links have also been provided for external training, as happened between China and Australia, and the commitment of employers to pay a fee to the trainees contributes to the development of their capabilities indirectly and provides opportunities to ensure that these outputs join the work in those same institutions that seek to do so. The trainees have financial returns to motivate them and their families, and work is being done to provide suitable jobs for them after graduation.

5. Connection with the labor market:

Differences: Yemen differs from Germany and China through the weak participation of the labor market in the public and private sectors in the development of technical education. There is no link between the outputs and the needs of the labor market. As for Germany and China, since the early beginnings, they have been interested in reforming technical education and linking it to economic development, and working on Meeting the needs of the labor market by identifying



the quality of skills required by various economic processes, and then employers, companies and economic institutions actively participate in the selection of curricula, practical training and supervision of training processes, which contributed to linking the outputs of technical education with what the market needs. the job.

From the foregoing, it is clear that technical education and vocational training in China and Germany have relied on legislative trends and long-term strategies in order to achieve development and economic renaissance for those countries that are among the most economically powerful countries in Asia and the European Union; As the efforts of governments and economic bodies beneficiary in the private sector from the outputs of technical education were unified and the quality of technical skills for the workforce was determined to meet the needs of the labor market and contribute to the economic renaissance, highly qualified human cadres were provided in various industrial, technical and professional fields, by providing an educational climate and appropriate training to develop their capabilities and practical skills in a more accurate manner, and in partnership with private sector institutions that contribute to the training process and provide employment opportunities and other successful and supportive roles for technical education institutions.

While we find that the technical education sector in Yemen is trying to achieve its goals in light of the low level of strategic planning for the quality of outputs and their role in building the Yemeni economy, and the low level of training due to the lack and old training equipment and equipment, and the weak capabilities of human resources based on training - whether academics or administrators. The poor link between specializations and the needs of the labor market; As the technical education and vocational training sector faces an almost complete break with the economic sectors, whether private or governmental; Legislative directions have not been activated to strengthen ties with these parties, in addition to the lack of joint communication channels between the two parties in the areas of training and supervision.

Chapter Five The proposed vision for the development of technical education in Yemen

The current chapter deals with the research methodology, the results that have been reached, and the proposed scenario as follows:

First: Research Prevedures: Research Methodology

The current research relied on the descriptive approach due to the nature of the research and its problem with the purpose of studying indicators of the reality of technical and vocational education in Yemen and analyzing this problem, and diagnosing the reality of technical education to identify the most important obstacles that hinder its development, in addition to the comparative approach in order to monitor and analyze the experiences of the Republic of China and the Federal Republic of Germany in technical education And the professional in terms of: the legislative aspect, the administrative aspect, curricula and training, and the labor market, and benefiting from these experiences in presenting a vision for the development of technical and vocational education in Yemen.

Second: Research results:

- 1. Technical education and vocational training aims to develop students' abilities and skills in order to exercise their role in building their societies and achieving the development they aspire to.
- 2. The reality of technical education in Yemen is characterized by many indicators, the most important of which are:
- There are no links between the outputs of technical education and the aspirations and needs of the labor market and the private sector of companies and various economic institutions, especially that the current programs and specializations no longer keep pace with contemporary technological changes.
- Multiple supervisory bodies for technical education institutions.



- The weak role of current laws in the process of developing the technical education and vocational training sector in institutes and colleges.
- The technical education and training available in Yemen does not qualify its outputs in the manner required to join the labor market and achieve its role in the development process due to its weak skills and its inadequacy with the needs of the labor market.
- The education and vocational training sector suffers from weak infrastructure, which in turn does not amount to the investment required for Yemeni society in the future.
- The low level of practical and applied training for the outputs of technical education and vocational training.
- The small number of highly qualified faculty members who specialize in modern programs, in addition to the poor level of training for many of them, which negatively affected their students' output.
- Lack of academic guidance for students during the admission process
- Lack of financial allocations that are not commensurate with the needs of technical and vocational education.
- 3- Technical education and vocational training in Yemen faces many difficulties, including legal, administrative, academic and financial difficulties.
- 4- The experiences of the People's State of China and the Federal Republic of Germany reflect multiple and interrelated legal, administrative and academic directions for the development of technical education and training in their countries, by paying attention to the role of the economic community institutions such as companies, institutions and employers in managing, following up and evaluating the outputs of technical education and vocational training, all to achieve an effective and successful role for educational outputs Technical and vocational training in the development process and keeping pace with the needs of the labor market in light of the economic and technological changes that afflict the world.
- 5- Presenting a proposed vision for the development of technical education and vocational training in Yemen in the light of global experiences.

