ENSURING FOOD AND NUTRITION SECURITY IN CLIMATE FRAGILITIES AND DISASTERS: THE 31 INSPIRING PRACTICES

National Institute of Disaster Management (NIDM)
(Ministry of Home Affairs, Government of India)
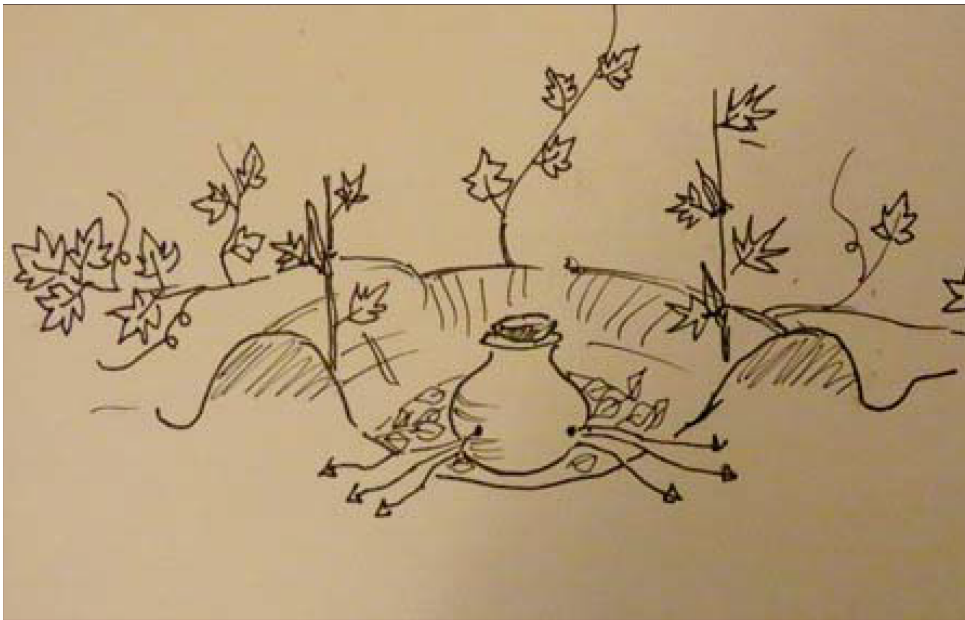
This good practice compendium is an outcome of 'the Map and Exchange Good Practices (MEGP) Initiative' jointly led by National institute of Disaster Management (NIDM) and United Nations World Food Programme. Climate change has significantly altered the disaster risk landscape in Asia. Disasters are more frequent and severe now and calls for urgent need to resort to more innovative approaches in disaster management lest it overwhelm the collective capacities of humanitarian agencies to respond to urgent humanitarian needs.

NIDM and WFP joined hands together to mainstream the agenda of food and nutrition security in India's emergency preparedness and response. Impacts of climate change and disasters on Food security and nutrition are significant. Disaster disrupts all critical dimensions of food security and nutrition, including physical and economic access, availability, and utilisation. Climate fragilities can lead to even more catastrophic and long-term impacts.

Knowledge sharing and co-learning platforms have great potential to fast-track policy and practice reforms. With sectoral focus on food security and nutrition, the MEGP initiative reached to a range of Asian stakeholders including grass root practitioners, NGOs, private sectors and government departments to identify proven solutions from across the spectrum of humanitarian, DRR and climate change adaptation.

This book collates good practices and innovative solutions that have succeeded in addressing complex problems around food security and nutrition and offers potential for replication and scale-up. The case stories illustrated here will interest range of audiences including humanitarian practitioners, policy makers, researchers, innovators, private sector, donor agencies and government officials committed to foster support to grass root innovations.

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FOREWORD

Climate change may be global, but its impacts are unequally borne by people across the world. Although, communities are at the receiving end of the detrimental climate change impact, decades of calamities have manifested how the most under-resourced are pushed into the abyss and thereby escalating their vulnerabilities. Further, disasters and crisis situations have their influence on the food systems across the globe and are among the most tangible repercussions of climate change. Being one of the most densely populated countries, India faces an even bigger challenge in terms of developing coping mechanisms and strategies to combat such humanitarian crisis. Although in India, the recent surge in the occurrence of disasters is being treated as a "wake-up call" to take appropriate actions against climate change, for many communities, hazards and disasters have been a part and parcel of their lives which makes their journey of survival arduous. Droughts and floods are amongst the most pervasive kinds of disasters in India that has directly affected our food systems. As per a recent report by Intergovernmental Panel on Climate Change (IPCC), it is envisaged that India would face strong heat-waves and erratic rainfalls more frequently in the coming years. The agricultural reparations due to these disasters account for almost $1/4^{th}$ of the economic losses followed by food shortages.

