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Introduction

The Ministry and its associated bodies play a critical role in achieving the development goals in their comprehensive sense, the goals of the 2020 national transformation, the national transformation 2020 and the vision of Saudi Arabia 2030 through the planning, implementation and monitoring of many life activities and in order to achieve the requirements of the social, balanced and stimulating production.

The Ministry is issuing this guide in line with the high directives that require constant preparedness to deal with disasters of all kinds, whether natural, technical or environmental.

The aim of the guide is to give officials and staff responsible for the consequences of disaster response to municipal bodies an overview of those disasters, measures, services and plans to be prepared to address them, including his property directly related to its normal work and the functions it performs in accordance with the provisions of the regulations and instructions in relation to the general directives imposed by changes and developments in the local or global environment.

The guide is a tool to improve the efficiency of the performance of human cadres responsible for the issue of disaster, where the human element is always based on the success of the plans prepared.

This guide differs from the regulatory evidence issued by the ministry in that it is very flexible in the main subjects it deals with the preparation of the required plans, as it allows the municipal system to prepare these plans according to the data imposed by the local characteristics of each region and the type of disasters expected and the human and technical potential available to them.

The guide also expresses a new pattern in the performance of the services provided by the municipalities through administrative, practical and technical coordination between multidisciplinary government bodies that require the public interest to work as a team under one administrative leadership to accomplish a series of activities and activities necessitated by the conditions that arise from disasters.

We would like the municipalities to exert every effort in their work in the various stages of disasters, in partnership with the concerned government agencies, in order to achieve the objectives that our wise government aspires to serve the nation and the citizen.

Preface

Disasters of all kinds are exceptional and painful events for the human being, and in the absence of catastrophic consequences, which are often reflected by large human and material losses, are at the same time a major challenge for government agencies when confronted and addressed in order to minimize those losses to the extent possible.

The concept of confrontation does not mean to wait until it occurs and then deal with it, but extends this concept to the pre-occurrence through the preparation of regulations and technical and administrative manuals and design plans that the aim is to ensure the safety of the population and enterprises.

The sooner we think about the possible consequences of disasters of different kinds and then work out the appropriate solutions to them, the more it will reduce the human and material losses and save a lot of effort and money in facing them.

The ministry is issuing this guide and updating it to guide the municipalities in preparing disaster response plans according to scientific and practical methodology based on factual information and accurate analysis, and thus employ the available human and technical resources to optimize the disaster and reduce its repercussions. Using disaster management.

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1- Municipalities and disasters

Article 5 of the municipalities and villages regulations issued by the Council of Ministers Decree No. 130 of 6/2 / 1397H and promulgated by Royal Decree No. M / 5 on 21/2 / 1397H on the functions carried out by the municipality, including all the work related to the organization, Health and comfort and public safety, and from this to maintain the appearance and cleanliness of the town and the prevention of public health and control of food and the filling of ponds and marshes and prevent the risk of floods. And in particular to take the necessary measures in conjunction with the concerned authorities to prevent fires and extinguish them and demolish the buildings that cause the fall or dilapidated parts of them, the establishment of public shelters and the authorization of construction and buildings and the application of the Saudi building code, as well as the practice of trades and occupations.

Prevention of many natural, environmental, health and technical hazards to humans and their benefits, each of these hazards requires a number of programs and plans to deal with them.

These plans and the actions that are part of the plan are part of the preventive plan to address the various types of potential disasters, if neglected, especially with the expansion of cities and increase population activities and diversity.

It can be said that the planning, technical, legal and other legislation issued by the municipalities is only one of the national strategies adopted, which in essence aims to reduce the many risks that can arise for various reasons, with constant emphasis on the principle of safety and protection of lives in every effort.

2- The concept of disaster

The disaster in the language means the intensity of the matter and its distress, it is said that the most important and most disastrous of the disaster, and the disaster (DISASTER) of the Latin derivative of the two DIS (DIS) means the negative power and (ASTRUM) meaning the star, and therefore the disaster means: bad star or bad luck The concept of catastrophe has received several definitions related to the subject of the disaster and we will mention only the main definitions of them as follows:

A - Definition of the International Civil Defense Organization (I.C.D.O) of the disaster:

The disaster is defined as "a major incident that results in significant loss of life and property that may be natural due to the action of nature such as floods, earthquakes, storms, etc., and may be the result of human action whether voluntary (intentionally) or involuntarily (Neglect) and require facing the aid of the homeland or the world.

B - Definition of the disaster in the system of Saudi civil defense:

In the second article of the law, the disaster was defined as: "any fire, demolition, leakage, storm, earthquake or other incident that would cause damage or endanger the lives of individuals or public or private property.

C - OCHA definition of the disaster:

A serious disturbance in community functions leads to extensive human, physical or environmental losses

The ability of the affected community to rely on its internal resources.

The concept of disaster management:

Is a management approach based primarily on the predictive capacity of the organization to anticipate disasters in their forms, sizes and times of occurrence, and to develop full scenarios for the expected disasters, through the examination and diagnosis of weaknesses and placed under strict supervision.

It consists of several disasters from the specializations and departments of preparedness and planning and movement confrontation disasters as soon as they occur, so that the team works on the approach of integration and consultation and use what it deems necessary support and support if the disaster occurred and includes the concept of disaster management and restore the situation to the post-disaster stages of the disaster counter them before they occur and to address them while they occur and to the recovery and re-conditions to what it was after the fact.

3- Types of disasters

They can be classified into the following types:

1. Natural disasters:

Be caused by geological, climatic, or environmental factors such as earthquakes, volcanoes, floods, hurricanes, landslides, desertification, drought, locust invasion and pollution of water.

2. Technical disasters:

Resulting from large-scale fires, explosions due to technical reasons, explosions with terrorist causes, radioactive explosion, wars and epidemics.

Other types of disasters, such as financial and economic disasters, have different causes. Past disasters can be classified in terms of their scope of impact to limited disasters and comprehensive disasters such as a collision between two trains and the occurrence of a war between two or several countries.

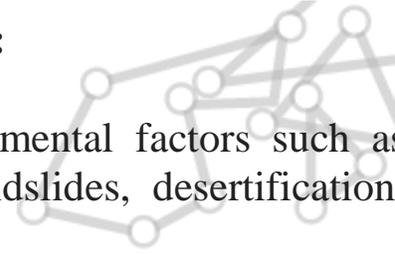
Disasters expected to occur to suddenly and expected such as earthquakes, desertification and drought, in terms of time scale to short-term disasters and long-term disasters such as a plane crash, a civil war in a country.

Spatial scale to local disasters, regional disasters, national disasters and international disasters as a pandemic in a local area leading to displacement to the regional level leads to his transfer at the national level leads to its spread in the world.

In terms of the consequences thereof to physical or human disasters or both together as a collapse or fire in the building and be free of population or populated, and in terms of those affected by individual disasters and mass disasters such as the death of a person from the collision of a car or the sinking of a ship, including passengers.

In terms of the place to marine, land, mountain or space disasters such as the sinking of an oil vessel, pollution of soil and groundwater, mountain collapses or a space shuttle explosion.

In terms of overlap to the disasters of a hybrid natural disaster leading to a technical disaster as a Tsunami causes damage to a nuclear reactor such as radiation leakage from Fukushima Japanese reactor and the previous information gives the municipal authorities, especially those responsible



for the preparation of plans an initial idea of the types of disasters that can municipalities Participate in dealing with other government agencies to focus on, whether collecting information, equipment work or training the human resources involved in confronting them.

3-1- Features of the disaster:

Disasters generally have some common features that determine their acceptability as a disaster. The following figure illustrates the features of the disaster:



natural disasters

Environmental issues

Invasion of locusts

Desertification and sand crawling

Environmental Pollution

Climate change

Sand Storms

Floods and Seoul

drought

Tropical cyclones

Geology

volcano

Earthquakes

Landslides

The tsunami

Technical disasters

Diseases

Diseases From the Air And Plants

Diseases From Humans

Diseases From The Water And Food

Diseases From Animals

Wars - Civil disputes -
Electronic attacks -
Terrorism

Industrial technology transfer

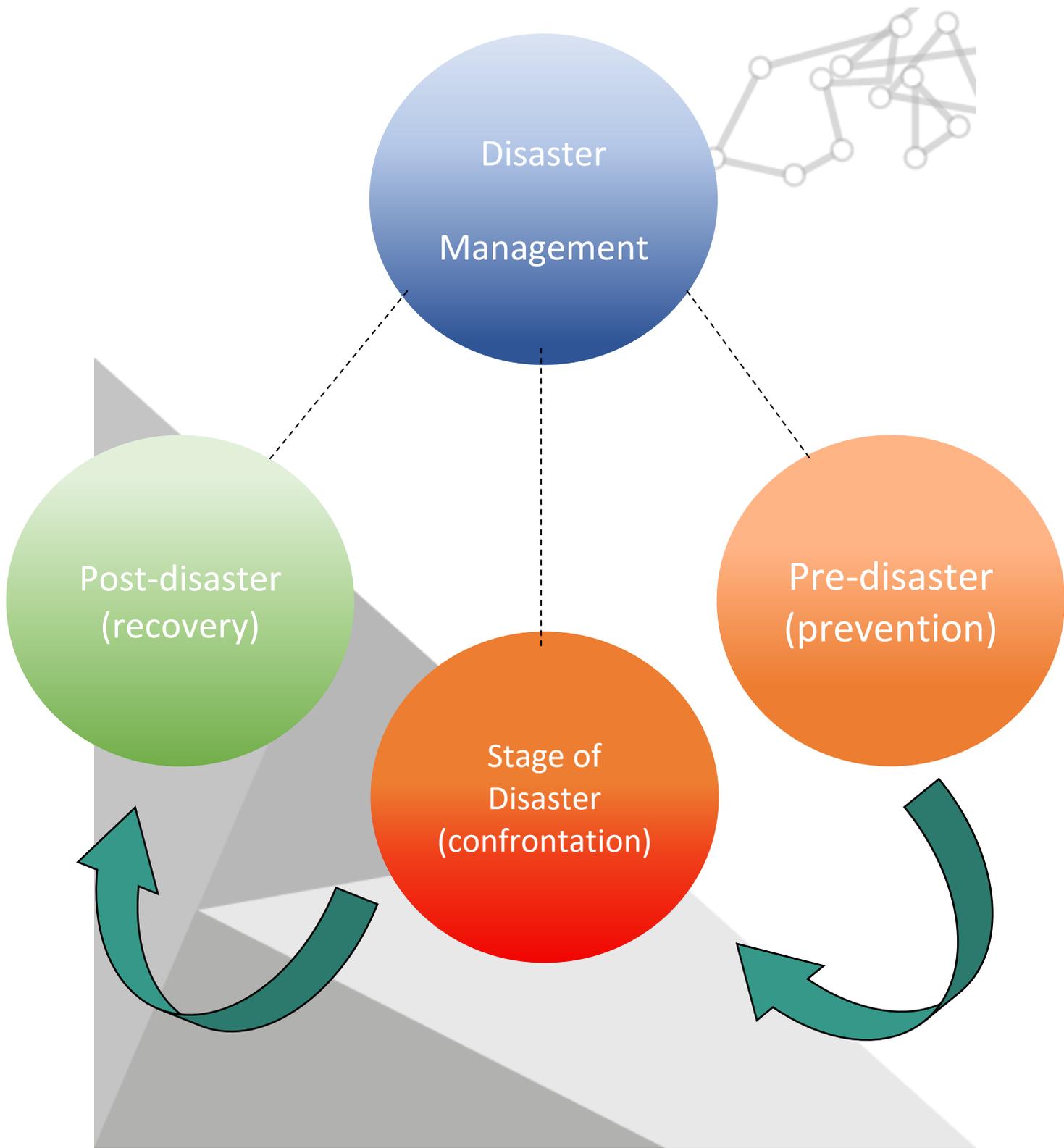
accidents
Planes
And
Ships
And
Trains
And
Roads
And
The space

leakage
Oil
And
Radiology
And
And
Biological
diversity
And
Bacterial

Fires
And
Collapse
Buildings
And
Mines
And
Roads
And
Dams

Interruption
Resources
energy
And electricity
And
water
And
communications

Explosions
Oil
And
Nuclear
weapons
And
Chemical
And
Biological
weapons
And
Bacterial



3-1- Characteristics of disasters:

Three main characteristics of disasters can be identified below:

3-1-1 The surprise

It is a characteristic of most quarts that humans cannot predict when or where they occur.

Such as some natural or technical disasters.

3-1-2 The Damage

Where the disaster always leads to material or human losses or both types of losses.

3-1-3 The Imbalance

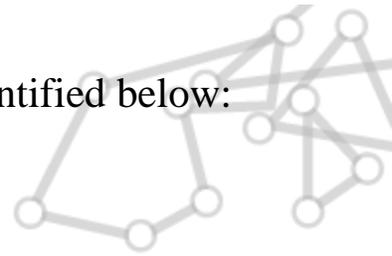
In the physical and natural human life systems imposed by the extraordinary nature of the event Represented by the disaster.

-3-2- General disaster stages:

3-2-1- Pre-disaster phase (Preparedness).

3-2-2- Stage of Disaster (confrontation).

3-2-3- Post-disaster (recovery).



-3-3-

Comparison between emergency, disaster and crisis:

There is confusion in determining the type of event (s) that occur, may be classified as an emergency, disaster or crisis and it is a conflict of reality, and the identification of the event or situation It is very important to know the technical, human and material possibilities to face the event and recover from it.

-3-4-

Stages of the event:

The event moves from stage to stage if it is not controlled by the following sequence:



In the atmosphere in the following table compare the emergency, disaster and crisis to clarify the difference between them

	Element	Emergency	Disaster	Crisis
1	Example	Iraqi-Kuwaiti meetings	The invasion of Kuwait by the Iraqi army	Gulf Crisis
2	The Time period	Expected, slow and intermittent	Surprise, fast and short	The long-term lasts days, weeks, months or even years
3	The Damages and losses	Limited	large	Very Large
4	The range	Limited	large	Very Large
5	The influence	Affect a person or a limited group of individuals	Affect a group of people or communities	Affect entire population
6	The Possibilities	Within the limits of possibilities	Beyond the limits of possibilities	Beyond the limits of the possibilities of the state or several countries

4- Disaster in the Kingdom of Saudi Arabia

The diversity of disasters in the Kingdom due to its geographical spread and its different climatic, geological, economic and developmental characteristics. The Kingdom has been exposed to various types of natural and famine disasters, some of which can be mentioned as follows:

Earthquake in Abu Arish (Jazan region)	In 1941 AD
Earthquake in Abu Arish and the southern region	In 1960 AD
Flood in Wadi Hanifa	In 1974 AD
Sinking of a ship in Jeddah + crash Airplane of the Middle East	In 1976 AD
A huge fire in oil pipelines in Abqaiq	In 1978 AD
The burning of the Saudi plane in Riyadh	In 1980 AD
Hurricane in the city of Khafji + earthquake in the Gulf of Aqaba	In 1982 AD
Gulf region war	In 1990 AD
The suffocation of pilgrims in the tunnel of Maisam in Makkah	In 1990 AD
Earthquake in the Gulf of Aqaba + Fire in Mina	In 1995 AD
Massive fire in the camps of pilgrims in Mina	In 1997 AD
Floods in East of Jeddah province	In 2009 AD
Floods in East of Jeddah province	In 2011 AD
The explosion of a truck loaded with a gas tank east of the city of Riyadh	In 2012 AD

5- The importance of disaster risk reduction in Saudi Arabia

1 Protection of life

Protecting lives (humans, animal, plants) is one of the most important factors in disaster risk reduction. The loss of human, plant, or animal life in large numbers simultaneously and in one place constitutes an irreparable loss, in addition to resulting in large numbers of people affected and displaced, in addition to significant losses in vegetation and livestock, which constitute a major human resource, Governments and international organizations to restore their status and recover from the event they have suffered.

2 Protection of property

Protection of property is an equally important factor in the protection of life and the imperative of disaster risk reduction. The loss of property in large numbers simultaneously and in one place is a major harm to persons, as well as large numbers of affected persons and displaced persons who have lost their property and homes making them in a very difficult humanitarian situation, which also calls for compensation and help them to restore their status to what it was.

3 Long-term investment

Disaster risk reduction is a long-term investment where I spend 1 Riyal before the disaster provides from 6-7 Riyals after the disaster. Investment in infrastructure and disaster risk reduction projects are indirect financial returns over time, and equivalence.

The following describes the relationship between risk, vulnerability and vulnerability prior to a disaster and the resulting risk after the disaster Coping capabilities and high-risk management have led to disaster risk reduction.

$$\frac{\text{Risk} \times \text{Vulnerability} \times \text{Exposure}}{\text{Confrontation or dealing}} = \text{Disaster risk}$$

4 investment foreign

Investment in disaster risk reduction is not only a long-term investment at home but also a key factor in attracting foreign investment of all kinds (industrial, commercial, etc.).

The availability of high-risk disaster-protected infrastructure, High credit and risk asset insurance helps a lot to reassure foreign investors and bring their investment indoors.

5 Protection of city infrastructure

When cities have a strong infrastructure that becomes more resilient to risks and makes the city and when the city has a poor infrastructure that becomes more vulnerable and weakens its resilience and makes the city unable to reduce the risks of disasters and natural and technical disasters in a way that is very influential on the infrastructure on which it spent large sums, disaster risk reduction and prevention Which leads to the preservation of infrastructure damage, and ensure the continuation of life normally without disrupting the main services of the city, leading to the readiness of cities and enable them to cope with disasters and make it a city of sustainable development

6 Achieving sustainable development

When integrating disaster risk reduction into urban planning and urban design, making disaster risk reduction an issue that interacts with all city planning and development processes, it will undoubtedly achieve real sustainable development for present and future generations.

7 Minimize losses

Disaster risk reduction does not lead to, but reduces, the loss of lives, property and the environment around us to the minimum acceptable and with minimal losses.

8 Disaster recovery speed

At the time of the disaster, the main concern of the secretariats and municipalities will be to restore the situation. The more effective risk reduction measures are in place before the disaster, the easier the recovery and recovery will be.

9 Protection of the environment, biodiversity and fungi

The Kingdom of Saudi Arabia has a diverse and diverse biodiversity, biodiversity and diversity, due to the different nature of the Kingdom Geology and topography, the Kingdom has some of the longest and most beautiful beaches in the world, and it has an ecological diversity as well as the kingdom's ownership of mountainous and wild environments, plains, deserts, valleys and biodiversity. The fungus makes reducing the risks that beset by them an essential factor for maintaining this diversity.

10 Maintaining the integrity of the sites and maintaining a healthy environment for human and veterinary use

The safety of man and place is a real objective and a requirement for all nations and peoples, and the safety of man or place is in no doubt a responsibility for national, regional and local governments to maintain the integrity of sites and to maintain a healthy environment for human and veterinary use.

11 Maintain the integrity of the sites and maintain a healthy environment for human and veterinary use

The safety of man and place is a goal and a real demand for all nations and peoples and the safety of man or place is undoubtedly a danger that will lead to the responsibility of national, regional and local governments to maintain the safety of sites and keep them healthy environment for human and veterinary use.

The Kingdom of Saudi Arabia has a long historical, cultural and social heritage. It is a Muslim core by the Kaaba and the tomb of the Prophet. It is the best prayer and delivery. It has the city of Makkah, Madinah and the holy places. It receives millions of Muslims every year during the Hajj and Umrah seasons. Making it a historical treasure and an open museum that needs to be protected from dangers and the protection of the historical, cultural and social heritage of the Kingdom of Saudi Arabia.