Third: The proposed scenario:

The results showed that the reality of technical education and vocational training in Yemen needs to be developed and benefited from the experiences of China and Germany in their development to effectively achieve its role in the development process that Yemen aspires to in the future. Therefore, the following part of the research includes a presentation of the proposed vision for the development of technical education and vocational training according to the analysis of China's experiences and Germany, as follows:

1- Visualization starting points:

- The need to build Yemen and achieve social, economic, technical and technological development throughout the Yemeni governorates.
- The need for technical education and vocational training in Yemen to keep pace with global trends and benefit from them in order to effectively fulfill their role.

2- Objectives of the proposed vision:

- Raising the level of technical education outputs in a manner commensurate with the needs of the labor market.
- Preparing the outputs and rehabilitating them with high skills and abilities that contribute to the possibility of them joining one of the professions required in the labor market.
- Achieving effective partnership with various economic institutions and the Ministry of Technical Education and Vocational Training through drawing up joint policies for technical education in determining the quality of skills for graduates, providing opportunities for training and employment, and providing appropriate equipment and supplies for training.
- Transformation of technical education and vocational training institutes and colleges into a dual education system so that the student spends a large part of his time in practical training.

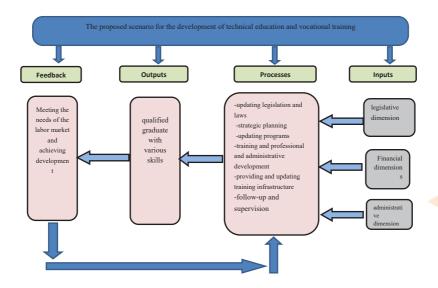


Figure (1) The proposed scenario for the development of technical education and vocational training

* Prepared by: researcher

3- Suggested visualization requirements:

• Legislative Dimension:

- Update student admission laws in technical education and vocational training to provide more opportunities for enrollment.
- Activating the laws of the advisory council and granting it the powers to exercise its duties in all technical education institutes and colleges.
- Issuing legislative laws that clarify the role of the training process for students and employers, and the role of the Ministry of Technical Education and Vocational Training.
- Designing national frameworks and approving qualifications that confirm the existence of experiences gained during work, and encourage the private sector to cooperate with institutions of technical education and vocational training.

- Issuing legal legislation regulating technical education and vocational training to support the participation of private sector institutions and motivate them to support technical education.
- Introducing legislation that encourages the private sector to perform the task of technical education and vocational training through direct and indirect incentives.
- Work to unify the legislation that clarifies the roles and responsibilities that the participating institutions for the training of technical education outputs must undertake with the Ministry of Technical Education and Vocational Training.

Administrative Dimension:

The field of planned planning:

- Working on documenting the role of technical education in achieving development through setting strategic plans related to development within the country and in all sectors.
- Develop a comprehensive strategy for all technical education colleges and institutes to be implemented with commitments and serious directions from the leadership of the Administrative Ministry of Technical Education.
- Work on planning the establishment of technical education institutes in all governorates of the Republic to meet their current and future requirements, thus providing opportunities for male and female enrollment without discrimination.
- Work on the decentralization of planning and implementation in order to facilitate partnership with the private sector in a manner that encourages its participation in cooperation with technical education and vocational training institutes and centers, and to meet the needs of the labor market in the various governorates of the Republic of Yemen.
- Work to activate the role of private sector institutions in providing employment opportunities for graduates.
- Work to unify the supervisory and administrative bodies for technical education in one body, and to ensure continuous monitoring and follow-up.

Student field:

- Guiding students academically during the coordination process to

join the majors that suit the needs of the surrounding environment and the labor market by providing guides to help that.

Increasing the hours of practical training for students inside and outside the internal and external training workshops.

