

Supplementary Materials S1: Study questionnaire

Questionnaire was designed to identify the extent of government preparedness in the Kingdom of Saudi Arabia to confront disasters and crises, as well as the factors affecting them. Please kindly answer all questions The questionnaire is for the purposes of the study knowing that your answer will be treated with strict confidentiality and for scientific research purposes only

First: Explanatory Concepts

This paragraph is devoted to giving the respondent an illustrative idea about some of the concepts used in this questionnaire and related to the subject of the study:

- A. **Crisis:** It is an emergency or sudden event that affects the system in place organization, and requires rapid action and immediate attention. Or it is an unusual situation that leaves a decisive impact on the normal course of things.
- B. **Disaster:** sudden accident is not expected and awful it causes suffering big destruction.
- C. **Readiness :** It is the preparation to deal with the state of changes resulting from the crisis, or is a strategic umbrella that represents general plans for dealing with unpredictable and unusual environments.
- D. In order to avoid duplication or repetition and to remove any confusion between the meanings of the crisis and the disaster, it has been considered as one word and it remains for the reader to specify the relevant case in the context
- E. The Civil defence Committee means the main (area) or sub (a governorate)
- F. The term organization has been used as a substitute for management because it is more inclusive despite having the same meaning.

Second : Data on disasters in your area				
the number	disaster	Number times happening The catastrophe of the past ten years		
		Once one	twice	three times and more
1	heavy rain	€	€	€
2	flood sweeping	€	€	€
3	hurricanes	€	€	€
4	earthquakes	€	€	€
5	landslides	€	€	€
6	locust invasion	€	€	€
7	Catastrophes drought	€	€	€
8	fires for amenities producing oil	€	€	€
9	fires for industrial facilities	€	€	€
10	Leak Material petroleum on the beaches	€	€	€
11	Catastrophes air accidents	€	€	€
12	Catastrophes marine accidents	€	€	€
	Catastrophes Other : (specify)			
13		€	€	€

14		€	€	€
15		€	€	€

Third : The levels of readiness The levels of (readiness) in dealing with crises depend on the availability of certain characteristics procedures in the organization. Please specify the degree of availability of each of the following in the field, by placing a sign x in exact place opposite each phrase.

No.	level paragraphs readiness	Strongly Disagree	not agree	neutral	OK	Strongly Agree
Preparedness Phase						
1	Various different teams are formed to solve the most likely crises in the region.					
2	Adequate support is available to the team that diagnoses and plans for potential crises					
3	There are general administrative instructions manuals and standard specifications that define how and procedures for dealing with potential crises					
4	Organization provides the material human and technical capabilities when needed to deal with crises					
5	The organizational structure in the departments of my organization is flexible enough to help them deal with crises if they occur					
6	There are adequate and ready-made training programs and plans for crisis management in The organization is constantly reviewed and developed					
7	Each department reviews its plans on an ongoing basis and in light of the precautionary measures that are being implemented.					
8	Periodic meetings are held and mock experiments are conducted to deal with potential crises.					
9	The organization carries out the tasks related to it as stipulated in the executive regulations for the tasks and responsibilities of ministries and government agencies.					
10	There are detailed regulations and a clear executive mechanism to accomplish the tasks required on the ground by each department					
No.	readiness level items	Strongly Disagree	not agree	neutral	OK	Strongly Agree
Response stage (damage containment and mitigation)						
18	The crisis is controlled when it occurs and its spread and continuation are limited in an appropriate period of time					
19	There is a willingness to distribute tasks and define responsibilities and powers in a short and appropriate period when the crisis occurs					
20	Influencing events and using emergency measures efficiently that minimize and limit the damage caused by crises and disasters					
21	The connection is done accurately and quickly by organization to ascertain the level of damage caused by the crisis.					
22	There is an operating room equipped with modern technologies to contain the causes and damages of the crisis					
23	The organization has the ability and speed to move the necessary material and human resources to contain the crisis.					
24	The organization deals with crises when they occur, not before them					