India has witnessed some major famines since the 1300s, droughts since the 1900s coupled with cyclones, floods, epidemics and pandemics throughout which hunger and malnutrition have always been a constant companion. Food production, availability, and accessibility during such times is hampered and becomes an important factor contributing to the increased mortality rates. Indian Government as well as agencies like the United Nations have been working relentlessly to fight such crisis. The Sustainable Development Goal 2 and Goal 13 on Zero Hunger and Climate Action respectively lays down some very significant targets and indicators provoking us to re-think our actions towards sustainable use of resources.

Combating climate change and induced disasters as well as building resilience appears like a long-term vision, challenging and uncertain however, something that falls under our control is adapting towards the risks associated with these challenges. The Map and Exchange Good Practices (MEGP) Initiative as a result of the collaboration between the National Institute of Disaster Management (NIDM) and the United Nations World Food Programme (WFP) takes us through a journey of various strategies that different communities across Asia have applied so far to integrate the components of disaster risk reduction and emergency preparedness to mainstream food and nutrition security in the realm of Disaster Management.

(Nityanand Rai)

New Delhi
25th May, 2022

WFP World Food Programme
Programme Alimentaire Modial
Programa Mundial de Alimentos

SAVING
LIVES
CHANGING
LIVES

MESSAGE

I would like to congratulate the team at NIDM and WFP for publishing this inspiring report which recognises the extraordinary efforts taken by agencies and individuals in the last mile to improve food and nutrition security of the vulnerable communities affected by the shocks of disasters and climate change.

The direct impact of disaster and climate change on food security and nutrition is humongous. To achieve the SDG goal of zero hunger, a more scientific and innovative approach needs to be adopted across the spectrum of humanitarian, DRR and climate change action. This compendium succinctly brings some of the proven practices from across Asia and offers a great opportunity of learning and replication. The processes adopted under this initiative was to map and exchange good practices. The support from the humanitarian networks and alliances from Asia, in this endeavour, is commendable and affirms faith in the spirit of partnership and cooperation and we thank everyone for their engagement and contributions.

Amidst the current climate crisis, these innovative solutions, gives a glimmer of hope that a transformational change can be catalysed through such grass root initiatives and local actions which can inspire policy and practice reforms at national and global levels in building resilience of people most at risk of disasters. This also provides an opportunity for countries to contextualize and scale-up such initiatives that benefit their people the most.

This report will go as a useful tool not only for the practitioners working in the grass roots to help vulnerable communities build absorptive, adaptive, and transformative capacities but also for the policy makers committed to mainstream the agenda of food security and nutrition in humanitarian and climate actions across India, the region and global community.

WFP is committed to support, the capacity strengthening roadmap on food security and nutrition in Asia which culminated as a major area of discussion in the regional discourse led by NIDM, Government of India. Such platforms of co-learning bring greater depths in the collective endeavour of combating global hunger. The report may have captured stories only from Asia, but I am sure, it is going to ripple inspiration across the globe.

Bishow Parajuli
WFP Representative and Country Director, India

Maj. Gen. Manoj Kumar Bindal VSM

Executive Director

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MESSAGE

Time and again, the risk associated to Climate Change have proved to be one of the most important drivers directly and indirectly impacting the lives and livelihoods of millions across the globe. Among the various implications of climate change and disasters, one of the worst affected is the process that underpins food security. In this regard, Case Studies have overtime facilitated in providing an all-inclusive and unbiased perspective by exposing the related on-ground situations. I would like to extend my sincere appreciation and congratulate the NIDM and WFP team for their initiative in mapping 31 such Case Stories from across Asia and bringing it out as a compendium.

For ages, India's strategy of responding to disasters came from a relief-oriented perspective. However, the recent Disaster Management Framework goes beyond rescue and relief strategies and also emphasises upon prevention, mitigation and preparedness. The Disaster Management Act, 2005 as well as the various Reforms and Initiatives in the Public Distribution System has laid down clear management and operational goals with demonstrated results.

Despite of these mandates, the unpredictability of a disaster risk often makes the coordination between the responders (both government and non-government) and the survivors tenuous. In terms of food security, the survivors often experience challenges like surge in food prices, lack of storage facilities, socio-cultural differences, unequal distribution of food etc. Therefore, the affected communities become the first responders formulating their own coping mechanisms to survive a crisis, emergency or a disaster.

