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What are the measures to prevent earthquakes and the measures to be taken before or after an earthquake?

Is it possible to prevent earthquakes?

According to most research, it is not possible to prevent earthquakes, but according to Colin Schultz's article on April 2, 2014, a study has been conducted indicating that it is theoretically possible to prevent earthquakes.

According to the theory, although the scientists are still at a very early stage, they have developed a way to stop the energy of earthquakes. If earthquakes could be predicted in advance, it would be possible to reduce the damage caused by earthquakes. During an earthquake, waves from the broken fault lines spread rapidly through the ground. However, like waves, there must be a medium through which they pass.

Scientists tried to disrupt wave propagation by opening holes specially placed in the ground for seismic waves according to their wavelength. Thus, in a way, they built an earthquake reflector. Thanks to this system, seismic energy was reflected and concentrated in areas close to the source. However, this system had only been tried for one type of seismic wave, and the wave frequencies were precisely known. Nevertheless, theoretically, it could offer an opportunity such as building a type of earthquake-resistant wall around important buildings.

Precautions to be Taken Before an Earthquake

Building earthquake-resistant buildings: Firstly, necessary systems must be used during the construction of buildings and they must be built sturdy.

Checking the safety of buildings: It is essential to check the safety of buildings to increase the earthquake resistance of homes or workplaces. This provides an opportunity to detect and repair structural damage. At the same time, unsafe buildings should be demolished or reinforced if necessary.

Preparing an earthquake bag: The earthquake bag should contain basic necessities such as first aid materials, clean drinking water, food, flashlight, sleeping bag, blanket, radio, hygiene materials. This bag will be ready to meet your emergency needs in an earthquake.

Earthquake insurance: It is essential to get earthquake insurance for homes and workplaces. This can reduce the cost of damage after an earthquake.

Preparing an emergency plan: It is important to prepare an emergency plan for family and workplace to know what to do and where to go during an earthquake. This plan can facilitate communication and meeting between family members or colleagues.

Measures that can be taken after an earthquake may include

Ensuring safety: After an earthquake, check the safety of your home or workplace. If there are any dangerous situations such as structural damage, cracks, wall or ceiling collapse, water or gas leakage, immediately evacuate the buildings and inform the relevant authorities.

First aid: After an earthquake, check if there are any injuries. If you have received first aid training, you can intervene in the injured. Also, you can help the injured using the first aid materials in your emergency bag.

Checking water, electricity and gas lines: It is important to check water, electricity and gas lines after an earthquake. If you detect any leaks or damage in these lines, inform the authorities and make sure they are turned off if possible.

Emergency Plan: If you have a designated meeting place with family members or coworkers in case of an earthquake, go to that location. If you do not have an emergency plan, you can meet at a safe location designated by local authorities.

Requesting Help: After an earthquake, you can apply to the authorities for help. This is important to meet your basic needs such as shelter, food, water, and medical assistance.

Psychological Support: You can receive psychological support to overcome the stress and trauma experienced after an earthquake. This may include methods such as seeking professional help or joining support groups.

These are some of the steps that can be taken after an earthquake. However, as with any natural disaster, it is important to always be prepared for safety and follow the instructions of local authorities.

My Project and Recommendations

A website and app should be developed prior to earthquakes for the coordination of logistics, safety, and needs of individuals. In fact, AFAD has a similar project, but it contains numerous incomplete projects.

Similar projects such as "FEMA" in the USA, "Safety tip "s in Japan, "China Emergency Response" in China and "Get Prepared" in Canada already exist.

Similar Projects' Deficiencies

User Awareness: Some users may not be aware of the existence of disaster management applications or websites, or they may not have sufficient knowledge on how to use such platforms. Therefore, it is important to promote these types of projects and provide informative materials for educated users.

Accessibility: The usefulness of disaster management applications or websites may be limited depending on the accessibility of users. For example, people who do not have internet access or limited access to technology may not be able to use these types of platforms.

Users' Requests and Needs: The failure of disaster management projects to fully meet users' demands and needs can restrict the use of these platforms. For example, users should be able to request emergency aid or use functions such as searching for missing family members in disaster management applications.

Language and Cultural Differences: Due to factors such as different languages and cultural differences, disaster management projects may not fully meet the needs of some users.