6- Functions and Responsibilities of the Ministry of Municipal and Rural Affairs in Disasters

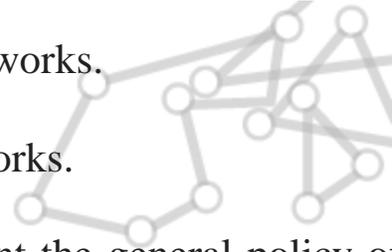
The Council of Ministers Decision No. (9) and (16/1/1387 AH) approved the proposal to establish the Civil Defense Council. The Royal Decree No. (M / 10) and the date (10/5/1406H) issued the approval of the civil defense system. The Royal Decree No. M / 63 dated 13/9/1436 AH and the Council of Ministers Decree No. 406 dated 12/9/1436 AH issued the decree to amend some provisions of the Civil Defense Law and the functions of the Civil Defense Council and the General Committee for Civil Defense. Including the continuation of the Civil Defense Council and the General Committee for the work of civil defense in supervising all civil defense works, including disaster management operations and confront them. The resolution also specified the formation of the Civil Defense Council and its competences and the General Committee for the work of civil defense and its specialties. The Executive Regulation of the Civil Defense Committees in the regions was issued on the basis of the decision of His Royal Highness the Minister of the Interior and the Chairman of the Civil Defense Council No. 6 / T / / / dated 26.10.1407, The decision of His Royal Highness the Minister of the Interior and the Chairman of the Civil Defense Council No. 9 / T dated 26/1/1407H approved the Executive Regulations for the functions and responsibilities of ministries and government agencies, and amended by His Highness's Decree No. 12/2 and 6 / Date of 24/3 / 1421H. And amended by His Highness's Decree No. 12/1 and 5 / DEF and dated 19/6/1429 H regarding the tasks and responsibilities of the Ministry of Municipal and Rural Affairs in the civil defense system, which were circulated to the secretariats by the number 57605 and 1 / 8 / 1429H. The tasks and responsibilities of the Ministry of Municipal and Rural Affairs and its stakeholders were defined to achieve the goals of civil defense, which will be mentioned later. The Ministry of Municipal and Rural Affairs is a senior member of the Civil Defense Council and the General Committee for Civil Defense and Civil Defense Committees in the regions.

High Council of Civil Defense

	Members	Position
1	Interior Minister	Chairman
2	Minister of National Guard	Member
3	Minister of Energy, Industry and Mineral Resources	Member
4	Minister of Trade and Investment	Member
5	Minister of Finance	Member
6	Minister of Economy and Planning	Member
7	Minister of Municipal and Rural Affairs	Member
8	Minister of Environment, Water and Agriculture	Member
9	Minister of Transport	Member
10	Minister of Health	Member
11	Minister of Labor and Social Development	Member
12	Minister of Culture and Information	Member
13	Deputy Minister of Interior	Member
14	President of the Saudi Red Crescent Authority	Member
15	President of the General Authority for Meteorology and Environmental Protection	Member
16	President of King Abdulaziz City for Science and Technology	Member
17	President of King Abdullah City for Atomic and Renewable Energy	Member
18	Chief of General Staff	Member
19	Director General of Civil Defense	Member
20	Public Security Director	Member

The functions of the Civil Defense Council are as follows:

- 1- Approving the general policy of civil defense works.
2. Adopting the general plans for civil defense works.
- 3 - Adopting the necessary projects to implement the general policy of civil defense works and plans.
- 4 -To adopt the tasks and responsibilities of government agencies and other bodies for the implementation of civil defense works.
- 5- Issuing regulations that specify the safety conditions and rules that must be met in various industrial, commercial, agricultural, professions, works, residential buildings, facilities and infrastructure in order to protect public and private lives and property in agreement with the concerned authorities.
- 6 - Issuing regulations that specify the conditions for the establishment of public and private bunkers and their specifications in cooperation with the concerned authorities.
7. Issuing the necessary regulations to regulate the work of volunteers in the civil defense and determining the conditions that must be met in them and their rights and duties.
8. Adopting the general policy for training in civil defense works and implementing its plans and projects and approving the necessary programs.
9. Supporting scientific and research activity in subjects related to civil defense and disaster management.



10- Forming the civil defense committees and determining their duties, procedures, places, and their representative bodies and their respective heads.

11. To identify and classify the places and installations that apply civil defense measures in whole or in part, as well as the places and facilities where the necessary equipment for the implementation of civil defense operations are put in place, and to establish the necessary rules for the assessment of damages and the assistance of those affected.

12- To determine the number of operation rooms and centers of civil defense operations, their places and the formation of their bodies, and to ensure the means by which the rooms and centers of civil defense operations are linked to the centers and operations rooms of the military and other bodies for the exchange of information and instructions.

13. Consideration of the annual report on the work of civil defense.

14. Adopting the mechanisms of international cooperation in the field of civil defense and disaster response.

15. Approve the draft annual budget of the Directorate General of Civil Defense and the draft annual budget of the Civil Defense Council; in preparation for transmission to the Ministry of Finance.

16- To propose the necessary financial resources for civil defense means and to implement its plans and projects in the budgets of ministries, government departments and persons of general moral character, in coordination with the concerned authorities.

Second: The General Committee for Civil Defense

	Members	Position
1	Director General of Civil Defense	Chairman
2	Director General of Public Security or his deputy	Member
3	Director General of the Border Guard or his deputy	Member
4	A representative of the Ministry of National Guard whose rank is not less than a brigade	Member
5	A representative of the Ministry of Defense whose rank is not less than a brigade	Member
6	Undersecretary of the Ministry of Municipal and Rural Affairs for Technical Affairs	Member
7	Undersecretary of the Ministry of Finance	Member
8	Deputy Minister of Health	Member
9	Deputy Minister of Environment, Water and Agriculture	Member
10	Deputy Minister of Energy, Industry and Mineral Resources	Member
11	Under-Secretary of the Ministry of Transport	Member
12	Vice President of King Abdulaziz City for Science and Technology	Member
13	Vice President of King Abdullah City for Atomic and Renewable Energy	Member
14	Assistant to the President of the General Authority for Meteorology and Environmental Protection	Member
15	Vice President of the Saudi Red Crescent Authority	Member
16	Deputy Governor of the Communications and Information Technology Commission	Member
17	Secretary General of the Civil Defense Council	Member

The functions of the General Committee for Civil Defense are as follows:

- 1 - Supervising the preparation of policies and general plans for civil defense works, and submitting them to the Civil Defense Council and overseeing their implementation after approval.
- 2 - Approving the detailed plans of the governmental bodies related to civil defense work.
- 3 - Supervising the review and evaluation of the policies and general plans of civil defense work and proposing amendments thereto.
- 4 - To work to raise the level of coordination between the parties related to the work of civil defense and to resolve the obstacles that may be encountered.
- 5 - Follow-up the disaster management operations as they occur, and work to overcome the difficulties that may be encountered and ensure the implementation of the parties and committees concerned plans to cope with disasters and the effectiveness of coordination between them.
- 6 - Direct disaster management in special cases entrusted to it by a decision of the Minister of Interior and Chairman of the Civil Defense Council.
- 7 - Follow-up of the implementation of experiments and applications of disaster preparedness in accordance with the objective plans, and the participation of all stakeholders and ensure their effectiveness according to the results of the assessment, and work to develop them.
- 8 - Supervise the development and modernization of information systems related to the work of civil defense and disaster response.
- 9 - Supervising studies and research related to the work of civil defense, especially in relation to disaster management.
- 10 - Approve programs aimed at raising the level of awareness in the community regarding the work of civil defense and in cooperation with the relevant authorities.

11 - Proposing regulations and regulations for civil defense works, verifying their effectiveness, proposing amendments to them, and submitting them to the Civil Defense Council to consider completing the legal procedures in this regard.

12 - Approval of the formation of specialized advisory committees in the field of civil defense in the General Secretariat of the Civil Defense Council.

13 - Follow up the work of the committees of civil defense in the regions of the Kingdom, evaluate its effectiveness, and make suggestions in it, and submit them to the Council.

14 - Supervise the programs and mechanisms of international cooperation in the field of civil defense work.

15 - Consideration of the annual report on the work of civil defense and disaster response, before being submitted to the Civil Defense Council.

16 - A study submitted by the Council in the field of civil defense work.

17 - Adoption of the items on the agenda of the Council.

18 - Adoption of the draft budget of the Civil Defense Council and its final account before being submitted to it.

19 - Any other task assigned to it by the Civil Defense Council.

Third: Civil Defense Committees at the level of the regions and consists of the

	Members	Position
1	Prince of the region	Chairman
2	Deputy Governor of the region	Member
3	Director of Civil Defense in the region	Member
4	Director of the branch of the Ministry of Municipal and Rural Affairs in the region	Member
5	District police chief	Member
6	Commander of the military zone	Member
7	Commander of the National Guard in the region	Member
8	Director of the Ministry of Finance branch in the region	Member
9	Director of the Ministry of Transport branch in the region	Member
10	Director of the Ministry of Health branch in the region	Member
11	Director of the Ministry of Environment, Water and Agriculture	Member
12	Director of the Ministry of Trade and Investment Branch in the region	Member
13	Director of the branch of the Ministry of Energy, Industry and Mineral Resources in the region	Member
14	Director of the Ministry of Labor and Social Development Branch	Member
15	Director of the Ministry of Education branch in the region	Member
16	Director of border guards in the region	Member
17	Director of the branch of the Supreme Commission for Industrial Security in the Region	Member
18	Director of Red Crescent Branch in the region	Member
19	Executive Director of Tourism Development Authority of the General Authority for Tourism and National Heritage	Member
20	Director of Water and Sanitation Branch	Member

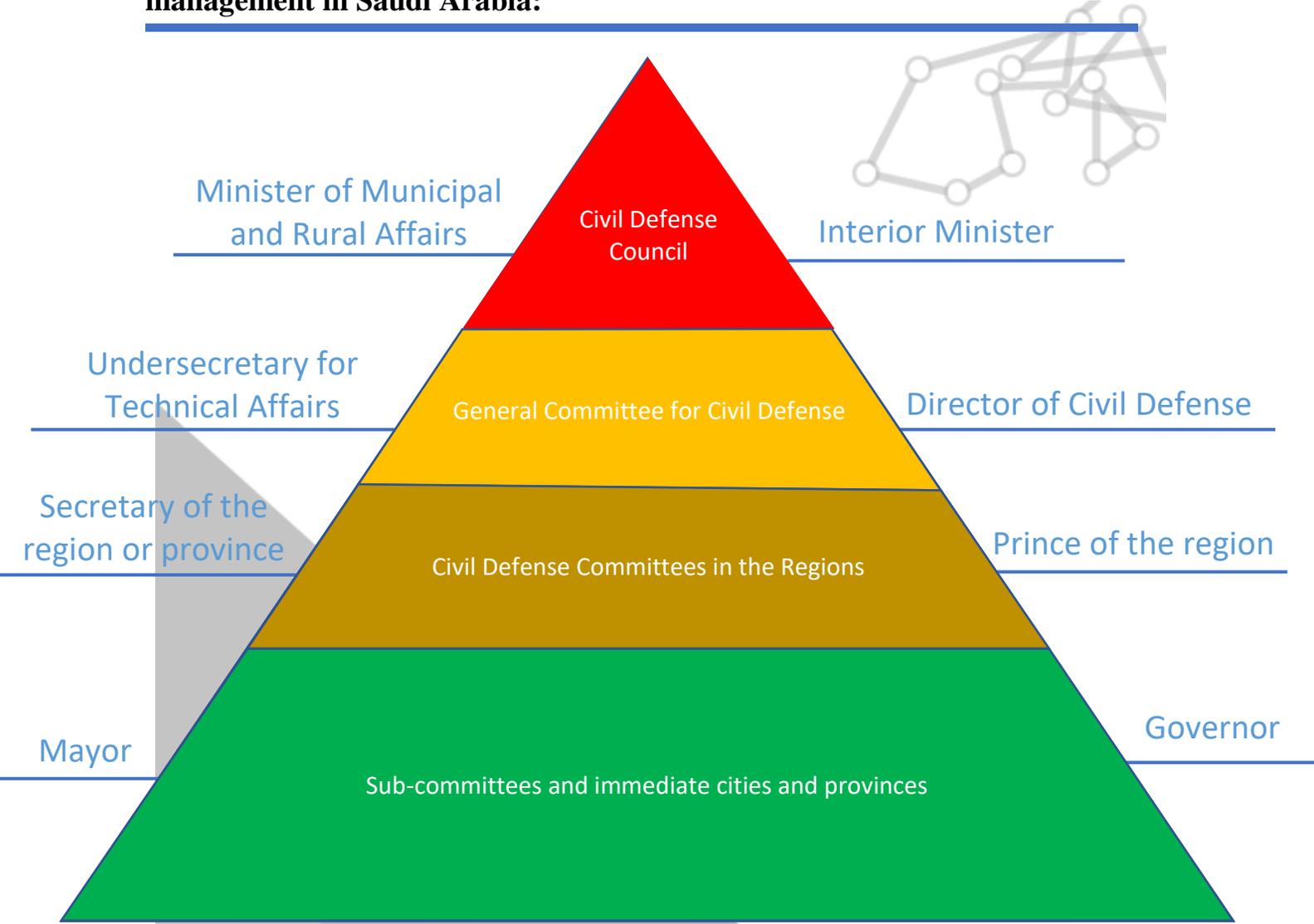
The functions of the Civil Defense Committees at the district level are as follows:

- 1- Implement the provisions and rules of civil defense and its regulations in cities and villages in order to protect the lives and property of the population and the sources of national wealth in cases of peace, disasters, emergencies and wars.
- 2- To implement the plans, programs, policies and decisions issued by the Civil Defense Council concerning civil defense procedures.
- 3- Coordination of the duties and actions required to be implemented by the participating parties such as the army, the National Guard, the internal security forces, the Red Crescent and other services such as hospitals and the like , To determine the role of each party in the implementation of this task with the preparation and preparation of the exercises, and the appropriate formations to carry out the task and the use of all possibilities for the implementation of the work of protection, relief and rescue.
4. The Committee shall prepare the necessary arrangements for the use of volunteers in the various fields of civil defense, in accordance with plans issued by the Civil Defense Council.
5. To provide the means of protection for the region and to follow up the implementation of the construction of public and private bunkers as well as the operation and maintenance of public bunkers, their use in normal and emergency situations and the determination of necessary public services in emergency shelters.
- 6- To study and determine the requirements and needs of the civil defense work in the region. Each member of the committee shall submit the requirements of the body representing them. These requirements shall be approved by the committee.
7. The members of the Committee shall take into account the duties, duties and responsibilities of the ministries and government departments, since

the functions of the Chairman of the Committee shall be determined in the region as well as the duties of each member of the Committee.

The Civil Defense Committees shall be formed bodies in each of the Kingdom's regions to carry out the necessary procedures and actions to protect the inhabitants of their area from the dangers surrounding them. Their functions shall be determined by the Civil Defense Committees Regulations issued by His Royal Highness the Minister of the Interior, In general, the importance of the Civil Defense Committees in their study of the potential risks in the region and their analysis and readiness to confront them through the branches of ministries and government departments in the region each according to its competence, There is no doubt that each region has risks commensurate with its nature and thus the preparation must be commensurate with the type of danger in the region, and emanates from these main committees in the regions sub-committees in the provinces that assume all the functions and responsibilities assigned to the main committees and the same composition of branches of ministries and government departments The number of the main committees (13) and the number of sub-committees (111) These are the governmental bodies that can be coordinated with the municipal authorities to prepare plans, training, information exchange and other matters related to civil defense work. The tasks and responsibilities of each of them are defined within the civil defense system and its executive regulations. Each of them achieves part of its goals and objectives.

The following figure illustrates the administrative organization of disaster management in Saudi Arabia:



The organizational pyramid for disaster management in the Kingdom of Saudi Arabia and the representation of the Ministry of Municipal and Rural Affairs and its agencies.

6-1- Tasks and Responsibilities of the Ministry of Municipal and Rural Affairs in the Civil Defense System

The functions and responsibilities of the Ministry of Municipal and Rural Affairs and its municipal bodies included in the civil defense system include many activities that must be activated in the various stages of disasters according to specific plans and strategies both in the preparation phase for the disaster and the actual confrontation phase or recovery.

Tasks in the following:

1- inventory all engineers and technicians specialized maintenance departments and all the equipment and mechanisms and operators located in the municipal organs of the ministry that can be used for this purpose in case of emergency or the development of general plans and detailed that ensure the presence of all officials and specialists when needed, and the largest possible number of equipment and machinery, And identify companies, institutions and consulting offices that deal with the ministry and its branches and possibilities available to be used in emergencies and the renewal of information on them periodically.

2- Study all engineering plans for all public service facilities, residential and commercial buildings, and ensure that they conform to their standards or instructions issued, including the requirements of safety and fire prevention. And not to issue a building permit or to allow the use of facilities and facilities unless all these conditions and requirements are met and to ensure when studying the schemes of finding sources of energy reserves in vital facilities, which are within the competences of the Ministry of self-employment at the interruption of power.

3- The Ministry shall conduct a study of all new schemes in the cities and villages to determine the nature of the education to determine the suitability of the nature of the establishments to be constructed, whether residential, industrial or commercial, and obligate the owners of the private lands subject to planning to carry out this study when they are

required to plan their lands, including the ground floor (in any location within the urban domain, whether governmental or private), provided that the relevant authorities are: the Ministry of Interior (Civil Defense), the Ministry of Environment, Agriculture and Water, the Ministry of Energy, Industry and Mineral Resources, And any other governmental body involved in the study and identification of areas prone to disasters and hazards such as floods, floods, earthquakes and volcanoes, and to establish rules and regulations to ensure this, and to provide the Ministry of Municipal and Rural Affairs.

4- The Ministry shall work with the concerned authorities to remove the dilapidated buildings and the collapse of the damaged buildings according to the existing regulations and instructions.

5. The Ministry shall take into account the distribution of activities and population in the planning of cities in order to avoid the focus to reduce the effects of disasters.

6- The Ministry participates in coordination with relevant bodies such as the specialized scientific authorities, the General Directorate of Civil Defense, the Ministry of Energy, Industry and Mineral Resources and any other entity related to the development of instructions and technical requirements for safety requirements against disasters, especially earthquakes in public and private establishments, To such risks, and to establish rules and arrangements to ensure that this is achieved.

7- In addition to the duties stipulated in the preceding articles, the Ministry shall implement the following: Not to authorize the use of buildings and apartments as warehouses for storage, and to establish controls to ensure that this is done in coordination with relevant bodies, such as the Ministry of the Interior (Directorate General of Civil Defense). Failure to grant or renew the license to work for the professions and crafts issued by the Ministry only after the availability of safety and prevention requirements and firefighting equipment in accordance with the regulations issued by

the Civil Defense Council and compliance with environmental protection regulations against pollution of all kinds.

8-The Ministry participates in coordination with the relevant authorities such as the General Directorate of Civil Defense in setting rules and arrangements to ensure the owners of residential and commercial buildings consisting of six or more floors or containing sixteen housing units and more, public markets, commercial centers and large exhibition halls, (1000 m²), hotels of all categories, such as furnished apartments for daily and private health buildings such as hospitals, clinics, large health centers, public celebrations, palaces and wedding halls Riyadh Its equivalentents to submit periodically (every five years(On the safety and validity of these facilities by an approved engineering consultant office, and work under this article until the issuance of the proposed periodic protection system.

9- The Ministry shall ensure the proper and appropriate means of transport for the transport of bodies from the scene of the accident to the place where the bodies are kept, with the bags of the dead being kept, and to prepare the dead and bury them after issuing the death certificates and the burial permit after the completion of the health and security procedures as stated in the General Plan of Medical Evacuation.

10- Take measures and precautions to preserve public health and environmental health in urban areas in case of disasters.

11- Establish the organization of equipment, mechanisms and human resources available at the Ministry of Municipal and Rural Affairs and its branches in the regions and governorates to benefit from them as a force to support civil defense in cases of emergency and disaster.

12 - Work to find appropriate solutions to deal with the marshes and excavations that result from the work of companies, especially in the cities and suburbs, where rainwater collects and poses a danger to life.