The publication of this compendium identifies agencies, communities and individuals and their exertions in ensuring food security and nutrition in emergencies that are innovative and inclusive. It goes in tandem with the current Disaster Management Framework and will be a great source of reference to improvise and build upon the framework and related mandates. I would like to thank the various organizations and institutes who have contributed to this compendium and the communities whose struggle will pave way for revolutionary changes in the field of Disaster and Food Security.

(Manoj Kumar Bindal)

Beingood App

Shahul Hameed

Kerala, India

Features

Let's share and care each other. Look out the features of Beingood for the better understanding of our vision.
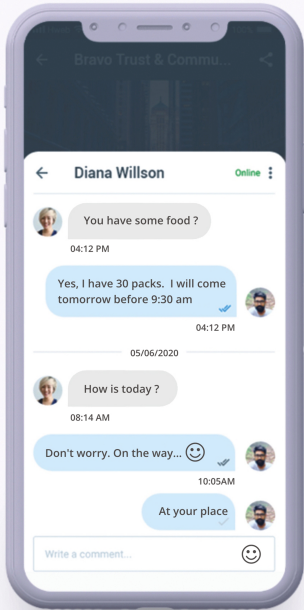
Easy to Use
Beingood is a highly user-friendly application; anyone can post help requests or check for available helps nearby easily.

Location Wise Helping
This app provides you location wise details of people looking for helps or people providing helps for earliest access and easy navigation

Honorary Bages
Get self-motivated and honoured forever by taking real tasks and receive points with exclusive honorary badges on your timeline accomplishments.

Instant Messenger
Whenever you find help needed or help provided you can simply chat with the person in real-time for faster communication

Community Social Networking
You can create communities to simply connect with them or follow people having same interests and keep a tab of all the things posted by them

Quick Notification:
Instant notifications of new posts will be delivered for all the App users in 50 km radius, so that we don't miss out on new requirements.

Beingood, a futuristic App utilises sophisticated technologies like map, navigation, real-time instant messaging and notifications to connect those needing help and those wanting to provide help. Born during COVID-19 pandemic it can be used in any humanitarian disaster in the world.

Target Population

Today there is proliferation of mobile smart phones and use of social media by a wide cross-section of people including the marginalised and uneducated. During the peak of the COVID-19 pandemic, the deluge of information created and disseminated was possible largely because of this reality. Against this backdrop having a dedicated app that brought together those who wanted to help and those seeking help, was timely and much needed.

The App was designed as a unique platform connecting those in search of help during disasters, calamities, pandemics and other difficult times with those in the vicinity and willing to help. They comprised of people dedicatedly serving in government institutions, task forces, organisations, volunteers and anyone else ready to help, share and care for each other. The App served as a bridge allowing both users to provide assistance and seek support across categories that included Quick Help, Food, Medical, Blood, Dress, Educational, Travel Assist and Other.

Problem

In 2020, during the COVID-19 induced lockdown, it was heart-breaking to see migrants and marginalised population stranded and struggling for basics like food and water. The images and videos beamed in the press and on social media showed countless people left to fend for themselves. With fear and paranoia regarding the virus, there was little movement outside. So even if there were people in one locality, they were cooped up in their homes not knowing there might be stranded individuals 100 metres away thirsty and hungry. This became the genesis for creating a technology platform that could bring together the help-seeker and helper.

Solution

The Beingood App was developed by Shahul Hameed, a teacher from Minicoy island of Lakshwadeep. It is free and available in App Store and Play Store globally. Hameed spent his personal money to the tune of Rs 7.5 lakh to ensure it could be of help at a most crucial time of the pandemic. Its functionalities are simple. It has icons on its home screen with 'Get Help' and 'Give Help'. A person who wants to help can click on 'Give Help' and a person who wants to receive help can click on 'Get Help'. The moment s/he does this, their request gets plotted in the Map in Red or Yellow colour as per the intensity of the request. There is space to add a description, photo, audio or a short video too. Once the request gets posted, it immediately provides notifications to registered App users in a radius of 50 kms. Any of these users can contact the person seeking help using an inbuilt Real-time instant messaging system with navigation from the post itself.

Available Helps
Helps provided by others will be shown in Green colours

Urgent Requests
Help requests under urgent categories will be plotted on the map in Red colours.

Moderate Requests
Will be shown in Yellow colours

The 'Give Help' option allows the 'giver' to donate food, clothes or any free service by posting and plotting details in green colour in the map so that those in the vicinity seeking help get a notification. Several volunteers were registered and they helped connect the helper and helped. Besides notifications, people could see requests as lists using filter buttons by selecting preferred categories, distance, time, category types like Urgent, Moderate and Available.