Possible Strategies to Address Deficiencies

User Awareness: It is important to promote projects and provide informative materials for educated users. This can also help users who are not aware of the existence of disaster management applications or websites to become aware of such platforms.

Accessibility: To address accessibility issues, emergency management projects can interact with users through multiple channels. For example, emergency information can be provided to users not only over the internet but also via SMS or phone.

Users' Requests and Needs: To fully meet users' demands and needs, user feedback and suggestions should be collected and used to advance the project. For example, users may suggest new features such as an "SOS" button to request emergency aid.

Language and Cultural Differences: To address language and cultural differences, disaster management projects should be designed to be multilingual and multicultural, taking into account the diverse needs of users.

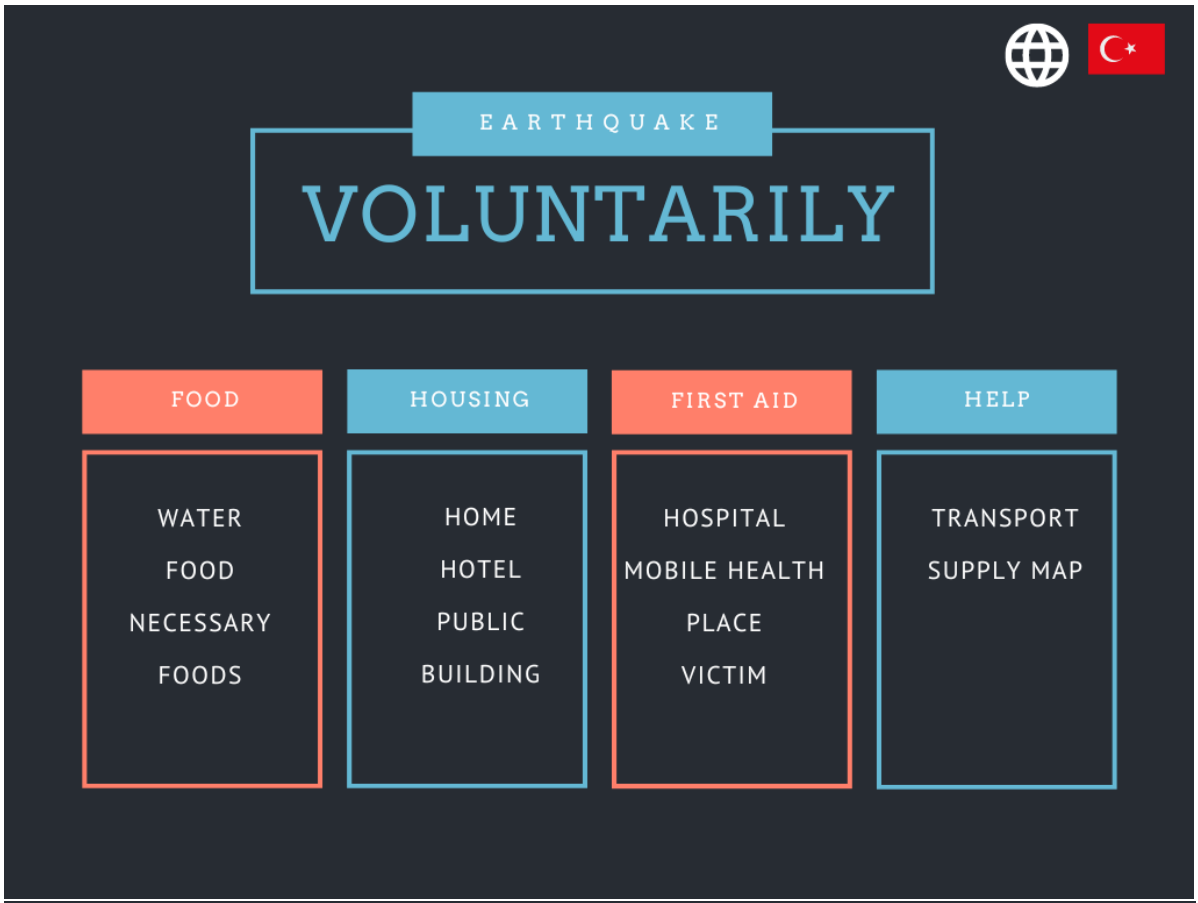
In addition to these strategies, it is important for disaster management projects to have user-friendly interfaces, be easily accessible to users, provide fast and up-to-date information, and provide accurate guidance. Using these strategies together can help make disaster management projects more effective and useful.