13- Work to find appropriate solutions for the treatment of waste resulting from traffic accidents on the roads supervised by the secretariats and municipalities.

14 - Detection of food provided to those affected in times of emergency.

15. The Ministry and its branches shall specify the names and addresses of the persons responsible and the delegates implementing the civil defense measures and the civil defense.

16 - Organization of equipment and manpower working in the contracting companies for cleaning to take advantage of them in the removal of the ruins of the damaged buildings and restore the situation to normal.

17 - Processing of mobile lighting devices available to the Ministry and its branches in the regions and cities of the Kingdom to benefit from when needed.

18 - Appointing places from now to be appropriate and far from the cities to serve as mass graves of contaminated bodies in coordination with the relevant authorities such as the Ministry of Health and the Saudi Red Crescent and public security.

19 - Provide gags and protective clothing for all its employees, especially the workers involved in the removal of the rubble and training them, to be used in time of need.

20- Forming a team of all its facilities in the various regions of the Kingdom, whose members are sufficiently qualified in the field of safety and fire prevention and trained in the fire, rescue and ambulance operations, and shall be trained and defined, its responsibilities and composition and the level of its members according to the regulations issued according to the system.

21. The Ministry shall take into account, in planning the establishment of a facility within the Ministry of Interior and the Ministry of Interior in the various regions of the Kingdom, in coordination with the General Directorate of Civil Defense, to find model caches that accommodate the largest possible number of owners in the area as well as the occupants of the facility and its suitability for multiple uses in bombing cases or The general war of all types of radiological and chemical weapons and so on. In the case of the supervision of the ministry or its participation in supervising the implementation of an enterprise notification of the Directorate General of Civil Defense if there is no typical cache in this facility and indicating the obstacles.

22- To develop a general plan and detailed plans specifying the responsibilities and tasks for each entity or person, through which the required actions will be carried out in accordance with the plans, rules and procedures stipulated by the civil defense system and its regulations.

23- Conducting practical applications on how to implement civil defense work in general to ensure the safety of the regulations and plans and to identify the negatives and to deal with them so that not less than once a year in cooperation with the General Directorate of Civil Defense.

24- In coordination with the Ministry of Culture and Information, the Ministry of Education, the Ministry of Health and the General Directorate of Civil Defense and Public Security, the necessary plans should be made to raise awareness among citizens of the danger of dumping hazardous waste in domestic waste containers.

25- Establish appropriate regulations and take measures to ensure that no facilities in the valleys and floodwaters are removed and that any encroachments on these valleys and floodwaters are removed.

26- Covering the Kingdom's areas with flood drainage networks in order to reduce the danger of their flow towards the residential and industrial neighborhoods, noting the periodic maintenance of these areas and ensuring that there are no obstructions within their sewage and maintenance of the pumps.

27- Urging the municipal councils in all regions of the Kingdom (cities and governorates of centers) to take care of the requirements of the civil defense and study subjects that pose a danger to the members of society and propose suitable solutions in coordination with the General Directorate of Civil Defense.

Examples include:

A) Sale of dangerous fireworks in some seasons and holidays.

B) Gathering during accidents and disasters.

28- Allocation of land in each area used for shelter in emergency situations to be chosen in coordination with the Ministry of Finance and the General Directorate of Civil Defense shall be within the urban area and easy to access and have electricity, water and telecommunications services.

29- Identifying joint committees of the concerned parties to implement the Saudi building code, especially in areas likely to be exposed to natural hazards, including seismic hazards.

30- The Ministry of Municipal and Rural Affairs or one of its branches shall prevent the existence of warehouses within residential neighborhoods or in commercial areas, and allocate sites for warehouses in each city and urban gathering organized according to the type of material stored therein and the degree of seriousness of coordination with the branches of the General Directorate of Civil Defense.

31- Not to authorize the establishment of warehouses or permit the use of warehouses, if found only after confirmation of the existence of all services (water - electricity – telephone)

Tasks and Responsibilities of the Coordinator of the Ministry of Municipal and Rural Affairs with the Civil Defense

The President of the Civil Defense Council, including the duties and criteria for selecting the Civil Defense Coordinator in ministries and government departments, are based on the cable number 12/3 and 4/4/1475 AH dated 6/2/1417 H. The Coordinator of the Ministry with the Civil Defense: is the liaison officer representing his case before the Civil Defense to discuss and carry out his functions towards the civil defense works contained in the civil defense system and its executive regulations to be implemented in the required manner. The functions of the Ministry Coordinator with the Civil Defense are:

1- To work on communication and coordination of the relationship between the Directorate General of Civil Defense and the Secretariat of the Civil Defense Council and the concerned bodies within the ministry through meetings or libraries to ensure the implementation of procedures and measures of civil defense.

2- General of Civil Defense and the Secretariat of the Civil Defense Council and the concerned bodies within the ministry through meetings or correspondence to ensure the implementation of procedures and measures of civil defense.

To review the tasks and competences contained in the regulations and regulations of the Ministry and discuss them with the Civil Defense and work to implement them.

3- To propose the amendment or addition of any functions and competences of the Ministry contained in the system and regulations with the Civil Defense.

4- Continuous communication with the civil defense and whenever necessary to exchange information and overcome all difficulties.

5- Discuss any comments or actions that may require clarification regarding civil defense work in the system or in the functions of the ministry or in the civil defense regulations in coordination with those concerned with civil defense.

6- Work on the preparation and follow-up implementation of the contingency plans of the Ministry, as stated in its tasks.

7- To take the necessary steps to prepare detailed regulations for the implementation of the functions of the Ministry in the field of civil defense in times of peace and war and emergency and submitted to the Civil Defense Council for approval.

This is matched by the identification of the secretariats with their coordinators with the Civil Defense Directorate in the regions in the same tasks referred to above with the Ministry Coordinator.

6-2-

National Plan for Natural Disasters

The Civil Defense Council Resolution No. (32690) dated 29/10/1435 e approved the National Plan for Natural Disasters and directed the competent authorities to implement them.

Functions and Responsibilities of the Ministry of Municipal and Rural Affairs in the National Plan for Natural Disasters

The necessary equipment and mechanisms for natural disasters should be provided in coordination with the General Directorate of Civil Defense and the concerned authorities.

- 1- Provide and equip the equipment, machinery and manpower with adequate preparation necessary to remove the debris and debris from the disaster area and clean the site in order to restore the situation to what it was according to a detailed plan to show how the required operations.
- 2- Provide the necessary manpower with adequate numbers in the shelter camps that are operated to maintain the cleanliness of the site and provide the necessary equipment and supplies to ensure that the waste does not accumulate in the quartering area.
- 3- Periodic inspection of the food provided shelters to ensure their validity before they are submitted to those who have been or are being housed.
- 4- cleaning the sewerage drains within the cities and remove all obstacles that prevent the flow of water in the form required and monitored on a continuous basis, and provide a sufficient number of necessary water pumps to be used when needed in coordination with the Ministry of Water and Electricity and maintenance of drainage networks in tunnels and neighborhoods, maintenance of tunnels and bridges Within cities before, during and after rainy seasons.
- 5- Provide human resources and engineering and technical capabilities in sufficient and necessary numbers that can be used in the face of disasters.
- 6- The inventory of engineers, surveyors, specialists and all the equipment and mechanisms located in the ministry's agencies (area, city, village) to be used in case of emergency and to develop general and detailed plans to ensure the presence of officials and specialists when needed.
- 7- Studying all engineering plans for all public service facilities, residential and commercial buildings, ensuring compliance with their technical controls, safety requirements and fire protection, in addition to the civil protection requirements issued by the General Directorate of Civil Defense. If all these controls and requirements are met, and make sure to find backup sources of energy in the vital facilities important function automatically when the power outages.
- 8- Conducting a study for all cities to know the nature of the land and analyzing it to determine their suitability to the nature of the establishments to be constructed, whether residential, industrial or commercial, and not to allow the planning or establishment of any facilities in areas prone to disasters and hazards such as floods, And organizations that ensure that this is done in coordination with the relevant authorities.
- 9- Removal of dilapidated and collapsible buildings, as well as the ruins of damaged buildings, in the disaster area after being detected and evaluated by the relevant committees.

10- The distribution of activities and population in the planning of cities, in order to avoid concentration and to reduce the effects of disasters.

11- Develop technical requirements for safety against disasters, in particular earthquakes in public or private facilities, especially in areas likely to be exposed to such hazards, and to establish rules and arrangements to ensure this.

12- Taking into account the amounts of floods and their paths when developing roads and bridges and tunnels within cities.

13- To establish controls to prevent and stop the expansion and urban encroachment in the valleys and on the banks of the valleys and agricultural areas near the valleys, which are subjected to flood raids.

14- The Ministry shall provide adequate number of bags for the preservation of bodies of the dead, special means of transportation for the transport of bodies from the site of the disaster to the place where the bodies are kept, process and identify the dead. And then bury them after the issuance of death certificates and permit burial after the completion of health and security procedures as stated in the General Plan of Medical Evacuation.

15- taking measures and precautions necessary to maintain public health and environmental health.

6-3- National Radiation and Nuclear Emergency Response Plan

The Council of Ministers issued Resolution No. (263) dated (1/9 / 1429H) approving the National Radiation and Nuclear Emergency Response Plan and directing the competent authorities to implement it.

6-3-1- Tasks of the Ministry of Municipal and Rural Affairs in the National Radiation and Nuclear Response Plan

- 1- Inventory the engineers, surveyors, specialists and relevant personnel and all the equipment and technicians located in the agencies affiliated with the Municipality to be used in time of need.
- 2- Prepare detailed plans for the removal of waste and debris from the area of radioactive or nuclear accidents and clearing sites in order to restore the situation to what it was.
- 3- Provide the necessary labor in the camps or accommodation camps that are occupied to maintain the cleanliness of the site and provide the necessary supplies to ensure that the waste does not accumulate in the quartering.
- 4- Develop plans for the detection of food provided by the Relief Committee before it is provided to those who are housed.
- 5- Participate in the work of searching for victims, lifting the rubble and transporting the bodies of the dead from the site of radioactive or nuclear accidents to places of preservation and burial after being identified and the competent authorities to bury them.
- 6- the transfer of bodies after being cleared by Civil Defense and other supporting bodies.

6-4- National Disaster Response Plan

The Supreme Decree No. (3057 / M) and the date (3/3 / 1426H) approved the national plan for combating marine disasters in the waters of the Kingdom and directed the competent authorities to implement them.

6-4-1-

Functions of the Ministry of Municipal and Rural Affairs in the National Plan for Disaster Management

- 1- Carrying the bodies of the dead from the evacuation point to the places they are kept in hospitals or burying them after they have been identified and the permission of the competent authorities to bury them.
- 2- Provide the necessary labor in the accommodation sites that are determined to maintain the cleanliness of the site and provide the necessary supplies to ensure that the waste does not accumulate in the quartering area.

6-5-

National plan for the response of chemical and micro-biological disasters

The decision of the Civil Defense Council No. (27160) dated (18/9/1436) was adopted by approving the National Plan for Natural Disasters and directing the competent authorities to implement them.

6-5-1-

Tasks of the Ministry of Municipal and Rural Affairs in the National Plan for the Response of Chemical and Bacterial Disasters

- 1- Inventory all engineers, surveyors, technicians and all equipment and mechanisms located in the Ministry's departments in all regions of the Kingdom to use them when necessary and to prepare all technical and engineering equipment and equipment for use when needed.
- 2- To identify the companies in the consulting institutions and offices that deal with the ministry and its branches and the available possibilities that can be used in emergencies and the renewal of information on them periodically.
- 3- The organization of equipment and manpower working in the contracting companies for cleaning to take advantage of them in the removal of the rubble of damaged buildings and restore the situation to the state of nature.
- 4- Coordinate with the Civil Defense to organize the equipment and human capacities necessary to implement the mechanism of the plan to remove the debris

and debris from the site of the event after being cleared and prepared by the competent authorities in order to restore the situation to normal.

5- Provide trained manpower and supplies necessary and sufficient to maintain the cleanliness of sites and camps for shelter and ensure that the accumulation of waste in those areas and camps in coordination with the Civil Defense.

6- The preparation of health teams trained and qualified with the necessary equipment and equipment for the periodic detection of food and drinking water to ensure that it is not contaminated and fit for human consumption, which is provided to areas and camps accommodation in coordination with the General Directorate of Civil Defense and the Food and Drug Authority.

7 - Contribute to the work of searching for victims and lifting the rubble and transport the bodies of the dead from the site of the event after being cleared and configured by the competent authorities to the sites of conservation and then buried in coordination with the Civil Defense after recognition of the criminal and the authorization of the competent authorities buried.

8. Identify suitable and remote locations for cities, surface and underground water and agricultural projects in coordination with the Civil Defense, Public Security, Ministry of Health and the Saudi Red Crescent Authority for the use of mass graves of contaminated bodies.

9. The processing of mobile lighting devices available to the Ministry and its branches in the regions and cities of the Kingdom in coordination with the Civil Defense to take advantage of them in emergency situations.

6-6- The functions of municipalities within the general plan for emergency pilgrimage

It has been identified in the following tasks:

1- To limit the potential of the mechanism and human resources, including the engineers, technicians, companies and advisory institutions dealt with by the ministry or its branches, which can be used in emergencies.

2- Removal of debris and debris from the area of the event and restore the situation to where it was, according to (a detailed plan) to show how the required operations.

3- Detection of food provided at the accommodation sites, while providing the necessary labor in those sites to maintain cleanliness.

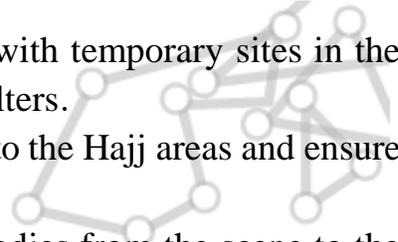
4- work on the control of meals and food ready, or cooked, continuously, and ensure their safety.

5- Providing the General Directorate of Civil Defense with temporary sites in the Hajj areas that can be used as shelters or emergency shelters.

6 - Maintenance and operation of the tunnels belonging to the Hajj areas and ensure the readiness of the means of safety.

7- Provide employment and transport mechanisms of bodies from the scene to the scene of the bodies with the provision of bags for the preservation of the dead, and also processing the dead, and then bury them after the issuance of death certificates and burial permits and the completion of health and security.

8- Taking the measures and precautions necessary to preserve the public health and health of the environment in the Hajj areas.



Functions of Municipal Bodies Within the General Emergency Plan in the Month of Ramadan

Provide the necessary equipment and mechanisms to cope with the emergency and various incidents in cooperation with the General Directorate of Civil Defense and the concerned authorities, and carry out its tasks in restoring the situation through:

The tasks of the Ministry of Municipal and Rural Affairs in the National Plan for Disaster Management:

- 1- Provide and equip the equipment, machinery and manpower to remove the debris and remove the debris from the area of the event and clean the site in order to restore the situation to what it was according to (detailed plan) to show how the required operations.
- 2- Provide the necessary labor camps accommodation operating to maintain the cleanliness of the site and the removal of equipment and supplies necessary to ensure that the accumulation of waste in the quartering area.
- 3- Disclosure of the supplies that are provided at the shelters when needed before they are submitted to those who have been accommodated.
- 4- Control meals and foodstuffs ready or cooked continuously and ensure their safety.
- 5- make arrangements for the maintenance of the tunnels in general and make sure the readiness of safety means.
- 6- In the case of a fire below a bridge. The case will be dealt according to the cable of His Royal Highness Prince of Makkah Region, Chairman of the Central Hajj Committee No. 3134 dated 4/4/1416 H.
- 7- Work to clean up the streams and drainage networks and remove all obstacles that prevent the flow of water in the form required and a sufficient period of time before the beginning of the season of Ramadan and monitor on a continuous basis and provide the necessary number of water pumps to be used when needed in coordination with the Ministry of Environment, Water and Agriculture.
- 8- Provide all necessary engineering and technical services and capabilities that can be used in response to disasters.
- 9- To remove all risks within its jurisdiction and to establish rules and regulations to ensure that this is achieved, and the work of checkpoints on sites that are forbidden to take risks in coordination with the relevant authorities.

6-8-

Functions of Municipal Bodies Within the General Plan for Medical

Evacuation:

It has been identified in the following tasks:

- 1- Transfer the deceased from the site of the disaster to the places dedicated to caring for the dead and the procedures for burying them.
- 2- Allocate spaces as close as possible to the site of the disaster to bury chemically contaminated dead.
- 3- Allocating areas near public burial sites to bury the deaths of chemically injured from hospitals in the event of this.
- 4- Provide manpower covering the work assigned to the transfer and burial of the dead and cleaning.
- 5- Provide water for development in the medical evacuation areas.

6-9-

Tasks of the secretariats of the regions and governorates of the Ministry of Municipal and Rural Affairs in the defense committees:

The competencies of the regional and governorate secretariats of the Ministry of Municipal and Rural Affairs in the Civil Defense Committees in the regions are as follows:

- A) Develop detailed plans to ensure the presence of engineers, surveyors, specialists and all the equipment and mechanisms of the municipality to be used in emergency situations, and provide the civil defense.
- B) Removal of buildings to fall, lifting debris and removing the effects of demolitions, especially in cases of disasters.
- C) To contribute to the creation of backup water resources and to support the civil defense with fire and human resources to help extinguish large fires.
- D) Setting technical instructions and requirements for safety requirements against disasters, especially earthquakes in public installations, especially in areas likely to be exposed to such hazards, and establishing rules and regulations and arrangements to ensure all types of buildings and other facilities meet technical and preventive requirements.

The list of the composition and terms of reference of the Civil Defense Committees includes a number of general provisions specified in the following articles:

Article 1:

The competent authorities shall provide a periodic technical report to the Department of Civil Defense in the region on the safety, suitability of the use of all facilities and facilities associated with them and their supervisors, and the availability of all civil defense requirements by means of safety, Fire and civil protection requirements such as shelters and specialized teams in the field of safety and fire prevention. This report shall be prepared by a technical committee formed by the competent technical authorities for the state-owned buildings. A report shall be sent to the party, which shall be prepared by a licensed engineering office, and the necessary regulations shall be established to ensure this.

Article 2:

These entities should develop a general plan and detailed plans that define the responsibilities and tasks assigned to individuals. And its affiliated sections in relation to the civil defense works to carry out the required works through these plans.

Article 3:

The parties referred to in Article (1) shall carry out theoretical and practical applications on how to implement civil defense works in general to ensure the safety of regulations and plans, and to identify and deal with the negatives in coordination with the Department of Civil Defense, not less than once every six months.

Article 4:

Without prejudice to the provisions of Article (1), the aforementioned parties shall submit a comprehensive technical report every six months to the Civil Defense Committee for the implementation of the requirements of civil defense and the effectiveness of those achievements and the future proposals which it deems necessary for the Committee to decide. And solve the problems they face.

Article 5:

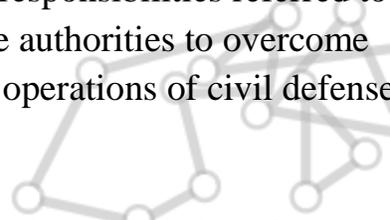
These tasks, responsibilities, instructions, and regulations referred to in these Regulations shall be reviewed by the concerned authority each year to take into consideration the developments and changes that may occur in order to ensure their effectiveness and achieve the objectives required of them.

Article 6:

The Civil Defense Department in the region shall undertake coordination and follow-up to ensure the implementation of the tasks and responsibilities referred to in this regulation, and review all reports submitted by the authorities to overcome the difficulties and facilitate the performance of all joint operations of civil defense measures and actions.

Article 7:

All the parties concerned in this regulation shall draw up alternative plans for the basic plans to ensure that their tasks and activities are carried out properly under all circumstances.