To get best results, 30 tech developers were hired from Government Cyber Park in Kerala to imbibe advanced features. They worked for a year to complete the dream project which had no previous reference point. Although people can get connected through the App without contacts, it lets them use solutions as they have the option to share the request in the App through social media. Community Groups can be created for multitasking and doing bigger things. People can follow a particular person to get request notifications even when beyond the 50 km radius. They can add requests, available help and add persons to their favourite lists. The option to select date and time according to users' convenience while making a post too is possible.
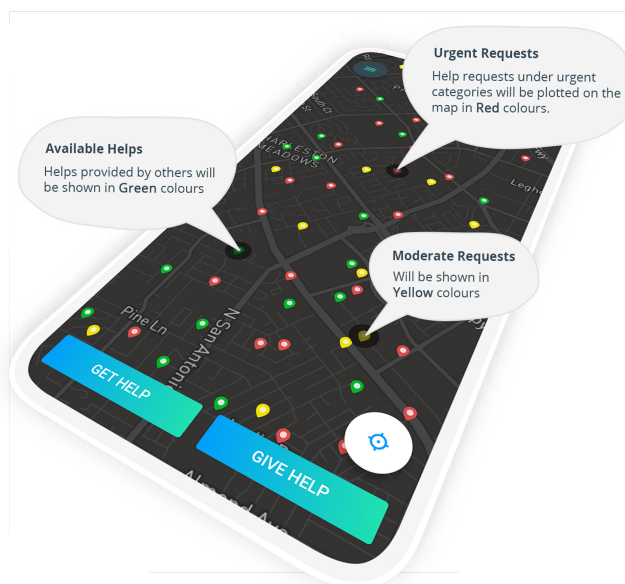
The App provides honorary points and virtual badges to users on their timeline accomplishments appreciating real efforts to enhance the feel-good factor and motivate others to follow suit. The most relevant part of the App is it compiles all people regardless of categorisations connecting help providers and seekers for food, petrol, clothes, medicines, shelter, support for education, help with performing last rites or any other. Without having contact details of an individual, it provides them access to a wide database just by posting a request.

Results

The app has been successfully launched in Kerala by the Kozhikode District Collector. It was used extensively by both categories with positive response and feedback filtering into various social media platforms and on the App too.

The feature related to location plotting was useful in rescue operations. The target of attaining zero hunger target now seemed possible. The psychological feel-good factor that app users felt helped them deal with the trauma of the pandemic. As word got around requests for being part of 'Give Help' began to rise with professional, media personnel, government functionaries, student associations, charitable trusts, industry CSR and others joining. Users from Europe, Canada and Middle-east became part of the Beingood community and helped not just by offering help but also traction in their circles, expanding the database.

Replicability

The Beingood App is built on native languages in iOS and Android with high-end features and can work flawlessly while scaling-up. It uses one of the fastest servers in the world with the ability to receive droplets in any location. Its firebase real-time chat ensures unparalleled speed. Mobile number authentication is part of the registration process with an Admin panel that controls and monitors all activities and users.

For refining the working flow of the app, it must be reached and accessed by more people. Since the app is developed by an individual, its marketing and advertising is a challenge. It relies on word of mouth and visibility through people driven free platforms. Another innovative feature relates to how while installing the App, it detects Country code after its flag is selected and number entered for authentication. It is an advanced feature to enable users from others countries to receive notifications as an invalid number but when conveyed the right way, gets them authenticated.

The Beingood App is an excellent example of how technology can be used as an innovative futuristic invention to address issues and provide hope for humanity and mankind.

The National Institute of Disaster Management (NIDM) was constituted under an Act of Parliament with a vision to play the role of a premier institute for capacity development in India and the region. The efforts in this direction that began with the formation of the National Centre for Disaster Management (NCDM) in 1995 gained impetus with its redesignation as the National Institute of Disaster Management (NIDM) for training and capacity development. Under the Disaster Management Act 2005, NIDM has been assigned nodal responsibilities for human resource development, capacity building, training, research, documentation and policy advocacy in the field of disaster management. NIDM provides Capacity Building support to various National and State level agencies in the field of Disaster Management & Disaster Risk Reduction. The Institute's vision is to create a Disaster Resilient India by building the capacity at all levels for disaster prevention and preparedness.

The United Nations World Food Programme is the world's largest humanitarian agency fighting hunger worldwide. The mission of WFP is to help the world achieve Zero Hunger in our lifetimes. Every day, WFP works worldwide to ensure that no child goes to bed hungry and that the poorest and most vulnerable, particularly women and children, can access the nutritious food they need.