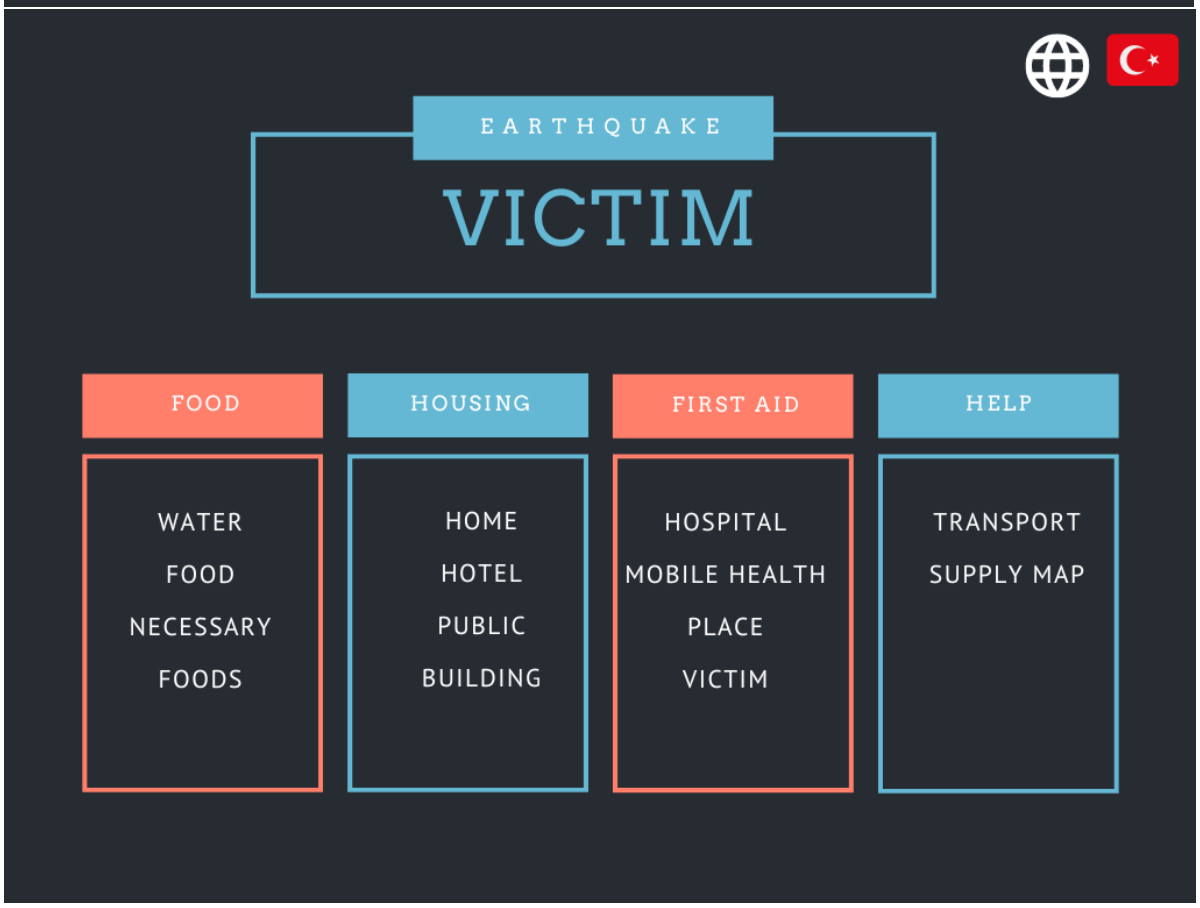
The value of my project will be to facilitate and save the lives of earthquake victims by eliminating coordination and logistics deficiencies after earthquakes. Using the project, it may be possible to provide coordination in post-earthquake relief efforts, improve logistics processes, and distribute relief materials more quickly and accurately.

As a result, the urgent needs of earthquake victims can be responded to more quickly and accurately, and lives can be saved. In addition, post-earthquake relief efforts can be made more effective through increased communication and collaboration among volunteers and relevant organizations.

My project creates a platform to eliminate coordination and logistics deficiencies after earthquakes, which will contribute to post-earthquake relief efforts and help save lives. Therefore, my project will provide valuable social benefits and offer great assistance to people in need.

Sample Interface Design





EARTHQUAKE MAP