7-International bodies related to disasters

There are a number of international agencies and organizations emanating from the United Nations that have the task of supporting the practical implementation of disaster preparedness plans and coordination of humanitarian assistance. They also play different roles in disaster management, including the following organizations:

Organization

Tasks assigned to it

World Health Organization(WHO)

Operational assistance for epidemiological situations in times of disasters and health preparedness

United Nations Disaster Relief Office (UNDRO)

Coordination of information - Disaster assessment - Planning for mitigation and

Food and Agriculture Organization (FAO)

Evaluation of agriculture, weather advisories and early warnings of all food information

United Nations Children 's Fund (UNICEF)

Emergency vaccination and feeding programs Water programs and shelters

United Nations High Commissioner for Refugees (UNHCR)

Emergency planning to accommodate refugee flows

World Food Program (WFP)

Assessment of emergency needs for food relief and logistics of food and non-food items

World Meteorological Organization (WMO)

Information on tropical storms and weather variability

United Nations Development Program (UNDP)

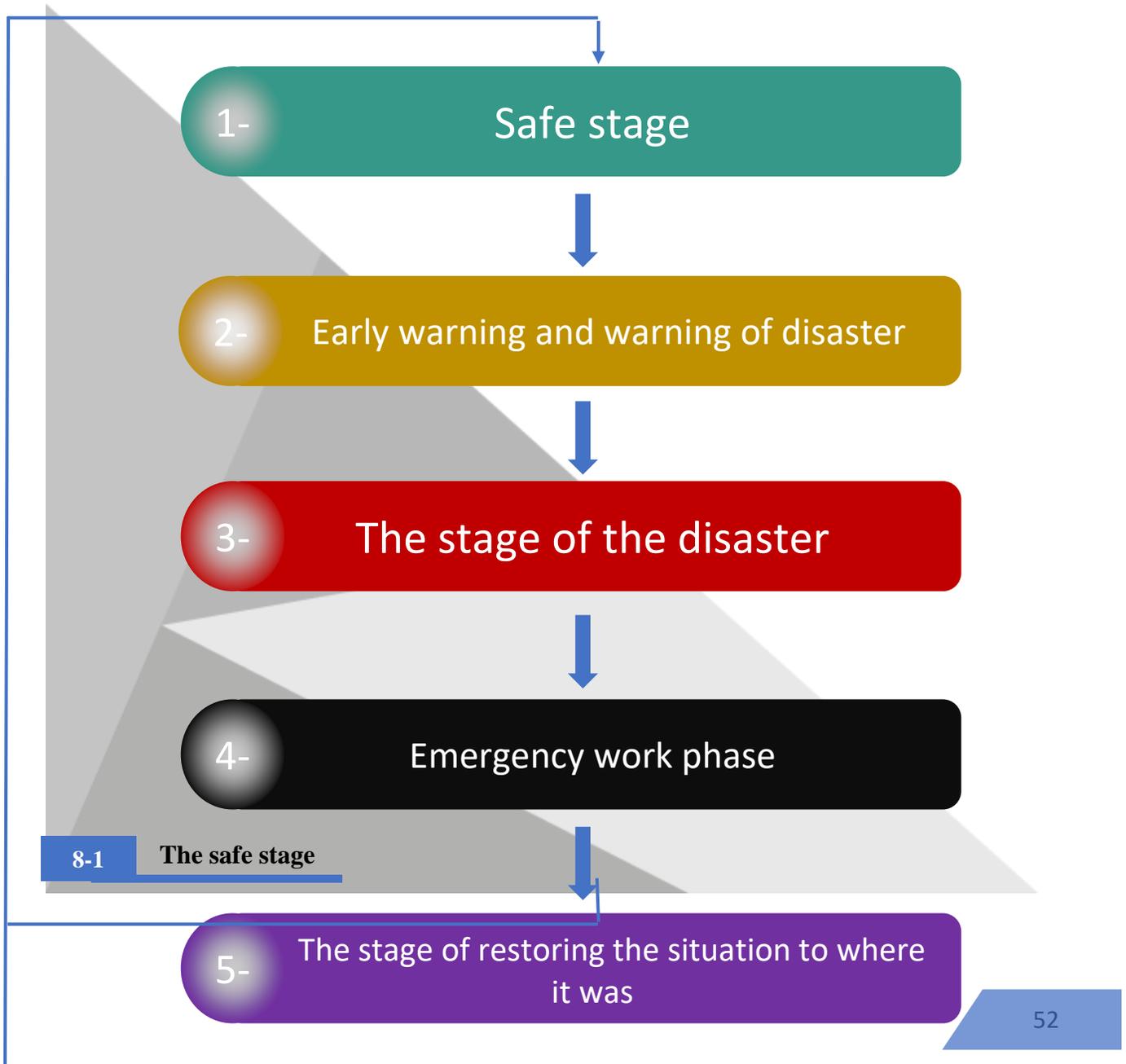
Disaster Relation to Development - Technical Assistance to Disaster Preparedness Plans and Strategies

Global Facility for Disaster Reduction and Recovery (GFDRR)

Assistance to disaster-affected countries and their reconstruction

8- Detailed disaster Phases

according to the functions of the municipal organs and the tasks and activities carried out by the system. In the framework of its regular work and its relationship to disasters in order to adopt the necessary strategies and adopt the procedures to help to check the maximum possible preventive impact, the officials in the system to adopt a systematic approach to what is aimed at early control of what could develop into a disaster or what can lead To double the impact of disasters according to their type, through the functions entrusted to them in full independence, if possible, or in coordination with other government agencies in cases where this is required. To illustrate this, five stages of time for the development of a particular situation can be identified as catastrophic without being understood to be in conflict with disaster plans, as follows:



This is the stage in which municipal bodies perform their usual service functions taking into consideration safety standards from hazards. Both at the level of individuals and establishments or the city, through various licenses for shops and activities. Construction permits, urban planning works, street construction, sewage works, flood management and work. Environmental sanitation, waste disposal services, etc., where the municipal apparatus through its functions can first be prevented. The development of a situation to the level of disaster, or contribute to take a lot of actions that reduce the risks and effects. Consequences of a pre-disaster. To illustrate this, taking into account water issues and floodwaters that form natural drains of rainfall. The physical planning of the neighborhoods, as well as the topography of the sites, will prevent the occurrence of dangers that may reach the level of the disaster according to the concept mentioned earlier as a result of the accumulation of rain when it rains heavily in the neighborhoods without discharge. And the emergence of floods, which is a continuing financial burden on citizens on the one hand and government agencies on the other.

This burden will be dealt with in the long run as a normal part of the work of the parties without being aware of the catastrophic aspect, which is the repeated material losses, where the principle of treatment will be taken in a manner while it was possible to follow the principle of prevention which saves a lot of money and effort. For further clarification, it is possible to refer to the results of the accumulation of rain in the areas of the lowest areas in the neighborhoods without drainage, from the experiences that have occurred in some cities of the Kingdom in the past, and from the following:

- A- Pollution of the land and the entry of contaminated water into buildings and sometimes leakage into ground water tanks.
- B- closure of the streets and the inability to use for the crossing of small cars.
- C- Effect in the asphalt layer and pavements.
- D- Traffic accidents.
- E - the possibility of interruption of the means of communication.
- F- Difficulty in transporting patients and practicing the life activities of the population.
- G - the spread of unpleasant odors and the proliferation of insecticide germs.
- H- The problem is exacerbated when rainfall continues for several days.

One of the interim measures that are usually taken to address this situation after it occurs is the following:

- A- Suction and transfer of water to open areas, if any Emergency measures for those affected
- B- Emergency measures for those affected.
- C- Repairs to pavements and damaged asphalt layers;
- D- Double the work of cleaning and transport of waste and spraying pesticides.
- E- Restoration and repair of damaged buildings

Permanent solutions to this situation include the establishment of water outlets through flood drainage projects and the ongoing maintenance work.

At the safe stage, the following actions are taken:

- A -Prepare plans to deal with potential disasters of various kinds.
- B- Organizing and coordinating with the participating parties.
- C- Training work for the participating human cadres.
- D- The equipment and equipment of the machinery and equipment and their availability, maintenance and spare parts.

To achieve the above, the municipal system can benefit from the characteristics of this stage, which can be summarized as follows:

- 1- Adequate planning, implementation and preparation time.
- 2- The appropriate time to deal with the issue of disasters.
- 3- The possibility of relying on sufficient data and information on the subject of the expected disaster.
- 4- Lack of the need for the participation of government agencies in the planning and implementation stages in a number of disasters.
- 5- Easy follow-up, evaluation and development of disaster action measures and actions.

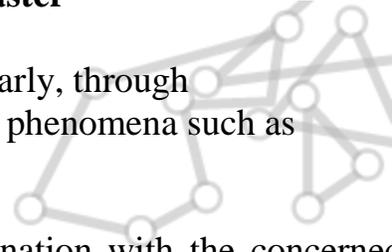
8-2-

Warning and Early Warning Stage of Disaster

A phase in which a disaster can be predicted relatively early, through meteorological instruments and early warning of natural phenomena such as hurricanes, storms, heavy rains and colds.

Actions to be taken include:

- 1- Prepare and prepare to face the situation in coordination with the concerned authorities in accordance with the plan.
- 2- Take appropriate precautions according to the type of potential disaster.
- 3- To increase control and follow-up of the areas in which disaster can be affected.



8-3-

Disaster and Emergency Action

These two phases are coincidental as emergency work is the result of a disaster and the plan of operations is activated

To confront them by the type of disaster.

8-4-

The stage of restoring the situation to what it was

Which is the stage after the disappearance of the danger of the disaster and the survival of some of the effects resulting therefrom, and the plan to restore the situation is activated

Including the maintenance and repair work of the damaged facilities and the restoration of normalcy by returning the affected persons to their homes.

9- Disaster Preparedness Plans

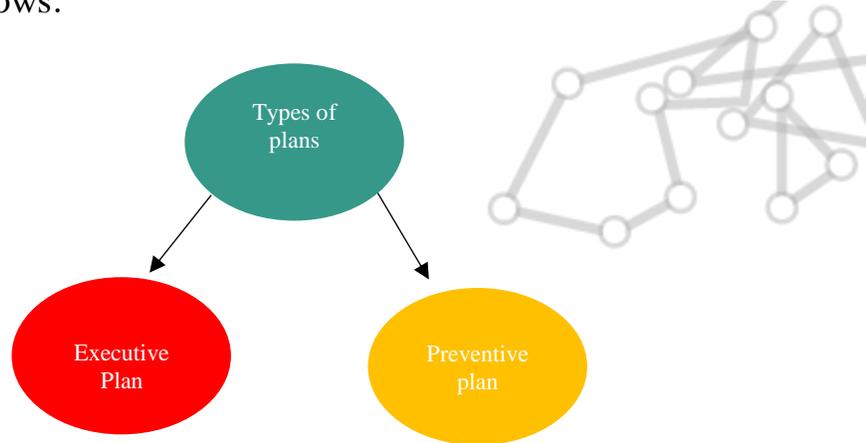
The concept of the plan is closely related to the objective to be achieved, and the goal is to begin when there is a risk that exists or is expected, and in this light the plan can be defined as:

9-1-

Concept of Plan

A set of theoretical and practical measures, procedures and precautions taken to prevent, minimize, or counteract the various hazards in order to minimize human and material losses and thus restore the status quo.

It is possible to distinguish two main types of plans in relation to the work of municipal bodies as follows:



9-1-1- Preventive plan:

It includes a series of activities, procedures and municipal work carried out by the Authority in accordance with the regulations and functions assigned to it on a regular basis. Its objectives are to prevent or mitigate the effects of the disaster to the extent possible and to cover the work of urban planning and service projects. Environmental projects and infrastructure projects. And all procedures related to building permits and the application of Saudi building codes, and licenses to grant shops or operating conditions related to safety, and therefore the preventive plan is the responsibility of all departments of the municipal system.

9-1-1-1- Draw scenarios, simulations and risk analysis models:

First: scenario concept:

The scenario is "a set of specific steps and actions that will collectively address the disaster and the developments that may occur," noting that:

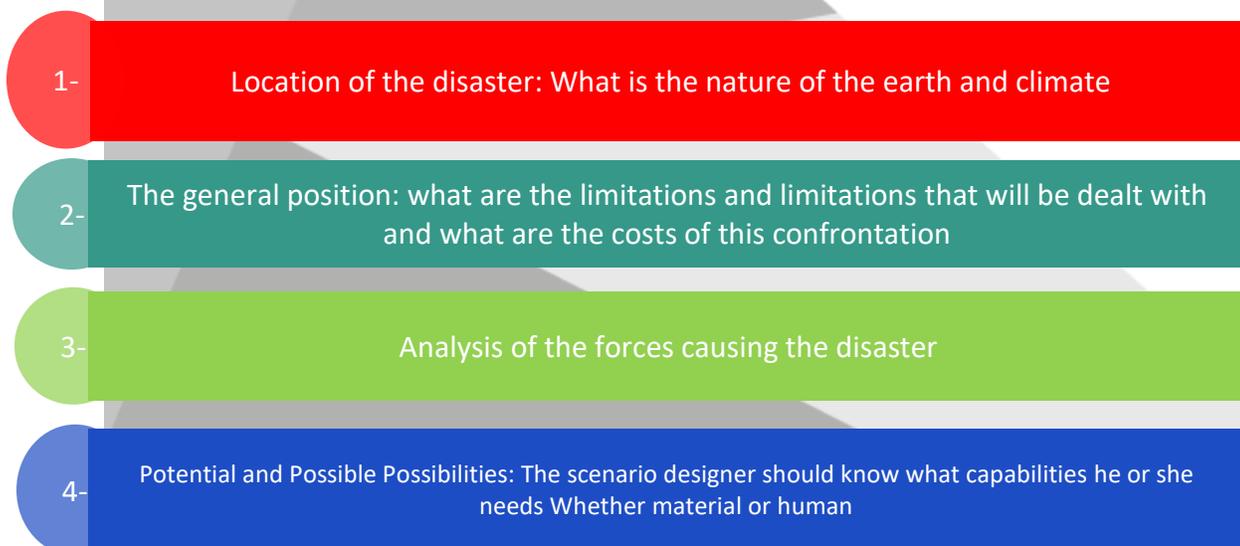
- 1- scenario is important and vital to the success of the plan to address the disaster.
- 2- Scenario Diagnosis and treatment At the same time, it is a perception of what can happen with a clear definition of the roles, resources and capabilities needed to cope with the disaster.
- 3- Scenario A presentation of the possible developments of a disaster through the release of imagination and the use of brainstorming method, which allows to give perceptions of different paths of disaster and possible reactions and developments of the disaster.
- 4- The disaster scenario includes the implementation tools, the place of implementation, the timing of the tasks and processes, their follow-up, the size and type of results achieved at each stage and the responsibility for implementing each part of the scenario.

Second: the objectives of preparing disaster scenarios:

- 1- Mitigation of the time component needed to deal with the disaster. The pressure of the element of time increases when there is a news of the disaster.
- 2- Contribute to raising the skills of the disaster management team to carry out the tasks required of them through training on the scenarios developed.
- 3- Inform decision makers of all possible dimensions of decisions taken in the face of disaster.
- 4- To achieve the optimal use of resources and material and human resources in the face of disaster.
- 5- Facilitate the decision-making process during the confrontation after identifying changes that differed from the assumptions on which the scenarios were based and then make the necessary adjustments to the scenarios to be usable.
- 6- Discover deficiencies and weaknesses in planning, organization and coordination, and other elements of the face of the disaster.
- 7- The opportunity to study the decisions to be taken in advance in the absence of psychological pressure or material.
- 8- Access to new ideas and non-stereotyped solutions.
- 9- Avoid critical situations that may arise during disaster management.

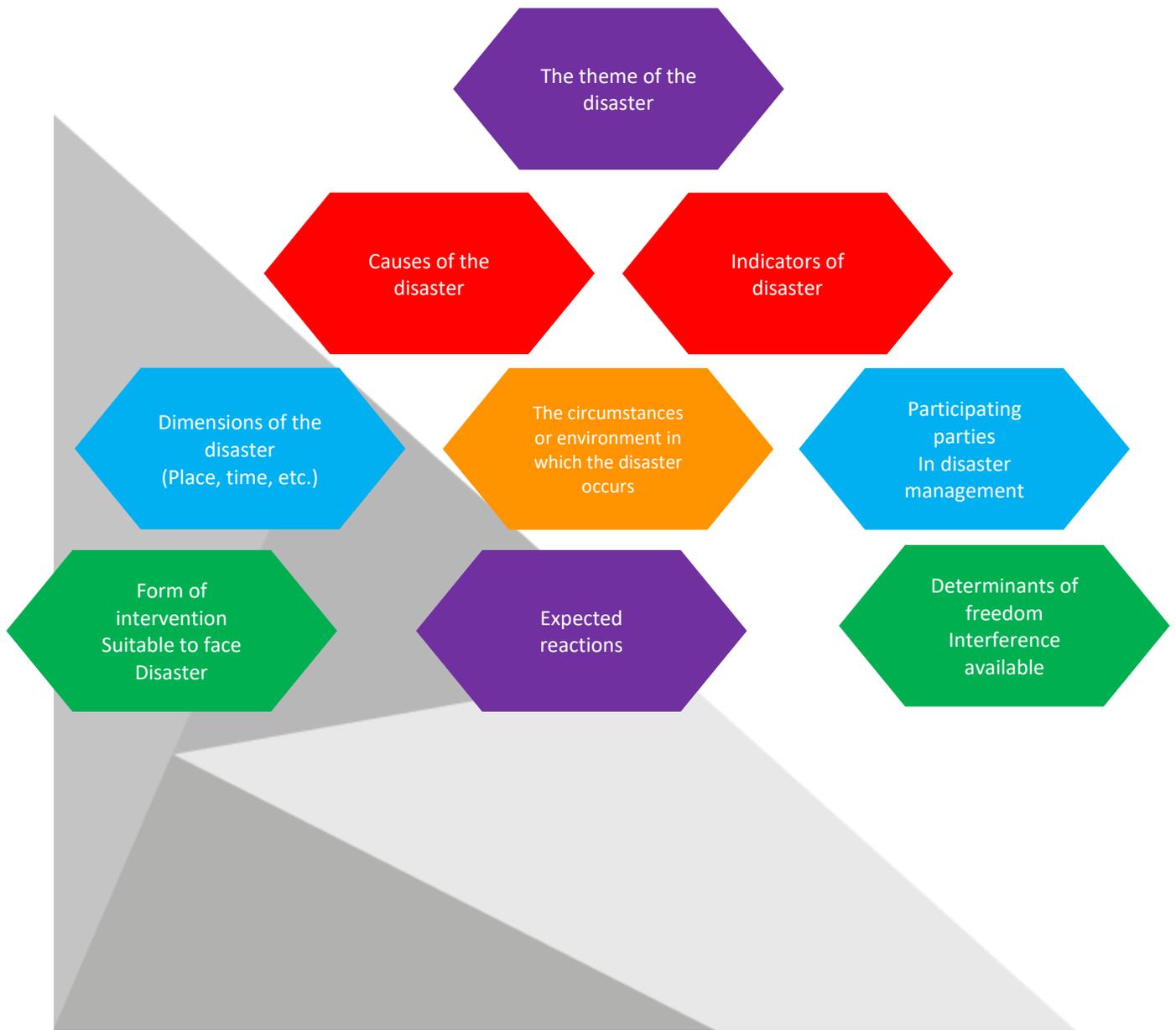
Third: factors governing the scenario of confronting the disaster:

The following figure illustrates the factors that determine the scenario of confronting the disaster:



Fourthly: Scenario Components:

The following diagram illustrates the scenario components:



Fifthly: The main structure of scenario drawing:

1. Form of intervention to cope with the disaster.
2. Limits of power, responsibility and ability to act without reference to others.
- 3 - The location of the confrontation and its limits and the space allowed to be dealt with.
- 4 - To know the evolution of the situation in the disaster and therefore change the deal according to new developments.
- 5 - emotional and emotional factors to be taken into account in the face of the disaster.
- 6- To take advantage of the fixed geographic and spatial factors (roads, bridges, airports, etc.), humanity (customs, traditions, etc.) to support the implementation of the scenario for its success and the elimination of disaster.