• Field of programs and training:

- Updating current programs and courses in line with the requirements of the labor market.
- Providing effective partnership links with various private sector institutions to participate in determining the quality of academic programs, and participating in the training processes necessary to qualify the outputs of specialized cadres according to the needs of those different economic sectors.
- Coordination to provide professional development opportunities for members of institutes and colleges, whether for academics or administrators, with government and private sectors.
- Working on maintaining the current equipment and supplies available in the training workshops and laboratories.
- Developing and establishing laboratories and workshops equipped with modern equipment and tools that keep pace with the training processes of the courses that will be updated.
- Work to introduce the technology component in all administrative processes and activate information systems in all institutes and colleges.
- Establishing a Quality Assurance Authority for Technical Education and Vocational Training Institutes and Faculties to:
 - → Setting standards for vocational and technical education.
 - → Accrediting academic programs for technical and vocational education.

• Financial Dimension:

- Increasing allocations for technical education and vocational training from the state's general budget.
- Establishing financing funds in economic groups, and working on allocating projects for technical institutes.

4- Mechanisms of applying the proposed visualization:

 Forming joint committees from businessmen, companies, economic institutions and the Ministry of Technical Education and Vocational Training to frame the quality of skills and abilities required in technical education outputs, and accordingly the quality of study curricula and curricula are determined.

- Establishing advisory and technical committees and bodies for training programs to build partnership links with the private sector.
- Linking training to employment by creating joint paths between private sector institutions and the Ministry of Technical Education and Vocational Training and its various institutions.
- Allocating financial budgets to support and build technical capacities for all partners based on technical education.
- Work to activate the dual system in technical education institutions through:
- Developing internal training programs and on-the-job training, and keenness on learning foreign languages that further enhance the possibility of employing the workforce.
- Establishment of an integrated information system and monitoring of the dual system during work.
- Adopting a skills-based apprenticeship program for the benefit of learners and educational institutions.
- Provide study materials for executive programs and customize curricula to suit each unit.
- Introducing new methods of active learning and assessment based on ICT in technical and vocational education and training curricula.

Guarantees of the success of the proposed concept:

- Working to implement good governance practices in the Ministry of Technical Education so that laws are applied fairly, ensuring transparency in all practical practices, and providing information to all those working in the Ministry of Technical Education and the beneficiaries of employers, companies and economic institutions.
- Provide an adequate financial budget for a cademic and material reforms.
 Obstacles to applying the proposed vision:
- Low participation of the private sector and its economic institutions.
- Weak activation of legal legislation related to the role of advisory councils.
- Weak monitoring and follow-up systems for the role of vocational

institutes and colleges

 Centralization and bureaucracy within technical and professional institutions and institutes.

Conclusion:

Technical education and vocational training are the most types of education that developed countries rely on to achieve development in their societies, and the evidence for this is that many of the economically developed countries are those that have given technical education great importance and made it among their priorities in their strategic planning process, and linked their needs with what should be It must have technical education to keep pace with its aspirations and achieve its ambitions in light of the ongoing economic changes. This encourages Yemen, a developing country that most in need of comprehensive development in all areas of life, to take the same steps as those countries to advance the role of technical education and vocational training.

Recommendations:

Establishing a national observatory in order to provide a reliable base of data and information on the needs of the labor market and training programs to be provided by technical education and vocational training institutions, and to identify training needs and administrative and technical requirements on which the training program is appropriately built according to pre-defined criteria.

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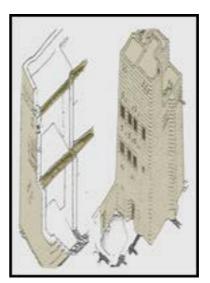
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Suitability of Architectural Spaces Composition of Clay Architecture with Climatic Environment in Wadi Hadhramout–Yemen

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Abstract:

Architectural space is an essential feature in Hadhrami architecture and it has been addressed in different methods. These methods developed based on the cognitive and cultural accumulation of Hadhrami architects. Hadhramis, therefore, have developed expertise that qualifies them to deal with variables of time and place in composing functional spaces suitable with climate. Hadhramis have developed an architectural style featuring temperature and light comfort besides psychological satisfaction from aesthetic perspective. Hadhramis not only have paid attention to internal spaces but also external spaces such as streets and quarters. Spaces as such achieve complementary balance between climate conditions and relative comfort of architectural style which adds a great value and uniqueness to Hadhrami architectural style. The present paper aims at identifying the main methods of composing spaces in clay architecture and the extent to which they fit the climate conditions. The paper also explores the technical, environmental and cultural methods utilized in spaces composition. The findings show that clay is superior to any other construction materials in terms of thermal insulation and temperature decrement, which yields in huge economy of the required energy for heating and cooling. In addition, the paper sheds light on the most important issues in developing clay as a sustainable construction material for better utilization in current and future architecture.

Keywords: Suitability, Architectural Spaces, Composition, Climatic Environment, Clay Architecture

1- INTRODUCTION

Architects address concepts of clay architecture differently and with contradiction at some points. Some architects consider clay architecture something from the past heritage. Some perceive it as shacks of villages that do not suit the modernity because clay is inferior in terms of the required level of durability and sustainability. However, some others deal with clay architecture with subjectivity and they achieve pioneering and modern projects out of it. Wadi Hadhramout comprises many well-known world monuments such as the city of Shibam, which features multiple-story buildings, and *Almehdhar* Minaret (Figure 1), forty meters high, which is very difficult to replicate its slender shape using concrete. Clay architecture continues to increase constantly in different types of buildings. Heritage clay buildings deal with hot dry desert environment in Wadi Hadhramout through attaching with urban fabric of single inward-enclosed blocks.

Clay buildings also feature efficiency of self-thermal to compose buildings, especially for the spaces between blocks of urban fabric as being the most important environmental element. Certain geometric proportions have been assigned for spaces between blocks, (Shaaban, 2000). Hadhrami architecture is one of Yemen's innovations and produces main techniques based on environmental divergence-the place variable- multiple patterns, (Al-Muqatri 2000).

2. Statement of the Problem

The present paper attempts to explore environmental and climatic performance of spaces in clay buildings in Wadi Hadhramout based on data available from metrology and solar energy calculated theoretically. On this basis, the climatic features have been determined and measured; and thermal specifications of clay buildings have been deduced.



A- Aims of the Paper

The paper aims at presenting a series of techniques in building walls utilizing traditional bricks 'adobe'. The paper also presents a number of methods for roofs using domes.

B- Methodology of the Paper

The methodology of this paper is derived from the aim of this paper that is to search of making use of this traditional construction technology to build suitable architectural spaces. The study methods adopted an analysis of physical survey of layout, elevations and types of doors, windows, columns and sections samples of traditional techniques and construction of clay building and houses, environment and stability, and characteristics of mud clay materials to be able for sustainable development. This measure is based on the results of tested mud cubes mixed with straw.

C-Size Composition of Spaces and Buildings

The style and size of external spaces fit systematically with the shape and size of the building. This is evident in urban fabric of old cities in Wadi Hadhramout. Architectural space plays an effective role in solving climate issues. Connecting and attaching building together decrease the possibility of external walls being exposed to rays of sun light. Most of the attached buildings in Wadi Hadhramout shade the neighboring ones and the internal spaces and passages, (Mubarak, 2000).

The architectural work - above all - is a function, and this function should be determined before it exists, and any architectural space determined by man must provide a kind of needs. As for design, it is the ability to place the required elements within specific and clear relationships; therefore, the Hadrami builder was able to make the mud architecture a wonderful example of human interaction in positive interaction with the environment with creativity and efficiency, so it merged with its diverse terrain and materials in the plain and the mountain and rose from its mud, stones and reeds.

Figure 1: AlAlmehdhar Minaret in Tarim

Figure 2: Type of Window (Mashrabiyah)

Figure 3: Facade and Axonometric of the Traditional Clay House

Figure 4.: Plan & Elevation of a Traditional House in Shibam

D - Design of Clay Buildings

The design of Shibam buildings provides unique models in terms of functions and shapes (Figure 4). Composition patterns include square and rectangle blocks or compound blocks open externally with a continuous horizontal and vertical rhythm in the main interfaces. Shibam buildings are rich in terms of experiences of its climatic and environmental adaptability, its ability in creating temperature comfort in terms of direction; functions of the building and in terms of construction materials of high insulation and stability. Shibam buildings feature small slots in the top and bottom of the stories for better ventilation and light. The further higher stories are enclosed and are of vertical directions taking into consideration the increasing numbers of the household. Shibam buildings together compose neighborhoods that have functional and rhythmic services in common (mosque and quarter). The buildings and other blocks are of similar harmonious height. In addition, Shibam buildings feature small bridges that connect blocks together, (Damluji, 1992).

