



DIGITIZING DISASTER RISK REDUCTION

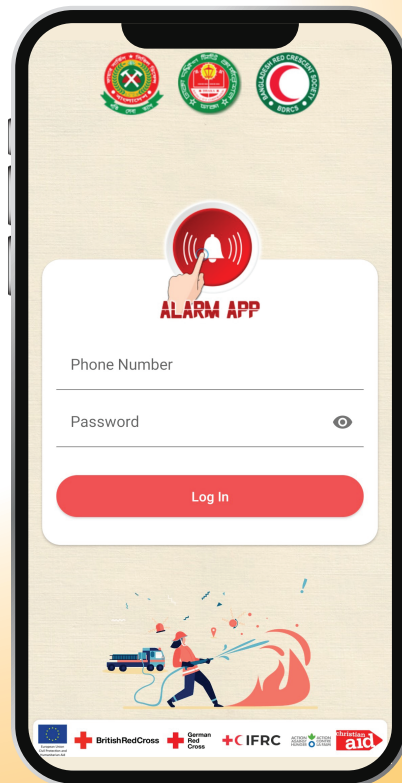
Dhaka Earthquake and Emergency Preparedness - Enhancing Resilience (DEEPER)

A German Red Cross and BDRCS joint initiative funded by European Civil Protection and Humanitarian Aid Office

Existing Volunteer Mobilizing Mechanism

With the support from development actors, the Government of Bangladesh has developed a large pool of urban community volunteers with the aim to reduce emergency response time, thereby minimizing the impact of disasters. Various national and foreign funded projects have equipped the volunteers with the skills and knowledge to abate the perilous consequences of urban hazards.

Although the volunteers have played very crucial roles in nearly every urban emergency in the recent past, coordinating with them effectively remains a challenge. There is no accessible central database to locate the exact position of volunteers and deploy them to the epicenter of the calamity. In addition, the existing protocol to reach them during emergencies involves navigating through too many intermediaries. Also, the only method to alert them is individual phone calls which is not very efficient.



Digitized Volunteering Deployment System

Funded by DG-ECHO, the DEEPER project embarked on an innovative mission to address this challenge through advancements made in smartphone technology. Under the consortium implemented by six esteemed international Disaster Risk Reduction actors: German Red Cross, Bangladesh Red Crescent Society, British Red Cross, International Federation of Red Cross and Red Crescent Societies, Christian Aid, Action Contre La Faim, the DEEPER project created an Android based mobile application, titled as ALARM, that connects all the volunteers directly with the FSCD and speeds up the response efforts.

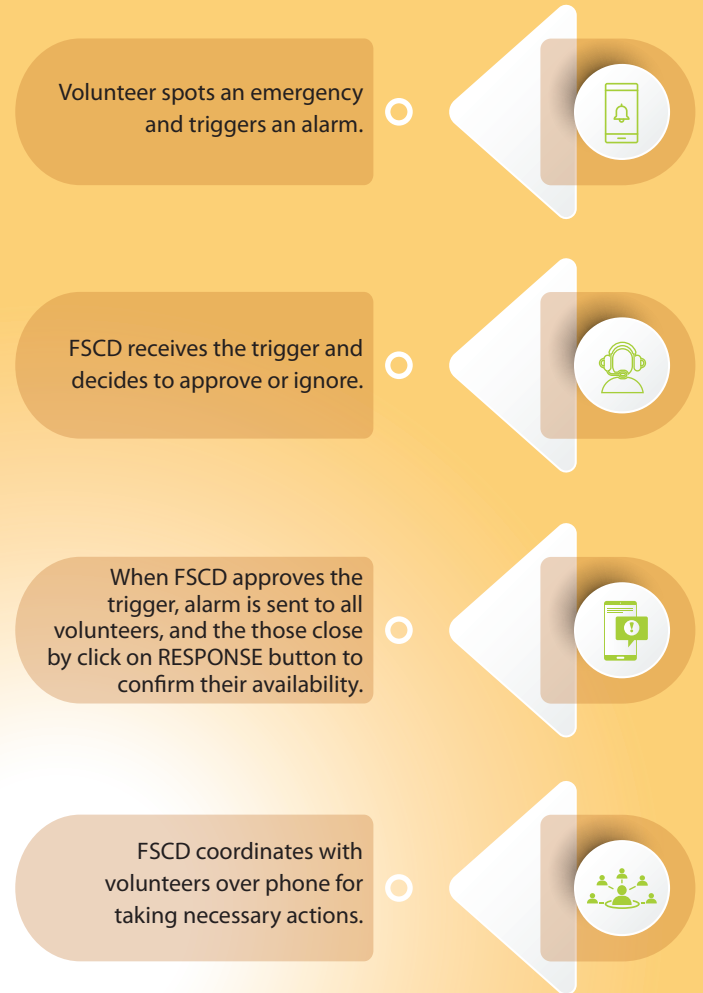
Through the ALARM app, volunteers notify FSCD of an emergency. It also enables FSCD to alert all the volunteers available near the scene. Once the volunteers confirm their availability to act, FSCD can coordinate with each volunteer over phone, thereby ensuring effective coordination that saves precious times during calamities.

EXISTING VOLUNTEER DEPLOYMENT MECHANISM



The system involves a long chain of intermediaries and relies on individual time-consuming phone calls to check the availability of volunteers and direct them to the scene.

MOBILE APPLICATION BASED MECHANISM



The ALARM app connects FSCD with all the volunteers and does not require individual phone calls. All the volunteers are alerted at the same instant when FSCD approves a trigger, thereby saving crucial time.

Vulnerability in Dhaka

Standing at the northern bank of the Buriganga River, the capital city of Bangladesh: Dhaka is one of the most vulnerable megacities in the world. The estimated 21 million city dwellers live under continuous threats of earthquakes and fire outbreaks. The situation is further exacerbated by widespread violation of building codes and use of substandard materials in housing constructions. Unplanned spatial development activities and high population growth rates in the city has led to encroachment on water retention areas and natural drainage paths resulting in waterlogging during monsoon seasons. The conditions are further worsened by the lack of awareness of the most vulnerable communities that are characterized by low level of education and understanding of risks and vulnerabilities.



Awareness for ALL

Christian Aid (CA) under DEEPER project has developed an Android based disaster risk awareness application 'PREPARE.' Users of the free app can learn about the best practices to cope with earthquakes, fire outbreaks, waterlogging, thunderstorms & lightnings and epidemics (like COVID-19).

The application uses illustrations and interactive games that enable users to learn about DOs and DON'Ts of risk reduction. Endorsed by the Department of Disaster Management under the Ministry of Disaster Management and Relief, the messages are accessible to people of various levels of literacy, including persons with disabilities. This initiative is aligned with a key component of Bangladesh's Disaster Management Policy 2015 that encourages use mobile technology to reduce disaster risks.

PREPARE APP



- DO's and DON'Ts on five major hazards in Dhaka.



- Interactive games to make messages more interactive and engaging.



- Emergency contacts of FSCD, police, Domestic Violence Call Centre, etc.



- Knowledge resources on Disaster Management Act, SOP, etc.



- Feature accessible to person with disabilities.

MAINSTREAMING



The app will initially be promoted to youths through social media.



Efforts are ongoing to mainstream the app in the activities of Department of Disaster Management.