Sixthly: The Worst and Best Screenplay:

- 1- The worst scenario involves failing to cope with the disaster as planned and therefore the treatment tools are ineffective, and therefore determine what the results will be if this happens and what the expected losses are and how long.
- 2- The best scenario includes success in the face of the disaster as prescribed according to the scenario.

Seventh Implementation of disaster response scenarios through electronic simulation:

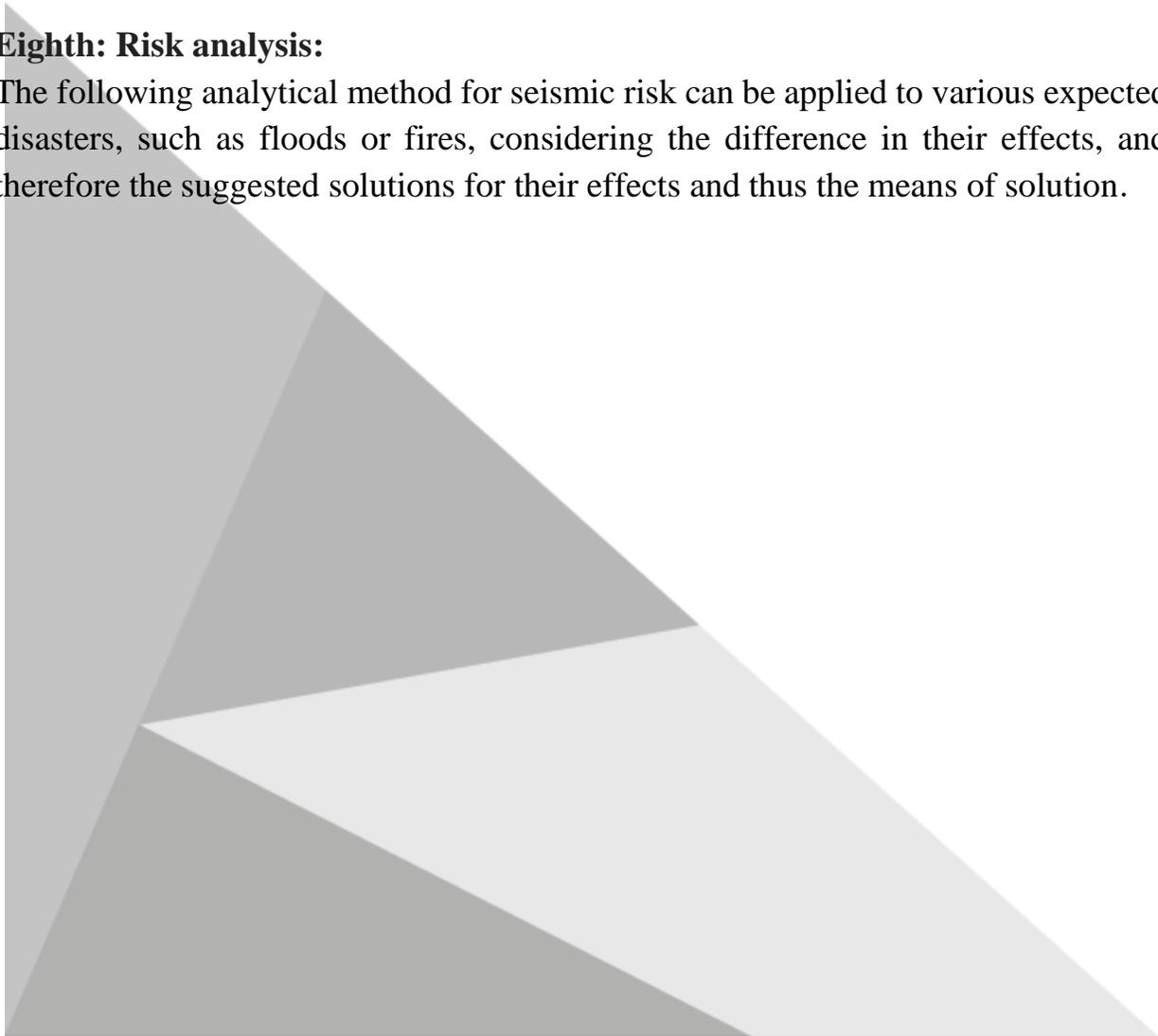
The simulation method is defined as "an elegant tradition that matches and is completely similar to the original reality so that the circumstances, circumstances and prospects of the actual reality of situations and events can be coexisted to increase the ability to deal with such situations in working life"

The e-simulation approach to disaster-response scenarios helps:

- 1- Learning by doing.
- 2- Acquiring skills and accumulating experiences through practical experiments on simulators.
- 3-Take the opportunity and time to think about how to face the disaster, by stopping the simulation for a period of time, and then continue after that.
- 4- In the event that the trainee is the leader of the disaster-fighting team, the simulation allows him to monitor the performance of his team and thus to know their abilities and level of performance.
- 5- Simulation allows the introduction of expert experiences in the scenario in place and registration, and therefore do not need to exist during the implementation.

Eighth: Risk analysis:

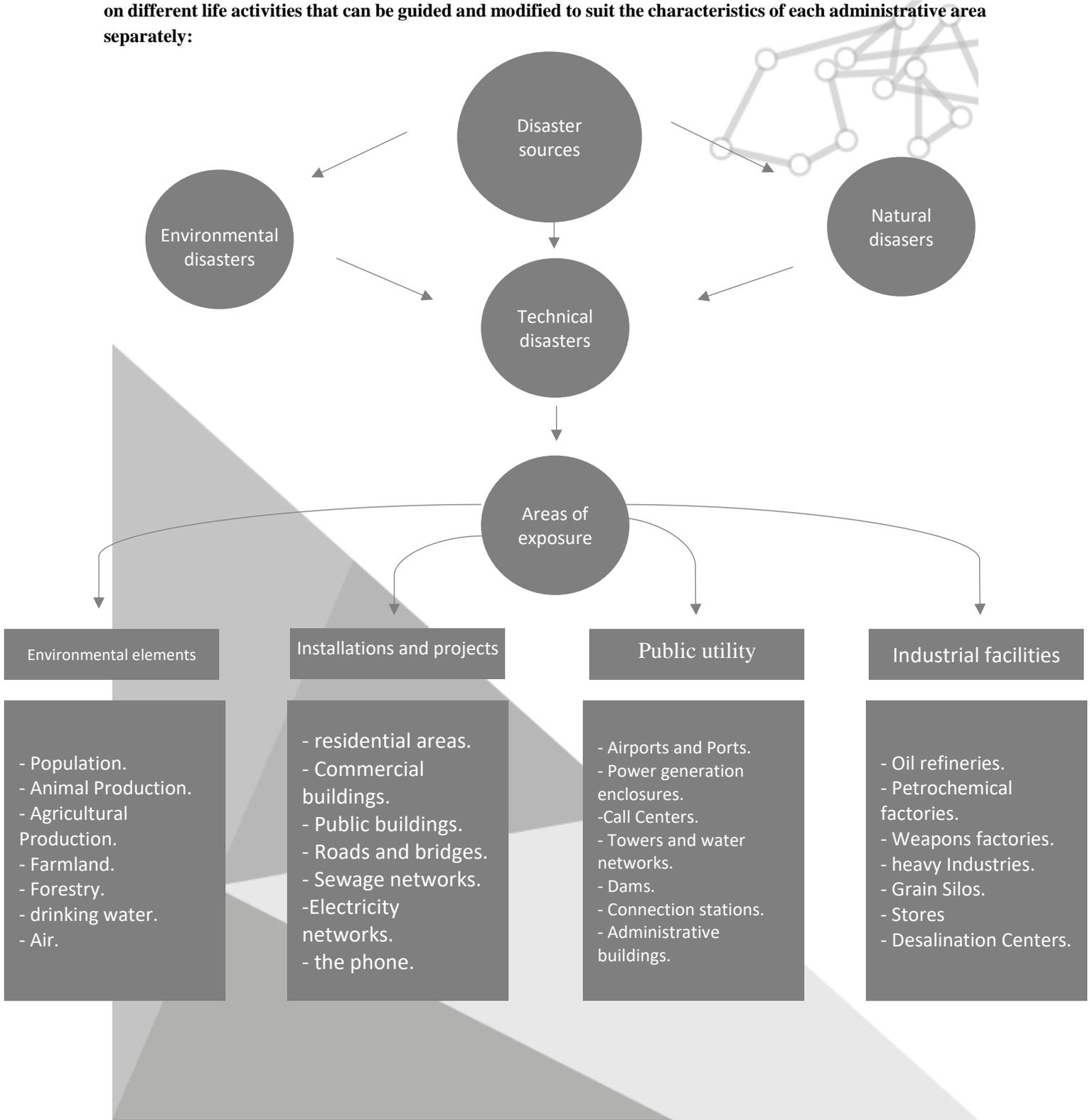
The following analytical method for seismic risk can be applied to various expected disasters, such as floods or fires, considering the difference in their effects, and therefore the suggested solutions for their effects and thus the means of solution.



The following table shows one of the methods of risk analysis for a type of disaster is earthquakes:

The risk of an earthquake areas of influence				
	Buildings	Population	Infrastructure	The Soil
The Problem	<ul style="list-style-type: none"> - Collapse of buildings. - cracks. 	<ul style="list-style-type: none"> - Deaths. -Injuries. 	<ul style="list-style-type: none"> - Destruction of water networks. - Destruction of networks. - Sewage. -Cracking of roads and bridges. 	<ul style="list-style-type: none"> - landslides. - Dissolve soil. - Immersion. -Rock Collapse.
The Target	<ul style="list-style-type: none"> - Prevent crashes. - Mitigation of collapses. -Prevent cracks. 	<ul style="list-style-type: none"> - Reduce mortality. - Injury mitigation. -Achieving psychological security. 	<ul style="list-style-type: none"> - protection. -Reduce impact. 	<ul style="list-style-type: none"> -Suitable soil for construction and properties of resistance. -Treatment of weak soil.
The Information	<ul style="list-style-type: none"> - Physical characteristics. Building Materials. - Structural and architectural designs. -Implementation. 	<ul style="list-style-type: none"> - Demographic characteristics. - Cultural background. -Population activities. 	<ul style="list-style-type: none"> - Charts. - Technical Specifications. - Network chronology. -Maintenance programs. 	<ul style="list-style-type: none"> - Geo-technical studies of soil, rocks and water. -Soil tests.
The Outputs	<ul style="list-style-type: none"> - A defect in the physical controls. - Weak structural strength. - Weak technical specifications. -Lack of engineering design. 	<ul style="list-style-type: none"> - Lack of safety factors in the urban environment. -Lack of social awareness. 	<ul style="list-style-type: none"> - Weak in specifications. -Submitted in implementation. 	<ul style="list-style-type: none"> - Determination of soil qualities.
The Solutions	<ul style="list-style-type: none"> - Technical regulations. Building code. - Technical specifications and standard. -Engineering supervision of implementation. 	<ul style="list-style-type: none"> - Obstacles to customs and traditions. - Planning and engineering systems. -Prior Awareness. 	<ul style="list-style-type: none"> -Improved technical specifications. -Developing maintenance programs. 	<ul style="list-style-type: none"> - Soil studies before construction. - Avoid planning weak soil sites. -Deep identification and type of foundations.

Risk analysis for its effects and means of overcoming it within the preventive plan measures:
The following analytical form shows a general methodology for determining the impact of different disasters on different life activities that can be guided and modified to suit the characteristics of each administrative area separately:



It is possible to identify the need to prepare a plan for each type of disaster based on the following elements:



The safe phase is of particular importance in reducing the impact of certain types of disasters or identifying their hazards, which is part organs, including:

- 1- Taking into account the protection and safety factor of various disasters in the urban planning work.
- 2- Activating fire safety regulations in buildings.
- 3 - Application of building code (seismic code) in the designs of installations located in seismic zones.
- 4- Implement technical and operational regulations and requirements for various projects and services and ensure compliance with the technical, health, environmental and standard specifications approved for them.
- 5- Design water and sanitation networks to cope with disaster conditions and work to improve and develop their technical and standard specifications.
- 6- Application of instructions for the supervision of engineering on the implementation of buildings.
- 7 - Application of instructions for the periodic maintenance of facilities.
- 8- Participate in the design and activation of public awareness programs related to disaster prevention.

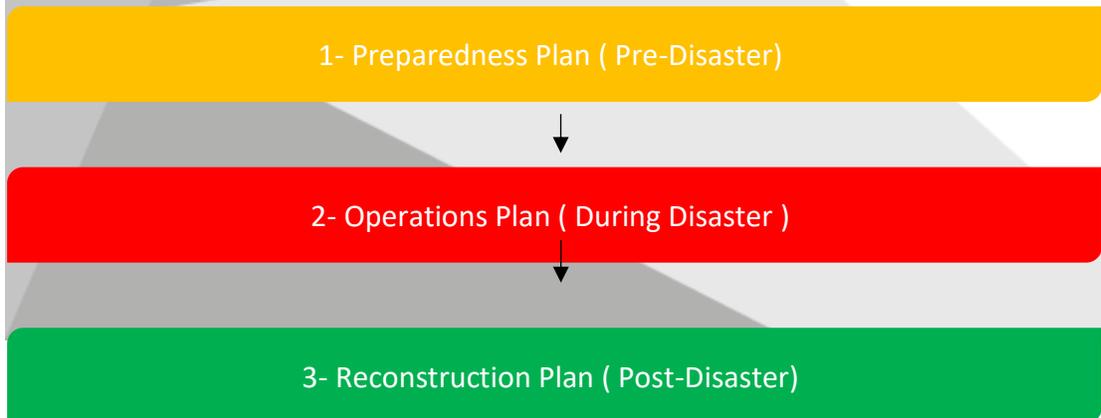
9-1-2- Operational Plan:

It deals with measures, activities and activities prepared to deal with a potential disaster, before they occur, and then deal with them when they occur in order to mitigate their effects, and then work to restore the conditions that result from them to what they were.

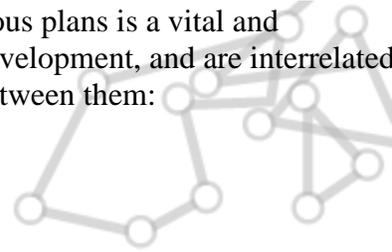
It is primarily self-sustaining, and the operational plan is the responsibility of specific departments within the system such as management

Operation and maintenance and related emergency task forces as will be explained later.

The plan can be divided into three types of plans dealing with disasters at different stages As follows:



It should be borne in mind that the process of preparing the previous plans is a vital and continuous process that requires constant review, updating and development, and are interrelated. The following figure summarizes the nature of the relationship between them:



Types of executive plan:

- 1- Plan of preparedness (safe phase)
- 2- Plan of operations (disaster phase).
- 3- Recovery Plan (post-disaster phase).

10- Target disaster response plans

Is to achieve full readiness of the party entrusted to participate in the face of the disaster, including municipal organs to neutralize the element of surprise as far as possible, and to achieve the greatest possible performance to contain and reduce the losses resulting from it as well as the repercussions that may be caused through coordination with the participating parties and the development of measures and precautions achieved.

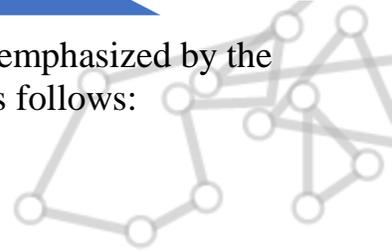
10-1- Causes of disaster planning:

- 1-reduces the element of surprise to emergencies and disasters.
- 2- Increase the effectiveness and timeliness of emergency and disaster response.
- 3- Helps to ensure consistency of emergency and disaster response and relief work.
- 4- Help avoid duplication.
- 5- An effective way to build strong relationships with implementing partners from different parties.
- 6 - achieve the optimal use of resources and possibilities.
- 7- reduces the decision-making to cope with emergencies and disasters on arbitrary and personal grounds.
- 8- Contain emergency and disaster and reduce the resulting losses.
- 9- Achieves coordination with the parties involved in the management of emergency and disaster and the development of measures and precautions achieved.

11- The framework of municipal bodies on disaster preparedness

This framework includes the main topics that should be emphasized by the municipal bodies when preparing their plans, which is as follows:

1. Determine the exposure to the disaster
2. Planning
3. Coordination and participation
4. The information
5. Finance
6. Training



11-1 Determination of the percentage of exposure to the disaster

It is known that each administrative area specific demographic, geographic, natural and economic plans and can in the light of awareness of the expected disasters in their scope, and to gauge the extent of their impact and to meet the appropriate strategies, and prepare them with human cadres, equipment, Sufficient for those characteristics and not anticipated by the expected consequences of the disaster.

11-2 Planning

Plan to advance perceptions of future objectives in addressing the disaster by type. Natural and requires separate plans for each type of disaster. Or technical.

In the preparation of a plan it is essential that planners take into account the factors that are:

- A) Critical to determining the objective or objectives to be achieved through the plan.
- B) The plan should contain an organized set of activities and levels to achieve the goal.
- C) To accurately define the tasks and responsibilities of all the elements involved in their implementation.
- D) Not to interfere with the plans of other parties and to observe their applicability without hindrance.

11-3 **Coordination and Participation**

Action to address the disaster requires the participation of a number of government agencies. Each of which is concerned with specific activities and tasks, coordination among them becomes necessary in the various phases of the disaster and the resulting corruption of plans and the loss of efforts. All disaster stakeholders will ultimately work as a team under unified management and leadership.

11-4 **The Information**

The importance of information to the agencies involved in the face of disasters and other information that can be used and which are the source of municipalities, such as urban plans. Road networks and infrastructure projects, and urban and demographic characteristics in general. And the natural fabric of the administrative area, municipalities can exchange information with the participating parties of their importance to each of them. There are geological, climatic, environmental, health, agricultural and safety information for fire safety, and the municipal authorities can request them from the authorities as an important part of the preparation of plans. On factual information and data. And bored with those who can benefit from the information provided by the municipal agencies in the preparation of their plans.

Funding

11-5

The highest who are devoted to the subject of disaster response. With regard to the work of the municipal bodies, funding is limited to the needs of the tasks entrusted to it through the provision of mechanisms, equipment and human cadres participating in the framework of its general budget, and from the responsible authority in the municipal district, the availability of such equipment and machinery or the need to secure more. As well as the provision of spare parts, and the necessary maintenance to ensure their readiness at any time, and includes within the two possible alternatives of insurance such as temporary rent of equipment when needed. The concept of funding also includes the training required by human resources through specialized courses. And work outside the official working hours. And what is required to secure drinking water and sanitation facilities and supplies, both at the disaster site or shelters.

Training

Includes the critical and practical training and practitioners in the framework of disaster management include the participation of all sectors of government, including municipal bodies. It aims to increase the mental and physical efficiency of the participants and to explore weaknesses in the implementation of the plan for all concerned elements of government agencies. Disaster management is one of the most important strategies.

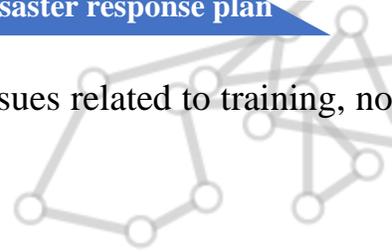


12- Elements for the preparation and implementation of the disaster response plan

the success of the plans. The guide will address some issues related to training, not really.

The municipal apparatus consists of four elements

- Administration.
- Human resources.
- Machinery and equipment.
- operations room.