25	When the last disaster occurred , the immediate committee provided for in the system was formed to implement civil defence measures in emergency situations					
26	They organize effective participation through trained teams in a committee to estimate damage or exchange compensation etc..					
No.	readiness level items	Strongly Disagree	not agree	neutral	OK	Strongly Agree
The recovery phase and drawing lessons learned						
27	Regular activities are carried out in the organization without any confusion in crisis conditions					
28	Different locations affected by crises are being provided with the necessary resources to restore normal activity					
29	organization works to mitigate the effects of crises by limiting the causes of their occurrence					
30	The organization is directing a media campaign to inform all citizens of the damage caused by the crisis and . how it was dealt with					
31	Lessons and lessons from the crisis it faced in order to benefit from it in the future					
32	Evaluate the adequacy and effectiveness of previous crisis management plans and programs with a view to improving them to deal with future crises					
33	The lessons from foreign countries and other administrative bodies are used in dealing with crises					
34	The organization participates in one or more committees in the stage of recovery, such as studying and evaluating the disaster, its causes and results , to draw lessons and lessons					
35	The media is dealt with at all stages of the crisis with transparency and clarity to eliminate rumours					

Fourth : Paragraphs of the possible influencing factors on readiness						
They are those factors that are likely to affect the levels of readiness to deal with crises. Please put a tick (x) in the appropriate place						
No.	Paragraphs (potential influencing factors on readiness)	Strongly Disagree	not agree	neutral	OK	Strongly Agree
human factors						
1	The tendency of employees in the organization to evade their responsibilities and duties in crisis conditions increases.					
2	Employees in the organization suffer from a lack of understanding of the possibilities of crises.					
3	Employees in the organization tend to be dependent, rely on traditional work methods, and lack self-initiative during crises.					

4	The employees in the organization feel fear, frustration, and lack of desire to cooperate with others in crisis conditions.					
5	The organization's employees are increasingly proud of their belonging to the organization because of the incentives and appreciation for their efforts in managing the disaster.					
Regulatory factors						
6	The organization tends towards centralization in decision-making and lack of delegation of authority in crisis situations.					
7	The role of leaders with specialization in the organization is reduced in crisis conditions in favor of central leaders (official rank or rank).					
8	The procedures, instructions and laws followed in the organization during crises are characterized by their rigidity, inflexibility and clarity.					
9	Material and moral incentives granted to competent employees in the organization in dealing with crises are weak.					
10	The organization deals with crises with the same methodology (method), despite the differences between these crises.					
11	The procedures established by the organization to confront crises do not depend on prior planning.					
Technology factors						
12	Limited communication systems in the organization in providing immediate and sufficient information about the crisis and its parties, symptoms, and developments to the relevant authorities.					
13	Communication and information systems are characterized by their weak ability to analyze quantitatively and qualitatively and update the necessary data in a timely manner in crisis conditions.					
14	Limited joint communication systems among the various parties to exchange information and integrate efforts in crisis conditions.					
15	There is a difficulty in diagnosing the accuracy, credibility and validity of information in crisis situations.					
16	The mechanisms and equipment available in the organization to deal with crises are insufficient.					
17	The technological capabilities of the organization are characterized by their inadequacy and insufficiency in dealing with crises.					
Surrounding Environmental factors						
18	Population density is considered a hindrance to the organization's handling of crises.					
19	The limited degree of understanding, response and awareness of the population negatively affects dealing with crises.					

20	The organization conducts awareness and educational campaigns for citizens to improve how they deal with potential crises.					
Co-ordinating factors						
21	The level of coordination between different organizations, including yours, is acceptable and matches the level of the event and the plan.					
22	The internal coordination processes in your organization between the departments involved in dealing with crises are weak.					
23	We suffer from the absence of a central body in the organization working on the circulation and coordination of information in crisis conditions.					
24	Coordination with civil society institutions is weak.					
25	The Civil Defence undertakes all coordination and arrangements between all members of the Civil Defense Committee in all stages of crisis management with high efficiency.					

Fifth : Personal Data

Put a tick (x) in front of the appropriate choice:

1. Age

30 years under ☐ From 31-40 years old ☐ 41-50 years old ☐ more than 50 years old ☐

2. Qualification

High school or less ☐ Intermediate Diploma ☐ BA ☐ Postgraduate ☐

3. Academic major

scientific literature ☐ ☐ commercial ☐ Industrial ☐ Other ☐

4. Job title

5. :Rank : Please specify

6. The name of the organization in which the employee works

7. The region in which the organization is located.....

8. Service Duration

☐ under 5 ☐ 5-10 years ☐ more than 10 years

9. The number of courses you have completed in your field of occupation

3 courses or less ☐ 4-5 courses ☐ more than 5 courses ☐

10. Number training courses that I passed it In the field of disaster management

3 courses or less ☐ 4-5 courses ☐ more than 5 courses ☐