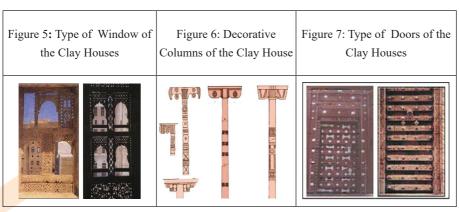
The main facades (Figure 3), that contain slots, generally overlook streets or quarters. The facades also contain decorated *Mashrabiyah* (special decorated and projected small windows used for cooling the drinking water naturally through the blowing breeze) (.Figure 2).

Buildings are coated with lime from the top to the bottom. The upper floors are painted with lime for protection purposes against rain. External walls are pyramidal and graded. The decorations are simple artistic patterns around windows especially on the wooden shutters, (Al-Shibany & Al-Madhajy, 2000).

E - The Most important Elements of Clay Building

• Windows

The main function of wooden windows in Wadi Hadhramout is ventilation, light, and seeing (Figure 5). The location of windows usually takes into account social perspectives such as inhabitants and neighbors' privacy. Windows are distributed over the main facades that overlook streets and inner squares. The windows comprise of decorative net and decoration that lessen sun rays and allows better ventilation. Colored glass is used in buildings of Seyuin and Tarim, but not in Shibam buildings. Windows are made of nabk, (Damluji, 2007).



Doors

They are made of nabk and they feature magnificence and thickness besides decoration and Arabic calligraphy (Figure 7).

Suntrap

It refers to the slot used for ventilation and light-openings "manwar" or "shammah" inside the building (Figure 8). It penetrates the building vertically from the ground floor to the last one. Within the suntrap, there are small long rectangle slots, (Lewcock, 1986).

Terrace

It refers to the open surface of the roof assigned for night stay during summer nights. Terrace contains small bedrooms (Ratio) for the traditional Arabian house. The walls of the terrace contain small slots that protect inhabitants' privacy.



Figure 8: Openings at the Interior Walls, (*Shammash*)

Figure 9: Construction and plaster of Ceilings

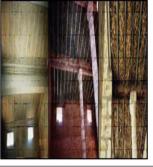


Figure 10: Method for construction of bearing walls & foundation



Beams

Beams are used in clay buildings to support the roof and they are made of nabk. The thickness of the beam (Figure 6).

• Method of Wall Construction (Loading Bearing) with Clay

The construction of walls with clay depends mainly on the suitable kind of clay. Clay gives durable brick when mixed with water and shaped according to the construction criteria. Strength of bricks is intensified either by drying such as 'adobes', which are dried directly in the sun rays before they are used in construction or by drying the mud mixture on the wall (Figure 9,10) such as 'cube, (Leslise,1991).

• Construction Using Clay Brick (Adobe)

Clay bricks are prepared by mixed mud with straw or other shrub fibers and mixing well by feet or using bulls and cows. Then, bricks are formed in a wooden mold where mixed mud is placed inside the mold on the ground, and clamped with hands to ensure that the voids are filled well and to obtain a homogeneous mass. The mold is then lifted, leaving the formed clay mass on the ground, which is left under the sun for a few days to dry. The process of making bricks continues in rows, separated by a small space, and left to dry in the sun. The bricks are flipped on its side, in order to ensure that they dry well before using them in construction (Figure 11).