12.1 Administration:

It consists of the task forces responsible for preparing the plans and coordination work and managing and directing the civil teams participating in the emergency work. His Highness the Minister issued a circular No. 53980 and date 17/11/1432 H ,To establish a special department for disasters in the ministry, secretariats and municipalities under the name of (General Department of Disasters) to take up the topics related to the response to disasters, based on the guidance of the High Holy Quran No. 7 / B / 15424 and the date 20/11/1421 H , Which is directed primarily to the Royal Highnesses Minister of the Interior and the President of the Civil Defense Council. The directive includes the establishment of departments or units in its organs concerned with this matter and to assume their functions under the plans prepared for these purposes as well as for the training and supervision of the executive teams according to two basic considerations:

- Preparing for rapid intervention in the face of disasters of various kinds, both natural and technical, and the consequences of terrorist acts and sabotage.
- The field units carry out their tasks and tasks in coordination with the civil defense and other bodies through the coordination operations rooms and according to operational plans and operations that define the tasks and roles of all the parties involved in confronting the disaster.

The role of the Working Group can be summarized below:

- Develop appropriate disaster plans according to their quality in coordination with the participating government agencies.
- The importance of steering and leadership of the human and technical cadres representing the municipal apparatus in relation to the work of disasters in various stages.
- Horizontal and vertical coordination at the different administrative levels in relation to the activation of prepared plans (e.g. training / finance / adaptation / processing).
- Organizing the reception of equipment and special mechanisms or leased according to need and imposed by the state of emergency.
- Documenting the municipal works related to the participation of the municipal system in the face of the disaster. Both in the period of preparation and implementation. Or reinstatement.

It is the responsibility of the team to take into account the sufficient number of human cadres that the emergency situation requires permanently, and this requires a good and practical organization for regular and forced leave and theoretical or practical courses that may involve officials.

This is part of the disaster plan. The success of the plan always reinforces the creation of a reserve of human resources within the municipal system whenever possible

Who are not previously registered with the technicians and officials with the availability of scientific and theoretical training.

It is important to take into consideration the distribution of responsibilities and the identification of all the elements involved. There is a direct supervisor of the cleaners who receive guidance from him and others to the operators of equipment and machinery from engineers, technicians and drivers

Such as for maintenance workers and so on as dictated by the emergency situation

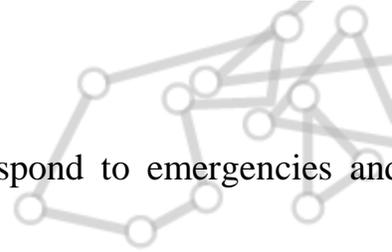
The Director of the General Department of Disasters and the head of the emergency task force can use the various leadership, agencies and departments of the Secretariat to assist him in implementing the plan administratively and field ally within the framework of the tasks entrusted to the Secretariat.

And the organizational structure of the proposed General Department of Disasters in light of these tasks.

It is proposed to be as described in the following form, which includes the following departments

- Planning Department:

Which undertakes the necessary planning work to respond to emergencies and disasters.



- Operations Management:

Which provides the processing room and provide staff in the presence of emergencies and disasters to manage the confrontation, and the provision of communication services (940)

To citizens and residents as will be explained in the operating room component, and provide various means of communication, including hotlines with other government agencies, and pass the communications to the competent departments of the Secretariat.

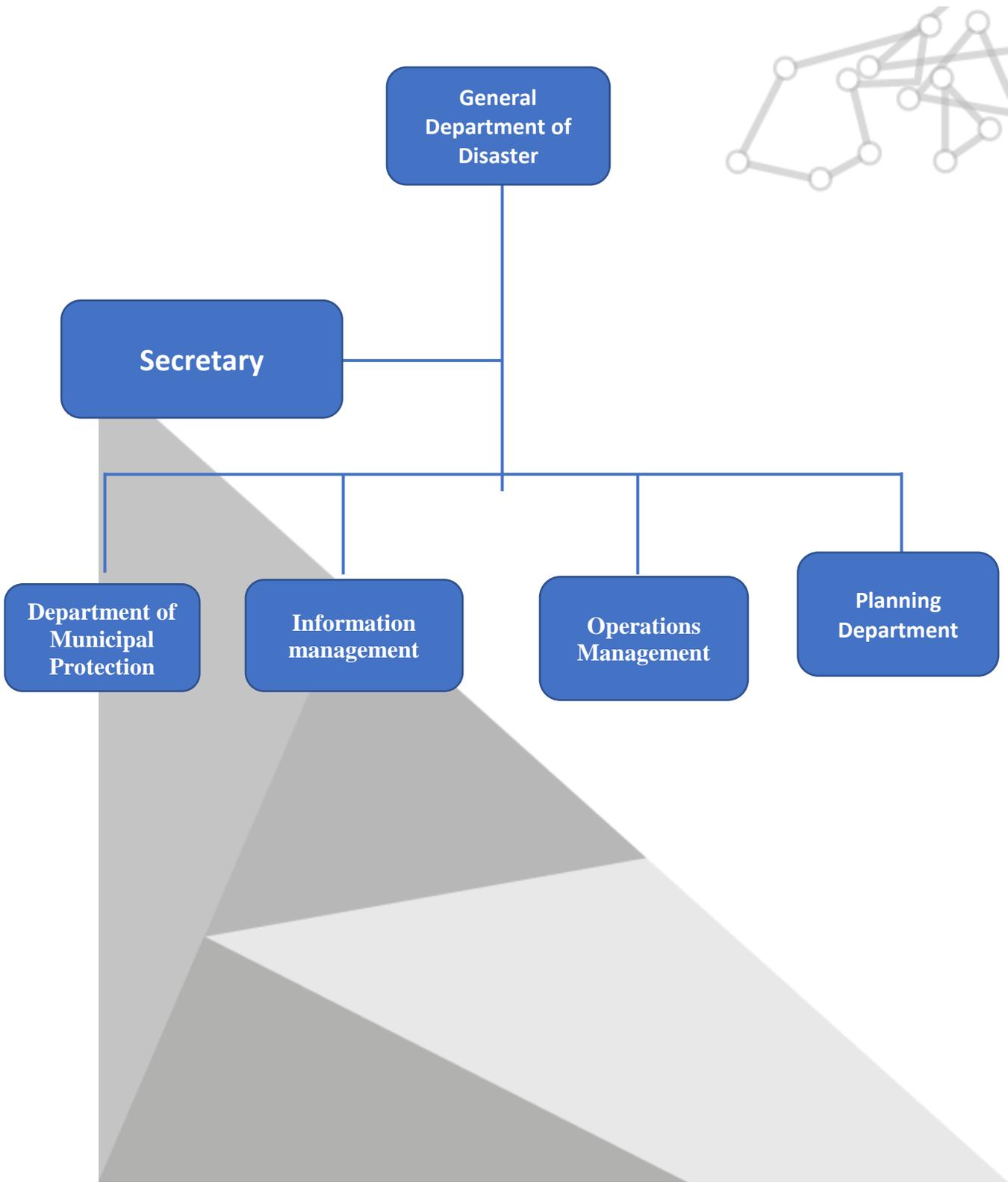
- information management:

Which carries out the tasks of collecting and analyzing information, preparing and presenting maps, documenting emergencies and disasters, collecting reports, preparing them and submitting them to the competent authorities.

- Department of Municipal Protection

Which prepares the programs of hypotheses, prevention and awareness, preparing and analyzing risk scenarios, and training human cadres in the secretariats, municipalities, citizens and residents in the face of emergency and municipal disasters.

Proposed Organizational Structure for Public Disaster Management



The Director of the General Department of Disasters and the head of the emergency task force can use the various heads of the various departments and departments of the Secretariat to assist him in implementing the plan administratively and in the field within the framework of the tasks entrusted to the Secretariat. The emergency work team that works with the director of the department and the team leader includes officials from engineers, technicians, maintenance and cleaning workers and drivers who participate directly in the disaster response work with other government agencies and are associated with the heads of field teams to receive guidance from them according to the tasks and work required of each of them has been referred to those tasks previously.

It is important to explain the work plan to them in advance. Distribute their assigned roles, and involve them in theoretical and practical training to raise their skills when implementing the plan.

The human cadres concerned with the implementation of plans to cope with the disaster must be competent and personal ability to deal with the disaster, and this is not necessarily related to the functional levels they occupy in the device, and therefore it is appropriate to choose them very carefully and focus on training and prepare them to the extent that they can perform the tasks entrusted Their highly efficient, Such as when it is necessary to use the equipment to lift the rubble in order to rescue the detainees under it, where this requires high skills from the implementation team so as not to worsen the situation, and note that there are government agencies for rescue and ambulance such as civil defense, the Red Crescent, and the guiding and executive and time and skill Major in the rescue work and set the size of human cadres associated with the size of the device, And the nature of potential disasters, and the EMWG should therefore note this. The head of the emergency task force of the municipal system, the head of the field team at the disaster sites and the head of the field team at the shelter sites should be identified and their responsibilities can be defined as follows:

Responsibilities of the Chairman of the Emergency Task Force

A number of tasks and responsibilities are carried out at different stages of the disaster, which can be summarized as follows:

- 1- Management of the meetings of the group and advocacy, and the discussion and discussion of emergency topics with the members of the team work to secure the needs of the team with the responsible authorities in the municipality or offer to the head of the device for approval and secure.
- 2- Participation of the Task Force in proposing appropriate training programs for field teams assigned to participate in disaster work.
- 3- Participation of the working group in the preparation of plans for disasters in various stages and raise them to the head of the device for approval.
- 4- Coordination with the civil defense operations room in disaster management.
5. Assign responsibilities to the team and select and direct field officers.
- 6- Ensure the readiness of machinery and equipment on a permanent basis by following up with the person responsible for the provision of such mechanisms, and to develop possible alternatives if emergency situations require it.
- 7- Collecting and analyzing information about the expected disasters and making appropriate plans with the working team.
8. Updating the information and data of field teams, machinery and equipment.
- 9- Raising the emergency work needs of the head of the agency.

Responsibilities of the head of the field team at disaster sites

1- Directing and managing the human cadres in disaster sites in coordination with the civil defense, including guidance, for example:

- (A) the order to remove the rubble to clear the detainees (in the case of buildings collapsing)
- (B) Order the removal of bodies from the site of the disaster by ambulance to the designated storage areas
- (C) lifting and removing the rubble to open the streets (in the case of the collapse of buildings)
- (D) discharge of flood water by suction by means of white waters or pumps or finding temporary channels if possible
- (E) Supervise the disaster site cleanup works. Transport waste and spray pesticides as needed.
- (F) Oversee the post-disaster work by preparing a report for the team leader that includes an opinion on the importance of evaluating the buildings and facilities

technically affected, and the procedures to be taken by the municipality's technical department

2- Evaluate the situation to identify the needs of the required services and report it to the head of the work team in the operations room of the municipality.

3- Documentation of the disaster in the field through forms prepared for this purpose, including adequate information thereon and preparation of a final report to the team leader.

4 - Receiving the cadres and additional mechanisms required for support and activation.

5 - Maintain the safety of the workers and the safety of equipment and machinery.

6 - not to make any press statements or television

12-2-3-

Responsibilities of the Field Team Leader at Shelter Sites

It is one of the tasks assigned to the municipalities involved with the concerned authorities in selecting and coordinating shelters where needed in the open areas, while providing the necessary labor for their cleaning and the detection of food for those affected in those sites.

1- Coordination with the participating parties, in particular the civil defense, to assess the necessary needs.

2. Evaluate the accommodation location in terms of size, adequacy of basic services and report it to the team leader.

3. Direct and manage those responsible for cleaning containers and spraying pesticides when necessary.

4 - work on securing containers of hygiene and spraying pesticides when necessary.

5 - Documentation of municipal works through forms prepared for this purpose.

6. Not to make press or television statements.

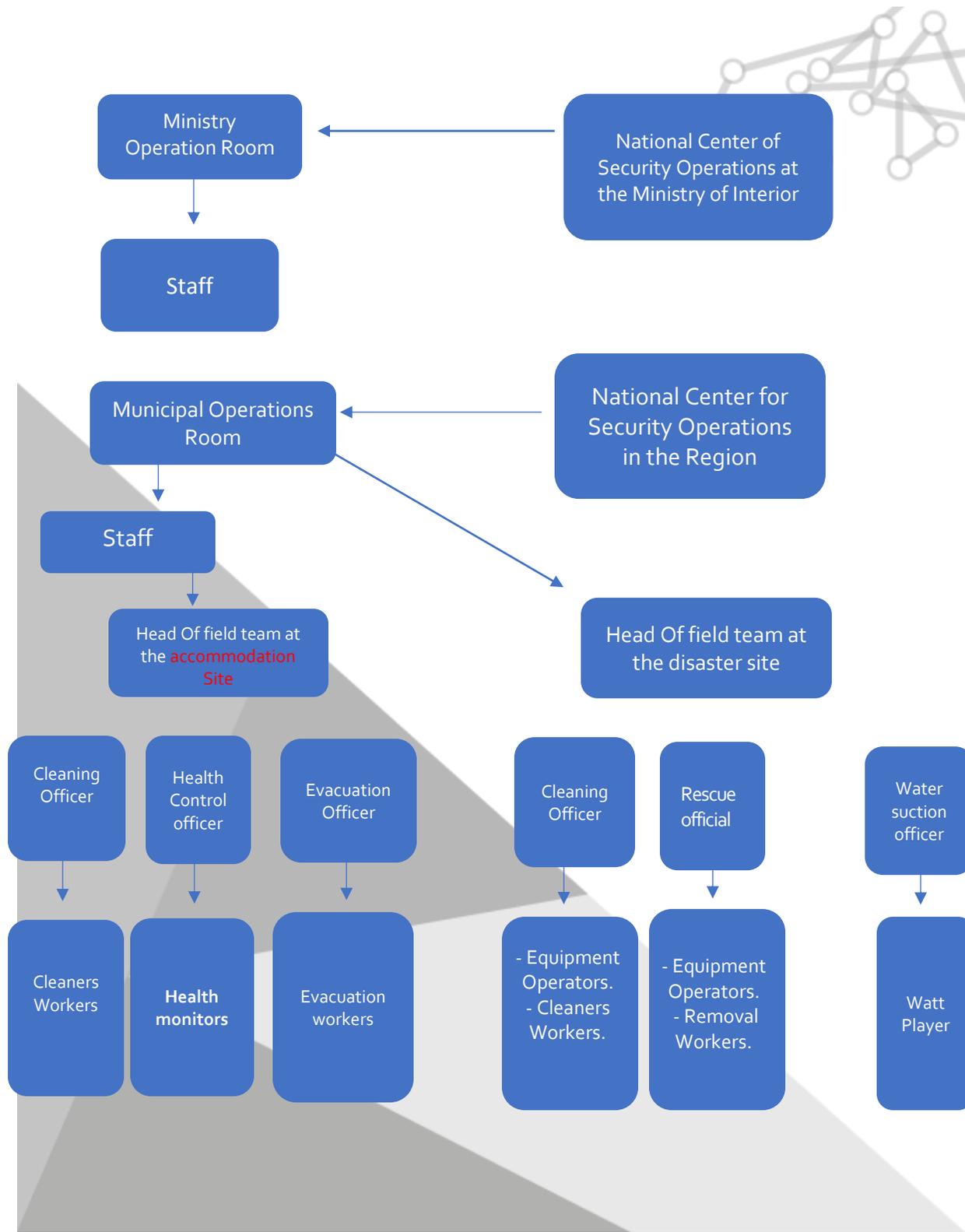
The regulations of evictions and accommodation approved by the decision of His Royal Highness the Minister of the Interior and the Chairman of the Civil Defense Council No. 12/2/12 Def And the date 8/8/1422 H And circulated to the municipal authorities to circulate the Minister of Municipal and Rural Affairs No.: 52757/10 / F on 22/10/1422

The following tasks:

- (A) Provide the necessary labor for cleaning the various accommodation sites.
- (B) Disclosure of the self-insured resources of the affected persons in the shelters prior to distribution.
- (C) Preserve the health of the habitat environment.
- (D) Opening and cutting roads within the urban area in the affected areas and repairing the damaged disasters to facilitate evacuation, shelter and relief of the injured.



The organizational structure of disaster management in the municipal system:



12-3- Machinery and equipment

It is intended for those using municipal daily works which can also be used for emergency work, including cranes, bulldozers, bulldozers, shovels, hooks, whites, dumps, dredgers, sprayers, cleaning cars, ambulances and hygiene containers. Mobile generators and mobile water units when they are created for emergency situations (these units were not used previously) in the open shelters, as well as on the mechanisms and equipment of the cleaning contractors or maintenance contractors with municipalities, so available in the private sector And individuals or institutions that are available for rental, if the municipal authorities need to keep a comprehensive record of these and the machinery and equipment available to them and their addresses to benefit them when needed.

There is a classification of some of the mechanisms and equipment that can be used by the municipalities in the normal business and also in emergency situations in determining their functions as follows:

Scrapers:

Used to drill a small proportion of the surface of the earth in large areas, used for the work of settlement from high to low areas.

Bulldozers:

It is used for drilling or osmosis and moving the excavated soil, and often the displacement of distances is simple and the amount of drilling or dust to be displaced, and moving is the control of the power of the machine itself, and can be on wheels or track.

Equipment Based Tractor:

It is used for drilling and loading the dust resulting from the drilling on the vehicles directly, in addition to that the weight is relatively light with the possibility of movement and maneuver can be on wheels or tracks.

Loading Machine:

Used for drilling and loading of dust resulting from drilling on the vehicles directly in addition to that the weight is relatively light with the possibility of movement and maneuver can be on wheels or tracks.

Crane:

Its primary function is the transport of landfill and earthmoving materials

Rippers:

Its main function is drilling and rock breaking

Shovels, manual shovels and drilling rigs:

It is used in drilling, abrasion and fragmentation

List of the most important mechanisms and equipment that can be used in emergency and disaster situations

statement	N	statement	N
Electric ladder	1	Great Shiol	17
Mobile power workshop	2	Small Shiol	18
Crane crane	3	Grader	19
Winch pull	4	bulldozer	20
Trilla	5	Baccalaureate excavator	21
Ambulance	6	Rollers	22
Small car transport	7	Forklift	23
Large cleaning containers	8	Compressor air compressor	24
Small cleaning containers	9	Asphalt cutter	25
Great car cleaner	10	Electric machine	26
Car spray	11	Mach Welding	27
cement mixer	12	Air Mattor	28
DENVER	13	Great flip flop	29
Asphalt fertilizer	14	Small flip flops	30
Water suction mater	15	White is great	31
Electric ladder	16	Normal White	32

First: Tasks of the emergency and disaster operations room:

- 1- The place where the disaster is managed, plans are prepared and scenarios are implemented.
- 2- Maintain the information needed for emergency and disaster management (before, after and after).
- 3- speed of making the necessary decisions.
- 4- The provisions for masterminding the initiative at all stages of emergency and disaster management.
- 5- Optimal use of disaster preparedness capabilities.
- 6- Coordination between the different actors working in the field of emergency and disaster management.
- 7- Provide the necessary information on the location and magnitude of the crisis and losses achieved.

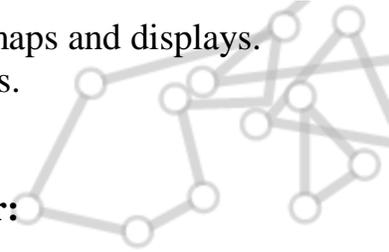
Second: Criteria governing the selection of the location of the operating room emergency management and major disasters:

- 1- Be in a place that is easy to reach.
- 2- to be connected to a network of major roads so as to facilitate access to them as soon as possible.
- 3- Build away from crowded residential areas.
- 4- To establish, as far as possible, according to engineering requirements aimed at protecting and securing them.
- 5- To be surrounded by concealment and camouflage methods, which hinder the ease of identification.
- 6 - be far from the danger of the explosion of major water and sewage pipes.
- 7- to have more than the entrance and exit..
- 8- The entrances shall be in the opposite direction of the exits.

Third: Important specifications for the emergency and disaster management operations room (940):

- 1- Equipped with effective means of communication and computers for analysis.
- 2- equipped with technical capabilities such as high-end television cameras and cameras for the event site and electronic transmitters.

- 3- Its validity in terms of size and breadth to accommodate the disaster management team and provide a comfortable atmosphere for them.
- 4- equipped with necessary explanatory means such as maps and displays.
- 5- Equipped with sleeping, rest, dining and water courses.



Fourth: Important specifications of the Media Center:

1. Security reserves must be taken into consideration before the press conference, such as the review of personal and professional cards.
- 2 - Do not ignore some important things such as the generator of electricity reserve for the media center and electrical connections and the availability of chairs and seats and the existence of several sockets for electricity and communication devices.
- 3 - There are several telephone lines, fax, internet and high-speed Wi-Fi.
- 4 - The presence of projectors, satellite channels and large displays ready for use when needed.

Fifthly: Important specifications for the media spokesperson and the official spokesperson of the Secretariat:

- 1- To be highly competent and educated and to understand the nature of work.
- 2- To be a high degree of transparency and clarity to enhance public confidence and reduce the spread of rumors.
- 3- to respond credibly to the news that is published and lacks credibility with diplomacy and intelligence.
- 4- be keen to show interest to those who speak to them.
- 5- good listening to questions directed with the speed of intuitive.
- 6- To be able to absorb the public and follow up all the platforms that provide information that supports the efforts and efforts of the representative.
- 7- Have the ability to follow the tweets and interact with the public and communicate with him quickly.
- 8 - be able to use modern means of communication, and use all the tools available to facilitate his mission.
- 9 - to be able to maintain the atmosphere calm and gentle and avoid appearing confused or nervous or nervous or incapacitated.
- 10 - be able to properly understand the nature of crises and reflect their reflections.
11. Be open and responsive during the crisis to enhance credibility with the media.
- 12 - Be frank, direct and vital and controlling the situation until the end of the answer.
- 13 - Keep away from the use of office language and scientific terminology when talking to the public.

14 - not to stand in a defensive position and not negative and be positive in his responses.

15- Draw his eyes to the whole room and allow questions from all over the room.

16 - not to be angry, and this does not prevent it to be firm.

17 - not to evade the question words incomprehensible.

18 - Not afraid to say to the liquid that.

19- In press conferences, managers with excellent experience related to the current emergency or disaster should be located near the platform to answer questions related to them. It is not expected that the media spokesperson and the official spokesperson will answer the questions.

20 - Be skilled in communication, friendly and flexible and receptive to criticism and know the hidden media.

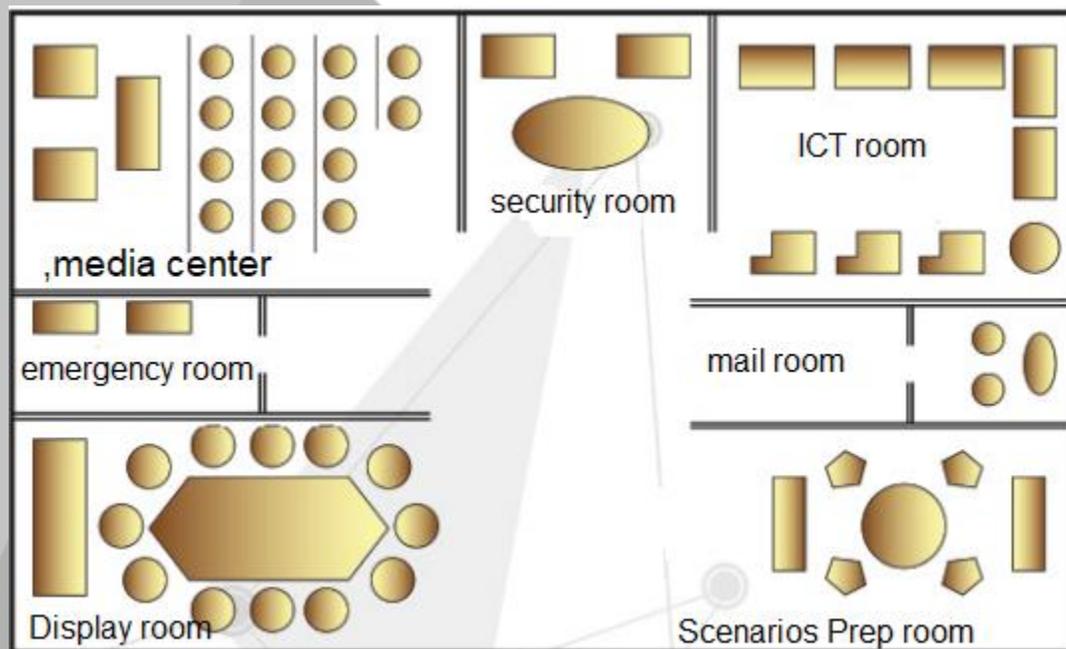
21. Have a good record of culture and the literature of practice as well as good relations with the media.

22 - be aware of the role and mission and the message of the body that works.

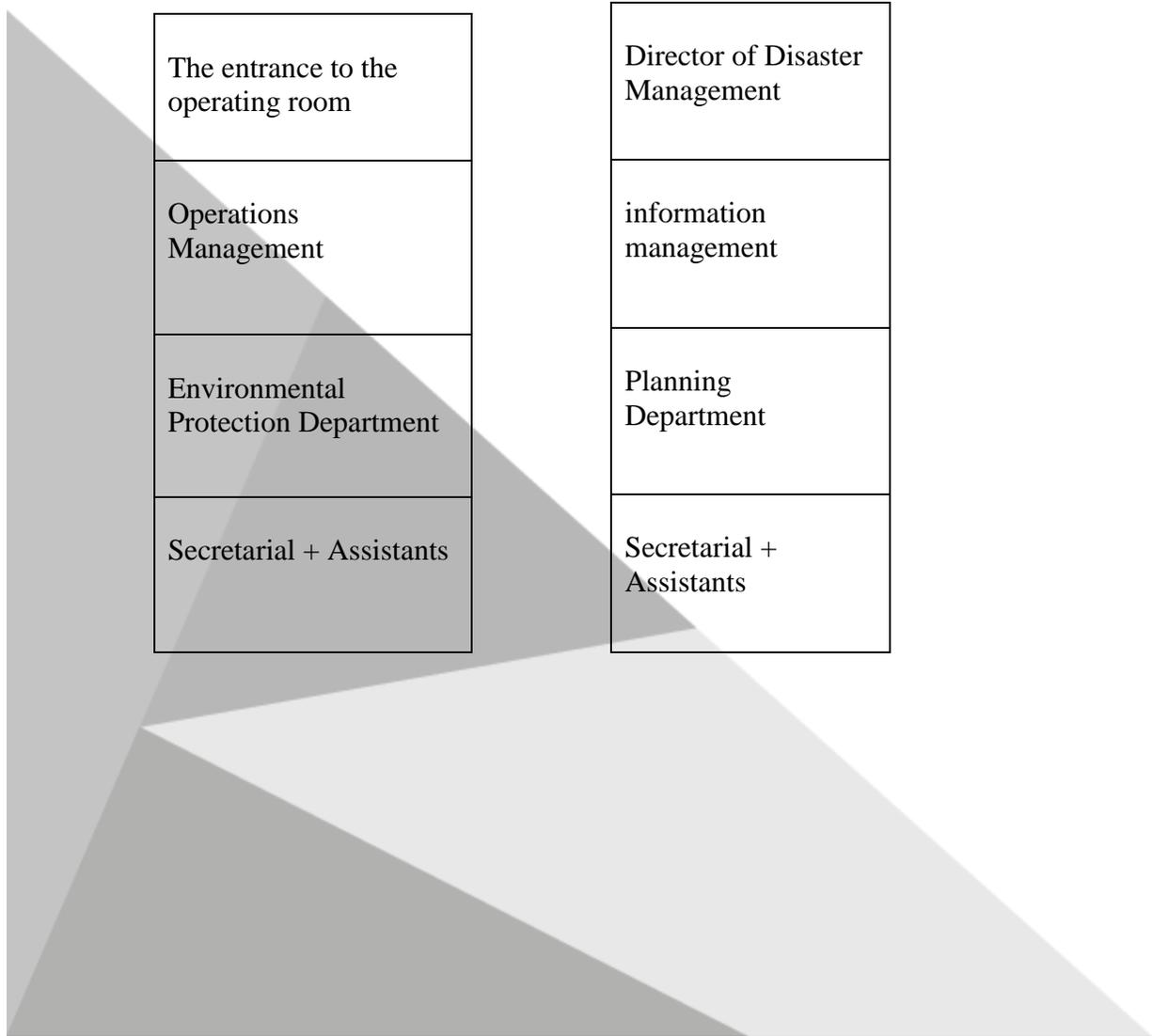
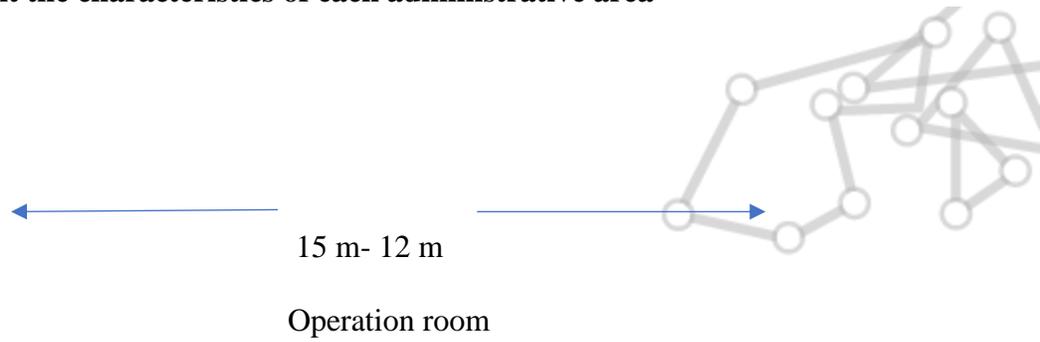
23. Know when to talk and when to stop and keep in touch with listeners.

24 - to make his conversations influential and objective, this will remain in the memory of listeners.

The following figure shows a sketch showing the operating room that can be guided and adjusted to suit the characteristics of each administrative area separately



The following figure illustrates the general management of disasters that can be guided and adjusted to suit the characteristics of each administrative area



VI Functions of the Emergency Operations and Disaster Management Operations Management Team:

- 1- Receiving communications, notifications and distress calls.
- 2 - Enter the information that arrives immediately either on the computer or models prepared or both together.
- 3- Coordinating with the authorities responsible for emergency and disaster management
- 4- Provide the necessary data and information on the location of the emergency or disaster and the resulting losses.
- 5- Maintaining the latest data and information before, during and after the emergency.
- 6- Sending and receiving data and information related to the emergency or disaster to various relevant authorities.
- 7- Identification of real needs for emergency or disaster situations and whether international assistance is needed.
- 8- the best use of the possibilities to cope with the emergency or disaster.
- 9- The provisions to control the initiative in all phases of the emergency or disaster by one competent body, which ensures the unity of decision and speed required.
- 10- Distribution of information on the decisions to be taken to the Operations Room Group in Emergency and Disaster Management.
- 11- Follow up the arrival of the emergency and disaster response team and equipment to the emergency and disaster site.
- 12- Assessment of the results of disaster response procedures.

Seventh Success factors of the operations room management team in the performance of its functions:

The following table shows the success factors of the management team of the Chamber of Science in the performance of its functions:

- 1 - Availability of updated databases updated status.
- 2 - the availability of sufficient powers to cope with emergencies and disasters.
- 3 - good administrative organization of the operations team to ensure the flexibility and rapid adaptation to the changes that face.
4. Availability of an effective and advanced communications network in the Operations Room through which disaster dimensions can be identified and controlled as soon as possible.
5. The Operations Room Management Team is fully discharged to perform emergency and disaster management functions.
- 6 - Establishment of a field operations room in the emergency or disaster site linked to the main operating room.

Eighth: Objectives of IT in the Emergency and Disaster Management Operations Room:

- 1 - The preparation of a center with high dynamic, and the ability to quickly shift from one degree to another, It does not affect the handling of the situation or disaster.
- 2 - processing the center and its support by means and capabilities and equipment that enable him to control fully all the time and spatial factors, and does not lose the ability to move and work in different circumstances.
- 3- Assisting emergency and disaster management personnel in the performance of their work. With the desired efficiency and in a modern and sophisticated manner and in a way that meets the need for qualified manpower to make a profit in this field.
- 4- Supporting the skills and capabilities of the scientific response to the emergency data, disasters and their components, starting with skillfully anticipating the causative factors and ending with the phase of removing their effects and to benefit from its results, by monitoring the recent trends of emergency management and disaster management.
- 5- Providing emergency and disaster management centers with means that will help raise the awareness of emergency and disaster management personnel and relate it to the realities of current socio-economic variables and challenges.
- 6- Providing the tools that support the integrated approach to the various types of emergencies and disasters, in cooperation with all stakeholders, according to careful analysis and controls in this field.
- 7- Prepare the environment and the psychological and behavioral environment to cope with emergencies and disasters and overcome the challenges that can be encountered by employees in this field and turn them into triggers and catalysts to achieve the desired goals by knowing the data of situations and potential conditions and confirming the leading qualities of confrontation and confrontation.
- 8- To provide in-depth studies and scientific research in the field of emergency and disaster management, in cooperation with all concerned bodies, and to create an appropriate scientific environment to encourage researchers to study in this field and to establish a solid base of science and knowledge in the same field.
- 9- Building contacts to strengthen cooperation with research centers, universities, scientific, national and international bodies of mutual interest.

Ninth: Establishment of an alternative operations room and a field operations room for emergency and disaster management:

It may be necessary to create an alternative room for the main operating room for emergency use, if the main operating room cannot be used for any reason. In this case, all the components of the main operating room should be available in all the operations room.

Tenth: The requirements to achieve the previous goals:

1. Well-qualified human resources, which are subject to special selection criteria for the task of each element and enjoy calmness, calmness of nerves, promptness, decision-making and good things.
- 2 - equipment and computers such as search and tracking devices, digital camcorders, positioning equipment, fixed and mobile computers that fit the work and determine the method of building crisis management.
- 3 - Telecommunication technology of various types of wired and wireless satellite and ready-made software and the ability to employ them in building multiple applications for the management of work, and internal networks and local and international.
- 4- Information systems that include: applications, smart software packages that help crisis management staff to the conclusion and analysis of information, decision support systems that help to select one of the different options, with the reasons and expected results of each alternative.
- 5- In addition to the use of geographic information systems (GIS) that enable good use of different layers of information, Which can be installed on top of one another on digital maps, illustrating areas deprived of basic services such as schools, hospitals, clean drinking water and sanitation.

13- Disaster response plans

13-1- Preparedness Plan (Pre-Disaster)

The plan is based on the processing of the various information that must be provided in the administrative domain supervised by the municipal system. It includes knowledge of the urban, demographic, environmental, natural and economic characteristics. The municipal system can provide some information, and others can be requested from different sources such as government agencies or research centers. Or scientific references. In general, processing of information should include, for example:

- 1 - Processing of cadastral and geographical maps determined by population distribution, natural fabric of areas and networks of roads, and areas of exposure to disasters and types.
- 2-processing of statistical information and include the types of disasters that occurred in the past and the losses incurred at the administrative level.
- 3- Processing information on government agencies entrusted with disaster response.

The preparation plan should therefore be based on the following two components:

- 1- The preparation of analytical studies on disasters of various types and probability of occurrence, and the areas of impact expected by type, and the duration of this effect, and the consequences that can result in the short and long term, in the administrative range supervised by the municipal system.
- 2- Preparing the emergency operations room in the municipal system to organize and coordinate the required services and form the work team entrusted with the work of management and guidance, gathering information, planning and processing for all related to the subject of disasters and appointing the human cadres assigned to implement the plans and the age of the mechanisms and equipment available and taking into account the administrative levels and responsibilities of the participants and the communication system horizontally and vertically In order to ensure smooth performance and rapid response in the event of a disaster. The operations room is

associated with field team chiefs, equipment supplies and maintenance services and any services considered to be added.



13-2-

Operations Plan (During Disaster)

Without understanding that there is overlap between the plan of preparation and the plan of operations, the plan of operations as a basic principle must be prepared in advance according to the expected prospects with the need to prepare and configure the administrative and executive teams to activate them as soon as necessary, and this plan constitutes a framework and a starting point for the disciplined performance of the staff of the participating parties, That at the time of the disaster must be identified directly on the needs required to deal with them to achieve the goals of rescue and reduce the human and material losses.

Therefore, the following actions should be taken immediately after the disaster:

- 1- Assessment of Situation by the head of the field team at the site of the disaster, and report it to the head of the emergency task force in the emergency room so that the required services can be estimated from human resources and mechanisms, whether at the disaster site or the shelter if necessary.
- 2- Define the location of the disaster and its initial effects,
- 3- perception and prioritization in the manner of dealing with it.
- 4- Quick response and coordination with the Civil Defense Operations Room by the Head of Emergency Teams.

The operations plan in this light includes the set of activities and tasks required of the agency at the site of the disaster or the location of the shelter, as explained by the responsibilities of the heads of the field teams in disaster sites and accommodation of the tasks included in the general plans of workers and civil defense measures in disaster situations and tasks set out in the system Civil Defense, its Executive Regulations and the Evacuation and Housing Regulations.

During the disaster and when assessing the situation resulting from it, it is important that the human cadres participate in the face of the readiness, each in his position and the task entrusted to him and everyone to recognize the importance of time and rapid response, and good performance when intervening in the face. It may be important to note that there are some problems that may hinder the successful implementation of the plan must be thought of ways to solve in advance before the disaster, and that the disaster is not linked to the official permanence of employees and workers, Therefore, it is necessary to address this issue in particular to ensure the presence of participants with the participating parties at any time and are required to do so according to administrative procedures to be presented to the first official in the municipal system and then the adoption and evacuation of participants to walk in accordance with the disaster can also entail the need for additional equipment and mechanisms depending on size and type This is subject to considerations of assessment and assessment of the situation when the disaster area is explored. Therefore, there are likely to be alternatives available to be considered in advance to ensure the integrated performance of the Executive Team and the adequacy of such equipment and mechanisms.

Some of the alternatives that can be adopted include the following:

1- Support process:

Through the use of mechanisms and equipment in the municipal organs closest to the municipal system, which is the disaster in the administrative scope in coordination with the Secretary of the region or the province, and can cooperate between secretariats to overcome the problem of shortages, in some other needs such as employment and so on.

2. Direct rent from the private sector:

This requires maintaining a register of private institutions and contractors in the municipal system, which includes the mechanisms and equipment that can be used when the need required by the disaster.

The plan requires a comprehensive and accurate assessment of the effects of the disaster, and then prioritizing the repair and maintenance according to the type of disaster, and the reforms and actions that can be taken:

1-Addressing the consequences of the disaster of epidemics or pollution, as a result of the collapse of sewage pipes and the spread of insects and the accumulation of waste, which threatens the health of the population.

2- Technical evaluation of buildings, roads and bridges when the source of the disaster earthquakes or torrential flood or acts of war or terrorism, and then work on the implementation of instructions for maintenance and restoration.

3- Technical evaluation and maintenance work for various service projects such as lighting poles, public parks and drainage channels, when the source of the disaster is earthquakes, floods or hurricanes.

4- continue the work of shelter until the return of the affected to their homes.

It should be borne in mind that the technical evaluation here should not only mean the immediate negative effects of the disaster, but rather extend the proposal to amend and develop the general specifications and technical specifications and revise their instructions in the technical regulations or Codes, if any, in order to take them into consideration in future projects. Durability and strength to withstand disasters.