Figure 11: Traditional Methods of Preparing adobe Construction in Wadi Hadhramout

Architectural Characteristics of Clay as A construction Material

There are many advantages of using clay as the main substance for building, which has an old history in the human settlement, including the following:

- 1- Soil is available in most of the areas of construction, which contributes to building permits. It is considered the only free material available.
- 2- Preparing mud bricks and building with clay is simple, as these processes require the least number of machines and tools. Further, they do not require specialized technical knowledge.
- 3- There are diverse methods of clay construction, which give the investor a great opportunity to choose the optimal construction method in the desired area by studying the quality of the available soil and manpower.
- 4- Construction with clay saves energy, during the construction processes by using simple machines in forming, sun rays in drying bricks and in the process of using clay buildings for various purposes

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5- Clay construction features sound insulation and fire resistance. As a result, clay buildings provide complete privacy within spaces, have resistance to thermal insulation and contribute to the safety of inhabitants.

Table I: The result of tested mud cubes mixed with straw and other mud brick samples at Aden University

Wall unit	Unit strength (N/mm²)	E (N/mm²)	Reference
Mud brick	1,32	50	1
Fired clay brick	16.2	1740	3
Hollow block	8.55	1600	2
Thamostone	4.61	5.30	11
Concrete	25	22500	Common

Several factors influence the load carrying capacity of walls constructed with brick units laid with mortar. Amongst others, these include unit strength, mortar strength, and the eccentricity of loads. [8] pointed that the wall strength in general, is proportional to square root of unit strength and to fourth root of mortar strength, which may be written in the following equation:

 $\sigma w = C(\sigma b) (4 \sigma m) Ke$

Where: σw; wall length

 Σb ; unit strength Σm ; mortar strength

C; constant

K ; eccentricity factor

In order to estimate the strength capacity of adobe walls, the equation is used in conjugate with test results of research project carried out by the author to evaluate the strength capacity of full size one-storey high walls

constructed with fired clay brick unit covering the variables mentioned above [3]. One type of brick unit was used that had an average strength of 16.2 N/mm2 in addition to four types of mortars their strength ranged from very weak to even stronger than units. The mortar strength range was 0.18 to 1.33 of brick strength.

Since the ancient days, mud clay is used as an important substance in construction. It is recorded that clay soils cover more than 70% of the land surface. Throughout history, it is used as building materials like stone blocks to construct houses, monuments and buildings. Currently, about 30% of the world population live in mud-constructed houses and this percentage represents about 80% of the houses in rural areas in Yemen. It is recorded that 99% of houses in Hadhramout Valley and other rural areas are built from mud. Using mud in house construction is considered as the easiest application of the construction system. The supply of the raw materials is in abundance and available in the surrounding areas that this has made the people who live in it to apply mud construction system. Some traditional house builders are more creative by applying this material in different design with circular and organic forms. When the clay blocks were burnt in an oven house to a temperature exceeding 850oCelcius, the strength of its physical and chemical properties improves tremendously (Figure 12).



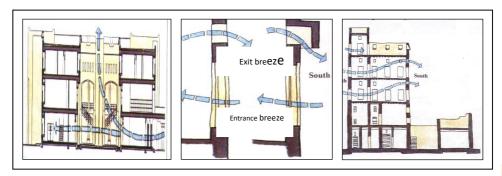


Figure 12: A detailed Section of the Ventilation in the Clay House

3- Conclusion

- 1-The research carried out an objective mechanism depending on building bioclimatic chart for assessing the environmental climatic performance in Wadi Hadhramout.
- 2- It is concluded that the optimal shape of the spaces is the blocks and the rectangle. This is based on the requirements for shading and insulation for the conditions of thermal comfort required in the region. The large side extends between east and west and that the height increases by no less than one and a half times from any of the horizontal dimensions. It should be noted that the effect of the geometric proportions of space is much more important than the effect of direction. This conclusion is consistent with the reality of the field survey of residential complexes as in the city of Shibam.
- 3- In terms of dynamic heat flow, thermal performance assessment of clay buildings shows great superiority over other construction patterns. The time lag in a clay wall is as twice as what a similar thickness of a concrete wall provides. The decrement factor decreases to a quarter of its value in a concrete wall of similar thickness. This is due to the fact that the thermal conductivity coefficient (Thermal Conductivity) of clay is very low compared to any other building materials. This is due to the low density of clay through air slots in