It is important for those responsible for disaster management and management teams not to look at disaster preparedness plans as a static mathematical equation that cannot be developed and modified. Making a clear and understandable plan for the individuals involved cannot be successful. Was drawn to the participants in the activation of the basic goal of the preparation of the plan is to achieve in the end the purpose of reducing the human and material losses to the extent possible, Therefore, it is necessary to assess what has been done to identify the strengths and weaknesses that can be learned and used in the development of new strategies to deal with the disaster and also in the development of the aspects of the schematic prepared for this purpose, and on this basis is the next phase of the re-status stage to what was a new

starting point A new coming is the pre-disaster following and the associated need to update and develop plans for confrontation.

Therefore, dealing with disasters will take the nature of continuity, and necessarily the nature of renewal and development of plans for the better because of the lessons learned from the results, and there are often safe periods may be prolonged or near disaster and others can be used in the preparation of good plans and raise the competencies of human elements involved both administrative or operational through theoretical training or practical.

13-6- **The components of the success of the plans**

There are a number of elements and considerations. Which must be taken into consideration by the disaster preparedness planners, which are reliable in the success of their purpose. These elements and considerations can be clarified as follows:

	The Element	The Considerations
1	To accurately define the objective of the plan and to gather sufficient information on its subject	<ul style="list-style-type: none"> • Identify the type of disaster. • Risk analysis.
2	The clarity of the plan of the participants in its implementation and its full conviction.	<ul style="list-style-type: none"> • Distribution of responsibilities. • Explain tasks. • Selection of appropriate competencies.
3	Performance efficiency for those responsible for its management and those involved in its implementation.	<ul style="list-style-type: none"> • Continuous theoretical and practical training.
4	Good preparation and availability of technical equipment.	<ul style="list-style-type: none"> • Continuous maintenance. • Provision of spare parts.
5	Pre-thinking about possible barriers and appropriate solutions.	<ul style="list-style-type: none"> • Identify barriers. • Develop possible alternatives.
6	The ability of the plan to apply and its compatibility with the plans prepared with other government agencies.	<ul style="list-style-type: none"> • Continuous coordination with other bodies. • Exchange of views.

14- City and village clean-up and disaster recovery plan

14-1- The name of the plan

Plan to clean cities and villages and restore the situation in disasters.

14-2- Objective of the Plan

Preserve the cleanliness of cities and villages in the event of a major disaster.

14-3- Areas of application of the plan

The occurrence of a major disaster by natural, technical or military action on the face of corruption may lead to the departure of foreign workers who do such work to their countries, or due to riots and strikes by cleaners for any other reason.

14-4- Components of the Plan

Optimal exploitation of the human potential and the mechanism available in the city or in the village.

Activating the role of the community under the exceptional circumstances imposed by the disaster.

14-5- Strategies for achieving the objective

14-5-1 Mechanization of work

Where the municipal authorities take into account during the emergency period the reliance on the main mechanisms and equipment in the cleaning work more than the dependence on labor, in the sense of automating those actions as possible, and the circumstances of the emergency that may cause the cessation of foreign workers from work, And equipment through the following:

A- Saudi labor available in the departments of the device through training them to operate.

B- Volunteers who are familiar with the operation of such mechanisms.

C- Coordination with other government departments and companies and institutions that have labor trained on similar mechanisms.

D- The municipal bodies to be cleaned by the contractors shall ensure that these contractors are required to seek the recruitment of Saudi drivers who are trained to lead these mechanisms from locally available labor.

14-5-2- Sufficiency in the number of employments

Where the emergency requires the adoption of measures to provide alternative employment, and to achieve this can take the following:

A- Benefit from the Saudi labor available in various departments in the municipal system such as parks and beautification, or maintenance and operation and so on.

B- Coordination with schools, institutes, colleges, universities, associations, sports clubs and scouts.

C- Coordinating with the mayors of the neighborhoods and the imams of the mosques to encourage the residents to volunteer to help the municipal bodies in the cleaning work and the formation of teams to maintain the cleanliness of the neighborhoods.

14-5-3- Action Plan

It is based on the following elements:

A- Distribution of work and supervision of cleaning work:

It is done as follows:

1- Division of the scope of work in the administrative scope of the municipal system to several regions, and each region to several centers by size and area.

2- The head of the emergency task force in the Municipal Authority shall coordinate between the work areas and distribute the available mechanical and human resources as required.

3- The head of the emergency task force shall assign the field supervisors and determine their responsibilities in the areas of work specified for them, preferably from the staff of the supervision of cleaning works in the secretariat or the municipality or from the employees of the contractor in the cases of cities. To his region and to direct the automatic and human potentials to achieve Objective.

4- The task of supervising the cleaning work in each center of a citizen living within the limits of the center and be a link between the secretariat or the municipality or the village complex and the population of that center.

It is selected according to the following priorities:

- To be a member of the Secretariat or the municipality or the village complex who can bear this responsibility.
- Any engineer living within the boundaries of the center.
- or any teacher living within the boundaries of the center.

- or any doctor living within the limits of the center.
- If you estimate the presence of any of the above persons assign this task to any citizen who is reliable and lives within the limits of that center.

B - Method of work:

As follows:

- 1- Officials of the Municipal Authority shall coordinate with government departments, companies and institutions as much as possible to take advantage of their potential to assist in the implementation of this plan.
- 2- The emergency task force through the head of the municipal system can hold meetings with those who are selected to oversee the areas and centers of cleaning services to coordinate with them and understand the plan of action.
- 3- The municipal authorities shall work through the task forces to prepare an awareness leaflet explaining the work methods and waste removal dates of each center. It includes urging citizens to respond to the work plan and comply with waste disposal times and cooperate with officials of the hygiene services center within the framework of the possible hypotheses and preparedness plan.
- 4- The supervisors of the work areas shall coordinate with the educational institutions in their areas to assist the supervisors of the volunteer centers to form teams of workers in their positions.
- 5- The supervisors of the cleaning services centers shall coordinate with the mayors, imams and the residents by contacting them directly and by addressing them in the mosques.
- 6- Directing citizens through supervisors of cleaning services centers and by means of bulletins to reduce the volume of their waste by rationalizing consumption and ensuring the removal of organic waste only, such as food scraps and the like, and keeping non-polluted paper wastes such as newspapers, magazines, empty cartons and non-polluting metals until the crisis is released.
- 7- It is appropriate that municipal bodies provide a stock of various waste bags and insecticides sufficient for at least three months to be distributed to citizens in case of emergency to ensure that waste is not scattered and stored in sealed bags for easy lifting and deportation to the targets.
- 8- Each supervisor shall be provided with a cleaning service center with a sufficient number of waste bags to be distributed to the residents of the center. He shall also be provided with a bulletin on how to put the waste in these bags and the quality of the waste to be placed in them.
- 9- The owners of shops and the owners of crafts in the industrial areas to maintain cleanliness around their stations and the collection of waste and placed in the containers allocated to it.
- 10- Containers that can be unloaded as often as possible are to be relied upon.

11- Large-scale containers are placed in densely populated areas to minimize aggregation sites.

12- Markets, centers, hotels, large enterprises and companies are obliged to carry their waste to the target.

13- Reducing the number of container discharges in less densely populated neighborhoods.

14- A specific program for the passage of waste vehicles shall be established at the service centers and citizens shall be urged to discharge their waste according to this program.

15- The municipal bodies shall focus on the available labor and mechanisms available to them:

A- Discharging the containers and transferring their contents to the targets with a focus on the markets of meat and vegetables, restaurants and neighborhoods with high population density, hospitals and health centers.

B- Automated synagogue works for the main streets as much as possible.

C- The work of pest control and rodents whenever possible.

D- Spray the water swamps with pesticides to prevent the proliferation of insects and mosquitoes.

14-6- **Note**

All concerned to implement this plan should take into account coordination with other government agencies.

Training is one of the elements and means of disaster preparedness, which is of great importance to the participating teams from government agencies, including the municipal bodies, which is activated in the safe stage of the disaster and is linked to the preparation plan and its results are reflected in the operations and re-conditions.

A - theoretical training

B - Practical training

15-1-Theoretical Training:

Through the sessions prepared for this purpose, or by laying down the possible hypotheses and then suggesting appropriate measures and discussing them through the participants in the system or in constant coordination with the governmental bodies through the work of meetings, panel discussions and symposia that exchange views and experiences around them and overcome the obstacles that surround them and then develop solutions appropriate to them.

This is an important part of the training to address problems related to the plans of confrontation leading to the following:

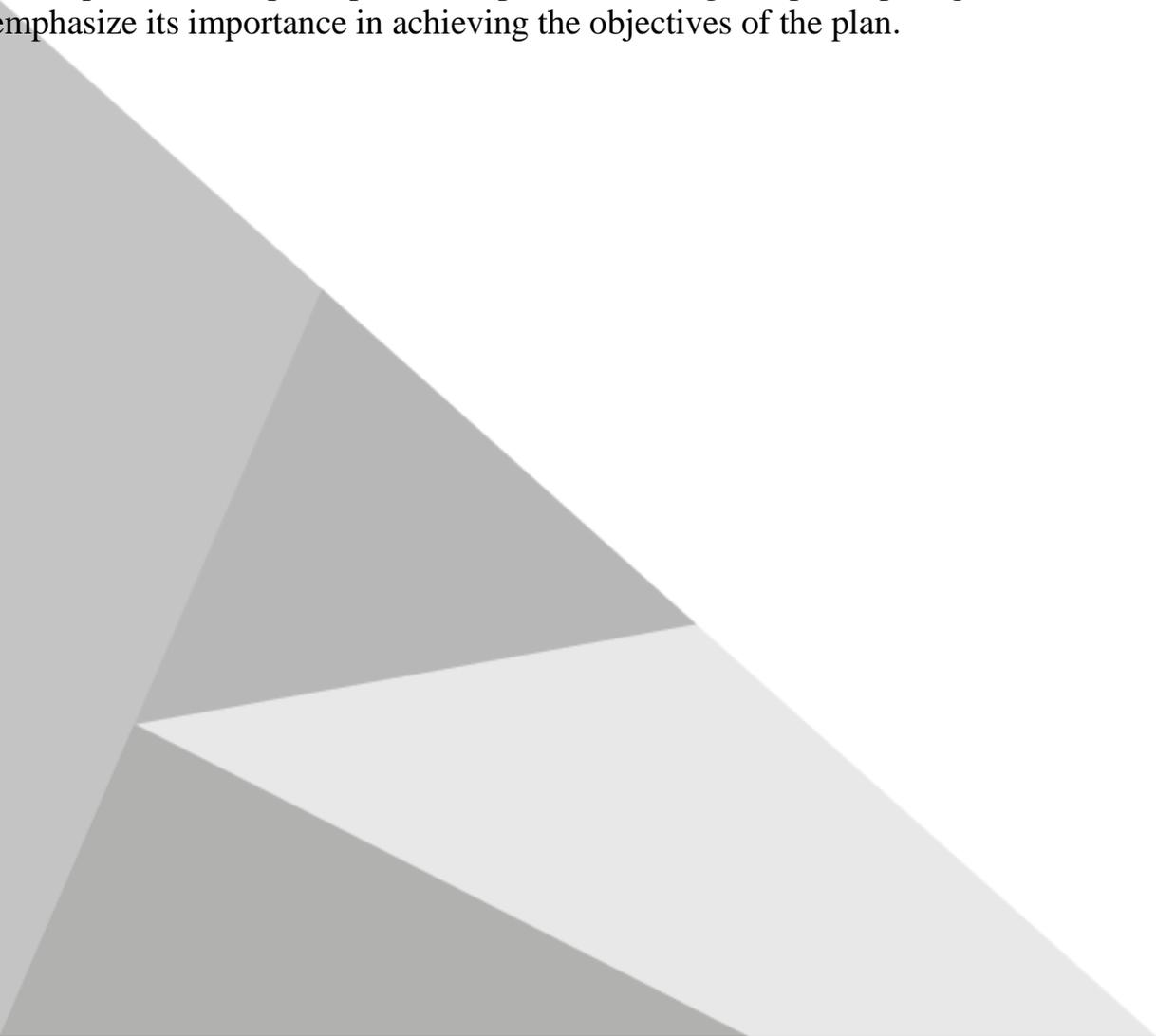
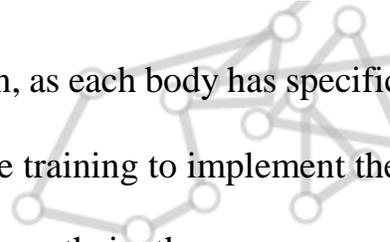
- 1- Enhancing the spirit of one team (despite the multiplicity of actors involved) and that coordination, cooperation and communication achieved by meetings and panel discussions will lead to positive and tangible results for all participating teams.
- 2- Defining each side with its problems to other parties. This results in constructive proposals and an exchange of experiences.
- 3- clarity of plans for the participating bodies, which is one of the reasons for their success.
- 4- benefit from the safe stage in the introduction of constructive ideas.

The training of the participating individuals from the municipal system of the executive teams must be a goal of their training to increase their practical skills through mental preparation, psychological preparation, enhancing confidence, spirit and cooperation, and imparting the necessary practical skills. These are important elements that should be developed and observed in all participating individuals, to achieve the ability to participate, confront and optimize the potential.

And shall be with all parties involved in the confrontation, as each body has specific tasks and responsibilities under which it is prepared

Plans, and the most important objectives of the collective training to implement the plans of operations and the restoration of the following:

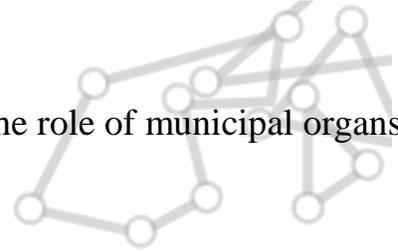
- 1- Test the plans and identify the weaknesses and strength in the sequence of operations to cope with the disaster.
- 2- Identify the capacities of the participating teams according to specialization and their reactions to the response and movement processes and activate the potential.
- 3- Test the ability to use the available technical means with great effectiveness
- 4- To promote the principle of cooperation among the participating teams and to emphasize its importance in achieving the objectives of the plan.



16- Factors leading to increased disaster risk

Which can be referred to the most important related to the role of municipal organs as follows:

- 1- The weakness of the city's infrastructure.
- 2- lack of means of intervention in the confrontation.
- 3- Lack or lack of means of alert or rescue.
- 4- Lack of or lack of means of transport and communication.
- 5- Destruction of vital installations of the population.
- 6- Damage to populated facilities.
- 7- The complex act of disaster.



16-1- The weakness of the infrastructure of the city

When the city has a strong infrastructure that becomes more industrialized and more resilient to the risks that surround it and makes the city more Capacity for disaster risk reduction. When the city has a fragile infrastructure, it becomes less immune and weaker And the city is unable to reduce the risks of disasters.

16-2- Lack of means of intervention

It is limited to two elements:

Shortage of the number of cadres participating or delay in their intervention in a timely manner, and have serious consequences for For the affected and especially those infected.

The solution lies in the composition of the field teams and their preparation to be ready for rapid intervention. Lack of equipment and machinery, and overcome as mentioned above:

- (A) the means of attribution.
- (B) the means of lease.

16-3- Lack or lack of means of alert or rescue

This includes the means of warning and warning of the disaster, and the means of awareness before the disaster is a responsibility of the parties These means also include fire alarms, means of extinguishing them, and escape outlets to be observed in Building designs, especially multi-role, lack of means prevents the opportunity to escape or take shelter from danger.

16-4-

Lack of or lack of means of transport and communication

And prevent the possibility of escape. When the threat of danger in a location to a safer location also causes the inability of the operational teams in the confrontation to intervene quickly to carry out rescue work, and assess the situation.

16-5-

Destruction of vital installations of the population

Examples of water and electricity installations, whose destruction disrupt the services of the intervention teams as well as the increased risks and consequences of the disaster. Advance planning is needed to find solutions, albeit temporary, with the speed of action to reform them.

16-6-

Damage to populated facilities

With no safe or private shelters, the facilities that did not collapse due to the disaster are threatened with collapse Especially if the source of the disaster is earthquakes and the solution in evacuating these facilities from their inhabitants and transferring them to safe shelters. And to evaluate the structural efficiency of these installations and to make the necessary repairs before allowing the return of the population.

16-7-

Factor of the compound action of the disaster

As if the disaster resulted in the emergence of a number of other disasters earthquakes as well as destructive action on the facilities and buildings. They can cause large fires, destroy water and sanitation networks and result in a bad health situation.

In emergency and disaster management, the detailed plans of the municipal authorities in the emergency and disaster management department should be filled out below and provided to the Ministry of Defense and the General Directorate of the Civil Defense in the regions and updated regularly, and the annual report of the municipal bodies must be submitted to the Civil Defense Council as follows:

- 1- Head of the Authority and the emergency work team.
- 2- Engineers, surveyors, specialists and employees related to emergency plans.
- 3 - Officials, observers and cleaners related to contingency plans.
- 4- Security and safety departments.
- 5- Equipment and tools available at the secretariats and municipalities.
- 6- Advisory offices that may be used in emergency situations.
- 7- Companies and institutions that can be used in emergency situations.
- 8- Equipment and tools available to companies and institutions that can be used in emergencies.
- 9- Equipment and mechanisms available in the cleaning companies that are contracted with the secretariats and municipalities, which can be used in emergency situations.
- 10- Cemeteries.
- 11- Accommodation sites
- 12- An annual report on the achievements and responsibilities assigned to the municipal bodies in the functions of the civil defense system.

N	The Element
1	The municipal and village system issued by Royal Decree No. M / 5 in 21/2/1397 H and its executive regulations
2	Civil Defense System issued by Royal Decree No. M / 10 in 10/5/1406 H and its executive. regulations.
3	General plans for civil defense actions and measures in disaster situations.
4	Empower cities from disaster-fighting - My city is preparing 2010-2015 .
5	Abu Qahaf, Abdel Salam 1428H Crisis Management, Alexandria, Author.
6	Hamlawi, Mohamed Rashad 1432H Crisis Management - Local and International Experiences, 1, Cairo, Ain Shams Library
7	Abdel-Mahmoud, Abbas Abu Shama 1420H. Facing non-traditional disasters. 1. Riyadh. Naif Arab University for Security Sciences
8	Ajobah.mokthar.1425H. Natural disasters: their causes, results and ways to confront them. Riyadh: Arab Center for Security Studies
9	Alammari.abbas.1433H. Crisis Management in a Changing World, Cairo: Al Ahram Foundation.
10	Aoud.Adel RafQy.1431H. Disaster in the Arab World: Preparedness, Response and Prevention, Riyadh: Naif Arab University for Security Sciences
11	Fathi.mohammed.1428H. Out of Crisis (The Art of Crisis Management), 1, Cairo: New Andalus House for Publishing and Distribution
12	Fahmi.khaled.jehad.1408H. Disaster Planning. Riyadh: Naif Arab University for Security Sciences.
13	Al-matery.hassan bin nahar.1424H. Disaster Management.Riyadh: Jarir Library
14	Alhowary.sid.1435H. Crisis Management: How to manage and overcome crises, Riyadh: House of Cordoba for publication and distribution
15	Disaster Management Training Course (1990) issued by Academy of Scientific Research and Technology / Cairo
16	Alkudhery.mohsen Ahmed.1430H. Cairo: The Nile Group
17	Scientific Forum to mitigate the dangers of disasters. 1993 - earthquakes - fires - torrents. Publication of Academy of Scientific Research of Technology / Cairo
18	International conference on the management of disasters present and future / Cairo / 1990 issued by the Academy of Scientific Research and Technology
19	Human and disaster\Ali Orfly And Sultan mohammed alathel.
20	Symposium on Disaster Management in the Kingdom of Saudi Arabia (Reality and Perspective). Issued by the Institute of Public Administration / Kingdom of Saudi Arabia
21	Personnel Management - Foundations - Phases and Mechanisms D. Fahad Bin Ahmed Al-shaalan.