- clay building resulting from the evaporation of water from it after it dries up. Further, the specific temperature of mud is relatively higher than that of other building materials.
- 4-The temperature of the concrete wall and the temperature inside the room is generally high, compared to the temperature of the mud brick wall and temperature inside a clay room.
- 5-The rise in temperature of a concrete wall starts from noon to record a clear difference between concrete and mud brick wall and the difference in temperature disappears at dawn the next day. Temperature of a mud brick wall begins to rise relatively from six o'clock to seven thirty, and temperature of a concrete wall rises again.
- 6-There is a clear similarity between the temperature of the mud brick wall and temperature inside a clay room as it does not exceed one degree Celsius recorded inside the room at noon. However, the temperature inside the clay room is much lower than the temperature inside the concrete room. The highest differences between the two are recorded since noon until ten o'clock at night. The difference in temperature begins to decrease until six thirty in the morning. The temperature in a mud brick room increases slightly at this time compared with the temperature of the concrete room because of temperature loss of the concrete wall. However, the temperature in the concrete room increases again around eight o'clock in the morning because a concrete wall gains heat quickly.
- 7-On this basis, the high efficiency of mud brick architecture with regard to thermal performance shows great superiority in the energy consumption required for heating and cooling; this property is one of the justifications for the future expansion of clay architecture projects in the world.

4- Recommendations

Clay is one of the oldest building materials that humans have developed and used in construction through many different techniques in accordance with the data available and in line with the surrounding environmental conditions. Clay has many advantages as well as it is not without some defects, which call for a comprehensive and scientific study in order to develop clay further as a construction material. The following recommendations are presented:

A. Scientific perspective

- It is necessary to coordinate efforts to benefit from the existing research and application centers that pay great attention to clay as a construction material. The Internet can present a great opportunity in this regard.
- Field scientific experiments where clay is used for construction in a modern way need to be reviewed and evaluated in order to extract lessons and avoid defects.
- Further efforts are required in developing the durability of clay. Economical and successful methods should be developed to protect the surface and to resist the impact of water and sand-laden winds.
- Available information on addressing sanitation issues should be utilized. Sanitation in clay buildings and its impact calls for further studies.
- Further studies that explore relations of clay with other building materials such as wood, waterproofing materials, tiles, whitewashing, are needed.
- The necessary systems, including mechanical, sanitary, electrical installations and their methods of maintenance should be taken into account in clay buildings in order to ensure the preservation of clay buildings and to extend their life span.
- Official bodies and private sector are highly recommended to fund specialized studies on developing clay. In so doing, they encourage researchers to highlight the characteristics of clay accurately; such as fire resistance and sound insulation. Funding studies also helps

address negative sides of clay buildings such as their weak resistance for earthquake.

• Standards for clay buildings should be developed and disseminated. Decision-makers should be persuaded to include these standards in the national standards and specifications documents for all countries.

B. Media and Cultural perspective

- The public should be educated about the multiple advantages of clay construction through awareness raising campaigns disseminating information, holding exhibitions, lectures, and seminars to encourage people to accept, and use clay in construction.
- Modern architectural projects built with mud bricks in developed countries should be highlighted in order to correct the misconception in the developing world linking clay buildings with poverty, disease, and backwardness.
- The media should highlight beautiful designs of mud bricks buildings. Clay buildings sense the surrounding environmental and climatic variables.
- Colleges and institutes of architecture in the Arab universities should teach clay construction in order to give students technical information about clay as a construction material, its characteristics, and some basic ways to develop it.
- Official authorities should pay attention to the restoration of mud bricks buildings of architectural value and take into consideration the original materials used in construction. Renovation may benefit from previous restoration work for such buildings to avoid errors and to conserve the independent architectural character of each region.



C. Economic and environmental perspective

- Specialized studies are needed to highlight the economic aspects of clay buildings at all levels in the initial cost of construction, on the operational cost of energy consumption, and in terms of maintenance. These economic aspects should be compared with buildings constructed with other materials. The comparison may contribute to adopting clay buildings as a solution to housing problems afflicting many developing countries.
- Environmental dimension of clay should be highlighted, especially in industrialized countries. Environmental aspects of clay should be underscored in relation to (a) production issues
 (b) the use of appropriate technology that reduces pollution
 (c) waste resulting from clay construction is not harmful or distorting to the environment.

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